

## **Board gender diversity and earnings management in agricultural sector - Does it have any influence?**

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### **Abstract**

This paper investigates the effect of board gender diversity on earnings management which is one of the most debated issues in the corporate world. The results of the previous researches are mixed. Many studies, especially in the Anglo-Saxons states shows that the firms with greater female participation on their boards exhibit lower earnings management, which is explain as the results of psychologically differences between males and females which has different ethical sensitivity for consequence. This study conducted on Serbian agriculture companies listed at Belgrade Stock Exchange suggests that there is insignificant negative linear relationship between number of women in the board and earnings management. This finding are supported with the studies which indicate that the reasons for earnings management should be found in different factors, like cultural and political factors or religious attitude or age of the members of the boards not on the gender differences itself.

**Keywords:** Earnings management. Board diversity. Gender. Agriculture companies

## 1. Introduction

Earnings management is the phenomena which attracts considerable attention of practitioners and academic community. Nowadays, many researches have been published in prestigious journals having earnings managements as their scope. This fact should not be taken as a surprise. In the last several years, researchers attention have been drawn to the area of distinguishing earnings management and fraud (MARAI, PAVLOVIĆ, 2013), detection of activities and motives that encourage earnings management, like mergers (ALSHARAIRI, ET AL., 2015), short selling (FANG, ET AL., 2016; MASSA, ET AL., 2015), seasoned equity offering (KOTHARI, ET AL., 2015) stock repurchase (FARRELL, ET AL., 2014; ALQUHAIF, ET AL., 2017), the influence of refinancing pressure on earnings management (FIELDS, ET AL., 2018), the influence of IPO on earnings management (SHEN, ET, AL, 2014), the effects of adoption of compensation clawback provisions on earnings management (CHAN, ET AL., 2014), the research on ownership effects on earnings management (GORDON, 2015), the effect of regulatory environments (IAS/IFRS& US GAAP) on earnings management (CAPKUN, ET AL., 2015; DOUKAKIS, 2014; HO, ET AL., 2015; EVANS, ET AL., 2014), the effect of firm growth and model specification choices on earnings management (COLLINS, ET AL., 2016) the influence of institutional pressures on earnings management (VANSANT, 2016), the research on book-tax conformity and earnings management (BLAYLOCK, ET AL., 2015) and market competition effects on earnings management (MARKARIAN, 2014; HEALY, ET AL., 2014 ).

Among the above mentioned researches within the scope of earnings management, special consideration should be given to the research focused on identifying the relationship between CSR and earnings management (MARTÍNEZ-FERRERO, ET AL., 2016; CURTIS, 2015; GROUGIOU, ET AL. 2014) and earnings management and corporate governance (GONZÁLEZ, GARCÍA-MECA, 2014; CHEN, ZHANG, 2014; RAMACHANDRAN, ET AL, 2015 SHAN, 2015; ALMAHROG, ET AL., 2016; CHENG, ET AL., 2015).In this specific area researchers are focused on influence of board committee and audit committee on earnings management, or influence of board independence (BRAVO, REGUERA-ALVARADO, 2018; CHEN, ET AL., 2015) on earnings management, board composition and its influence on earning management, and especially the influence of gender diversity of the board (ARUN, ET AL, 2015; PALVIA, ET AL, 2015; FRANCIS, ET AL, 2015; SHAWVER, CLEMENTS, 2015; HILI, AFFESS, 2012; GAVIOUS, ET AL, 2012;

SRINIDHI ET AL, 2011; SUN ET AL, 2011; CARTER, ET AL, 2010; YE, ET AL, 2010; KRISHNAN, PARSONS, 2008) their age (HUANG, ET AL, 2012) and their religious attitude (KANAGARETNAM, ET AL., 2015; DU, ET AL., 2015). Also, there are studies on the magnitude by which earnings management is affected by audit committee characteristics ie: accounting financial expertise; board tenure; additional directorships block shareholdings; and committee size (SUN, ET AL, 2014; ASTAMI, ET AL, 2017; MARAI, ET AL, 2017; BADOLATO, ET AL., 2014; SOLIMAN, RAGAB, 2014; JUHMANI, 2017; CHOI, ET AL., 2018). As been portrayed by Alquhaif, Latif and Chandren (2017, p. 48), gender diversity of boards and reporting of earnings are two most debated issues in the corporate world.

## **2. Theoretical aspect of the impact of gender diversity**

In the last decades there is a wide consensus about the importance of women to be included in all segments of civil life, as well as in all spheres of the economy and in the company's board of directors and audit committees. Based on the above mentioned trend, many countries passes gender laws. In November 2012 the European Commission proposed legislation (Directive on gender balance) to increase number of women on corporate boards. The proposal set the aim of a minimum of 40% of non-executive members of the under-represented sex on company boards, to be achieved by 2020 in the private sector and by 2018 in public-sector companies (EU COMMISSION, 2012b.) Although, the Directive has not been adopted, a number of European countries have introduced gender diversity requirements to their corporate governance code to meet the quotas imposed on the EU level (see: EUROPEAN COMMISSION 2012a).

In 2016, women accounted for 29% of parliament members in EU countries, but the number of women in business leadership is not satisfactory and the proposed quota is still far to be achieved. Data from October 2016 shows that women still account for less than one in four (23.9 %) board members in the largest publicly listed companies registered in EU Member States (EUROPEAN COMMISSION, 2017). There are only four countries — France, Italy, Finland and Sweden, — in which boards of large companies have at least 30 % of women. In the majority of Member States, women are outnumbered by at least 4:1 and in Estonia, Greece and Malta by at least 9:1 (EUROPEAN COMMISSION, 2017).

European Commission in 2014 publishes the Directive 2014/95/EU which amending the Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013. The Directive 2014/95/EU requires companies with more than 500 employees regardless the sector in which they operate to disclose gender diversity policies in relation to the administrative, management and supervisory boards. Directive specifically requires that diversity policy should be disclosed in the corporate governance statement (article 20, Directive 2014/95/EU). If no diversity policy is applied than company should explain its position. The information provided in the statement may concern the actions taken to ensure gender equality (Preamble, position 7). Many countries have legally supported gender diversity, so the higher share of women in the corporate boards can be characterized as contemporary trend. In this context gender researches are very important and gain their actuality.

In the literature it is emphasized that male and female are biologically and psychologically different (HO ET AL, 2015, pp. 351). Risk aversion and ethical sensitivity are tied to key accounting issues, such as conservatism in financial reporting and steadfast opposition to fraud (HO ET AL, 2015, pp. 351; CUMMING, ET AL, 2015). As Kennedy and Kray (2014, pp. 53) stated gender differences in reactions to ethical compromises is one possible explanation for the under-representation of women in high-ranking positions in business organizations.

Researches regarding the participation of women in board of directors can be divided into two stands. Firstly, it is the influence of gender diversity on firm's profitability and consequently on firms value. The interest in gender diversity and its influence on profitability is not a surprise, having in mind that the "profitability is set as a key test of business performance" (VUKOVIC, ET AL, 2017, pp. 337). Secondly, the other area in which researchers focus their attention is the influence of women in board of directors, as well in the audit committee on the ethical questions. Namely the widespread expectation is that gender diversity have influence on higher quality financial reporting, i.e. lower level of earnings management activities.

The literature on board diversity and the firm financial performance (e.g. Adams et al. 2009; Campbell and Mínguez-Vera 2008; Farrell and Hersch 2005; Carter et al. 2003; Erhardt et al. 2003) broadly supports the view that the presence of women representatives on the board enhance the firm financial performance. (ARUN, ET AL, 2015, pp. 137) Campbell and Mínguez-Vera (2008) find that more women representatives in the board of directors have a

positive impact on firm value. Carter (2010) finds low positive relationship between number of women in board and the number of ethnic minorities and ROA, but did not find positive relationship with Tobin Q. Krishnan and Parsons (2007, pp. 65) find, on a sample of Fortune 500 firms, that companies with more women in senior management are found to be more profitable and have higher stock returns after initial public offerings than those with fewer women in the management ranks. Adams and Ferreira (2009) find positive relationship between corporate performance measures and gender diversity. Joecks, Pull and Vetter (2013) find that it is needed to be a critical mass of women on the board to realize the advantage of a more diverse board of directors. (According: KNEZEVIC, ET AL, 2017) Shrader, Blackburn, Iles (1997) as well as Smith, Smith and Verner (2005) denote mixed relations among measures of women in management and firm financial performance. (According: KNEZEVIC, ET AL, 2017) Ozbilgin, Tatli, Ipek and Sameer (2016) find that there is often a misconception that diversity outcomes refer only to single bottom line or profit (According: KNEZEVIC, ET AL, 2017).

The research on firms profitability and gender diversity have also been undertaken by countries with no financial markets developed. Drmac, Pervan and Pavic Kramaric find that gender diversity has no statistically significant impact on profitability in Croatia, while Knezevic, Pavlovic and Bojicic (2017) find on the sample of agricultural companies that the share of women representatives in the board of directors has a weak positive impact on company profitability (ROA). It can be concluded that nowadays research do not give uniform answer to the question whether board diversity impacts profitability.

Concerning the impact of women in board of directors and audit committee on earnings management practices, the results are mixed. Females are frequently described as being less assertive, less aggressive, less overconfident, more anxious, more risk averse, and more ethical, all of which are qualities that suggest a conservative mindset and a low propensity to commit fraud (HO, ET AL, 2015, pp. 296). Early gender studies have suggested that women are more ethical than males. (SHAWVER, CLEMENTS, 2015, pp. 557) But today, there are many conflicting studies that suggest similarities or differences in ethical evaluations and ethical decision making of males and females. (SHAWVER, CLEMENTS, 2015, pp. 557).

Adams and Ferreira (2009, pp1638) results indicate that firms with greater female participation on their boards exhibit higher earnings quality. The research is conduct on a

sample data taken from the S&P COMPUSTAT, Corporate Library's Board Analyst and IRRC databases for the period 2001–2007. Adams, Gray and Nowland (2010) also argue that female directors exhibit better earnings quality. Ho, Li, Tam and Zhang (2015, pp. 21) in their study which is based on a sample of 13.206 firm- years taken from Compustat database find a positive association between CEO gender and accounting conservatism. As they stated, the results indicate that female CEOs are more ethical and risk-averse. The expectation is that the companies with female CEOs report earnings more conservatively, ie recognize bad news in reported earnings in a more timely fashion. Francis, Hasan, Park and Wu (2015) also find that female CFOs are more conservative in their financial reporting. The research is conducted on a sample taken from ExecuComp database, which covers most of the S&P 1,500. Srinidhi, Gul and Tsui (2011) examine whether U.S. corporations with gender-diverse boards exhibit higher-quality earnings and find that firms with greater female participation on their boards exhibit higher earnings quality. Arun, Almahrog and Aribi (2015, pp. 137) found that firms with a higher number of female and independent female directors are adopting restrained earnings management practices in the UK. Gaviious, Segev and Yosef (2012) find evidence for a negative relation between the presence of female directors and earnings management. Their findings indicate that accounting aggressiveness is affected by the proportion of women on the board of directors as well as on the audit committee and indicate that earnings management is lower when either the CEO or the CFO is a woman. (GAVIOUS, ET AL, 2012, pp. 4) Notably, in firms with a higher female representation in corporate governance and/or in top management, external monitoring by auditors and creditors seems to be weaker, yet earnings quality is higher. (GAVIOUS, ET AL, 2012, pp. 4) Palvia, Vähämaa and Vähämaa (2014) findings are consistent with the view that gender-based behavioral differences affect corporate decisions.

Other studies do not support those findings. Sun, Liu and Lan (2011) find no gender effect with respect to independent audit committees' effectiveness in constraining earnings management and suggest that there are no significant differences in ethical beliefs towards earnings management among male and female audit committee directors. Their conclusion is bringing on a research based on a sample of firms included in S&P 500. Shawver and Clements (2015, pp. 557) find that there are no significant differences between male and female professional accountants when they make an ethical evaluation involving earnings management by shipping product early to meet a quarterly bonus. It seems that the gender diversity did not play significant differences in China, as well (YE, ET AL, 2010). Using a

sample of 70 French firms listed at the SBF 120 index, Hili and Affes (2012) find that the enhancement of earnings persistence could not be attributed to gender diversity. The results of this study do not display significant differences among firms with female and male directors. HILI, AFFES, 2012, p. 2)

Some studies show negative impact of board diversity on earnings management. Krishnan and Parsons (2007, pp. 65) findings suggest “that the improved bottom line for companies with more women senior executives is not produced through the management of earnings or lower quality earnings. Instead, earnings quality is positively associated with gender diversity in senior management.”

### **3. Hypothesis development and variable description**

The paper tests the hypothesis related to the board gender diversity and its effects on earnings management practices of Serbian agricultural companies in the period 2015–2016.

We posted the following hypothesis:

#### **H 0: There is association between board gender diversity and earnings management**

We decided to measure these effects using the following variables: *dependent variable* is earnings management practices, while *independent* are percentage of women on board and Blau index of diversity. Accounting variables are calculated from the firm's financial statements for the three year period 2014–2015.

Independent variable, namely, diversity is measured by the percentage of women in the board (KNEZEVIC, ET AL, 2017; CAMPBELL, MINGUEZ-VERA, 2008). This measure is calculated by dividing the number of women in the board with the board size. Also we compose, the Blau Index. Value of the Blau Index ranges from 0.0–0.5. It is 0 when the population is homogeneous, consisting of the same gender and 0.5 when there is equal number of men and women. Control variables in this research are a total asset, which is calculated as the book value of total assets of firms. We report the results using the unlogged value for total assets. The justification of using this control variable is that larger firms tend to be more diversity sensitive and they have more female on the board. The other control variable is total sales (turnover). Firm's total sales must be associated with the percentage of

women on board because firms with higher sales tend to employ more women in the board. We also use unlogged value for the total sales.

#### 4. Data and Methodology of a Research

The influence of gender diversity on earnings management is tested on a sample consisting of all Serbian agriculture companies (agriculture, fishing, forestry sector) listed on the Belgrade Stock Exchange for the period 2015-2016. This includes 36 companies. The financial information was obtained from the Serbian Business Register Agency web site for the analyzed period. In addition the data is collected from the Management report where Serbian companies give data about the name and affiliations of the board of directors. Women are identified by their name from the list of board members.

The first step was to identify the appropriate method for detecting earnings management. (see: JONES, 1991; DECHOW, ET AL, 1995; HEALY, WAHLEN, 1999; MARAI, PAVLOVIC, 2014). This is done on the sample of all agriculture companies (agriculture, fishing, forestry sector) listed on Belgrade stock exchange in the period 2011-2016. This includes 36 companies, which gives a sample of 144 observations per each variable. We tested few methods for detecting earnings management in order to find the appropriate one. We have tested the: (1) Jones Model ( $ACC = \beta_i 1/TA_{-1} + \beta_{1i} \Delta SALES + \beta_{2i} PPE + \epsilon_{it}$ ); (2) Modified Jones Model ( $ACC = \beta_i 1/TA_{-1} + \beta_{1i} \Delta SALES - \Delta RECEIV + \beta_{2i} PPE + \epsilon_{it}$ ); (3) Performance ADJ Jones Model ( $ACC = \beta_i 1/TA_{-1} + \beta_{1i} \Delta SALES - \Delta RECEIV + \beta_{2i} PPE + PERFORMANCE + \epsilon_{it}$ ); (4) Modified Jones Panel Data ( $ACC = \beta_i 1/TA_{-1} + \beta_{1i} \Delta SALES - \Delta RECEIV + \beta_{2i} PPE + \epsilon_{it}$ ) and (5) Performance ADJ Jones Panel Data ( $ACC = \beta_i 1/TA_{-1} + \beta_{1i} \Delta SALES - \Delta RECEIV + \beta_{2i} PPE + PERFORMANCE + \epsilon_{it}$ ).

Where:

ACC = total accruals

TA = total assets at the end of year  $t_1$

$\Delta SALES$  = the change in sales from year  $t_1$  to  $t$

$\Delta RECEIV$  = the change in receivables from year  $t_1$  to  $t$

PPE = gross property, plant, and equipment in year  $t$  for firm  $i$ .

$\epsilon_{it}$  = error term in year  $t$  for firm  $i$ .



**Table 1: Performance ADJ Jones Panel Data model**

xtreg tacts TA1 chrev_rec ppeta ROA, fe vce(robust)						
Fixed-effects (within) regression			Number of obs =		144	
Group variable: number			Number of groups =		36	
R-sq: within = 0.6787			Obs per group: min =		4	
between = 0.1401			avg =		4.0	
overall = 0.3660			max =		4	
F(4,35) =			83.10			
corr(u_i, Xb) = -0.6788			Prob > F =		0.0000	
(Std. Err. adjusted for 36 clusters in number)						
-----						
Robust						
tacts	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
-----+						
TA1	-16300.76	12440.93	-1.31	0.199	-41557.19	8955.671
chrev_rec	-.0071859	.0248818	-0.29	0.774	-.0576987	.0433269
ppeta	.0050822	.018824	0.27	0.789	-.0331326	.043297
ROA	.9367527	.0521863	17.95	0.000	.8308088	1.042697
_cons	.0244675	.036115	0.68	0.503	-.0488499	.0977849
-----+						
sigma_u   .1040239						
sigma_e   .07656414						
rho   .64862115 (fraction of variance due to u_i)						

Source: Author's own calculations

As it is shown in the above results, we find that the *Performance ADJ Jones Model* is the appropriate model for detecting earnings management on sample of Serbian agricultural companies.

## 5. Key findings on influence of board gender diversity on earnings management

### 5.1. Results for the Year 2015

Descriptive statistics for observed variables is presented in the following tables. The total number of observations in the year 2015 is 36 companies. The mean percentage of women in the Board is 19.5358.

**Table 2: Set of Descriptive statistics of variables for the year 2015**

Descriptive Statistics			
	Mean	Std. Deviation	N
2015.	0.00053	0.067639	36
% Women	19.5358	20.56502	36
Correlations			
		YEAR 2015	%
Pearson Correlation	2015.	1.000	-.438
	% Women	-.438	1.000
Sig. (1-tailed)	2015.	.	0.004
	% Women	0.004	.
N	2015.	36	36
	% Women	36	36

Source: Author's own calculations

According to the regression results the model (Table 3) shows that 19,2% of the percentage of women in the board explains earnings management used by agriculture companies.

**Table 3: Regression model results for % of women in the board for the year 2015**

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
Perf. ADJ Jones model	0.438 <sup>a</sup>	<b>0.192</b>	0.168	0.061693	0.192	8.071	1	34	0.008

a. Predictors: (Constant), % Women

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
Perf. ADJ	Regression	0.031	1	0.031	8.071	0.008 <sup>b</sup>
	Residual	0.129	34	0.004		

Jones model	Total	0.160	35			
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a. Dependent Variable: 2015

b. Predictors: (Constant), % Women

Source: Author's own calculations

The ANOVA table shows that this relationship in the year 2015 is significant at the level Sig. 0.008 which is lower than 0.005. According to the above mentioned this relationship can be considered statistically significant with the F value of 8.071.

### 5.1. Results for the Year 2016

Descriptive statistics for observed variables for the year 2016 is presented in the following tables. The total number of observations in the year 2016 is 36 companies. The observed variables are % of women in the board and earnings management. The mean percentage of women in the Board is 19.5358 and it is the same as for the year 2015 which means that board gender % did not change between the years (see Table 4).

**Table 4: Set of Descriptive statistics of variables for the year 2016**

Descriptive Statistics			
	Mean	Std. Deviation	N
2016.	-0.01144	0.072541	36
% Women	19.5358	20.56502	36

  

Correlations			
		YEAR 2016	%
Pearson Correlation	2016.	1.000	-0.255
	% women	-0.255	1.000
Sig. (1-tailed)	2016.	.	0.067
	% women	0.067	.
N	2016.	36	36
	% women	36	36

Source: Author's own calculations

In Table 5 (set of tables) we present the relationship between % of women in the board and earnings management for the year 2016. As it can be observed from the first table in this set, only 6,5% of earnings management in this year can be explained with the % of women in the board.

**Table 5: Regression model results for % of women in the board for the year 2016**

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
Perf. ADJ Jones model	0.255 <sup>a</sup>	<b>0.065</b>	0.037	0.071169	0.065	2.363	1	34	0.133

a. Predictors: (Constant), % Women

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.012	1	0.012	2.363	0.133 <sup>b</sup>
	Residual	0.172	34	0.005		
	Total	0.184	35			

a. Dependent Variable: 2016.

b. Predictors: (Constant), % Women

Source: Author's own calculations

ANOVA table shows that for the year 2016 that regression model does not fit the data (Sig. is 0.133 which is higher than 0.05). We can draw a conclusion that in the year 2016 there is no relationship between gender diversity and earnings management for the Serbian agriculture companies.

## 5.2. Comparative analysis for the year 2015 and 2016

This section shows comparative analysis of the influence of % of women in the board of directors on the earnings management practice of Serbian agriculture companies.

**Table 6 Set of tables for the Descriptive Statistics and comparative analysis of the results for the year 2015/2016**

	Mean	Std. Deviation	N
2015.	0.00053	0.067639	36
2016.	-0.01144	0.072541	36

		Year 2015	Year 2016
Pearson Correlation	2015.	1.000	0.050
	2016.	0.050	1.000
Sig. (1-tailed)	2015.	.	0.385
	2016.	0.385	.

		Year 2015	%
Year 2015	Pearson Correlation	1	<b>-0.438**</b>
	Sig. (2-tailed)		0.008
	N	36	36
%	Pearson Correlation	<b>-0.438**</b>	1
	Sig. (2-tailed)	0.008	
	N	36	36

\*\* . Correlation is significant at the 0.01 level (2-tailed).

		Year 2016	%
Year 2016	Pearson Correlation	1	<b>-0.255</b>
	Sig. (2-tailed)		0.133
	N	36	36
%	Pearson Correlation	<b>-0.255</b>	1
	Sig. (2-tailed)	0.133	
	N	36	36

Source: Author's own calculations

In the above set of tables we can see that between % of women appointed in the board of directors and earnings management there is insignificant negative linear relationship with the Pearson coefficient of -0.438 for the year 2015. While in the year 2016 this coefficient is still negative, but even lower (-0.255) meaning that the correlation between variables is also insignificant. But the sign is what we expected from the beginning.

## 6. Interpretation of the Results

Agricultural sector in Serbia has significant influence on the economy (see: VUKOVIC, ET AL, 2017; KNEZEVIC, ET AL, 2017). We can draw a statement that this sector has been very suitable for foreign investors, not only those willing to invest in Serbia, but also those willing to invest in Southeast Europe (FILIPOVIC, ET AL, 2011, pp. 134). That is why it does not come as a surprise that many researchers focus their research on this sector. On the other hand, only few papers investigate earnings management in Serbia (BESLIC ET AL, 2015; KNEZEVIC, ET AL, 2012) but no one puts it in the context of gender diversity and no one investigates earnings management in agribusiness.

Until now, just one paper investigates the influence of gender diversity on profitability in the agriculture sector, and finds a weak positive correlation. This is the first study in Serbia which analyzes the influence of board diversity on earnings management practices. This study is important for its contribution to this very actual topic. We find no evidence of the significant linear relationship between Blau Index and % of women on board and earnings management. The results of the analysis suggest that there is an *insignificant negative linear relationship* between number of women in the board and earnings management. In the above table we can see that R square for the Year 2015 is 0.192 or 19,2% with the standard error of the estimate of 0.061693. This result indicates that the percentage of women in the board could be significant. But the R square for the Year 2016 is 0.065 or 6,5% and the standard error of the estimate is 0.071169 while the Sig. is 0.133 which is higher than 0.05.

Although, the coefficient of correlation between % of women appointed in the board of directors and earnings management in the year 2015 is  $-0.438$ , this satisfies the relation  $0.25 \leq |r| < 0.5$ , and means that the insignificant linear correlation exists between the variables. Therefore, the fact that Pearson correlation coefficient is quite near the right hand borderline of significance of 0.5, this could also be treated as almost significant linear correlation. In the other case, Pearson correlation coefficient is  $-0.255$  which satisfies the relation  $0.25 \leq |r| < 0.5$ , and we can conclude that the insignificant linear correlation exists between the variables in the year 2016. The minus sign in both coefficients shows that with the higher value of one variable (% of women in the board) there is the lower value of the other variable (earnings management) reached in the observations. The line function has a

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negative slope. Negative slope of the line means that the two variables move in opposite directions.

## 7. Conclusion

Serbia is considered as traditional society, but with a long tradition of female education. In 1846 the declaration of women schools was passed, the female high school education dated back in the year 1863, while in the 1871 the first woman is enrolled in the faculty (MATIJEVIC, 2011). Nowadays, the most students of the Economics Faculties are female students.

Therefore, it can be concluded according to the EU criteria that the % of women in the board in Serbia is at a low level (KNEZEVIC, ET AL, 2017). Although, in other neighboring countries situation is the same (DRMAC, ET AL, 2017), as well as in the EU Member States where the percentage of female in large firm's board was zero in 15 out of 27 countries (EUROPEAN COMMISSION 2012b) despite the fact that there is a widespread EU initiative to include more female in the management board.

Based on the contemporary research in this area, it seems that the percentage of women in the board has an influence on earnings management more in Anglo-Saxons countries, while this correlation is not quite significant in other countries, showing different cultural heritage, which is in line with the statement of Ozbilgin, Tatli, Ipek, Sameer (2016). Those authors suggest that cultural, political and other factors besides the economic context play crucial role in diversity topic in accounting. Regarding the influence of gender diversity on board decisions, the question posed by Sun, Liu and Lan (2011) about the possibility of women to influence other audit board members seems to be very important.

In the explanation of the result of this study, which founds insignificant negative linear relationship between % of women in the board and earnings management, we can agree with Feldberg and Glenn (1979) position that the socialization in the accounting environment has effectively eliminated the gender differences. Also, Lacy, Bokemeier and Shepard (1983) explains that male and female accountants eventually make the same types of decisions (According: SHAWVER, CLEMENTS, 2015, pp. 565), so the gender has no influence over decision made. Many psychological studies focus their research on different attitude of men and women in the context of making ethical decisions. Gender studies in the business in most of the cases rely on these psychological differences between male and female, but the most

part of these studies have been done on the sample consisting of students, not business people. So it is quite questionable if the psychological profile of women from the sample of students is similar with the psychological profile of women in the business, especially for the psychological profile of women appointed in the management board. It could be possible that the psychological profile of women in the board is more close to the psychological profile of men in the board. One of explanation of the above posted statements, which introduces Owroso (2002) could also be that similar training may produce similar ethical evaluation results, as well as that gender differences are minimized once an individual enters the structure of the business world. This is also supported by Robin and Babin (1997). (SHAWVER, CLEMENTS, 2015). As Chong (2006) argues one would not considered earnings management to be bad if the management uses it to create a stable financial performance by acceptable and voluntary business decisions. So, it does not matter in this case whether earnings management is done by male dominated board or female dominated board. It is considered ethical because it has stable performance as its goal. Sun, Liu and Lan (2011) continue this with their statement “some female audit committee directors may believe that not all earnings management is unethical... earnings management may be useful to protect the firm from the consequences of unforeseen events when contracts are rigid and incomplete.”(SUN, ET AL, 2011). In this specific case, again, gender differences have no influence over earnings management.

It seems that that board member age and religious attitudes has much more influence on earnings management than gender diversity, which is indicate by recent studies of Huang (2012), Du, Jian, Lai, Du and Pei (2015) and Kanagaretnam, Lobo and Wang (2015). This is quite logical, especially in the business world, that religious attitudes and life experience have more prominent role in the context of ethical considerations than gender.

## 8. References

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