

# Impact of Continuing Education on Employee Productivity and Financial Performance of Banks

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## Abstract

**Objectives:** This research aims to measure the impact of continuing education on employee productivity and that of the latter on the financial performance of commercial banks in Kosovo. **Methods:** A quantitative approach was employed to achieve the research objectives and questions. The statistical population comprised 3636 employees working at commercial banks operating in Kosovo. We obtained data from the Central Bank of Kosovo (CBK). A sample of 360 employees was then determined using Slovin's formula to include the representative sample. **Findings:** The Ordinary Least-Squares (OLS) model demonstrated that continuing education affects employee productivity, and the latter affects the financial performance of commercial banks in Kosovo. The findings indicated that 40.2% of employee productivity is explained by continuing education, while 20.4% of financial performance is explained by employee productivity. **Novelty/improvement:** This research showed that commercial banks could receive feedback on the importance of employees' continuing education in increasing their productivity and, subsequently, the bank's financial performance. This can improve effectiveness and productivity at work and the organization's financial results, especially cost optimization and income generation.

## Keywords:

Continuing Education;  
Employee Productivity;  
Employee Training;  
Financial Performance;  
Banking Sector.

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## 1- Introduction

Nowadays, human resource management (HRM) is a priority in any organization [1], where human resource development (HRD) determines business success and performance. Human capital is characterized by human resource skills directly impacting a company's success or failure [2]. Therefore, the survival of an organization depends on its affinity with human resource training (HRT) and HRD to improve its productivity and performance [3] by developing knowledge, skills, and competencies and, consequently, increasing its competitive advantage [4]. Continuing education helps improve employees' skills, knowledge, competencies, and performance, thereby increasing their productivity, and is also vital for organizational effectiveness [5, 6].

At the general level, managers reckon that continuing education is a determining factor in improving employee performance and productivity, i.e., providing organization members with knowledge and skills to perform effectively [7]. Many authors have interpreted continuing education as employee retention and engagement, ensuring a supportive organizational culture, and increasing the enterprise's positive perception to meet in-house employee expectations [8]. Many studies have confirmed that continuing education contributes to employee satisfaction, motivation, and productivity [9]. Employee training programs help improve employee efficiency and retention, guaranteeing success [10].

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This research aimed to analyze the impact of continuing education on employee productivity and that of the latter on financial performance. The relationship between employee productivity and financial performance can be evaluated as a phenomenon in common sense, where increased productivity can boost profitability as the cost per unit is reduced. However, this phenomenon is incomplete in the modern business environment because, in some instances, there is a high enterprise profit but decreased productivity, and vice versa [11]. The literature provides evidence that employee productivity affects the financial performance of enterprises through the empirical findings of many authors. Hatane (2015) [12] concluded that employee satisfaction and productivity could positively impact financial performance through the least-squares method. Besides, Chen et al. (2005) [13] identified the positive impacts of the workforce on financial performance.

Since the authors' findings for the research variables differ, this study aims to analyze the impact of continuing education on employee productivity and that of the latter on the financial performance of Kosovo's banking sector, thereby bridging the gap between the findings of other authors and those of this research.

This research will provide banks with a better understanding of the importance of employee development through continuing education and encouraging education even outside of mandatory training courses to fulfill tasks. Besides increasing employee capacities and development, education contributes to an increase in effectiveness and productivity at work and financial results, especially in cost optimization and income generation.

## **2- Literature Review**

### ***2-1- Continuing Education***

Continuing education refers to professional or non-professional educational activities that individuals participate in after leaving formal education, which last a lifetime [14]. That is, continuing education offers individuals educational activities to acquire professional competencies after leaving formal education [15]. It is provided either by public or private institutions for different categorizations, e.g., age, academic, professional, or even individual development [16].

Although training and education are associated in many cases, Sirkova et al. (2014) [17] identified the difference between the two. According to their study, training contributes to specific expectations from the employee's perspective, for which they will be rewarded or penalized. At the same time, education is a stimulant for people using the brain. Education can have a positive impact when it is aligned with the vision, mission, and strategies and implemented professionally; thus, it can be carried out by internal and external experts [18]. The primary goal of continuing education is to improve employees' knowledge and skills, thereby increasing organizational performance, employee productivity, and competitive power.

Continuing education is crucial in developing a quality management system (QMS) model for the company [19]. Schraeder (2009) argues that continuing education aims to improve organizational efficiency and operation. According to Kepha et al. (2012) [20], continuing education is essential in succession planning, leadership development, building innovation programs to develop new products or services, and identifying new customers and markets. Therefore, a company's continuing education strategy to develop employee skills will influence that in the future, thereby increasing their investments. Training and development are defined as HRM functions. Even though they are usually used synonymously, there is a substantial difference between them. Training refers to the process of acquiring skills and, as such, is measured by the individual's ability to demonstrate the acquired skills and produce the desired outcome [21]. Training for specific work skills was found to have the most significant impact on work performance and addresses the mismatch between work and development [22]. Development courses provide opportunities for employee growth by enhancing professional skills and experiencing personal advancement [23].

### ***2-2- Employee Productivity***

Employees can be considered the most essential resource in any organization. Therefore, employee employment and utilization are not enough; consequently, they should be enabled to work efficiently by providing them with opportunities for continuing education [24]. An indicator for improving employee performance and productivity is identifying the organization's skills gap by analyzing the skills it lacks and continuing with strategic steps by providing training to fill the identified skills gap [6]. Creating employee training and development programs can improve employee performance and productivity. Thus, employee performance and productivity will increase, and they will also be able to better understand their work [25]. Employees' competitive levels can also boost employee performance and productivity. Among other things, employee productivity is affected by their satisfaction with the organization and whether their continuing education expectations have been met. Accordingly, continuing education is an essential indicator of increased employee productivity; therefore, employee productivity will positively impact organizational effectiveness [26]. It is considered one of the most widespread tools to improve employee performance and organizational productivity [27]. Consequently, companies invest large sums of money in continuing human capital education since their performance will increase organizational performance [28].

### 2-3- Financial Performance

Employee productivity varies from when an employee is present at work and roughly from the degree to which he is mentally present. That is, it is a measure of the evaluation of the efficiency of an employee or a group of employees [29]. Increased levels of employee productivity supply the enterprise with numerous advantages. It enables the company to evaluate human capital and, consequently, positively affect organizational performance [30]. Other studies have identified significant relationships between employee productivity and financial performance using structural equation modeling (SEM) and a direct impact of employee productivity on financial performance [31].

The association between financial performance and employee productivity is considered a phenomenon in common sense, where increased productivity increases (and, in some cases, decreases) the organization's financial performance [11]. Thus, more empirical evidence is needed to evaluate the relationship between employee productivity and the organization's financial performance. Parast & Fini (2010) [32] analyzed the relationship between productivity and the financial benefits of the airline industry in the US. They concluded that productivity was the most important determinant of their financial performance. Afterward, Prakash et al. (2017) [33] found a significant positive relationship between productivity and the financial performance of manufacturing companies in India. Moreover, Nguyen et al. (2019) [11] identified a positive relationship between productivity and the financial performance of companies listed in Vietnam. This was also consistent with Agiomirgianakis et al.'s (2006) [34] findings, who found a positive relationship with Return on Assets (ROA) in the study carried out with Greek companies.

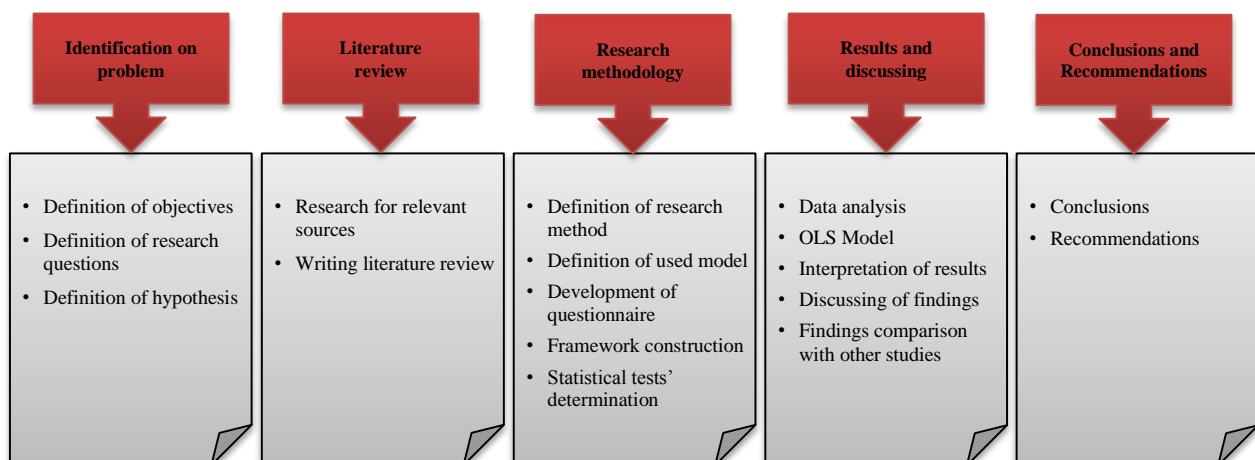
### 3- Research Methodology

The research was carried out based on primary data, using the quantitative method to achieve the objectives and research questions of the study. The population of the study is 3636 employees of commercial banks in Kosovo, where the data for their number were obtained from the Central Bank of Kosovo (CBK) [35]. The sample was determined through Slovin's formula to include the most representative sample. The sample definition is shown in the following equation:

$$N = \frac{N}{1 + N * (e)^2} = \frac{3636}{1 + 3636 * (0.05)^2} = \frac{3636}{10.09} = 360 \quad (1)$$

The inclusion in the research of 360 bank employees will influence the results with a confidence level of 95%. Through the structured measuring instrument, the realization of the study has been made possible. The questionnaire was divided into four sections (Appendix I). The first part of the questionnaire contains questions about the demographics of the respondents. The second section consists of 8 statements created through a Likert scale from 1 = "I strongly disagree" to 5 = "I strongly agree" about continuing education. The third section also consists of 8 statements made through a Likert scale for employee productivity, and the last section had five statements created through this scale to measure financial performance based on five financial components (gross profit, net profit, working capital, cash flow, and debt-to-equity ratio).

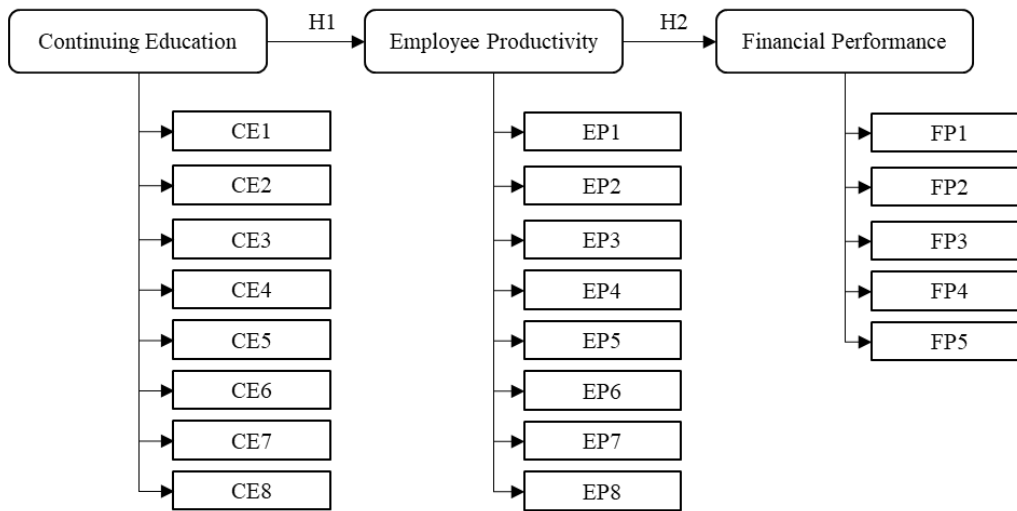
The realization of the research was made possible by distributing the questionnaires created through Google Forms to the bank employees. Then the data processing was done through the Statistical Package for Social Sciences. The flow chart shown in Figure 1 explains the flow steps of the research methodology. For more details, refer to Figure 1:



**Figure 1. Framework of the research**

The flowchart of the research methodology that was used to achieve the study's aims is shown in Figure 2. This study has presented two objectives and two hypotheses:

- **Objective 1:** To measure the impact of continuing education on employee productivity.
- **H<sub>1</sub>:** There is a significant interrelation between continuing education and employee productivity.
- **Objective 2:** To measure the impact of employee productivity on financial performance.
- **H<sub>2</sub>:** There is a significant interrelation between employee productivity and financial performance.



**Figure 2. Flowchart of research**

*Definition of variables for first objective:* The independent variable is continuing education, and the dependent variable is employee productivity.

*Definition of variables for second objective:* The independent variable is employee productivity, and the dependent variable is financial performance. In the Figures 3 to 5, you can find the correlation between the independent variable and the dependent variable:

The presentation of the results is done through the use of multiple analyses. Initially, the reliability of the measuring instrument was tested through the Cronbach alpha coefficient to see if the reliability of the measuring instrument was acceptable, a condition that is essential to starting with the analysis and discussion of the results. The Kolmogorov-Smirnov test was also performed, which shows the distribution of the data; depending on the value of the P-value, it was decided to use the OLS model to measure the influence of the independent variable on the dependent one.

Initially, descriptive analyzes were performed (minimum, maximum, arithmetic mean, and standard deviation) for all questionnaire sessions (continuing education, employee productivity, and financial performance). Average sizes represent an important statistical method for researching economic-social phenomena, through which it is possible to discover the typical size, development directions, and connections between different economic or social phenomena. The arithmetic average is best used in homogeneous series of statistical units. Depending on the nature of the phenomenon, specifically on the presentation of data in the series, there are two arithmetic averages: simple and weighted. In this case, the weighted arithmetic mean was used, given that the frequencies of the series data are different or grouped, which represents the ratio of the amount obtained as a result of multiplying the data by their frequencies divided by the sum of the sizes of the frequencies of the variants of the series. The arithmetic mean is calculated using the following equation:

$$x_i = \frac{\text{Upper class limit} + \text{Lower class limit}}{2} \quad (2)$$

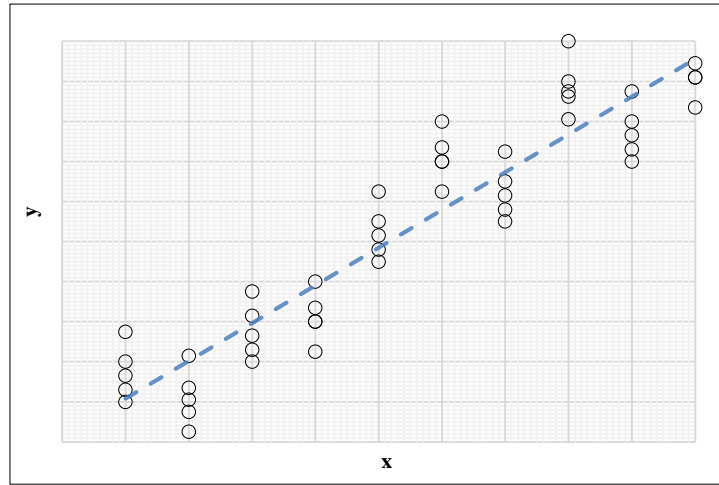
$$\text{Mean} = \bar{x} = \frac{\sum f_i x_i}{\sum f_i} \quad (3)$$

Variation indicators are essential indicators of statistical analysis. The peculiarities between a series of features with the same value as the arithmetic mean are investigated through variation indicators, and the degree of closeness or difference between them is revealed. After the benefit of the variance as an absolute indicator of deviations, another indicator was used to measure the variables, such as the standard deviation, through the following equation:

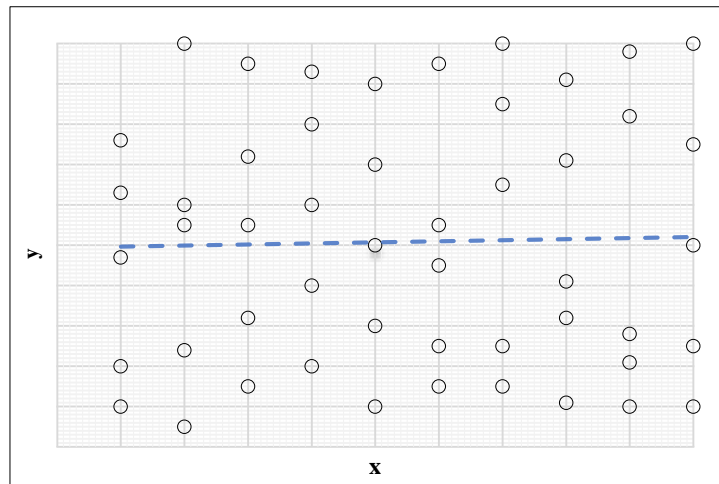
$$SD = \sqrt{\frac{\sum (x - \bar{x})^2}{N - 1}} \quad (4)$$

Pearson's correlation coefficient is among the most complex indicators, which shows the degree and intensity of correlations between the variations of two or more phenomena. Its values range from -1 to 1, respectively. Values from

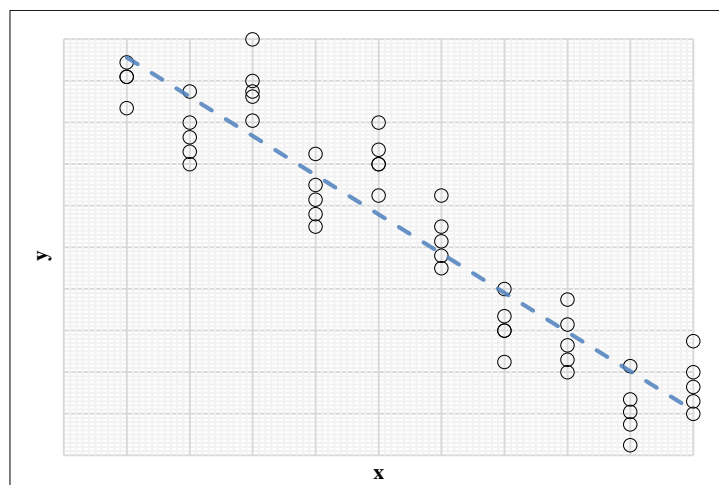
0 to 1 express the positive relationship between the two variables, and from -1 to 0, the negative relationship between them. And when the correlation coefficient is 0, there is no correlation between the variables. This explanation is presented figuratively in Figures 3 to 5.



**Figure 3. Positive correlation**



**Figure 4. No correlation**



**Figure 5. Negative correlation**

We calculated the correlation coefficient through the following equation:

$$\rho_{(x,y)} = \frac{\sum[(x_i - \bar{x})(y_i - \bar{y})]}{\delta x * \delta y} \quad (5)$$

By regression analysis, we mean the discovery of the functional relationship between two quantities, dependent and independent. So, regression investigates the impact of changing the independent variable's value on the dependent variable's value. It represents the average quantitative ratio between two or more mass phenomena. It means a mathematical function expressing the average ratio of two or more observed phenomena. Simple linear regression is presented through the following equations:

$$\hat{\beta}_0 = \bar{y} - \beta_1 \bar{x} \quad (6)$$

$$\hat{\beta}_1 = \frac{\sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y})}{\sum_{i=1}^n (x_i - \bar{x})^2} \quad (7)$$

$$\hat{\alpha} = \min_{\alpha} \sum_{i=1}^n (y_i - \alpha - \beta x_i)^2 = \min_{\alpha} \sum_{i=1}^n \epsilon_i^2 \quad (8)$$

$$\hat{\beta} = \lim_{\beta} \sum_{i=1}^n (y_i - \alpha - \beta x_i)^2 = \min_{\beta} \sum_{i=1}^n \epsilon_i^2 \quad (9)$$

#### 4- Results

Of the 360 surveyed employees of commercial banks in Kosovo, 57.8% (N = 208) were female, and 42.2% (N = 152) were male. The age distribution of bank employees was different, where 18-26 years old were 3.6% (N=13), 27-35 years old were 15% (N=54), 36-44 years old were 54.2% (N=195), aged 45 - 53 years old were 23.3% (N=84) and over 54 years old were 3.9% (N=14). The education level of the employees was categorized into three groups, where 23.1% (N=83) had a bachelor's education level, 73.3% (N=264) had a master's degree, and 3.6% (N=13) had a Ph.D. Regarding the position of the employees in the bank, 69.2% (N=249) were Bank Officers, 15.6% (N=56) were Branch management, and 15.3% (N=55) were Head Office (Table 1).

**Table 1. Respondent Characteristics; Note: N=360**

		N	Percent (%)
<b>Gender</b>	Female	208	57.8
	Male	152	42.2
<b>Age</b>	18 - 26 years old	13	3.6
	27 - 35 years old	54	15.0
	36 - 44 years old	195	54.2
	45 - 53 years old	84	23.3
	Over 54 years old	14	3.9
<b>Level of education</b>	Bachelor	83	23.1
	Master	264	73.3
	PhD	13	3.6
<b>Employees' position</b>	Bank officer	249	69.2
	Branch management	56	15.6
	Head Office	55	15.3

According to the descriptive results, referring to the Likert scale where 1 = strongly disagree to 5 = strongly agree, the average of continuing education is  $\bar{x} = 3.21$  and  $SD = 0.864$ . This result, according to the average, expresses an above-average level of the provision of training for the development of skills for which the bank's employees are not at the appropriate level according to the performance assessment, the provision of training for capacity building for new tasks, capacity for development professional, for raising capacities for career development, for developing soft skills, providing training depending on the individual needs of the staff. Also, the results showed that the bank enables you to address requests for individual training and the possibility of financing external training depending on the staff's requirements.

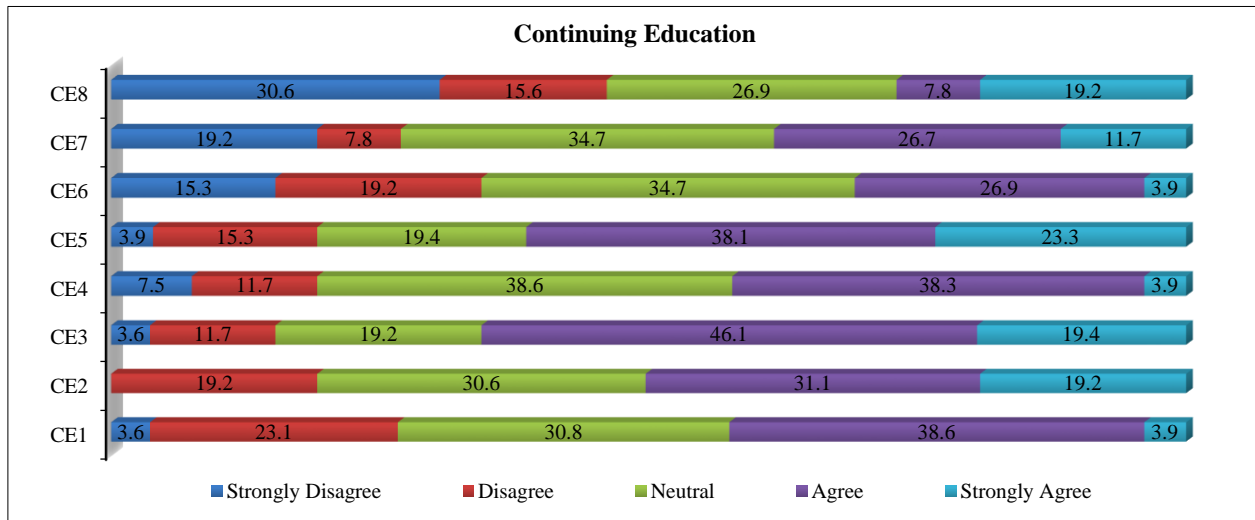
The dependent variable, such as employee productivity with mean  $\bar{x} = 3.36$  and  $SD = 0.805$ , also shows an above-average level of increase in employee productivity as a result of the training offered depending on the performance evaluation, the training provided to increase the capacities for new tasks, for professional development, for career development, for soft skills development. Likewise, the employees considered that their productivity has significantly improved due to the possibility of financing external training. The second independent variable addressed is financial performance, where according to the financial performance indicators, the employees considered that the company has an increase in the gross profit margin, an increase in the net profit margin, an increase in the working capital, an increase in the current ratio and increase in the ratio of debt to capital based of mean  $\bar{x} = 3.74$  and  $SD = 0.770$  (Table 2).



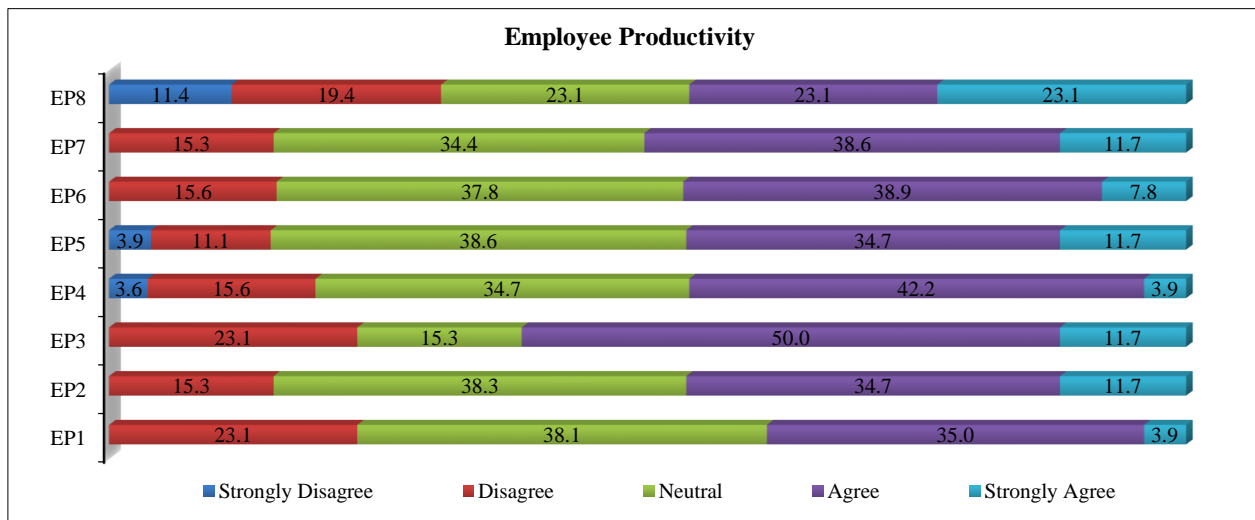
**Table 2. Descriptive statistics of variables**

	N	Minimum	Maximum	Mean	Std. Deviation
Continuing Education	360	1.38	4.63	3.2149	0.86418
Employee Productivity	360	2.00	4.88	3.3646	0.80566
Financial Performance	360	1.80	5.00	3.7444	0.77094

According to the results, a more significant percentage of respondents agreed that the bank where they work offers training for the development of skills for which they are not at the appropriate level according to the performance evaluation, training for capacity building for new tasks, training for building capacities for professional development, training for raising capacities for career development, for developing soft skills, and training depending on the individual needs of the staff. The lowest result was the ability to address requests for individual staff training and the financing of external training depending on their requests, where the employees were more in favor of the disagree and neutral options.

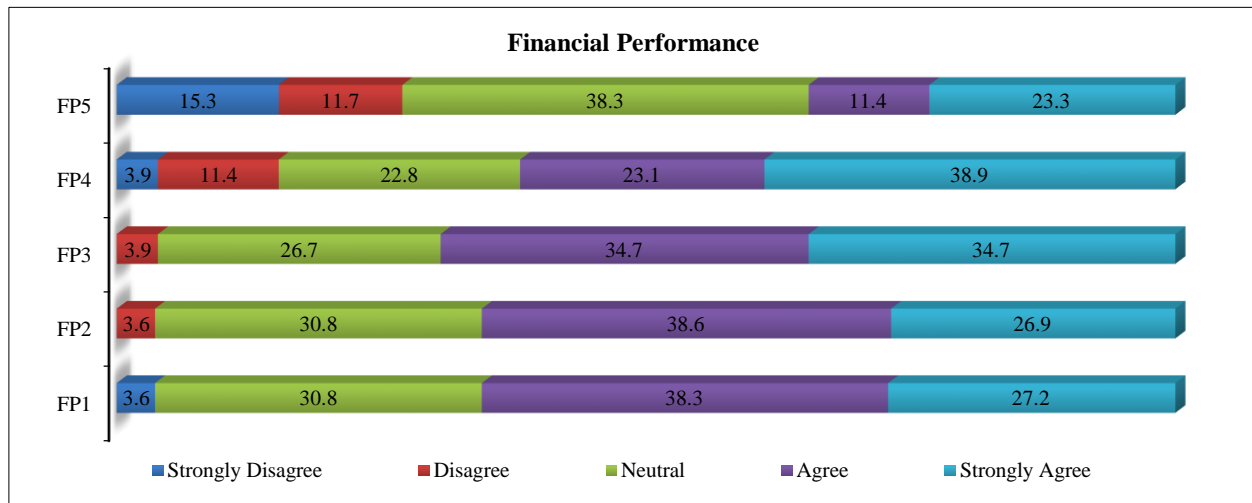
**Figure 6. Continuing education**

Referring to Figure 7, half of the respondents showed a high level of compliance that their productivity has improved as a result of providing training depending on performance evaluation, training provided for capacity building for new tasks, training provided for capacity building for professional development, for raising capacities for career development, for developing soft skills, training offered depending on the individual needs of the staff, as well as addressing requests for individual training and the possibility of their financing. The rest of the respondents mainly remained neutral with the statements of this category since they did not have information about their productivity level or whether their productivity has improved or not as a result of continuing education. The level of non-compliance was low, according to the surveyed employees.

**Figure 7. Employee productivity**

According to Figure 8, the independent variable "Financial performance" showed the highest result among the other variables treated in the paper, where the level of compliance was very high. According to the surveyed employees, the

bank where they work has had an increase in gross profit margin, net profit margin, working capital, current ratio, debt-to-equity ratio, return on equity, return on assets, and an increase in operating cash flow. The level of non-compliance was very low, where employees stated that the bank's financial performance was high.



**Figure 8. Financial performance**

Based on the value of the Alpha Cronbach coefficient, the reliability of the measuring instrument for the session "Continuing education" is  $\alpha = 0.901$ . For the session "Employee productivity", it is  $\alpha = 0.921$ , and for the session "Financial performance", it is  $\alpha = 0.801$ . Referring to the Table 3, the reliability of the entire measuring instrument is  $\alpha = 0.874$ , which expresses the acceptable reliability of the measuring instrument.

**Table 3. Reliability of the instrument**

Variables	Cronbach Alpha coefficients
Continuing Education	0.901
Employee Productivity	0.921
Financial Performance	0.801
<b>Total</b>	<b>0.874</b>

According to the results of the normality tests, the Kolmogorov-Smirnov and Shapiro-Wilk tests based on the value of  $\text{Sig.} > 0.05$ , it results that the data distribution is normal and the condition for using Pearson's correlation and the OLS model to measure the influence of the variable is met. Dependent to non-dependent.

Table 4 presents Pearson's correlation analysis, a test used to measure the relationships between dependent and independent variables. According to the value of the Pearson coefficient,  $r = 0.634$  and  $\text{Sig} < 0.01$ , it results that between continuing education (independent variable) and employee productivity (dependent variable), there is a moderate positive linear relationship, while according to  $r = 0.513$  and  $\text{Sig} < 0.01$  between employee productivity (independent variable) and financial performance (dependent variable) there is also a moderate positive linear relationship, but the coefficient is slightly lower. According to this analysis, which expresses the relationship between the variables, dependent and independent variables are directly proportional. This result implies that if the banks provide continuing education, the employees' productivity will improve and vice versa. If the employees are productive in their work, the financial performance of the commercial banks of Kosovo will increase and vice versa.

**Table 4. Pearson's correlation**

	CE	EP	FP
CE	1	0.634**	0.451**
	-	0.000	0.000
	360	360	360
EP	0.634**	1	0.513**
	0.000	-	0.000
	360	360	360
FP	0.451**	0.513**	1
	0.000	0.000	-
	360	360	360

\*\* Correlation is significant at the 0.01 level (2-tailed). Note: CE = Continuing education, EP = Employee productivity, FS = Financial performance.



#### 4-1- Verification of Hypothesis H1

The OLS model was used to measure the impact of continuing education on employee productivity. First, we emphasize that all the conditions necessary to perform simple linear regression have been met. The first condition fulfilled is the representative sample included in the study. The normal distribution according to the Kolmogorov-Smirnov and Shapiro-Wilk tests, the model used has no problems with autocorrelation since the value of the Durbin Watson test for the two models is within the permissible range, being between the values of 1.5 and 2.5. Based on the VIF value of less than 5, the model had no problem with multicollinearity.

In Table 5 (Model Summary <sup>b</sup>), R<sup>2</sup> expresses what percentage of the dependent variable is explained by the independent variable. R<sup>2</sup> = 0.402 shows that 40.2% of employee productivity is explained by continuing education, while the remaining 59.8% is explained by variables that are not included in the model.

**Table 5. Model Summary <sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	0.634 <sup>a</sup>	0.402	0.400	0.62401	0.402	240.432	1	358	0.000	1.842

a. Predictors: (Constant), Continuing education; b. Dependent Variable: Employee productivity

According to the significance value F (1, 358) = 240.432; sig = 0.000) from the ANOVA analysis, the model is significant at each level. According to the results of the OLS model (table 6), the value of ( $\beta_0 = 1.465$ , Sig. < 0.05), expresses that despite the provision of continuing education, bank employees are productive in their work, with the increase of each unit in education continuous, employee productivity will increase ( $\beta = 0.591$ , Sig. < 0.05).

#### OLS Model:

$$y = \beta_0 + \beta_1 \times x_1 + \varepsilon \quad (10)$$

$$y_{(\text{Continuing education})} = 1.465 + 0.591 \times x_{(\text{Employee productivity})} \quad (11)$$

**Table 6. The OLS model**

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1	(Constant)	1.465	0.127	-	11.547	0.000
	Continuing education	0.591	0.038	0.634	15.506	0.000

a. Dependent Variable: Employee productivity.

Based on the results of the OLS model, Hypothesis H1 is confirmed, as there is a statistically significant relationship that continuing education affects the productivity of commercial bank employees in Kosovo. This result implies that the more banks emphasize providing continuing education, the more productive employees they will have.

#### 4-2- Verification of Hypothesis H<sub>1</sub>

In Table 7 (Model Summary <sup>b</sup>), R<sup>2</sup> expresses what percentage of the dependent variable is explained by the independent variable. R<sup>2</sup> = 0.204 shows that 20.4% of financial performance is explained by employee productivity, while the remaining 79.6% is explained by variables that are not included in the model.

**Table 7. Model Summary <sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.451 <sup>a</sup>	0.204	0.201	0.68895	0.204	91.528	1	358	0.000	1.810

a. Predictors: (Constant), Employee productivity; b. Dependent Variable: Financial performance

According to the significance value F (1, 358) = 91.528; Sig = .000) from the ANOVA analysis, the model is significant at each level. According to the results of the OLS model (table 8), the value of ( $\beta_0 = 2.450$ , Sig. < 0.05), states that regardless of the level of employee productivity, banks will have positive financial performance, with the increase of each unit in employee productivity, financial performance will increase ( $\beta = 0.403$ , Sig. < 0.05).

#### OLS model:

$$y = \beta_0 + \beta_1 \times x_1 + \varepsilon \quad (12)$$

$$y_{(\text{Employee productivity})} = 2.450 + 0.403 \times x_{(\text{Financial performance})} \quad (13)$$

**Table 8. The OLS model**

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.450	0.140	-	17.495	0.000
	Employee productivity	0.403	0.042	0.451	9.567	0.000

a. Dependent Variable: Financial performance

Based on the results of the OLS model, hypothesis H<sub>2</sub> is confirmed as there is a statistically significant relationship that employee productivity positively affects the financial performance of commercial banks. This result implies that the more productive the employees, the banks will have better financial performance.

## 5- Discussions

Bature et al. (2013), in their studies at Zenith Bank Plc, found a positive relationship between workforce training and productivity [7]. Likewise, the study by Akhtar et al. (2014) proves the positive impact of employee training on productivity [36]. Also, the authors Verma et al. (2011) studied the impact of training on employee productivity, and through correlation and regression analysis, they found that training programs affect productivity growth [37]. The findings of the above authors are consistent with the results of this research, where there is a positive correlation between continuing education and employee productivity.

Malaolu & Ogbuabor (2013) brought consistent findings to this research. Their research analyzed the effect of training and development on the productivity of First Bank of Nigeria Plc workers by including 75 people in the study through structured questionnaires [38]. According to their findings, it turned out that training and development affect the productivity and efficiency of employees. In addition, Tahir et al. (2014) identified a positive correlation between continuing education and employee productivity through 80 questionnaires analyzed through SPSS [39]. According to Nda & Fard (2013), training and development, in addition to influencing workers' productivity, have also improved the organization's well-being. So, their findings are consistent with this research's [40].

In addition to analyzing the impact of continuing education on productivity, we also investigated the impact of employee productivity on the financial performance of banks in Kosovo. According to the OLS model, we found that productivity affects the financial performance of commercial banks in Kosovo. These findings are in complete agreement with those of Mellat Parast & Fini (2010), who studied the airline industry in the USA [41]. Stierwald's (2010) study on 961 Australian companies revealed that productivity is among the main factors that explain a firm's financial performance [42]. According to them, productivity turned out to be the most important predictor of the financial benefits of this industry. Also, Nguyen et al. (2019), in the research carried out on companies listed on the Vietnamese stock exchange, identified positive relationships between productivity and financial performance [11]. Similarly, Salman & Yazdanfar (2012) found that productivity affects financial performance, measured through ROA [43]. In addition, Prakash et al. (2017) found a positive relationship between employee productivity and the financial performance of manufacturing companies in India [33].

## 6- Conclusions

According to the results of the research in the continuing education category, we conclude that a more significant percentage of employees agreed that the bank where they work offers training for the development of skills for which they are not at the appropriate level according to the performance evaluation, training for raising capacities for new tasks, and training for raising. Capacities for professional development, training for increasing capacities for career development, the development of soft skills, and training depending on the individual needs of the staff. The lowest score was for the ability to address requests for individual staff training and the funding of external training depending on their requirements, where employees were more in favor of the dissent and neutral options.

If we refer to the productivity variable, more than half of the bank employees stated that their productivity has improved as a result of providing training. Depending on performance evaluation, training was provided for capacity building for new tasks; training was provided for raising capacities for professional development; building capacities for career development; and the development of soft skills. Training was offered depending on the individual needs of the staff, as well as addressing requests for individual training and the possibility of their financing. The rest of the respondents remained primarily neutral with the statements in this category, as they did not have information about their productivity level or whether or not their productivity has improved as a result of continuing education. The level of non-compliance was low, according to the employees surveyed.

Financial performance, as the third variable treated in the research, presents the highest result from the other variables if we also refer to the arithmetic mean and frequency distribution. According to the employees surveyed, the bank where

they work has seen an increase in gross profit margin, net profit margin, working capital, current ratio, debt-to-equity ratio, return on equity, return on assets, and increase in operating cash.

A moderately positive linear relationship between continuing education and employee productivity based on Pearson's correlation analysis has been concluded. In contrast, the relationship between employee productivity and financial performance was moderately positively linear. The value of the coefficient is lower than in the first case. From this result, we conclude that if banks provide continuing education, employee productivity will improve, and vice versa. Also, if employees are productive in their work, the financial performance of commercial banks in Kosovo will increase, and vice versa.

According to the OLS model, based on the R-square value, we conclude that 40.2% of employee productivity is described by continuing education. In comparison, the remaining 59.8% is explained by variables not included in the model. Likewise, the OLS model shows that 20.4% of financial performance is described by employee productivity, while the remaining 79.6% is explained by variables not included in the model. According to this model, we conclude that continuing education has a positive impact on improving the productivity of employees and has a positive effect on increasing the financial performance of commercial banks in Kosovo.

### ***6-1-Limitations and Suggestions for Further Research***

The limitation of this paper is the lack of inclusion in the study of Microfinance Institutions and Technological Financial Institutions (FinTech), analyzing the phenomenon in general in all financial institutions in Kosovo. In this form, it would be possible to compare them and identify in which cases the workers showed higher work productivity and which financial institutions showed better financial performance by identifying the influencing factors. Referring to this, we recommend future researchers who deal with the study of a similar phenomenon in their research make such a categorization to identify the effects better than continuing education brings, as well as make a comparison between the financial performance of institutions involved in the research.

## **7- Declarations**

### ***7-1-Author Contributions***

Conceptualization, M.H., A.Q., and F.Q.; methodology, A.Q.; software, A.Q.; validation, M.H.; formal analysis, A.Q. and M.H.; investigation, F.Q.; resources, M.H.; writing—original draft preparation, M.H., A.Q., and F.Q.; writing—review and editing, M.H.; visualization, F.Q.; project administration, M.H.; funding acquisition, M.H. All authors have read and agreed to the published version of the manuscript.

### ***7-2-Data Availability Statement***

The data presented in this study are available on request from the corresponding author.

### ***7-3-Funding***

The authors received no financial support for the research, authorship, and/or publication of this article.

### ***7-4-Institutional Review Board Statement***

Not applicable.

### ***7-5-Informed Consent Statement***

Informed consent was obtained from all subjects involved in the study.

### ***7-6-Conflicts of Interest***

The authors declare that there is no conflict of interest regarding the publication of this manuscript. In addition, the ethical issues, including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, and redundancies have been completely observed by the authors.

## **8- References**

- [1] Gamage, P. N., & Imbulana, L. (2013). Training and development and performance of employees: Evidence from Sri Lanka Telecom. *International Journal of Marketing, Financial Services & Management Research*, 2(9), 12-24.
- [2] Chițu, I. B. (2012). The Real Impact of Projects Financed Through European Social Fund–Sectoral Operational Programme for Human Resources Development-over Target Audien. *Journal of Applied Economic Sciences*, 7(22), 366-372.
- [3] Vemic, J. (2007). Employee training and development and the learning organization. *Economics and Organization*, 4(2), 209–216.

- [4] Azeem, M., Ahmed, M., Haider, S., & Sajjad, M. (2021). Expanding competitive advantage through organizational culture, knowledge sharing and organizational innovation. *Technology in Society*, 66, 101635. doi:10.1016/j.techsoc.2021.101635.
- [5] Abdurrahman, Parmin, & Muryanto, S. (2022). Evaluation on the automotive skill competency test through 'discontinuity' model and the competency test management of vocational education school in Central Java, Indonesia. *Heliyon*, 8(2), 8872. doi:10.1016/j.heliyon.2022.e08872.
- [6] Behluli, A., Qerimi, F., Pula, F., & Shabani, L. (2022). The Impact of Graduates' Skills on Facing Challenges in the Labor Market. *Emerging Science Journal*, 6(2), 399–417. doi:10.28991/ESJ-2022-06-02-014.
- [7] Bature, N., & Mustapha, O. F. A. (2013). Manpower training and development: A tool for higher productivity in Zenith Bank Plc, Maitama Branch, Abuja. *Development*, 5(28), 1-8.
- [8] Beaumont, S. (2020). The Impact of Training and Development on Employees in the Northeast Region of Florida State Government: An Evaluation of The Northeast Region Professional Development Training Program. Ph.D. Thesis, West Chester University, Pennsylvania, United States.
- [9] Elnaga, A., & Imran, A. (2013). The effect of training on employee performance. *European journal of Business and Management*, 5(4), 137-147.
- [10] Clarke, N., & Higgs, M. (2016). How Strategic Focus Relates to the Delivery of Leadership Training and Development. *Human Resource Management*, 55(4), 541–565. doi:10.1002/hrm.21683.
- [11] Nguyen, P. A., Nguyen, A. H., Ngo, T. P., & Nguyen, P. V. (2019). The relationship between productivity and firm's performance: Evidence from listed firms in Vietnam stock exchange. *Journal of Asian Finance, Economics and Business*, 6(3), 131–140. doi:10.13106/jafeb.2019.vol6.no3.131.
- [12] Hatane, S. E. (2015). Employee Satisfaction and Performance as Intervening Variables of Learning Organization on Financial Performance. *Procedia - Social and Behavioral Sciences*, 211, 619–628. doi:10.1016/j.sbspro.2015.11.081.
- [13] Chen, M. C., Cheng, S. J., & Hwang, Y. (2005). An empirical investigation of the relationship between intellectual capital and firms' market value and financial performance. *Journal of Intellectual Capital*, 6(2), 159–176. doi:10.1108/14691930510592771.
- [14] Yu, K., Gong, R., Jiang, C., Hu, S., Sun, L., & Luo, Y. Z. (2018). A study on the effect of continuing education with digital technology on professional growth and job satisfaction of librarians. *Eurasia Journal of Mathematics, Science and Technology Education*, 14(7), 3285–3292. doi:10.29333/ejmste/91247.
- [15] Di Serio, Á., Ibáñez, M. B., & Kloos, C. D. (2013). Impact of an augmented reality system on students' motivation for a visual art course. *Computers and Education*, 68, 586–596. doi:10.1016/j.compedu.2012.03.002.
- [16] Manzini, F., Diehl, E. E., Farias, M. R., dos Santos, R. I., Soares, L., Rech, N., Lorenzoni, A. A., & Leite, S. N. (2020). Analysis of a Blended, In-Service, Continuing Education Course in a Public Health System: Lessons for Education Providers and Healthcare Managers. *Frontiers in Public Health*, 8. doi:10.3389/fpubh.2020.561238.
- [17] Sirkova, M., Taha, V. A., & Ferencova, M. (2014). Continuing education and development of employees in enterprises. *Bulletin of the Transilvania University of Brasov. Economic Sciences. Series V*, 7(1), 185.
- [18] Morse, S. W. (2008). Realizing our mission: Why continuing education must lead the way. *Journal of Continuing Higher Education*, 56(1), 11–14. doi:10.1080/07377366.2008.10400137.
- [19] Schraeder, M. (2009). Leveraging potential benefits of augmentation in employee training. *Industrial and Commercial Training*, 41(3), 133–138. doi:10.1108/00197850910950916.
- [20] Kepha, O., Kagiri, A., Omoke, D. O., & Omoke, D. O. (2012). The influence of training and development on the performance of employees in research institutes in Kenya. *International Journal of Science and Research*, 3(5), 139-146.
- [21] Furterer, S. L., & Wood, D. C. (2021). *The ASQ certified manager of quality/organizational excellence handbook*. Quality Press, Seattle, United States.
- [22] Tripopsakul, S., & Puriwat, W. (2022). Understanding the Impact of ESG on Brand Trust and Customer Engagement. *Journal of Human, Earth, and Future*, 3(4), 430-440. doi:10.28991/HEF-2022-03-04-03.
- [23] Sal, A., & Raja, M. (2016). The impact of training and development on employees performance and productivity. *International Journal of Management Sciences and Business Research*, 5(7), 36-70.
- [24] Ali, H. (2021). The Impact of Training, Development and Performance on Employees' Performance in the Banking Sector of Pakistan. *Pakistan Social Sciences Review*, 5(I), 1068–1080. doi:10.35484/psr.2021(5-i)81.
- [25] Samson, A. J., & Gungul, T. (2014). Effects of human resource training and development on productivity in Nigerian hospitality industry. *International Journal of Public Administration and Management Research*, 2(2), 80-87.

- [26] Hallgren, M., & Olhager, J. (2009). Flexibility configurations: Empirical analysis of volume and product mix flexibility. *Omega*, 37(4), 746–756. doi:10.1016/j.omega.2008.07.004.
- [27] Gupta, S., Bostrom, R. P., & Huber, M. (2010). End-user training methods. *ACM SIGMIS Database: The DATABASE for Advances in Information Systems*, 41(4), 9–39. doi:10.1145/1899639.1899641.
- [28] Gambo, H. S. (2015). The Impact of Training and Development on Workers' Productivity. *Review of Public Administration and Management*, 03(01), 87-97. doi:10.4172/2315-7844.1000160.
- [29] Mehmeti-Bajrami, S., Qerimi, F., & Qerimi, A. (2022). The Impact of Digital Marketing vs. Traditional Marketing on Consumer Buying Behavior. *HighTech and Innovation Journal*, 3(3), 326-340. doi:10.28991/HIJ-2022-03-03-08.
- [30] Hanaysha, J. (2016). Improving employee productivity through work engagement: Evidence from higher education sector. *Management Science Letters*, 6, 61–70. doi:10.5267/j.msl.2015.11.006.
- [31] Abbas, J. (2020). Impact of total quality management on corporate green performance through the mediating role of corporate social responsibility. *Journal of Cleaner Production*, 242, 118458. doi:10.1016/j.jclepro.2019.118458.
- [32] Parast, M. M., & Fini, E. H. (2011). Investigating the effect of productivity, quality, and safety on profitability in the US airline industry. *International Journal of Logistics Systems and Management*, 10(1), 70–89. doi:10.1504/IJLSM.2011.042054.
- [33] Prakash, A., Jha, S. K., Prasad, K. D., & Singh, A. K. (2017). Productivity, quality and business performance: an empirical study. *International Journal of Productivity and Performance Management*, 66(1), 78–91. doi:10.1108/IJPPM-03-2015-0041.
- [34] Agiomirgianakis, G., Voulgaris, F., & Papadogonas, T. (2006). Financial factors affecting profitability and employment growth: the case of Greek manufacturing. *International Journal of Financial Services Management*, 1(2/3), 232. doi:10.1504/ijfsm.2006.009628.
- [35] Central Bank of the Republic of Kosovo. (2022). Financial System, Monthly Information, August 2022. Central Bank of the Republic of Kosovo, Pristina, Republic of Kosovo. Available online: [https://bqk-kos.org/wp-content/uploads/2022/09/CBK\\_F\\_S\\_August-2022.pdf](https://bqk-kos.org/wp-content/uploads/2022/09/CBK_F_S_August-2022.pdf) (accessed on April 2023).
- [36] Akhtar, N., Ali, F., Bukhari, S., & Nasir, J. (2014). Impact of Training on Productivity of Employees: A Case Study of Electricity Supply Company in Pakistan RAJA IRFAN SABIR. *International Review of Management and Business Research*, 3(2), 595.
- [37] Verma, S., Goyal, R., & Mmim, A. P. (2011). a Study of Training in Insurance and Their Impact on Employees Productivity. *International Journal of Research in Economics and Social Sciences (Ambala)*, 1(1), 31–45.
- [38] Ogbuabor, J., & Victor, a M. (2013). Training and Manpower Development, Employee Productivity and Organizational Performance in Nigeria: an Empirical Investigation. *International Journal of Advances in Management and Economics*, 2(5), 163–177.
- [39] Tahir, N., Yousafzai, I. K., Yousafzai, I. K., Jan, D. S., & Hashim, M. (2014). The Impact of Training and Development on Employees Performance and Productivity A case study of United Bank Limited Peshawar City, KPK, Pakistan. *International Journal of Academic Research in Business and Social Sciences*, 4(4), 86–98. doi:10.6007/ijarbss/v4-i4/756.
- [40] Nda, M. M., & Fard, R. Y. (2013). the Impact of Employee Training and Development on Employee Productivity. *Global Institute for Research & Education*, 2(6), 91–93.
- [41] Mellat Parast, M., & Fini, E. (Ellie) H. (2010). The effect of productivity and quality on profitability in US airline industry. *Managing Service Quality: An International Journal*, 20(5), 458–474. doi:10.1108/09604521011073740.
- [42] Stierwald, A. (2010). Determinants of Profitability: An Analysis of Large Australian Firms. *SSRN Electronic Journal*. doi:10.2139/ssrn.1632749.
- [43] Salman, A. K., & Yazdanfar, D. (2012). Profitability in Swedish Micro Firms: A Quantile Regression Approach. *International Business Research*, 5(8), 94–106. doi:10.5539/ibr.v5n8p94.

## Appendix I: The Questionnaire

Dear Sir/Madam,

I wish you a nice day!

First of all, thank you for your time and sincerity in completing this questionnaire. Your contribution by completing this questionnaire is very important in providing your answers, analysis and conclusions, which will improve productivity of the employees of commercial banks and bank's financial performance. The implementation of this questionnaire will be done in confidence, your data will be used for analysis purposes and will not be shared with other parties. It will take you about 10 minutes to complete this questionnaire.

This questionnaire was created and is being implemented in the framework of research by the authors *Muhamet Hajdari, Fidan Qerimi and Arberesha Qerimi*.

If you have any questions about the survey, please email me at: *fidqer@gmail.com*.

Thank you very much for your time and suggestions. Please answer all questions honestly to have a clear picture of your opinion.

### Session 1 - Demographic questions

#### 1. Gender:

- a) Female
- b) Male

#### 2. Age:

- a) 18 - 26 years old
- b) 27 - 35 years old
- c) 36 - 44 years old
- d) 45 - 53 years old
- e) Over 54 years old

#### 3. Level of education:

- a) Bachelor
- b) Master
- c) PhD

#### 4. The position in which I work is:

- a) Bank officer
- b) Branch management
- c) Head Office

### Session 2 - Continuing education

*1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree*

CE1 - I am offered skill development training which is not up to par according to performance appraisal.	1	2	3	4	5
CE2 - I am offered capacity building training for new tasks.	1	2	3	4	5
CE3 - I am offered capacity building training for professional development.	1	2	3	4	5
CE4 - I am offered capacity building training for career development.	1	2	3	4	5
CE5 - Trainings are offered for the development of soft skills.	1	2	3	4	5
CE6 - Trainings are offered depending on the individual needs of the staff.	1	2	3	4	5
CE7 - We are able to address requests for individual training.	1	2	3	4	5
CE8 - It is possible to finance external training depending on the staff's requirements.	1	2	3	4	5



***Session 3 – Employee productivity******1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree***

EP1 - The trainings offered depending on the performance evaluation have resulted in improved employee productivity.	1	2	3	4	5
EP2 - The trainings provided for capacity building for new tasks have resulted in improved employee productivity.	1	2	3	4	5
EP3 - The trainings provided for capacity building for professional development have resulted in improved employee productivity.	1	2	3	4	5
EP4 - The trainings offered to increase the capacities for career development have resulted in the improvement of the productivity of the employees.	1	2	3	4	5
EP5 - The training provided for the development of soft skills has resulted in improved employee productivity.	1	2	3	4	5
EP6 - The training provided depending on the individual needs of the staff has resulted in improved employee productivity.	1	2	3	4	5
EP7 - Addressing individual training requirements has resulted in improved employee productivity.	1	2	3	4	5
EP8 - The opportunity to finance external trainings has resulted in improved employee productivity.	1	2	3	4	5

***Session 4 – Financial performance******1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree***

FP1 - The company has increased gross profit margin.	1	2	3	4	5
FP2 - The company has increased net profit margin.	1	2	3	4	5
FP3 - The company has increased working capital.	1	2	3	4	5
FP4 - The company has an increasing current ratio (cash flow).	1	2	3	4	5
FP5 - The company has increased debt to equity ratio.	1	2	3	4	5