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CONTENTS

Alexandros G. SAHINIDIS, Alina HYZ

CSR activity configuration and the prioritizing of stakeholder claims:
A multi-firm multi-sector study 5

Iwona KOWALSKA

Corrective Action Plans for Local Governments as Their Financial Health
Barometers? 25

Natalia ZAJĄC

The evaluation of the system of financing the integration courses in Germany 37

Mirosław LEGUTKO

Regionalna Izba Obrachunkowa w Krakowie (Regional Chamber of Audit in Krakow) . . . 51

Izabela MŁYNARZEWSKA-BOROWIEC

TFP determinants in European Union member states in 2000–2014
in the light of panel study results 65

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Alexandros G. SAHINIDIS¹, Alina HYZ²

CSR ACTIVITY CONFIGURATION AND THE PRIORITIZING OF STAKEHOLDER CLAIMS: A MULTI-FIRM, MULTI-SECTOR STUDY³

„I think we have a moral responsibility to help grow the economy, to help grow jobs, to contribute to this country and to contribute to the other countries that we do business in”.

Tim Cook, CEO Apple Inc.
Apple's Tim Cook Barnstorms for „Moral Responsibility”
The New York Times August 28, 2017

The purpose of this study is to identify the patterns of Corporate Social Responsibility (CSR) activities, in adverse economic circumstances, so as to understand the importance ascribed by the companies to each of their stakeholders. Prior research on stakeholder salience has looked into various issues related to the relative attention given to corporate stakeholders by management, however, none has examined what this relationship looks like following a prolonged economic crisis. We investigate the activities of CSR in Greece, examining how companies spend their CSR resources in a depressed economy, studying the respective activity patterns of the companies listed on the Athens Stock Exchange (ASE). Content analysis is used, thoroughly examining all public data available on the internet from 175 companies. The study includes data reported in 2014, collected at the end of 2015. Our results demonstrate that, the most popular CSR activities related to the human resources and the least practiced were the society and environment related ones. The findings show concern for the employees of the companies and their morale, superseded-

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ing the interest for the other stakeholder categories in spite of the crisis and the soaring unemployment rate. Moreover, a significant divergence emerged between the CSR programs of the various industries. This indicates that for reasons unbeknownst to us, companies are placing less emphasis on consumers, environment and the society and tend to cater to the needs of their internal constituents.

Keywords: Stakeholders, Economic Crisis, Corporate Social Responsibility, Stakeholder Saliency, CSR Activities, Greece.

JEL Classification Codes: M14, H12.

Introduction

Corporate social responsibility is one of the most researched areas in the business literature of the last two decades, especially following the corporate scandals at the beginning of the 21st century (Enron, WorldCom, Parmalat, Bernie Madoff etc.). Responsible businesses, actual and self-proclaimed, in need of cost-cutting and reputation insurance, adopted CSR activities, seeking to build their brands and protect themselves from possible crises in the future, especially manifested in the aftermath of the 2007–2008 crisis (Shiu and Yang, 2017; Fehre and Weber, 2016; Minor and Morgan, 2011; Eisenegger and Schranz, 2011).

As a result of different approaches to the study of CSR, owed to the diverse background of scholars, the extant literature comes under several terms, with great overlaps in meaning among them (Aguinis and Glavas, 2012; Orlitzky et al. 2017; Mitchell et al. 2017). Carroll and Shabanna (2010) observe that: „*The term „corporate social responsibility” is still in popular use, even though competing, complementary and overlapping concepts such as corporate citizenship, business ethics, stakeholder management and sustainability are all vying to become the most accepted and widespread descriptor of the field... however, all these concepts are related, in that they are integrated by key, underlying themes such as value, balance and accountability.*” (p. 86)

The multiple approaches to the study of CSR resulted to a lack of a universal definition of it. CSR may be defined as a concept or a tool, used by companies at the stage of strategy building, whereby they voluntarily take into account the interests of society and environmental protection, as well as relationships with various stakeholder groups. Being responsible means not only fulfilling all formal and legal requirements, but in addition increasing investment in human resources, society, environment, which is a voluntary commitment. Corporate responsibility is part of management strategy, which through social dialogue at the local level, contributes to the competitiveness of companies on a global level and at the same time helps drawing the trajectory for sustainable social and economic development. A Business by definition aims to make a profit, takes ac-

tions on behalf of many (if not all) of its stakeholders, treating such activities as an investment that lead it to the achievement of its objective, while taking care of the interests of all parts of the environment of the company. For the purposes of this study Carroll's early definition of CSR will be used, since it is encompassing all main sub-themes of the concept, and it is also one of the most commonly used in the literature. According to Carroll (1979): „*The social responsibility of business encompasses the economic, legal, ethical, and discretionary [later referred to as philanthropic] expectations that society has of organizations at a given point in time.*” (p. 500).

The deep economic crisis that afflicted Greece is reflected, inter alia, in the main macroeconomic ratios, like Gross Domestic Product and unemployment and some indicators of the banking sector, like deposits, total loans and non-performing loans (NPLs). Between 2008 and 2014 the Greek Gross Domestic Product decreased more than 25%, (<http://www.statistics.gr/el/statistics/-/publication/SEL24/>;) while unemployment increased from 7.8% in 2008, to a high of 27% (<http://www.statistics.gr/documents/20181/007b1bab-7cad-4df3-81f1-5b18c76770ce>).

Greece is characterized today by borrowing problems, high public debt, serious lack of competitiveness, unsustainable social security system, particularly poor public administration and a large inefficient public sector. With real GDP in 2014 almost 25% below its 2008 level, Greek firms have borne the brunt of the economic crisis in recent years. The protracted economic crisis decreased firms' profitability and increased the need of finding ways to gain funds.

The purpose of this study is to identify the patterns of Corporate Social Responsibility (CSR) activities, in adverse economic circumstances, so as to understand the importance ascribed by the companies to each of their stakeholders. In particular, we examine how the companies listed on the Athens Stock Exchange (ASE) spent their CSR resources during 2014, the sixth year into the crisis. In this study, we provide a comprehensive view of the public companies' full spectrum, addressing the activities and the emergent patterns of CSR, as they derive from the websites of the entirety of the organizations listed on the ASE. Using stakeholder theory (Freeman, 1984; Orlitzky et al. 2017; Michell et al. 1997; Weitzner and Deutsch, 2015), this study attempts to identify which stakeholders rank high in the corporate priorities and which are secondary ones, in a six-year long economic crisis environment (Thijssens et al. 2015; Weitzner and Deutsch, 2015; Neville et al. 2011). The stakeholder salience approach has not been studied in the context of a long-lasting crisis and to that extent this will be the contribution of this study. We investigate what the industry CSR practices look like, following six years of economic recession, high unemployment and socio-political upheaval, characterizing Greece, since 2008. We try to answer the following questions:

- How do companies spend their CSR resources in a depressed economy, with many stakeholders making claims on those resources?

- Are there any differences between industries in terms of their responses to their stakeholder demands?

The paper is organized as follows: in the next section we review the literature on the subject. In section three we present the research methodology and the data sources used in the analysis. The results are presented and discussed in section four. In the last section, we present conclusions and directions for further research.

1. Literature review

There is a vast literature describing different aspects of corporate social responsibility.

Aguinis and Glavas (2012) in their review included 588 articles, both conceptual and empirical since the 1970's. Many of the studies initially focused on CSR antecedents, moving on, scholars examined the related outcomes while more recently, the focus has shifted to processes involving CSR within organizations (Wang et al., 2016). A large number of scholars focused on the influence of CSR on variables such as financial performance (Orlitzky et al. 2003; Wang et al. 2015; Taghian et al. 2015; Ni et al. 2015; Nag and Bhattacharyya, 2016), client or employee perception (Reklitis et al. 2018; Anadol et al. 2015), firm's reputation, innovation and learning, access to capital, risk reduction, productivity increase etc.

In a large study with samples from three countries: China, Hong Kong and Taiwan, Ni et al. (2015), examined the hypothesis that different types of CSR activity configurations, could lead to different financial performance. The authors reported that high levels of CSR activities targeted at primary stakeholders (customers, employees and investors), were associated with high performance. Also, they found that their conclusions were consistent in all three countries they studied, in terms of the configurations of the activities discussed. Porter and Kramer (2011, 2006), posited that addressing its other constituencies, along with its shareholders, will lead a company to sustainable high performance through the creation of shared value. Other studies focused on the impact of CSR on internal organizational aspects such as employee commitment, satisfaction, turnover rate, etc. (Chang et al. 2016; Yoon and Lee, 2016). Rupp et al. (2006) and Fukukawa et al. (2007) demonstrated the impact of corporate social responsibility activities on the level of trust in the organization and, consequently, on employees' attitudes and behavior. Kim et al. (2010) found that CSR activities affect the degree of employee identification with the company, and Brammer et al. (2007) that they correlate positively with employee involvement.

Some researchers focused on the investor's attitudes towards socially responsible companies, positing that investment companies, especially institutional investors demonstrate a proclivity to invest in companies with a proven record of long term thinking, part of which is being socially responsible and responsive to the calls of a company's

stakeholders (Cordeiro and Tewari, 2015; McKinsey, 2016; BCG, 2016). Two of the most fervent opponents of CSR, Friedman, (1970) and Leavitt, (1958), proposed that the goal of a business is to make profit for the shareholders and not to complement the state by remedying the deficiencies of the public sector. In another line of research, Fehre and Weber, (2016), studied management attitudes toward CSR in times of crisis, concluding that CEOs of German public companies tend to talk less about social and governance issues, in their public statements, indicating a lessening of interest on CSR or at least, a lack of consistency in their interests for the specific years, before and after the crisis. Finally, Orlitsky et al. (2017) studied the impact variation of the influence of the National Business Systems (NBS), the industry effects and those of organizational variables, on corporate social performance (CSP), a concept overlapping with CSR (Carroll and Shabanna, 2010; Ioannou and Serafim, 2012; Schwartz and Carroll, 2008). The authors concluded that although much more research is needed, their exploratory study showed that the role of company – level variables is greater than that of NBS and of the industry (Orlitzky et al. 2017; Matten and Moon 2008). A large part of the literature is devoted to customer CSR related perceptions and company reputation issues (Du et al. 2010; Chaudhary, 2017).

As the research on CSR progresses, the literature is moving in the direction of examining specific CSR activities and measures rather than the aggregate social performance of organizations (Wang et al. 2016; Mitchell et al. 2017; Pelozo and Papania, 2008).

Table 1 provides an overview of some recent studies of corporate social responsibility which are important from the point of our research.

Table 1. Corporate social responsibility – research review

Researcher(s)	Findings
Holcomb et al. (2007)	This study used as a sample the top ten hotel companies as listed in <i>Hotels</i> magazine. The findings reveal that: 80 percent of the companies analysed reported socially responsible activities relating to some form of charitable donations, 60 percent reported a diversity policy, and 40 percent provided some mention of SR in their vision or mission statements. Some companies were highly focused on providing a balanced approach to SR while other hotel companies were less focused in their efforts. The areas of SR that seemed to be lacking with regards to reporting were environmental, and vision and values.
Matten and Moon (2008)	The authors examined the historical evolution of CSR in the USA and in Europe. Their conclusions include: 1. The National Business System plays a role in the differing manifestations of CSR, contributing to the variations seen in many countries. 2. The differences in political, social, cultural and economic institutions lead to different approaches to CSR, an explicit one in the USA and an implicit one in Europe. The authors conclude that the European countries increasingly tend to adopt the explicit approach converging with the US business practices.

Researcher(s)	Findings
Achua, (2008)	This paper investigates the corporate social responsibility in Nigerian banking sector and identifies the following major constraints to the adoption of CSR: regulatory laxity, inauspicious macro-economic environment, endemic corruption and self-induced vices.
Smith (2008)	In this study the author is using two case studies from the pharmaceutical industry (GSK and BC) indicating why companies must implement CSR principles in their strategies with emphasis on brand name building and company awareness towards consumers.
Aras et al. (2010)	This paper aims to investigate the relationship between corporate social responsibility and firm financial performance in developing countries using as a sample 100 companies from Istanbul Stock Exchange (ISE). In doing this analysis the authors found a relationship between firm size and corporate social responsibility. However the authors were unable to find any significant relationship between corporate social responsibility and financial performance/profitability.
Vitaliano, (2010)	This paper aims to estimate empirically the effect on the voluntary turnover (quit) rate of employees when a large public corporation already judged as an outstanding employer is also ranked as being socially responsible by an external review organization. The researcher used as a sample 84 of Fortune magazine's "100 Best Employers". According to the findings these firms reduce the annual quit rate by 25-30 percent as compared to non-CSR public corporations or a larger comparison set including privately held and not-for-profit firms.
Ferreira, (2010)	This study show that consumers perceived greater benefit and value in the offer of the socially responsible firm, and were showed to be willing to pay 10 percent more for its product, judging this price differential as being fair. Moreover, the social action with direct impact on the consumer's life influenced more positively his/her reactions than the social action with indirect impact.
Mandhachitara and Poolthong, (2011)	This study demonstrated that CSR has a significant strong and positive association with attitudinal loyalty. Perceived service quality mediated the relationship between CSR and repeat patronage intentions (behavioural loyalty). Direct effects were reported between perceived service quality and both attitudinal and behavioural loyalty.
Chen and Wang, (2011)	The results of this study show that companies' social responsibility activity can improve their financial performance of the current year, have significant effects on their financial performances of the next year, and vice versa. The variation of CSR and financial performance can also significantly influence each other.
Al Naimi et al. (2012)	The research using the sample of Qatari companies listed on the Qatar Exchange finds that most companies disclosed information related to human resources and product development, followed by community involvement. No company reported environmental issues in their annual report.
Mozes et al. (2012)	This paper presents the positive significant correlations between organizational identification, volunteering, job satisfaction and motivation and CSR engagement. Significant differences were also found between active participants in the company's CSR programs and non-participants on organizational identification and motivation, but not for job satisfaction.

Researcher(s)	Findings
Rakotomavo (2012)	This research supports the hypothesis that mature firms tend to invest more in CSR. Specifically, firms investing highly in CSR tend to be larger, more profitable, and with greater earned equity. The evidence also supports the hypothesis that CSR investment does not subtract from dividends. Instead, CSR effort and dividend tend to increase together.
Ni et al., (2015)	In a large study with samples from three countries, the authors examined the hypothesis that different types of CSR activity configurations, could lead to different financial performance. The authors reported that high levels of CSR activities targeted at primary stakeholders (customers, employees and investors), were associated with high performance. Also, they found that their findings were consistent in all three countries they studied, China, Hong Kong and Taiwan, in terms of the configurations of the activities discussed.
Wang et al., (2015)	In a meta-analysis of 119 samples from 42 studies the authors reported an unshakable positive relationship between CSR and Financial Performance. Furthermore, testing for causality, they found that the relationship was found only when CSR preceded performance, while the reverse did not hold true.
Orlitzky et al. (2017)	The study examines the relationship between Corporate Social Performance (CSP) and three levels of variables, at the macro level (country), the meso level (industry) and micro level (firm). They report a strong relationship of country related variables with the shareholder dimension of CSP, while the overall CSP, the community, the environment and the employee dimensions related to company level variables.
Mitchell, Lee and Agle (2017)	The authors discuss the new findings reported in the literature on the stakeholder salience model, or alternatively as the “stakeholder prioritization work.” Mitchell et al., present the recent research categorizing it in five streams, as proposed by Lee (2015), Lee included five work domains in his model: stakeholder awareness, stakeholder identification, stakeholder understanding, stakeholder prioritization, and stakeholder engagement.

Source: Own summary based on the literature review.

Among the research streams in CSR, the stakeholder salience framework stands out. Freeman (1984, p. 46), defined stakeholder as „any group or individual who can affect or is affected by the activities of the organization’s objectives”. The need for the study of stakeholder salience arose due to lack of understanding of the impact of individual CSR activities on organizational outcomes. Earlier CSR studies failed to discriminate the specific dimensions of CSR, when making the connection between overall Corporate Social Responsibility and Financial performance or Reputation (Wang et al. 2016). The issue of identifying the importance of each of the corporate stakeholders was introduced in the relevant discourse by Mitchell et al. (1997) and discussed further in the latest work by Mitchell et al. (2017). Mitchell et al. (1997) suggested that “not all stakeholders are created equal” and there are three attributes that affect their salience to an organization, the Power, the Urgency and the Legitimacy of their claims. These three attributes

determine, the authors intimated, the priority given to the stakeholder claim, resulting in corresponding actions by the company when making resource allocation decisions. In this framework the context of the present study is unique, due to the changes in the socioeconomic environment, which are expected to have affected the power, the urgency and legitimacy of the stakeholder claims and the respective corporate behaviour thereof. The stakeholder salience theory considers how an organization's stakeholder relationships interact to generate maximum value in an ethical manner (Beckam et al. 2016; Mitchell et al. 1997). The stakeholder salience framework has received considerable support by several scholars examining the prioritization of stakeholders (Weitzner and Deutsch, 2015; Thijssens et al., 2015; Guerzi and Shani, 2013; Magness, 2008). However, the stakeholder salience framework has also been critiqued as being largely static, short-term-oriented, firm-centred, needing both enrichment with more attributes and the establishing of different potency of each of those (Baba and Raufflet, 2017; Beaulieu and Pasquero, 2002; Neville et al., 2011). The issue of the model's dynamism is relevant to our study, since the attributes that provide impetus to a stakeholder group claim, may change if there is a disruption in the corporate state of affairs, or its environment, making another stakeholder group claims more legitimate, urgent or hard to resist. While for example, a company normally contributes to environmental causes or to philanthropy, in a crisis period, management may be more inclined to direct company resources to more powerful stakeholders such as customers, or try to lessen the impact of the crisis on shareholders or employees, diverting the precious resources to them, instead of the relatively powerless environmental and philanthropic causes.

A growing body of literature emphasizes the role of social responsibility for the firm, albeit almost all the above mentioned studies aim to investigate the corporate social responsibility activities during non-crisis periods. Some researchers investigated CSR in crisis periods, in terms of its relationship to financial performance, perceived effects on company reputation and the cost-containment management actions leading to smaller CSR budgets (Diaz-Pont, 2017; Metaxas, and Tsavdaridou, 2013; Karahibramoglou, 2010; Placier, 2011; Souto, 2009). A study by Garcia-Benau et al. (2013), examining the economic crisis in Spain, concluded that „in times of crisis companies perceive CSR reporting and assurance as a valuable investment in spite of its costs” (p. 1539). Dias et al. (2016) has investigated the evolution and extent of CSRD, before and during the last financial crisis, for 36 listed Portuguese companies. In terms of general disclosure pattern during the crisis period, Portuguese listed companies were more concerned about their involvement with society, particularly in matters of corruption prevention and community affairs. Previous studies of CSR, among Greek companies, have partially shed light to relevant corporate activities in Greece during crisis, however the samples used were rather small, presenting a minute part of the big picture (Giannarakis and Theotokas, 2011; Sahinidis and Kavoura, 2014; Kavoura and Sahinidis, 2015; Sahinidis et al. 2018; Reklitis et al. 2018). Other relevant studies, examined only the early part

of the economic crisis, when its sheer size was not evident and had still little impact on CSR-related company decisions (Giannarakis and Theotokas, 2011). Karagiorgos (2010) examined a sample of Greek companies with CSR programs, before the economic crisis, reporting a causative positive relationship between CSR and financial performance. Our study tries to investigate the issue of CSR activity configuration and the prioritizing of stakeholder claims, following a protracted crisis period on a large scale.

2. Methodology and data collection

We use data from all Greek firms listed on the Athens Stock Exchange in 2014 making CSR disclosures. We collected data from the web pages of 175 companies, and other public sources such as the business press and CSR related organizations. No information was available on CSR activities by 31 companies. The companies we examined represented 19 sectors (Table 2).

Table 2. ASE Listed Companies (as of Jan. 2015)

Sector	Number of companies in sector's sample
Banks	7
Chemicals	5
Construction and Construction Materials	19
Energy	1
Financial Services	4
Food and Beverage	20
Health	6
Industrial Products and Services	19
Insurance	1
Media	6
Oil and Gas	3
Personal and Household Goods	20
Raw Materials	15
Real Estate	6
Services of General Interest	4
Technology	17
Telecommunications	1
Trade	7
Travel	14

Source: The authors' own calculations.

We use quantity content analysis as research method. It is a research technique widely used to analyse the text messages, both written (books, newspapers, documents, web pages) and oral (for example distributed by radio and television). Content analysis is typically used in qualitative studies, allowing though some quantitative analysis such as frequencies (Cascio and Aguinis, 2008). Berelson (1952) defined content analysis as „a research technique for the objective, systematic and quantitative description of the manifest content of communication”. The aim of this method is to reduce the content of the whole text to the most important meanings: the most frequently occurring words, key themes, prevailing forms of grammatical and semantic etc. We implement this method in three main phases: 1. preliminary analysis, 2. processing of the material tested and 3. analysis of results containing the interpretation and conclusions. During these we selected and categorized firms. Then, we chose the main dimension of social responsibility. We investigated the web site of each company using key words for the analysis. In the few cases where we were unable to locate the information needed we decided to contact directly the company to be able to obtain the necessary information. Following the work by Holcomb et al. (2007), Giannarakis and Theotokas, (2011) and Kavoura and Sahinidis, (2015), the following dimensions of CSR were used in this study: (1) Society, (2) Environment, (3) Marketplace, (4) Employees, (5) Vision, Values and Corporate Governance.

Our intent of this study is threefold:

1. To find out the choices of company activities of CSR during the year investigated.
2. To discern the differences between sectors.
3. To inquire the level of interest of firms in CSR beneficiary groups.

Our first step was to investigate the actions and activities carried out by each company for each dimension of CSR (Table 3). In this way we manage to present in a few words each action. Our next step was the use of more succinct descriptions of the CSR activities of each company. This allowed us to easily and quickly understand what CSR areas and actions are undertaken in each sector and which groups of companies have undertaken more action. Searching and classification of CSR actions on business reports proved an arduous process. As a result we obtained a number of 2999 CSR activities reported on the companies' web sites (including the few documents we accessed through direct contact with some companies).

Table 3. CSR Activity Categories

Society	Charitable donations, Community welfare, Corporate giving, Donations in kind, Education, Grants, Water conservation, Local regeneration, National welfare, Volunteerism, World welfare
Environment	Cultural heritage, Energy management, Pollution control, Relationship with customers, Recycle, Waste management, Self-regulation, Resource consumption Water and soil releases, Product impact
Marketplace	Ethical advertising, Providing a product of value, Relationship w/suppliers, Relationship with shareholders,
Employees	Advancement, Fair and equitable benefits, Career planning, Compensation and rewards, Daycare and family accommodations, Diversity/equal opportunity, Employee assistance program, Employee communication, Health and safety, Recruitment, Training, Forced and Child labor, Freedom of association, Right to organize
Vision, values and Corporate Governance	Accountability, Clear purpose, Code of conduct, Enduring values, Ethical behavior, Fairness, Trust, Independence of directors, Audit committee, Executive Compensation and remuneration schemes, Voting rights Anti-takeover devices

Source: The authors' own compilation.

Results and Discussion

Previous studies have shown that different types of CSR activities elicit different responses from the company stakeholders (Orlitzky et al. 2003; Pelozo and Shang, 2011), with the former reporting a stronger correlation of donation giving to financial performance than the one of environment related activities. Pelozo and Papania (2008) propose that the evaluations of different CSR activities from both salient and non-salient stakeholders constitute one reason for the conflicting findings on the relationship between CSR and firm financial performance.

It is expected then that different configurations of CSR activities will have a varying impact on organizational outcomes and scholars will need to shed light on the dynamics of this activity-outcomes relationship. Although this study does not examine organizational outcomes, it provides a lucid picture of the priorities of the public companies in ASE, in disbursing their CSR budgets both individually and in industry terms.

We present the results of the measure of the extent of CSR practices in the sample in Table 4. In order to enable direct comparisons between sectors the ratio „CSR' activities by firm” was calculated. The data show that most CSR actions are reported in the

following sectors: Telecommunications, Oil and Gas, Insurance and Banks. While the lowest activity rate appeared in: Trade, Construction and Construction Materials and Chemicals.

Table 4. Number of CSR activities by sector and firm

Sector	Total number of CSR activities in sector	Number of CSR activities by firm in the sector*
Banks	214	30.6
Chemicals	58	11.6
Construction and Construction Materials	149	7.8
Energy	21	21.0
Financial services	107	26.8
Food and Beverage	307	15.4
Health	122	20.3
Industrial products and services	399	21.0
Insurance	33	33.0
Media	113	18.8
Oil and gas	139	46.3
Personal and Household goods	433	21.7
Raw Materials	205	13.7
Real Estate	65	10.8
Services of general interest	62	15.5
Technology	186	10.9
Telecommunications	58	58.0
Trade	47	6.7
Travel	281	20.1

* Number of CSR activities by firm in the sector = Total number of CSR activities in sector/ Number of companies in sector's sample

Source: The authors' own calculations.

In Table 5 we show the breakdown of the number of various content category themes by industrial sector.

Corporate social responsibility can be considered in the external dimension – it is the activity addressed mainly to the customers or the environment, and in the internal dimension – it is an activity addressed to employees.

Table 5. Number of CSR content category themes by sector

Sectors	Society	Environment	Market	Employees	Vision, Values and Governance	Total
Banks	41	54	37	49	33	214
Chemistry	3	10	9	19	17	58
Construction and Construction Materials	20	25	26	39	39	149
Energy	8	3	4	1	5	21
Financial services	38	11	20	16	22	107
Food and Beverages	39	42	62	81	83	307
Health	42	9	20	23	28	122
Industrial Products and Services	56	64	77	106	96	399
Insurance	13	6	3	5	6	33
Media	21	16	18	34	24	113
Oil and gas	16	38	21	32	32	139
Personal and Household Goods	65	68	84	112	104	433
Raw Materials	34	50	27	56	38	205
Real Estate	15	13	9	10	18	65
Services of Common Interest	8	15	12	15	12	62
Technology	43	21	39	42	41	186
Telecommunication	5	19	9	19	6	58
Trade	10	5	15	5	12	47
Travel	48	43	50	70	70	281
Total	525	512	542	734	686	2 999

Source: The authors' own calculations.

The results of our research were rather surprising to us. Contrary to our expectation for the domination of society-related CSR practices (external dimension), employees appear to be the leading stakeholder capturing the attention of management (internal dimension), assuming a bigger stake than the other constituencies of the organizations whether primary or secondary stakeholders. Employee-related CSR activities exceed any other category in 9 industries, while they are the second priority in another 4 industries of the total of 19 in the sample (Table 6). This would be intuitively compelling in an economy functioning under normal circumstances, but less so in a depressed economy, with unemployment rates in the high 20's and the society ravaged by it. The second most preferred category was society in 5 industries, while if we were to include the second priority, values, vision and governance would be first, but with only 4 industries as a first priority. These results are not far from the findings of earlier studies, which were conducted in totally different contexts nevertheless. Ni et al., (2015), found that CSR practices concerned with employees, customers and investors (the primary stakehold-

ers), lead to high financial performance, as opposed to those addressing secondary stakeholder issues. The same authors claim that, although in Taiwan the employee CSR practices take precedence for the high performing companies versus customer CSR practices in Hong Kong, their key finding is that the determinant of the high company performance in their sample is the configuration of CSR practices and not those related to one stakeholder group.

Table 6. The top two Corporate Stakeholder Priority Rankings in 19 Sectors

	Society	Environment	Marketplace	Employees	Vision, values and Governance
First Priority in Number of Sectors	5	3	1	9	4
Second Priority in Number of Sectors	1	3	3	4	10

Source: The authors' own calculations.

4. Conclusions, Limitations and Implications for Further Research

Earlier findings by Pelozo and Shang (2011) lead to the conclusion that marketers' knowledge of stakeholder responses to specific CSR activities is rather limited. Given that most firms now engage in CSR activities, managers need a greater understanding of how different activities create differentiation, and how they can create a larger value proposition for stakeholders.

This study has investigated what the industry CSR practices look like, following six years of economic recession, high unemployment and socio-political upheaval, characterizing Greece, since 2008. We use data from 175 Greek firms listed on the Athens Stock Exchange in 2014, by means of a quantity content analysis of annual CSR disclosures. Our results demonstrate that, contrary to our expectations, the most popular CSR activities related to the human resources and the least practiced were the society and environment related ones. Employee-related CSR activities exceed any other category in 9 industries, while they are the second priority in another 4 industries of the total of 19 in the sample. This indicates that companies are placing less emphasis on consumers, environment and the society and tend to cater to the needs of their internal constituents.

Limitations

One limitation of this study stems from the fact that it is conducted in one country. In order to understand better the impact of financial crisis on Greek firms, the research could be extended by including more countries and more years in the crisis period. Research on comparative CSR practices indicates significant influence on corporate policy by cultural factors and National Business Systems (Matten and Moon, 2008; Orlitzky et al. 2017). Another limitation of this study is its cross-sectional nature, not

allowing for more generalizable conclusions, since the CSR activity profiles generated may be due to circumstances present only in the years studied. A third limitation of the present research relates to the grouping of the CSR activities and the drawing conclusions on the groups rather than the individual activities. This may conceal the importance attributed by management to specific activities, while inflating the gravity of others. Moreover, although the number of activities is greater for the employee-related activities, other categories may be consuming resources of greater amounts, which is not reflected in our analysis. Finally, the study remains within the bounds of description of a phenomenon, providing no exegesis of it, not being making the link between CSR practices and organizational outcomes (Aguinis and Glavas, 2012).

Implications and Future research

The study provides useful insight to researchers, as well as business strategists, especially in countries facing problems similar to those of Greece, such as Spain, Portugal, Cyprus and potentially Italy (Diaz-Pond, 2017; Skouloudis et al. 2014). Our analysis of the choices of actions in the field of social responsibility during the crisis indicates that the decision makers place a greater emphasis on employees. It may be explained by the efforts to increase their job satisfaction when the possibilities of using other incentives are limited. The crisis period is characterized by the increased uncertainty. One of the most important problems of Greek enterprises during the years of crisis is the loss of qualified staff, which is looking for the possibilities of employment abroad. Increased sensitivity to the human factor may be an effort to keep human resources in the business. When employees are the leading stakeholder capturing the attention of management, the incentive to leave their work places is limited, as the opportunity cost increases if they leave the company. Employees are a group of stakeholders that is crucial for the effective operation of a company, as it may constitute a source of firm's competitive advantage. Positive effects of socially responsible activities on employees are also strong, based on trust relationships with employees, increased motivation and loyalty of employees, greater integration, group cohesion and a good image within the company (Rupp et al. (2006), Fukukawa et al. (2007), Kim et al. (2010), Brammer et al. (2007)). According to research by Chaudhary (2017) employee-related CSR activities had the strongest impact on employee engagement at work.

Future studies can attempt to further delve into the dynamics of the CSR activity patterns leading to greater financial performance and overall organizational effectiveness. Assuming that there are industry and firm-specific differences, as to which CSR activities produce better outcomes, it would be an important contribution to strategists and policy makers, deciding on the optimal use of corporate resources. Although there is some research on the topic by Ni et al. (2015), and Orlitzky et al. (2017), more research is needed, considering the slow convergence rate between National Business Systems

(assuming there is such convergence). Moreover, based on the findings of Orlitzky et al. (2017), even if there is similarity in National and Industry level practices, the larger portion of corporate social performance is explained by firm-level variables and this necessitates the focus of research efforts more at the level of corporate strategies and practices. Furthermore, future research can examine the potential differences in the relationship between specific stakeholder-targeted CSR activities and financial performance, since it is expected (at least by the shareholders) that the scarce resources of the company will be allocated in the optimal way for the interest of the organization (Mitchell et al. 2017; Orlitzky et al. 2017; Ni et al. 2015; Tupura et al. 2016; Pelozo and Shang, 2011).

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CORRECTIVE ACTION PLANS FOR LOCAL GOVERNMENTS AS THEIR FINANCIAL HEALTH BAROMETERS?

The implementation of corrective action plans in local government units (LGUs) takes place in the situation when they are unable to draw up a Multiannual Financial Forecast or the budget complying with the principles set out in Article 242-244 of the Public Finance Act (UFP). In the years 2012–2016, there was a six-fold increase in the number of LGUs which were obliged to implement these plans. Therefore, the aim of this paper is to assess their suitability as an actual barometer of the financial standing of local government units and propose an alternative solutions. The conducted analysis shows that the adopted legislative solutions regulating the implementation of corrective action plans are inconsistent and their effectiveness is not fully satisfactory. The paper suggests changes in current regulations and proposes alternative approach to the assessment of the financial position of local government units.

Keywords: finance, local government, debt, corrective action plan.

JEL Classification Codes: H6, H7, G28.

Introduction

The effective functioning of the local government finance system is not an end in itself. Finances are only a means to implement the main goals of local government (...), but are indispensable to achieve these goals (Malinowska-Misiąg et al., 2015). Therefore, if the local government financial standing deteriorates, the quality of public services and the scope of these services delivered to local communities are also endangered. The reasons for the decline in the financial health of local government units (LGUs)

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are very diverse. In the opinion of the Supreme Audit Office (NIK), the identification of uniform factors which determine the deterioration of LGUs financial standing is difficult due to their specificity. Deterioration of this situation results in the obligation to implement corrective actions. Local governments are obliged to implement corrective action plans for reasons that often originated in the years preceding their adoption. These reasons are usually of a long-term and often structural nature. But they may also include one-off situations, (e.g.: the fulfillment of obligations resulting from the concluded court settlement). However, the main reason for the deterioration of LGUs' financial standing is the 'investment spree' resulting from the availability of aid funds. In order to make investments co-financed from the EU funds, LGUs had to provide their own contribution financed by loans, credits or bond issue. This increased their indebtedness and aggravated the indicators monitoring their financial health. In 2012-2016, the number of LGUs implementing corrective action plans increased 6-fold, i.e. from 10 to 60. The greatest increase in the number of self-governments implementing corrective action plans took place in 2014-2015. The corrective action plans were most often implemented by municipal and rural gminas (communes), and less frequently by powiats (districts). The voivodeships (provinces) in which LGUs implemented corrective action plans were evenly distributed across the country. The only exception was the Zachodniopomorskie voivodeship with the largest number of 16 local governments implementing corrective action plans. In four provinces (Wielkopolskie, Opolskie, Małopolskie, Lubelskie) LGUs did not implement corrective action plans. Therefore, the problem of the deteriorating financial health of local governments, which resulted in the need to implement corrective plans, concerned about 2% of all LGUs². The aim of this paper is to assess the suitability of the LGU's corrective action plans as an actual barometer of their financial health and to suggest changes in this area. The study involves the critical analysis of legislation regulating self-government finance sector and the review of the literature. The analysis covers the period 2012–2016, which is identical to the period of an audit carried out by the Supreme Audit Office on the effectiveness of corrective action plans implemented in LGUs.

Regulation of corrective action plans for LGUs in the Public Finance Act

Contents of Article 240a of the Act of 27 August 2009 on Public Finance (UFP) (Journal of Laws of 2017, item 2077 as amended), specifies the consequences of non-compliance with the statutory limits on spending and incurring liabilities by LGUs. This provision was introduced in Article 1 point 19 of the Act of November 8, 2013 amending the Public Finance Act and some other acts (Journal of Laws, item 1646, as amended). This provision regulates the LGU's corrective proceedings in a situation when the Multi-

²As of January 1, 2017 there were 2808 LGUs in Poland. Information on local governments carrying out corrective action plans was collected as at the end of 2017.

annual Financial Forecast (WPF) or the budget of LGUs cannot be drawn up in accordance with the principles set out in Articles 242–244 of the Public Finance Act. The occurrence of this situation obliges the College of the Regional Chamber of Audit (RIO) to summon the local government units to develop and adopt a corrective action plan within 45 days from the date of receipt of the request. The LGU's governing body shall adopt a corrective action plan for a period not exceeding three consecutive financial years. This plan should include in particular:

- 1) analysis of the financial standing of the local government unit (including the identification of the reasons for the threat to the implementation of public tasks);
- 2) a corrective action plan with an implementation schedule;
- 3) expected financial results of individual corrective actions along with the method of their measurement.

According to Article 240a, subsection 4 of the UFP the constituting body of LGU may enact the Multiannual Financial Forecast and the budget of the unit, which do not comply with the regulation on debt limit specified in Article 242–244 of the UFP during the implementation of the corrective action plan, which received a positive opinion of the Regional Chamber of Audit (RIO). However, the failure to comply with the regulation may only concern the repayment of liabilities existing on the day of adopting the corrective action plan. This article is not uniformly interpreted. According to J.M. Salachny the reservation formulated in the cited Article 240a, subsection 4 does not apply to loans granted from the state budget for the implementation of the corrective proceedings (Salachna, 2014). A different view on this issue has been expressed by the representatives of the Regional Chamber of Audit in Rzeszów. They passed a resolution which bans incurring liabilities, including a loan from the state budget for the implementation of a corrective action plan, if their repayment will result in breaching the regulation specified in Article 242–244 UFP (Uchwała Kolegium RIO..., 2014).

During the period of implementing corrective proceedings, LGUs are not allowed to:

- 1) undertake new investments financed by a loan or issue of securities³;
- 2) provide financial assistance to other local government units;
- 3) grant sureties, guarantees and loans;
- 4) incur expenditure on the promotion of the unit;
- 5) create a Municipal Fund (Municipal Fund comprises funds separated from the gmina's budget, guaranteed for the implementation of projects aimed at improving the living standard of residents) (Walczak, 2017).

³This is a problem of interpretation, because in the budget, investments are financed by capital expenditure. Assuming that the budget shows a deficit, while maintaining the requirement set in Article 242 of the UFP, the deficit may be financed, for example, by taking out a loan. As part of capital expenditure, to determine the acceptable level of incurring debt obligations, it will be necessary to identify continued and new investments. However, if the operating surplus can cover part of the capital expenditures, it is problematic to decide whether these expenses are related to new or continued investments.

LGU is also obliged to limit the implementation of tasks other than mandatory and financed from own resources. It should also be noted that starting from the month following the month in which the corrective action plan was adopted, until the day the corrective procedures are completed, the amount of expenditure for:

- 1) remuneration of councilors,
- 2) remuneration of the LGU's management board,

cannot exceed the amount of expenditure incurred for this purpose in the year preceding the year in which the resolution regarding the corrective actions was taken.

In the period preceding the entry into force of Article 240a the corrective proceedings for LGUs were not regulated by generally applicable regulations (except for the reference in the contents of Article 224 of the UFP). However, it should be emphasized that the mentioned provisions of Article 224 and 240a of the UFP are not consistent. As a result, in the current legal status there are two modes of implementing corrective proceedings: pursuant to Article 224 of the UFP or pursuant to Article 240a of the UFP. According to the provisions of Article 224 of the UFP, LGU may be granted a loan from the state budget if:

- 1) LGU carries out a corrective action plan or proceeds to its implementation and
- 2) analysis of the corrective action plan shows that the following criteria will most probably be met:
 - a) Improvement of the financial health of the local government unit and its effectiveness in carrying out statutory tasks.
 - b) Principles set out in Article 242-244 UFP will be met at the end of the year in which the loan repayment deadline expires.
 - c) Loan repayment with interest will be secured.

The loan is interest-bearing and the interest rate is determined by the contract (Article 115, subsection 2 of the UFP). The loan and interest cannot be cancelled (Article 224, subsection 2 of the UFP). LGU submits a loan application to the Minister of Finance. The loan application must enclose the corrective action plan, documents containing data enabling the current and forecasted assessment of the financial standing of the entity as well as proposed collateral to secure the loan (Article 224, section 3 of the UFP). The Minister of Finance issued the Ordinance of December 23, 2010 on loans from the state budget granted to local self-government units as part of prudential or corrective proceedings (Journal of Laws No. 257, item 1730), which includes:

- 1) the detailed scope of data contained in the loan application,
- 2) list of documents to be enclosed in the application,
- 3) the type and scope of accepted collateral⁴.

⁴ The catalogue of collaterals securing the loan is closed and comprises bank promissory notes or notarial act of submission to execution under Article 777, section 1, subsection 5 of the Act of November 17, 1964, the Code of Civil Procedure (Journal of Laws of 2016, item 101, as amended).

Conclusions from the audit on the implementation of corrective action plans in LGUs conducted by the Supreme Audit Office

The Supreme Audit Office (NIK) audited the LGUs' corrective action plans mainly to check their compliance with Article 240a, subsections 2 and 3 of the UFP (period of development and content of the corrective action plan) The audit was carried out in 14 LGUs implementing 15 corrective action plans in the period 2012-2016⁵ (*Skuteczność programów naprawczych ...*, 2017). It was also checked if the restrictions resulting from Article 240a subsections 5 and 6 of the UFP were observed. Furthermore, the audit verified if the causes of the deterioration of the financial standing of local governments were correctly identified as well as the feasibility of corrective actions with regard to the results to be accomplished. Their achievement was supposed to eliminate the threats to the implementation of public tasks and lead to compliance with the regulation specified in Articles 242 and 243 of the UFP. The consistency of data with the figures included in the Multiannual Financial Forecast (WPF) was also assessed. In the period under scrutiny, i.e. the years 2012-2016, the Minister of Finance granted corrective loans in the total amount of PLN 298.1 million to LGUs conducting or initiating corrective proceedings.

The audit carried out by the Supreme Audit Office (NIK) included both positive and negative assessments of the implementation of corrective action plans in local government units. The positively evaluated aspects included the fact that in the majority of audited local governments the condition specified in Articles 242-243 of the UFP was met. This means that almost all of the controlled corrective action plans have resulted in the improvement of the financial health of LGUs. Nevertheless, due to the short period of time which passed between the completion of the corrective actions (most often in 2016) and the audit, NIK refrained from determining if the results were lasting. The positive outcome achieved by LGUs was partly determined by the loans granted by the Minister of Finance. The loan applications were subject to a thorough verification regarding the reliability of the information provided by local government units. The loans served to eliminate the main causes for the deterioration of the financial health of the audited entities. Taking out loans from the state budget was economically beneficial for local governments as debt maturity dates have been extended, and annual debt service expenditure has been reduced. The Minister of Finance also monitored the use of loans by LGUs. To this end, fiscal controls were carried out at LGUs and the LGUs' compliance with the ban on incurring debts without the prior written consent of the Minister of Finance was monitored.

In the quoted report on the effectiveness of corrective action plans implemented in LGUs the following aspects were negatively evaluated:

⁵ Gmina Pełcław implemented the first corrective action plan in 2014 and in the years 2016–2017 the second corrective action plan.

1. Lack of determination of the expected financial results of part of corrective actions and/or the measurement methods. Failure to meet these requirements was inconsistent with UFP regulations. Over half of the controlled corrective actions did not achieve the planned financial results. The corrective action plans most often assumed that the taken actions would result in a reduction in expenditure and an increase in budget revenues.
2. Failure to comply with statutory limitations resulting from the implementation of corrective action plans. This, however, did not affect the effectiveness of the carried out actions. During the implementation of corrective action plans, 21% of audited local government units, incurred expenditures on promotion in the total amount of PLN 57.6 thousand which breached the regulation set out in Article 240a, section 5, subsection 4 of the UFP.
3. Failure to limit the implementation of tasks other than mandatory, financed from own resources, thereby violating Article 240a, section 5, subsection 6 of the UFP and incurred expenditure in the total amount of PLN 254.5 thousand.
4. Failure to develop reliable corrective action plans (this concerned less than half of the audited plans). A recurrent irregularity was the failure to specify what financial results should be achieved by the corrective actions and how they would be measured, which was inconsistent with Article 240a, section 3, subsection 3 of the UFP.
5. Discrepancies in the assessments of corrective action plans carried out by the Supreme Audit Office (NIK) and Regional Chambers of Audit (RIO). This situation concerned 43% of cases of audited LGUs. These discrepancies regarded the assessment of non-compliance of the corrective action plans with the UFP regulations.
6. Irregularities in financing the development of corrective action plans in the amount of PLN 51.6 thousand (in the first case, the expenditure was inconsistent with the authorization defined in the budget resolution, in the second case – the internal procedures for awarding public contracts were not respected).
7. Failure to meet deadlines in the implementation of corrective actions specified in most corrective action plans. In 71% of audited LGUs, the corrective actions were delayed or their implementation was cancelled.

Proposed changes in the assessment of the financial position of local government units resulting in the implementation of corrective action plans

If we assume that the obligation to implement corrective action plans by LGUs is a legislative and real proof of their difficult financial position and, as concluded by the Supreme Audit Office, the adopted scope of these actions is not fully satisfactory; an attempt may be made to suggest changes to the assessment of LGUs' financial standing. These proposals could be divided into two groups. The first group would be characterized by an evolutionary approach to change. It could include a proposal to change the

scope of competencies related to the supervision of LGUs as well as an amendment to the currently applicable provisions regarding the corrective action plans. The second group would include changes of a more revolutionary nature (i.e. the introduction of new regulations that would radically change the current conceptual approach).

In the first case, there would be changes in the division of competences regarding the supervision of LGUs between the Prime Minister, voivodes (province governors) and Regional Chambers of Audit (RIO). Pursuant to the currently binding regulations, this supervision over LGUs is not cohesive. The tasks in the field of financial supervision over LGUs should be performed by the RIO. Resolutions on the adoption of corrective action plans are in turn partially reviewed by voivodes, but only in cases where local governments apply for loans granted from the state budget. In this case, the voivode issues an opinion on the projects proposed for implementation by local government units as part of the corrective proceedings as regards the compliance with the law of the planned corrective actions. RIOs provide voivodes with information on the financial standing of local governments, mainly in the cases when LGUs are threatened with being placed into receivership or when RIOs negatively evaluate LGU's budget implementation reports and information on the status of LGU's property. However, these are all *ex post-facto* actions. Thus, the reliability of the implementation of the adopted assumptions of corrective action plans is not verified by any supervisory authority. On the other hand, voivodes do not generally collect information on the financial position of local governments operating in their territories, and thus they do not monitor the implementation of LGUs' corrective action plans. However, it should be remembered that in addition to compliance with the regulations set out in Articles 242 and 243 of the UFP, which is monitored by the RIOs, the essence of the corrective action plan is the elimination of the threat to the implementation of public tasks, including tasks ordered by the voivode. Therefore, situations may arise in which voivodes find out about the bad financial situation of local governments only when it is necessary to place them into receivership. Consequently, the obligation to draw up annual reports on the implementation of corrective action plans should be considered. These reports should be submitted to RIOs and voivodes to ensure ongoing monitoring of the financial health of local governments, accurate implementation of corrective actions set out in the corrective action plans, as well as compliance with statutory prohibitions and restrictions on local government activities resulting from the adoption of corrective action plans.

The first group of proposed changes should also include amendments to the currently binding provisions on corrective action plans which would regard the following aspects:

1. Interpretation of Article 240a, subsection 6 of the UFP. A teleological interpretation of this provision indicates that the expenditure regime may only apply to those components which are incurred upon the employer's decision, (but it should apply to expenditure arising from employees' entitlements like seniority bonuses, additional annual remuneration, severance pay in connection with retirement or disability benefit). Consequently,

it should refer to the prohibition of increasing expenditure on basic pay, special allowances and functional benefits.

2. Inconsistencies in the provisions of Article 224 and 240a of the UFP regarding:

2.1. The period for which a corrective action plan may be approved with the period for which a loan from the state budget may be granted;

2.2. Failure to use loans from the state budget by self-governments carrying out corrective action plans – it should be clarified that the loan granted from the state budget is not subject to the restrictions on incurring new liabilities;

2.3. Failure to determine the procedure for early closure of corrective actions and no interpretation regarding the final closure of a corrective action (i.e. what date / period should be adopted in this case);

2.4. Determining the possibility of introducing changes in the course of the implementation of corrective action plans, specifying in which situations and in what mode they can be made / reviewed and which elements of the corrective action plans may be adjusted.

3. Imprecise provision of Article 240a, subsection 5, point 5 of the UFP on the prohibition of the creation of a Municipal Fund by LGUs during the corrective proceedings. The Municipal Fund is created much earlier (the self-governing body decides to separate the fund by 31 March of the year preceding the year for which the fund is established) compared to the corrective action plan. In the light of the above, it seems that the intention of the discussed instruction is first of all the prohibition of disbursement of funds from the Municipal Fund, which should however be clarified, by the legislator. It should be enacted that during the implementation of the corrective action plan, new expenditure from the Municipal Fund created before the plan was adopted is banned. Consequently, amendments should be made to the content of the Act of 21 February 2014 on the Municipal Fund (Journal of Laws of 2014, item 301, as amended). The new regulation should provide that tasks initiated before the adoption of the corrective action plan could be completed during its implementation

4. Clarification in the content of Article 240a subsection 6 of the UFP specifying which expenditure related to remuneration of councillors and LGU's management board may not exceed the legally binding limit.

As for the changes of more revolutionary character, an alternative approach to assessing the financial health of LGUs could go beyond checking compliance with the regulation provided in Articles 242-244 of the UFP. In this context, the implementation of corrective action plans in LGUs could be considered in the case of:

- 1) mismanagement of free reserves;
- 2) incurring liabilities with the use of non-standard debt instruments increasing the actual debt.

Mismanagement of free reserves refers to the content of Article 217, subsection 2, point 6 of the UFP. It defines free reserves as a surplus of cash in the current account of the LGU's budget, resulting from settlements of issued securities, credits and loans from

previous years. It can be concluded that the free reserves include the funds defined in Article 2017 of the UFP from 2009, as well as funds coming from the undistributed cumulative budget surplus and other available funds from a given period, except the funds from the state budget subsidy (Rutkowska-Tomaszewska, 2012). If the free reserves are not taken into account as a source of funding to close the budget gap and instead new loans are incurred and securities issued for the same purpose, such actions may be considered doubtful with regard to good practices in public financial management and fiscal prudence⁶. It should be noted that the management of public funds is subject to the budgetary discipline regulations, that is, the obligation to observe the principles of legality and economic efficiency defined by law (Chojna-Duch, 2003).

The financial situation of LGUs is also affected by entering into contracts for so-called non-standard debt instruments. Their use is permitted by the Regulation of the Minister of Finance of December 28, 2011 on the detailed manner of classifying debt titles classified as state public debt (Journal of Laws of 2011, No. 298, item 1767), which in its content lists a catalogue of debt items classified as state-owned public debt. Local and regional authorities take various methods to circumvent statutory debt regimes. They include:

- 1) Concluding false debt assumption and debt restructuring agreements.
- 2) Concluding factoring agreements. Pursuant to the definition adopted by the Convention on International Factoring (Ottawa 1988) the factoring company is to perform at least two of the following functions:
 - finance for the supplier, including loans and advance payments
 - maintenance sales ledger
 - collection of receivables
 - protection against default in payment by debtors (Filipiak, Ziolo, 2016).
- 3) Other quasi-financial products with the features of repayable financing instruments: subrogation, return sale and leaseback.

By not including the non-standard debt instruments into debt, the LGU increases its actual indebtedness, leading to a situation where it may not be able to draw up the Multiannual Financial Forecast or the budget complying with the principles set out in Articles 242-244 of the UFP. The RIO report of 2016 titled: 'Non-standard financing instruments for budgetary needs of local government units' shows that LGU's liabilities total PLN 274.5 million (including main receivables and any side receivables related to a given instrument, for example, rent, interest, commissions, leasing installments, repayment deposits, etc.).

⁶ Legitimate reasons for the application of this solution may apply to exceptional situations e.g. securing funds for pending lawsuits and appellations which may result in urgent payments or tax refunds

Summary and Conclusions

The conducted analysis demonstrates that the assessment of the legislative framework for the local governments' corrective action plans in the context of their suitability as an actual barometer of LGU's financial health is not unambiguously positive. Launching corrective action plans in cases like the inability to draw up a Multiannual Financial Forecast or the budget complying with the principles set out in Articles 242-244 of the UFP seems to be insufficient. Hence the proposed solutions representing evolutionary and revolutionary approaches to legislation regulating LGU's financial position assessment procedures. The evolutionary approach requires a sufficient number of votes to enact the amendments to the existing legal acts in the parliamentary procedure and the signature of the president. However, in order to implement the proposed solutions of a more fundamental and revolutionary nature, a much more important condition than the support on the legislative path will have to be met. The local government finance system should be reviewed in an unconventional way from an interdisciplinary perspective. Therefore, further efforts to work out detailed solutions within the proposed framework, should be supported by academic environments representing various scientific disciplines.

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THE EVALUATION OF THE SYSTEM OF FINANCING THE INTEGRATION COURSES IN GERMANY

Persons intending to live in Germany should have a certain knowledge of the German language and about the country in general. Foreigners may acquire the necessary skills and knowledge by participating in integration courses. They are financed by the state as well as by the immigrants themselves. The aim of the article is to evaluate the system of financing such courses that was adopted in Germany. As part of the justification for selecting this particular topic it is worth mentioning that there are no analyses on this subject available in the source literature. Furthermore, also the geopolitical situation in the world and the influx of refugees in Europe (including Germany) that results from it serve to prove just how current and important with regard to cost economics the issue of financing immigrant integration actually is. The analysis has been carried out on the basis of German legal acts and the financial data obtained from the Federal Statistical Office and the Federal Office for Migration and Refugees. The article covers the period January 2017 – July 2018 and is based on the method of document analysis.

Keywords: finances, system, immigrants, Germany, integration course.

JEL Classification Codes: F15, F36.

Introduction

In the world of globalisation and cultural intermingling the process of integration plays a very important role. Integration is an interdisciplinary term, and as such can be interpreted in different ways. The Dictionary of Polish defines social integration as a process of merging that happens on various social levels (Słownik języka polskiego PWN 2018), whereas in the encyclopaedic sense social integration is a “condition of organisation,

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combination and harmonisation of different elements constituting a social community, pertaining to the sphere of norms and values, actions and unity between individuals and social groups” (Encyklopedia PWN 2018). It is important to be able to integrate with one another for the purpose of socio-economic development despite different historical experiences, cultural diversity, language or legal differences. In the light of the migration from Africa to Europe, which has been gaining force over the last several years, the importance of the integration process has only increased. Europeans start having doubts about “the negative impact the influx of too large numbers of immigrant communities may have on their national identity and general social solidarity, social protection systems or levels of security” (Grzymała-Kazłowska, Łodziński 2008); at the same time it can be observed that immigrant groups separate from the rest of the society for the fear of not being allowed to reconcile their cultural values with the European ones. Social observations confirm that the most effective way towards achieving integration leads through the labour market, so the employers and public bodies play a key role in it. “We cannot speak of integration, if a foreigner is employed illegally or works on the basis of task-specific contracts, performs their duties in inhumane conditions or in isolation” (Mikulska, Patzer 2012). Decent work with fair remuneration constitutes an important integration factor. Unemployment, living in poverty and social exclusion certainly do not facilitate the process. However, providing social support (e.g. accommodation, food, clothes, health insurance), assistance in filling in the documents that confirm the level of education and language skills, or professional activation initiatives require financing. The European Union has also noticed the importance of these aspects. In the process of realising its structural policy, the EU strives towards economic and social cohesion by facilitating the use of resources and increasing competitiveness not only of individual member states, but also of the Union as a whole. Such actions are defined by the priorities of the structural policy, among others priority no. 8 – promoting sustainable and quality employment and supporting labour mobility; priority 9 – promoting social inclusion, combating poverty and any discrimination, and priority 10 – investing in education, training and lifelong learning. (Ministerstwo Rozwoju 2015).

The beginning of the process of the UK leaving the European Union is the reason for uncertainty regarding the future of millions of immigrants living in the British Isles. Those who have been legal residents for at least five years “may apply for a permanent residence permit which will allow them to live and work in the United Kingdom without any restrictions” (Borońska-Hryniewska 2016). However, those who will not qualify for permanent residence could cause another migration wave towards Western Europe (including, for instance, Germany). That is why initiatives aimed at integration have been gaining in importance.

Germany is relatively often chosen by immigrants as the country of permanent residence. It is estimated that the country received 1 391 515 immigrants in 2017, mainly from countries such as Romania (194 420), Poland (170 460), Bulgaria (83 365), Syria

(70 650), Italy (65 515) and Croatia (56 265) (Statistisches Bundesamt, 2018a). The scale of this phenomenon and the problems connected to securing financial means for integrating migrants deserve an analysis. Even more so, as in the current economic conditions in Germany – with the country's GDP in 2017 amounting to €3 263.35 billion (Statistisches Bundesamt, 2018b) and the unemployment rate oscillating around 5.7% (Statistisches Bundesamt, 2018c) – such an evaluation of integration initiatives may be particularly interesting for practical and learning purposes.

The issues described above have until now not been a subject of many analyses. Therefore, this article constitutes an attempt to fill the existing gap in the economic literature. The aim of the article is to evaluate the system of financing the process of integrational support for immigrants in Germany. The analyses have been carried out with the help of the following sources of data: German legislation and financial data obtained from the Federal Statistical Office and the Federal Office for Migration and Refugees. The analysed period encompasses the timeframe between January 2017–July 2018. The analysis is based on the method of document analysis with a particular emphasis on German source literature.

1. The scope of the system of financing integration measures in Germany

Immigrants, in order to function well in the new society, should know the official language of the country in which they are living. The knowledge of history, culture, and above all the law is very important for taking up work, completing administrative errands or, in case of parents, for supporting one's children in their education and development. It is with such situations in mind that the idea of integration courses was developed in Germany in 2005. The following documents constitute the legal basis for this type of an integration offer:

- 1) §43 and ff of the Residence, Employment and Integration of Foreigners within the Territory of the Federal Republic of Germany Act (Residence Act) (Gesetz über den Aufenthalt, die Erwerbstätigkeit und die Integration von Ausländern im Bundesgebiet (Aufenthaltsgesetz – AufenthG) vom 25. Februar 2008 (BGBl. I 2017 S. 162));
- 2) Ordinance on Integration Courses (Verordnung über die Durchführung von Integrationskursen für Ausländer und Spätaussiedler (Integrationskursverordnung IntV) vom 13. Dezember 2004 (BGBl. I 2004 S. 3370)).
- 3) Regulation on the examination and verification procedures for the final tests of integration courses (Verordnung über die Prüfungs- und Nachweismodalitäten für die Abschlusstests des Integrationskurses (Integrationskurstestverordnung – IntTestV) vom 9. April 2013 (BGBl. I S. 801)).

The aim of the integration course is to enable the participants to achieve a sufficient knowledge of German (level B1) in accordance with § 43(3) of the Residence, Employment and Integration of Foreigners within the Territory of the Federal Republic of Germany Act and with § 9(1)(1) of the Federal Law on Refugees and Exiles (Gesetz über die Angelegenheiten der Vertriebenen und Flüchtlinge (Bundesvertriebenengesetz – BVFG) vom 10. August 2007 (BGBl. I S. 1902)) as well as to convey knowledge about the values of the democratic state of the Federal Republic of Germany and the principles of the rule of law, equality of rights, tolerance and religious freedom (Integrationskursverordnung 2004). Foreigners should become familiar with the conditions of living in Germany in order to be able to function on their own in all areas of everyday life without the support or intermediation by third parties. The following persons are eligible to participate in the course:

- 1) foreigners who are permanent residents in the federal territory if they have received a residence permit for employment purposes, for the purpose of subsequent immigration by dependents, on humanitarian grounds or as a long-term resident i.e. having the legal right to attend the course in accordance with § 44(1) of the Residence, Employment and Integration of Foreigners within the Territory of the Federal Republic of Germany Act,
- 2) exiles, in accordance with § 4(1) or (2) of the Federal Law on Refugees and Exiles as well as members of their families in accordance with § 7(2)(1) of the Federal Law on Refugees and Exiles, or persons entitled to attend the course in accordance with § 9(1)(1) of the Federal Law on Refugees and Exiles i.e. immigrants of German origin who arrived in Germany from Eastern European countries,
- 3) persons allowed to participate in accordance with § 44(4) of the Residence, Employment and Integration of Foreigners within the Territory of the Federal Republic of Germany Act i.e. especially the foreigners whose participation obligation expired, but who demonstrate a willingness to attend the course, foreigners who have permission to remain pending the asylum decision and who are expected to be allowed to remain in Germany lawfully and permanently as well as German citizens, if their command of German is insufficient and they have special integration needs,
- 4) foreigners obliged to attend the course in accordance with § 44a(1)(1)(2) or § 44a (1) (3) of the Residence, Employment and Integration of Foreigners within the Territory of the Federal Republic of Germany Act i.e. foreigners receiving benefits in accordance with the Second Book of the Social Code or foreigners who have not fulfilled their participation obligations for reasons they are accountable for, or who have not passed the final test;
- 5) foreigners who have special integration needs and the Foreigners Office obliges them to attend an integration course, as described in § 44a(1)(3) of the Residence, Employment and Integration of Foreigners within the Territory of the Federal Republic of Germany Act,

6) foreigners obliged to attend the course in accordance with § 44a(1)(4) of the Residence, Employment and Integration of Foreigners within the Territory of the Federal Republic of Germany Act i.e. persons referred to in §44(4) receiving benefits on the basis of the Asylum Seekers' Benefits Act (Verordnung über die Durchführung von Integrationskursen für Ausländer und Spätaussiedler, 2004).

The above-mentioned groups of persons are entitled to a one-time participation in the integration course. The right to attend expires if the entitled person, due to the reasons ascribable to them, does not commence the integration course within a year from the moment of registration with an official course provider or if the participation in the course exceeds the one-year period (Verordnung über die Durchführung von Integrationskursen für Ausländer und Spätaussiedler, 2004).

In accordance with § 44(4) of the Residence, Employment and Integration of Foreigners within the Territory of the Federal Republic of Germany Act, a foreigner who does not possess or no longer possesses an attendance entitlement may still be allowed to participate in the course provided there are free places available. This provision is also applicable to German citizens if they do not demonstrate a sufficient command of German or have special integration needs, as well as to foreigners who:

- 1) have a residence permit and who are expected to remain in Germany legally and permanently;
- 2) have been granted a permit for a tolerated stay in accordance with § 60a(2)(3) of Residence, Employment and Integration of Foreigners within the Territory of the Federal Republic of Germany Act; or
- 3) have a residence permit in accordance with § 25(5) of Residence, Employment and Integration of Foreigners within the Territory of the Federal Republic of Germany Act (Gesetz über den Aufenthalt, die Erwerbstätigkeit und die Integration von Ausländern im Bundesgebiet, 2008).

Each integration course consists of two parts: language course and orientation course i.e. introduction to social and civic competences. Within the framework of the general integration course the language part encompasses 600 lessons (45 minutes each). The language part covers important topics from everyday life regarding, among others, the following issues:

- 1) „work and career,
- 2) basic and further training,
- 3) bringing up and raising children,
- 4) shopping/trade/consumption,
- 5) leisure time and social interaction,
- 6) health and hygiene/human body,
- 7) media and media use, and
- 8) housing”. (Bundesamt für Migration und Flüchtlinge, 2018a).

The above-mentioned topics vary depending on the type of the course. The language part ends with the final exam “German test for immigrants” that consists of a written and oral part. The written exam lasts 100 minutes and serves to verify the listening, reading and writing skills (writing a short letter). The oral exam lasts approximately 15 minutes and consists of a short introduction and a conversation with the examiners on selected topics (Verordnung über die Durchführung von Integrationskursen für Ausländer und Spätaussiedler, 2004).

As part of the general course, the introduction to social and civic competences encompasses 100 hours (Verordnung über die Durchführung von Integrationskursen für Ausländer und Spätaussiedler, 2004). The following issues are discussed in this part of the course:

- 1) „the German legal system, history and culture,
- 2) rights and obligations in Germany,
- 3) ways of co-existing in society, and
- 4) important values in German society, e.g. freedom of worship, tolerance and equal rights”. (Bundesamt für Migration und Flüchtlinge, 2018a).

The orientation part of the course ends with the final test “Life in Germany” that consists of 33 questions. A minimum result of 15 correct answers is required to pass the test (Verordnung über die Durchführung von Integrationskursen für Ausländer und Spätaussiedler, 2004). In order to obtain a skills certificate in accordance with § 10(1)(1) of the Citizenship Act, it is necessary to answer at least 17 questions correctly (Verordnung über die Durchführung von Integrationskursen für Ausländer und Spätaussiedler, 2004).

Apart from the general courses there are other types of courses available, as presented in Table 1.

Table 1. Description of the special types of integration courses in Germany in 2017 and 2018

No.	Name of the integration course	Topics covered during the course	Hours of the course
1.	Integration course including literacy skills	Topics from the general course + learning how to read and write in Latin script	1000–1600
2.	Integration course for persons learning a different alphabet	Topics from the general course + learning the Latin alphabet for persons who have learned reading and writing in a different writing system.	1200
3.	Integration course for women	Topics from the general course + getting to know some elements of the educational system in Germany (e.g. the nursery school and/or school of the participants' children). Furthermore, topics of special interests to the participants, such as teaching and bringing up children or similarities and differences between the life of women in Germany and in the participants' countries of origin, are also discussed during the course.	1000

No.	Name of the integration course	Topics covered during the course	Hours of the course
4.	Integration course for parents	Topics from the general course + getting to know the nursery school or school of the participants' children. The person conducting the course introduces the parents to their children's teachers and tutors. The participants learn in a group of parents who have the same or similar interests and obtain a lot of useful information on the structure of the German education system and the possibilities available to them and their children in Germany.	1000
5.	Integration course for young adults	Topics from the general course + the participants establish contacts with education institutions and employers as well as discuss topics such as: 1. „school and training, 2. work and career, 3. family and living together harmoniously, 4. health and healthcare provision, 5. culture and leisure” (Bundesamt für Migration und Flüchtlinge, 2018f).	1000
6.	Catch-up course	This course is aimed at persons who have lived in Germany for a few years but have not had the chance to learn German and would like to catch up. The participants prepare for the linguistic requirements of the labour market and social life as well as familiarise themselves with the most important facts regarding politics, history, culture and the legal system in Germany.	1000
7.	Intensive course	The thematic scope of the general course compressed to a reduced number of hours.	430

Source: Compiled by the author on the basis of: Bundesamt für Migration und Flüchtlinge, 2018b; Bundesamt für Migration und Flüchtlinge, 2018c; Bundesamt für Migration und Flüchtlinge, 2018d; Bundesamt für Migration und Flüchtlinge, 2018e; Bundesamt für Migration und Flüchtlinge, 2018f; Bundesamt für Migration und Flüchtlinge, 2018g; Bundesamt für Migration und Flüchtlinge, 2018h.

If, despite regular participation in the course and having used up the full limit of hours of they were entitled to, the participant does not pass the B1 German language test, they can apply for a one-time repetition of 300 hours of the course and retake the test again without any additional costs.

All the aspects discussed during the integration courses (not only from the theoretical, linguistic point of view, but also from the practical one) fit in very well with the key elements of the holistic approach of the EU's integration policy i.e. above all:

- 1) integration on the labour market;
- 2) education and language command;
- 3) housing and urban policies in cities;
- 4) health protection and social assistance (Kicinger 2005).

2. Financial implementation of the integration courses

The German Federal Office for Migration and Refugees repays the costs of organising integration courses for persons entitled to attend them to the individual course providers in accordance with § 14 and ff of the Ordinance on Integration Courses. From 1 June 2016 the rate for a single lesson was set at €3.90, reduced by 50% if the participant pays their share i.e. the participation fee. The Office repays the costs after every 100 lessons of the linguistic course and after conducting the entire orientation course (Bundesamt für Migration und Flüchtlinge 2018i). In order to attend the course the participant needs to pay a fee to the Federal Office for Migration and Refugees that amounts to 50% of the applicable rate according to § 20(6) of the already quoted Ordinance on Integration Courses. The fee does not have to be paid in total at once. It is possible to pay in instalments, in advance for every 100 lessons.

In accordance with § 43(3)(4) of the Residence, Employment and Integration of Foreigners within the Territory of the Federal Republic of Germany Act the person who provides for the potential participant of the course is also obliged to pay the fee. This provision serves as a legal basis for waiving the fee for persons who receive unemployment benefits or benefit from social assistance. If paying the fee poses a particular difficulty due to the economic or personal situation of the course participant they can also apply for a fee waiver. The costs of the exam are covered by the Federal Office for Migration and Refugees (Bundesamt für Migration und Flüchtlinge 2018i). If the participant has been granted a waiver for the participation fee, receives an unemployment benefit or benefits from social assistance, they can also apply for a subsidy for travel costs reimbursement. Such a reimbursement is based on the precondition that the distance between the place of residence and the venue of the course is at least 3.0 km. The Federal Office can also support the participation in the course by providing for childcare for the participants' children if there is no other local institution providing childcare and if they are not subject to compulsory education (Verordnung über die Durchführung von Integrationskursen für Ausländer und Spätaussiedler, 2004).

In 2017, 376 468 persons were eligible to participate in the course, including 257 925 persons obliged to participate, and 118 543 persons who could attend on a voluntary basis. In the end 291 911 people participated in the integration courses – 193 054 (66.1%) of those obliged by the state and 98 857 (33.9%) voluntary participants (Bundesamt für Migration und Flüchtlinge, Referat Statistik 2018).

The participation structure of the integration courses according to gender is presented in Table 2.

Table 2. Participants breakdown by gender in 2017

Type of course	Men		Women		Total number of participants	
General integration course	102713	35,2%	81317	27,9%	184030	63,0%
Integration course including literacy skills	45687	15,7%	31202	10,7%	76889	26,3%
Integration course for parents and for women	1455	0,5%	6556	2,2%	8011	2,7%
Catch-up course	37	0,0%	22	0,0%	59	0,0%
Intensive course	281	0,1%	291	0,1%	572	0,2%
Integration course for young adults	6258	2,1%	2749	0,9%	9007	3,1%
Integration course for persons learning a different alphabet	7573	2,6%	4358	1,5%	11931	4,1%
Other integration courses	876	0,3%	536	0,2%	1412	0,5%
Total	164880	56,5%	127031	43,5%	291911	100,0%

Source: Compiled by the author on the basis of Bundesamt für Migration und Flüchtlinge, Referat Statistik 2018.

The cost of the integration courses for voluntary participants depends on the number of lessons of the chosen course (See: Table 3)

Table 3. The cost of the integration courses for an individual participant

Type of course	Number of lessons		Cost of a single lesson	Cost of the entire course	
	min.	max.		min.	max.
General integration course	700		1,95 €	1 365	
Integration course including literacy skills	1000	1300		1 950 €	2 535 €
Integration course for persons learning a different alphabet	900	1000		1 755 €	1 950 €
Integration course for women	1000			1 950 €	
Integration course for parents	1000			1 950 €	
Integration course for young adults	1000			1 950 €	
Catch-up course	1000			1 950 €	
Intensive course	430			838,5 €	

Source: Compiled by the author on the basis of Bundesamt für Migration und Flüchtlinge, Referat Statistik 2018.

The minimal remuneration for an individual teacher employed by the provider of the integration courses amounts to €35 for a single lesson (Bundesamt für Migration und Flüchtlinge, 2016). The course provider also receives a one-time payment of €30 for conducting a placement test that verifies the level of German and determines the type and part of course the person should attend. The costs of the final exam are also covered by the Federal Office. For each person examined the Office pays €91.44 for the linguistic part and €18.65 for the orientation part (Bundesamt für Migration und Flüchtlinge, 2018i). The cost of conducting the integration course for an individual par-

participant (entitled to a fee waiver) including the final exams varies depending on the profile of the participant (See: Table 4).

Table 4. The cost of the integration course paid by the Federal Office

Type of course	Number of lessons		Teacher's remuneration (EUR)		Cost of tests (EUR)		Total cost of the course including exams for one participant (EUR)	
	min.	max.	min.	max.	German for immigrants	Life in Germany	min.	max.
General integration course	700		24500		91,44	18,65	24 610,09	
Integration course including literacy skills	1000	1300	35000	45500			35 110,09	45 610,09
Integration course for persons learning a different alphabet	900	1000	31500	35000			31 610,09	35 110,09
Integration course for women	1000		35000				35 110,09	
Integration course for parents	1000		35000				35 110,09	
Integration course for young adults	1000		35000				35 110,09	
Catch-up course	1000		35000				35 110,09	
Intensive course	430		15050				15 160,09	

Source: Compiled by the author on the basis of Bundesamt für Migration und Flüchtlinge, Referat Statistik 2018.

Table 4 presents the minimal cost of the course for one person paid by the Federal Office. However, it has to be taken into account that the calculations are based on the minimal remuneration rate and do not include any additional payments for the teachers e.g. for conducting a special type of course or travel costs subsidies. In 2017 the German state paid €610 077 000 for integration courses (Bundesministerium der Finanzen, 2017).

In the long term perspective the immigration on humanitarian grounds may in fact lessen the burden on the public finances in Germany, provided that a successful integration of immigrants into the labour market can be achieved. The stability of public finances improves when immigrants reach the average fiscal capacity of qualified national residents, and the integration process required for it to happen lasts a little longer than 10 years. The failure to integrate immigrants into the qualified labour market may, in a long-term perspective, lead to additional and substantial financial burdens for the citizens. Public spending on effective vocational training and faster economic integration of immigrants could result in a middle- and long-term return in the form of higher revenues from taxes and contributions as well as lower expenses for the basic social

assistance. Perceived from the perspective of the future returns, today's expenses also serve a fiscal aim – ensuring the stability of public finances in a long-term perspective. (Bonin 2016)

Conclusions

The analysis of the system of financing integration courses in Germany proves that the Federal Office for Migration and Refugees is the main payer for these courses. This results, among others, from the fact that the majority of the course participants are entitled to a fee waiver due to their difficult economic situation, as social assistance constitutes their only source of income. A complete waiver of the examination fees for all course participants is another burden for the German state. Travel cost subsidies and childcare arrangements are important factors that encourage immigrants to participate in the integration courses. In the light of the growing numbers of immigrants arriving in Germany, a need to increase Federal spending may be expected in order to ensure an effective integration process. Therefore, the policy of the Federal Government in Germany in the future may be directed towards:

- 1) increasing the participants' share in the costs of the integration process;
- 2) excluding travel and childcare cost reimbursement from federal financing;
- 3) extending the catalogue of persons obliged to complete integration courses.

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LOCAL GOVERNMENT DEBT CONTROL METHODS BY REGIONAL CHAMBERS OF AUDIT

The aim of this paper was to evaluate the system of control over local government debt exercised by the Regional Chambers of Audit (RCA) and to present the conclusions and expectations resulting from this assessment both generated by the RCA and applicable to the RCA within the scope of conducted debt audits. The method applied to assess legal regulations included analysis of legislative documents, i.e. primarily the Constitution, the Public Finance Act of 27 August 2009, Act of 7 October 1992 on Regional Chambers of Audit and the Regulation of the Minister of Finance of 28 December 2011 on the detailed manner of classifying debt titles classified as public debt. The analyses contained in this paper cover the period from 2014, when the Individual Debt Ratio defined in art. 243 of the Public Finance Act came into force, until 2018. The presented data and regulations confirm the correct functioning of the extensive control system in this respect. Every year, the number of negative assessments of local government debts decreases. However, it seems necessary to eliminate negative phenomena, such as: extending debt repayment period, use of unlimited types of debt titles and falsification of reporting data. The elimination of these negative phenomena may be achieved through amendments to the currently binding law regulating obtaining funding by local governments.

Keywords: debt, deficit, budget, Regional Chamber of Audit, local government, opinion, supervision, audit.

JEL Classification Codes: H63, G28.

Introduction

Local governments (hereinafter: LGs) and their unions are part of the public finance sector, which follows from the provision of art. 9 sec. 2 of the Public Finance Act (here-

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inafter: PFA) of 27 August 2009 (Journal of Laws of 2017, item 2077, as amended). Entities in this sector have specific rights and obligations in the field of financial management, including those related to obtaining funding and debt management. The debt incurred by a local government as an entity of the public finance sector is part of the state public debt, limited by the legislator in accordance with art. 216 sec. 5 of the Constitution of the Republic of Poland. According to art. 72 sec. 1 of the PFA, state public debt includes liabilities of the public finance sector from the following titles:

- 1) issued securities for cash receivables;
- 2) taken out loans;
- 3) accepted deposits;
- 4) due liabilities:
 - resulting from separate acts and final court decisions, or final administrative decisions,
 - considered indisputable by the competent unit of the financial sector being a public debtor.

The detailed classification of debt titles included in the state public debt was provided by the regulations of the Minister of Finance of December 28, 2011 on the detailed manner of classifying debt titles classified as public debt (Journal of Laws 2011 No. 298, item 1766), (hereinafter: the Regulation).

The state public debt after consolidation at the end of 2017 amounted to PLN 965.84 billion, including the debt of the local government sub-sector, which was PLN 69.5 billion. The debt of territorial self-governments and their unions after consolidation at the end of 2017 amounted to PLN 65.8 billion (Data of the Ministry of Finance, 2018). Therefore, the debt incurred by local governments directly affects the state public debt. For this reason, the processes related to incurring debt liabilities by these entities become crucial aspect of the financial management of these entities.

The financial management of local government units is subject to the supervision and control of specialized control bodies which are the Regional Chambers of Audit (hereinafter: RCA). According to art. 171 sec. 1 and 2 of the Constitution of the Republic of Poland (Journal of Laws of 1997 No. 78, item 483, as amended), the activities of a local government are subject to supervision from the point of view of legality, and the authorities supervising financial matters are RCAs. However, pursuant to the provision of art. 1 sec. 1 of the Act of 8 March 1990 on Regional Chambers of Audit (Journal of Laws of 2016, item 561) RCAs exercise supervisory and control power over financial management in local governments on behalf of the state. The aforementioned provision of the Constitution of the Republic of Poland and art. 5 sec. 1 of the Act on RCAs provides that the supervision and control over the processes of incurring debt liabilities by local government entities are exercised by these authorities taking into account only the criterion of legality. Legality should be understood as compliance with the legal or-

der, but it is necessary to take into account this legal norm which was the basis for the taken action (Zimmerman, 2009).

The aim of this paper was to evaluate the current control system over local government debt exercised the Regional Chambers of Audit and to present the conclusions and expectations resulting from this assessment, which are generated by the RCA and applicable to the RCA within the scope of conducted debt audits. The method applied to assess legal regulations included analysis of legislative documents, primarily the Constitution of the Republic of Poland, the Public Finance Act, the Act on the Regional Chambers of Audit as well as the cited Regulation. The analyses contained in the paper cover the years from 2014 when the Individual Debt Ratio came into force under art. 243 of the PFA (see also Art. 121 sec. 1 and 2 of the Act Provisions introducing the Public Finance Act of 27 August 2009 – Journal of Laws No. 157, item 1241). The assessment of the actual functioning of the regulations was made for the period from the introduction of the Individual Debt Ratio until the first quarter of 2018.

Legal basis for local government debt

The control system of local government debt is based on the criterion of legality, i.e. the legality of actions undertaken by LGs in the area of financial management. The general principles of incurring debt obligations by local governments are regulated in art. 89-94 of the Public Finance Act:

1. Purposes for which local government entities may incur debts and issue securities are defined in the *numerus clauses* manner. The list includes: 1) covering the budget deficit of LGs occurring during the year, while debt obligations incurred for this purpose are repayable or bought back in the same year in which they were incurred or issued, 2) financing of the planned LG budget deficit, 3) repayment of previously incurred liabilities related to the issue of securities and taken out loans, 4) pre-financing of tasks co-financed from funds from the European Union budget - art. 89 sec.1 of the PFA.
2. The sum of debt liabilities incurred for the purposes mentioned in art. 89 and 90 of the PFA cannot exceed the amount specified in the LG budget – art. 91 sec. 1 of the PFA.
3. Local government is obliged to obtain prior opinion of RCA on the feasibility of repayment of loans or redemption of securities when it intends to incur liabilities from these titles (with the exception of funding obtained to cover the temporary budget deficit) – Art. 91 sec. 2 of the PFA.
4. Local governments only incur financial liabilities whose servicing costs are incurred at least once a year – art. 92 of the PFA.
5. Local government entities were prohibited from taking loans, issuing securities and granting sureties and guarantees whose nominal value due to be paid on the ma-

turity date, expressed in PLN, was not determined on the day the transaction was concluded - art. 93 of the PFA.

6. Local and regional authorities are allowed to issue sureties and guarantees provided that they have maturity date, are granted up to a specified amount and do not exceed the limit set in the budget resolution- art. 94 of the PFA.

Detailed regulations introducing restrictions on the local government debt were included in the provisions of art. 242 and 243 of the PFA. The art. 242 of the PFA sets out the principle that, at the stage of adopting and executing the budget, local governments are obliged to maintain the balance in the operating part of the budget in terms of current expenditure. According to the provision of art. 242 of the PFA, the LG cannot approve the budget in which the planned current expenditure is higher than the planned current income increased by the budget surplus from previous years and the free funds referred to in art. 217 sec. 2 subsec. 6 of the PFA (cash surplus on the current account of the budget resulting from settlements of loans from previous years). In turn, at the end of the financial year, current expenditure cannot be higher than current income, increased by the budget surplus from previous years and free funds. However, an exception has been made to this rule (article 242, sec. 3) according to which the actual current expenditure may exceed actual current income plus a budgetary surplus from previous years and free funds only by the amount needed to cover current expenditure on projects co-financed from the funds from the European Union and the Member States of the European Free Trade Agreement (EFTA), if these funds have not been transferred in a given financial year.

Regulations included in art. 242 PFA are aimed at counteracting financial management, in which LGs could take out loans or issue securities to cover current expenditure (Owsiak, 2005). However, it should be emphasized that the legislator, setting out the abovementioned expenditure rule was not completely consistent. Permission to balance the operating part of the budget with free funds, (as defined in art. 217 sec. 2 subsec. 6 of the PFA), is a de facto consent to finance current expenditure with funding from loans taken out in previous years and unused securities (Walczak, 2017). In practice, this means that a local government may for example inflate the planned amount of investment expenditure in one year, take out a loan at the end of this year to finance this type of expenditure, fail to implement the investments and, as a consequence, generate free funds that will balance the budget in the operational part in the next years.

Another restriction on local government debt results from art. 243 of the PFA. In this provision, the legislator defined the method of calculating the Individual Debt Ratio. The rationale for the change says: 'On the one hand, the new construction of the ratio abolishes limitations restricting local governments with considerable development potential, for whom incurring even significant financial obligations may be an instrument of safe development policy; on the other hand, it disciplines the entities who are significantly burdened with repayment of liabilities and should be extremely cautious when taking

out new credits and loans.’ (Rationale for the draft Public Finance Act. Sejm Paper No. 1181, VI term of the Sejm).

According to art. 243 of the PFA, the local government constitutive body (council), cannot adopt a budget in which, in the budget year and in each subsequent year following the budget year, the total amount of the following liabilities:

- repayment of loan instalments referred to in art. 89 section 1 items 2–4 and art. 90 of this Act together with interest due in the given year on these loans,
- redemption of securities issued for the purposes specified in art. Article 89 paragraph 1 items 2–4 and art. 90 of this Act together with interest due and a discount on securities issued for these purposes,
- potential repayment of amounts resulting from granted sureties and guarantees to the planned total budget revenues,

divided by the total budget revenue in a given financial year will exceed the arithmetic average from the calculation of its current income for the last three years increased by the income from the sale of assets less current expenses divided by the total budget revenue.

This rule is expressed in a formula often referred to as the Individual Debt Ratio (hereinafter: IDR) set out in art. 243 sec.1 of the PFA:

$$((R + O)/D)_n \leq 1/3 \cdot ((Db_{n-1} - Wb_{n-1} + Sm_{n-1})/D_{n-1} + (Db_{n-2} - Wb_{n-2} + Sm_{n-2})/D_{n-2} + (Db_{n-3} - Wb_{n-3} + Sm_{n-3})/D_{n-3})$$

where:

R – Planned for the financial year total amount due for the repayment of loan and credit instalments and redemption of securities - payments to debt incurred to maintain liquidity and repaid by the end of the financial year are not included in the expenditure on this account;

O – Planned for the financial year interest on loans and interest and discount on issued securities as well as repayment resulting from the granted sureties and guarantees;

D – Total budget income in the financial year;

Db – Current income;

Sm – Asset sale gains;

Wb – Current expenditures;

n – Financial year for which the relationship is determined;

n-1 – Year prior to the financial year for which the relation is determined;

n-2 – Year two years prior to the financial year;

n-3 – Year three years prior to the financial year

When calculating these ratios for the year preceding the budget year, we use the estimated values presented in the LG budget implementation report for the third quarter,

whereas for the calculation of the previous two years – the actual values based on the annual reports. However, these restrictions do not apply to:

- repayment of credits and loans and redemptions of securities together with the interest due or discounts respectively taken out or issued in connection with the implementation of projects co-financed from EU funds;
- sureties and guarantees granted to self-government legal entities implementing the tasks of local governments within the framework of programmes co-financed from EU funds;
- within no more than 90 days after the completion of the co-financed project and receiving a refund;
- redemption of securities, repayment of loan and loan instalments, with interest and discount due, respectively issued or incurred in connection with the agreement concluded for the implementation of a project co-financed in at least 60% from EU funds, in the part corresponding to the expenditure incurred as national contributions financed by these liabilities.

In the case when the funds specified in the grant agreement have not been transferred or have been returned after their transfer, LGs cannot issue securities, take out loans or grant sureties and guarantees until the principle defined by the Individual Debt Ratio is fulfilled.

The rule of balanced current budget and the individual debt ratio are fiscal rules for local government (Owsiak, 2017).

However, the practice proves that the regulations included in art. 243 and art. 242 of the PFA contain a number of drawbacks. One of the drawbacks of the adopted solutions is including in the calculation the income from the sale of assets. As a rule, the budgets and Multiannual Financial Forecasts (hereinafter: MFF) enacted by local governments estimate unrealistic revenue from the sale of assets, which artificially increases the acceptable debt limit. The fact that the calculation of the Individual Debt Ratio is based on the operating surplus understood as the difference between current income and current expenditure carries the risk that the estimated values may be difficult to achieve taking into consideration the cyclical financial crises in the economy. Additionally, the IDR has been criticised for the fact that it is calculated solely on the basis of historical data. Furthermore, the entry into force of the IDR forced some LGs to change their debt repayment schedules, e.g. by renegotiating loan agreements and extending the repayment period or transferring repayment to the end of the loan maturity period (Jastrzębska, 2017).

The scope of debt control by RCA – current status

The principles of incurring debt obligations by local governments set the general framework for controlling the indebtedness of territorial self-governments by RCAs.

Pursuant to the provisions of the Act on Regional Chambers of Audit, there are several basic functions exercised by these authorities, i.e.: supervision, consultation, controlling and education (Wójcik, 2003). One of the tasks of the RCA is also reporting on the state of financial management of local governments. The control of local government debt is part of the supervisory function fulfilled by the RCA Colleges (Dubiel, 1997), the opinion-giving function - performed by the adjudicating panels of the RCA Colleges and the control function - carried out by inspectors of the control department and employees of the analysis and training department. According to art. 11 of the Act on Regional Chambers of Audit when exercising their supervisory power, RCAs have the institutional competence to review resolutions and orders of local self-government bodies regarding: budget and its changes, incurring liabilities affecting the amount of public debt and granting loans, MFFs and changes to MMFs.

This paper will only focus on those categories of resolutions subject to the supervision of the chambers, which directly or indirectly relate to local government debt. The basis for planning local government debt is a budget resolution or a resolution amending the budget. Credits, loans or funds from the sale of securities are budget revenues within the meaning of art. 5 sec. 1 subsec. 4 of the PFA and as such, in accordance with the provisions of art. 212 sec. 1 subsec. 4 of this Act are included in the total amount of planned budget revenues. On the other hand, the repayment of loans and redemption of securities are defined as expenditure (article 6 sec. 2, subsec. 1-3 of the PFA) and are included in the budget expenditure plan (article 12 sec. 1 subsec. 5 of the PFA). In addition, the budget resolution sets a limit on liabilities such as loans and issued securities, as referred to in art. 89 sec. 1 and art. 90 of the PFA (and article 212 sec. 1 subsec. 6 of the PFA). The budgetary resolution may also include authorizations for the executive body to incur these obligations (article 212 sec. 2 subsec. 1 of the PFA).

A resolution regarding the Multiannual Financial Forecast or its amendments also includes content referring to local government debt. The provisions of art. 226 sec. 1 subsec. 6 and 6a of the PFA create the obligation to determine in the MFFs the amount of local government debt and the method of financing its repayment. This document includes information on compliance with the debt limit regulations referred to in art. 242-244, or the degree of non compliance with these regulations in the cases referred to in art. 240 a sec. 4 and art. 240b of the PFA.

The supervisory body of RCA is a College. Pursuant to art. 18 sec. 1 of the Act on RCA, Colleges are entitled to annul resolutions which infringe the law and, in a situation where the infringement is irrelevant, they only state that the resolution was passed in violation of the law. A special procedure concerns the annulment in whole or in part of the budget resolution (article 12 of the Act on RCA). In this case, the RCA College is required to indicate irregularities in the budget resolution and to determine the manner and time of their removal. In the event when the abovementioned irregularities are not rectified within the prescribed period, the RCA College decides that the resolution is

invalid in whole or in part and sets the budget or its invalid part. The competences of the RCA College also include setting the local government budget in the event of failure to pass a budgetary resolution by the LG constitutive body by January 31st of the budget year. In this situation, in accordance with art. 240 sec. 3 of the PFA, the RCA College sets the LG budget in the scope of mandatory and ordered tasks by the end of February of the budget year.

According to art. 240a of the PFA, if it is not possible to pass the Multiannual Financial Forecast or the local government budget in accordance with the principles set out in art. 242-244 of the PFA a RCA College calls on LG Council to develop and adopt a corrective action plan and submit this plan to RCA for opinion, within 45 days of receipt of the request. In the event of failure to prepare, by the requested entity, a corrective action plan or in the absence of a positive opinion of the RCA on this plan, the budget is drawn up by the RCA College and may not comply with the debt limit formula from art. 242-244 of the PFA.

The LG constitutive body may pass the MFF and the budget without complying with the debt limit (IDR) from art. 242-244 PFA during the implementation of a corrective action plan, under the following conditions: 1) the corrective action plan received a positive opinion from RCA; 2) failure to comply with the debt limit (IDR) may only refer to the repayment of liabilities existing as of the date of adopting the corrective action plan.

The provision of art. 240b of the PFA allows the RCA to determine the LG budget without complying with the debt limit formula referred to in art. 242-244 of the PFA also in a situation where a local government does not have the possibility to pass the MFF or the budget while complying with the abovementioned provisions, however, at the same time there is no threat to the implementation of public tasks. Additionally, according to article 240a, sec. 9 a territorial self-government may make changes to the budget drawn up by the RCA College on the basis of art. 240a sec.8 or 240b of the PFA, on condition that the amendments do not further undermine the debt ratio balance specified in art. 242-244.

The above-mentioned review of the supervisory competences of the RCA College regarding the resolutions of local governments pertaining to debt leads to the conclusion that supervision exercised as control and the possibility of imperious interference in the activities of the supervised authorities is one of the most powerful and effective pillars of the local government debt control system.

The next pillar of the debt control system applied by RCA is giving opinions. As far as local government debt is concerned, the most relevant types of opinions are defined in art. 13 sec. 1, 3, 12 and 3 of the Act on Regional Chambers of Audit and include: opinions on the possibility of repayment of a loan or redemption of securities, opinions on submitted draft budget resolutions, draft Multiannual Financial Forecasts and opinions on corrective action plans.

The Chambers also give opinions on the possibility of financing the deficit presented by local governments, which is issued twice, i.e. on the basis of a draft budget resolution and on the basis of the adopted budget resolution. The obligation to issue these opinions results from the provision of art. 246 of the PFA. It should be noted here that, pursuant to the provision of art. 217 sec. 2 subsec. 1-3 PFA, the LG budget deficit may be financed by revenues from the sale of securities issued by this entity or by funding obtained from loans and credits. For these reasons, the assessment of the feasibility of financing the budget deficit, in the case when the budget includes estimated revenues from these sources, plays an important role. One should also mention opinions on the accuracy of the estimated amount of LG debt resulting from planned and incurred liabilities issued on the basis of a draft budget and based on the provision of art. 230 sec. 4 of the PFA.

The abovementioned opinions are issued by three-person adjudication panels, appointed from among the members of the RCA College. Appeals against the resolutions of the adjudication panels are considered by the RCA College. Opinions issued by adjudicating panels are not supervision acts and have a non-binding character (Ofiarska M., Ofiarski Z. 2013). However, in the case of a negative opinion on the accuracy of the planned amount of debt, the local government is obliged – by virtue of the provision of art. 230 sec. 5 - to make such changes to the budget and the MFF, to comply with the debt limit specified in art. 243 of the PFA. The number and type of opinions issued by the RCA Colleges are presented in Table 1.

Table 1. Number and type of opinions regarding local government debt issued by adjudicating bodies of RCAs in years 2014 – 2017

Opinions regarding	Total number of opinions				Negative opinions			
	2014	2015	2016	2017	2014	2015	2016	2017
the ability to repay a loan, a loan or buy back securities	4 057	2 925	2 186	3 452	7	13	11	10
draft budgets	3 017	2 987	2 971	2 978	55	33	26	21
the possibility of financing the deficit presented in the draft budget	1 410	1 463	2 001	2 363	25	7	19	11
the possibility of financing the deficit presented in the approved budget	1 947	1 689	1 762	2 367	4	3	3	4
draft Multiannual Financial Forecast	3 014	2 983	2 970	2 968	72	45	33	25
the accuracy of the planned amount of debt	2 866	2 903	2 894	2 842	13	24	15	4
corrective action plan	26	23	18	6	6	5	4	1

Source: Reports on the activities of Regional Chambers of Audit and implementation of local government budgets in 2014–2017.

When analysing the data from Table 1, one should note the decreasing number of negative opinions, especially regarding the accuracy of the planned amount of debt. There is also a clear difference between the number of negative opinions about the possibility of financing the budget deficit issued at the draft budget stage and the much smaller number of opinions issued at the adopted budget stage - which proves that comments on the submitted draft budget papers made by RCA adjudicating bodies were taken into account by local government councils. According to the author, the presented data show that the applied form of debt control in local governments is effective despite its 'soft' character.

Weaknesses in the control and supervision system exercised by the RCA over local government debt

The control over local government debt exercised by the RCA Colleges within their supervisory competence and by adjudicating panels as part of their advisory function may still turn out to be ineffective because it relies solely on documents presented by local governments. Only the audit performed by inspectors at the local government premises allows them to state unequivocally whether the processes related to incurring debt obligations and debt management are performed in compliance with the law and whether the documentation is consistent with the actual state of affairs. Unfortunately, there are cases when local governments drew up documents regarding debt, which included data inconsistent with the actual situation. As a result of these illegal practices, the actual indebtedness of LG was disguised even for a longer period of time. As a consequence, such local governments are unable to repay the debt, need to implement corrective action plan and ultimately may be placed into receivership.

Comprehensive audits of the financial management of local governments are carried out at least once every four years (article 7 sec. 1 of the Act on RCA). In addition, RCAs also perform problem-related, ad-hoc audits and check the implementation of post-audit recommendations. The reviews of quarterly budget implementation reports submitted by local governments are performed by the employees of the analysis and training department. Although they are carried out only in accounting and formal terms (article 9a of the Act on RCA), they undoubtedly monitor the processes in the field of financial management and reveal irregularities.

The control of local government debt carried out by RCAs brings - according to the author of the article - expected effects, but does not completely eliminate the risk of excessive debt mounting. The risk is generated primarily by these local governments who undertake effective attempts to circumvent the binding regulations limiting their borrowing capacity. They resort to extra-budgetary forms of raising funding. The category of unnamed contracts includes, for example, revenue bonds, securitization, forfeiting,

factoring and assignment of receivables, while named contracts comprise – e.g. return sale, lease back and subrogation (Langer, 2014). Liabilities under these agreements are not included in public debt, but they fall into the category of current expenditure (in the case of subsidies) or capital expenditure (in the case of acquisition of new shares and stocks) (Konberger-Sokołowska, 2015). The burden of debt is also transferred to companies where local governments are shareholders. The excessive debt load of local governments is generated mainly by disguised debt, as well as the tendency to extend the debt repayment period, which generates high servicing costs.

Expected changes in the local government debt control system

The RCAs' expectations of regarding the current system of LG debt control boil down to 'sealing' the existing law.

Firstly, the most urgent action, which should be taken by the legislator, is to amend the Individual Debt Ratio formula under art. 243. Local governments should be obliged to include in the calculation of IDR all debt titles which are not loans or redemption of securities but fall into the public debt category specified by the Regulation of the Minister of Finance of 28 December 2011 on the detailed manner of classifying debt items classified as public debt. Such a solution will make it impossible to burden the budgets of the future LGs with unlimited debt.

Secondly, the period for which a debt can be incurred should be limited. Lack of restriction in this area results in rescheduling debt repayments over long periods, which generates higher debt servicing costs.

Thirdly, it is necessary to introduce a uniform control file in the budget reporting. The possibility of analyzing the accounts entries reflected in the reports will enable a much faster response from the RCAs and will prevent falsification of data presented in the reports.

Finally, the Regional Chambers of Audit should anticipate future problems and increase the number of ad hoc debt audits in those local governments whose debt load poses a threat to their financial health.

Summary

The Polish legislator provided Regional Chambers of Audit with a wide range of legislative tools to control the local government debt. This control is carried out through the following functions: supervision, opinion-giving, control and, to a certain extent, education. So far, these tools have proved to be effective, although they have not erased certain negative phenomena, such as the use of unlimited types of debt, extending debt

repayment periods, or falsification of reported data to hide the actual size of debt. In individual cases, this led to an economic collapse (e.g. Ostrowice commune).

It seems that the introduction of minor adjustments in the system of control over local government debt could 'seal' the system. The recommended changes include: changes in the debt limit formula (art. 243 of the PFA) to include all debt titles, restriction on the period for which debt may be incurred, as well as the introduction of new methods of debt control, e.g. a remote audit of actual entries in the ledgers.

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TFP DETERMINANTS IN EUROPEAN UNION MEMBER STATES IN 2000–2014 IN THE LIGHT OF PANEL STUDY RESULTS

The aim of the article is to examine, whether and to what extent disparities in TFP levels in the group of 27 member states of the European Union in the period 2000–2014 are the result of difference in factors determining them. In the light of the conducted panel data analysis, the countries of the EU-15 group with higher levels of TFP differ from the „new” EU countries in terms of determinants of TFP. In the first group of countries the key role in shaping TFP play human capital resources, in the second group – the degree of involvement in international exchange. Human skills and qualifications are found to be completely irrelevant determinants of TFP levels in the „new” EU members states.

Keywords: Total Factor Productivity, determinants of TFP, panel analysis, European Union Member States.

JEL Classification Codes: C33, F15, O40, O52.

Introduction

In the literature the accumulation of physical and human capital is treated as an important, but not the only, determinant of differences in the level of economic growth of countries and regions. Theoretical studies, and even more so empirical ones, indicate the importance of Total Factor Productivity (TFP). Furthermore, the proponents of the concept of TFP emphasise the necessity of considering the process of real convergence

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in terms of Total Factor Productivity (Hulten, 2000; Caselli and Tenreyro, 2005). They refer to this form of growth as productivity growth, and to the phenomenon of convergence as productivity convergence.

Heretofore, the literature of the subject lacks a fully developed theory of TFP. The need for the formulation of the theoretical basis of multifactor productivity, especially in the context of its determinants has long been suggested (Prescot, 1997). The source of TFP growth in the neoclassical growth theory is not specifically defined. In the endogenous growth theories, multifactor productivity changes are identified as activities in the sphere of research and development as well as human capital accumulation. However, they do not take into account all the factors affecting the level and volatility of productivity. Most economists agree with the idea that determinants of TFP vary depending on the economic, political and social conditions of countries and regions (see, e.g. Durlauf and Quah, 1996; Brock and Durlauf, 2001). In other words, the range of these determinants is similar in countries whose economies operate in a similar manner and on the basis of similar conditions.

Taking into account the political, economic and social conditions mentioned above, European Union countries show a significant differentiation. It particularly concerns the group of the so-called „new” and „old” member states. In addition, as empirical research indicates, EU member states differ in terms of the level and dynamics of TFP. In general, in the period 2000-2014, the average TFP level of the „old” member states (EU-15: Austria, Denmark, Sweden, Finland, Germany, Portugal, Spain, Italy, Greece, Belgium, the Netherlands, Luxembourg, Ireland, United Kingdom, France) was much higher than in the group of the „new” EU members (EU-12: Czech Republic, Estonia, Malta, Cyprus, Lithuania, Latvia, Poland, Hungary, Slovakia, Slovenia, Bulgaria, Romania). However, in the analyzed period the „new” EU countries showed much higher TFP growth rate (about 3.5%). The average annual TFP growth rate for the „former fifteen” was lower and amounted to approx. 2% (Młynarzewska-Borowiec, 2018).

This article is a continuation of research on the diversity of TFP (levels and dynamics) among EU countries. Its purpose is to investigate the causes of existing differences. The hypothesis that TFP differences in the EU were derived from the different factors determining TFP levels in the particular groups of countries, is verified. In the first part of the article, the results of the previous empirical studies on TFP determinants are reviewed. The second part discusses in detail the statistical data and methodology of the panel study. In the third part, using panel models, an analysis of TFP determinants in the European Union in the period 2000–2014 is carried out. Their significance and the impact in relation to the countries with relatively higher and lower levels of TFP (EU-15 and EU-12 group) are assessed.

1. TFP determinants in the light of previous empirical studies

Due to the lack of a theoretical reference, the spectrum of determinants analysed in empirical studies on the causes of differences in the level and growth of TFP between countries conducted intensively since the early 1990s is very wide. Reviewing the empirical studies, Durlauf and Quah (1996) found as many as 90 potential determinants of TFP. However, there is a group of factors most commonly considered in empirical research. They include expenditures on the R&D sector, the degree of openness of the economy, government spending, the structure of the economy and the size and quality of human capital.

With reference to the theory of endogenous growth, there is a close relationship between the creation of knowledge (technology) and multifactor productivity in the economy, in particular the impact of expenditures for research and development (R&D) on innovation, and consequently on the increase in TFP. These expenditures are important from the point of view of highly developed countries as they allow them to create innovation on their own. They are also necessary for countries that are at a lower level of technological and economic development as it allows them to increase the level of the so-called absorption capacity required for the implementation of imported technology (Gomulka, 1990). Empirical studies conducted at the macroeconomic level in most OECD countries generally confirm this thesis and the positive relationship between the size of expenditures for R&D and the level of TFP (e.g. Abdi and Joutz, 2005; Furman and Hayes, 2004). Some of them also consider the issue of the sources of these expenditures. For example, Guillec and Van Pottelsberghe de la Potterie (2001) focused their research on sources of expenditures for R&D broken down into public, private and foreign funds. In the light of the obtained results, they concluded that all the considered sources had a significant impact on TFP in OECD countries, with the largest reported in the case of R&D financed from foreign sources. They also noted an increasing importance of expenditures from private sources. Ulku (2004) stated, in turn, that expenditures for R&D are important only for the countries with the highest level of development, and are also important in the creation of TFP and growth only in a short run. Research on the impact of expenditures for R&D on productivity is also carried out on a large scale at the level of industries and enterprises, and its results confirm the positive correlation between these economic categories (see, e.g. Lichtenberg and Siegel, 1991; Griffith *et al.*, 2000; Wang and Tsai, 2003; Ahn, 2001). Reviewing empirical studies from the above area, one can also find examples of studies where authors explicitly challenge these correlations (Jones and Williams, 1998; Comin, 2002).

The importance of human capital in shaping TFP has profound theoretical justification, mainly in theories of endogenous growth. Nelson and Phelps (1966) argue that human capital stimulates positive changes in TFP by supporting technology transfer. Romer (1991), Aghion and Howitt (1998) emphasise the importance of human capital

in stimulating TFP because of the fact that an increase in skilled workforce accelerates technological innovation in a given country. Obviously, from a theoretical point of view, correlations are not, however, univocally confirmed by empirical studies. Evidence for a significant and positive impact of human capital on productivity was found, *inter alia*, by Fleisher and Chen (1997), Vandenbussche *et al.* (2006) as well as Fleisher *et al.* (2008). In turn, in his study, Pritchett (2001) found a statistically significant negative impact of human capital on TFP. The discrepancies in the obtained results are mainly explained by the endogenous nature of the creation of human capital (Bils and Klenow, 2000; Krueger and Lindahl, 2001) and an inaccurate manner of measuring human capital, which does not take into account its quality (Hanushek and Kimko, 2000; Bosworth and Collins, 2003).

According to Muendler (2004), an important factor determining changes in TFP is the degree of openness of economies. Increasing the participation of the country in international economic flows facilitates competition in the domestic market, as if „forcing” domestic companies to innovative actions (competitive push), and secondly allows to acquire cheaper resources from abroad, import of capital and technology (foreign input push). Thirdly, in the face of increasing competition from foreign companies, the least efficient companies are eliminated in favour of those having higher efficiency, increasing their market share and, consequently, the overall productivity of the economy (competitive elimination). In the light of the results of past empirical studies, the above theses are not unequivocally confirmed. Studies in which the openness of the economy is measured by the traditional indicator of the share of trade in GDP (exports plus imports) confirm the significant relationship between the degree of openness of the economy and TFP (e.g. Frankel and Romer, 1999; Irwin and Tervio, 2002; Lee *et al.*, 2004; Kumar *et al.*, 2010). A positive and significant relationship between these economic categories is observed in most studies on the impact of exports on TFP, especially with respect to exports from developed countries (Austria, 1998; Miller and Upadhyay, 2002; Alkino, 2005). In countries which are at a lower level of development this positive relationship is conditioned by a correspondingly high level of human capital (Upadhyay, 2002; Isaksson, 2001). The impact of import on TFP is less clear because some studies provide evidence for the absence or insignificance of this factor (Mahmood and Afza, 2008). Therefore, the impact of the structure of import on TFP is often examined. Kim (2000) observed a positive influence of imports of capital goods and consumer goods, and an insignificant impact of imports of raw materials. Xu and Wang (1999), Mayer (2001), Caselli and Tenreyro (2005) and Cameron *et al.* (2005) show that import of high-tech goods has a significant influence on TFP. Therefore, they perceive import in terms of technology import. Keller and Yeaple (2003) further emphasise the important role of direct foreign investment in the intensity of technology import in the material and intellectual form. In the literature, one can find examples of studies whose results contradict

the thesis about the importance of the openness of economy on multifactor productivity, such as studies by Khan (2006), Gonzalez and Constantin (2009).

From a theoretical point of view, government spending (e.g. expenditures on infrastructure, education, healthcare) can influence both the level and growth rate of TFP (Barro and Sala-i-Martin, 1995). On the other hand, the activities of the government sector are considered less effective than those of the private sector. It can therefore be expected that in the case of an increase in government spending, the efficiency level of the economy, and thus the growth rate of TFP, decreases. So far, empirical studies do not fully confirm or deny the above hypothesis. Thomas and Wang (1993) have shown that appropriate government policies aimed at ensuring macroeconomic stability have a positive impact on TFP, and government spending is positively correlated with productivity growth. In a study of 115 countries for the period from 1960 to 1980 Ram (1986) has shown a positive effect of public spending on the efficiency of the economy, similarly to Garces-Ozanne (2006). In studies that take into account the level of government consumption spending, usually evidence of the negative impact of such spending on TFP is obtained (e.g. Barro, 1991; Landau, 1986; Hansson and Henrekson, 1994). Evidence for a significant and positive relationship is obtained, in turn, in studies that take into account expenditures for infrastructure (Aschauer, 1989; Devarajan *et al.*, 1993) and education (Evans and Karas, 1994; Wyatt, 2005). Khan and Kumar (1997), Loayza *et al.* (2004) on the other hand, prove that the investments of the government sector have the same positive effect on productivity as private sector spending, particularly in less economically developed countries.

Kuznets (1979) argued that it is impossible to achieve high rates of growth of GDP per capita or output per employee without proportional, significant changes in the share of individual sectors in the economy. Therefore, the literature of the subject quite commonly discussed the relationship between structural changes in the economy and the growth of TFP. The above hypothesis was verified, among others, by Chenery *et al.* (1986), who proved that the structural changes of the economy to a large extent explain the growth processes. In turn, Lucas (1993), in studies based on the model of industrial development considered from the point of view of supply, and Verspagen (1993), in studies taking into account a similar model from the point of view of demand, confirmed the importance of structural changes on the growth of multifactor productivity. Fagerberg (2000) proved that the flexible structure of production is an important element of productivity growth. In the light of the results of his tests, countries that specialise in high-tech products reached a higher level of productivity than countries that specialise in goods with a low degree of processing. A significant and positive relationship between structural changes (reallocation of resources in the economy) and the level of productivity was also noted by Akkemik (2005), Berthelmy (2001), Ngai and Pissarides (2007) as well as Chen *et al.* (2011). In turn, Peneder (2003) empirically proved that the structural changes in the economy can have both positive and negative effects on TFP growth,

and the role of structural factors in creating productivity decreases and is ambiguous. Caselli (2005) demonstrated, in turn, that the relationship between the structure of the economy and productivity does not exist.

2. Data and methodology of the study

Taking into account achievements of the previous empirical analyses concerning factors influencing TFP in individual countries or their groups, it appears reasonable to examine determinants of the TFP levels in European Union Member States. The empirical studies mentioned in the first part of the paper apply to the countries of the EU-27 to a limited extent, and the results are not conclusive. Given the significant disproportion in the levels of TFP in the EU-15 and EU-12 countries, studies on the existence and strength of the factors determining TFP were performed separately for the both groups of countries. These are attempts to identify the main causes of TFP differentiation occurring in the period of 2000–2014.

To investigate the „driving forces” of TFP levels in both groups, several alternative econometric panel models were tested. Different sets of variables, the proxies of determinants of TFP proposed in the literature, as well as their time lags were taken into account. The models were built with particular focus on the satisfactory number of variables as well as the statistic quality. Finally, the following *fixed effect* model (1) was applied:

$$\ln(TFP_{i,t}) = \alpha_i + \beta_1 \ln(LIB)_{i,t} + \beta_2 \ln(GERD)_{i,t-1} + \beta_3 \ln(GOV)_{i,t-1} + \beta_4 \ln(AGR)_{i,t} + \beta_5 \ln(HUM)_{i,t} + \varepsilon_{i,t} \quad (1)$$

where:

$\varepsilon_{i,t}$ – random term $\varepsilon_{i,t} \sim IID(0; \sigma_\varepsilon^2)$ for $i=1,2,\dots,N$ $t=1,2,\dots,T$; $\forall_{i=1,\dots,N} \forall_{t,s=1,\dots,T} E\{x_{it}, \varepsilon_{is}\} = 0$
 x_{it} – independent variables' matrix.

The dependent variable of the model is the natural logarithm of the TFP level of the country i in the period t . TFP levels of the particular UE countries in the period 2000–2014 were obtained from Author's study for EU countries in the period 2000–2014 (Młynarzewska-Borowiec, 2018).

Independent variables are logarithmised values of the following economic indicators:

- a) $LIB_{i,t}$ – showing the degree of openness of the economy, calculated as the value of foreign trade of the country i (EX + IM) in relation to GDP in the period t , based on data obtained from the World Bank WDI Database (2017);
- b) $GERD_{i,t-1}$ – showing the level of total expenditures for research and development, calculated as the share of these expenditures in the GDP of the country i in the period $t-1$, based on data from Eurostat database (2017);

- c) $GOV_{i,t-1}$ – showing the degree of involvement of the government sector in the economy, calculated as a share of total government spending in the GDP of the country i in the period $t-1$, based on data from Eurostat database (2017);
- d) $AGR_{i,t}$ – showing the economic structure of the country as a share of agricultural production in the total added value of the economy of the country i in the period t , obtained from the Eurostat database (2017);
- e) $HUM_{i,t}$ – reflecting human capital resources, calculated as the share of population with secondary and higher education in the total population aged 15 – 64, obtained from the Eurostat database (2017).

3. Results of empirical studies

To make estimates of the panel models for the EU-15 and EU-12 group the following procedure was conducted. The models were initially estimated using the ordinary least squares method (OLS) as a pooled type models (a panel treated as a set of cross-sectional data). In both cases, diagnostic tests, primarily the results of the Breusch-Pagan test, suggested a rejection of the null hypothesis about the absence of individual effects. For that reason, the models with individual effects were taken into account. A proper method of estimation was selected after conducting the Hausman test and confirmed by the F-test for diversification of the constant in groups. The results in both cases suggested the use of FE (*within*) estimator (*fixed effect model*). Assessing the quality of the models, it should be stated that it was satisfactory. The independent variables explained the TFP variability to a large extent, as evidenced by the values of determination coefficients (LSDV R^2 and within R^2).

In the light of the estimation results of model (1) for the EU-15 group (see Table 1), all explanatory variables, reflecting TFP determinants, are statistically significant (significance at the level of 1% according to the Student's t test for variables). The signs of estimated structural parameters correspond to the expectations formulated on the theoretical basis and generally confirm the results of the previous empirical studies regarding the correlation between the individual determinants and the level of TFP.

The estimates show that human capital resources and liberalisation of the economy had a high positive impact on the level of TFP in the EU-15 group. A one-percent increase in the share of high-skilled workers in population and in the share of trade turnover in GDP, *ceteris paribus*, resulted in an increase in the level of TFP by 0.2 and 0.12 percent, respectively. Expenditures on R&D (made a year earlier) also turned out to affect positively productivity, but to a lesser extent (relatively lower value of the coefficient of the variable approximating R&D expenditures). In the light of the obtained results, government spending negatively affected TFP of the discussed group of countries. A one-percent increase in the share of these expenditures in GDP resulted in

a decrease in the level of TFP by 0.3%. A structure of economy, namely the high share of agriculture in generating GDP, negatively affected productivity in this group of countries. However, the negative correlation in this case turned out to be much weaker than in the case of government spending (elasticity of AGR_{it} variable amounted to -0.07).

Table 1. Estimation results of panel model (1) for the EU-15 countries in the period 2000–2014; dependent variable: $\ln TFP_{it}$; FE estimator; number of observations:210

variable	coefficient	std. error	t-retio	p-value	significance
const	6,12899	0,2676900	22,8959	<0,00001	***
LIB _{it}	0,119232	0,0345408	3,4519	0,00069	***
GERD _{it-1}	0,0812171	0,0202462	4,0115	0,00009	***
GOV _{it-1}	-0,290402	0,0545066	-5,3278	<0,00001	***
AGR _{it}	-0,0733413	0,0207489	-3,5347	0,00051	***
HUM _{it}	0,185382	0,0577095	3,2123	0,00155	***
Mean dependent var	6,394099		S.d dependent var	0,164158	
Residual sum of squares	0,449713		Residual std error	0,048651	
LSDV R ²	0,920152		Within R ²	0,631205	
LSDV F(19, 190)	115,2380		p value (F)	2,11e-93	
Log-likelihood	347,3795		Akaike criterion	-654,7590	
Schwarz criterion	-587,8169		Hannan-Quinn	-627,6968	
Autocor. rho1	0,652676		Durbin-Watson	0,570262	
Model diagnostics: Test for diversification of the constant in groups Null hypothesis H ₀ : groups have a common constant Test statistics: F(14, 190) = 60,3823 p = P(F(14, 190) > 60,3823) = 4,25535e-062 critical value = 2,1769 test result: rejection of H ₀ : the use of the fixed effect model is justified					

*** means significance at 1%

Source: own calculations using GRET.L.

Table 2 presents the estimation results of the structural parameters of model (1) built for the „new” European Union member states in the investigated period 2000–2014. According to the Student's t-test, four of the five independent variables included in model showed a statistical significance (at 1% level).

Table 2. Estimation results of panel model (1) for the EU-12 countries in the period 2000–2014; dependent variable: $\ln TFP_{it}$; FE estimator; number of observations:168

variable	coefficient	std. error	t-retio	p-value	significance
const	6,74828	0,511564	13,1915	<0,00001	***
LIB_{it}	0,192982	0,0327455	5,8934	<0,00001	***
$GERD_{it-1}$	0,0923401	0,0294195	3,1387	0,00204	***
GOV_{it-1}	-0,383259	0,0743753	-5,1530	<0,00001	***
AGR_{it}	-0,0957131	0,0257312	-3,7197	0,00028	***
HUM_{it}	0,0493731	0,0761428	0,6484	0,51769	
Model diagnostics:					
Mean dependent var					
6,256289		S.d dependent var		0,126618	
Residual sum of squares		Residual std error		0,058154	
0,510668		Within R ²		0,512201	
LSDV R ²		p value (F)		4,34e-46	
0,809266		Akaike criterion		-462,9646	
LSDV F(16, 151)		Hannan-Quinn		-441,4110	
40,04229		Durbin-Watson		0,464311	
248,4823					
-409,8572					
0,710226					
Test for diversification of the constant in groups					
Null hypothesis H ₀ : groups have a common constant					
Test statistics: F(11, 151) = 32,6501					
p = P(F(11, 151) > 32,6501) = 1,61419e-034					
critical value = 2,36728					
test result: rejection of H ₀ : the use of the fixed effect model is justified					

*** means significance at 1%

Source: own calculations using GRETL.

The estimates point to a strong positive impact of LIB_{it} variable, approximating the degree of openness of the economy, on TFP level in the EU-12. Its positive change by 1% resulted in TFP growth of about 0.19%. The impact of investment in R&D sector on productivity in the analysed group of countries turned out to be much weaker and comparable to that in the EU-15 (the value of the estimated parameters corresponding to $GERD_{it}$ variable in the both models amounted only to about 0.08–0.09).

In the EU-12 countries, as well as in the EU-15 group, the structure of economy with a high share of agriculture in generating GDP influenced negatively on their productivity level. Moreover, an increase in the share of government spending in GDP by 1% caused, *ceteris paribus*, a drop in their TFP level by about 0.4% on average.

In the light of the estimates obtained for the EU-12, the variable approximating human capital resources in the economy (HUM_{it}) showed a slight positive impact on the explained variable (TFP_{it}) but it turned out to be insignificant from a statistical point of view. Given the fact that human capital was proved to be a key determinant shaping TFP level of the EU-15 countries, the result is a bit surprising.

Conclusion

In the light of the econometric studies conducted in this paper, it can be concluded that the differences between European Union member states in terms of TFP levels, in particular differences between the EU-15 and EU-12 groups, were related to the factors determining them. In the „former fifteen” group the resources of human capital as well as the degree of openness of economies played the most important role in shaping productivity. A positive impact on the level of TFP was also exerted by R&D expenditures, which is not surprising due to the fact that R&D outlays and highly qualified employees are the basis for endogenous creation of technology and increase of innovation level in the countries with a relatively high level of technological development, to which this group is undoubtedly included.

As expected, a high share of agriculture sector in generating GDP negatively influenced the level of productivity in both groups of countries. In the case of government spending, a negative impact on TFP was proved, which is in line with the results of the previous empirical research quoted in the first part of the paper. This negative impact, especially in the EU-12 countries, turned out to be surprisingly strong. Perhaps, an imprecise selection of the variable, reflecting all categories of government spending is the reason. In the future, it is worth introducing a more detailed variable, approximating those categories of government spending that are directly related to technological resources in the economy, e.g. expenditure on education, higher education or infrastructure.

In the EU-12 countries, TFP changes resulted mainly from the increase in their involvement in international exchange (trade). It can be assumed that the level of TFP in these countries was largely due to the successive adaptation of companies to the conditions of „demanding” international market, as well as the import of technology, organizational and management innovations, etc. A high level of expenditures on R&D sector had also a positive impact on productivity in this group of countries. In the light of the obtained results, human skills and qualifications were completely irrelevant. This controversial statement certainly requires in-depth analysis, especially in the face of the prevailing opinion among economists about the key importance of qualified personnel in building the so-called knowledge-based economies. It may be explained by the fact that countries with a relatively lower level of technological development initially focus on eliminating technological shortages and importing innovations from abroad. Expenditures on R&D sector are mostly related to improving absorption and adaptation capacities of the country. Only later, after reaching the higher stage of technological development, which is characteristic for the EU-15 countries, R&D sector is associated with independent creation of technology. In this case, human capital resources become crucial for the successful functioning of R&D sector as well as other high-tech industries in the economy. The results of the empirical study seem to confirm the above view.

In addition, it is worth to consider constructing a more complex indicator reflecting not only the quantity but also the quality of human capital. A more comprehensive study, taking into account the various aspects of human capital (education level of the society, information society development, migration of skilled personnel, lifelong learning, etc.) can shed new light on the issue of the importance of human capital in shaping TFP in the countries that are at the stage of „technological catching up”.

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