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Svop poslovi kao instrument zaštite od valutnog i kamatnog rizika u Republici Srpskoj

Swaps as a tool for hedging currency and interest rate risk in the Republic of Srpska

Rezime

Razvoj savremenog bankarskog poslovanja karakterišu procesi deregulacije, povećane konkurencije, globalizacije i primjene informacionih tehnologija. Ovi procesi uticali su na smanjivanje uloge tradicionalnih kreditno-depozitnih poslova banaka i njihovu orijentaciju ka drugim vidovima poslovnih aktivnosti, poput razvoja inovativnih derivatnih finansijskih instrumenata. Ipak, situacija u Republici Srpskoj nešto je drugačija. Bankocentričan finansijski sistem i dominacija tradicionalnih bankarskih usluga ukazuju na manjak zainteresovanosti za finansijske inovacije. Sa druge strane, visokorizično okruženje u kome posluju domaće banke i njihovi klijenti stvara pretpostavke za uspješnu upotrebu finansijskih derivata, poput svop poslova.

Ovaj rad bavi se analizom trenutnog stanja i mogućnosti razvoja svop poslova u Republici Srpskoj u cilju zaštite investitora od kamatnog i valutnog rizika. Rezultati istraživanja pokazuju da svop poslovi imaju izvjesnu perspektivu u Republici Srpskoj. Banke, kao finansijski supermarketi, ali i njihovi klijenti, posebno oni čije poslovanje ima međunarodni karakter te su više izloženi rizicima u poslovanju, imaju interes za zaključenje svop transakcija u cilju smanjenja rizika i/ili ostvarivanja zarade.

Ključne riječi: finansijski derivati, svopovi, banke, finansijska tržišta.

Abstract

The development of modern banking is characterized by processes of deregulation, increased competition, globalization and application of information technologies. These processes have impacted the reduction of the role of banks' traditional credit - deposit operations and their orientation towards other types of business activities, such as the development of innovative derivative financial instruments. However, the situation in the Republic of Srpska is somewhat different. The bank-centric financial system and dominance of traditional banking services indicate a lack of interest in financial innovation. On the other hand, the high-risk environment in which domestic banks and their clients operate creates preconditions for successful use of financial derivatives, such as swap transactions.

This paper analyses the current situation and the possibility of development of swap transactions in the Republic of Srpska in order to protect investors from interest rate and currency risk. Survey results show that swap transactions have some perspective in the Republic of Srpska. Banks, as financial supermarkets, as well as their clients, especially those which are internationally oriented and thus more exposed to business risks, have an interest in concluding swap transactions in order to reduce risk and/or make a profit.

Keywords: Financial Derivatives, Swaps, Banks, Financial markets.

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UVOD

Povećanje rizika sa kojima se privredni subjekti susreću u obavljanju svojih redovnih aktivnosti predstavlja jednu od posljedica ekonomske globalizacije. Povećanju valutnog rizika doprinijela je olakšana međunarodna trgovina, na kamatni rizik direktan uticaj imaju mjere monetarne politike razvijenih zemalja kroz promjene referentnih kamatnih stopa, dok na kretanje cijena roba i hartija od vrijednosti utiče veliki broj različitih faktora. U cilju zaštite od gore pomenutih rizika, razvijeni su derivatni finansijski instrumenti. Tržište finansijskih derivata brzo se razvijalo i na njemu se pojavio veliki broj učesnika koji su, u potrazi za zaradom, kupovali i prodavali derivate, odnosno „kladili se“ na buduće kretanje cijena aktive u njihovoj osnovi.

Predmet posmatranja u ovom radu usmjeren je na svopove kao fundamentalne derivatne instrumente na OTC tržištu. Pritom, za lakše razumijevanje funkcionisanja svopova, ograničićemo se na predstavljanje najjednostavnijih formi ovih instrumenata, koje mogu biti modifikovane i kombinovane na neograničen broj načina. Svopovi su izabrani zbog toga što ih njihove relativno jednostavne karakteristike čine prikladnim za upotrebu na tržištu nižeg nivoa razvoja, kao što je tržište Republike Srpske.

1. METODE ISTRAŽIVANJA

Metode istraživanja primijenjene u ovom radu jesu metode analize sadržaja, strukturalne analize, komparativne analize, te metode sinteze u predstavljanju svop poslova kao posebne vrste poslova investicionog bankarstva. Istraživanje je provedeno prikupljanjem i obradom podataka iz različitih izvora: izvještaja regulatornih institucija finansijskog tržišta Republike Srpske, javno dostupnih izvještaja i podataka osam poslovnih banaka sa sjedištem u Republici Srpskoj, te podataka dobijenih iz upitnika koji su popunile sve banke.

Cilj istraživanja je da se naučnoj i stručnoj javnosti, istraživačima i praktičarima u finansijskom i bankarskom sektoru da naučni i stručni prikaz trenutnih istraživanja svop poslova, stepen dostignutog razvoja ovih poslova i mogućnosti njihovog razvoja u Republici Srpskoj.

Istraživanje polazi od hipoteze da domaće banke imaju mogućnost i interes za uvođenje svop poslova u svoju ponudu u smislu građenja dobrih poslovnih odnosa sa klijentima, zaštite od rizika i ostvarenja zarade.

Pomoćna hipoteza je da su neophodni, ali ne i dovoljni uslovi za razvoj svop poslova u Republici Srpskoj povećanje nivoa informisanosti o mogućnostima i postupku korišćenja svopova, povećanje znanja o potencijalnim koristima ovih instrumenata u oblasti upravljanja rizicima i obrazovanje zaposlenih u bankama.

Doprinos ovog rada ogleda se u jasnom sagledavanju osnovnih vrsta svop poslova, predstavljanju njihovih mogućnosti u procesu zaštite od rizika, unapređenju poslovanja banaka kao finansijskih supermarketa i odnosa sa njihovim klijentima, te unapređenju i rastu privrede Republike Srpske kroz razvoj finansijskog sistema. Akademski doprinos rada ogleda se u proširenju baze istraživanja iz oblasti finansija, uzimajući u obzir da je ova tema koja u Republici Srpskoj do sada nije zasebno obrađivana.

2. PRETHODNA ISTRAŽIVANJA – TEORIJSKA PODLOGA

Finansijski derivati i njihova upotreba predmet su velikog broja istraživanja, naročito onih provedenih po okončanju globalne finansijske krize iz 2008. godine. Iako se ovi instrumenti često dovode

u vezu sa nastankom krize, ukoliko se pažljivije sagledaju pravi razlozi gubitaka učesnika na finansijskom tržištu i ekonomije u cjelini, dolazi se do zaključka da oni nisu nastali zbog derivata per se, nego zbog njihove nepravilne upotrebe. Organi uprave tržišnih učesnika zanemarivali su rizike koji proističu iz derivatnih pozicija ili su derivate koristili isključivo u špekulativne svrhe umjesto u svrhe upravljanje rizicima (Fabozzi, Peterson, 2009).

Iako je osnovna literatura iz ove oblasti fokusirana na razvijena tržišta zbog visokog stepena liberalizacije i značajnih prometa finansijskih derivata, u posljednje vrijeme je povećan broj studija koje se bave analizom upotrebe finansijskih derivata na tržištima u razvoju (Atilgan, Demirtas, Simsek, 2016). Interesovanje stručne javnosti za tržišta u razvoju dolazi kao posljedica konstantnog rasta aktivnosti na njima, te paralelno sa povećanjem veličine, prihoda i orijentacije ovih tržišta ka inostranstvu i međunarodnim ekonomskim i finansijskim tokovima, raste i upotreba finansijskih derivata (Singh, Singh, 2018). Prethodno naročito dobija na značaju ukoliko se uzme u obzir da na tržištima u razvoju postoji veća neizvjesnost i volatilnost u odnosu na razvijena tržišta, što se potvrđuje kretanjem bruto društvenog proizvoda, deviznog kursa, kamatnih stopa i tokova kapitala, i zbog čega bi se moglo očekivati da tržište finansijskih instrumenata za zaštitu od rizika (hedžing) bude dobro razvijeno. Međutim, to često nije slučaj (Upper, Valli, 2016). Tržište finansijskih derivata u zemljama u razvoju sastoji se od manjeg broja finansijskih instrumenata i generalno je na nižem nivou razvoja.

Danas se na uređenim ili OTC tržištima trguje velikim brojem finansijskih derivata. Pored klasičnih forvarda (engl. forward), fjučersa (engl. futures), opcija (engl. options) i svopova (engl. swaps), postoje i finansijski derivati kompleksnih struktura koji se kreiraju putem tzv. društava posebnih namjena (engl. Special Purpose Vehicle – SPV) ili se zasnivaju na drugim finansijskim derivatima, pa predstavljaju „izvedenice na izvedenice“.

Kamatni svopovi imaju brojne prednosti, ali i potencijalne rizike (Skarr, 2004). Prednosti korišćenja kamatnih svopova ogledaju se u snižavanju troškova finansiranja, zaštiti od kamatnog rizika, predvidivosti budućih troškova finansiranja, usklađivanju novčanih tokova u aktivni i pasivi, te proširenju baze investitora. Sa druge strane, najznačajniji rizici kamatnih svopova su rizik druge strane u svop ugovoru, rizik referentne kamatne stope, rizik ranog prestanka svopa, rizik refinansiranja (engl. Rollover Risk), rizik amortizacije i poreski rizik.

Pojedina istraživanja bavila su se efektima kamatnih svopova na njihove korisnike i identifikovanjem karakteristika kompanija koje ih koriste. Balsam i Kim (2001) pokazali su da kompanije koje koriste svopove imaju veću šansu da se suoče sa smanjenom varijacijom novčanih tokova u periodu od pet godina nakon stupanja u svop ugovor. Pored toga, kompanije koje učestvuju u svop transakcijama obično su veće i sa većim leveridžom u odnosu na kontrolni uzorak kompanija koje ne koriste svopove. Kada je riječ o svrsi korišćenja svopova, ovo istraživanje nalazi da su svopovi kamatnih stopa korišteni prvenstveno u svrhe hedžinga, odnosno smanjenja rizika.

Kamatni rizik nije jedini koji se umanjuje upotrebom svopova. Globalizacija i povećanje obima međunarodne trgovine doveli su do porasta valutnog rizika i, posljedično, razvoja valutnih svopova. Pored zaštite od rizika proisteklog iz direktnih plaćanja u trgovinskim odnosima, valutni svopovi imaju sve značajniju ulogu prilikom zaduživanja u stranim valutama. Ovo se prvenstveno odnosi na slučajeve kada dužnik emituje hartije od vrijednosti u stranoj valuti i odmah ulazi u svop ugovor kako bi se osigurao od budućih plaćanja u toj stranoj valuti (Munro, Wooldridge, 2010).

Domaća literatura se u veoma maloj mjeri bavila svopovima i mogućnostima njihove upotrebe u Republici Srpskoj. Svopovi su

INTRODUCTION

Increase in risks that businesses are facing in performing their regular activities is one of the consequences of economic globalization. The increase in foreign exchange risk happened due to facilitated international trade, interest rate risk is directly affected by developed countries' monetary policy measures through changes in reference interest rates, while the movement of commodity and securities prices is influenced by a number of different factors. In order to protect against the above mentioned risks, derivative financial instruments have been developed. The financial derivatives market has grown rapidly and has seen a large number of participants looking to earn, buy and sell derivatives, or "bet" on the future price movement of their underlying assets.

The subject of this paper focuses on swaps as fundamental derivative instruments on OTC market. In that regard, for easier understanding of the functioning of swaps, we will limit ourselves to presenting the simplest forms of these instruments, which can be modified and combined in an unlimited number of ways. Swaps are chosen because their relatively simple characteristics make them suitable for use on less developed markets, such as the Republic of Srpska market.

1. RESEARCH METHODS

The research methods used in this paper are methods of content analysis, structural analysis, comparative analysis, and methods of synthesis in presenting swaps as a special type of investment banking activity. The research was conducted by collecting and analysing data from various sources: reports of the Republic of Srpska financial market regulatory institutions, publicly available reports and data from eight commercial banks based in the Republic of Srpska, and data obtained from questionnaires completed by those banks.

The aim of the research is to provide scientific and professional public, researchers and practitioners in the financial and banking sector, with a scientific and professional overview of current research on swaps, the degree of development of these activities and the possibilities of their development in the Republic of Srpska.

The research starts from the hypothesis that domestic banks have the opportunity and interest in introducing swaps into their offer in terms of building good business relationships with clients, hedging against risks and earning a profit.

Ancillary hypothesis is that necessary, but not sufficient, conditions for the development of swap operations in the Republic of Srpska are to increase the level of information on the possibilities and procedures of using swaps, to increase knowledge about the potential benefits of these instruments in the field of risk management and to work on education of bank employees.

The contribution of this paper is to clearly perceive the basic types of swaps, to present their hedging possibilities, to improve the operations of banks as financial supermarkets and their relationships with clients, and to improve growth of the Republic of Srpska economy through development of the financial system. The academic contribution of this paper is reflected in the expansion of the research base in the field of finance, considering that this is a topic that has not been addressed separately in the Republic of Srpska.

2. PREVIOUS RESEARCH

Financial derivatives and their use have been the subject of numerous research studies, especially those conducted since the end

of the 2008 global financial crisis. Although these instruments are often thought of as related to the emergence of the crisis, if one looks more closely at the real reasons for the losses of financial market participants and the economy as a whole, it can be concluded that they did not occur due to derivatives per se but due to their improper use. The Management of market participants ignored the risks arising from derivative positions or used derivatives solely for speculative purposes rather than for risk management purposes (Fabozzi & Peterson, 2009).

Although the basic literature in this field focuses on developed markets due to high degree of liberalization and significant financial derivatives turnover, the number of studies dealing with the analysis of the use of financial derivatives in emerging markets has recently increased (Atilgan, Demirtas & Simsek, 2016). Such interest in emerging markets comes as a consequence of constant increase in activity on these markets: the use of financial derivatives is expanding in parallel with the increase in size, income and orientation of these markets towards foreign countries and international economic and financial flows (Singh & Singh, 2018). The former is particularly important given that there is greater uncertainty and volatility in emerging markets than in developed markets, confirmed by movements in GDP, exchange rates, interest rates and capital flows, which might cause the financial derivatives market to be well developed. However, this is often not the case (Upper & Valli, 2016). The financial derivatives market in developing countries consists of fewer financial instruments and is generally at a lower level of development.

Nowadays, a large number of financial derivatives are traded on the regulated or OTC markets. In addition to classic forwards, futures, options and swaps, there are financial derivatives of complex structures that are created through so-called Special Purpose Vehicles (SPVs) or are based on other financial derivatives, so they represent "derivatives on derivatives".

Interest rate swaps have many advantages as well as potential risks (Skarr, 2004). The benefits of using interest rate swaps are reflected in lowering the cost of financing, hedging against interest rate risk, predictability of future financing costs, reconciling cash flows in assets and liabilities, and expanding the investor base. On the other hand, the most significant risks of interest rate swaps are counterparty risk, reference interest rate risk, early termination of the swap risk, rollover risk, amortization risk and tax risk.

Some studies have addressed the effects of interest rate swaps on their users and identified the characteristics of the companies using them. Balsam & Kim (2001) showed that companies that use swaps have a greater chance of experiencing reduced cash flow variation over a five-year period following the swap contract. Furthermore, companies that participate in swap transactions are typically larger and have higher leverage compared to the control sample of companies that do not. When it comes to the purpose of using swaps, this research finds that interest rate swaps are used primarily for hedging purposes, that is, risk mitigation.

Interest rate risk is not the only one hedged against by the use of swaps. Globalization and increase in volume of international trade have led to amplification of currency risk, and consequently the development of currency swaps. In addition to hedging against the risks arising from direct payments in a commercial relation, currency swaps have a growing role in foreign currency borrowing. This applies primarily to cases where the debtor issues securities in foreign currency and immediately enters into a swap contract to secure future payments in that foreign currency (Munro & Wooldridge, 2010).

obično analizirani u okviru istraživanja o stanju na tržištu finansijskih derivata u Bosni i Hercegovini, koja su imala slične zaključke. Jedan od njih je da upotreba finansijskih derivata u Bosni i Hercegovini još uvijek nije na nivou mogućnosti koje oni pružaju u zaštiti od rizika.

Kozarević i Jukan (2011) ispitivali su nivo upotrebe finansijskih derivata, njihove vrste, ponudu i tražnju. Istraživanje je obuhvatilo 29 banaka koje posluju na teritoriji Bosne i Hercegovine (19 u Federaciji BiH i 10 u Republici Srpskoj), pri čemu je utvrđeno da ukupno 10 njih nudi derivatne proizvode (šest u Federaciji BiH i četiri u Republici Srpskoj). Rezultati istraživanja pokazali su da je tražnja za finansijskim derivatima u Bosni i Hercegovini veoma niska i da ne postoji organizovano tržište za ove finansijske instrumente, kao što je berza finansijskih derivata. Najveća tražnja prisutna je kod valutnih forvarda, zatim valutnih svopova i kamatnih svopova. Sa druge strane, istraživanje je pokazalo da je niska i ponuda ovih finansijskih instrumenata. Komercijalne banke nude samo tri vrste derivata koje se koriste u svrhe zaštite od valutnog i kreditnog rizika: valutni forvardi, valutni svopovi i kamatni svopovi. Banke koje planiraju da prošire svoju ponudu derivatnih finansijskih instrumenata fokusirane su prvenstveno na kamatne i valutne svopove, kao i kreditne opcije.

Kumalić (2013) je analizirao inovacije na tržištu kapitala kao šansu za razvoj Bosne i Hercegovine i u nalazima navodi da su nosioci inovacija na finansijskom tržištu u Bosni i Hercegovini banke koje su u većinskom stranom vlasništvu, ali da se te inovacije javljaju u formi povećanja broja klasičnih instrumenata kojima se trguje, a ne u formi novih finansijskih instrumenata, poput finansijskih derivata.

Halilbegović i Mekić (2017) u svojim nalazima navode da u Bosni i Hercegovini ne postoji tržište finansijskih derivata, ali da ih u maloj mjeri nude neke komercijalne banke. Kao osnovne prepreke za razvoj ovog segmenta finansijskog sektora u svom istraživanju identifikovali su nedostatak informacija o procedurama u vezi sa upotrebom finansijskih derivata i nedostatak znanja o potencijalnim koristima njihove upotrebe u sferi upravljanja rizicima. Prethodno se odnosi i na zaposlene u kompanijama koje bi mogle da koriste finansijske derivate i na zaposlene u bankama kao finansijskim posrednicima. Dodatni ograničavajući faktor je relativno mali broj poslovnih aktivnosti kompanija iz Bosne i Hercegovine na globalnom tržištu, kao i stabilna valuta kao posljedica fiksnog režima fiksnog deviznog kursa (valutni odbor).

Iz prethodno navedenog vidljivo je da finansijski derivati predstavljaju veoma zanimljivu i aktuelnu temu istraživanja koja sve više dobija na značaju i na tržištima u razvoju i kojoj će u narednom periodu biti potrebno posvetiti više pažnje.

2.1. Karakteristike i vrste svop poslova

Nastanak svop poslova vezan je za London, gdje se 1979. godine pojavio valutni svop, a dvije godine kasnije i svop kamatne stope. Vodeći dileri svopova su 1985. godine osnovali Međunarodno udruženje dilera svopova (engl. International Swap Dealers Association – ISDA), koje je publikovalo prvi propis u cilju standardizacije ovih ugovora i na taj način u velikoj mjeri smanjilo vrijeme i troškove njihovog kreiranja.

Prema podacima Banke za međunarodna poravnanja (engl. Bank for International Settlements), veličina tržišta kamatnih i valutnih svopova je na kraju 2018. godine iznosila 6.676 mlrd. USD, dok je ukupna nominalna vrijednost zaključenih, ali neizvršenih derivatnih ugovora (engl. Notional amounts outstanding) iznosila 727 biliona USD. Istovremeno, Međunarodno udruženje za svopove i derivate (engl. International Swaps and Derivatives Association, ISDA) objavilo je da je trgovanje kamatnim derivatima zabilježilo snažan rast u 2018. godini, odnosno da je došlo do povećanja obima trgovine od

čak 22% u odnosu na prethodnu godinu (SwapsInfo Full Year 2018 and Fourth Quarter of 2018 Review). Najzastupljeniji među njima bili su kamatni svopovi fiksne za varijabilnu kamatnu stopu u jednoj valuti (engl. Single currency fixed-for-floating IRS).

Svop je finansijski instrument koji predstavlja sporazum između dvije strane o razmjeni određenih periodičnih novčanih tokova u budućnosti, u čijoj osnovi se nalazi neki osnovni instrument ili cijena. Ova vrsta ugovora ugovornim stranama obezbjeđuje mehanizam za zaštitu od rizika, kao što su kamatni, valutni, tržišni i drugi rizici. Potpisivanjem svop ugovora, dvije strane potvrđuju da su saglasne da razmijene seriju plaćanja na određeni period. U osnovi ovog ugovora nalazi se određena imovina kvantitativno ili vrijednosno iskazana. Pritom, obično je jedna strana saglasna da plaća fiksnu cijenu, dok druga strana pristaje da plaća promjenjivu (varijabilnu) cijenu na određeni dogovoreni nominalni iznos imovine.

Najefikasniji način strukturiranja svop ugovora je da se u njihovo kreiranje uključi i banka kao treća ugovorna strana, koja će se pojaviti kao potpisnik svop ugovora sa obje zainteresovane strane u poslu. Uloga banke kao svop dilera veoma je važna: ona inicira svop posao i, kao posrednik, potpisuje ugovore sa svakom od strana u svop poslu. U jednom svop ugovoru banka kao svop diler plaća fiksnu, a prima promjenjivu cijenu, dok u drugom svop ugovoru banka kao svop diler prima fiksnu, a plaća promjenjivu cijenu, čime ostvaruje zaradu na osnovu kupoprodajnog spreda na svop ugovoru.

Svopovima se ne trguje na berzi, već se trgovina ovim finansijskim instrumentima obavlja na vanberzanskom tržištu (engl. Over the Counter Market – OTC), neposredno između učesnika ili uz posredovanje banaka kao svop dilera¹. Nakon završetka globalne finansijske krize, došlo je do značajnih izmjena u regulativi svopova. Odgovornosti su podijeljene između nadležnih institucija, a pravila ponašanja pooštrena kao odgovor na nedostatak regulative OTC derivata prije krize. Svop dileri i učesnici u trgovanju ovim instrumentima sada moraju da ispune niz uslova koji se odnose na osnivanje, kapital, izvještavanje javnosti i regulatora, odnose sa klijentima i sl.

Učesnici na tržištu svopova razlikuju se u zavisnosti od motiva za učešće u transakcijama ovim finansijskim instrumentima. Špekulanti transakcije sa svop ugovorima obavljaju sa namjerom da ostvare razliku u vrijednosti. Hedžeri transakcije obavljaju sa namjerom da se zaštite od rizika promjene cijena, odnosno kamatnih stopa. Arbitražeri u svop transakcije ulaze koristeći prednosti u pristupu različitim tržištima (npr. tržištima kredita sa fiksnom i varijabilnom kamatnom stopom).

Na osnovu toga koja aktiva ili instrument se nalazi u osnovi svop ugovora, razlikuju se i pojedine vrste svopova, poput kamatnog (engl. Interest Rate Swap), valutnog (engl. Currency Swap), robnog (engl. Commodity Swap), akcijskog (engl. Equity Swap), svopa neizvršenja kredita (engl. Credit Default Swap) i dr. U ovom radu pažnju ćemo zadržati na razmatranju osnovnih modela svopova: kamatnog i valutnog.

2.1.1. Kamatni svop

Kamatni svop je ugovor dvije strane o zamjeni fiksne za promjenjivu kamatnu stopu u istoj valuti, obračunate po osnovu zamišljenog glavnčkog iznosa u određenom periodu vremena. Pritom, važno je naglasiti da u kamatnom svopu ne dolazi do razmjene glavnčkih iznosa koji služe kao osnov za kreiranje kamatnog svopa. Kamatni svop je provodiv kada jedna ugovorna strana ima komparativnu prednost u pribavljanju novčanih sredstava na određenom tržištu od druge strane. Za vrijeme trajanja ugovora: jedna strana prihvata da drugoj plaća promjenjivu kamatnu stopu na osnovu ugovornog iznosa glavnice i naziva se platilac promjenjive stope (engl. Floating rate payer), a druga strana prihvata da prvom strani plaća fiksnu

¹ Određene vrste svopova mogu se naći i u trgovanju na berzama fjučersa.

Domestic literature has dealt very modestly with swaps and their use in the Republic of Srpska. Swaps have usually been analyzed in the context of conditions on the Bosnia and Herzegovina financial derivatives market, and all studies had similar conclusions. One is that the use of financial derivatives in Bosnia and Herzegovina is still not up to the level of opportunities they provide in risk mitigation.

Kozarevic and Jukan (2011) examined the level of use of financial derivatives, their types, supply and demand. The survey included 29 banks operating in the territory of Bosnia and Herzegovina (19 in the Federation of Bosnia and Herzegovina and 10 in the Republic of Srpska), finding that a total of 10 banks offered derivative products (6 in the Federation of Bosnia and Herzegovina and 4 in the Republic of Srpska). The research results showed that demand for financial derivatives in Bosnia and Herzegovina is very low and that there is no organized market for these financial instruments, such as the financial derivatives stock exchange. The greatest demand is present in currency forwards, followed by currency swaps and interest rate swaps. On the other hand, research has shown that supply of these financial instruments is low as well. Commercial banks offer only three types of derivatives used for currency and credit risk hedging: currency forwards, currency swaps and interest rate swaps. Banks planning to expand their derivative offering focus primarily on interest rate and currency swaps as well as credit options.

Kumalic (2013) analyzed innovations on the capital market as an opportunity for development of Bosnia and Herzegovina, and found that the carriers of innovations on the financial market in Bosnia and Herzegovina are foreign-owned banks, but that these innovations occur in the form of increase in number of classic financial instruments, rather than new financial instruments such as financial derivatives.

Halilbegovic and Mekic (2017) state in their findings that there is no financial derivatives market in Bosnia and Herzegovina, but that these instruments are in a small extent offered by some commercial banks. The main obstacles to development of this segment of the financial sector are lack of information on procedures related to the use of financial derivatives and lack of knowledge about potential benefits of their use in the field of risk management. The foregoing applies both to employees of companies that could use financial derivatives and to employees of banks as financial intermediaries. An additional limiting factor is relatively small number of business activities of Bosnia and Herzegovina companies in the global market, as well as the stable currency as a consequence of fixed exchange rate regime (currency board).

Therefore, it is evident that financial derivatives are a very interesting and current topic of research that is increasingly important in emerging markets as well and which will need to be given more attention in the coming period.

2.1. Characteristics and types of swaps

The origination of swaps is related to London, where currency swap appeared in 1979 and interest rate swap two years later. Leading swap dealers established the International Swap Dealers Association (ISDA) in 1985, which published the first regulation aiming to standardize these contracts, and thus greatly reducing the time and cost of creating them.

According to the Bank for International Settlements, the size of the interest rate and currency swaps market at the end of 2018 was 6.676 billion USD, with the total notional amount outstanding

of 727 trillion USD. At the same time, the International Swaps and Derivatives Association (ISDA) announced that interest rate derivatives trading had strong increase in 2018, i.e. a 22% increase in trade volume compared to previous year (SwapsInfo Full Year 2018 and Fourth Quarter of 2018 Review). The most common of these swaps were single currency fixed-for-floating interest rate swaps.

Swap is a financial instrument that represents an agreement between two parties to exchange certain periodic cash flows in the future, with some instrument or price underlying it. This type of contract provides counterparties with a hedging mechanism against different types of risks, such as interest rate risk, currency risk, market risk etc. By signing a swap agreement, two parties confirm that they agree to exchange a series of payments for a specified period. The basis of this contract is asset presented quantitatively or in terms of value. In this type of agreement usually one party agrees to pay a fixed price while the other party agrees to pay a variable price to a certain agreed nominal amount.

The most effective way to structure a swap agreement is to involve a bank as a third party, which will appear as a signatory to the swap agreement with both parties involved in the business. The bank's role as a swap dealer is very important: it initiates a swap and, as an intermediary, signs contracts with each of the parties. In one swap contract the bank, as a swap dealer, pays a fixed and receives a variable price, while in another swap contract, the bank receives a fixed and pays a variable price, thereby earning a profit on the basis of the purchase and sale spread on the swap agreement.

Swaps are not traded on the stock exchange, but on the Over the Counter Market (OTC), directly between participants or with intermediation of banks as swap dealers.¹ Since the end of the global financial crisis, there have been significant changes in the regulation of swaps. Responsibilities are shared between competent institutions, and rules of conduct have been tightened in response to the lack of regulation of OTC derivatives before the crisis. Swap dealers and participants in trading of these instruments now have to fulfill a number of conditions related to incorporation, capital, public and regulatory reporting, customer relations etc.

Participants in the swap market differ depending on their motives for entering these contracts. The speculators conduct swap transactions with the intention of making a difference in value. Hedgers conduct transactions in order to hedge against the risk of changes in price or interest rates. Arbitrators enter into swap transactions by taking advantage of access to different markets (eg. fixed and floating rate loan markets).

There are different types of swaps, depending on which asset or instrument underlies the contract, such as interest rate swap, currency swap, commodity swap, equity swap, credit default swap, etc. In this paper, we will focus on the basic models of swaps: interest rate and currency swaps.

2.1.1. Interest rate swap

Interest rate swap is an agreement between two parties to exchange a fixed for variable interest rate in the same currency, calculated on the basis of imagined principal amount over a period of time. In doing so, it is important to emphasize that there is no exchange of principal amounts that serve as the basis for creating the swap. Interest rate swap can be used when one party has comparative advantage in obtaining funds in a particular market over the other. During the contract:

¹ Certain types of swaps can also be found on futures exchange.

kamatnu stopu² na osnovu ugovornog iznosa glavnice i naziva se platilac fiksne stope (engl. Fixed rate payer).

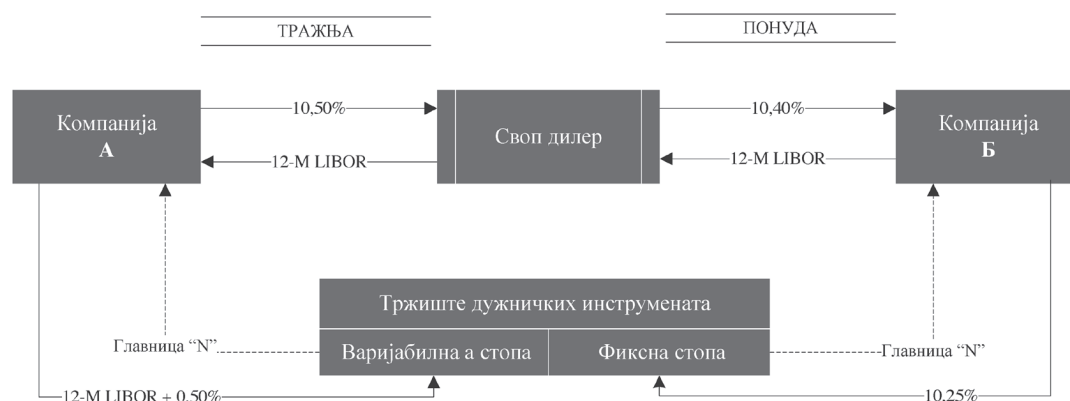
Od početka trajanja kamatnog svopa, ugovorna strana koja plaća promjenjivu kamatnu stopu najčešće je vezana za LIBOR (engl. London Interbank Offered Rate), koja se iskazuje kao kamatna stopa (na godišnjoj osnovi) na jednomjesečne (1-M LIBOR), tromjesečne (3-M LIBOR), šestomjesečne (6-M LIBOR) i jednogodišnje depozite (12-M LIBOR). U pristupanju ovakvoj transakciji platilac fiksne stope želi da svoju pasivu sa promjenjivim stopama pretvori u pasivu sa fiksnim stopama u cilju usaglašavanja sa pozicijama sa fiksnim prinosom u aktivi. S druge strane, interes platioca promjenjive stope je suprotan. Banka se javlja u ulozi finansijskog posrednika, garantujući novčani tok koji se nalazi u osnovi svop ugovora i time ostvarujući odgovarajuću naknadu.

Kreiranje kamatnog svopa često je motivisano nastojanjem da se smanje troškovi finansiranja. Pritom, jedna ugovorna strana ima povoljniji pristup izvoru finansiranja sa fiksnom kamatnom stopom od druge strane, ali želi da se finansira po promjenjivoj kamatnoj

stopi, dok druga ugovorna strana ima suprotnu situaciju. Ulaskom u svop posao, obje strane će iskoristiti svoje komparativne prednosti na različitim tržištima i ostvariti željenu formu finansiranja. Za ilustraciju strukture procesa kreiranja kamatnog svopa uzmimo primjer u kome dvije kompanije uz pomoć svop diler kao finansijskog posrednika kreiraju kamatni svop³.

Kompanija A – ima potrebu da kao izvor finansiranja pronade zaduženje na 10 godina. Ona ima komparativnu prednost pri zaduživanju po promjenjivoj kamatnoj stopi, ali želi zaduženje po fiksnoj kamatnoj stopi. Ova kompanija može da se zaduži po promjenjivoj kamatnoj stopi od 12-M LIBOR + 0,50% ili po fiksnoj kamatnoj stopi od 11,25%.

Kompanija B – ima potrebu da kao izvor finansiranja pronade zaduženje na 10 godina. Ova kompanija ima komparativnu prednost pri zaduživanju po fiksnoj kamatnoj stopi, ali želi zaduženje po promjenjivoj kamatnoj stopi. Ona može da se zaduži po fiksnoj kamatnoj stopi od 10,25% ili po promjenjivoj kamatnoj stopi od 12-M LIBOR.



Slika 1. Struktura kamatnog svopa

U navedenoj situaciji, banka se pojavljuje kao svop diler koji je spreman da potpiše svop ugovore kao platilac fiksne stope (prima-lac promjenjive stope) i platilac promjenjive stope (primalac fiksne stope). U oba slučaja, promjenjiva stopa koju diler plaća iznosi 12-M LIBOR, dok kod fiksne stope kao platilac plaća fiksnu kamatnu stopu od 10,40% a kao primalac zahtijeva fiksnu stopu od 10,50%.

Banka kao svop diler će sugerisati kompaniji A da emituje dužničke instrumente po promjenjivoj kamatnoj stopi od 12-M LIBOR +

0,50%, a kompaniji B da emituje dužničke instrumente po fiksnoj kamatnoj stopi od 10,25%. Kompanija A zatim potpisuje kamatni svop sa svop dilerom koji će platiti varijabilnu kamatnu stopu 12-M LIBOR, a primiti fiksnu kamatnu stopu 10,50%, a kompanija B takođe potpisuje svop sa svop dilerom koji će platiti fiksnu kamatnu stopu 10,40% i primiti varijabilnu kamatnu stopu 12-M LIBOR.

Pogledajmo sada kakav efekat ima kamatni svop na njegove učesnike:

Naziv	Kompanija A	Kompanija B
Plaćene kamate		
1.1. Zaduženje	12M-LIBOR + 0,50%	10,25%
1.2. Svop	10,5%	12M-LIBOR
Primljene kamate		
Svop	12M-LIBOR	10,4%
UKUPNO		
3.1. Plaćene kamate	12M-LIBOR + 0,50% + 10,5%	10,25% + 12M-LIBOR
3.2. Primljene kamate	12M-LIBOR	10,40%
NETO REZULTAT		
4.1. Putem svopa (3.1. – 3.2)	11%	12M-LIBOR – 0,15%
4.2. Ako posuđuje direktno	11,25%	12M-LIBOR
4.3. Rezultat	MANJE 0,25%	MANJE 0,15%
Zarada svop dilera iznosi 0,10% (10,50% – 10,40%)		

Tabela 1. Prikaz efekata kamatnog svopa na učesnike u svopu

² Umjesto fiksne kamatne stope, ova strana po ugovoru može plaćati i neku drugu promjenjivu kamatnu stopu.

³ Marshall (1994), op. cit., 233.

- one party agrees to pay variable interest rate to the other based on the contractual principal amount and is called a floating-rate payer, and
- the other party agrees to pay a fixed interest rate² to the first party based on the contractual principal amount and is called a fixed-rate payer.

From the beginning of the interest rate swap, the counterparty paying a floating interest rate is most often linked to LIBOR (London Interbank Offered Rate), which is expressed as an interest rate (on an annual basis) on a monthly (1-M LIBOR), quarterly (3-M LIBOR), six-month (6-M LIBOR) and one-year deposits (12-M LIBOR). In accessing such a transaction, the fixed rate payer wishes to convert its variable rate liabilities into fixed rate liabilities in order to comply with fixed income positions in assets. On the other hand, the interest of the variable rate payer is opposite. The bank appears as a financial intermediary by guaranteeing the cash flow underlying the swap contract and thereby obtaining an appropriate remuneration.

Creating an interest rate swap is often motivated by an effort to

reduce financing costs. In doing so, one counterparty has more favorable access to fixed-rate source of funding than the other, but wants to be financed at a variable interest rate, while the other counterparty has the opposite position. By entering into a swap, both parties will use their comparative advantages in different markets and achieve the desired form of financing. To illustrate the structure of the interest rate swap process, we take an example where two companies create an interest rate swap with the help of a swap dealer as financial intermediary.³

Company A - has the need to find a 10-year debt as a source of financing. It has the comparative advantage of borrowing at a variable interest rate, but it wants to borrow at a fixed interest rate. This company can borrow at a variable interest rate of 12-M LIBOR + 0.50% or at a fixed interest rate of 11.25%.

Company B - has the need to find a 10-year debt as a source of financing. This company has the comparative advantage of borrowing at a fixed interest rate, but wants variable rate borrowing. It can be borrowed at a fixed interest rate of 10.25% or at a variable interest rate of 12-M LIBOR.

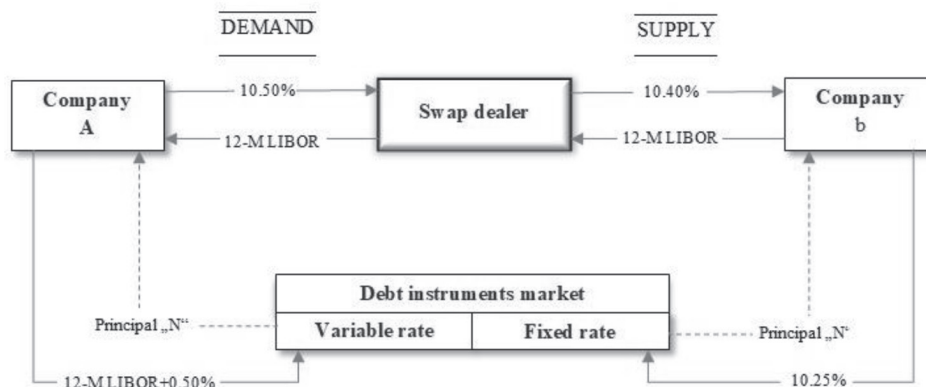


Figure 1. Interest rate swap structure

In this situation, the bank appears as a swap dealer willing to sign swap contracts as a fixed rate payer (variable rate recipient) and a variable rate payer (fixed rate recipient). In both cases, the variable rate paid by the dealer is 12-M LIBOR, while at a fixed rate, the dealer pays a fixed interest rate of 10.40% and requires a fixed rate of 10.50%.

The bank, as a swap dealer, will suggest Company A to issue debt instruments at a variable interest rate of 12-M LIBOR + 0.50%

and Company B to issue debt instruments at a fixed interest rate of 10.25%. Company A then enters into interest rate swap with the dealer that will pay a variable interest rate of 12-M LIBOR and receive a fixed interest rate of 10.50%, while Company B also signs a swap agreement with the dealer that will pay a fixed interest rate of 10.40% and receive a variable interest rate of 12-M LIBOR. Now let us look at the effect of interest rate swap on its participants:

Name	Company A	Company B
Paid interest		
1.1. debt	12-M LIBOR+ 0.50%	10.25%
1.2. swap	10.5%	12-M LIBOR
Received interest		
swap	12-M LIBOR	10.4%
TOTAL		
3.1. paid interest	12-M LIBOR +0.50% +10.5%	10.25% + 12-M LIBOR
3.2. received interest	12-M LIBOR	10.40%
NET RESULT		
4.1. swap (3.1 – 3.2)	11%	12-M LIBOR – 0.15%
4.2. direct borrowing	11.25%	12-M LIBOR
4.3. result	0.25% LESS	0.15% LESS
Swap dealer's profit 0.10% (10.50% - 10.40%)		

Table 1. Effects of interest rate swap on its participants

² Instead of a fixed interest rate, this contractual party may also pay some other variable interest rate.

³ Marshall (1994), p. 233.

Kompanija A zadužila se po varijabilnoj kamatnoj stopi od 12M-LIBOR + 0,50%, a po svop ugovoru od svop dilera prima 12M-LIBOR, a plaća 10,5%. Konačni troškovi kapitala kompanije A iznose 11%. Da se zaduživala na tržištu po fiksnoj kamatnoj stopi, ona bi iznosila 11,25%, te možemo zaključiti da je kompanija A ulaganjem u svop posao ostvarila uštedu od 0,25%.

S druge strane, kompanija B je platila na tržištu dužničkih instrumenata fiksnu kamatnu stopu od 10,25%, a po osnovu svop posla od svop dilera prima 10,40%, a plaća 12M-LIBOR. Da se zaduživala na tržištu po varijabilnoj kamatnoj stopi, kompanija B bi platila 12M-LIBOR te možemo zaključiti da je opredjeljenjem za svop posao kompanija B ostvarila uštedu od 0,15%.

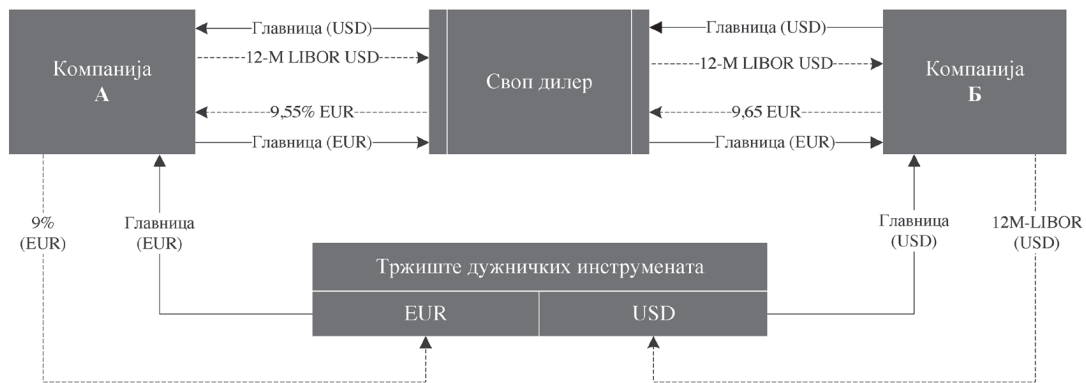
Banka je u ulozi svop dilera sklopila kamatne svop ugovore sa kompanijom A i kompanijom B i, kao naknadu za njene usluge u obezbjeđenju likvidnog svop tržišta, ostvarila zaradu od 0,10%. Ova zarada nastala je kao razlika između primanja po kamatnom svopu od kompanije A (10,5%) i plaćanja po kamatnom svopu kompaniji B (10,40%). Ovaj kupoprodajni spread predstavlja osnovni izvor zarade banke u kreiranju kamatnog svop tržišta. Pritom, treba napomenuti da u ovom poslu banka ne angažuje svoja finansijska sredstva nego samo povezuje dvije zainteresovane strane u svop poslu.

2.1.2. Valutni svop

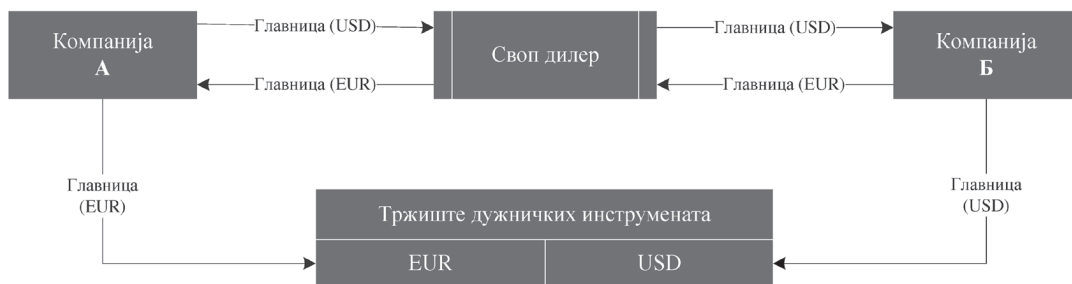
Valutni svop je ugovor između dvije strane, koje su se najčešće zadužile u različitim valutama, o zamjeni jedne valute za drugu, a u cilju smanjenja rizika od gubitka usljed promjene kursa valute. Valutni svop nastaje u situaciji kada jedna ugovorna strana ima komparativnu prednost, odnosno jeftiniji pristup nabavci određene valute od druge strane. Za vrijeme trajanja ugovora strane se sporazumijevaju da izvrše zamjenu valute koje posjeduju za valutu kojom raspolaže druga strana u određenom iznosu. Kao treća strana u ovom poslu najčešće se pojavljuje banka koja ima ulogu svop dilera.

Za ilustraciju strukture i postupka kreiranja valutnog svopa podimo od sljedećih pretpostavki:

- kompanija A može da pozajmi EUR na pet godina po fiksnoj stopi od 9%, a USD po promjenjivoj stopi od 12-M LIBOR;
- kompanija B može da pozajmi EUR na pet godina po fiksnoj stopi 10,3%, a USD po promjenjivoj stopi 12-M LIBOR; i
- kompaniji A treba USD po promjenjivoj stopi, a kompaniji B treba EUR po fiksnoj stopi.



Slika 2. Razmjena glavnica valuta nakon isteka svopa



Slika 3. Struktura i novčani tokovi valutnog svopa

U navedenoj situaciji, pojavljuje se banka u ulozi svop dilera koji pronalazi rješenje u valutnom svopu EUR za USD. Svop diler je spreman da plati fiksnu kamatnu stopu od 9,55% na EUR, s tim da mu se plati 12-M LIBOR na USD, te da plati 12-M LIBOR na USD, s tim da mu se plati fiksna kamatna stopa od 9,65% na EUR. Kompanija A će na tržištu posuditi EUR po cijeni od 9%, dok će se

kompanija B zadužiti u USD po cijeni od 12M-LIBOR. Ovdje treba napomenuti da će EUR koji je kompanija A posudila na tržištu valutni svop konvertovati u USD. U valutnom svopu, pri razmjeni valuta, dvije strane obično dogovaraju fiksni kurs valuta koji odražava očekivanja ugovornih strana budućih kretanja kursa valuta.

Naziv	Kompanija A	Kompanija B
Plaćene kamate		
1.1. Zaduženje	9% EUR	12M-LIBOR USD
1.2. Svop	12M-LIBOR USD	9,65% EUR
Primljene kamate		
Svop	9,55%	12M-LIBOR USD
UKUPNO		

Company A borrowed at a variable interest rate of 12-M LIBOR + 0.50%, and according to swap it receives 12-M LIBOR from the swap dealer and pays 10.5%. Company A's final cost of capital is 11%. If it had borrowed at a fixed interest rate, it would be 11.25%, so we can conclude that Company A saved 0.25% by entering into this swap.

Company B, on the other hand, paid a fixed interest rate of 10.25% in the debt instruments market, and according to swap it receives 10.40% from the swap dealer and pays 12-M LIBOR. If it had borrowed on the market at a variable interest rate, Company B would have paid 12-M LIBOR, so we can conclude that Company B saved 0.15% by entering into this swap.

The bank entered into interest rate swap with Company A and Company B as a swap dealer, and as compensation for its services of providing liquid swap market, earned 0.10%. This earnings was the difference between interest received from Company A (10.5%) and interest paid to Company B (10.40%) pursuant to interest rate swap. This buying and selling spread is the basic source of bank's earnings in creating an interest rate swap market. In doing so, it should be noted that in this business, the bank does not engage its financial resources but only connects two interested parties in a swap transaction.

2.1.2. Currency swap

Currency swap is a contract between two parties, most often borrowing in different currencies, to exchange one currency for another in order to reduce the risk of loss due to changes in exchange rate. Currency swap can be used when one party has comparative advantage, i.e. cheaper approach to purchasing a particular currency compared to the other. During the term of the contract, the parties agree to exchange the currency they hold for the currency available to the other party in a specified amount. The role of swap dealer in this activity is usually played by banks.

To illustrate the structure and procedure of creating a currency swap, we will start with the following assumptions:

- Company A can borrow EUR for 5 years at a fixed rate of 9% and USD at a variable rate of 12-M LIBOR,
- Company B can borrow EUR for 5 years at a fixed rate of 10.3% and USD at a variable rate of 12-M LIBOR and
- Company A needs USD at a variable rate and company B needs EUR at a fixed rate.

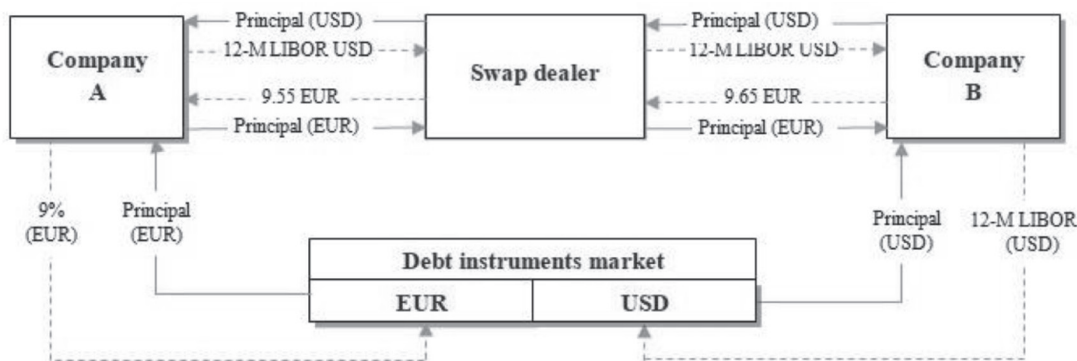


Figure 2. Currency exchange after the swap has expired

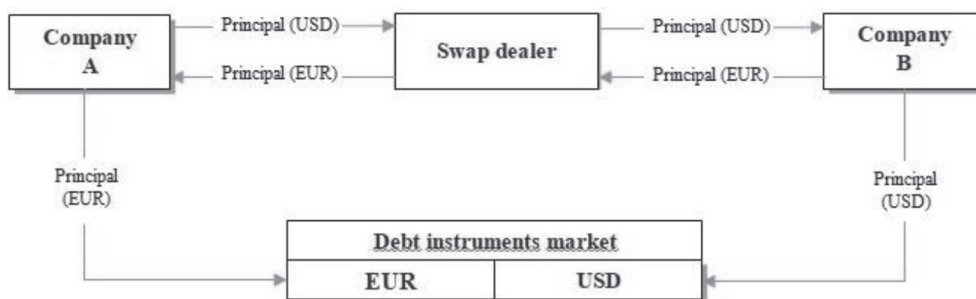


Figure 3. Structure and cash flows of currency swap

In this situation, a bank appears as a swap dealer which finds solution in the EUR/USD currency swap. The swap dealer is ready to pay a fixed interest rate of 9.55% on EUR, and receive payment of 12-M LIBOR on USD, as well as to pay 12-M LIBOR on USD, and receive payment of a fixed interest rate of 9.65% on EUR. Company A will borrow in EUR on the market at a price of 9%,

while company B will borrow in USD at the price of 12-M LIBOR. It should be noted here that this currency swap will convert EUR that Company A borrowed on the market to USD. In a currency swap, when exchanging currencies, the two parties usually agree on a fixed exchange rate that reflects the counterpartys' expectations of future movements in the exchange rate.

Name	Company A	Company B
Paid interest		
1.1. debt	9% EUR	12M-LIBOR USD
1.2. swap	12M-LIBOR USD	9.65% EUR
Received interest		
Swap	9.55%	12M-LIBOR USD
TOTAL		

3.1. Plaćene kamate	9% + 12M-LIBOR	12M-LIBOR + 9,65%
3.2. Primljene kamate	9,55%	12M-LIBOR
NETO REZULTAT		
4.1. Putem svopa (3.1. – 3.2.)	12M-LIBOR – 0,55%	9,65%
4.2. Ako posuđuje direktno	12M-LIBOR	10,3%
4.3. Rezultat	MANJE 0,55%	MANJE 0,65%
Zarada svop dilera iznosi 0,10% (9,65% – 9,55%)		

Tabela 2. Prikaz efekata valutnog svopa na učesnike u svopu

Kao što možemo vidjeti, kompanija A na tržištu je posudila EUR po fiksnoj kamatnoj stopi od 9%, te je valutnim svopom sa svop dilerom izvršila zamjenu za USD po varijabilnoj kamatnoj stopi od 12M-LIBOR, s tim da joj svop diler plaća na EUR fiksnu kamatnu stopu 9,55%. Konačni troškovi kapitala kompanije A u USD po varijabilnoj kamatnoj stopi iznose 12M-LIBOR – 0,55%. Da se direktno zaduživala na tržištu, kompanija A bi USD po varijabilnoj kamatnoj stopi platila 12M-LIBOR, što znači da je valutnim svopom kompanija A uštedjela 0,55%.

S druge strane, kompanija B je na tržištu posudila USD po cijeni od 12M-LIBOR, a valutnim svopom sa svop dilerom je izvršila zamjenu za EUR po fiksnoj kamatnoj stopi od 9,65%, s tim da joj svop diler plaća na USD varijabilnu kamatnu stopu 12M-LIBOR. Konačni troškovi kapitala kompanije B u EUR po fiksnoj kamatnoj stopi iznose 9,65%. Da se direktno zaduživala na tržištu, kompanija B bi EUR

po fiksnoj kamatnoj stopi platila 10,3%, što znači da je valutnim svopom kompanija B uštedjela 0,65%.

Pored toga, i banka u ulozi svop dilera je ostvarila zaradu od 0,10%, kao naknadu za njene usluge u obezbjeđenju likvidnog svop tržišta. Ova zarada nastala je kao razlika između primanja po valutnom svopu od kompanije B (9,65%) i plaćanja po valutnom svopu kompaniji A (9,55%), što predstavlja osnovni izvor zarade banke od kreiranja valutnog svop tržišta, pri čemu ne angažuje svoja finansijska sredstva.

2.2. Potencijal bankarskog sektora Republike Srpske za razvoj svop poslova

Finansijski sistem Republike Srpske ima karakteristike kontinentalnog modela,⁴ u kome dominiraju banke kao ključne finansijske institucije, dok se finansijsko tržište i instrumenti nedovoljno koriste kao izvor finansiranja.

Finansijske institucije ⁵	31. 12. 2017.		31. 12. 2018.		Indeks 2018/2017.
	Aktiva	Udio (%)	Aktiva	Udio (%)	
Banke	7.038.965	88	7.760.073	89	110
Društva za osiguranje	432.730	5	473.540	5	109
Investicioni fondovi	244.436	3	219.602	3	90
Mikrokreditne organizacije	261.725	3	307.126	4	117
UKUPNO	7.977.856	100	8.760.341	100	110

Tabela 3. Struktura neto aktive finansijskog sektora Republike Srpske u 2017. i 2018. godini (u 000 KM)⁶

Prema podacima o strukturi neto aktive finansijskog sektora Republike Srpske, dominantno učešće ima bankarski sektor sa vrijednošću neto aktive od 7.760.073 KM u 2018. godini (10% više u odnosu na prethodnu godinu). Učešće bankarskog sektora u ukupnoj neto aktivi finansijskog sektora iznosi 89%, što predstavlja povećanje za jedan procentni poen u odnosu na prethodnu godinu. Rast bilansne aktive imale su sve banke, od kojih je pet banaka imalo rast po stopama u rasponu od 3% do 8%, jedna banka po stopi od 12%, a dvije banke po stopama od 35% i 36%.

Pored banaka, značajno mjesto u strukturi neto aktive finansijskog sektora zauzimaju društva za osiguranje i mikrokreditne organizacije koji su ostvarili rast neto aktive u 2018. godini u odnosu na 2017. godinu od 9%, odnosno 17%, respektivno. Investicioni fondovi su jedine finansijske institucije koje bilježe pad neto aktive u 2018. godini (-10%), što može da se dovede u vezu sa prvim otvaranjima investicionih fondova nastalih u procesu vaučerske privatizacije i otkupa udjela od njihovih vlasnika⁷.

Struktura aktive banaka u 2017. i 2018. godini prikazana je u sljedećoj tabeli:

OPIS	31. 12. 2017.		31. 12. 2018.		Indeks
	Stanje	Učešće	Stanje	Učešće	
1. Novčana sredstva	1.567.782	21	2.023.829	25	129
2. Krediti (bruto)	4.869.919	65	5.005.850	61	103
3. Hartije od vrijednosti za trgovanje	616.936	8	762.467	9	124
4. Hartije od vrijednosti koji se drže do dospeljeća	129	0	693	0	537
5. Plasmani drugim bankama	68.080	1	69.458	1	102
6. Poslovni prostor i ostala fiksna aktiva	181.093	2	183.253	2	101
7. Ostala aktiva	193.868	3	183.920	2	95

⁴ U kontinentalnom modelu finansijskog sistema banke su organizovane kao univerzalne banke, tj. finansijski supermarketi, koji nude širok spektar usluga iz oblasti komercijalnog i investicionog bankarstva, sa izrazitom dominacijom komercijalnih bankarskih poslova.

⁵ Od 2017. godine u Republici Srpskoj postoji i Evropski dobrovoljni penzioni fond, međutim, isti je isključen iz posmatranja zbog male vrijednosti aktive (2017. godine 2.503 KM, 2018. godine 302.155 KM).

⁶ Izvor: Agencija za osiguranje RS, Agencija za bankarstvo RS i Komisija za hartije od vrijednosti RS.

⁷ Izmjenama i dopunama Zakona o investicionim fondovima iz 2015. godine propisano je obavezno preoblikovanje zatvorenih investicionih fondova nastalih u postupku vaučerske privatizacije u otvorene investicione fondove.

3.1. paid interest	9% + 12M-LIBOR	12M-LIBOR + 9.65%
3.2. received interest	9.55%	12M-LIBOR
NET RESULT		
4.1. swap (3.1. – 3.2.)	12M-LIBOR – 0.55%	9.65%
4.2. direct borrowing	12M-LIBOR	10.3%
4.3. result	0.55% LESS	0.65% LESS
Swap dealer's profit 0.10% (9.65% - 9.55%)		

Table 2. Effects of currency swap on its participants

As we can see, Company A borrowed EUR at a fixed interest rate of 9% on the market and swapped it for USD at a variable interest rate of 12-M LIBOR, with receiving a fixed interest rate of 9.55% from the swap dealer. The final cost of capital for Company A in USD at a variable interest rate is 12-M LIBOR - 0.55%. If it had borrowed directly on the market, Company A would have paid USD at a variable interest rate of 12-M LIBOR, which means that Company A saved 0.55% with this currency swap.

Company B, on the other hand, borrowed USD on the market at a price of 12-M LIBOR, and swapped it for EUR at a fixed interest rate of 9.65%, with receiving a variable interest rate of 12-M LIBOR from the swap dealer. The final cost of capital for Company B in EUR at a fixed interest rate is 9.65%. If it had borrowed directly on the market, Company B would have paid EUR at a fixed interest rate

of 10.3%, which means that Company B saved 0.65%. In addition, the bank in the role of swap dealer, earned a profit of 0.10% as compensation for its services of providing liquid swap market. This earnings was the difference between receiving payment from Company B (9.65%) and paying to Company A (9.55%), which is the bank's primary source of income from creating a currency swap market without engaging its own financial resources.

2.2. Potential of the banking sector of the Republic of Srpska for development of swaps

The Republic of Srpska financial system has the characteristics of a continental model⁴, in which banks dominate as key financial institutions, while the financial market and instruments are underutilized as a source of financing.

Financial institutions ⁵	31.12.2017.		31.12.2018.		Index
	Assets	Share (%)	Assets	Share (%)	
Banks	7,038,965	88	7,760,073	89	110
Insurance companies	432,730	5	473,540	5	109
Investment funds	244,436	3	219,602	3	90
Micro-credit organizations	261,725	3	307,126	4	117
TOTAL	7,977,856	100	8,760,341	100	110

Table 3. Net assets structure of the Republic of Srpska financial sector in 2017 and 2018 (000 KM)⁶

According to data on the structure of net assets of the Republic of Srpska financial sector, the banking sector has a dominant share, with net asset value of KM 7,760,073 in 2018 (10% more than in the previous year). The share of banking sector in total net assets of the financial sector is 89%, an increase of one percentage point compared to the previous year. All banks had growth in balance sheet assets, five of which at rates ranging from 3% to 8%, one bank at a rate of 12% and two banks at rates of 35% and 36%. Alongside banks, insurance companies and micro-credit organizations, which achieved net assets growth in 2018 compared to

2017 of 9% and 17%, respectively, occupy a significant place in the structure of net assets of the financial sector. Investment funds are the only financial institutions to record a decline in net assets in 2018 (-10%), which can be related to the first openings of investment funds established in the process of voucher privatization and redemption of their shares⁷.

The structure of banks' assets in 2017 and 2018 is shown in the following table:

Position	31.12.2017.		31.12.2018.		Index
	Value	Share	Value	Share	
1. Cash	1,567,782	21	2,023,829	25	129
2. Loans (gross)	4,869,919	65	5,005,850	61	103
3. Trading securities	616,936	8	762,467	9	124
4. Securities held to maturity	129	0	693	0	537
5. Loans to other banks	68,080	1	69,458	1	102
6. Buildings and other fixed assets	181,093	2	183,253	2	101
7. Other assets	193,868	3	183,920	2	95

⁴ In the continental model of the financial system, banks are organized as universal banks, i.e. financial supermarkets, offering a wide range of services in the field of commercial and investment banking, with a distinct dominance of commercial banking.

⁵ As of 2017, there is European Voluntary Pension Fund in the Republic of Srpska, however, it has been excluded from observation due to the low value of the assets (in 2017 KM 2,503, in 2018 KM 302,155).

⁶ Source: Republic of Srpska Insurance Agency, Republic of Srpska Banking Agency and Republic of Srpska Securities Commission.

⁷ Amendments to the Investment Funds Act 2015 stipulate mandatory transformation of closed-end investment funds established in the process of voucher privatization into open-end investment funds.

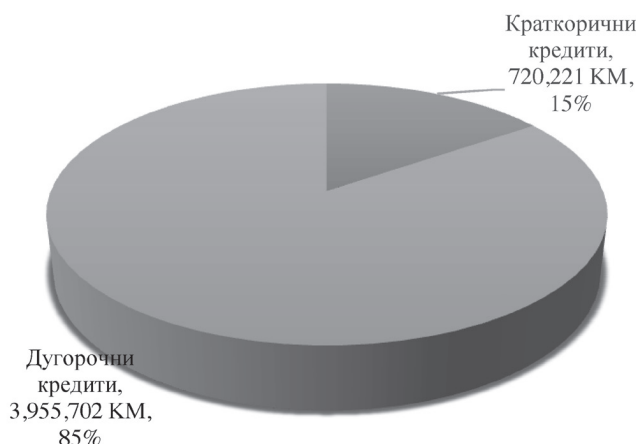
8. UKUPNO (od 1 do 7)	7.497.807	100	8.229.470	100	110
9. Ispravke vrijednosti	458.842		469.397		102
Bilansna aktiva (8-9)	7.038.965		7.760.073		110

Tabela 4. Struktura aktive (imovine) u bankarskom sektoru Republike Srpske na dan 31. 12. 2017. i 31. 12. 2018. godine⁸

Iz prethodne tabele vidljivo je da u strukturi bilansne aktive osam banaka sa sjedištem u Republici Srpskoj dominiraju krediti koji su na dan 31. 12. 2018. godine imali učešće od 61% u ukupnoj imovini i zabilježili rast od 3% u odnosu na prethodnu godinu. Ipak, učešće kredita u strukturi aktive je u 2018. godini smanjeno za 4% u odnosu na prethodnu godinu, dok je učešće novčanih sredstava povećano za isti procenat. Hartije od vrijednosti čine 9,3% aktive

i njihova vrijednost je u 2018. godini porasla za 23,7% u odnosu na prethodnu godinu.

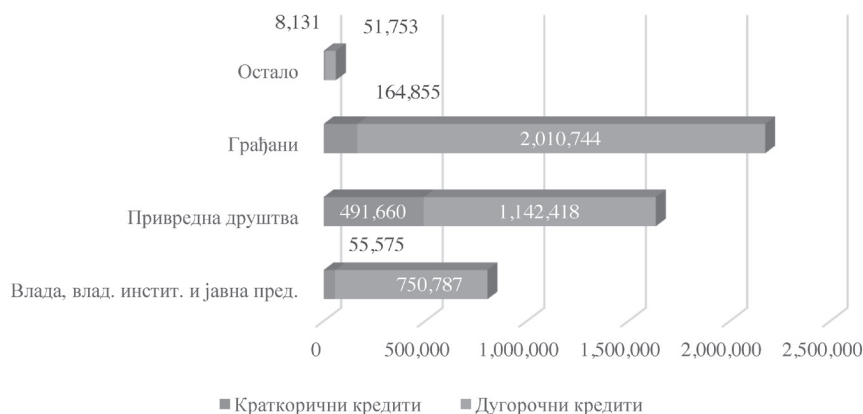
Kreditna funkcija je jedna od osnovnih funkcija poslovanja banaka, te je, shodno tome, nivo ukupnih kredita najvažniji pokazatelj obima poslovanja svake banke i sektora u cjelini, ali isto tako kreditna funkcija predstavlja i najveći potencijalni generator rizika u poslovanju banaka⁹.



Slika 4. Struktura kredita bankarskog sektora Republike Srpske po ročnosti na dan 31. 12. 2018. godine (u 000 KM)

Sa slike 4. vidljivo je da 85% kredita u bankarskom sektoru Republike Srpske čine dugoročni krediti, sa rokom dospelja

preko jednu godinu, što utiče na povećanje rizika u poslovanju banaka.



Slika 5. Ročna struktura kredita bankarskog sektora Republike Srpske po sektorima na dan 31. 12. 2018. godine (u 000 KM)

Najveći dio dugoročnih kredita banke su plasirale građanima i privrednim društvima. Od ukupnih kredita koje su banke plasirale, 46,5% čine krediti dati građanima, a od tih kredita 93% se odnosi na dugoročne kredite koji su više izloženi riziku promjena kamatnih stopa. Ovo ide u prilog tvrdnji da bi banke mogle da ponude svop ugovore, kao instrument zaštite od rizika, i svojim klijentima fizičkim licima.

Kreditiranje stanovništva (fizičkih lica) predstavlja rizik i sa aspekta banke. Ovo će naročito doći do izražaja u budućnosti, nakon stupa-

nja na snagu nove Uredbe o zaštiti pojedinaca u vezi sa obradom ličnih podataka i o slobodnom kretanju takvih podataka i stavljanju van snage Direktive 95/46/EU (Opšta uredba o zaštiti podataka – GDPR),¹⁰ čija će primjena imati značajan uticaj na poslovanje i upravljanje rizicima u bankama.

Naime, banke u Republici Srpskoj kreditnu sposobnost svojih klijenata provjeravaju, između ostalog, uvidom u podatke o kreditnim zaduženjima pravnih i fizičkih lica u BiH u finansijskim institucijama u Centralnom registru kredita (CRK), koji vodi Centralna banka Bosne

⁸ Agencija za bankarstvo Republike Srpske, Izvještaj o stanju u bankarskom sistemu Republike Srpske 1. 1. 2018 –31. 12. 2018. godine, str. 22, URL= https://www.abrs.ba/public/data/documents/1244/Izvjestaj_o_stanju_bankarskog_sistema_RS_31122018.pdf

⁹ Isto, str. 25.

¹⁰ Regulation (EU) 2016/679 Of The European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation – GDPR).

8. TOTAL (1 to 7)	7,497,807	100	8,229,470	100	110
9. Valuation adjustment	458,842		469,397		102
Balance sheet assets (8-9)	7,038,965		7,760,073		110

Table 4. Asset structure in the Republic of Srpska banking sector 31.12.2017 and 31.12.2018⁸

The previous table shows that the structure of balance sheet assets of eight banks based in the Republic of Srpska is dominated by loans as at 31 December 2018, which accounted for 61% of total assets and recorded a growth of 3% compared to the previous year. Nevertheless, the share of loans in the structure of assets decreased by 4% in 2018 compared to the previous year, while the share of cash increased by the same percentage. Securities make up 9.3%

of assets and their value increased in 2018 by 23.7% compared to the previous year.

The credit function is one of the basic functions of banks' operations; therefore the level of total loans is the most important indicator of the volume of business of each bank and the banking sector as a whole. On the other hand, the credit function is the largest generator of potential risks in banks' operations⁹.

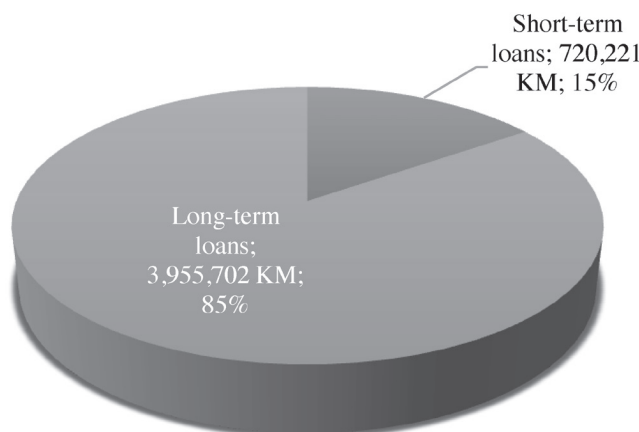


Figure 4. Structure of loans of the Republic of Srpska banking sector by maturity date 31.12.2018 (000 KM)

Figure 9 shows that 85% of loans in the Republic of Srpska banking sector are long-term loans, with maturity of over one year, which

increases the risk in banks' operations.

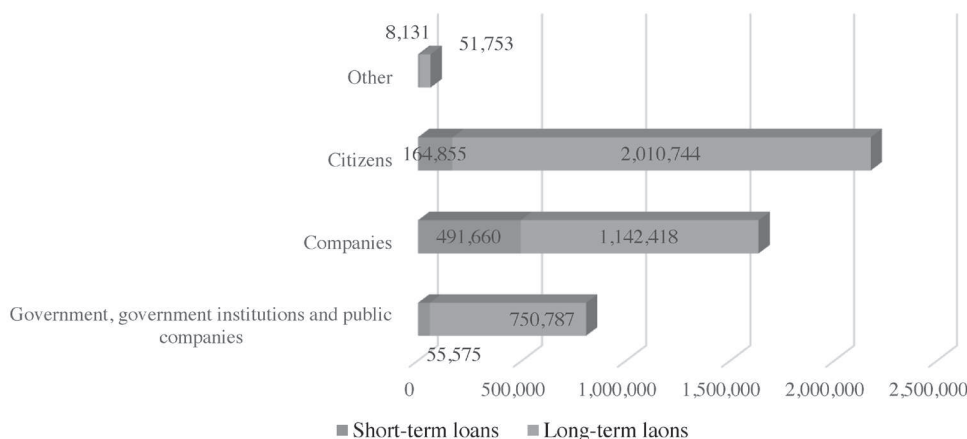


Figure 5. Loans maturity structure of the Republic of Srpska banking 31.12.2018 (000 KM)

The banks lent most of their long-term loans to citizens and companies. Of the total loans made by banks, 46.5% are loans to citizens, 93% of which refer to long-term loans that are more exposed to interest rate risk. This is in support of the claim that banks could offer swaps as hedging instruments to their clients natural persons.

Retail lending (natural persons) poses risk for banks as well. This will be especially visible in the future, following the entry into force of the new Regulation 2016/679 Of The European Parliament and of the Council of 27 April 2016 on the protection of natural persons

with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation - GDPR)¹⁰, the application of which will have a significant impact on banks' operations and risk management.

Namely, banks in the Republic of Srpska check creditworthiness of their clients, among other things, by reviewing the data on credit debts with financial institutions of legal entities and natural persons in Bosnia and Herzegovina in the Central Registry of Credits (CRK) kept by the Central Bank of Bosnia and Herzegovina, only with the

⁸ Republic of Srpska Banking Agency, Report on the Condition of the Banking System of Republic of Srpska 01.01.2018-31.12.2018, p. 22, URL= https://www.abrs.ba/public/data/documents/1244/lzvjestaj_o_stanju_bankarskog_sistema_RS_31122018.pdf

⁹ Republic of Srpska Banking Agency, p. 25

¹⁰ Regulation (EU) 2016/679 Of The European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation - GDPR).

i Hercegovine, isključivo uz pisanu saglasnost pravnih i fizičkih lica. Početak primjene GDPR-a u Bosni i Hercegovini još uvijek nije doveo u pitanje pravo banaka da provjeravaju kreditnu sposobnost putem CRK i time značajno promijenio proces kreditiranja, za razliku od susjedne Hrvatske¹¹.

Međutim, primjena ove direktive u narednom periodu mogla bi da postavi pitanje opstanka ili značajnije transformacije načina rada CRK-a, što bi moglo značajno umanjiti sposobnost banaka da provedu adekvatnu provjeru kreditne sposobnosti njihovih klijenata i time povećaju rizik u poslovanju i rastu troškova kredita. U rješavanju ovog problema, banke će u procesu zaštite od rizika morati da vrate u široku upotrebu mehanizam žiranata, koji je gotovo iščezao usljed brojnih zloupotreba od strane korisnika kredita i dovođenja hiljada građana u veoma tešku finansijsku poziciju.

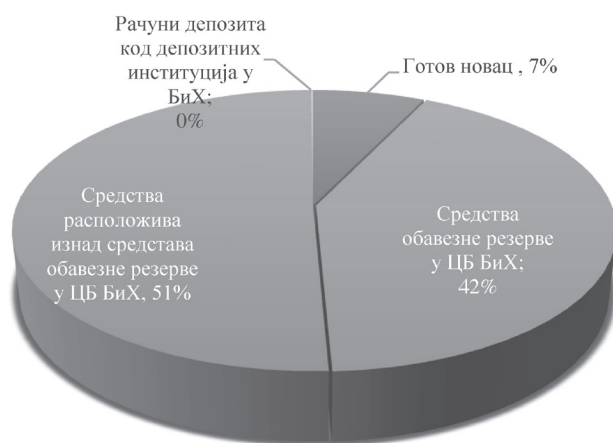
Drugo rješenje za banke u procesu upravljanja kreditnim rizikom u budućem periodu je da se za ove promjene pripreme razvijanjem internih modela procjene kreditnog rizika i/ili korišćenjem savremenih finansijskih instrumenata kao što su svop ugovori. Naime, banke moraju ozbiljno da razmisle o mogućnostima uključivanja na tržište tzv. svopova kreditnog neizvršenja (engl. Credit Default Swaps – CDS), koji će im omogućiti osiguranje, tj. pokrivanje gubitka svojih potraživanja u slučaju nemogućnosti naplate potraživanja po osnovu kredita, odnosno dužničkog finansijskog instrumenta u koji je banka investirala. CDS

omogućava jednom učesniku u ovom poslu da transferiše rizik drugom učesniku, koji je u datim okolnostima spremniji da snosi taj rizik, uz odgovarajuću naknadu. Banke mogu da igraju značajnu ulogu na obje ugovorne strane ovog svop posla, kao učesnik koji prenosi svoj rizik ili učesnik koji preuzima rizik uz odgovarajuću zaradu.

Uvidom u ponude kreditnih proizvoda na internet stranicama banaka može se primijetiti da banke prema vrsti kamatne stope u svojim ponudama daju dvije vrste kredita, sa fiksnom i promjenjivom kamatnom stopom. U zavisnosti od toga za koju stopu se klijenti opredijele, visina kamatnih stopa na kreditna sredstva se razlikuje. Iz dostupnih podataka je vidljivo da banke u svojim ponudama dajući „trenutno“ povoljnije dugoročne kredite po promjenljivoj kamatnoj stopi, vežući varijabilnu kamatnu stopu za EURIBOR, na dugi rok očekuju rast kamatnih stopa, te tako izlažu svoje klijente riziku promjene kamatnih stopa u periodu otplate kredita.

Navedene činjenice ukazuje na potrebu banaka da sebi i svojim klijentima obezbijede adekvatne mehanizme zaštite od rizika, a posebno kamatnog i valutnog rizika. Jedan od veoma efikasnih finansijskih instrumenata zaštite banaka i njihovih klijenata u ovoj vrsti rizika su svop ugovori.

Struktura novčanih sredstava banaka pokazuje da one drže više od polovine ovih sredstava na računima kod Centralne banke, kao sredstva raspoloživa iznad obavezne rezerve.



Slika 6. Struktura novčanih sredstava u KM bankarskog sektora Republike Srpske na dan 31. 12. 2018. godine

Sredstva obavezne rezerve sa stanjem na dan 31. 12. 2018. godine iznosila su 642,8 miliona KM, a sredstva raspoloživa iznad sredstava obavezne rezerve iznosila su 770,8 miliona KM.¹² Iz navedenog može da se zaključi da banke u Republici Srpskoj raspolažu značajnom sumom neplasiiranih likvidnih novčanih sredstava.

U proteklom periodu, povećana je aktivnost banaka na tržištu kapitala. Hartije od vrijednosti za trgovanje učestvuju u ukupnoj aktivni banaka sa 9% i u odnosu na kraj 2017. godine evidentan je rast ulaganja od 24%, najvećim dijelom u obveznice Republike Srpske. Poslovanje sa hartijama od vrijednosti za trgovanje obavlja sedam banaka, s tim da samo tri veće banke imaju portfelj u vrijednosti od 654,5 miliona KM (kod dvije veće banke zabilježen je rast ulaganja u hartije od vrijednosti za trgovanje po stopi od 36% i 16%, a time je zabilježen i rast učešća ove pozicije u aktivni navedenih banaka).

Imajući u vidu činjenicu da banke u svojoj imovini imaju preko 760 mil. KM u hartijama od vrijednosti, sa trendom rasta, možemo

primijetiti da su po tom osnovu izložene rizicima ulaganja u hartije od vrijednosti (kamatni, valutni, tržišni rizik i sl.). U cilju upravljanja tim rizicima, banke mogu da traže rješenje u upotrebi svopova kao instrumenata zaštite od rizika.

3. REZULTATI ISTRAŽIVANJA I DISKUSIJA

U cilju utvrđivanja vrsta svop ugovora koji su trenutno u ponudi banaka iz Republike Srpske, procjene nivoa tražnje za svopovima, te mogućnosti i ograničenja njihovog razvoja, izvršen je pregled službenih internet stranica ovih banaka i sprovedeno je istraživanje upućivanjem odgovarajućeg online upitnika.¹³ Svih osam banaka iz Republike Srpske odgovorilo je na dostavljeni upitnik, s tim da je jedna banka dala nepotpune odgovore sa obrazloženjem da se radi o zaštiti povjerljivih podataka.¹⁴

¹¹ Hrvatski registar obaveza po kreditima (HROK) je 25. 5. 2019. godine, na dan početka primjene GDPR-a, privremeno prestao sa izdavanjem kreditnih izvještaja za građane i fizička lica koja obavljaju poslovnu djelatnost te razmjenu podataka o kreditnoj istoriji ograničio isključivo na pravna lica.

¹² Isto, str. 24.

¹³ Upitnik sadrži 20 pitanja, a istraživanje je sprovedeno u skladu sa Međunarodnim kodeksom o tržišnim i društvenim istraživanjima ICC/ESOMAR-a (engl. ICC/ESOMAR International Code on Market and Social Research).

¹⁴ Ova banka nije dala odgovore na pitanja o broju i vrijednosti svop ugovora koji je banka kreirala u periodu u posljednjih pet godina poslovanja.

written consent of legal entities and natural persons. The introduction of GDPR in Bosnia and Herzegovina still has not challenged the right of banks to check creditworthiness through the CRK and significantly change the lending process, unlike neighboring Croatia¹¹.

However, the implementation of this directive in the coming period could raise the question of survival or major transformation of the CRK modus operandi, which could significantly reduce the ability of banks to adequately test the creditworthiness of their clients and thereby increase business risk and credit costs. In addressing this problem, banks will need to reinstate the guarantor mechanism in the process of risk mitigation, which has almost disappeared due to numerous abuses by credit users and putting thousands of citizens in a very difficult financial position.

Alternative solution for banks in the process of credit risk management in the future is to prepare for these changes by developing internal credit risk assessment models and/or using modern financial instruments such as swaps. Namely, banks need to seriously consider the possibility of entry into Credit Default Swaps (CDS) market that will enable them to secure, i.e. cover the loss in case of their client's credit default or in case of default of the issuer of a debt financial instrument in which the bank has invested. The CDS allows one participant in this business to transfer the risk to another

participant which is more prepared to bear that risk, with appropriate compensation. Banks can play a significant role on both counterparties to this swap agreement, as a participant which transfers risk or a participant which takes risk with an appropriate return.

Looking at the credit product offers on banks' websites, it can be noticed that banks offer two types of loans – those with fixed and those with variable interest rates. Depending on the rate clients choose, the interest rates on loans vary. From the available data on banks offerings, it is evident that banks expect interest rates to rise in the long term, by providing "currently" more favorable long-term loans at a variable interest rate tied to EURIBOR, thus exposing their clients to interest rate risk during the loan repayment period.

These facts indicate the need for banks to provide themselves and their clients with adequate risk protection mechanisms, in particular interest rate and currency risk. One of the very effective financial instruments to protect banks and their clients from these types of risks is a swap contract.

The structure of banks' funds shows that they hold more than half of these funds in the accounts with the Central Bank, as funds available above the required reserve.

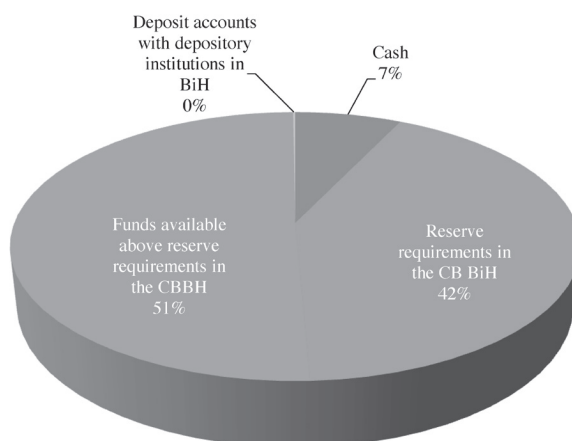


Figure 6. Cash structure of the Republic of Srpska banking sector on December 31, 2018

Required reserve assets as of December 31, 2018 amounted to KM 642.8 million and the available funds above the required reserves amounted to KM 770.8 million¹². It can be concluded from the previously mentioned that banks in the Republic of Srpska have a considerable amount of unplaced liquid cash.

Banks' activity on capital market has increased in the past. Trading securities account for 9% of banks' total assets, and have a 24% increase in investment compared to the end of 2017, mostly in the Republic of Srpska bonds. Operations with trading securities are performed by seven banks, with only three larger banks having a portfolio worth KM 654.5 million (two larger banks had increase in securities investments at a rate of 36% and 16 %, and thus the growth of the share of this position in the assets of these banks was recorded).

Considering the fact that banks hold over KM 760 million in securities, with an upward trend, we can observe that they are exposed

to the risks of investing in securities (interest rate risk, currency risk, market risk, etc.). In order to manage these risks, banks may seek a solution in the use of swaps as risk hedging instruments.

3. RESEARCH RESULTS AND DISCUSSION

In order to determine the types of swaps currently offered by banks in the Republic of Srpska, to assess the level of demand for swaps, and the possibilities and limitations of their development, the official websites of these banks were reviewed and a survey was conducted by sending an appropriate online questionnaire¹³. All eight banks in the Republic of Srpska responded to the questionnaire, with one bank providing incomplete answers with an explanation of confidential information protection¹⁴.

¹¹ On the day of application of GDPR, 25.05.2019, the Croatian Register of Credit Obligations (HROK) has temporarily ceased issuing credit reports for citizens and natural persons engaged in business activities and restricted the exchange of credit history data exclusively to legal entities.

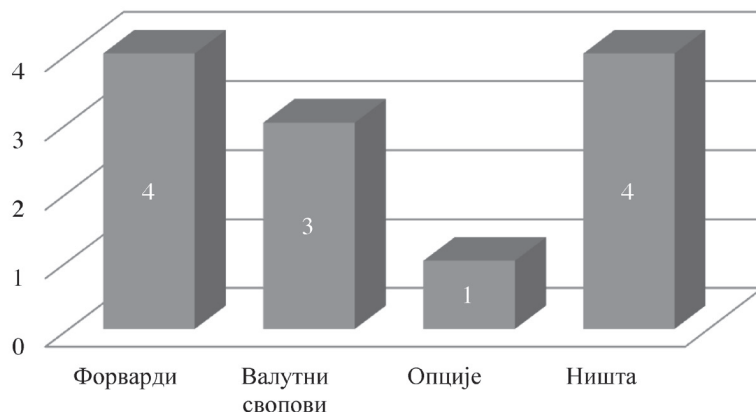
¹² Republic of Srpska Banking Agency, p. 24.

¹³ The questionnaire consists of 20 questions and the research was conducted in accordance with ICC/ESOMAR International Code on Market and Social Research.

¹⁴ This bank did not provide answers on number and value of contracts concluded in the past 5 years.

Prema prikupljenim podacima, četiri banke sa sjedištem u Republici Srpskoj nude proizvode sa derivatima,¹⁵ a od toga samo jedna banka u svojoj ponudi ima svopove, i to valutne svopove. U posljednjih pet poslovnih godina, odnosno u periodu od 2013. do 2018. godine, četiri

banke su zaključivale derivatne ugovore za sebe ili svoje klijente, dok ostale četiri banke nisu. Derivati koje su banke u posmatranom periodu koristile ili nudile klijentima bili su: forvardi (četiri banke), valutni svopovi (tri banke) i opcije (jedna banka).



Slika 7. Pregled vrsta derivata koji su bili u ponudi banaka u periodu od 2013. do 2018. godine

U međuvremenu, dvije banke su prestale da posluju sa valutnim svopovima. Kao glavne razloge za upotrebu derivata četiri banke navode zaštitu od rizika, a jedna banka, pored zaštite od rizika,

navodi i ostvarivanje profita. Četiri banke nude zaštitu od valutnog rizika, a zaštitu od kamatnog i tržišnog rizika nudi po jedna banka.



Slika 8. Pregled vrsta rizika od kojih banke u Republici Srpskoj nude zaštitu putem derivata

Jedna banka koja u svojoj ponudi ima svopove je u periodu od 2013. do 2018. godine zaključila za sebe i preko 25 klijenata više od 50 valutnih svopova u vrijednosti od oko 40 mil. KM. Od dvije banke koje u ponudi više nemaju svop ugovore, jedna banka je zaključila za sebe i manje od pet svojih klijenata između 15 i 30 valutnih svopova ukupne vrijednosti između 500.000 i 1 mil. KM, dok je druga banka zaključila za sebe i između pet i 10 svojih klijenata valutne svopove u vrijednosti između 3 i 5 mil. KM. Svi klijenti banaka u realizaciji svop transakcija u posmatranom periodu bili su pravna lica.

Imajući u vidu navedeno, možemo da donesemo generalni zaključak da je ponuda derivatnih finansijskih instrumenata odnosno svopova u Republici Srpskoj veoma slaba. Ovaj dio poslova investicionog bankarstva u bankama Republike Srpske nalazi se tek u početnoj fazi razvoja.

S druge strane, prema navodima banaka u odgovorima na upitnik, potražnja za svopovima u Republici Srpskoj takođe je mala. Iz odgovora koje su banke dale u upitniku, najveće interesovanje klijenata banaka je za valutne svopove, sa prosječnom ocjenom 2 (na skali od 1 do 5), a zatim za kamatne svopove, sa prosječnom ocjenom 1,75.

Kao najvažnije razloge za slabu zainteresovanost i upotrebu svopova u poslovanju svojih klijenata, sve banke navode:

- nedostatak znanja o mogućnostima upotrebe svopova u upravljanju rizicima,
- nedostatak informacija o postupku njihovog korišćenja i
- činjenicu da je relativno mali broj kompanija iz Republike Srpske koja posluju na međunarodnom tržištu.

Banke u odgovorima na upitnik smatraju da su najvažnija ograničenja za korišćenje svop poslova od strane njihovih klijenata:

- nerazvijeno tržište svopova;
- nedostatak informacija i znanja klijenata o mogućnostima i načinu korišćenja svop poslova;
- nedostatak dugoročnog planiranja i strategije;
- nepovjerljivost klijenata prema novim i složenijim proizvodima;
- ograničenost banaka da kreiraju ove proizvode jer, sa druge strane, na domaćem tržištu imaju ograničene mogućnosti da zatvore svoju poziciju;
- troškovi njihovog korišćenja; i
- postojeća regulativa.

¹⁵ Četiri banke u svojoj ponudi imaju forvarde, a jedna od njih i opcije, od 2003. odnosno 2004. godine.

According to the collected data, four banks based in the Republic of Srpska offer derivative products¹⁵, only one of which has swaps in its offer, namely currency swaps. In the last five financial years, from 2013 to 2018, four banks have entered into

derivative contracts for themselves or for their clients, while the other four banks have not.

Derivatives used or offered by banks in the observed period were: forwards (4 banks), currency swaps (3 banks) and options (1 bank).

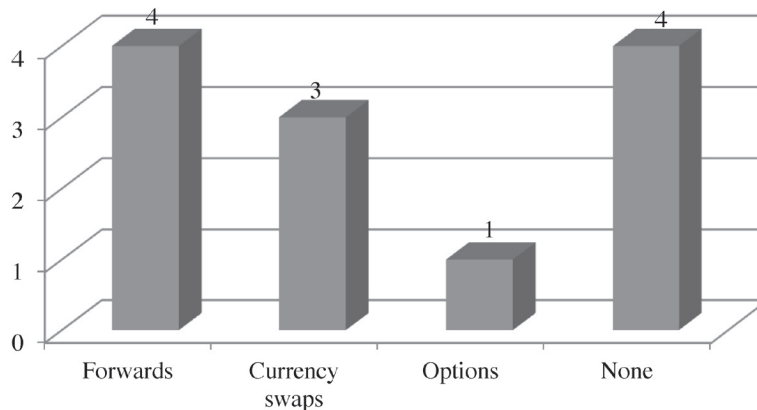


Figure 7. An overview of the types of derivatives offered by banks from 2013 to 2018

In the meantime, two banks ceased to operate with currency swaps. Four banks cite risk protection as the main reason for using derivatives, and one bank, in addition to hedging, cites profit. Four banks

offer hedging against currency risk, while hedging against interest rate and market risk is offered by one bank each.

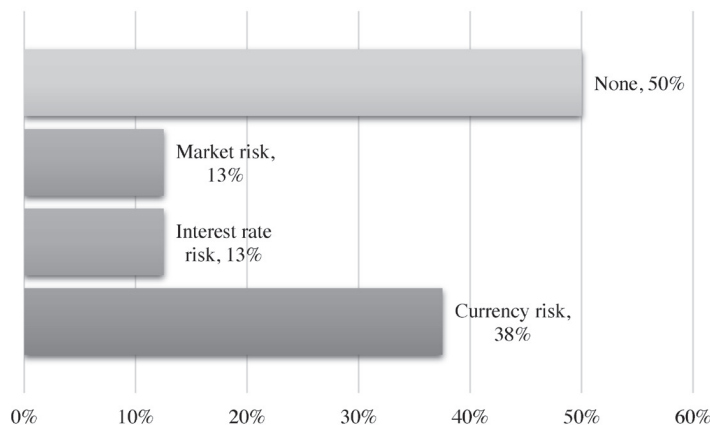


Figure 8. An overview of the types of risks offered by the use of derivatives at banks in Republic of Srpska

One bank that has swaps in its offer has entered in the period from 2013 to 2018 into more than 50 currency swaps worth about KM 40 mil. for itself and over 25 of its clients. Regarding the two banks that no longer have swaps in their offer, one bank has concluded for itself and less than 5 of its clients between 15 and 30 currency swaps with a total value of between 500,000 and KM 1mil., while the other bank has concluded for itself and between 5 and 10 of its clients currency swaps worth between 3 and 5 mil. KM. All bank clients which entered into swap transactions in the observed period were legal entities.

In view of the above, we can reach a general conclusion that the supply of derivative financial instruments, i.e. swaps in the Republic of Srpska is very weak. This part of investment banking activities in the banks of Republic of Srpska is only in the initial stages of development.

On the other hand, according to the banks' replies to the questionnaire, demand for swaps in the Republic of Srpska is also low. From the answers given by banks, the greatest interest of bank clients is for currency swaps, with an average score of 2 (on a scale of 1 to 5), followed by interest rate swaps, with an average score of 1.75.

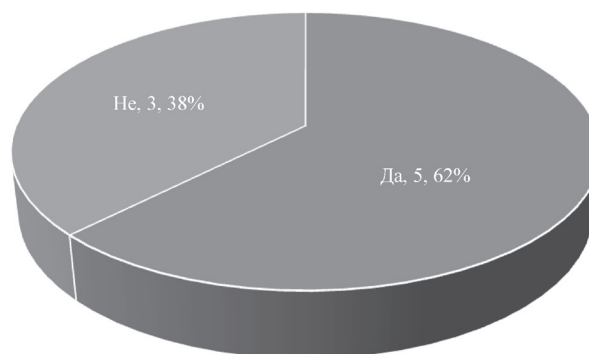
The most important reasons for the low interest and use of swaps in their clients' business are the following:

- lack of knowledge about the possibilities of using swaps in risk management,
- lack of information on how to use them and
- the fact that there are relatively few companies from the Republic of Srpska operating on the international market.

In response to the questionnaire, banks consider the most important restrictions on the use of swaps by their clients:

- underdeveloped swap market,
- lack of information and knowledge of clients about the possibilities and ways of using swaps,
- lack of long-term planning and strategy,
- customer distrust of new and more complex products,
- the restrictions on banks to create these products because they have limited opportunities in the domestic market to close their position,
- the cost of their use and
- existing regulation.

¹⁵ Four banks have forwards in their offer, one of which has options as well, since 2003 and 2004.

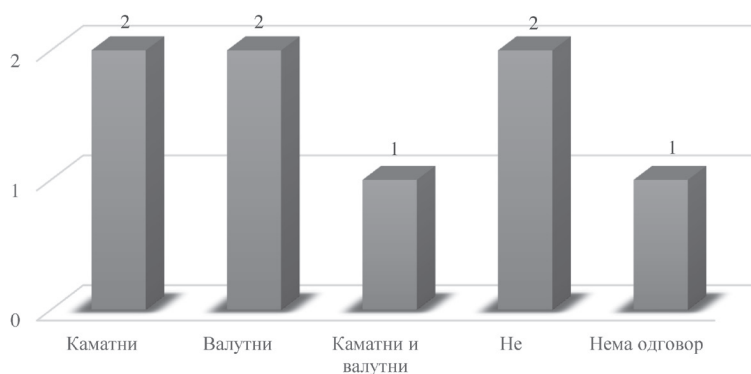


Slika 9. Pregled banaka u Republici Srpskoj prema pitanju da li imaju odjeljenje za poslovanje sa finansijskim instrumentima

Sve četiri banke koje u svojoj ponudi imaju derivate, veliku pažnju posvećuju ponudi finansijskih instrumenata, te u svojoj organizacionoj strukturi imaju posebno odjeljenje za poslovanje sa finansijskim instrumentima. Pozitivna strana kod ovih banaka je da u okviru ovih odjeljenja imaju zaposlena lica sa odgovarajućim znanjima i sertifikatima za poslovanje sa finansijskim instrumentima. Pored njih, i jedna banka koja u svojoj ponudi nema derivate ima organizovano posebno odjeljenje za poslovanje sa finansijskim instrumentima. Međutim, ova banka nema zaposlena lica sa odgovarajućim znanjima

i sertifikatima za poslovanje sa finansijskim instrumentima. Samo jedna banka ima posebno organizovano odjeljenje za poslove sa hartijama od vrijednosti za obavljanje brokerskih i dilerskih poslova sa dozvolom izdatom od strane Komisije za hartije od vrijednosti Republike Srpske, u skladu sa Zakonom o tržištu hartija od vrijednosti.

Kada je riječ o planovima za budućnost, pored jedne banke koja namjerava da zadrži svopove u svojoj ponudi, četiri anketirane banke planiraju da u budućnosti uvedu svopove kao dio ponude svojim klijentima, i to kamatne i valutne svopove.



Slika 10. Planirana ponuda svop ugovora od strane banaka u Republici Srpskoj

Od banaka koje trenutno u ponudi nemaju svopove, kamatne svopove u budućnosti planiraju da ponude dvije banke, jedna banka valutne svopove, a jedna banka i kamatne i valutne svopove. Dvije anketirane banke ne planiraju da ponude svopove niti druge derivatne finansijske instrumente u budućnosti, dok jedna banka nije dala odgovor na ovo pitanje.

U jednom stavu sve anketirane banke su jednoglasne. Naime, sve banke smatraju da postoji potreba za obrazovanjem njihovih kadrova u poslovanju sa derivatima i njihovom korišćenju u upravljanju različitim vrstama rizika sa kojim se u svom poslovanju suočavaju banke i njihovi klijenti. Ovo ukazuje na zaključak da su nedostatak informisanosti i edukacije zaposlenih u bankama i strah od negativnih posljedica pri obavljanju ovih poslova poslije finansijske krize bitni razlozi veoma niskog nivoa ponude i tražnje za svop ugovorima.

Na pitanje koja je vrsta edukacije zaposlenih u banci potrebna u cilju unapređenja svop poslova, banke navode sljedeće:

- osnovni termini i načini funkcionisanja derivatnih ugovora, način funkcionisanja, vrste i način izbora u zaštiti od rizika, trgovanje i sl.;
- specijalistička edukacija od osnovnog teorijskog do naprednog praktičnog poznavanja poslovanja po pojedinom finansijskom instrumentu;
- računovodstveni tretman ovih proizvoda i praktični primjeri.

ZAKLJUČCI

Poslovi investicionog bankarstva na razvijenim finansijskim tržištima danas su se toliko proširili da obuhvataju čitav niz aktivnosti i imaju značajno učešće u poslovanju banaka. Obavljanjem investicionih poslova banke ostvaruju prihod i olakšavaju pribavljanje finansijskih sredstava privrednim subjektima na tržištu hartija od vrijednosti.

Jedan od najvažnijih trendova u oblasti savremenih finansija predstavlja razvoj tržišta izvedenih (derivatnih) hartija od vrijednosti i njihova sve šira upotreba od strane finansijskih institucija. Učesnici na tržištu ove instrumente koriste za zaštitu od rizika ili u špekulativne svrhe u nastojanju da zarade na pravilnom predviđanju kretanja njihovih cijena. U razvoju tržišta derivatnih hartija od vrijednosti najizraženiju ulogu imaju banke u funkciji dilera.

Tržišta u razvoju, kao što je finansijsko tržište Republike Srpske, nudi velike mogućnosti za poslovanje banaka. Pritom, banke moraju da poznaju specifičnost svakog tržišta, odnosno da adekvatno procijene rizike povezane sa ulaganjima na ovim tržištima. S druge strane, ovi poslovi izloženi su mnogo većim rizicima nego na razvijenim tržištima kapitala.

Struktura aktive banaka, trendovi u domaćem bankarskom sektoru, povećana aktivnost banaka na tržištu hartija od vrijednosti, rizici kojima su izložene banke u svom poslovanju, kao i njihovi klijenti, stvaraju pretpostavke za uspješno korišćenje finansijskih derivata kao što su svopovi.

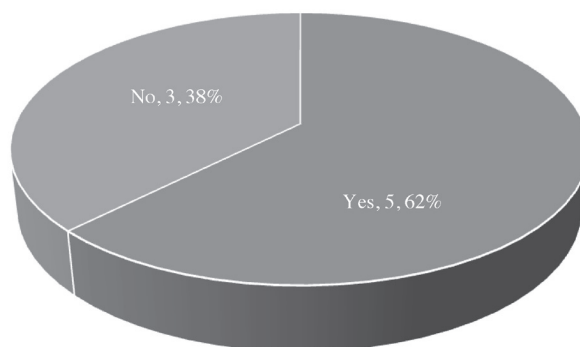


Figure 9. Review of banks in the Republic of Srpska by whether they have a financial instruments business department

All four banks that have derivatives in their offer pay great attention to financial instruments offer, and have separate departments for dealing with financial instruments in their organizational structure. The positive side with these banks is that they have employees with appropriate knowledge and certificates for dealing with financial instruments within these departments. In addition, one bank that does not have derivatives in its offer has an organized special department for operations with financial instruments. However, this bank does not have any employees with adequate knowledge and

certificates for dealing with financial instruments. Only one bank has a specially organized Securities Division to conduct brokerage and dealer activities with a license issued by the Republic of Srpska Securities Commission in accordance with the Securities Market Act.

When it comes to plans for the future, in addition to one bank that intends to keep swaps in its offer, four surveyed banks plan to introduce swaps in the future as part of the offer to their customers, namely interest rate and currency swaps.

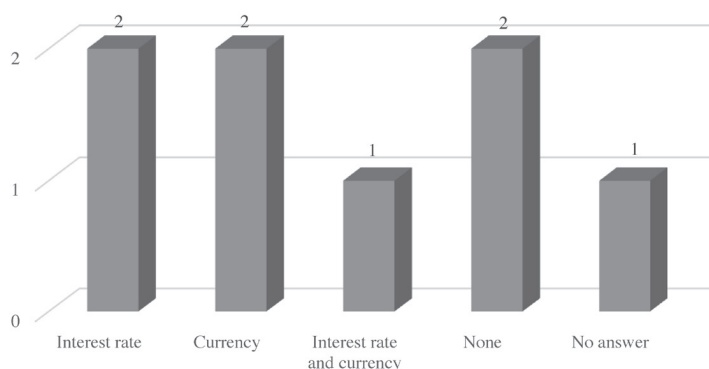


Figure 10. Swaps that banks in the Republic of Srpska plan to offer

Regarding the banks that currently do not offer swaps, two banks plan to offer interest rate swaps in the future, one bank plans to offer currency swaps and one bank both interest rate and currency swaps. Two banks surveyed do not plan to offer swaps or other derivative financial instruments in the future, while one bank did not answer this question.

All surveyed banks are unanimous in one opinion: they believe that there is a need to educate their staff in derivatives business and to use these instruments in managing different types of risks that banks and their clients face in their operations. This suggests that the lack of information and education of bank employees and the fear of negative consequences in performing these activities after the financial crisis are important reasons for the very low level of swaps supply and demand.

When asked about the type of training that is needed for bank employees in order to enhance the swap operations, banks state the following:

- basic terms and methods of derivative contracts functioning, method of functioning, types and methods of choice in risk protection, trading, etc.
- specialist education from basic theoretical to advanced practical knowledge of operations in a particular financial instrument,
- accounting treatment of these products and practical examples.

CONCLUSIONS

Investment banking activities in developed financial markets have expanded so much that they encompass a range of activities and participate significantly in bank operations. By performing investment activities, banks generate income and facilitate the collection of financial resources for companies in the securities market.

One of the most important trends in the field of modern finance is development of derivatives markets and their widespread use by financial institutions. Market participants use these instruments for hedging or for speculative purposes in an effort to make money by properly predicting the movement of their prices. Banks play the most prominent role in development of derivatives market acting like dealers.

Emerging markets such as the Republic of Srpska financial market offer excellent business opportunities for banks. In that regard, banks need to be aware of the specificity of each market, that is, to adequately assess the risks associated with investing in these markets. On the other hand, these activities are exposed to much greater risks than in developed capital markets.

The banks' assets structure, trends in the domestic banking sector, increased activity of banks in the securities market and the risks banks and their clients are facing, create prerequisites for the successful use of financial derivatives such as swaps.

Tržište svopova u Republici Srpskoj još uvijek je na samom začetu. Samo jedna banka u svojoj ponudi ima valutne svopove kao instrument zaštite od rizika. Glavni razlog slabe ponude banaka je niska tražnja, nedostatak znanja o koristima izvedenica i nizak obim poslovanja na stranim tržištima od strane klijenata banaka.

Nedostatak znanja u bankama još je jedan razlog za nisku ponudu svop ugovora. Anketirane banke su izrazile mišljenje da postoji potreba za obrazovanjem i osposobljavanjem njihovih kadrova, kako u teorijskom dijelu tako i usavršavanjem u području poslovanja sa svop ugovorima.

Glavni zaključak istraživanja je da će u bliskoj budućnosti biti potrebe za uspostavljanjem tržišta svopova, što većina banaka i sada prepoznaje te u narednom periodu planira da u svoju ponudu uvrsti kamatne i valutne svopove.

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The swap market in the Republic of Srpska is still in its infancy. Only one bank has currency swaps as hedging instruments in its offer. The main reason for the poor supply within banks is low demand, lack of knowledge of the benefits of derivatives and low volume of business in foreign markets by bank clients.

Lack of knowledge in banks is another reason for low supply of swap contracts. The surveyed banks expressed the opinion that there is a need for education and training of their staff, both in theory and in the field of practical swap operations.

The main conclusion of the research is that in the near future there will be a need to establish a swap market, which most banks already recognize and plan to include interest rate swaps and currency swaps in their offer in the coming period.

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