

UDK 005.5:658.1

DOI: 10.7251/FIN1903017V

Bojana Vuković*

PREGLEDNI RAD

Determinante rasta preduzeća

Determinants of Company Growth

Rezime

U radu je sprovedena analiza rasta preduzeća koja su kotirana na Banjalučkoj berzi u periodu 2017–2018. godina. Za potrebe istraživanja korišćen je uzorak od 591 opservacije finansijskih izveštaja preduzeća u ukupnom periodu od 2016. do 2018. godine. Rast preduzeća meren je na osnovu apsolutnih i relativnih pokazatelja rasta na bazi referentnih pozicija prihoda, poslovne imovine i kapitala. Rezultati rasta preduzeća merenog na osnovu primarne delatnosti preduzeća, odnosno prodaje proizvoda i pružanja usluga, pokazuju da preduzeća u 2017. godini u proseku ostvaruju rast od 5,58%, a u 2018. godini prosečan rast od 10,38%. Analiza rasta preduzeća ukazuje na odsustvo povezanosti između rasta preduzeća merenog na bazi prihoda od prodaje proizvoda i pružanja usluga i ostalih pokazatelja rasta. Preduzeća u većoj meri ostvaruju rast prihoda od prodaje učinaka i usluga od rasta poslovne aktive, osnovnog i ukupnog kapitala.

Ključne reči: rast preduzeća, prihod od prodaje proizvoda i pružanja usluga, poslovna imovina, kapital.

Abstract

The paper analyzes the growth of companies listed on the Banja Luka Stock Exchange in the period 2017-2018. For the purposes of the survey, a sample of 591 observations of the financial statements of the company over the total period 2016-2018 was used. Company growth was measured on the basis of absolute and relative growth indicators based on reference positions of income, operating assets and capital. The results of the growth of the company, measured on the basis of the primary activity of the company, that is, the sale of products and services, show that the companies in 2017 achieve an average growth of 5.58%, and in 2018 the average growth of 10.38%. An analysis of company growth indicates that there is no correlation between company growth measured on the basis of revenue from the sale of products and services and other growth indicators. Companies are more likely to increase their sales and services revenue from the growth of operating assets, share and total capital.

Keywords: company growth, revenue from the sale of products and services, operating assets, capital.

UVOD

Poslovanje preduzeća u današnje vreme realizuje se u izuzetno turbulentnom poslovnom okruženju, koje karakteriše oštra konkurencija, nužnost poslovanja izvan granice nacionalne ekonomije i ostvarivanje kontinuiranog rasta u cilju opstanka i razvoja preduzeća. Rast preduzeća može se definisati na različite načine. Rast preduzeća može se iskazati kao rast odnosno promena prihoda od prodaje, tehnoloških inovacija i veličine preduzeća (Ericson, 2007). Prema Delmaru, rast preduzeća se najčešće meri i izražava preko promene prodaje, odnosno prihoda od prodaje i broja zaposlenih. Takođe, Delmar ističe da je merenje rasta preduzeća preko varijable poslovne imovine prihvatljivo za prerađivački sektor, s obzirom na to da je on u velikoj meri zavisao od strukture kapitala (Delmar, 2006). Prema Krugeru, rast preduzeća može se kvantitativno izraziti kao promena prihoda, kao i kvalitativno, kroz promenu kvaliteta proizvoda i ocene boniteta (Kruger, 2004).

Kada se govori o rastu preduzeća, treba napomenuti apsolutni i relativni rast. Apsolutni rast meri se kao razlika između pokazatelja rasta (npr. prihoda od prodaje ili broja zaposlenih) između dva vremenska perioda. Relativni rast meri se kao racio između pokazatelja rasta u dva uzastopna vremenska perioda (Brnjas i sar., 2015). Bez obzira na metodologiju merenja i analize rasta preduzeća, analiza rasta preduzeća je od velikog značaja za preduzeće, sektor i privredu kao celinu. Menadžment preduzeća na osnovu signala o negativnom rastu preduzeća mora da donese adekvatne poslovne odluke u vezi s ostvarivanjem budućeg rasta preduzeća. Rast preduzeća pozitivno utiče na profitabilnost, jer stvara veću masu prihoda koji pozitivno utiču na krajnji neto rezultat. Takođe, ulaganja i investiranje treba da bude usmereni dalje u pravcu rasta i razvoja preduzeća. Na nivou nacionalne ekonomije, rast preduzeća doprinosi rastu i razvoju privrede, smanjenju stope nezaposlenosti i povećanju konkurentnosti.

Privredna aktivnost Republike Srpske u periodu 2016–2017. godina beleži rast, posmatrano sa aspekta rasta broja preduzeća i broja zaposlenih. U 2017. godini, ukupan broj preduzeća iznosio je 31.286, što je za 3,33% više u odnosu na broj preduzeća iz 2016. godine i za 7,36% više u odnosu na broj preduzeća iz 2015. godine. Broj zaposlenih na prosečnom godišnjem nivou se u posmatranom periodu povećava sa 245.975 u 2015. godini na 260.608 u 2017. godini. Prema podacima Republičkog zavoda za statistiku, ukupan broj akcionarskih preduzeća iznosi 2.164 u 2017. godini (Republički zavod za statistiku, 2018). Međutim, mnogo je manji broj akcionarskih preduzeća koja su aktivna na Banjalučkoj berzi. Osnovni cilj rada jeste da se sagleda rast preduzeća kotiranih na Banjalučkoj berzi, i to pre svega na osnovu rasta prihoda od prodaje proizvoda i usluga, a zatim i na osnovu drugih relevantnih pokazatelja, kao što su rast poslovne aktive i kapitala. Istraživanje je bazirano na analizi apsolutnih i relativnih pokazatelja rasta u periodu 2016–2018. godina. Za potrebe istraživanja korišćeni su javno dostupni finansijski izveštaji preduzeća sa Banjalučke berze (Banjalučka berza, 2019). Rezultati istraživanja daju odgovor na pitanje da li preduzeća na Banjalučkoj berzi ostvaruju rast prihoda od prodaje proizvoda i usluga i da li je rast meren na osnovu primarne aktivnosti preduzeća praćen i rastom ostalih pokazatelja, kao što su imovina i kapital.

1. METODOLOGIJA ISTRAŽIVANJA

U cilju istraživanja rasta preduzeća i determinanti rasta preduzeća kotiranih na Banjalučkoj berzi, formiran je uzorak od 197 predu-

zeća. Za potrebe istraživanja korišćena je ukupno 591 opservacija finansijskih izveštaja preduzeća u vremenskom periodu od 2016. do 2018. godine. Istraživanje rasta preduzeća sprovedeno je u tri faze. Istraživanje u prvoj fazi treba da prezentuje deskriptivan prikaz osnovnih pozicija rasta preduzeća u periodu 2016–2018. godina, na bazi prosečnih, minimalnih i maksimalnih vrednosti. Prva faza istraživanja odnosi se na analizu rasta merenu na bazi apsolutnih pokazatelja, i to sledećih:

- prihod od prodaje učinaka i usluga,
- prihod od prodaje učinaka i usluga u inostranstvu,
- prihod od prodaje,
- poslovni prihod,
- ukupan prihod,
- poslovna aktiva,
- osnovni kapital,
- ukupan kapital.

Druga faza istraživanja podrazumeva analizu relativnog rasta preduzeća u periodu 2017–2018. godina. Relativni rast preduzeća meren je na bazi sledećih pokazatelja:

- rast prihoda od prodaje učinaka i usluga,
- rast prihoda od prodaje učinaka i usluga u inostranstvu,
- rast prihoda od prodaje,
- rast ukupnih prihoda,
- rast poslovne imovine,
- rast osnovnog kapitala,
- rast ukupnog kapitala.

Relativni rast meri se kao odnos između vrednosti u tekućem periodu i vrednosti u prethodnom periodu. Prema tome, ukoliko je vrednost relativnog rasta manja od 1, to znači da je preduzeće ostvarilo manju vrednost u tekućoj u odnosu na prethodnu godinu. Pozitivan rast preduzeće beleži kada je vrednost koeficijenta rasta veća od 1.

$$\text{Koeficijent rasta} = X_t / X_{t-1},$$

gde je X vrednost pokazatelja rasta.

Treća faza istraživanja rasta preduzeća odnosi se na davanje odgovora na pitanje da li je rast prihoda od prodaje učinaka i usluga kao primarne delatnosti preduzeća praćen ravnomernim rastom ostalih značajnih pokazatelja rasta, kao što su: prihod od prodaje proizvoda i usluga u inostranstvu, poslovna aktiva, osnovni kapital i ukupan kapital. U cilju davanja odgovora na navedeno pitanje, sproveden je statistički test Studentov t-test, na osnovu kojeg je testirano postojanje statistički značajne razlike u rastu preduzeća merenih na bazi prihoda od prodaje učinaka i usluga i ostalih relevantnih pokazatelja rasta. Podaci su obrađeni primenom statističkog softvera SPSS v. 23 (Field, 2009; Black, 2012).

2. REZULTATI I DISKUSIJA

2.1. Deskriptivna analiza apsolutnih pokazatelja rasta u periodu 2016–2018. godina

U narednoj tabeli prezentovani su rezultati apsolutnih pokazatelja rasta na bazi pozicija prihoda iz bilansa uspeha preduzeća. Pro-

INTRODUCTION

Today, the business of the company is realized in an extremely turbulent business environment, characterized by fierce competition, the necessity of doing business beyond the borders of the national economy and achieving continuous growth in order to survive and develop the company. Company growth can be defined in different ways. Company growth can be expressed as growth or change in sales revenue, technological innovation and size of the company (Ericson, 2007). According to Delmar, company growth is most often measured and expressed through changes in sales, ie sales revenue and headcount. Delmar also points out that measuring the growth of a company through operating assets variable is acceptable to the manufacturing sector since it is highly dependent on the capital structure (Delmar, 2006). According to Kruger, enterprise growth can be quantitatively expressed as a change in revenue as well as qualitatively through a change in product quality and credit rating (Kruger, 2004).

When talking about company growth, absolute and relative growth should be mentioned. Absolute growth is measured as the difference between growth indicators (eg sales revenue or headcount) between two time periods. Relative growth is measured as the ratio between growth indicators over two consecutive time periods (Brnjas et al. 2015). Regardless of the methodology for measuring and analyzing company growth, company growth analysis is of great importance for the company, the sector and the economy as a whole. Management of the company based on the signal of negative growth of the company must make adequate business decisions regarding the realization of the future growth of the company. Company growth has a positive impact on profitability, as it generates a larger mass of revenue that positively impacts the net end result. Also, investments should be directed further in the direction of growth and development of the company. At the national economy level, company growth contributes to the growth and development of the economy, reducing unemployment rates and increasing competitiveness.

The economic activity of the Republika Srpska in the period from 2016 to 2017 recorded growth in terms of growth of the number of companies and the number of employees. In 2017, the total number of enterprises was 31,286, which is 3.33% more than the number of enterprises in 2016 and 7.36% more than the number of enterprises in 2015. The average annual number of employees increased from 245,975 in 2015 to 260,608 in 2017. According to the data of the Republic Bureau of Statistics, the total number of joint stock companies is 2,164 in 2017 (Republic Bureau of Statistics, 2018). However, the number of joint stock companies active on the Banja Luka Stock Exchange is much smaller. The main objective of the paper is to look at the growth of companies listed on the Banja Luka Stock Exchange, primarily on the basis of growth in revenues from the sale of products and services, and then on the basis of other relevant indicators such as the growth of business assets and capital. The study is based on an analysis of absolute and relative growth indicators from 2016 to 2018. For the purposes of the research, publicly available financial statements of companies from the Banja Luka Stock Exchange (Banja Luka Stock Exchange, 2019) were used. The results of the survey answer the question of whether the companies on the Banja Luka Stock Exchange are generating revenue from the sale of products and services and whether the growth is measured on the basis of the primary activity of the companies followed by the growth of other indicators such as assets and capital.

1. RESEARCH METHODOLOGY

In order to investigate the growth of enterprises and the determinants of growth of companies listed on the Banja Luka Stock Exchange, a sample of 197 companies was formed. A total of 591 observations of the Company's financial statements over the period 2016-2018 were used for the purposes of the survey. The company growth survey was conducted in three phases. The first phase of the research should present a descriptive account of the basic positions of growth of the companies in the period from 2016 to 2018 on the basis of average, minimum and maximum values. The first phase of the research is related to the analysis of growth measured on the basis of absolute indicators, namely:

- Revenue from the sale of products and services
- Revenue from the sale of products and services abroad
- Sales revenue
- Operating revenue
- Total revenue
- Operating assets
- Share capital
- Total capital

The second phase of the research involves analyzing the relative growth of the company in 2017-2018. The relative growth of the company was measured on the basis of the following indicators:

- Growth in sales of products and services
- Growth in revenues from sales of products and services abroad
- Sales revenue growth
- Total revenue growth
- Operating assets growth
- Share capital growth
- Total capital growth

Relative growth is measured as the ratio between the values in the current period and the value in the previous period. Therefore, if the value of relative growth is less than 1, it means that the company has achieved a lower value in the current compared to the previous year. A company registers positive growth when the value of the growth factor is greater than 1.

$$\text{Growth coefficient} = X_t / X_{t-1}$$

Where X is the value of the growth indicator

The third stage of companies growth research is to answer the question whether the growth of revenues from the sale of products and services as a primary activity of the companies is accompanied by a steady growth of other significant growth indicators such as: revenue from sales of products and services abroad, operating assets, share capital and total capital. In order to answer the above question, a Student t test was conducted, which tested the existence of a statistically significant difference in the growth of companies measured on the basis of revenue from the sale of products and services and other relevant growth indicators. Data were processed using SPSS v.23 statistical software (Field, 2009; Black, 2012).

sečna vrednost prihoda od prodaje proizvoda i usluga u periodu 2016–2018. godina beleži pad u 2017. godini, a potom rast u 2018. godini. U 2018. godini preduzeća u proseku ostvaruju nešto više od 9 miliona KM prihoda od prodaje proizvoda i usluga. Kada se

tome pridodaju prihodi od prodaje robe i ostali prihodi, preduzeća su u proseku u 2019. godini ostvarila 16.668 hiljada KM ukupnih prihoda. Prihodi od prodaje proizvoda i usluga u 2019. godini čine u proseku oko 55% ukupnih prihoda.

Tabela 1. Deskriptivna analiza apsolutnih pokazatelja rasta prihoda u periodu 2016–2018. godina

U KM

Prihod od prodaje učinaka i usluga	Prosek	Minimum	Maksimum
2016.	10.579.943	1.026	438.988.532
2017.	8.363.881	1.200	418.999.954
2018.	9.008.262	562	413.144.512
Prihod od prodaje učinaka u inostranstvu	Prosek	Minimum	Maksimum
2016.	1.258.802	0	30.865.394
2017.	864.646	0	29.506.809
2018.	946.011	0	33.528.389
Prihod od prodaje	Prosek	Minimum	Maksimum
2016.	15.816.027	1.026	439.581.537
2017.	13.887.657	1.200	419.452.617
2018.	15.278.782	1.241	475.776.099
Poslovni prihod	Prosek	Minimum	Maksimum
2016.	15.094.744	2.370	439.591.537
2017.	14.439.168	2.232	423.330.247
2018.	16.077.171	2.062	476.769.743
Ukupan prihod	Prosek	Minimum	Maksimum
2016.	16.869.761	17.475	447.766.497
2017.	15.032.751	3.962	427.221.295
2018.	16.668.437	2.652	477.861.513

Izvor: Izrada autora na osnovu podataka sa Banjalučke berze, 2019.

Kada je reč o preduzećima koja svoju poslovnu aktivnost realizuju izvan granica Bosne i Hercegovine, primetno je da se u 2018. godini maksimalni prihod od prodaje u inostranstvu povećava na 33.528 hiljade KM, sa 30.865 hiljade KM u 2016. godini. Broj preduzeća

koja obavljaju svoju poslovnu aktivnost prodaje u inostranstvu u 2016. i 2017. godini iznosi 31,98% posmatranih preduzeća, odnosno 32,49% posmatranih preduzeća u 2018. godini (tabela 2).

Tabela 2. Raspored preduzeća prema realizaciji prodaje u inostranstvu

Prodaja u inostranstvu	Da	Ne	Ukupno
Broj preduzeća u 2016. godini	63	134	197
%	31,98%	68,02%	100,00%
Broj preduzeća u 2017. godini	63	134	197
%	31,98%	68,02%	100,00%
Broj preduzeća u 2018. godini	64	133	197
%	32,49%	67,51%	100,00%

Izvor: Izrada autora na osnovu podataka sa Banjalučke berze, 2019.

U narednoj tabeli prezentovani su rezultati apsolutnih pokazatelja rasta na osnovu poslovne aktive, osnovnog i ukupnog kapitala. Prosečna vrednost poslovne aktive ima tendenciju pada u posmatranom periodu, kao i prosečne vrednosti osnovnog i ukupnog kapitala. Prosečna poslovna aktiva posmatranih preduzeća u 2018. godini iznosi 52.635 hiljada KM, prosečan osnovni kapital 26.945 hiljada

KM i prosečan ukupan kapital 35.852 hiljada KM. Posmatranjem prosečnih apsolutnih vrednosti uvida se da osnovni kapital u proseku učestvuje sa oko 51% u poslovnoj aktivi. Maksimalna vrednost poslovne aktive u posmatranom periodu beleži rast sa 1.426.867 hiljada KM na 1.450.325 hiljada KM.

2. RESULTS AND DISCUSSION

2.1 Descriptive analysis of absolute growth indicators for the period from 2016 to 2018

The following table presents the results of absolute growth indicators based on income positions from the income statement of the company. The average value of sales of products and services

in 2016-2018 declines in 2017, followed by growth in 2018. In 2018, companies generate an average of just over BAM 9 million in sales of products and services. When this is added to the revenues from the sale of goods and other revenues, on average, in 2019, the companies generated BAM 16,668 thousand of total revenues. Revenue from the sale of products and services in 2019 accounts for an average of about 55% of total revenues.

Table 1. Descriptive analysis of absolute indicators of revenue growth for the period from 2016 to 2018

BAM

Revenue from the sale of products and services	Average	Minimum	Maximum
2016	10.579.943	1.026	438.988.532
2017	8.363.881	1.200	418.999.954
2018	9.008.262	562	413.144.512
Revenue from the sale of products abroad	Average	Minimum	Maximum
2016	1.258.802	0	30.865.394
2017	864.646	0	29.506.809
2018	946.011	0	33.528.389
Sales revenue	Average	Minimum	Maximum
2016	15.816.027	1.026	439.581.537
2017	13.887.657	1.200	419.452.617
2018	15.278.782	1.241	475.776.099
Operating revenue	Average	Minimum	Maximum
2016	15.094.744	2.370	439.591.537
2017	14.439.168	2.232	423.330.247
2018	16.077.171	2.062	476.769.743
Total revenue	Average	Minimum	Maximum
2016	16.869.761	17.475	447.766.497
2017	15.032.751	3.962	427.221.295
2018	16.668.437	2.652	477.861.513

Source: Created by author based on data from Banja Luka Stock Exchange, 2019.

Regarding the companies that carry out their business activity outside the borders of Bosnia and Herzegovina, it is noticeable that in 2018, the maximum revenue from sales abroad will increase to BAM 33,528 thousand from BAM 30,865 thousand in 2016. The

number of companies selling abroad in 2016 and 2017 is 31.98% of observed companies, or 32.49% of observed companies in 2018 (Table 2).

Table 2. Distribution of companies according to sales abroad

Sales abroad	Yes	No	Total
Number of companies in 2016	63	134	197
%	31,98%	68,02%	100,00%
Number of companies in 2017	63	134	197
%	31,98%	68,02%	100,00%
Number of companies in 2018	64	133	197
%	32,49%	67,51%	100,00%

Source: Created by author based on data from Banja Luka Stock Exchange, 2019.

The following table presents the results of absolute growth indicators based on operating assets, share and total capital. The average value of operating assets tends to fall over the observed period, as well as the average values of share and total capital. The average operating assets of the observed companies in 2018 amount to BAM 52,635 thousand, the average share capital BAM 26,945

thousand and the average total capital BAM 35,852 thousand. Looking at average absolute values, it can be seen that the share capital averages about 51% of its operating assets. The maximum value of operating assets in the observed period increased from BAM 1,426,867 thousand to BAM 1,450,325 thousand.

Tabela 3. Deskriptivna analiza apsolutnih pokazatelja rasta pozicija bilansa stanja u periodu 2016–2018. godina
U KM

Poslovna aktiva	Prosek	Minimum	Maksimum
2016.	58.879.353	105.774	1.426.867.462
2017.	51.596.914	99.993	1.430.488.300
2018.	52.635.559	98.678	1.450.325.995
Osnovni kapital	Prosek	Minimum	Maksimum
2016.	30.035.540	49.266	1.159.729.110
2017.	26.893.401	49.266	1.159.729.110
2018.	26.945.247	49.266	1.159.729.110
Ukupan kapital	Prosek	Minimum	Maksimum
2016.	45.473.012	0	1.191.499.052
2017.	35.801.373	64.960	1.188.344.752
2018.	35.852.582	1.109	1.188.344.752

Izvor: Izrada autora na osnovu podataka sa Banjalučke berze, 2019.

2.2. Analiza relativnog rasta preduzeća

Rezultati relativnog rasta treba da ukažu na to da li je i u kojoj meri na pojedinačnom nivou svakog preduzeća došlo do rasta, merenog

primenom različitih pokazatelja. Prosečne minimalne i maksimalne vrednosti na bazi pojedinačnih pokazatelja rasta prihoda prikazane su u narednoj tabeli:

Tabela 4. Relativni rast prihoda u periodu 2017–2018. godina

Rast prihoda od prodaje učinaka	2018.	2017.
Prosek	1,1038	1,0558
Minimum	0,0012	0,0911
Maksimum	5,7407	5,8625
Rast prihoda od prodaje učinaka u inostranstvu	2018.	2017.
Prosek	0,9299	1,2551
Minimum	0,0000	0,0000
Maksimum	2,5921	10,2260
Rast prihoda od prodaje	2018.	2017.
Prosek	1,1165	1,0341
Minimum	0,0021	0,1
Maksimum	5,7407	3,5824
Rast ukupnih prihoda	2018.	2017.
Prosek	1,0691	1,1637
Minimum	0,0026	0,2267
Maksimum	2,8502	3,308

Prosečan rast prihoda od prodaje učinaka na bazi pojedinačnih stopa rasta ukazuje na to da preduzeća u 2017. godini ostvaruju rast u proseku od 5,58%, a u 2018. godini rast od 10,38%. Kada se posmatra rast prihoda od prodaje u inostranstvu, u 2017. godini

u proseku preduzeća beleže pozitivan rast, dok u 2018. godini prosečna stopa rasta iznosi 0,9299, što znači da u proseku preduzeća ostvaruju pad prihoda od prodaje u inostranstvu za oko 7%.

Table 3. Descriptive analysis of absolute growth indicators of balance sheet positions for the period 2016-2018

BAM

Operating assets	Average	Minimum	Maximum
2016	58.879.353	105.774	1.426.867.462
2017	51.596.914	99.993	1.430.488.300
2018	52.635.559	98.678	1.450.325.995
Share capital	Average	Minimum	Maximum
2016	30.035.540	49.266	1.159.729.110
2017	26.893.401	49.266	1.159.729.110
2018	26.945.247	49.266	1.159.729.110
Total capital	Average	Minimum	Maximum
2016	45.473.012	0	1.191.499.052
2017	35.801.373	64.960	1.188.344.752
2018	35.852.582	1.109	1.188.344.752

Source: Created by author based on data from Banja Luka Stock Exchange, 2019.

2.2 Analysis of the relative growth of the companies

The results of relative growth should indicate whether and to what extent individual growth has occurred at the individual level of each

company, as measured by the use of different indicators. The average minimum and maximum values based on individual revenue growth indicators are shown in the following table:

Table 4. Relative revenue growth for the period 2017-2018

Growth of revenues from the sale of products	2018	2017
Average	1,1038	1,0558
Minimum	0,0012	0,0911
Maximum	5,7407	5,8625
Growth of revenues from the sale of products abroad	2018	2017
Average	0,9299	1,2551
Minimum	0,0000	0,0000
Maximum	2,5921	10,2260
Growth of sale revenues	2018	2017
Average	1,1165	1,0341
Minimum	0,0021	0,1
Maximum	5,7407	3,5824
Growth of total revenues	2018	2017
Average	1,0691	1,1637
Minimum	0,0026	0,2267
Maximum	2,8502	3,308

The average growth of revenues from the sale of products based on individual growth rates indicates that in 2017, companies are growing on average by 5.58% and in 2018 by 10.38%. When looking at the growth of revenues from the sales abroad, in 2017,

on average, companies show a positive growth, while in 2018, the average growth rate is 0.9299, which means that on average the revenues from the sales abroad decreased by about 7% .

Tabela 5. Relativni rast poslovne imovine i kapitala u periodu 2017–2018. godina

Rast poslovne imovine	2018.	2017.
Prosek	0,9997	0,9961
Minimum	0,1361	0,5502
Maksimum	1,7241	1,5839
Rast osnovnog kapitala	2018.	2017.
Prosek	0,9988	1,0063
Minimum	0,4797	0,7200
Maksimum	1,4999	2,2785
Rast ukupnog kapitala	2018.	2017.
Prosek	1,0129	0,9887
Minimum	0,0033	0,2419
Maksimum	5,4976	1,5096

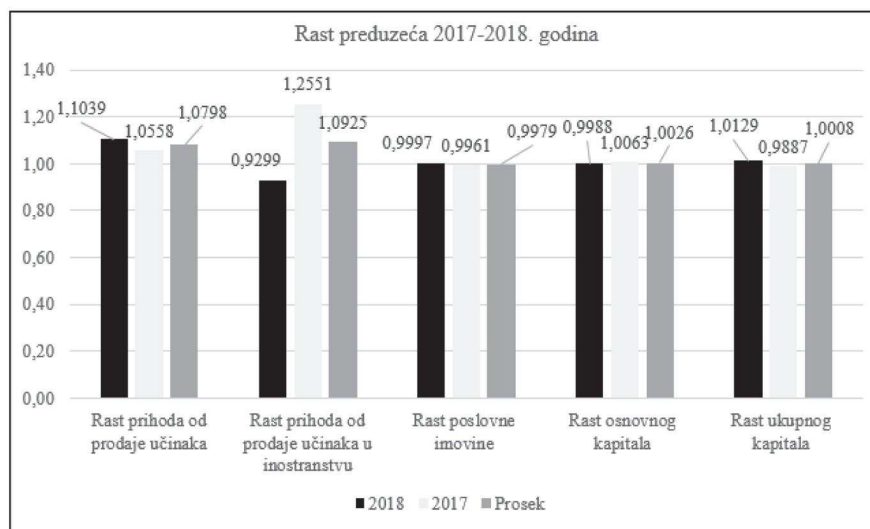
Posmatranjem prosečnog rasta poslovne aktive, uvida se da poslovna aktiva u 2017. i 2018. godini beleži pad. Kada se posmatra osnovni kapital u periodu 2017–2018. godini, on je na relativno istom nivou. Ukupan kapital u 2018. godini beleži rast za nešto više od 1%.

2.3. Povezanost rasta prihoda od prodaje učinaka i usluga i ostalih relevantnih pokazatelja rasta

Prihodi od prodaje proizvoda i usluga u 2017. godini beleže prosečan rast od 5,58%, a u 2018. godini rast od 10,38%. Rast prihoda

od prodaje proizvoda i učinaka treba sa jedne strane da bude podstaknut rastom prihoda od prodaje u inostranstvu. Sa druge strane, rast prihoda od prodaje treba da dovede do investiranja i rasta poslovne aktive i kapitala u cilju daljeg kontinuiranog rasta preduzeća. Prema tome, potrebno je ispitati da li su stope rasta prihoda od prodaje učinaka i usluga praćene ravnomernim rastom prihoda od prodaje u inostranstvu, rastom poslovne imovine, osnovnog i ukupnog kapitala.

Prikaz 1. Prosečne stope rasta u periodu 2017–2018. godina



Rezultati sprovedenog Studentovog t-testa u cilju ispitivanja povezanosti između rasta prihoda od prodaje učinaka i usluga i ostalih relevantnih pokazatelja rasta prikazani su u narednoj tabeli.

Tabela 6. Studentov t-test – testiranje razlika u pokazateljima rasta preduzeća

Pokazatelji rasta	Studentov t-test					t	Broj stepeni slobode	Značajnost (p)
	Srednja vrednost	St. devijacija	St. greška sredine	95% interval poverenja				
				Min.	Maks.			
Rast prihoda od prodaje učinaka i usluga – rast prihoda od prodaje u inostranstvu	0,7304	1,0104	0,0509	0,6304	0,8305	14,350	393	0,000
Rast prihoda od prodaje učinaka i usluga – rast poslovne imovine	0,0817	0,5494	0,0276	0,0273	0,1362	2,954	393	0,003

Table 5. The relative growth of operating assets and capital for the period 2017-2018

Growth of operating assets	2018	2017
Average	0,9997	0,9961
Minimum	0,1361	0,5502
Maximum	1,7241	1,5839
Growth of share capital	2018	2017
Average	0,9988	1,0063
Minimum	0,4797	0,7200
Maximum	1,4999	2,2785
Growth of total capital	2018	2017
Average	1,0129	0,9887
Minimum	0,0033	0,2419
Maximum	5,4976	1,5096

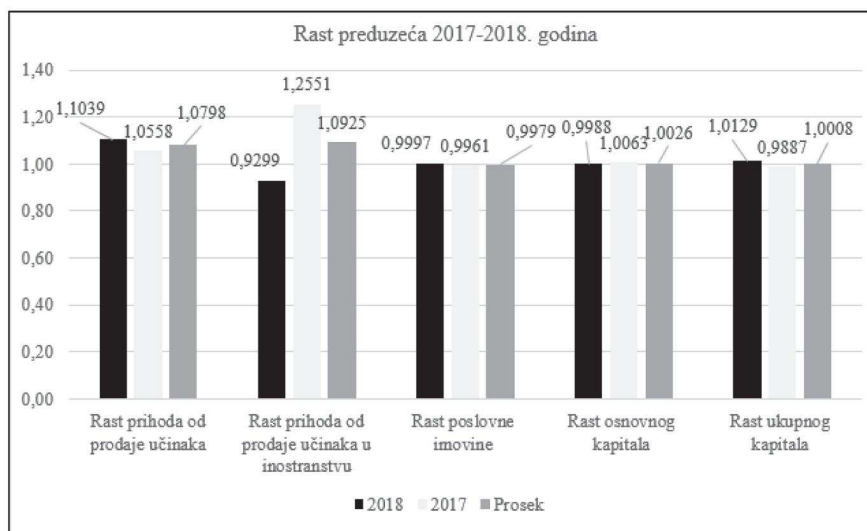
Looking at the average growth of operating assets, it is evident that operating assets in 2017 and 2018 are decreasing. When looking at share capital for the period 2017-2018 it is at relatively the same level. Total equity in 2018 is up just over 1%.

2.3 The correlation between the growth in sales of products and services and other relevant indicators of growth

Revenue from the sale of products and services in 2017 recorded an average growth of 5.58% and in 2018 an increase of 10.38%.

Growth of revenue from the sale of products should be encouraged, on the one hand, by growth of revenues from the sales abroad, and on the other hand, growth in sales revenues should lead to investment and growth of operating assets and capital for continuous growth of the company. Accordingly, it is necessary to examine whether the growth rates of revenue from the sale of products and services are accompanied by a steady growth of revenues from the sales abroad, growth of operating assets, share and total capital.

Figure 1. Average growth rates for the period 2017-2018



The results of the Student's t-test conducted to examine the correlation between growth of revenues from the sale of products

and services and other relevant growth indicators are presented in the following table.

Table 6. Student t test – testing for differences in companies growth indicators.

Growth indicators	Student t test					t	Degrees of Freedom	Significance (p)
	Mean	St. deviation	St. midpoint error	95% confidence interval				
				Min	Max			
Growth of revenues from sale of products and services – Growth of revenue from sales abroad	0,7304	1,0104	0,0509	0,6304	0,8305	14,350	393	0,000
Growth of revenues from sale of products and services - Growth of operating assets	0,0817	0,5494	0,0276	0,0273	0,1362	2,954	393	0,003

Rast prihoda od prodaje učinaka i usluga – rast osnovnog kapitala	0,0772	0,5589	0,0281	0,0219	0,1326	2,744	393	0,006
Rast prihoda od prodaje učinaka i usluga – rast ukupnog kapitala	0,0786	0,5970	0,0301	0,0193	0,1379	2,608	393	0,009

Dobijene vrednosti Studentovog t-testa prilikom testiranja razlika između rasta prihoda od prodaje učinaka i usluga i rasta prihoda od prodaje u inostranstvu, rasta poslovne imovine, osnovnog i ukupnog kapitala su u svim posmatranim slučajevima manje od referentne vrednosti 0,05 (značajnost p iznosi 0,000; 0,003; 0,006 i 0,009 respektivno). Rezultati Studentovog t-testa istraživanja razlika u stopama rasta prihoda od prodaje učinaka i ostalih referentnih stopa rasta (prihoda od prodaje u inostranstvu, poslovne aktive, osnovnog i ukupnog kapitala) ukazuju na to da postoji statistički značajna razlika u stopama rasta merenim na osnovu navedenih pokazatelja. Prema tome, može se zaključiti da rast aktivnosti preduzeća meren putem stope rasta prihoda od prodaje proizvoda i usluga nije praćen ravnomernim rastom ostalih pokazatelja rasta i razvoja preduzeća.

tendenciju pada, dok je rast osnovnog kapitala i ukupnog kapitala znatno ispod nivoa rasta prihoda od prodaje proizvoda i usluga.

Analiza rasta preduzeća treba da bude kontinuirani proces. Rast preduzeća ukazuje na determinante, ali i na efekte rasta. Rast preduzeća može se ostvariti povećanjem izvoza zbog bolje politike prodajnih cena. Sa druge strane, rast prihoda od prodaje dovodi do poboljšanja profitabilnosti, koje treba da bude usmereno ka budućim investicijama koje dalje dovode do ostvarivanja rasta prihoda od prodaje. Međuzavisnost između rasta prihoda od prodaje, profitabilnosti i rasta investicija ključna je za uspešno poslovanje i dalji razvoj preduzeća.

ZAKLJUČAK

Istraživanje rasta preduzeća na Banjalučkoj berzi ukazuje na to da u 2017. godini preduzeća u proseku ostvaruju rast prihoda od prodaje učinaka i pružanja usluga od 5,58%. Prosečna stopa rasta se u 2018. godini povećava na nivo od 10,38%. Prosečan rast prihoda od prodaje proizvoda i učinaka nije praćen ravnomernim rastom prihoda od prodaje u inostranstvu. Rast prihoda od prodaje u inostranstvu beleži značajne oscilacije. Tako je npr. prosečan rast prihoda od prodaje u inostranstvu u 2017. godini 25,51%, dok u 2018. godini, kada preduzeća u proseku ostvaruju ukupan rast od prodaje proizvoda od 10,38%, prihodi od prodaje u inostranstvu beleže pad za oko 7%.

Analizom odnosa između rasta merenog na osnovu prihoda od prodaje proizvoda i učinaka, sa jedne strane, i poslovne aktive, osnovnog i ukupnog kapitala, sa druge strane, takođe se uviđa nepostojanje statistički značajne veze. Prema tome, može se zaključiti da rast prihoda od prodaje proizvoda i usluga nije praćen ravnomernim rastom poslovne aktive i kapitala. Ako se posmatra vremenski period 2017–2018. godina, primetno je da prosečan rast prihoda od prodaje proizvoda i usluga iznosi 7,98%, dok su stope rasta poslovne imovine 0,9979%, osnovnog kapitala 1,0026% i ukupnog kapitala 1,008%. Prosečna stopa promene poslovne imovine ima

IZVORI

1. Black, K. (2012), *Business Statistics*. USA: John Wiley & Sons.
2. Banjalučka berza (2019). *Zbirni finansijski izveštaji*. Preuzeto 1. 9. 2019. sa <http://www.blberza.com/Pages/OtherMarketInfo.aspx?group=1>
3. Brnjas, Z., Vulićević, V. i Čanaićević, D. (2015). *Importance and Role of Fast Growing Companies – Gazelles in Modern Economies*. Economic Analysis. 48 (1–2), 44–61.
4. Delmar, F. (2006). Measuring Growth: Methodological Considerations and Empirical Results. In: P. Davidsson, F. Delmar and J. Wiklund (Eds.), *Entrepreneurship and the Growth of Firms*. Cheltenham (UK); Northampton (MA, USA): E. Elgar, cop.
5. Ericson, M. (2007). *Business Growth: Activities, Themes and Voices*. Cheltenham (UK), Northampton (MA, USA): E. Elgar, cop.
6. Field, A. (2009). *Discovering statistics using SPSS*. London: Sage Publication Ltd.
7. Kruger, M. (2004). *Entrepreneurial theory and creativity*. USA: University of Pretoria.
8. Republički zavod za statistiku (2018). *Statistički godišnjak 2018*. Banja Luka: Republički zavod za statistiku.

Growth of revenues from sale of products and services - Growth of share capital	0,0772	0,5589	0,0281	0,0219	0,1326	2,744	393	0,006
Growth of revenues from sale of products and services – Growth of total capital	0,0786	0,5970	0,0301	0,0193	0,1379	2,608	393	0,009

The obtained Student's t test values when testing the differences between growth of revenues from the sale of products and services and growth of revenues of sales abroad, growth of operating assets, share and total capital are in all observed cases less than the reference value of 0.05 (significance p is 0.000; 0.003; 0.006 and 0.009 respectively). The results of the Student's t test of differences in growth rates of revenues from the sale of products and other benchmark growth rates (revenues from the sales abroad, operating assets, share and total capital) indicate that there is a statistically significant difference in growth rates measured based on the above indicators. Therefore, it can be concluded that the growth of companies' activity measured by the growth rate of revenues from the sale of products and services is not accompanied by the steady growth of other indicators of companies' growth and development.

CONCLUSION

The Banjaluka Stock Exchange growth survey indicates that in 2017, companies on average have a 5.58% increase in revenues from the sale of products and services. The average growth rate in 2018 is rising to the level of 10.38%. The average growth in revenues from the sale of products is not accompanied by a steady increase in revenues from sales abroad. The growth in revenues from the sales abroad has seen significant fluctuations. Thus, e.g. the average growth of revenues from sales abroad in 2017 is 25.51%, while in 2018, when companies achieved on average a total growth of 10.38% in product sales, revenues from the sales abroad fell by about 7%.

Analyzing the relationship between growth measured on the basis of revenues from the sales of products on the one hand and operating assets, share and total capital on the other, one also recognizes the absence of a statistically significant relationship. Therefore, it can be concluded that the growth of revenues from the sales of products and services is not accompanied by a steady growth of operating assets and capital. Looking at the period from 2017 to 2018, it is noticeable that the average growth in revenues from the sales of products and services is 7.98%, while the growth rates of operating assets are 0.9779%, share capital 1.0026% and total capital 1.008%. The average rate of change of operating

assets tends to decrease, while the growth of share capital and total capital is well below the level of growth of revenues from the sales of products and services.

Company growth analysis should be a continuous process. Company growth indicates the determinants, but also the effects of growth. Company growth can be achieved by increasing exports due to better sales policy. On the other hand, growth in revenues from the sales leads to improved profitability, which should be geared towards future investments that further lead to the growth of sales revenues. The interdependence between sales revenue growth, profitability and investment growth is key to successful business and further company development.

REFERENCES

- Black, K. (2012), *Business Statistics*. USA: John Wiley & Sons.
- Banjalučka berza (2019). *Zbirni finansijski izveštaji*. Preuzeto 1. 9. 2019. sa <http://www.blberza.com/Pages/OtherMarketInfo.aspx?group=1>
- Brnjas, Z., Vulićević, V. i Čanaićević, D. (2015). *Importance and Role of Fast Growing Companies – Gazelles in Modern Economies*. Economic Analysis. 48 (1–2), 44–61.
- Delmar, F. (2006). Measuring Growth: Methodological Considerations and Empirical Results. In: P. Davidsson, F. Delmar and J. Wiklund (Eds.), *Entrepreneurship and the Growth of Firms*. Cheltenham (UK); Northampton (MA, USA): E. Elgar, cop.
- Ericson, M. (2007). *Business Growth: Activities, Themes and Voices*. Cheltenham (UK), Northampton (MA, USA): E. Elgar, cop.
- Field, A. (2009). *Discovering statistics using SPSS*. London: Sage Publication Ltd.
- Kruger, M. (2004). *Entrepreneurial theory and creativity*. USA: University of Pretoria.
- Republički zavod za statistiku (2018). *Statistički godišnjak 2018*. Banja Luka: Republički zavod za statistiku.