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ORIGINALNI NAUČNI RAD

# Faktori upravljanja gotovinom

## Cash Management Factors

### Rezime

U radu je sprovedena deskriptivna analiza upravljanja gotovinom, kao i faktora koji opredeljuju kretanje gotovine. U prvom delu rada dat je teorijski osvrt na pitanje gotovine i analizu koji faktori utiču na iznos gotovine koju preduzeće drži radi izmirenja dospelih obaveza i ulaganja u poslovne aktivnosti. U drugom delu rada sprovedeno je istraživanje koje se odnosi na deskriptivnu analizu upravljanja gotovinom i identifikaciju faktora koji imaju signifikantan uticaj na držanje gotovine. Istraživanje je bazirano na uzorku od 578 opservacija preduzeća, odnosno 289 finansijskih izveštaja preduzeća koja su kotirana na Banjalučkoj berzi u periodu 2018–2019. Rezultati istraživanja ukazuju na to da preduzeća u proseku drže gotovinu u iznosu od 4% u odnosu na ukupnu aktivu. S druge strane, rezultati istraživanja ukazuju na to da na iznos gotovine primarno utiču veličina preduzeća i zaduženost. Veličina preduzeća ima negativan uticaj na pitanje držanja gotovine, a takođe i preduzeća koja imaju viši nivo zaduženosti imaju manji iznos gotovine meren kroz odnos ukupne aktive.

**Ključne reči:** gotovina i gotovinski ekvivalenti, likvidnost.



### Abstract

The paper conducts a descriptive analysis of cash management, as well as the factors that determine the movement of cash. The first part of the paper provides a theoretical overview of the matter of cash and an analysis of the factors that affect the amount of cash held by the company to settle due liabilities and investments in business activities. In the second part of the paper, a research was conducted related to the descriptive analysis of cash management and the identification of factors that have a significant effect on cash holding. The research is based on a sample of 578 observations of companies, ie 289 financial reports of companies listed on the Banja Luka Stock Exchange in the period 2018-2019. The results of the research indicate that companies on average hold cash in the amount of 4% in relation to total assets. On the other hand, the results of the research indicate that the amount of cash is primarily influenced by the size of the company and indebtedness. The size of the company has a negative effect on the matter of holding cash, and also companies that have a higher level of indebtedness have a smaller amount of cash measured through the ratio of total assets.

**Keywords:** cash and cash equivalents, liquidity.

## UVOD

Gotovina i gotovinski ekvivalenti predstavljaju najlikvidniji oblik obrte imovine preduzeća. Novčana sredstva su neophodna za adekvatno funkcionisanje i poslovanje preduzeća, bez obzira na to kojom delatnosti se bave. Raspolaganje novčanim sredstvima omogućuje preduzeću da učestvuje u poslovnim transakcijama koje se tiču, pre svega, plaćanja različitih vrsta obaveza. Dakle, značaj gotovine ogleda se u obezbeđivanju kontinuirane tekuće platežne sposobnosti poslovног subjekta. Novčana sredstva predstavljaju depozite u bankama i svaki oblik koji će banka prihvati (Meigs, Meigs, 1999). Gotovina obuhvata gotovinu u blagajni i depozite po viđenju. Gotovinski ekvivalenti su kratkoročna visokolikvidna ulaganja koja se mogu brzo konvertovati u poznate iznose gotovine, uz beznačajan rizik od promene vrednosti (Međunarodni računovodstveni standard 7 – Izveštaj o tokovima gotovine).

Upravljanje gotovinom značajno je pitanje za kontinuirano poslovanje preduzeća, internog finansiranja i obezbeđivanje likvidnosti preduzeća. Adekvatnim upravljanjem gotovinom stvara se optimalni nivo gotovine koji omogućuje raspoloživ novac u funkciji povećanja efikasnosti poslovanja preduzeća. Nedovoljni nivo gotovine stvara potrebu za iznalaženjem izvora izvan preduzeća u cilju obezbeđivanja kontinuiteta poslovanja i izmirivanja dospehlih obaveza. Pronalaženje novih izvora novčanih sredstava izvan preduzeća treba da bude praćeno uz što povoljniju, nižu kamatu. Sa druge strane, može se javiti i situacija da preduzeća imaju tzv. višak novčanih sredstava i tada je zadatak menadžmenta preduzeća da pronađe adekvatna ulaganja koja će osigurati finansijsku moć preduzeća. Politika održavanja optimalnog nivoa gotovine jedan je od primarnih ciljeva korporativnog finansijskog upravljanja. Upravljanje gotovinom je stalno balansiranje između solventnosti i rentabilnosti. Deficit gotovine ugrožava solventnost preduzeća. Deficit gotovine mora imati adekvatne izvore pokrića, dok suficit gotovine treba da ima rentabilan plasman izvan redovnog poslovanja (Banović, 2012).

Pitanje upravljanja gotovinom zaokuplja značajnu pažnju. Loše navike u upravljanju gotovinom mogu da postanu deo poslovanja, posebno u periodu rasta ili kada je lako dobiti kredite. Potencijalni benefit upravljanja gotovinom uključuje (Miletić i saradnici, 2015):

- unapređenje postojećeg poslovanja,
- povećanje perioda predviđanja i poverenja u tačnost informacija,
- unapređenje ključnih funkcija poslovanja,
- menjanje uobičajenih postavki i shvatanja u organizaciji, i
- unapređenje performansi profiti.

Menadžeri kompanija okrenuti su ka držanju veće količine gotovine, s obzirom na to da im ona predstavlja sigurnost, odnosno smanjuje rizik poslovanja. U takvim situacijama može doći do sukobljavanja na strani menadžera, koji imaju za cilj održavanje likvidnosti kompanije, i vlasnika kompanija, koji očekuju maksimizaciju profiti u poslovanju (Opler, 1999). Prilikom razmatranja optimalnog nivoa gotovine, potrebno je razmotriti nekoliko relevantnih aspekata troškova koji nastaju u vezi sa gotovinom. Pre svega troškovi držanja gotovine odnose se na gubitak prinosa koji je mogao da nastane na osnovu ulaganja gotovine. Zatim, troškovi transakcija gotovine koji predstavljaju administrativne troškove, troškove provizija transfera u hartiјe od vrednosti i depozite i obrnuto. Kao treća vrsta troška u vezi sa gotovinom javljaju se troškovi nedostatka gotovine koji su posledica trenutnih kasa-skonta ili drugih priliva da se sirovine i materijal nabave pod povoljnijim uslovima (opširnije videti: Banović, 2012).

Upravljanje gotovinom zavisi od brojnih faktora, kao što su npr. veličina preduzeća, struktura kapitala, profitabilnost, investicije i drugi. Ekonomija obima dovodi do toga da velika preduzeća

drže manji iznos gotovine. Sa druge strane, mala preduzeća karakteriše veća cena pozajmljivanja novčanih sredstava i okretnuta su ka držanju većeg iznosa gotovine. Dalje, preduzeća sa većim mogućnostima investiranja imaju potrebu za većim iznosom gotovine, tako da postoji pozitivna veza upravo između obima investiranja i obima gotovine koju preduzeće drži. Cilj rada jeste da se analizira upravljanje gotovinom preduzeća koja kotiraju na Banjalučkoj berzi u periodu 2018–2019. Istraživanje je bazirano na deskriptivnoj analizi pokazatelja upravljanja gotovinom i regresionej analizi u cilju davanja odgovora na pitanje koji faktori utiču na upravljanje gotovinom.

## 1. METODOLOGIJA ISTRAŽIVANJA

Istraživanje u radu postavljeno je sa ciljem analize upravljanja gotovinom preduzeća na Banjalučkoj berzi i identifikovanja ključnih faktora koji utiču na upravljanje gotovinom. Analiza upravljanja gotovinom obuhvata sagledavanje učešća gotovine u poslovnoj imovini preduzeća u periodu 2018–2019. Identifikovanje ključnih faktora koji utiču na upravljanje gotovinom obuhvata analizu faktora kao što su:

- veličina preduzeća,
- zaduženost,
- profitabilnost,
- neto obrtni kapital.

Postojeća istraživanja na temu identifikovanja faktora upravljanja gotovinom nisu ujednačena kada je u pitanju uticaj pojedinih faktora na držanje gotovine. Postojanje negativne veze između veličine preduzeća i iznosa gotovine potvrđuje obrazloženje da velika preduzeća imaju pristup povolnjim eksternim izvorima finansiranja i da, shodno tome, ne postoji potreba za držanjem veće količine gotovine (Opler, 1999). Sa druge strane, Borici i Kruja (2016) navode da velika preduzeća koja ostvaruju poslovni uspeh i visoku profitabilnost drže i veću količinu gotovine neophodnu za dalje investicione aktivnosti. Prema tome, navodi se postojanje pozitivne veze između veličine preduzeća i držanja gotovine.

Preduzeća svoje poslovne aktivnosti mogu finansirati iz sopstvenih izvora ili iz tuđih izvora finansiranja. Pozajmljivanje dodatnih izvora finansiranja praćeno je dodatnim troškovima. Tuđi izvori finansiranja predstavljaju rizičniji izvor u odnosu na sopstvene izvore, s obzirom na definisanu dinamiku vraćanja i plaćanja troškova kamata (opširnije videti: Milić, Jakšić, 2019). U skladu sa navedenim, kada preduzeće ima potrebu za pozajmljivanjem novčanih sredstava, onda je pretpostavka da preduzeća drže manji iznos gotovine. Prema tome, očekivano je da postoji negativna veza između zaduženosti u pogledu učešća tuđih izvora finansiranja u ukupnim izvorima i obima gotovine.

Pitanje odnosa profitabilnosti i držanja gotovine takođe nailazi na različita objašnjenja. Profitabilna preduzeća ne moraju da drže velike iznose gotovine s obzirom na to da mogu svoju zaradu ostvarenu kroz profitabilnost da koriste za isplatu obaveza. U skladu sa navedenim, preduzeća koja imaju nisku profitabilnost obično imaju i veći nivo gotovine. Sa druge strane, Rafinda i sar. (2018) navode da su preduzeća koja imaju nisku profitabilnost zavisnija od pozajmljivanja eksternih izvora finansiranja i da postoji pozitivna veza između profitabilnosti i držanja gotovine.

Neto obrtni kapital posmatra se sa aspekta likvidnosti preduzeća i preduzeća sa većim neto obrtnim kapitalom imaju potrebu za manjim iznosom gotovine, s obzirom na to da neto obrtni kapital

## INTRODUCTION

Cash and cash equivalents are the most liquid form of current assets of a company. Funds are necessary for the adequate functioning and operation of the company, regardless of what activity they are engaged in. The use of cash allows the company to participate in business transactions that relate primarily to the payment of various types of liabilities. Therefore, the importance of cash is reflected in ensuring the continuous current solvency of the business entity. Cash represents deposits in banks and any form that the bank will accept (Meigs, Meigs, 1999). Cash includes cash on hand and demand deposits. Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value (International Accounting Standard 7 - Statement of Cash Flows).

Cash management is an important issue for the continuous operation of the company, internal financing and providing liquidity to the company. Adequate cash management creates an optimal level of cash that provides available money in order to increase the efficiency of the company. Insufficient level of cash creates the need to find sources outside the company in order to ensure business continuity and settle due liabilities. Finding new sources of funds outside the company should be accompanied by the most favorable, lower interest rates. On the other hand, there may be a situation that companies have the so-called surplus of cash funds, and then the task of the company's management is to find adequate investments that will ensure the financial strength of the company. The policy of maintaining an optimal level of cash is one of the primary goals of corporate financial management. Cash management is a constant balancing act between solvency and profitability. The cash deficit threatens the solvency of the company. The cash deficit must have adequate sources of coverage, while the cash surplus should have a profitable placement outside the regular business (Banovic, 2012).

The issue of cash management is attracting significant attention. Bad cash management habits can become part of the business, especially during periods of growth or when it is easy to get loans. The potential benefits of cash management include (Miletic et al., 2015):

- improvement of existing business,
- increasing the period of forecasting and confidence in the accuracy of information,
- improvement of key business functions,
- changing common settings and perceptions in the organization and
- improving profit performance.

Company managers are focused on holding a larger amount of cash, since it represents security for them, ie it reduces business risk. In such situations, there may be conflicts on the part of managers who aim to maintain the liquidity of the company and company owners who expect to maximize profits in business (Opfer, 1999). When considering the optimal level of cash, several relevant aspects of the costs incurred in relation to cash need to be considered. First of all, the costs of holding cash refer to the loss of return that could have occurred on the basis of investing cash. Then, the cost of cash transactions representing administrative costs, the cost of commission transfers to securities and deposits and vice versa. The third type of cost related to cash is the cost of lack of cash resulting from current cash discounts or other inflows to procure raw materials and supplies under more favorable conditions (for more details see: Banovic, 2012).

Cash management depends on a number of factors such as e.g. company size, capital structure, profitability, investments and others. Economies of scale lead to large companies holding a smaller amount of cash. On the other hand, small businesses are characterized by a higher cost of borrowing cash and hold a higher amount of cash. Furthermore, companies with greater investment opportunities need a larger amount of cash, so there is a positive relationship precisely between the volume of investment and the amount of cash that the company holds. The aim of this paper is to analyze the cash management of companies listed on the Banja Luka Stock Exchange in the period 2018-2019. The research is based on a descriptive analysis of cash management indicators and regression analysis in order to answer the question of which factors affect cash management.

## 1. RESEARCH METHODOLOGY

The research in this paper is set with the aim of analyzing the cash management of companies on the Banja Luka Stock Exchange and identifying key factors that affect cash management. The analysis of cash management includes consideration of the share of cash in the business assets of the company in the period 2018-2019. Identifying key factors that affect cash management includes analyzing factors such as:

- size of the company,
- indebtedness,
- profitability,
- net working capital.

Existing research on identifying cash management factors are not uniform in terms of the effect of individual factors on cash holding. The existence of a negative relationship between the size of the company and the amount of cash is confirmed by the explanation that large companies have access to more favorable external sources of finance and consequently there is no need to hold more cash (Opfer, 1999). On the other hand, (Borici, Kruja, 2016) state that large companies that achieve business success and high profitability also hold a larger amount of cash necessary for further investment activities. Therefore, it is stated that there is a positive relationship between the size of the company and holding cash.

Companies can fund their business activities from their own sources or borrowing. Borrowing is accompanied by additional costs. Borrowing represent a riskier source in relation to company's own sources, given the defined dynamics of repayment and payment of interest costs (for more details see: Mijic, Jaksic, 2019). In accordance with the above, when a company has a need to borrow cash, then the assumption is that companies hold a smaller amount of cash. Therefore, it is expected that there is a negative relationship between indebtedness in terms of the share of borrowed funds in total funds and the volume of cash.

The matter of the relationship between profitability and cash holding also encounters various explanations. Profitable companies do not have to keep large amounts of cash as they can use their earnings from profitability to pay off liabilities. In line with the above, companies that have low profitability usually have a higher level of cash. On the other hand (Rafinda et al. 2018) state that companies that have low profitability are more dependent on borrowing and that there is a positive relationship between profitability and cash holding.

mogu lakše pretvoriti u novčana sredstva. Dittmar i saradnici (2003) navode da postoji negativna veza između neto obrtnog kapitala i držanja gotovine.

Analiza upravljanja gotovinom zasniva se na deskriptivnoj analizi učešća gotovine i gotovinskih ekvivalenta u ukupnoj poslovnoj imovini u periodu 2018–2019. godina. Identifikovanje faktora koji utiču na upravljanje gotovinom realizuje se primenom regresionog modela (prema: Field, 2009). Regresiona analiza daje odgovor na pitanje koji faktori i na koji način utiču na kretanje zavisne varijable.

$$Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

**Tabela 1.** Kalkulacija zavisne i nezavisnih varijabli modela (Rodić i sar., 2017; Rafinda i sar., 2018)

Varijabla	Oznaka	Kalkulacija
Upravljanje gotovinom	Y <sub>i</sub>	Gotovina i gotovinski ekvivalenti / ukupna imovina
Veličina preduzeća	X <sub>1</sub>	Ln ukupna imovina
Zaduženost	X <sub>2</sub>	Tuđi izvori finansiranja / ukupna imovina
Profitabilnost	X <sub>3</sub>	Neto rezultat / ukupna imovina
Neto obrtni fond	X <sub>4</sub>	(Tekuća imovina – tekuće obaveze – gotovina) / ukupna imovina

Za potrebe istraživanja korišćeni su finansijski izveštaji preduzeća koja kotiraju na Banjalučkoj berzi (Banjalučka berza, 2020) u periodu 2018–2019. Uzorak čini ukupno 578 opservacija preduzeća koja su u navedenom periodu imala iskazanu vrednost gotovine i gotovinskih ekvivalenta u bilansu stanja. Statistička obrada podataka sprovedena je primenom statističkog softvera SPSS v. 23 (Field, 2009; Black, 2012).

## 2. REZULTATI I DISKUSIJA

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Kretanje gotovine i gotovinskih ekvivalenta u periodu 2018–2019. prikazano je u sledećoj tabeli. Gotovina u apsolutnom iznosu u 2018.

gde je

Y<sub>i</sub> – upravljanje gotovinom (zavisna varijabla),

X<sub>1</sub> – veličina preduzeća (nezavisna varijabla),

X<sub>2</sub> – zaduženost (nezavisna varijabla),

X<sub>3</sub> – profitabilnost (nezavisna varijabla),

X<sub>4</sub> – neto obrtni fond (nezavisna varijabla).

U narednoj tabeli dat je pregled kalkulacije zavisne i nezavisnih varijabli.

godine iznosila je 171.066 hiljada KM, dok je za ista preduzeća u narednoj godini iskazana gotovina u bilansu stanja iznosila 156.723 hiljade KM. Iako se iznos gotovine smanjuje za 8,39% posmatrajući u odnosu na bilansnu masu ukupne aktive, učešće gotovine u bilansu ima konstantan trend. U odnosu na ukupnu aktivu, učešće gotovine u proseku iznosi 4%. Postoje preduzeća sa izrazito niskim iznosom gotovine (svega nekoliko KM u odnosu na ukupnu imovinu od 1.000.000 KM). Takođe, postoje i preduzeća sa izrazito visokim iznosom gotovine, čak 52% u odnosu na ukupnu imovinu.

**Tabela 2.** Deskriptivna analiza upravljanja gotovinom

	2018. godina (u KM)	2019. godina (u KM)	Trend
Gotovina i gotovinski ekvivalenti	171.066.942,00	156.723.810,00	0,9161
Upravljanje gotovinom	0,04	0,04	-

U narednoj tabeli prezentovane su prosečne vrednosti varijabli (veličina preduzeća, zaduženost, profitabilnost i neto obrtni fond) u

posmatranom periodu.

**Tabela 3.** Deskriptivna analiza faktora upravljanja gotovinom

Varijabla	2018. godina (prosečna vrednost)	2019. godina (prosečna vrednost)	Trend
Veličina preduzeća	15,29	15,27	0,9986
Zaduženost	0,4	0,4	-
Profitabilnost	-0,03	-0,02	0,6667
Neto obrtni fond	-0,06	-0,07	1,1667

U 2019. godini 156 preduzeća poslovalo je sa neto dobitkom. Prosečna profitabilnost preduzeća sa dobitkom iznosila je 0,0238, što znači da su preduzeća u proseku ostvarila 2,38% neto dobitka od visine uložene ukupne imovine. Sa druge strane, 129 preduzeća poslovalo je sa neto gubitkom, i to u prosečnom iznosu od 4,55% u odnosu na ukupnu aktivu. U istoj godini su četiri preduzeća poslovala sa neutralnim neto finansijskim rezultatom. U prethodnoj godini situacija koja se tiče profitabilnosti može se oceniti u boljem kontekstu u odnosu na prethodnu godinu. U 2018. godini, 164 preduzeća poslovala su sa neto dobitkom koji u proseku iznosi 3,54% ukupne imovine.

Posmatrajući zaduženost preduzeća, može se zaključiti da preduzeća u proseku nisu zadužena. Prosečan nivo zaduženosti iznosi 0,4, što znači da ukupne obaveze čine u proseku 40% ukupne aktive. Prisutna su i preduzeća koja imaju koeficijent zaduženosti 1, ali i preduzeća koja imaju izrazito nizak koeficijent zaduženosti u iznosu od 0,0023. Sa druge strane, ocena neto obrtnog fonda nije zadovoljavajuća. Naime, ako se posmatra neto obrtni fond u funkciji likvidnosti, evidentno je da preduzeća u proseku nisu u mogućnosti da iz tekuće imovine (koja je umanjena za gotovinu i gotovinske ekvivalente) izmire o roku dospeća kratkoročne obaveze.

Net working capital is viewed from the aspect of liquidity of companies and companies with higher net working capital have a need for a smaller amount of cash, since net working capital can be more easily converted into cash. Dittmar and co-workers (2003) state that there is a negative relationship between net working capital and cash holding.

The cash management analysis is based on a descriptive analysis of the share of cash and cash equivalents in total operating assets in the period 2018-2019. Identification of factors influencing cash management is realized by applying a regression model (according to: Field, 2009). Regression analysis provides an answer to the question of which factors and in what way influence the movement of the dependent variable.

$$Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where:

$Y_i$  – Cash management (dependent variable)

$X_1$  – Company size (independent variable)

$X_2$  – Indebtedness (independent variable)

$X_3$  – Profitability (independent variable)

$X_4$  – Net working capital (independent variable)

The following table provides an overview of the calculation of dependent and independent variables.

**Table 1.** Calculation of dependent and independent model variables (Rodic et al., 2017, Rafinda et al., 2018).

Variable	Mark	Calculation
Cash management	$Y_i$	Cash and cash equivalents / Total assets
Company size	$X_1$	Ln Total assets
Indebtedness	$X_2$	Borrowing / Total assets
Profitability	$X_3$	Net result / Total assets
Net working capital	$X_4$	(Current assets - current liabilities - cash) / Total assets

For the purpose of the research, the financial reports of companies listed on the Banja Luka Stock Exchange (Banja Luka Stock Exchange, 2020) from 2018 to 2019 were used. The sample consists of a total of 578 observations of companies that in the stated period had the stated value of cash and cash equivalents in the balance sheet. Statistical data processing was performed using the statistical software SPSS v.23 (Field, 2009; Black, 2012).

## 2. RESULTS AND DISCUSSION

Cash and cash equivalents movement from 2018 to 2019 is shown in the following table. Cash in the absolute amount in 2018 amou-

nted to BAM 171,066 thousand, while for the same companies in the following year, the stated cash in the balance sheet amounted to BAM 156,723 thousand. Although the amount of cash decreases by 8.39% in relation to the balance sheet total assets, the share of cash in the balance sheet has a constant trend. In relation to total assets, the share of cash averages 4%. There are companies with a very low amount of cash (only a few BAM in relation to the total assets of BAM 1,000,000). Also, there are companies with a very high amount of cash, as much as 52% of total assets.

**Table 2.** Descriptive analysis of cash management

	2018 (BAM)	2019 (BAM)	Trend
Cash and cash equivalents	171.066.942,00	156.723.810,00	0,9161
Cash management	0,04	0,04	-

The following table presents the average values of variables (company size, indebtedness, profitability and net working capital)

in the observed period.

**Table 3.** Descriptive analysis of cash management factors

Variable	2018 (average value)	2019 (average value)	Trend
Company size	15,29	15,27	0,9986
Indebtedness	0,4	0,4	-
Profitability	-0,03	-0,02	0,6667
Net working capital	-0,06	-0,07	1,1667

In 2019, 156 companies operated with a net profit. The average profitability of companies with a profit was 0.0238, which means that companies averaged 2.38% of net profit from the amount of invested total assets. On the other hand, 129 companies operated with a net loss in the average amount of 4.55% in relation to total assets. In the same year, 4 companies operated with a neutral net financial result. In the previous year, the situation regarding

profitability can be assessed in a better context compared to the previous year. In 2018, 164 companies operated with a net profit of an average of 3.54% of total assets.

Observing the indebtedness of companies, it can be concluded that companies are not indebted on average. The average level of indebtedness is 0.4, which means that total liabilities make up an average of 40% of total assets. There are also companies that have

Rezultati regresione analize ukazuju na to da veličina preduzeća i zaduženost predstavljaju signifikantne faktore koji utiču na upravljanje gotovinom. Sa druge strane, profitabilnost i neto obrtni fond nemaju značajnog uticaja na pitanje upravljanja gotovinom preduzeća koja kotiraju na Banjalučkoj berzi. Veličina preduzeća ima negativan signifikantan uticaj na upravljanje gotovinom uz pouzanost od 95%. Rezultat ukazuje na to da velika preduzeća imaju manji iznos gotovine meren kao odnos gotovine i ukupne imovine.

Sa druge strane, manja preduzeća drže veći iznos gotovine (meren u odnosu na ukupnu imovinu) u odnosu na velika preduzeća. Navedeni rezultati u skladu su sa dosadašnjim istraživanjima (Opler, 1999). Zaduženost takođe ima negativan uticaj na upravljanje gotovinom. Prema tome, preduzeća koja se dodatno zadužuju i traže eksterne izvore finansiranja poseduju manji iznos gotovine. Profitabilnost i neto obrtni fond u pozitivnoj su vezi sa pitanjem upravljanja gotovinom, ali nemaju signifikantan uticaj.

**Tabela 4. Rezultati regresione analize istraživanja uticaja faktora na upravljanje gotovinom**

Model		Koefficijenti			t	Značajnost
		Beta	St. greška	Beta		
1	Konstanta	0.143	0.025		5.836	0.000
	Veličina preduzeća	-0.006	0.002	-0.161	-3.897	0.000
	Zaduženost	-0.034	0.012	-.157	-2.980	0.003
	Profitabilnost	0.037	0.028	0.054	1.310	0.191
	Neto obrtni fond	0.009	0.011	0.044	0.833	0.405

U sledećoj tabeli ilustrovan je prikaz uticaja ispitanih varijabli na upravljanje gotovinom.

**Tabela 5. Ilustracija rezultata istraživanja**

Varijabla	Uticaj
Veličina preduzeća	Negativan
Zaduženost	Negativan
Profitabilnost	Nema uticaj
Neto obrtni fond	Nema uticaj

## ZAKLJUČAK

Gotovina predstavlja najlikvidniji oblik imovine preduzeća koji u prvom redu obezbeđuje likvidnost preduzeća. Pored toga, gotovina i gotovinski ekvivalenti pretpostavka su ostvarivanja rasta preduzeća iz internih izvora. Rast preduzeća ostvaruje se donošenjem adekvatnih poslovnih odluka od strane menadžmenta preduzeća o ulaganju gotovine u cilju ostvarivanja buduće ekonomske koristi i profitabilnosti. Prema tome, upravljanje gotovinom i održavanje gotovine na određenom nivou predstavlja kalkulaciju i poslovno odlučivanje koje treba da obezbedi i plaćanje obaveza o roku dospeća (likvidnost preduzeća) i, sa druge strane, ulaganje u poslovne poduhvate koji treba da se realizuju uz ostvarivanje profitabilnosti.

Istraživanje u radu sprovedeno je sa ciljem identifikovanja koji faktori utiču na pitanje upravljanja gotovinom, odnosno držanja gotovine kod preduzeća na Banjalučkoj berzi. Istraživanje, koje se, u prvom redu, bazira na deskriptivnoj analizi upravljanja gotovinom, pokazuje da prosečan iznos gotovine po preduzeću ima tendenciju pada u 2019. godini u odnosu na 2018. godinu za oko 8,39%. Posmatrajući ukupnu aktivu, gotovina učestvuje u masi ukupne aktive sa 4%. Ukoliko se u razmatranje uzme odnos gotovine i gotovinskih ekvivalenta, sa jedne strane, i kratkoročnih obaveza, sa druge strane, uviđa se da preduzeća imaju problem sa održavanjem rigorozne likvidnosti. Naime, učešće kratkoročnih obaveza u ukupnoj aktivi iznosi u posmatranom periodu 31%. Prema tome, preduzeća ne ispunjavaju kriterijum rigorozne likvidnosti po kojoj se podrazumeva da su preduzeća u mogućnosti da izmire kratkoročne obaveze iz novčanih sredstava (opširnije videti: Rodić i sar., 2017).

Dalje, rezultati istraživanja identificuju da veličina preduzeća i zaduženost utiču negativno na iznos gotovine koji se drži kod preduzeća. Naime, velika preduzeća drže nešto manji iznos gotovine (meren u odnosu na ukupnu aktivu) u odnosu na velika preduzeća. Ovakvi rezultati su očekivani, s obzirom na to da velika preduzeća imaju lakši pristup eksternim izvorima finansiranja. Preduzeća koja imaju viši stepen zaduženosti imaju manji iznos gotovine. Preduzeća koja se dodatno zadužuju preko optimalnog iznosa zaduženosti, vrše pre svega iz razloga neraspolažanja dovoljnom količinom novčanih sredstava, kako bi iz internih izvora finansirala posovanje i vraćanje duga.

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a debt ratio of 1, but also companies that have a very low debt ratio in the amount of 0.0023. On the other hand, the assessment of the net working capital is not satisfactory. Namely, observing the net working capital in the function of liquidity, it is evident that companies are on average not able to settle short-term liabilities using current assets (which are reduced by cash and cash equivalents).

The results of the regression analysis indicate that company size and indebtedness are significant factors influencing cash management. On the other hand, profitability and net working capital do not have a significant effect on the matter of cash management of companies listed on the Banja Luka Stock Exchange. The size of

the company has a negative significant effect on cash management with a reliability of 95%. The result indicates that large companies have a smaller amount of cash measured as the ratio of cash to total assets. On the other hand, smaller companies hold a larger amount of cash (measured in relation to total assets) compared to large companies. These results are consistent with previous research (Opler, 1999). Indebtedness also has a negative effect on cash management. Therefore, companies that borrow more and seek external sources of finance have a smaller amount of cash. Profitability and net working capital are positively related to the issue of cash management but do not have a significant effect.

**Table 4.** Research results of regression analysis of the effect of factors on cash management

Model		Coefficients			t	Significance
		Beta	St. greška	Beta		
1	Constant	0.143	0.025		5.836	0.000
	Company size	-0.006	0.002	-0.161	-3.897	0.000
	Indebtedness	-0.034	0.012	-.157	-2.980	0.003
	Profitability	0.037	0.028	0.054	1.310	0.191
	Net working capital	0.009	0.011	0.044	0.833	0.405

The following table illustrates the effect of the examined variables on cash management.

**Table 5.** Illustration of research results

Variable	Effect
Company size	Negative
Indebtedness	Negative
Profitability	No effect
Net working capital	No effect

## CONCLUSION

Cash is the most liquid form of company assets that primarily provides liquidity to the company. In addition, cash and cash equivalents are a prerequisite for achieving business growth using internal sources. The growth of the company is achieved by making adequate business decisions by the company's management to invest cash in order to achieve future economic benefits and profitability. Therefore, managing cash and maintaining cash at a certain level is a calculation and business decision-making that should ensure the payment of liabilities on maturity (liquidity of the company) and on the other hand investing in business ventures that should be realized while achieving profitability.

The research in this paper was conducted with the aim of identifying which factors affect the issue of cash management, ie cash holding by companies on the Banja Luka Stock Exchange. The research, which is primarily based on a descriptive analysis of cash management, shows that the average amount of cash per company has a tendency to fall in 2019 compared to 2018 by about 8.39%. Observing total assets, cash participates in the mass of total assets with 4%. If the ratio of cash and cash equivalents on the one hand, and short-term liabilities on the other hand are considered, companies have a problem with maintaining rigorous liquidity. Namely, the share of short-term liabilities in total assets amounts to 31% in the observed period. Therefore, companies do not meet the criterion of rigorous liquidity, which implies that

companies are able to settle short-term liabilities using cash (for more details see: Rodic et al., 2017).

Furthermore, the research results identify that the size of the company and indebtedness negatively affect the amount of cash held by the company. Namely, large companies hold a slightly smaller amount of cash (measured in relation to total assets) compared to large companies. Such results are expected, given that large companies have easier access to borrowing. Companies that have a higher level of indebtedness have a smaller amount of cash. Companies that additionally borrow over the optimal amount of indebtedness, primarily due to the lack of sufficient amount of cash to finance operations and debt repayment using internal sources.

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