

decembar 2018  
godina 11, broj 43



UDRUŽENJE BANAKA  
CRNE GORE  
ASSOCIATION OF  
MONTENEGRIN BANKS

# Bankar

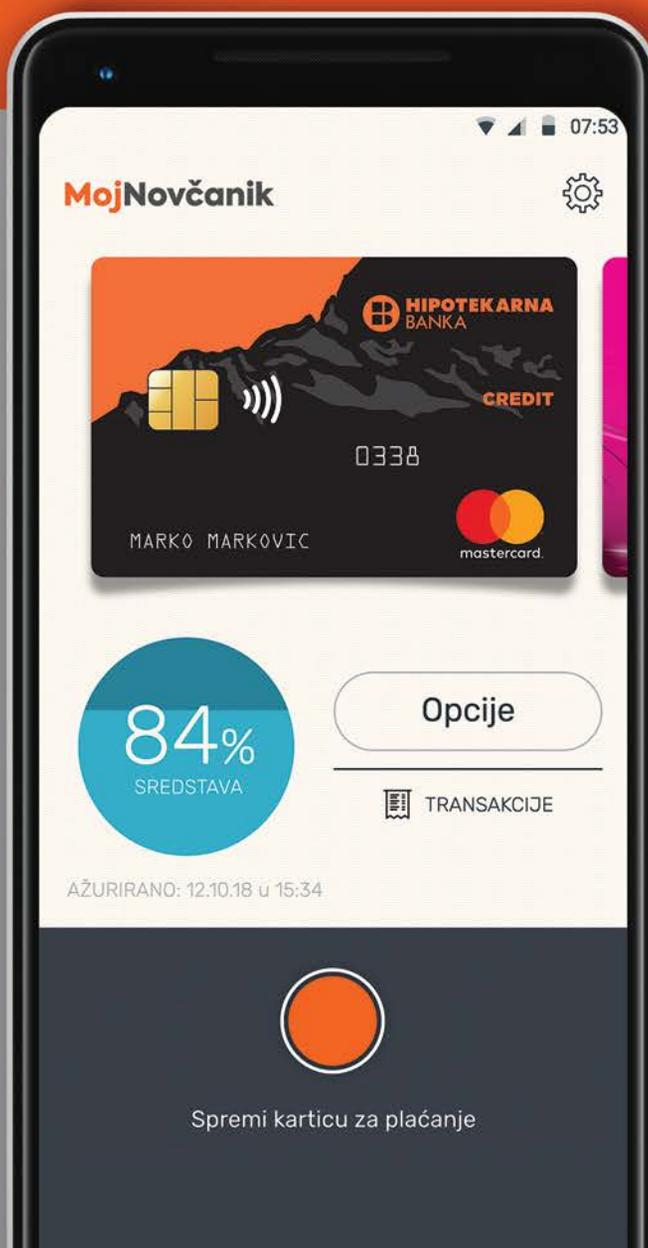
ISSN 1800-7465  
9 771800 746009 11



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## Uvodna riječ glavnog urednika

Poštovani čitaoci,

*Imamo zadovoljstvo da prezentujemo novi broj časopisa Bankar u organizaciji i izboru tekstova od strane Udruženja banaka Crne Gore. Kao i do sada trudili smo se da tekstovi budu operativno aktuelni i da ukazuju u kojem pravcu razvijeni bankarski sistemi promišljaju.*

*Za kraj kalendarske godine imamo zadovoljstvo da kroz intervju podjelimo stavove predsjednika Udruženja banaka g-dina Esada Zaimovića o aktuelnim pitanjima poslovanja banaka. Ovaj broj obrađuje implementaciju Opšte uredbe o zaštiti podataka o ličnosti (GDPR- General Data Protection Regulation) koja se primjenjuje u Evropskoj uniji od 25.maja ove godine. Međutim, teritorijalna primjena Uredbe je šira od područja EU tako da svoje poslovanje sa odredaba GDPR-a treba da usklade i kompanije iz zemalja koje nijesu članice EU. Opet smo značajan dio posvetili direktivi PSD2 koji uveliko mijenja postojeće mogućnosti platnog sistema sa ciljem da se izade u susret klijentima, povećanju konkurentnosti i očekivanjima da se servisi realizuju u realnom vremenu i da budu user friendly. Tretiramo principe Bazela III, koji nakon uspješne primjene u Evropskoj Uniji, se sprema implementirati i na Balkanu. Pored Bazela III imamo i najavu Bazela IV novog standardizovanog pristupa zasnovanog na internim rejtingzima za kreditni rizik, uticaj najnižeg dozvoljenog nivoa rizikom ponderisane aktive na tržišni rizik, operativni rizik, i rizik usklađivanja kreditnog vrednovanja. Predstavljamo Tehnologiju „robotska automatizacija procesa“ (RPA - Robotic Process Automation) kao alat koji se koristi u cilju dublje optimizacije poslova, smanjenja troškova i ubrzanja poslovnih procesa. Potom podvlačimo značaj digitalizacije i Sajber security-ja kroz stav predstavnika najveće Španske banke Santander. Pojašnjavamo pojam “Trade Finance” i tradicionalne usluge banaka u platnom prometu od davanja garancija do stand by akreditiva, dokumentarnih akreditiva i sl. Naravno i u ovom broju predstavljamo istoriju novca kod nas kroz tekstove g-dina Miodraga Kirsanova.*

*Ovom prilikom u ime Udruženja banaka Crne Gore, svim našim članicama, saradnicima, kolegama i čitaocima, kao i građanima Crne Gore i šire, želimo uspješnu novu 2019. godinu na poslovnom i privatnom polju.*

*S poštovanjem,*

*mr Bratislav Pejaković*

## Foreword of the Secretary General

*Dear readers,*

*We are pleased to present a new issue of our magazine the Bankar, which contains articles selected by the Association of Montenegrin Banks. As the case has been so far, we have continued to present hot topics and articles that point out in which directions the developed banking systems are going.*

*As this calendar year is almost ended, it is our pleasure to share with you in this issue of the Bankar the positions of the President of the Banking Association, Mr. Esad Zaimović, about the current issues of banking business. This issue addresses the implementation of the General Data Protection Regulation (GDPR), which is being applied in the European Union since 25 May of the current year. However, the territorial application of the Regulation exceeds the borders of the EU area, so the companies from the non-EU member states should also align their business with this regulation. We have again dedicated a significant part of the issue to the PSD2, which largely changes current possibilities of the payment systems in order to meet the demands of customers, increase competitiveness, execute transactions in real time and be user-friendly. One of the articles discusses the Basel III standards, which will be implemented in the Balkans after its successful implementation in the European Union. In addition to the Basel III implementation, there is an announcement of Basel IV, which will bring revisions of the standardised approach and internal rating-based approach for credit risk, output floors for market risk and operational risk, and the revision of the CVA risk. This issue also presents the Robotic Process Automation (RPA) technology as a tool used for higher optimisation of the business activities, cost efficiency, and acceleration of business processes. The importance of digitization and cyber security is emphasised through the views of the Santander, the largest bank in Spain. The term “trade finance” is also explained, as well as the traditional banking services in the payment system transactions, from issuing of guarantees to stand-by letters of credit, documentary letters of credit, and the like. Surely, this issue also speaks about the history of money through the article written by Mr. Miodrag Kirsanov.*

*And finally, on behalf of the Association of Montenegrin Banks, I wish you, all our members, associates, colleagues and readers, as well as citizens of Montenegro and beyond, a successful New Year 2019 in the business areas and personal lives.*

*Sincerely,*

*Bratislav Pejaković, M.SC.*

# BANKAR

Broj 43 / decembar 2018.

## IZDAVAČ

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Novaka Miloševa bb/3 Podgorica  
Tel: +382 20 232-028  
www.ubcg.info

TIRAŽ: 600 primjeraka  
Časopis izlazi kvartalno.

Rješenjem Ministarstva kulture, sporta i medija časopis Bankar je upisan u Evidenciju medija - štampani mediji 17. marta 2008, pod rednim brojem 641.

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Grafotisak, Grude, BIH

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## BANKAR

Časopis Udruženja banaka Crne Gore  
Broj 43 / decembar 2018.

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# Imamo kvalitetnu osnovu za nastavak rasta

Najveći problem sa kojim se hronično suočavaju banke u Crnoj Gori je neefikasan pravosudni sistem. Preko Udruženja banaka smo u prethodnom periodu pokrenuli niz inicijativa, održali više sastanaka sa predstavnicima nadležnih institucija, kako bismo dali svoj konstruktivan doprinos unapređenju poslovnog ambijenta. Određeni pomaci su vidljivi, ali i dalje postoji puno opstrukcija u sistemu, koji pomažu neurednim dužnicima da izbjegavaju plaćanje obaveza, ili usporavaju banke u realizaciji kolaterala, kaže u intervjuu za Bankar glavni izvršni direktor Hipotekarne banke Esad Zaimović



Planovi za naredni period su bazirani na dodatnom investiranju u nove tehnolo-

**B Hipotekarna banka je već duži niz godina prisutna na bankarskom tržištu Crne Gore. Kako ocjenjujete dosadašnji rad i naročito godinu na izmaku, jer se već sumiraju rezultati, a gdje vidite prostor za rast u narednom srednjoročnom periodu?**

Hipotekarna banka se od osnivanja trudila da pruži optimalan servis privredi i stanovništvu.

Promijenom vlasničke strukture tokom 2006. godine, nastupa period intenzivnijeg rasta banke, počev od povećanja kapitala, preko širenja poslovne mreže, pa do proširenja portfolia proizvoda, sa posebnim akcentom na novim tehnologijama.

U periodu od 2006. godine do danas prosječan godišnji rast svih pokazatelja poslovanja je iznosio preko 30%.

Prema podacima na 30.09.2018. godine Hipotekarna banka je druga banka po veličini u Crnoj Gori, mjereno visinom ukupnih depozita i ukupne aktive.

U strukturi kreditnog portfolia dominantno je poslovanje sa pravnim licima od oko 70% ali je poslovnom politikom planirano značajnije povećanje kreditiranja fizičkih lica.

Tokom ove godine renovirali smo 4 postojeće filijale i otvorili jednu novu u Delti, želeći da svojim klijentima ponudimo znatno efikasniji i komforniji servis.

logije, sa ciljem da što više digitalizujemo poslovanje. Pripremamo, takođe, značajnije unapređenje u dijelu investicionog bankarstva, koje podrazumijeva prije svega ponudu novih proizvoda za investiranje u hartije od vrijednosti. Želja nam je da klijentima ponudimo mogućnost da jednostavnije upravljaju svojim viškovima likvidnosti. Ova usluga je postala interesantna klijentima poslednjih godina, naročito nakon znatnog pada kamatnih stopa na depozite.

**B Šta je trenutno najveći izazov za banke na sistemskom nivou u Crnoj Gori?**

Najveći problem sa kojim se hronično suočavaju banke u Crnoj Gori je neefikasan pravosudni sistem. Preko Udruženja banaka smo u prethodnom periodu pokrenuli niz inicijativa, održali više sastanaka sa predstavnicima nadležnih institucija, kako bismo dali svoj konstruktivan doprinos unapređenju poslovnog ambijenta. Određeni pomaci su vidljivi, ali i dalje postoji puno opstrukcija u sistemu, koji pomažu neurednim dužnicima da izbjegavaju plaćanje obaveza, ili usporavaju banke u realizaciji kolaterala.

Jedan od većih izazova za banke u narednom periodu će biti i usklađivanje sa EU standardima, jer će njihova

# We have qualitative basis for continuance of growth

The biggest problem the banks in Montenegro are chronically facing is inefficient judicial system. We have launched several initiatives through the Association of Banks, held several meetings with the representatives of competent institutions to contribute to the improvement of business environment. Certain steps forward are noticeable, but there are still a lot of obstructions in the system that assist delinquent debtors to avoid paying taxes or decelerate banks in foreclosure of collateral, said in an interview for the Bankar, CEO of Hipotekarna banka Esad Zaimović

**Hipotekarna banka has been present in the banking market of Montenegro for many years. How do you evaluate the work that has been done so far and the work in the current year, since the results for the current year are already summing up? Where do you see the room for growth in the following medium-term period?**

Since its founding, Hipotekarna banka has been trying to provide optimum service both to corporate and households sectors.

After the change of the ownership structure during 2006, a period of intensified growth of the bank has started, from the increase in capital, through the expansion of business network to the widening of the portfolio of products, paying special attention to the new technologies.

In period since 2006 to date, average annual growth of all performance indicators exceeded 30%.

According to the data as at 30 September 2018, Hipotekarna banka ranks the second in the system in Montenegro, measured by the level of total deposits and total assets.

The business with corporate sector of about 70% accounted for the main share in the loan portfolio structure. However, a significant increase in households lending is planned in the business policy.

During the current year, we remodelled 4 existing branches and opened a new one in Delta shopping mall with a desire to offer to our clients substantially efficient and more comfortable service.

In the following period, we plan to invest additionally in new technologies in order to digitalise our operations. In addition, we are preparing significant improvement in the investment banking area, which primarily implies offering new products for investing in securities. We want to offer to our clients the possibility to manage surplus of their liquidity in easier manner.

**B What is currently the greatest challenge for banks at the system level in Montenegro?**

The biggest problem the banks in Montenegro are chronically facing is inefficient judicial system. We have launched several initiatives through the Association of Banks, held several meetings with the representatives of competent institutions to contribute to the improvement of business environment. Certain steps forward are noticeable, but there are still a lot of obstructions in the system that assist delinquent debtors to avoid paying taxes or decelerate banks in foreclosure of collateral.

One of the greatest challenges for banks in the following period will be also alignment with the EU standards, as their implementation will impose new requirements

*“Our clients may expect the improvement of the volume and quality of the offer in next year, paying special attention to new technological products*

## INVESTIRANJE U DIGITALIZACIJU JE INVESTICIJA U BUDUĆNOST

**B** Proces digitalizacije, kriptovalute i blockchain tehnologija su novi koraci u evoluciji novca. Kako gledate na taj trend i da li su banke u Crnoj Gori spremne na ovaj izazov?

Naš bankarski sistem je upoznat sa svim pomenutim terminima, kao i trendovima u svijetu, počev od digitalizacije, pa do block chain tehnologija, koja je mnogo više od platforme za kripto valutu.

Svi ovi procesi zahtjevaju investicije u tehnologiju i ljude. Naravno da smo svjesni da je investiranje u digitalizaciju investicija u budućnost banke, ali iako smo inovativni i lansirali neke usluge prvi na tržištu, povratak investicije treba prilagoditi zrelosti tržišta da prihvati ove inovacije. Sve banke u našem sistemu prate dešavanja na bankarskom tržištu globalno, a u skladu sa svojim strategijama i promišljaju investiranje i lansiranje novih usluga.

implementacija nametati nove zahtjeve pred banke, počev od kapitalne adekvatnosti, preko računovodstvenog izvještavanja, pa do praćenja poslovanja klijenata.

**B** Regulator radi na donošenju novih propisa, koji bi trebalo da budu usklađeni sa direktivama EU. Tu se prvenstveno misli na novi Zakon o kreditnim institucijama i prateća podzakonska akta. Šta očekujete u tom smislu?

Može se reći da imamo kvalitetnu saradnju sa CBCG, nadamo se da će se ta saradnja dodatno unaprijediti, kroz učešće UBCG u budućem periodu usvajanja i implementacije regulative na fonu harmonizacije sa EU standardima.

Naša očekivanja su da ćemo imati isti okvir za poslovanje kao banke u EU. Za sad nemamo posebne bojazni oko kapitalizovanosti i solventnosti, bankarskog sektora, jer sistemski imamo znatno jaču poziciju nego što je zakonski minimum od 10% ponderisane aktive, a koji je u ovom trenutku jači nego definisan EU direktivom

gdje je 8%. Moguće je da bude problema kog pojedinih, prvenstveno manjih banaka, što za rezultat može imati ukрупnjavanje bankarskog sektora.

**B** Šta klijenti Hipotekarne banke mogu očekivati u narednoj godini?

Tokom slijedeće godine naši klijenti mogu da očekuju unapređenje obima i kvaliteta ponude, sa posebnim akcentom na tehnološki inovativnim proizvodima. Nastavićemo sa dodatnim razvojem kartičnog poslovanja, posebno u dijelu mobilnih plaćanja, želimo takođe da proširimo portfolio klijenata u našem Premium programu, koji je postao jedan od najprepoznatljivijih brendova Hipotekarne banke. Nastavićemo i sa unapređenjem servisa na šalterima banke, kako bismo našim postojećim i budućim klijentima što više skratili čekanje u redovima, ili ga učinili komfornijim.

**B** Na nivou sistema, imamo pozitivne trendove u padu NPL-ova, trend pada kamata na plasmane banaka, ali i kod depozita gdje usprkos niskim kamatama imamo značajni rast depozita kod banaka. Kakav je Vaš komentar ovih trendova i kojim će pravcem ići u nekom srednjoročnom periodu?

Kao što ste naveli u pitanju, na nivou bankarskog sistema u Crnoj Gori se primjećuju pozitivni trendovi.

Javnost i klijente najviše zanima pad kamatnih stopa, koji je značajnije izražen na strani depozita, ali je primjetan i stabilan trend pada kamata na kredite.

Sa druge strane imamo povećanu bankarsku brigu o problematičnim plasmanima, kao i značajne aktivnosti CBCG, kroz usvajanje zakonskog rješenja za dobrovoljno restrukturiranje dugova, što je za rezultat imalo smanjenje sistemskog NPL sa skoro 26% iz 2011.god. na 6,8% na kraju trećeg kvartala 2018.god. što je veliki uspjeh.

Treba istaći i povratak povjerenja stanovništva i privrede u banke, prvenstveno kroz znatan rast depozita, ali se pozitivno može komentarisati i porast plasmana od strane banaka kako privredi tako i stanovništvu.

To nam daje za pravo da očekujemo da će se pozitivni trendovi nastaviti i naredne godine.

S obzirom na kraj godine iskoristio bih priliku da čestitam svim građanima i privrednicima Crne Gore sretnu Novu godinu, a finansijskom sistemu svi želimo stabilnost, rast i optimalnu interakciju banaka i ostalih aktera na crnogorskom tržištu.

*„Tokom slijedeće godine naši klijenti mogu da očekuju unapređenje obima i kvaliteta ponude, sa posebnim akcentom na tehnološki inovativnim proizvodima*

for banks, from capital adequacy, accounting reporting to monitoring of operations of the clients.

**B** The Regulator is drafting new regulations that should be aligned with the EU directives. This primarily refers to the new Credit Institutions Law and the supporting regulation. What do you expect in that regard?

It can be said that we have a good cooperation with the CBCG and we hope that this cooperation will be additionally improved through the participation of the Association of Montenegrin Banks in the future period of adoption and implementation of regulations and their alignment with the EU standards.

We expect to have the same framework for operations as banks in the EU. Currently, there is no particular concern regarding the capitalisation and solvency of the banking sector, since at the system level, we have stronger position than the prescribed statutory minimum of 10% of risk-weighted assets, which is even higher than the one defined in the EU directive of 8%. It is possible that some problems occur in individual, primarily smaller banks, which may result in the consolidation of the banking sector.

**B** What may the clients of the Hipotekarna banka expect in the following year?

Our clients may expect the improvement of the volume and quality of the offer in next year, paying special attention to new technological products. We will continue with the additional development of payment cards operations, particularly in the part concerning mobile payments and we want also to expand the portfolio of clients in our Premium programme which has become one of the most recognisable brands of Hipotekarna banka. We will also continue with the improvement of services at banks' tellers in order to shorten waiting time to our current and future clients or make it more comfortable.

**B** Positive downtrends in NPLs are observed at the system level, as well as a declining trend in interest on loans of banks and deposits which, despite low interest rates, increased. How do you comment these trends? What will be their direction in medium term?

As mentioned in your question, positive trends are noticeable in the banking system in Montenegro.

The public and the clients are mostly interested in the decline in interest rates, which is more significant in the deposit side; however, a steady declining trend is also noted in interest rates on loans.

On the other hand, we have an intensified banking concern regarding non-performing loans, and also significant activities of the CBCG, through the adoption of the law for voluntary debt restructuring which resulted in the decline of the NPLs at the system level from nearly 26% in 2011 to 6.8% at the end of the third quarter of 2018, which is a great success. We should also point out the return of the confidence of the households and corporate sectors to the banks, primarily through the increase in deposits. Another positive comment is directed to the increase in lending activities of banks, both in corporate and households' sector.

This gives us the right to expect further continuance of positive trends also in the following year.

Since the end of this year is approaching, I would like to take this opportunity to wish a happy New Year to all citizens and businessmen in Montenegro, and to the financial system we all wish the stability, growth and optimal interaction of banks and other players in the Montenegrin market.

## INVESTING IN DIGITALISATION IS INVESTING INTO THE FUTURE

**B** Digitalisation process, crypto currencies and blockchain technology are the new steps in the evolution of money. How do you see this trend, are the banks in Montenegro ready to cope with this challenge?

Our banking system is familiar with these terms, as well as the global trends, from digitalisation to blockchain technologies that are far more than the platform cryptocurrency.

All of these processes require investments in technology and people. Of course, we are aware that investing in digitalisation is investing into the future of the bank, but even though we are innovative and we have been the first to launch some of the services on the market, the return on investment should be adjusted to the maturity of the market to accept these innovations. All banks in our system monitor the developments in the global banking market, and consider investing and launching new services in accordance with their strategies.



Jozef Nemeth  
Deputy CEO Online  
Business Technologies

# Izazovi i rješenja stupanja na snagu Direktive o platnim uslugama PSD2

Svijet bankarstva se transformiše zbog promjena koje su inicirale informacione tehnologije koje se često nazivaju razornim tehnologijama. Ove tehnologije uključuju npr, prenosive uređaje (pametne telefone, tablete) velike podatke, vještačku inteligenciju i API (aplikacioni programski interfejs) koji omogućavaju redizajn procesa usluga između banaka i klijenata i pružaju mogućnost da se usluge daju klijentima 24 časa dnevno u realnom vremenu bez interakcije ljudi. Ove tehnologije su već promijenile ponašanje klijenata u mnogim sektorima, a današnji klijenti očekuju pružanje usluga u realnom vremenu koje su prilagođene njima.

Banke su reagovale previše sporo na ove inovacije, pa su se pojavile kompanije koje su ušle na finansijsko tržište i sada se takmiče sa bankama. S jedne strane postoje takozvane FinTech kompanije, male mlade kompanije koje pružaju jednu ili

dvije novih finansijskih usluga, dok s druge strane postoje takozvane BigTech kompanije u obliku tehnoloških giganata kao što su Google, Apple, Facebook, Amazon i Alibaba, koje su već postale uspješne u drugim sektorima.

Ove novajlije remete bankarski sektor na dva načina: ove kompanije koriste samo elektronske kanale i pružaju visoko automatizovane i jeftine usluge klijentima vršeći time veliki pritisak na profitabilnost banaka. Takođe, one remete i odnose sa klijentima, jer klijenti radije

koriste moderne aplikacije i Internet stranice FinTech i BigTech kompanija, pri čemu one kao posrednici pristupaju uslugama banaka koristeći API ili screen scraping (jedna od tehnika sakupljanja podataka). Ako banke dopuste da nestanu ovi odnosi sa klijentima, ubrzo će biti samo akteri „iza scene“ koji pružaju samo osnovnu infrastrukturu dok će interakcije sa profitabilnim klijentima obavljati FinTech i BigTech kompanije! Ovo će dovesti do toga da se klijenti drže

*„Informacione tehnologije su već promijenile ponašanje klijenata u mnogim sektorima, a današnji klijenti očekuju pružanje usluga u realnom vremenu koje su prilagođene njima. Banke su reagovale previše sporo na ove inovacije, pa su se pojavile kompanije koje su ušle na finansijsko tržište i sada se takmiče sa bankama*

# Challenges and solutions related to the entry into force of PSD2

Jozef Nemeth  
Deputy CEO Online  
Business Technologies

The world of banking is transforming due to changes initiated by IT technologies often referred to as disruptive technologies. These technologies involve e.g. portable devices (smartphones, tablets), big data, artificial intelligence and APIs (standardized interfaces), which enable the redesign of service processes between the banks and the clients and give the opportunity to serve the clients 24/7, real-time, without any human interaction. These technologies have already changed the behaviour of customers in many industries and the customers of today expect to be served real-time and user-friendly.

Banks reacted too slow to these innovations, therefore there were companies, which entered the financial market and now compete with banks. These companies are on one hand the so-called FinTechs, small

start-ups providing one or two innovative financial services and on the other hand the so-called BigTechs, the technology giants like Google, Apple, Facebook, Amazon and Alibaba, which already made a success in other industries.

These newcomers disrupt the banking industry in two ways: these companies use solely e-channels and provide highly automatized and cheap services to the clients; therefore they put a big pressure on the profitability of banks. In addition to that,

they also disrupt client relations, as clients prefer to use the fancy applications and websites of FinTechs and BigTechs, and these companies as intermediaries access the services of the banks through APIs or via screen scraping. If banks let these client relations go away, they will soon be only backstage players providing some basic infrastructure, but profitable client interactions will be done by Fintechs and BigTechs!

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*„Ako pretpostavimo da 70% odraslog stanovništva koristi pametne telefone i da Android ima 70% tržišnog učešća, to znači da Google već ima pristup gotovo do 50% stanovništva. Zamislite dan kada ove kompanije počnu konačan prodor u bankarski sektor što bi odmah preoblikovalo bankarstvo*

pružaoca usluga dok u pozadini nastavljaju da mijenjaju banke kako im se sviđa.

Iako su novine sklone tome da objavljuju više informacija o FinTech kompanijama, vjerujemo da BigTech kompanije predstavljaju veću prijetnju bankama jer već imaju značajan prodor na tržištu. Ako pretpostavimo da na primjer 70% odraslog stanovništva koristi pametne telefone i da Android ima 70% tržišnog učešća, što predstavlja realistične podatke, to znači da Google već ima pristup gotovo 50% stanovništva! Zamislite dan kada ove kompanije počnu konačan prodor u bankarski sektor što bi odmah preoblikovalo bankarstvo!

Ni jedna banka nije ozbiljno shvatila izazov koji su predstavljale FinTech i BigTech kompanije 2010.

*„Akcioni plan Evropskog bankarskog regulatora za FinTech kompanije objavljen je u martu 2018. godine i proglasio je da su nadležni organi dali zeleno svjetlo za inovacije, da će one ukloniti regulatorna ograničenja i podržati bezbjedne usluge cloud-a koje pružaju FinTech kompanije*

godine, ali one danas posmatraju svijet na drugačiji način. Anketa koju je uradila PwC kuća 2017. godine pokazala je da je 80-90% donosilaca odluka u finansijskom sektoru očekivalo poremećaje u narednih pet godina. Banke sada traže mogućnosti da ojačaju svoju konkurentnost. Mnoge od njih su našle način da to urade na istom mjestu odakle dolazi prijetnja: većina najvećih banaka je počela da saraduje sa FinTech kompanijama ili da ulaže u FinTech kompanije kako bi njihove uspjehe uključile u svoje usluge!

Mi vidimo pojavu takozvanih FinTech ekosistema, što znači da banke, FinTech kompanije i ostali pružaoci finansijskih usluga integrišu svoje IT sisteme koristeći API i pružajući zajedničke usluge klijentima (npr., banke koje odobravaju lične kredite za finansiranje skupih putovanja u inostranstvo). Ova vrsta saradivačkog pristupa bankarskim uslugama se često naziva otvorenim bankarstvom.

I ovdje direktiva 2366/2015 Evropske unije, poznata kao PSD2 stupa na scenu.

U periodu oko 2010. godine bankarski stručnjaci su očekivali da finansijski nadležni organi regulišu FinTech kompanije i nekako zaštite izvršioce od malih, inovativnih ali očigledno rizičnih konkurenata. Nadležni organi su uradili upravo suprotno: počeli su sa snažnom podrškom inovacijama. Akcioni plan Evropskog bankarskog regulatora (EBA) za FinTech kompanije objavljen je u martu 2018. godine i proglasio je da su nadležni organi dali zeleno svjetlo za inovacije, da će one ukloniti regulatorna ograničenja i podržati bezbjedne usluge cloud-a koje pružaju FinTech kompanije. Direktiva o platnim uslugama poznata kao PSD2 usaglašeno podržava ovaj napor jer obavezuje banke da daju pristup ovim kompanijama (u terminologiji iz PSD2 oni se nazivaju treće strane pružaoci usluga TPP) nekim platnim uslugama i prema tome omogućavaju FinTech kompanije da razviju inovativne finansijske usluge koristeći ove tačke pristupa.

*„Assuming e.g. that 70% of the adult population uses smartphones and Android has 70% market share, which is realistic data, it means that Google has already access to nearly 50% of the population! Imagine the day, when these companies start a definite intrusion in the banking industry, that would immediately reshape banking*

This will lead to clients sticking to a provider while in the background they can keep changing their banks to their liking.

Although newspapers tend to publish more about FinTechs, we believe that BigTechs pose a bigger threat to the banks as they already have a formidable market penetration. Assuming e.g. that 70% of the adult population uses smartphones and Android has 70% market share, which is realistic data, it means that Google has already access to nearly 50% of the population! Imagine the day, when these companies start a definite intrusion in the banking industry, that would immediately reshape banking!

In 2010 no bank took the challenge of FinTechs and BigTechs seriously, but they see the world differently today. The survey of PwC revealed in 2017 that 80 - 90% of decision makers in the financial industry expect disruption in the next five years. Banks are now looking for opportunities to enhance their competitiveness. Many of them found the way to do it in the same place, from where the threat comes: most of the largest banks started to cooperate with FinTechs or invest in FinTechs to incorporate their achievements in their services!

We see the emergence of so called FinTech ecosystems, which means that banks, FinTechs and other service providers integrate their IT systems using APIs and provide joint services to customers (e.g. banks providing personal loan to finance expensive foreign travel). This kind of cooperative access to the banks' services is often referred to with a term: open banking.

And here the 2366/2015 directive of the European Union, better known as PSD2, comes into the picture.

Around 2010 banking professionals expected the financial authorities to regulate FinTechs and somehow protect incumbents from the tiny, innovative but obviously risky competitors. The authorities did exactly the opposite: they started heavily supporting innovation. The FinTech Action Plan of the EBA published in March 2018 declared that authorities will give green light to innovation, they will remove regulatory constraints and support secure cloud services of FinTechs. PSD2 harmonically supports this effort, as PSD2 obliges banks to give access to FinTechs (in PSD2 terminology Third Party Providers – TPPs) to some of the payment services, and therefore enable FinTechs to develop innovative financial services using these access points.

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## O ČEMU GOVORI PSD2?

PSD2 reguliše platne usluge u Evropskoj uniji. Ona ima četiri velika stuba:

- Kreiranje jedinstvenog integrisanog tržišta platnog prometa u Uniji
- Jačanje konkurencije između izvršilaca i novih pružaoaca usluga
- Obezbjeđivanje bezbjednosti platnih usluga
- I zaštita potrošača.

Izazov informacione tehnologije u okviru PSD2 je uglavnom povezan sa konkurencijom jer PSD2 dozvoljava dvijema vrstama FinTech kompanija, pružaoacima informacionih usluga o računu (AISP) i pružaoacima usluga iniciranja plaćanja (PISP) da pruže nove usluge dajući pristup IT sistemima banaka. U ime klijenata, AISP će biti u mogućnosti da izvuku informacije o računu direktno i pruže usluge kao što je planiranje ličnog budžeta na osnovu tih podataka. PISP će isto u ime klijenta moći da iniciraju plaćanje sa klijentovog računa prema trećoj strani, što predstavlja savršen način da se

izmire plaćanja u elektronskoj trgovini. Banke će dati besplatan pristup AISP i PISP čak i bez formalnog ugovora.

Da li ovo znači da treća strana pružaoци usluga mogu u skladu sa PSD2 pristupiti slobodno računima klijenata?! Naravno da ne. Svaka transakcija koju pokrene TPP treba da bude autorizovana putem potvrde klijenta prema zadatim postavkama, što znači da dva elementa od tri kategorije (znanje, posjedovanje i postojanje) treba da se koriste za autentifikaciju, na primjer lozinka i jednokratna lozinka zajedno sa tokena/aplikacije koji posjeduje korisnik.

*„PSD2 predstavlja savršenu tačku ulaska za fintech ekosisteme, jer ona otvara prvi API za platne usluge. Međutim, ne očekuje se da će ovo biti kraj. Mi vjerujemo da bi u roku od 5-10 godina banke trebalo da otvore sve svoje usluge 24 časa dnevno*

Usluge koje pružaju AISP i PISP će se takmičiti sa mobilnim bankarskim uslugama koje nude banke. Ako je PSD2 kombinovana sa instant plaćanjem (SEPA Instant kreditni transfer), PISP može takođe da se takmiči sa kartičnim šemama (npr. Visa, Mastercard).

## KADA ĆE POČETI KONKURENCIJA?

Direktiva PSD2 je stupila na snagu 13. januara 2018. godine, ali bi API za AISP i PISP trebalo da se otvore kasnije, 14. septembra 2019. godine.

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Ovo je takođe i prekretnica za banke da ponovo razmisle o svojim strategijama kako da reaguju na promjene. Jedna opcija je da budu samo usaglašene, što znači da daju pristup uslugama kojima su obavezne po direktivi PSD2. U ovom slučaju, PSD2 će biti još jedan skupi regulatorni projekat bez bilo kakvog prihoda. Druga opcija je da se da pristup mnogim uslugama (na primjer, kreditima) po novim uslovima poslovanja

unovčavajući pristup fintech kompanija. Banke takođe u budućnosti mogu odlučiti da osnuju svoj PISP ili AISP, sve banke imaju ovu mogućnost u skladu sa PSD2 bez dodatnih odobrenja. Konačna opcija je da se pridruže fintech ekosistemima.

Mi mislimo da je trošenje novca ukoliko banke odluče samo da ostanu usaglašene sa direktivom. Banke treba da naprave posao sa PSD2 i otvorenim bankarstvom. A ovo bi moglo da se uradi postepeno; prvo da budu usaglašene sa direktivom, a zatim da izgrade dodatne usluge na API koje su razvile za PSD2.

**WHAT IS PSD2 ABOUT?**

PSD2 regulates the payment services in the EU. PSD2 has four big pillars:

- creating a single integrated payment market in the Union,
- enhancing competition among incumbents and new service providers,
- ensuring security of payment services,
- and protecting the customers.

The IT challenge of PSD2 is mostly related to competition, as PSD2 allows two types of FinTech companies the Account Information Service Providers (AISPs) and the Payment Initiation Service Providers (PISPs) to provide innovative services by giving access to the IT systems of banks. AISPs, on behalf of the customer, will be able to retrieve account information directly and provide services such as personal budget planning based on this data. PISPs, again on behalf of the customer, will be able to initiate a payment from the client’s account to a third party, which is a perfect way to

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settle e-commerce payments. Banks shall provide access for AISPs and PISPs free of charge and without having any formal contract.

Does this mean that under PSD2 TPPs can access freely the accounts of the clients?! Definitely not. Each of the transactions initiated by a TPP should be authorized via strong client authentication by default, which means that two elements of the three categories (knowledge, possession and inherence) should be used for authentication e.g. a password and one time password from a user possessed token/application together.

The services provided by AISPs and PISPs will compete with banks’ mobile banking services. If PSD2 is combined with instant payment (SEPA Instant Credit Transfer), then PISPs can also compete with card schemes (e.g. Visa, Mastercard)

**WHEN WILL THE COMPETITION BEGIN?**

The PSD2 Directive itself came into force on 13 January 2018, however the APIs for AISPs and PISPs should be opened later, on 14 September 2019.

PSD2 is a perfect entry point to the world of FinTech ecosystems, as PSD2 opens the first APIs for payment services. But this is not expected to be the end. We believe that within 5 – 10 years banks should open all of their services 24/7.

This is also a turning point for banks to rethink their strategy on how to react to changes. One option is to be merely compliant, which is to give access to services mandated by PSD2. In this case PSD2 will be another costly regulatory project without any return. Another option is to give access to more services (e.g. credits) under

new business terms monetizing the access of FinTechs. Going forward, the bank can also decide to establish an own PISP or AISP, all banks have this opportunity under PSD2 without any further authorization. The final option is to join the FinTech ecosystems.

We think that being only compliant is a waste of money. Banks should make business on PSD2 and open banking. And this could be done gradually: first be compliant, and then build further services on top of the APIs that are developed for PSD2.

### KOJI SU API OBAVEZNI PO DIREKTIVI PSD2? ŠTO BANKE TREBA DA URADE DA BI BILE USAGLAŠENE SA OVOM DIREKTIVOM?

Po PSD2, banke su obavezne da daju pristup trima platnim uslugama u skladu sa članovima 65, 66 i 67: provjera raspoloživosti sredstava, iniciranje plaćanja, izvlačenje informacija o računu. Detalje o pružanju ovih usluga ne reguliše PSD2 direktno već

je to regulisano posebnim regulatornim tehničkim standardima, Regulatornim tehničkim standardima za pouzdanu autentifikaciju klijenta i sigurne standarde komunikacije (RTS SCA).

RTS SCA zahtijevaju da banke treba da imaju najmanje jedan interfejs koji daje pristup ovim uslugama. Ovaj interfejs može da bude namjenski interfejs koji je posebno kreiran za ove usluge ili banke mogu da daju pristup korisničkom interfejsu koji koriste njihovi klijenti (Internet bankarstva ili bankarstva putem mobilnih telefona).

Vrsta pristupa putem mobilnih telefona je naišla na velike nesuglasice među bankama, fintech kompanijama i nadležnim organima. Razlog leži u tome jer ova vrsta pristupa koristi takozvani screen scraping. Po ovoj metodi, klijenti razmjenjuju svoje sertifikate (npr. korisničko ime i lozinku) koju im daje banke sa fintech kompanijom u kontrolisanom okruženju, a zatim softver fintech kompanije se uloguje na međubankarsko okruženje pretvarajući se da je klijent i inicira plaćanje u ime klijenta. Stručnjaci za bezbjednost informacionih sistema banaka smatraju da ova vrsta pristupa predstavlja ogromni operativni rizik. Fintech

### DA LI NAŠA KOMPANIJA IMA RJEŠENJE ZA PSD2?

Da. Mi smo razvili rješenje za PSD2 i za otvoreno bankarstvo. DigiTie omogućava klijentima i partnerima finansijskih institucija da pristupe 24 časa dnevno bilo kojoj željenoj finansijskoj usluzi, kao što su PSD2 usluge, instant plaćanja ili kreditno i debitno upravljanje putem elektronskih kanala. DigiTie može da pruži direktne elektronske kanale klijentima kao što je bankarstvo putem mobilnih telefona ili Internet bankarstvo, ali može i da rukuje aplikativnim programskim interfejsom (API) za dostavljanje naloga i upita iz partnerskih finansijskih institucija.

Pogledajte našu Internet stranicu za dodatne informacije: <https://www.online.hu/solutions/digitie>. Mi rado dajemo dodatne prezentacije ili demonstracije onima koji smatraju DigiTie kao rješenje za PSD2 i otvoreno bankarstvo. Možete nas kontaktirati na našoj Internet stranici: <https://www.online.hu/contact>.

kompanije smatraju ovu vrstu pristupa sigurnosnom mrežom za njih, pošto „zle banke“ mogu uništiti njihove usluge pružajući loše namjenske interfejsove. Ovaj spor se nije do danas riješio!

Mnoge banke više vole namjenske interfejsove. U stvari, ako je namjenski interfejs standardizovan i dobro funkcioniše, on je bolji čak i za fintech kompanije. Namjenski interfejs treba da funk-

cioniše tačno po istom kvalitetu i nivou usluga kao bančin korisnički interfejs. Banka treba da služi AISP i PISP ne nediskriminatoran način. Međutim, ako namjenski interfejs ne radi, tada, ako banka nije izuzeta od strane lokalnih nadležnih organa, banke će dati pristup korisničkim interfejsovima. Mnoge banke pokušavaju da izbjegnju ovo, tako da planiraju da izgrade dobar namjenski interfejs.

### ALI KAKO MOŽEMO DA IZGRADIMO DOBAR API?

PSD2 i RTS SCA su u osnovi tehnološki neutralni. To znači da regulatorna tijela ne definišu tačan interfejs kao što je to slučaj sa interfejsom za SWIFT, SEPA i kartične šeme. Na bankama je da ga izgrade, što može predstavljati problem. Interfejsovi kreirani i razvijeni slobodno od strane banaka će se su svakom pojedinom slučaju razlikovati, što otežava fintech kompanijama da se konektuju. Neke banke možda nemaju dovoljno znanja i iskustva da dizajniraju dobar interfejs. Što treba uraditi u tom slučaju?

U tom slučaju može pomoći takozvana API inicijativa. Nju su razvile neke tržišne organizacije čiji je

*Srećan Božić i Nova godina*  
*Merry Christmas and Happy New Year*

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LOVČEN BANKA<sup>AD</sup>

cilj da kreiraju opšte prihvaćeni „dobar“ API. Razvoj ovih standarda podržavaju Evropska centralna banka i Komisija, i oni su osnovali Radnu grupu za procjenu API početkom 2018. godine kako bi obezbijedili da su tehnički standardi usaglašeni sa zahtjevima PSD2 i RTS SCA. Radna grupa za procjenu API obuhvata pet API standarda: standard za otvoreno bankarstvo Ujedinjenog kraljevstva, the NextgenPSD2 standard Berlinske grupe, francuski STET, i tehničke standarde Udruženja banaka Poljske i Slovačke.

Koje tehničke standarde bi banke trebale da izaberu? To zavisi od njih. U teoriji, svaki od ovih standarda je odgovarajući za njih. U pravom trenutku izgleda da većina banaka namjerava da izabere rješenje Berlinske grupe. To je takođe tačno, ali većina naprednih API standarda danas je Standard za otvoreno bankarstvo Ujedinjenog kraljevstva jer se već primjenjuje od 13. januara 2018. godine.

Jedan od problema sa ovim tehničkim standardima – izuzev Standarda za otvoreno bankarstvo Ujedinjenog kraljevstva – je što su svi oni još uvijek inicijative, što znači da ovi standardi daju programske alate, „obrasce“ za kreiranje API ali ne daju tačne specifikacije za poslovanje. Zbog toga čak iako će dvije banke razviti API po NextgenPSD2, njihovi interfejsovi se razlikuju. To će povećati dodatne troškove fintech kompanijama.

Zašto odabradi „veliki“ tehnički API standard? Jer on pruža mnogo prednosti. Ovi standardi koriste najsavremenije tehnologije, kreirani su pažljivo i zasnovani su na sveobuhvatnim konsultacijama. Banke mogu uštedjeti ogromno vrijeme koristeći ove standarde umjesto da razvijaju sopstvena rješenja. Druga važna stvar je da će regulatorni nadležni organi dati više izuzetaka od screen scraping-a kao rezervnog sistema (alternative), ako je namjenski API implementiran u skladu sa „velikim standardom“. Ovim se takođe štedi: nema potrebe za razvojem u Internet ili mobilnoj banci.

### **KOJI SU PRAKTIČNI SAVJETI ZA BANKE KOJE NAMJERAVAJU DA KREIRAJU NAMJENSKI PSD2 INTERFEJS?**

Naša kompanija - Online Business Technologies – je stručnjak u kreiranju IT u skladu PSD2. Mi

razvijamo namjenske interfejsove za neke mađarske banke po „velikim standardima“. Dajemo sljedeće savjete:

Pazite na rok! API po PSD2 treba da se objavi za testiranje 6 mjeseci prije početka njegove upotrebe. Ako je vaš rok 14. septembar 2019. godina, treba da budete spremni do 14. marta 2019. godine!

Koristite namjenski interfejs! Uobičajeni je nesporazum da implementacija screen scraping-a koji je usuglašen sa RTS SCA ne zahtijeva izradu u Internet banci, pa je prema tome jeftino rješenje. Morate ga napraviti u bilo kojem slučaju, jer treća strana pružalac usluga treba da bude identifikovana i ovlašćena u ovom kanalu, a ako želite da kontrolišete njihove aktivnosti u Internet banci, to zahtijeva dodatne karakteristike. Danas ovo ne predstavlja problem, jer treće strane pružaoци usluga nijesu obavezni da se identifikuju! Pored toga, screen scraping je neuredan način da povežete vaše klijente i treću stranu pružaoce usluga, što postavlja dodatna pitanja u vezi sa Opštom uredbom o zaštiti podataka ličnosti.

Ako koristite namjenski interfejs po „velikom standardu“, treba da se prijavite za izuzetke od screen scraping-a kao rezervnog sistema (alternative) kod lokalnih nadležnih organa. Lokalni nadležni organi mogu koristiti različite obrasce, mogu implementirati procedure sa razilčitim rokovima za ovo!

Iniciranje plaćanje se generalno pominje u kontekstu kupovine putem elektronske trgovine, kada se zahtijeva jednokratni transfer sredstava. Međutim, ne treba da ograničite vaš API na ovo jer bi trebalo da budete u mogućnosti da rukujete plaćanjima na datume u budućnosti koji se ponavljaju, uglavnom na bilo koje plaćanje koje je trenutno dostupno vašim klijentima na mreži.

Olakšajte poslovanje vašim klijentima koliko god možete. Dajte izuzetke od strogih autentifikacija klijenta kada god je to moguće, ali koristite kontrole i pratite procese jer u ovom slučaju banka je u potpunosti odgovorna za transakciju!

Uvijek razmišljajte strateški: odaberite rješenje koje nije samo dovoljno da budete usaglašeni već koje se može dodatno razviti kako bi se postigli vaši poslovni ciljevi.

**WHAT ARE THE APIS THAT ARE OBLIGATORY UNDER PSD2? WHAT SHOULD BANKS DO TO BE COMPLIANT?**

PSD2 mandates to give access to three payment services under Articles 65, 66 and 67: checking the availability of funds, initiating a payment, and retrieve account information, The details of how these services should be opened is regulated not directly by PSD2, but by a specific RTS namely the RTS on Strong Customer Authentication and Secure Communication (hereinafter referred to as RTS SCA).

RTS SCA demands that banks should have at least one interface that gives access to these services. This interface can be a dedicated interface designed specifically for these services, or banks may give access to the user interface, that is used by their customers (online banking or mobile banking solutions).

The latter type of access has raised huge disputes among banks, FinTechs and authorities. The reason for that, that this kind of access uses so-called screen scraping. Under screen scraping the customers share their credentials (e.g. user name and password) provided by the bank with a FinTech in a controlled environment, and then the FinTech’s software logs in the internet bank pretending to be the customer, and initiates e.g. a payment on behalf of the customer. The security experts of banks consider this kind of an access as huge operational risk. FinTechs

**DO OUR COMPANY HAVE A SOLUTION FOR PSD2?**

Yes. We have developed a solution for PSD2 and for open banking. DigiTie enables the clients and partners of financial institutions to access 24/7 any desired financial service, like PSD2 services, instant payment or credit and debit management etc., through electronic channels. DigiTie is able to provide direct electronic customer channels such as a mobile bank or an internet bank, but it can handle the standard interfaces (API) to provide orders and queries from financial institution partners as well.

For further details please check our website: <https://www.online.hu/solutions/digitie>. We gladly give further presentations or demos to those considering DigiTie as a solution for PSD2 and open banking. Please contact us on our website: <https://www.online.hu/contact>.

consider this type of access as a safety net for them, as ‘mean banks’ may ruin their services by providing bad dedicated interfaces. This dispute hasn’t ended until today!

Most banks prefer dedicated interfaces. In fact, if the dedicated interface is standardized and works well, it is better even for FinTechs. Dedicated interfaces should work exactly at the same quality and service level as the bank’s

own user interface(s). Banks should serve AISP and PISPs in a non-discriminative way. If the dedicated interface fails however, then – if the bank is not exempted by the local authorities - banks shall give access to their user interfaces. Most banks try to avoid this case, so they plan to build a good dedicated interface.

**BUT HOW CAN WE BUILD GOOD APIS?**

PSD2 and the RTS SCA are fundamentally technology neutral. It means that regulatory bodies do not define exact interfaces like interfaces for SWIFT, SEPA and card schemes. This is up to banks, and this can be a problem. Interfaces designed and developed freely by banks will differ in each case, which make it hard for FinTechs to connect. Some banks may not have enough knowledge and experience to design a good interface. What to do then?

Here can the so-called API initiatives help. API initiatives are developed by some market organizations, which aim to develop widely accepted,

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'good' APIs. The development of these standards is supported by the European Central Bank and the Commission, and they established the API Evaluation Group early 2018 to ensure that technical standards are aligned with the requirements of PSD2 and RTS SCA. The API Evaluation Workgroup has five API Standards in scope: The Open Banking Standard UK, the NextgenPSD2 Standard of the Berlin Group, the French STET, and technical standards of the Polish and Slovak Banking Associations.

What technical standard should banks choose? It is up to them. Theoretically each of these standards are appropriate for them. At the very right moment it seems that most of the banks intend to choose the solution of the Berlin Group. It is also true however that the most advanced API Standard today is the Open Banking Standard UK as it is already in use since 13 January 2018.

One of the problems with these technical standards - except Open Banking Standard UK - that these are still initiatives, which means, that these standards give toolkits, 'building blocks' to create APIs, however they do not give exact specification for the operation. As a result, even though two banks will develop an API under NextgenPSD2, their interfaces will differ. This will raise additional costs for FinTechs.

Why choose a 'big' technical API standard? Well, this gives many advantages. These standards use state-of-the-art technologies, are designed carefully and are based on extensive consultation. Banks may save tremendous time using these instead of developing their own solutions. Another important point is, that regulatory authorities will more likely give exemption from screen scraping as fall-back, if the dedicated API is implemented under a 'big standard'. And this saves cost as well: no need for developments in the internet or mobile bank.

### **WHAT ARE OUR PRACTICAL ADVICES FOR BANKS WHO INTEND TO DEVELOP DEDICATED PSD2 INTERFACES?**

Our company - Online Business Technologies - is a practitioner in PSD2 IT developments. We develop dedicated interfaces for some Hungarian banks under 'big standards'. We give you the following advices:

Take care of timing! PSD2 APIs should be published for testing 6 months prior to live start. If your deadline is 14 September 2019, then you should be ready until 14 March 2019!

Use dedicated interfaces! It is a common misunderstanding that the implementation of RTS SCA compliant screen scraping does not require development in the internet bank, so it is a cheap solution. You must develop in either case, as TPPs should be identified and authorized on this channel as well, and if you want to control their activities in the netbank, that requires further features. This is not a problem today, as TPPs are not obliged to identify themselves! In addition to that, screen scraping is messy way to connect your customers and the TPPs and raises further questions related to GDPR.

If you use dedicated interface under a 'big standard', you should still apply for exemption from screen scraping as fallback at your local authorities. Local authorities may use different forms, may implement procedures with different deadlines for that!

Payment initiation is generally mentioned in the context of e-commerce purchases, when one-time transfer of funds is required. You should not however limit your APIs to this, as you should be able to handle future dated, recurring etc. payments, basically any payment that is currently available to your customers online.

Ease the customer journey as much as you can. Give exemptions from strong client authentication when it is possible, however use controls and monitor processes, as in this case the bank is fully responsible for the transaction!

Think always strategically: choose a solution, which is not only sufficient to be compliant, but which can be developed further to achieve your business goals.

# Izazovi implementacije Bazel 3 standarda u Crnoj Gori



Petar Arsić  
Certified FRM, M.Ec.,  
Manager Advisory Services  
at Ernst & Young Beograd

Nakon uspješne primene u Evropskoj uniji, primena Bazel 3 standarda se polako spustila i na zemlje na Balkanu. Danas su pojedine zemlje već implementirale pomenuti standard, dok se njegova implementacija očekuje uskoro i u Crnoj Gori.

Popularna je uzrečica bankara u SAD da slova FDIC (Federalna agencija za osiguranje depozita) zapravo znače „Zauvek Tražimo Povećanje Kapitala“ (engl. Forever Demanding Increased Capital!).

Bankarima SAD-a FDIC i ostale bankovne regulatorne agencije izgledaju kao da uvek nešto zahtevaju – više kapitala, više izveštaja, više javnih usluga itd. Menadžeri banaka su često zbunjeni pred novim regulatornim promenama i postavljaju pitanje regulatoru da li mi upravljamo rizicima ili regulacijama, odnosno upozoravaju regulatore da je potrebno pronaći optimalnu ravnotežu između sigurnosti sa jedne i efikasne upotrebe kapitala sa druge strane.

*“Menadžeri banaka su često zbunjeni pred novim regulatornim promenama i postavljaju pitanje regulatoru da li mi upravljamo rizicima ili regulacijama, odnosno upozoravaju regulatore da je potrebno pronaći optimalnu ravnotežu između sigurnosti sa jedne i efikasne upotrebe kapitala sa druge strane*

Savremeni sistemi regulacije nadzora i kontrole nad bankama daleko su više rezultat praktičnih pokušaja i promašaja u nalaženju optimalnih rešenja da se smanje konflikti interesa i poveća efektivnost bankarskih sektora nego što su plod teorijskih istraživanja. Regulacija svakako ne znači pokušaj eliminacije svih rizika sa kojima se banke suočavaju, obzirom da preuzimanje rizika leži u osnovi bankarskog poslovanja, kao i da su određeni rizici (pre svega kreditni rizik, rizik likvidnosti i kamatni rizik) inherentni bankarskom poslovanju, pa u tom smislu regulacija ima za cilj postavljanje standarda koji će naterati banke da bolje upravljaju rizicima sa kojima se suočavaju.

# Challenges of Basel III Implementation in Montenegro

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at Ernst & Young Beograd

After its successful implementation in the European Union, the implementation of the Basel III standards has slowly reached the Balkan countries. Some countries have already implemented Basel III, while its implementation is soon expected also in Montenegro.

The popular expression of the US bankers is that the letters FDIC (Federal Deposit Insurance Agency) actually mean Forever Demanding Increased Capital! The US bankers

look at the FDIC and other banking regulators as those who always require more capital, more reporting, more public services, etc. Bank managers are often confused with new regulatory changes and ask the regulators whether they are managing risks or regulation, i.e. they warn regulators that it is necessary to find the optimal balance between the safety and the efficient use of capital.

Modern systems for controlling and supervising banks are the result

of practical attempts and failures in finding optimal solutions to reduce conflicts of interest and increase the effectiveness of banking sectors rather than the outcome of theoretical researches. Surely, the regulation does not mean an attempt to eliminate all risks the banks are facing, since the risk taking underlies the banking business and certain risks (primarily credit risk, liquidity risk and interest rate risk) are inherent in banking business the regulators aim to set standards that will help banks manage their risks more effectively.

*“Bank managers are often confused with new regulatory changes and ask the regulators whether they are managing risks or regulation, i.e. they warn regulators that it is necessary to find the optimal balance between the safety and the efficient use of capital*

*“Najnoviji standardi imaju značajan uticaj pre svega u delokrugu organizacionih jedinica koje se bave upravljanjem rizicima u bankama. Bazelski standardi su doprineli promociji preciznijeg definisanja rizika, adekvatnijim metodologijama za merenje istih, merama kapitala osetljivim na rizike i međunarodno uporedivim pokazateljima adekvatnosti kapitala*

#### **BAZELSKI KOMITET ZA SUPERVIZIJU BANAKA I NJEGOVA ULOGA**

Rizici i prinosi koji nastaju na osnovu njihovog preuzimanja danas predstavljaju svakodnevnicu finansijskog i bankarskog sistema. Da bi se upravljalo prethodno navedenim rizicima, Bazelski komitet za superviziju banaka (u nastavku samo Komitet) je još 1988. godine razvio Bazel 1 standard koji po prvi put propisuje globalno važeća pravila u domenu adekvatnosti kapitala, propisujući minimalni koeficijent adekvatnosti kapitala na nivou 8% rizikom ponderisane aktive. Tada je u fokusu regulatora bio samo kreditni rizik.

Inače, ovaj Komitet je sastavni deo Banke za međunarodna poravnanja (BIS) koja je osnovana 1930. godine i koja predstavlja jednu od najstarijih međunarodnih finansijskih institucija. Osnovni cilj

Bazelskog komiteta za superviziju banaka je razumevanje ključnih supervizorskih izazova i unapređenje kvaliteta supervizije banaka širom sveta. Bitno je napomenuti da Bazelski komitet za superviziju banaka nema nadnacionalni autoritet kontrole. To znači da sadržaj standarda koje komitet propisuje čine osnovni standardi supervizije i primeri najbolje prakse koji za cilj imaju njihovu dalju primenu od strane nacionalnih supervizora na način koji je pogodan za njihove nacionalne sisteme.

Najnoviji standardi imaju značajan uticaj pre svega u delokrugu organizacionih jedinica koje se bave upravljanjem rizicima u bankama. Bazelski standardi su doprineli promociji preciznijeg definisanja rizika, adekvatnijim metodologijama za merenje istih, merama kapitala osetljivim na rizike i međunarodno uporedivim pokazateljima adekvatnosti kapitala.

#### **PUT OD BAZELA 1 DO BAZELA 3**

Bazel 1 regulativa se skoro u potpunosti odnosila na kreditni rizik i posledično ga je označavala kao osnovni rizik poslovanja banaka. Ovaj standard čine dve celine koje pokrivaju oblasti poput definisanja kapitala i određivanja strukture pondera rizika. Kada je reč o definisanju kapitala, Bazel 1 prepoznaje dva nivoa kapitala, osnovni (Tier 1) i dopunski (Tier 2) kapital. Za merenje rizika, propisuje takozvani portfolio pristup, po kome je bilansna aktiva klasifikovana u 5 grupa sa ponderima rizika od 0% do 100% koje se definišu na osnovu kategorija dužnika. Pored klasifikovanja bilansne aktive, standard definiše i faktore kreditne konverzije za vanbilansne stavke (posle čega se primenjuju odgovarajući ponderi rizika), kao i odnos između kapitala i ukupne izloženosti banke (bilansne i vanbilansne) ponderisane kreditnim rizikom s ciljem izračunavanja pokazatelja adekvatnosti kapitala.

Bazel 1 doveo je do sveopštog rasta adekvatnosti kapitala u međunarodno aktivnim bankama. Kao glavni uzročnik ove pojave smatra se relativno jednostavna struktura standarda, kao i to da je Bazel 1 standard primenljiv u različitim zemljama širom sveta. Takođe, globalna implementacija Bazel 1 standarda dovela je do jačanja konkurencije banaka na međunarodnom nivou, porasta discipline u procesu upravljanja kapitalom, kao i stvaranja određene vrste benchmarka za procenu banaka koju

**BASEL COMMITTEE ON BANKING SUPERVISION AND ITS ROLE**

Nowadays, risks and returns arising from those risks represent the everyday life of the financial and banking system. In order to address the above-mentioned risks, the Basel Committee on Banking Supervision (BCBS) developed the Basel Capital Accord (Basel I standards) in 1988, which prescribed for the first time globally applicable rules on capital adequacy, and minimum capital adequacy ratio at 8% of the risk-weighted assets. The focus of the regulators in that period was only credit risk.

This Committee is an integral part of the Bank for International Settlements (BIS), which was founded in 1930 and is one of the oldest international financial institutions. The basic objective of the BCBS is to understand key supervisory challenges and to improve the quality of banking supervision around the world. It is important to note that the BCBS does not have a supranational supervisory authority. This means that the content of the standards prescribed by the BCBS consist of core supervisory standards and examples of best practices aimed at their further application by national supervisors in a way that is appropriate for their national systems.

The latest standards have had significant impact primarily on the organisational units engaged in risk management in banks. The Basel Accords contributed to the

*“The latest standards have had significant impact primarily on the organisational units engaged in risk management in banks. The Basel Accords contributed to the promotion of more precise risk definition, more adequate methodologies for measuring them, capital requirements sensitive to risks and internationally comparable capital adequacy indicators*

promotion of more precise risk definition, more adequate methodologies for measuring them, capital requirements sensitive to risks and internationally comparable capital adequacy indicators.

**FROM BASEL I TO BASEL III**

Basel I almost completely referred to credit risk and indicated credit risk as core risk of bank operations. Basel I comprised of two parts: the one dealt with the definition of capital, while the other identified the risk weights structure. With regard to the definition of capital, Basel I recognises two tiers of capital, core (Tier 1) and supplemental (Tier 2) capital. As for the risk measurement, it prescribes portfolio approach, based on which balance sheet assets are classified into 5 categories with risk weights ranging between 0% and 100%, which are defined based on debtors’ categories. In

addition to the classification of balance sheet assets, Basel I defines also credit conversion factors for off-balance sheet items (which is followed by the application of corresponding risk weights), and capital to total exposure (balance sheet and off-balance sheet) of bank’s ratio weighted by credit risk in order to calculate capital adequacy indicators.

Basel I resulted in overall growth in capital adequacy of internationally active banks. The main factor contributing to this growth was relatively simple structure of standard and the fact that Basel I was applicable in different countries worldwide. In addition, global implementation of Basel I resulted in strengthening of the competition of banks internationally, increasing the discipline in the capital management process, and creating certain type of benchmark for the assessment of banks that

sprovode učesnici na finansijskom tržištu. Međutim, pored svih prednosti Bazel 1 standarda, vremenom su postali evidentni i nedostaci istog. Kao najveći nedostatak pome-

nutog standarda smatra se to što on nalaže da adekvatnost kapitala isključivo zavisi od kreditnog, dok su ostali rizici (npr. različite vrste tržišnog, operativni rizik i drugi rizici) izostavljeni iz analize. U cilju otklanjanja zavisnosti adekvatnosti kapitala od kreditnog rizika, Bazelski komitet za superviziju banaka je usvojio seriju normi koje se odnose na upravljanje tržišnim rizikom. Najbitnijom normom Bazel 1 standarda smatra se norma iz 1993. godine u kojoj se ističe da je portfolio banke izložen ne samo kreditnim rizikom, već i drugim vrstama rizika, kao što su kamatni, devizni, robni i cenovni rizik. Ova norma se smatra korakom ka Bazel 2 standardu upravo zato što taj pristup postoji pod imenom "standardizovan pristup". Najbitnijim doprinosom dopunjenog Bazel 1 standarda smatra se, pored uvođenja kapitalnog zahteva za tržišni rizik, uvođenje novog instrumenta za ocenu tržišnog rizika banke – VaR (Value at Risk). Isto tako, kao bitan nedostatak Bazel 1 standarda smatra se i neadekvatna ocena kreditnog rizika portfolia banke što proističe iz toga što standard ne pravi razliku između dužnika različitog kvaliteta i rejtinga, a

*“Za primenu Bazel 1 standarda na našim prostorima može se reći da je bila i više nego simbolična, a ogledala se u tome što su pojedini principi uvedeni u zakonodavstvo bivših jugoslovenskih republika krajem osamdesetih godina prošlog veka*

pritom standard stavlja akcenat na knjigovodstvene vrednosti umesto tržišnih vrednosti. Ovaj standard, takođe, neadekvatno procenjuje rizičnost, ali i efekte upotrebe modernih finansijskih instrumenata, kao i tehnike ublažavanja rizika.

Iako je Bazel I standard smatrao da je koeficijent adekvatnosti kapitala od 8% dovoljan, to nije bio slučaj sa zemljama sa većom izloženošću riziku. Odluka o propisivanju većeg iznosa regulatornog kapitala spadala je u domen nacionalnih organa supervizije. Upravo uvažavajući rizik zemlje, centralne banke u našem regionu su po pravilu propisivale minimalni pokazatelj regulatornog kapitala na višem nivou.

Za primenu Bazel 1 standarda na našim prostorima može se reći da je bila i više nego simbolična, a ogledala se u tome što su pojedini principi uvedeni u zakonodavstvo bivših jugoslovenskih republika krajem osamdesetih godina prošlog veka. Reforma bankarskog sistema iz 1993. godine obuhvatila je većinu principa Bazel 1 standarda (kapitalni cenzus, neto kapital i adekvatnost kapitala). U akademskim krugovima vlada mišljenje da se limitiranost primene Bazel 1 standarda ne ogleda u nedostatku nacionalne regulative,

već u izostanku njene primene. Kao posledica loše primene Bazel 1 standarda, došlo je urušavanja stabilnosti bankarskog sektora i postojanja više piramidalnih

banaka, ali i opšte nesolventnosti banaka. Ovakav odnos prema regulativi naneo je ogromnu štetu javnom interesu. Pored nanete materijalne štete, finansijske investicije su pretrpele i gubitak ugleda koji su imale u javnosti. Reformom krajem devedesetih i posle toga godine zatvoren je veliki broj banaka, uključujući i neke od najvećih institucija u našem regionu. Ovo navodimo kao podsetnik zašto je važno upravljanje rizicima i adekvatna primena adekvatnih standarda u praksi, o čemu će biti reči i u nastavku. Činjenica je da u celom regionu postoji određeno nasleđe koje svakako i danas ima implikacije na poslovanje banaka, stavove i preferencije deponenata i regulatora, kao i prisutne rizike.

Uzimajući u obzir tada već očigledne nedostatke Bazel 1 standarda, Bazelski komitet za superviziju banaka početkom 1999. godine razvija predlog novog sporazuma. Konačna verzija novog, revidiranog sporazuma koji je danas poznat kao Bazel 2 predstavljena je javnosti u junu 2004. godine. Uz određenu reviziju Bazel 2 standard stupa na snagu decembra 2006. godine. Zemlje članice Evropske unije počinju sa primenom Bazel 2

is conducted by market participants. However, apart from all of the advantages of the Basel I, its deficiencies have become apparent over time. The main deficiency

of Basel I was that it prescribed the dependence of capital adequacy only on credit risk, while other risks (e.g. various types of market risk, operational risk and other risks) were excluded from the analysis. With the aim to eliminating dependences of the capital adequacy on credit risk, Basel Committee on Banking Supervision adopted a series of rules that referred to the market risk management. The most important rule of the Basel I is considered to be the one from 1993, which emphasised that the bank's portfolio was exposed not only to credit risk but also to other types of risks, such as interest rate risk, foreign exchange risk, commodities risk and price risk. It is believed that this rule was a step towards the Basel II, because this approach exists under the name "standardised approach". In addition to the introduction of capital requirements for market risks, the most important contribution to the amended Basel I is considered to be the introduction of new instrument for market risk assessment of the bank - VaR (Value at Risk). Likewise, inadequate assessment of credit risk of the bank's portfolio was another

*“The implementation of Basel I in our region was more than symbolic, and reflected on the fact that certain principles were introduced into the legislation of former Yugoslav Republics in the late 1980*

important deficiency of the Basel I. This resulted from the fact that Basel I did not make any difference between different quality and rating of the debtor, and it emphasised carrying amounts instead of market values. Additionally, Basel I assessed inadequately risk and the effects of the use of modern financial instruments as well as risk mitigation techniques.

Although Basel I believed that the capital adequacy ratio of 8% is sufficient, it was not the case with countries that had higher exposure to risk. The decision prescribing higher amount of regulatory capital was within the scope of the national supervisory authorities. Taking into consideration country risk, central banks in our region prescribed, as a rule, higher amounts of minimum regulatory capital.

The implementation of Basel I in our region was more than symbolic, and reflected on the fact that certain principles were introduced into the legislation of former Yugoslav Republics in the late 1980s. The Banking System Reform of 1993 included most of the Basel I standards (capital requirements, net capital and capital adequacy). In academic circles,

the opinion is that the limitation of the application of the Basel I is not reflected in the lack of national regulation, but in the absence of its application. Due to the poor appli-

cation of the Basel I, the banking sector's stability was disrupted, more pyramid banks appeared, and general insolvency of banks also occurred. Such a relationship towards the regulation had caused enormous damage to the public interest. Subsequently, due to material damage incurred, financial investments had also undergone a loss of reputation in the public domain. A large number of banks was closed under the reforms that occurred in the late 1990s and beyond, including some of the largest institutions in our region. This is a reminder of why risk management and proper application of adequate standards in practice is important, as it will be discussed further in the paper. The fact is that there is a certain inheritance throughout the region that certainly has implications even nowadays on bank operations, views and preferences of depositors and regulators, as well as present risks.

Taking into consideration obvious deficiencies of the Basel I in that period, the Basel Committee on Banking Supervision drafted a new Capital Accord at the beginning of 1999. The final draft of the new, revised Accord, known nowadays

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standarda u januaru 2007. godine, dok su Sjedinjene Američke Države krenule sa primenom istog u julu 2007. godine. U regionu pojedine zemlje pristupaju implementaciji tokom 2011. godine dok pojedine zemlje su se odlučile da postepeno implementiraju standard ili pak možemo reći „skoče“ direktno na Bazel 3.

Kada govorimo o strukturi Bazela 2 standarda, možemo reći da se on, kao znatno složeniji u odnosu na Bazel 1 standard, zasniva na tri međusobno povezana dela koja za cilj imaju adekvatno uređivanje poslovanja u finansijskom sektoru – takozvani stubovi Bazela 2 standarda.

**Prvi stub** čine minimalni zahtevi za kapitalom, dok se osnovni principi ovog stuba mogu videti još u Bazel 1 standardu. U okviru prvog stuba obuhvaćeni su kreditni rizik, tržišni rizici i operativni rizik.

**Drugi stub** se odnosi na proces nadzora od strane supervizora. Podrazumeva adekvatno obuhvatanje svih rizika kojima je banka izložena u svom poslovanju, a ne samo rizika iz prvog stuba. Njegov cilj je da se sa novom ulogom supervizorskog nadzora, kao dodatnim instrumentom, ohrabre banke da

razviju interne tehnike upravljanja rizikom, ali i da se obezbedi da banke drže adekvatni nivo kapitala u odnosu na sve rizike kojima su izložene. Međutim, da bi se preporuke iz oblasti supervizorskog nadzora mogle primeniti, Bazel 2 podrazumeva određivanje rizičnog profila banke, odnosno određivanje svih rizika kojima banka može biti, odnosno jeste izložena.

Podsetimo se da princip supervizije predviđen Bazel 2 standardom sadržan je još u posebnom dokumentu koji je usvojen 2006. godine pod naslovom “Osnovni principi efektivne supervizije banaka”. Dokument sadrži 25 principa koji su sažeto prikazani u okviru Bazela II standarda kao četiri osnovna principa supervizorskog nadzora i navode sledeće:

**(1) Proces interne procene adekvatnosti kapitala (ICAAP):** nalaže bankama da vrše kontinuiranu internu procenu adekvatnosti kapitala u skladu sa svojim rizičnim profilom i da na osnovu njega određuju strategiju održavanja potrebnog nivoa kapitala što se omogućava putem:

- stalnog nadzora borda direktora i višeg menadžmenta, odgovornog za procenu adekvatnosti kapitalne pozicije banke,

- jasnog definisanja politike, procesa i procedura za uspešnu identifikaciju, procenu i merenje rizika i, u skladu sa tim, kalkulisanja potrebnog kapitala,
- detaljne i obuhvatne procene rizika kojima je banka izložena, praćenjem njihovog parcijalnog uticaja na poslovanje banke, ali i agregirane izloženosti, uz prezentiranje odgovarajućih izveštaja o ovim procedurama, i
- kreiranja efikasne interne kontrole na nivou banke;

**(2) Proces supervizije (Supervisory Review and Evaluation Process – SREP):** supervizori treba da procenjuju proces interne procene adekvatnosti kapitala (ICAAP) i strategiju banaka, kao i njihovu sposobnost da nadgledaju i osiguraju usaglašenost s regulatornim pokazateljima kapitala. Ukoliko nisu zadovoljni rezultatima tog procesa, supervizori treba da preduzimaju adekvatne korektivne mere.

**(3) Kapital iznad minimalnog nivoa:** jedna od novina Bazela 2 jeste zahtev i očekivanje supervizora da banke poseduju kapital iznad minimalnog nivoa (definisano Stubom 1), koji na pravi način odražava složenost poslovnih aktivnosti banke i dovoljan je za pokriće svih rizika koji iz tih aktivnosti proizlaze;

**(4) Intervencije supervizora:** supervizori bi trebalo da intervenišu u ranom stadijumu kako bi se sprečilo da kapital padne ispod minimalnog nivoa potrebnog da podrži rizike kojima je banka

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- ✓ *Tekući račun*
- ✓ *Debit Mastercard kartica*
- ✓ *SMS (odliv novca)*

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## ZIRAAT COMFORT

- ✓ *Tekući račun*
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izložena, kao i da zahtevaju brzu reakciju ukoliko kapital nije na propisanom nivou.

Prethodno navedeni principi se zasnivaju na postojanju čvrste veze između vrednosti kapitala koji banka poseduje sa jedne strane, i kvaliteta upravljanja kapitalom i procesa interne kontrole, sa druge strane. Kao glavni razlog formiranja univerzalnih principa supervizije banaka navodi se potreba za kontrolom poslovanja velikih, međunarodnih grupa finansijskih institucija, koje posluju u različitim jurisdikcijama i svoje poslovanje baziraju na različitim organizacionim principima.

**Drugi stub** predstavlja deo koji je izuzetno aktuelan poslednjih dana imajući u vidu da SREP polako dobija na značaju u regionu. U Srbiji su izdati nacrti rešenja u kojima su dati nalazi/preporuke kao i propisani dodatni interni kapitalni zahtevi iz stuba 2 u skladu sa ovim procesom. Slične aktivnosti se u skorijem periodu očekuju i u Crnoj Gori i Bosni i Hercegovini.

**Treći stub** odnosi se na podsticanje tržišne discipline putem uspostavljanja niza zahteva za izveštavanjem koji pružaju pristup informacijama od značaja za poslovanje finansijske institucije (informacije o kapitalu, izloženosti rizicima, procesima upravljanja rizicima i adekvatnost kapitala i sl.). Informacije se obelodanjuju po pravilu godišnje u detaljnom obliku kao i za pojedine delove na polugodišnjem nivou. Kod multinacionalnih bankarskih grupa informacije se predstavljaju na pojedinačnom i konsolidovanom

## *“Razvoj Bazel 3 standarda započet je krajem 2009. godine kao reakcija na veliku ekonomsku i finansijsku krizu, dok je tekst standarda objavljen decembra 2010. godine od strane Bazelskog komiteta za superviziju banaka*

nivou za čitavu grupaciju. Ono što možemo prepoznati kao opšti trend koji je prisutan i u regionu je povećanje regulatornih zahteva u pogledu minimalne sadržine i forme za obelodanjivanje podataka (npr. korišćenjem pojedinih obrazaca). Među najznačajnijim inovacijama koje su prouzrokovane uvođenjem pomenute regulative smatramo prepoznavanje novih vrsta rizika kao i uvođenje novih pojmova, poput operativnog rizika i različitih vrsta tržišnog rizika. Možda najznačajnija novina je uvođenje obaveze formiranja posebnih organizacionih delova banke koji se bave upravljanjem rizicima, što ima za direktnu posledicu značajan i brži napredak discipline upravljanja rizicima.

### **BAZEL 3 STANDARD**

Razvoj Bazel 3 standarda započet je krajem 2009. godine kao reakcija na veliku ekonomsku i finansijsku krizu, dok je tekst standarda objavljen decembra 2010. godine od strane Bazelskog komiteta za superviziju banaka. Naime, standard se donosi radi prevazilaženja pojedinih problema uočenih tokom ekonomske krize koja je potekla iz finansijskog sektora SAD-a i koja

je istakla potrebu za upravljanjem rizikom u bankama na znatno višem i ozbiljnijem nivou nego što je to praktikovano u prošlosti.

Neki od nedostataka bankarskog sistema, za koje se smatra da su uticali na nastanak ili produbljivanje krize, a koje Bazel 3 pokriva i rešava svojom sadržinom su:

- **loše upravljanje rizikom likvidnosti i nedovoljna likvidnost** (uprkos globalnoj prezasićenosti likvidnošću);
- **neadekvatan nivo i kvalitet kapitala banaka;**
- **neadekvatan okvir za upravljanje rizikom druge ugovorne strane;**
- **postojanje brojnih problema u korporativnom upravljanju, upravljanju rizikom i transparentnosti;**

Shvatajući značaj ovog standarda i neophodnost njegove pravovremene primene, kao potpisnice dokumenta javljaju se članice G20. Implementacija standarda započinje u januaru 2013. godine, a planirano je sprovođenje u etapama sve do kraja 2019. godine.

Kako je u prošlosti utvrđeno da samo usvajanje ovih standarda i njihova implementacija u nacionalno zakonodavstvo nije dovoljna, Bazelski komitet inicira formiranje

as the Basel II, was presented to the public in June 2004. It entered into force in December 2007, with certain revisions. The EU member states started its implementation in January 2009, its implementation in the USA started in July 2007. Some regional countries started implementing it during 2011, while some of them opted for gradual implementation of the Accord or to “jump” directly to Basel III.

Basel II, which is substantially more complex than Basel I, is based on three interconnected parts aimed at adequate organising financial sector operations – the so called Basel II pillars.

**Pillar 1** consists of minimum capital requirements, although the core principles of this Pillar could be seen even in Basel I. Credit risk, market risks and operational risk are covered within this Pillar.

**Pillar 2** refers to the supervisory process. It implies adequate inclusion of all risks the bank is exposed to in its operations, not only Pillar 1 risks. Taking into consideration the new role of supervision as additional instrument, its objective is to encourage banks to maintain adequate level of capital for all risks they are exposed to in their operations. However, in order to apply the recommendation from the supervisory process, Basel II implies identifying risk profile of the bank i.e. identifying all risks the bank may be or is exposed to in its operations.

As a reminder, supervisory principle set forth in Basel II is included

in another separate document that was adopted in 2006 under the title “Core principles for effective banking supervision”. The document contains 25 principles that are summarised within the Basel II as four core principles of the supervisory process stating the following:

**(1) Internal Capital Adequacy Assessment Process (ICAAP):**

the banks have to make an ongoing internal assessment of capital adequacy in accordance with their risk profile and determine strategies for maintaining capital required. This can be done by:

- Ongoing supervision of the board of directors and senior management, responsible for the assessment of bank’s capital adequacy,
- Clear definition of policies, processes and procedures for a successful identification, assessment and measurement of risk, and accordingly, the calculation of capital required,
- Detail and comprehensive assessment of risks to which the bank is exposed, monitoring their partial impact on bank’s operations, and also aggregating such exposures by presenting

respective reports on these procedures, and

- Creating efficient internal controls within the bank;

**(2) Supervisory Review and Evaluation Process (SREP):**

supervisors should assess ICAAP and strategy of banks, as well as their capability to oversee and comply with regulatory capital indicators. If they are not satisfied with results, they should take adequate corrective measures.

**(3) Capital above minimum threshold:**

one of the novelties introduced by Basel II is the requirement and expectation of the supervisor that the banks would hold capital above the minimum requirement (defined by Pillar 1), which reflects in the proper manner the complexity of business activities of the bank and is sufficient to cover all risks arising from such activities;

**(4) Supervisory interventions:**

supervisors should intervene at an early stage to prevent capital from falling below the minimum threshold required for supporting risks the bank is exposed to, and to require swift reaction if the capital is not at the prescribed level.

*“Some regional countries started implementing it during 2011, while some of them opted for gradual implementation of the Accord or to “jump” directly to Basel III*

# DOBRODOŠLI U KLUB BEZ OGRANIČENJA



**LE CLUB PREMIER** PAKET VAM OMOGUĆAVA DA SA MASTERCARD GOLD DEBIT KARTICOM NEOGRANIČENO I BESPLATNO PODIŽETE GOTOVINU NA BANKOMATIMA SVIH BANAKA U CRNOJ GORI.

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These principles are based on firm connection between the amount of capital owned by the bank and the quality of capital management and internal controls process. The main reason to set up universal principles of the bank supervision is the need to supervise the activities of large international groups of financial institutions that operate in different jurisdictions and base their operations on various organisational principles.

**Pillar 2** of the Basel II is a part that has been extremely current lately, bearing in mind that SREP is gaining slowly importance in the region. In Serbia, draft decisions have been issued, which contain findings / recommendations as well as the prescribed additional internal capital requirements from Pillar 2 in accordance with this process. Similar activities are expected in Montenegro and Bosnia and Herzegovina in the near future.

**Pillar 3** refers to encouraging market discipline through setting up a series of reporting requirements that provide access to information that are important for the operations of the financial institutions (information on capital, risk exposures, risk management processes and capital adequacy, and the like). The information is disclosed on annual basis as a rule in details, while for certain parts they are disclosed on semi-annual basis. With regard to the multinational banking groups, information is presented on solo and consolidated level for entire group. The increase in regulatory

requirements regarding minimum content and the form for disclosing data (use of specific forms) is recognised as a general trend that is present also in the region.

The recognition of new types of risk and the introduction of new terms, like operational risk and various types of market risks are among the most important innovations that resulted from the introduction of the aforesaid regulation. The most important novelty is perhaps the introduction of the obligation to establish special organisational units within banks that are engaged in risk management. This directly results in significant and fast progress of the risk management discipline.

### **BASEL III**

The drafting of the Basel III started at the end of 2009 as a reaction on big economic and financial crisis, while the text of the Standard was published in December 2010 by the Basel Committee on Banking Supervision. Namely, it is adopted for the purpose of resolving certain problems that were noted during the economic crisis that started in the USA financial sector. The crisis highlighted the need to manage

risks in banks at substantially higher and more serious level than it was the practice in the past.

Some of the deficiencies of the banking system, which are considered to have affected the emergence or deepening of the crisis, covered and resolved by Basel III covers are the following:

- **Poor liquidity risk management and insufficient liquidity** (despite global excess in liquidity);
- **Inadequate level and quality of capital of banks;**
- **Inadequate framework for counterparty credit risk management;**
- **Existence of numerous problems in corporate governance, risk management and transparency;**

Understanding the importance of this standard and the necessity of its timely application, the G20 member states appear as signatories to the document. The implementation of the Basel III started in January 2013, and its phased-in implementation was planned by the end of 2019.

Lessons learned from the past indicated that the adoption of these standards and their implementation into the national legislation was insufficient. Therefore, the Basel Committee initiated the

*“The drafting of the Basel III started at the end of 2009 as a reaction on big economic and financial crisis, while the text of the Standard was published in December 2010 by the Basel Committee on Banking Supervision*

posebnog Odbora za implementaciju standarda koji će se fokusirati na tumačenje standarda, pomoć u implementaciji njegovog sadržaja kako od strane države, tako i od strane banaka kao članica finansijskog sektora, kao i na procenu uticaja novih standarda na ove aktere. Iako je u poslovnoj praksi donekle bilo prisutno mišljenje da je Bazel 3 namenjen samo razvijenijim ekonomijama sveta i posledično bankama koje u njima privređuju, Komitet je težio da sadržajem ovog standarda omogući prevazilaženje nedostataka koji su doveli do ekonomske krize u svim bankama, bez obzira na njihovu veličinu, složenost ili pak lokaciju.

Bitno je istaći da je Bazel 3 doneo promenu do tada važeće i opšte prihvaćene paradigme. Naime, do tada se mislilo da je dovoljno da regulator osigura da banka ima dovoljno kapitala. Međutim, u krizi se pokazalo da je posedovanje neophodnog kapitala potreban, ali ne i dovoljan uslov da se prevaziđu različiti šokovi na tržištu. Shodno, banke nužno moraju da poseduju i adekvatan nivo likvidnosti. Štaviše, ovo je bio samo početak sve većeg mešanja regulatora u oblasti koje su do tada predstavljale „interne stvari“ banke, a danas se nazivaju u okviru procesa supervizorske procene analiza poslovnog modela banke. Regulatori su postali svesni da je razumevanje održivosti poslovnog modela banaka veoma važno iz razloga što upravo to oblikuje finansijsku stabilnost celog bankarskog sektora na srednji i dugi rok.

Ciljane rezultate reformi možemo posmatrati kako na mikro, tako i na makro planu. Na mikro planu odnose se na podizanje otpornosti

finansijskih institucija u periodima stresa, dok se na makro planu odnose na identifikovanje i praćenje rizika koji se najpre pojavljuju u bankarskom sektoru, a zatim se šire na celokupan privredni sistem ometajući njegovo poslovanje, rast i razvoj. Iz navedenog se može zaključiti da su ciljevi postavljeni na ova dva nivoa usaglašeni, u smislu da veći oprez svake banke smanjuje šansu za stvaranje sistemskih šokova koji bi potresli ne samo finansijsko tržište, nego i celokupne privredne sisteme na globalnom nivou.

U nastavku smo veću pažnju posvetili pre svega izmenama u delu likvidnosti i kapitala.

### LIKVIDNOST U PRVOM PLANU

Najveći fokus novog standarda je na riziku likvidnosti, te se kao posledica javlja uvođenje dva nova pokazatelja:

- **Pokazatelj pokrića likvidnom aktivom** (Liquidity Coverage Ratio – LCR): treba da obezbedi otpornost na rizik likvidnosti banke tako što će obezbediti posedovanje dovoljno kvalitetnih likvidnih sredstava da preživi značajan stres u periodu od 30 dana. Minimalno propisan na 100%.
- **Pokazatelj neto stabilnih izvora finansiranja** (Net Stable Funding Ratio – NSFR): ovaj pokazatelj promovise otpornost u dužem vremenskom periodu putem stvaranja dodatnih podsticaja za banke, sa ciljem da finansiraju svoje aktivnosti sa više stabilnih sredstava, na stalnoj osnovi. Minimalno propisan na 100% iako je oko ovoga bila velika diskusija

i o potencijalnim implikacijama na privredna kretanja.

Likvidna sredstva visokog kvaliteta, odnosno zaštitni sloj likvidnosti, koja se na osnovu odredbi Bazela 3 mogu uračunati u LCR dele se u dve kategorije:

- **Prvi nivo sredstava:** Ova sredstva su ograničena na gotovinu, rezerve centralne banke koje se mogu povući u vreme krize, kao na i određene kategorije vladinog duga; ovaj nivo može uključivati i neograničeni deo likvidnih sredstava za potrebe i svrhu LCR,
- **Drugi nivo sredstava:** Ova sredstva uključuju određene kategorije vladinog duga i visoko kotirane korporativne obveznice (izdate od strane nebankarskih emitenata), kao i pokrivene (garantovane) obveznice koje su se dokazale kao pouzdan izvor likvidnosti na tržištu; Ovaj nivo sredstava ne može obuhvatiti više od 40% ukupnih likvidnih sredstava za potrebe LCR, i imaće umanjeње primenjeno na njihovu trenutnu tržišnu vrednost (najmanje 15% umanjeња mora da se primeni na Nivo 2 sredstava).

### KAPITAL – SADA JOŠ VEĆI I KVALITETNIJI

Kriza je pokazala da kapital banaka širom sveta nije bio dovoljan da pokrije nastale neočekivane gubitke. Dodatno, pojedine odredbe u ugovorima su u praksi umanjile i kvalitet kapitala, što je sve imalo za rezultat da gubitke u krajnjoj instanci snose poreski obveznici.

Kako bi sprečio da se to ponovi, Komitet je odlučio da preispita

establishment of a special Standards Implementation Committee that will focus on standards interpretation, assistance in the implementation of its content both by the state and by banks as members of the financial sector, as well as on the assessment of the impact of new standards on these players. While an opinion was somehow present in business practice that Basel III was intended only for more developed economies of the world and consequently to the banks that operate in these economies, the intention of the Committee was to resolve the deficiencies that led to the economic crisis in all banks regardless of their size, complexity or location.

It is important to note that Basel III made a change to the current and generally accepted paradigm. Namely, it was believed until then that it was sufficient if the regulator ensured that the bank had sufficient amount of capital. However, the crisis has shown that it is necessary to have capital needed but it is not sufficient prerequisite to overcome the various shocks on the market. Consequently, banks must have an adequate level of liquidity. Moreover, this was just the beginning of an excessive interference of regulators in the areas that represented the "internal things" of the bank until then. Nowadays, they are known as the business model of the bank within supervisory review and evaluation process. The regulators have become aware that understanding of the sustainability of a bank's business model is very important as it precisely shapes the financial stability of the entire banking sector in medium and long term.

Targeted reform results can be viewed both on a micro and macro scale. The micro plan focuses on the upgrading of the resilience of the financial institutions in periods of stress, while macro plan refers to identifying and monitoring the risks first occurring in the banking sector, and then spreading to the entire economic system hindering its business, growth and development. It can be concluded that the targets set at these two levels are harmonised in the sense that greater caution of each bank reduces the chance of systemic shocks that would shake not only the financial market but also the global economic systems.

Higher attention will be paid further in the paper to the changes in liquidity and capital.

### LIQUIDITY IN THE FIRST PLACE

Basel III puts the highest focus on the liquidity risk; consequently, two new indicators are introduced:

- **Liquidity Coverage Ratio (LCR):** should provide resilience to liquidity risk of the bank by ensuring that has adequate stock of high-quality liquid assets to survive substantial stress in 30-day period. Its minimum is prescribed to 100%.
- **Net Stable Funding Ratio (NSFR):** promotes resilience in long period by creating additional incentives to banks aimed at funding their activities by more stable funds long-term. Its minimum is prescribed to 100%, although discussion has been going on regarding potential implications to economic trends.

High-quality liquid assets, i.e. liquidity buffer, which can be included into LCR based on the Basel III provisions are divided into two categories:

- **Level 1 assets:** These assets are limited to cash, central bank reserves that can be withdrawn in period of crisis, certain categories of sovereign debt; this level may also include unlimited portion of liquid funds for the purpose of LCR,
- **Level 2 assets:** These assets include certain categories of sovereign debt and eligible corporate debt securities (issued by non-banking issuers), and covered (guaranteed) bonds that have proven to be a reliable source of liquidity in the markets; this level cannot cover more than 40% of total liquid funds for LCR requirement and the deduction will be applied to their current market value (at least 15% of reduction must apply at the Level 2 assets).

### CAPITAL – HIGHER AND MORE QUALITATIVE NOW

The crisis has shown that the capital of banks around the world was not adequate to cover the unexpected losses. In addition, certain provisions in the contracts have reduced the quality of the capital in practice, which resulted in the loss ultimately paid by the taxpayers.

In order to prevent this from repeating, the Committee has decided to review the rules on capital, which resulted in more detailed and more severe conditions for recognition, increase and decrease of capital. In addition, minimum capital adequacy ratios are defined

pravila za kapital te su sada uslovi za priznavanje, povećanje i smanjenje kapitala mnogo detaljniji i rigorozniji. Pored toga, definisane su minimalne vrednosti pokazatelja adekvatnosti za sva tri nivoa kapitala čime se još bolje kontroliše struktura kapitala i uvedena su pravila za zaštitne slojeve kapitala (eng. Capital buffers) čime se direktno postavljaju veći zahtevi za kapitalom.

Razlikuju se tri nivoa kapitala:

1. **Osnovni akcijski kapital** (eng. Common Equity Tier 1 ili samo CET1): predstavlja najkvalitetniji kapital koji je sačinjen dominantno od osnovnih akcija, rezervi i dobiti iz prošlih godina, kao i sličnih instrumenata kapitala. Po pravilu CET 1 minimalno treba da iznosi 4.5% rizične aktive;
2. **Dodatni osnovni kapital** (eng. Additional Tier 1 ili samo AT1): predstavlja nešto manje kvalitetan kapital od CET1, ali je i dalje u pitanju kvalitetan kapital. Dok su u svetu ovde uglavnom ulazile tkz. CoCo obveznice, kod nas u regionu je moguće videti preferencijalne akcije koje bi ispunjavale propisane uslove. Po pravilu minimalno CET1 i AT1 u zbiru treba da iznose 6.0% rizične aktive;
3. **Dopunski kapital** (eng. Tier 2 ili samo T2): predstavlja najmanje kvalitetan kapital i tu po pravilu najbitniju stavku čini subordinirani dug koji se sada amortizuje po proporcionalnoj a ne stepenastoj metodi, kao što je ranije bio slučaj. Minimalno CET1, AT1 i T2 treba da iznose 8% rizične aktive;

Zanimljivo je da regulatori u pojedinim zemljama u regionu su se opredelili za propisivanje minimalnih vrednosti u skladu sa vrednostima definisanim u standardu, dok su se drugi opredelili za vrednosti koje su veće. Premda smo viđenja da je više u duhu Bazel 3 standarda da postoje jedinstvena pravila na nivou celog sveta u prvom stubu, dok specifični rizici lokalnih tržišta mogu na odgovarajući način biti adresirani kroz zaštitne slojeve kapitala i zahteve iz drugog stuba, svakako treba uvažiti činjenicu da nivo kapitala varira od zemlje do zemlje, te i pristup regulatora može varirati. Ipak, na srednji i dug rok je za očekivati da se pravila usaglase u potpunosti, a sve u cilju ispunjavanja uslova za pristupanje EU i dobijanja statusa ekvivalencije u delu regulative.

Za očekivati je, imajući u vidu visinu kapitala, na nivou pojedinih banaka u Crnoj Gori da će menadžment banke morati da sprovodi određene aktivnosti u sklopu implementacije Bazel 3 standarda i eventualno pribavi dodatan kapital.

Još jedna novina koju je uveo Bazel 3 standard odnosi se na korišćenje zaštitnog sloja kapitala. Ovde razlikujemo:

- **zaštitni sloj za očuvanje kapitala:** po pravilu iznosi 2.5%;
- **kontraciklični zaštitni sloj kapitala:** ima za cilj izdvajanje dodatnog kapitala u periodu velike ekspanzije i njegovo kasnije otpuštanje u periodu recesije. Posebno je značajan za ekonomije u razvoju omogućavajući bankama da se zaštite u periodima brzog rasta zaduženja. Visina varira i propisuje je regulatorno telo;

- **zaštitni sloj za sistemski rizik:** ima za cilj izdvajanje dodatnog kapitala za prisutne rizike u finansijskom sistemu. U zemljama u regionu primera varira i do 3% rizične aktive;
- **zaštitni sloj za sistemski važne banke:** ima za cilj izdvajanje dodatnog kapitala u slučaju da je banka označena kao sistemski važna. Najčešće iznosi do 2% rizične aktive;

#### IZMENE KOJE DONOSI BAZEL 4

U decembru 2017. godine Bazelski komitet za superviziju banaka je objavio finalizirane reforme Bazel 3 standarda. Imajući u vidu da se na pomenute reforme čekalo gotovo jednu deceniju nakon globalne finansijske i ekonomske krize, šira javnost pomenuti standard uglavnom poznaje kao Bazel 4.

Ovaj standard, koji ima za glavni cilj da smanji značajnu varijabilnost obračuna rizikom ponderisane aktive (eng. Risk-Weighted Assets), trebao bi da stupi najvećim delom na snagu od januara 2022. godine.

Kao ključne izmene koje finalizacija Bazel 3 standarda donosi navode se:

- revidiranje standardizovanog pristupa za kreditni rizik;
- ukidanje AMA pristupa i jedan novi standardizovani pristup za operativni rizik;
- okvir za obračun leveridž pokazatelja;
- okvir za CVA rizik;
- pravila za output floor;
- fundamentalna revizija knjige trgovanja (FRTB);
- revidiranje pristupa internih modela (IRB);

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# IZABERI DESTINACIJU

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*“U delu kreditnog rizika novine koje je doneo Bazel 2, kao i inicijalna verzija Bazel 3 standarda, ostavljala je utisak na lokalnim tržištima (u Crnoj Gori, Srbiji, BiH itd.) da se nije odmaklo dalje od Bazel 1 standarda, sve imajući u vidu da zbog nedostatka eksternih kreditnih rejtinga veća osetljivost na kreditni rizik zapravo nikada nije oživela u praksi*

Imajući u vidu poslovne modele banaka u Crnoj Gori i regionu možemo reći da će efekat na poslovanje banaka koje posluju na lokalnom tržištu imati sve prethodno navedene izmene izuzev izmena za IRB pristup imajući u vidu da nijedna banka trenutno ne koristi takav pristup. Najveći značaj svakako imaju prve dve stavke o kojima će nešto više detalja biti izneto u nastavku.

U delu kreditnog rizika novine koje je doneo Bazel 2, kao i inicijalna verzija Bazel 3 standarda, ostavljala je utisak na lokalnim tržištima (u Crnoj Gori, Srbiji, Bosni i Hercegovini itd.) da se nije odmaklo dalje od Bazel 1 standarda, sve imajući u vidu da zbog nedostatka

eksternih kreditnih rejtinga veća osetljivost na kreditni rizik zapravo nikada nije oživela u praksi. Sa izmenama koje donosi finalizacija Bazel 3 standarda ovo bi trebalo napokon da se izmeni u određenoj meri. Istakli bismo sledeće izmene:

- klasa banaka: uveden je SCRA pristup koji omogućava bolju granulaciju banaka za koje ne postoji eksterni rejting;
- klasa privrednih društava: uveden je SCRA pristup i “investment grade” kategorija, posebna pravila za projektno finansiranje i ponder od 85% za SME;
- klasa fizičkih lica: razlikovanje “revolving” i „non-revolving“ izloženosti;

- klasa obezbeđeno hipotekama: različiti ponderi u zavisnosti od vrednosti LTV i pristup za IPRE i IPCRE (engl. income producing real estate i income producing commercial real estate)
- izmene okvira za CCF;

Okvir za operativni rizik se promenio na način da se AMA pristup napušta za potrebe prvog stuba. Bankama koje su u svetu uložile veliki napor da isti pristup prethodno implementiraju i ispune sve uslove biće dozvoljeno da isti koriste u drugom stubu za potrebe obračuna u ICAAP. Naime, ovaj napredni način za merenje operativnog rizika nije zadovoljio zahteve regulatora koji se opredelio da propiše novi standardizovani pristup koji će se primenjivati u svim bankama i koji će zameniti sve postojeće pristupe. Pomenuti pristup predstavlja svojevrsnu kombinaciju BIA pristupa, koji je predstavlja standardnu praksu u Crnoj Gori i regionu, u čijoj osnovi su bilansni pokazatelji koji je sada obogaćen za informacije iz interne baze operativnih gubitaka date banke.

Na kraju, ističemo da je za same banke najveći izazov u primeni nove bankarske regulative zapravo stavljanje iste u funkciju poslovanja, tj. poboljšanja poslovanja. Čini se da je pre svega zbog svoje kompleksnosti, primena bankarske regulative danas postala svrha samoj sebi. Otuda je za adekvatnu primenu nove regulative, neophodna blagovremena priprema i edukacija, bliska saradnja menadžmenta, poslovnih funkcija i funkcija koje direktno učestvuju u implementaciji, ali i kontinuirana komunikacija između regulatora tj. supervizora i samih banaka.

*“Za same banke najveći izazov u primeni nove bankarske regulative zapravo stavljanje iste u funkciju poslovanja, tj. poboljšanja poslovanja. Čini se da je pre svega zbog svoje kompleksnosti, primena bankarske regulative danas postala svrha samoj sebi*

for all three tiers of capital implying better supervision of the capital structure. They also introduced rules for capital buffers, thereby directly imposing higher capital requirements.

Three tiers of capital differ:

1. **Common Equity Tier 1 (CET1)** is the most eligible capital that consists mostly of common shares, reserves and prior year income and similar instruments of capital. As a rule, CET 1, at a minimum, should amount to 4.5% of risk-weighted assets;
2. **Additional Tier 1 (AT1)** is capital that has somewhat lower quality than CET1, but is still eligible capital. While CoCo bonds are included in this category in the world, preferred shares that meet the requirements can be seen in the region. As a rule, the sum of CET1 and AT1, at a minimum, should amount to 6.0% of risk-weighted assets;
3. **Tier 2 (T2)** is the least eligible capital, where the most important item is subordinated debt, which is now amortised at proportionality method instead of granularity method as it was previously the case. CET1, AT1 and T2, at a minimum, should amount to 8% of risk-weighted assets;

It is interesting that regulators in certain countries in the region have opted for prescribing minimum values in accordance with the standards defined in the Basel III, while others have opted for prescribing higher values. While we believe that it is more in the spirit of the Basel III to have uniform

rules in Pillar I at the global level, whereas the specific risks of local markets can be appropriately addressed through capital buffers and Pillar II requirements, it is certainly worth taking into account the fact that the level capital varies from country to country as well as the regulator's approach. However, in the medium and long terms, it is to be expected that the rules will be fully harmonised, in order to meet the requirements for the EU accession and obtaining equivalence status in the regulation.

Given the level of capital at the level of individual banks in Montenegro, it is to be expected that the management of the bank will have to carry out certain activities within the implementation of the Basel III and possibly obtain additional capital.

Another novelty introduced by the Basel III refers to the use of capital buffers. Here we distinguish the following:

- **capital conservation buffer:** as a rule, it amounts to 2.5%;
- **Counter-cyclical capital buffer:** it aims at allocating additional capital during a period of major expansion and its later release in the recession period. It is particularly important for emerging economies, enabling banks to hedge in the rapid growth borrowings. The amount varies and is regulated by the regulatory body;
- **Systemic risk buffer:** it aims at allocating additional capital to the risks involved in the financial system. The amount varies in the regional countries even up 3% of risk-weighted assets;
- **Capital buffer for systemically important banks:** it aims at

allocating additional capital in case the bank is labelled as systemically important. It amounts usually up to 2% of risk-weighted assets;

### CHANGES BROUGHT BY BASEL IV

In December 2017, the Basel Committee on Banking Supervision issued the finalized Basel III reforms. Bearing in mind that these reforms have been expected almost one decade after the global financial and economic crisis, they are generally known as Basel IV to wider public.

Basel IV, which is aimed at reducing significant risk variability in risk-weighted assets, should have been largely effective from January 2022.

The following is stated as key changes made to the finalised Basel III reforms:

- revision of the Standardized Approach for credit risk;
- the abolition of the AMA approach and one new Standardized Approach to operational risk;
- leverage ratio framework;
- CVA risk framework;
- rules for output floor;
- fundamental revision of the trading book (FRTB);
- Revision of the internal ratings-based approach (IRB);

Bearing in mind the business models of banks in Montenegro and in the region, we can say that all of the above mentioned changes except for IRB approaches will affect banks' business in the local market, since no bank is currently using such approach. Surely, the first two items, which will be discussed



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below in the paper, will have the most important impact.

With regard to the credit risk, novelties brought by Basel II, as well as the initial draft of the Basel III gave the impression at the local markets (Montenegro, Serbia, Bosnia and Herzegovina, etc.) that nothing new occurred since the Basel I, bearing in mind that due to the lack of external credit ratings, greater sensitivity to credit risk has never actually come to life in practice. With the changes brought by the finalization of the Basel III, this should ultimately be changed to a certain extent. We would like to highlight the following changes:

- class of banks: a SCRA approach has been introduced which allows for better granulation of banks with no external rating;
- class of companies: a SCRA approach and investment grade category have been introduced, special rules for project financing and 85% of weight for SMEs;
- class of natural persons: distinguishing between "revolving" and "non-revolving" exposures;
- class secured by mortgages: different weights depending on the value of LTV and approach for IPRE and IPCRE (income producing real estate and income generating real estate);
- Changes of the framework for CCF;

The operational risk framework has changed in such a way that AMA approach leaves Pillar 1 requirements. Banks in the world, which have made great efforts to implement the same approach and to fulfil all the

*“With regard to the credit risk, novelties brought by Basel II, as well as the initial draft of the Basel III gave the impression at the local markets (Montenegro, Serbia, Bosnia and Herzegovina, etc.) that nothing new occurred since the Basel I, bearing in mind that due to the lack of external credit ratings, greater sensitivity to credit risk has never actually come to life in practice*

conditions, will be allowed to use it Pillar 2 for the purposes of its calculation in the ICAAP. Specifically, this Advanced Measurement Approach for operational risk did not meet the requirements of regulators who opted to prescribe a new standardized approach that will be applied in all banks and will replace all existing approaches. This approach represents a kind of BIA approach, which is a standard practice in Montenegro and in the region, which consists of balance sheet indicators that are now enriched for information from the internal base of operational losses of a given by banks.

Finally, we point out that the biggest challenge for the banks when applying new banking regulations will be to make the regulation operational, i.e. to improve their business. It seems that, primarily due to its complexity, the implementation of banking regulations has become a matter for itself. Hence, timely preparation and training, close cooperation of the management, business functions and functions directly involved in implementation, as well as continuous communication between regulators, i.e. supervisors and banks is needed for adequate implementation of new regulation.

*“The biggest challenge for the banks when applying new banking regulations will be to make the regulation operational, i.e. to improve their business. It seems that, primarily due to its complexity, the implementation of banking regulations has become a matter for itself.*



# Bazel 4 – standardi sve zahtjevniji za banke

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*“Uprkos onome što kreatori standarda mogu reći, Bazel 4 je stvarnost i povećaće zahtjeve za izdvajanjem potrebnog kapitala i troškove finansiranja, koji će uticati na sposobnost banaka da daju pozajmice, te će stoga uticati na širu ekonomiju*”

KPMG je predvidio 2013. godine pojavu „Bazela 4“ čak i prije nego što je Bazel 3 u potpunosti implementiran. Gledajući unazad, vidimo da je većina onoga što smo predvidjeli postala stvarnost, a u nekim slučajevima su međunarodni standardi i nacionalni propisi postali sve zahtjevniji za banke.

Uprkos onome što kreatori standarda mogu reći, Bazel 4 je stvarnost i povećaće zahtjeve za izdvajanjem potrebnog kapitala i troškove finansiranja, koji će uticati na sposobnost banaka da daju pozajmice, te će stoga uticati na širu ekonomiju.

Konačni dokument donosi cjelokupnu analizu serije dokumenata; novog standardizovanog pristupa i pristupa zasnovanog na internim rejtinzima za kreditni rizik, uticaj najnižeg dozvoljenog nivoa rizikom ponderisane aktive na tržišni rizik, operativni rizik, i rizik usklađivanja kreditnog vrednovanja.

Razgovarali smo o strateškim opcijama banaka za rješavanje Bazela 4, koje će se vjerovatno prvenstveno fokusirati na korekciji svojih portfolija proizvoda i klijenata i postizanje operativne efikasnosti. Dok rok i suština djelova zakonodavstva Evropske unije ostaju i dalje nejasni, banke treba da počnu da razmatraju puni uticaj koji bi oni mogli imati na njihove sisteme i procese, poslovni model i kapital.

## UTICAJ BAZELA 4 NA BANKE U EVROPSKOJ UNIJI

Evropski bankarski regulator (EBA) objavio je analizu uticaja Bazela 4 na banke u Evropskoj uniji, kojom se pokazuje povećanje zahtjeva za izdvajanjem potrebnog kapitala od oko 25 procenata za velike i međunarodno aktivne banke.

Glavni rezultati su uglavnom konzistentni sa inicijalnim procjenama koje su urađene upotrebom Instrumenta KMPG-a za analizu srodnih banaka.

## IMPLIKACIJE ZA KOMPANIJE

**Kapital** – kako je o tome obrazloženo u seriji članaka KMPG-a o Bazelu 4 početkom ove godine, neke banke će se suočiti sa značajno većim minimalnim potrebnim kapitalom zbog novih standarda Bazelskog komiteta. U nekim slučajevima, ovi veći zahtjevi su već ispunjeni u bankama koje drže kapital dosta iznad minimalnog nivoa, ali biće potrebno da neke banke donesu važne odluke o tome da li da poboljšaju koeficijente kapitala kroz emisiju novog kapitala, upotrebu neraspoređene dobiti, ili smanjenje rizikom ponderisane aktive tokom perioda kada će vjerovatno povraćaj na kapital ostati nizak.

**Optimizacija kapitala** – bez obzira na to da li su one ograničene u pogledu kapitala, banke će morati da odluče da li da primijene pristupe zasnovane na internim modelima (tamo gdje su oni još uvijek na raspolaganju), i da li da usklade portfolija aktive kao odgovor na promjene ponderisanja rizika.

**Podaci i sistemi** – najznačajniji uticaj novih Bazelskih standarda za mnoge banke će biti potreba da se ažuriraju

# Basel 4 – Standards More Onerous for Banks

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In 2013, KPMG predicted the emergence of ‘Basel 4’ even before Basel 3 had been fully implemented. Looking back, we see much of what we predicted has come to pass, and in some cases where international standards and national regulation have become more onerous for banks.

Despite what the standard setters may say, Basel 4 is real and it will increase capital requirements and funding costs, which will impact banks’ ability to lend and therefore hit the wider economy.

The final article brings together the full analysis of the series; the new standardised and internal ratings based approaches to credit risk, the impact of the output floor on market risk, operational risk, and credit valuation adjustment risk.

We discuss banks’ strategic options to address Basel 4, which are likely to focus primarily on adjusting their product and client portfolios, and on achieving operational efficiencies. While the timing and substance for parts of the EU legislation remain unclear, banks need to start considering the full impact that these could have on their systems and processes, business model and capital.

*“Despite what the standard setters may say, Basel 4 is real and it will increase capital requirements and funding costs, which will impact banks’ ability to lend and therefore hit the wider economy*

## IMPACT OF BASEL 4 ON EU BANKS

The European Banking Authority (EBA) has published an analysis of the impact of Basel 4 on EU banks, showing increases in capital requirements of around 25 percent for large and internationally active banks. The main results are broadly consistent with initial estimates using the KPMG Peer Bank tool.

## IMPLICATIONS FOR FIRMS

**Capital** - as discussed in KPMG’s series of papers on Basel 4 earlier this year, some banks will face significantly higher minimum capital requirements as a result of the new Basel Committee standards. In some cases these higher requirements are already met through banks holding capital well

in excess of current minimum requirements, but some banks will need to take important decisions on whether to improve their capital ratios through issuing new capital, retained earnings, or a reduction in risk weighted assets, during a period when return on equity is likely to remain low.

*“Dok rok i suština djelova zakonodavstva Evropske unije ostaju i dalje nejasni, banke treba da počnu da razmatraju puni uticaj koji bi oni mogli imati na njihove sisteme i procese, poslovni model i kapital*

podaci, sistemi i (interno i eksterno) izvještavanje, a ne da se ispune veći kapitalni zahtjevi.

**Širi kontekst** – banke treba da procijene i odgovore na uticaj revidiranih standarda kapitala u širem kontekstu ostalih regulatornih reformi i kretanja tržišta – revizija internih modela Evropske centralne banke (ECB), dodatna sposobnost pokrivanja gubitaka (pri čemu će 15-20 procenata povećanja rizikom ponderisane aktive u skladu sa Bazelom 4 dovesti istovremeno do većih zahtjeva za ukupnom sposobnošću pokrivanja gubitaka (TLAC) i većih minimalnih zahtjeva za regulatornim kapitalom i kvalifikovanim obavezama (MREL), planiranje oporavka i sanacije, rješavanje nekvalifikovanih izloženosti, dodatno izvještavanje prema supervizorima i javna objelodanjivanja iz Stuba 3, mogućnosti promjena tretmana kapitala izloženosti riziku države, i konkurentne prijetnje i mogućnosti koje predstavljaju finansijske tehnologije.

### GLAVNI REZULTATI

EBA u svojim analizama smatra da će reforme Bazela 4 zasnovanog na riziku (reformе u vezi kreditnog, tržišnog i operativnog rizika, najnižeg dozvoljenog nivoa rizikom ponderisane aktive i usklađivanje vrednovanja kredita) povećati ponderisani prosjek zahtjeva za minimalnim osnovnim rizičnim kapitalom uzorka od 38 velikih i međunarodno aktivnih banaka u Evropskoj uniji za 23 procenta (i povećanje od 26 procenata za globalno systemske važne banke (G-SIB) u okviru tog uzorka).

Elementi koji su doprinijeli ovim povećanjima su bili:

- Najniži dozvoljeni nivo rizikom ponderisane aktive – povećanja ukupnih zahtjeva rizičnog kapitala od 6,5 procenata (5,4 procenta za G-SIB). Ovo postaje značajno čim taj najniži dozvoljeni nivo dostigne 65 procenata (planirano za januar 2025).
- Zahtjevi za operativni rizik – povećanje od 6,4 procenta (7,5 procenata za G-SIB). Najveći uticaj ovdje je na banke koje migriraju sa pristupa naprednog mjerenja, zatim na banke sa visokim operativnim gubicima iz prethodnog perioda, i na velike banke koje će biti predmet visokih marginalnih koeficijenata na svoje poslovne parametre.
- Zahtjevi za kreditni rizik – povećanje od 4,5 procenata (4,7 procenata za G-SIB). EBA u svojim analizama smatra da su po klasi aktive najveća povećanja za vlasničke hartije od vrijednosti, ulaganja u kapital drugih pravnih lica i subordinisani dug i instrumente kapitala osim vlasničkog kapitala, iako ove klase aktive neće biti glavni doprinosioci ukupnom povećanju minimalnih zahtjevaza izdvajanjem potrebnog kapitala za kreditni rizik.
- Usklađivanje vrednovanja kredita – povećanje od 3,8 procenata (5,4 procenta za G-SIB).
- Tržišni rizik – povećanje od 2,3 procenta (3,44 procenta za G-SIB). Značajno prosječno povećanje minimalnog potrebnog kapitala za tržišni rizik od 52 procenta za velike i međunarodno aktivne banke u Evropskoj uniji (i oko 70 procenata za G-SIB) izaziva relativno mali uticaj na ukupan potrebni kapital, jer za većinu banaka tržišni rizik predstavlja relativno malu komponentu u ukupnim rizikom ponderisanim izloženostima. Minimalni potrebni kapital za tržišni rizik kod standardizovanog pristupa se povećava u prosjeku za 200 procenata, dok je uticaj na minimalni potrebni kapital kod pristupa internih modela mnogo više prigušen (oko 20 procenata).

Alternativno predstavljanje uticaja je da se uporede koeficijenti kapitala banaka u skladu sa (kompletnim) zahtjevima Bazela 4 sa koeficijentima iz kompletnih zahtjeva Bazela 3 (EU CRR i CRD4). Ovo pokazuje smanjenje koeficijenata redovnog osnovnog kapitala (CET1) sa 13,8 procenata na 11,1 procenat (i sa 12,7 procenata na 10,1 procenata za G-SIB).

Ova smanjenja koeficijenata kapitala takođe stvaraju nedostatak kapitala za neke banke kada se to uporedi sa

**Capital optimisation** – irrespective of whether they are capital constrained, banks will need to decide whether to apply to use internal model approaches (where these are still available), and whether to adjust their asset portfolios in response to changes in risk weightings.

**Data and systems** - for many banks the most significant impact of the new Basel standards will be on the need to upgrade their data, systems and (internal and external) reporting, rather than on meeting higher capital requirements.

**Wider context** – banks need to assess and respond to the impact of the revised capital standards in the broader context of other regulatory reforms and market developments – the European Central Bank (ECB)’s review of internal models, additional loss absorbing capacity (where the 15-20 percent increase in risk weighted assets under Basel 4 will also drive correspondingly higher TLAC and MREL requirements), recovery and resolution planning, addressing non-performing exposures, additional supervisory reporting and Pillar 3 public disclosures, the possibility of changes to the capital treatment of sovereign risk exposures, and the competitive threats and opportunities posed by fintech.

**MAIN RESULTS**

The EBA’s analysis finds that the risk-based Basel 4 reforms (to credit, market and operational risk, the output floor and the credit valuation adjustment) will increase the weighted average Tier 1 minimum risk-based capital requirement of the sample of 38 large and internationally active EU banks by 23 percent (and by 26 percent for the global systemically important banks (G-SIBs) within this sample).

The contributors to these increases were:

- **The output floor** - an increase in overall risk-based capital requirements of 6.5 percent (5.4 percent for G-SIBs). This becomes significant once the output floor reaches 65 percent (scheduled for January 2025).
- **Operational risk requirements** - increase of 6.4 percent (7.5 percent for G-SIBs). The largest impacts here are on banks migrating from the advanced measurement approach, on banks with high past operational losses, and on large banks that will be subject to high marginal coefficients on their business indicators.

*“While the timing and substance for parts of the EU legislation remain unclear, banks need to start considering the full impact that these could have on their systems and processes, business model and capital*

- **Credit risk requirements** – increase of 4.5 percent (4.7 percent for G-SIBs). The EBA analysis finds that the largest increases by asset class are for equities, equity investment in funds, and subordinated debt and capital instruments other than equity, although these asset classes are unlikely to be major contributors to the overall increase in minimum capital requirements for credit risk.
- **Credit valuation adjustment** – increase of 3.8 percent (5.4 percent for G-SIBs).
- **Market risk** – increase of 2.3 percent (3.4 percent for G-SIBs). A substantial average increase in minimum capital requirements for market risk of 52 percent for large and internationally active EU banks (and around 70 percent for G-SIBs) translates into a relatively small impact on overall capital requirements, because for most banks market risk is a relatively small component of total risk weighted exposures. Minimum capital requirements for market risk under the standardised approach increase on average by 200 percent, while the impact on minimum capital requirements under the internal models approach is much more muted (at around 20 percent).

An alternative presentation of the impact is to compare banks’ capital ratios under the (fully loaded) Basel 4 standards against their ratios under the fully loaded Basel 3 (EU CRR and CRD4) requirements.

potrebnim kapitalom iz Bazela 4, uključujući zahtjeve za zaštitne slojeve čuvanja kapitala i bilo koji dodatak kapitala za G-SIB. Ovi nedostaci su koncentrisani na G-SIB, koje se suočavaju sa nedostacima od 5 milijardi EUR za potreban CET 1 i 12 milijardi EUR za potreban osnovni kapital.

EBA napominje da su ovo relativno mali iznosi nedostataka u poređenju sa nivoima kapitala koje su banke povećale ili zadržale od 2010. godine, s obzirom na dug tranzicioni period prije potpunog stupanja na snagu Bazela 4. Međutim, treba takođe napomenuti da EBA u svojim analizama upoređuje stvarne koeficijente kapitala sa samo podsetom minimalnog potrebnog kapitala – zahtjevi za potrebnim kapitalom iz Bazela 4 koje je EBA koristila ne uključuju sve zaštitne slojeve kapitala koji se zahtijevaju da banke ispune, uključujući naročito bilo koje dodatne zaštitne slojeve za sistemski rizik i potrebni kapital iz Stuba 2. Oni bi mogli dodati 5 procentnih poena ili više na minimalni potrebni kapital, koji bi povećali značajno izmjerene nedostatke kapitala.

Uticao na reforme zasnovane na riziku je u određenoj mjeri kompenzacija za koeficijent zaduženosti iz posljednjih reformi. Ove revizije povećavaju koeficijente zaduženosti banaka sa 5,1 procenat na 5,4 procenta za velike i međunarodno aktivne banke u Evropskoj uniji u uzorku koji je uradila EBA (i sa 4,8 procenata na 5,2 procenta za G-SIB). Ovo znači da koeficijent zaduženosti predstavlja obavezujuće ograničenje za manji broj banaka (bez obzira na veći koeficijent zaduženosti za G-SIB). Prema tome, ukupni obavezujući minimum potrebnog osnovnog kapitala (zahtjevi za izdvajanjem potrebnog rizičnog koeficijenta ili koeficijenta zaduženosti, u zavisnosti od toga koji je veći) povećan je za 19 procenata (i za 25 procenata za G-SIB).

EBA u svojim analizama takođe pokazuje – što je konzistentno sa procjenama KPMG-a upotrebom

Instrumenta za analizu srodnih banaka – širok opseg rezultata na nivou individualne banke (iako EBA ne identifikuje te banke). Ovo je najizraženije za tržišni rizik, gdje su opsezi uticaja veoma široki.

#### METODOLOGIJA

EBA u svojim analizama procjenjuje uticaj na banke u Evropskoj uniji finalne revizije Bazelskog komiteta (kako je to dogovoreno u decembru 2017. godine) koja se odnosi na koeficijent zaduženosti, kreditni rizik,

operativni rizik i uvođenje zbirnog najnižeg dozvoljenog nivoa rizikom ponderisane aktive, kao i na nove standarde za tržišni rizik (kako je to dogovoreno u januaru 2016. godine) i usklađivanje kreditnom vrednovanju (CVA). Analiza ne obuhvata zahtjeve za banke da ispune dodatne zaštitne slojeve kapitala ili da ispune zahtjeve za sposobnost pokrivanja

*“Evropski bankarski regulator (EBA) objavio je analizu uticaja Bazela 4 na banke u Evropskoj uniji, kojom se pokazuje povećanje zahtjeva za izdvajanjem potrebnog kapitala od oko 25 procenata za velike i međunarodno aktivne banke*

gubitka (MREL i TLAC).

Uticao se procjenjuje upotrebom podataka na kraju 2017. godine, pretpostavljajući punu implementaciju Bazelskih reformi (uključujući u potpunosti postepen prelazak na najniži dozvoljeni nivo rizikom ponderisane aktive koji je planiran da se završi do 2027. godine). Analiza se zasniva na uzorku od 38 banaka koje pripadaju „Grupi 1“ (međunarodno aktivne banke kod kojih osnovni kapital prelazi 3 milijarde EUR) i 63 banke iz „Grupe 2“ (sve ostale banke).

Procjena minimalnog potrebnog kapitala koji se zasniva na koeficijentu zaduženosti uključuje minimalni zahtjev (od 3 procenta) za sve banke i dodatnih 50 procenata dodatka rizičnog kapitala za globalno sistemski važne banke, gdje se to može primijeniti.

Namjera postojeće procjene je da obezbijedi prve naznake uticaja Bazela 4, prije detaljnijeg izvještaja (na osnovu proširenog uzorka i podataka na kraju juna 2018. godine) kao odgovor na poziv Evropske komisije za dostavljanje mišljenja.

This shows a reduction in CET1 capital ratios from 13.8 percent to 11.1 percent (and from 12.7 percent to 10.1 percent for G-SIBs).

These reductions in capital ratios also generate capital shortfalls for some banks when compared against Basel 4 capital requirements, including the requirements for the capital conservation buffer and any G-SIB capital surcharge. These shortfalls are concentrated on G-SIBs, who face shortfalls of €5 billion and €12 billion against CET1 and Tier 1 capital requirements respectively.

The EBA observes that these are relatively small shortfall amounts compared with the amounts of capital that banks have raised or retained since 2010, and given the long transitional period before Basel 4 comes fully into effect. However, it should also be noted that the EBA analysis compares actual capital ratios against only a sub-set of minimum capital requirements – the Basel 4 capital requirements used by the EBA do not include all the capital buffers that banks are required to meet, including in particular any additional systemic risk buffers and Pillar 2 capital requirements. These could add 5 percentage points or more to minimum capital requirements, which would increase substantially the measured capital shortfalls.

To some extent the impact of the risk-based reforms is offset by the latest reforms to the leverage ratio. These revisions increase banks' leverage ratios from 5.1 percent to 5.4 percent for the large and internationally active EU banks in the EBA sample (and from 4.8 percent to 5.2 percent for G-SIBs). This makes the leverage ratio a binding constraint for fewer banks (notwithstanding the higher leverage ratio for G-SIBs). So the overall binding minimum Tier 1 capital requirements (the higher of the risk-based and leverage ratio requirements for each bank) increase by 19 percent (and by 25 percent for G-SIBs).

The EBA's analysis also shows – consistent with KPMG's estimates using the Peer Bank tool – a wide range of outcomes at the individual bank level (although the EBA does not identify these banks). This is most pronounced for market risk, where the impact ranges are very wide.

## METHODOLOGY

The EBA's analysis assesses the impact on EU banks of the Basel Committee's final revisions (as agreed in December 2017) to the leverage ratio, credit risk, operational risk, and the introduction of the aggregate output floor; and of the new standards for market risk (as agreed in January 2016) and credit valuation adjustment (CVA). The analysis does not cover requirements on banks to meet additional capital

*“The European Banking Authority (EBA) has published an analysis of the impact of Basel 4 on EU banks, showing increases in capital requirements of around 25 percent for large and internationally active banks*

buffers or to meet loss absorbing capacity (MREL and TLAC) requirements.

The impact is assessed using end-2017 data, assuming the full implementation of the Basel reforms (including the full phasing in of the output floor, scheduled to be completed by 2027). The analysis is based on a sample of 38 'Group 1' banks (internationally active banks with Tier 1 capital in excess of €3 billion) and 63 'Group 2' (all other) banks.

The estimation of the leverage ratio-based minimum capital requirement includes both the minimum requirement (of 3 percent) for all banks and the additional 50 percent of the risk-based capital surcharge for global systemically important banks, where applicable.

The current assessment is intended to provide a first indication of the impact of Basel 4, ahead of a more detailed report (based on an expanded sample and on data as of end-June 2018) in response to the European Commission's call for advice.



Mirjana Volkov,  
Agencija za zaštitu ličnih  
podataka i slobodan pristup  
informacijama Crne Gore

# EU standardi o zaštiti ličnih podataka obavezni i u Crnoj Gori

*“GDPR će u narednih 20 godina biti "zlatni standard zaštite ličnih podataka". On predstavlja kvalitetnu nadgradnju dosadašnjeg sistema zaštite ličnih podataka koja propisuje pravila, procedure, obaveze, mjere ali i oštre kazne*

**K**ao što je poznato, Opšta Uredba o zaštiti podataka o ličnosti (GDPR - General Data Protection Regulation) se primjenjuje u Evropskoj uniji od 25. maja ove godine. Međutim, teritorijalna primjena

obrađuju treba da izvrši plaćanje ili ukoliko prate ponašanje lica koje se odvija unutar EU. Dakle, Uredba se primjenjuje i na tzv. nadnacionalne kompanije koje posluju na internetu i obrađuju podatke građana EU.

Prema riječima stručnjaka, GDPR će u narednih 20 godina biti "zlatni standard zaštite ličnih podataka". GDPR predstavlja kvalitetnu nadgradnju dosadašnjeg sistema zaštite ličnih podataka koja propisuje pravila, procedure, obaveze, mjere ali i oštre kazne. Najvjerovatnije su, kao i kod ostalih propisa, kazne opredjeljujuće zbog čega se dugo i naširoko govorilo o ovoj temi a o čemu svjedoči i činjenica da je ovo jedan od najkompleksnijih

*“Rigorozna kaznena politika, od koje se i pošlo prilikom izrade Uredbe, je odjeknula i podstakla subjekte da se posvete uređenju sistema zaštite ličnih podataka kako bi se na vrijeme reagovalo i izbjegle kazne koje dosežu do 20 miliona eura ili 4% ukupnog bruto prihoda kompanije na globalnom nivou*

Uredbe je šira od područja EU tako da svoje poslovanje sa odredbama GDPR-a treba da usklade i kompanije iz zemalja koje nisu članice EU, ukoliko se njihova djelatnost bazira na nuđenju roba i usluga licima koja se nalaze u EU bez obzira na to da li lice čiji se podaci

# EU Standards on the Personal Data Protection Compulsory also in Montenegro

Mirjana Volkov,  
Agency for Personal Data  
Protection and Free Access to  
Information

*“GDPR will become the “golden standard of the personal data protection” in the next 20 years. GDPR is a qualitative upgrade of the current system of the personal data protection that prescribes rules, procedures, obligations, measures and severe fines*

the territory of the EU. Thus, companies coming from the non-EU member states should align their operations with the provisions of the GDPR, if their activity is based on offering goods and providing services to persons within the EU regardless of whether a per-

General Data Protection Regulation (GDPR), as generally known, has been applied in the European Union since 25 May 2018. However, the implementation of the Regulation goes far beyond

son whose data are processed should make payment in the EU or behaviour of a person being monitored is done within the EU. Therefore, the Regulation is applied also to supranational companies operating on the Internet and processing data of the EU citizens.

*“Severe penalty provisions underlying the drafting of the Directive echoed and instigated entities to pay attention to the organisation of the personal data protection system in order to react in a timely manner and avoid fines that may reach up to 20 million euros or 4% of total gross income of a company in global terms*

According to the professionals, GDPR will become the “golden standard of the personal data protection” in the next 20 years. GDPR is a qualitative upgrade of the current system of the personal data protection that prescribes rules, procedures, obligations, measures and severe fines. Most likely, as it is the case with other regulations, fines have been a determining factor for having

dokumenata EU na koji je uloženo oko 4.000 amandmana, koji je uvođen 2016. godine a čija je primjena, kako bi se ostavilo prostora za prilagođavanje, odložena za naprijed navedeni datum. Rigorozna kaznena politika, od koje se i pošlo prilikom izrade Uredbe, je odjeknula i podstakla subjekte da se posvete uređenju sistema zaštite ličnih podataka kako bi se na vrijeme reagovalo i izbjegle kazne koje dosežu do 20 miliona eura ili 4% ukupnog bruto prihoda kompanije na globalnom nivou.

Šta to ustvari znači? Jednostavno rečeno, izricanje kazne je ogroman udarac na poslovanje kompanije ali i kompromitacija kao nepouzdana i neodgovorne prema klijentima čiji se podaci obrađuju. Dakle, ukoliko kompanija posluje u više zemalja (članica EU ili trećih zemalja) i pri tom obrađuje podatke građana EU dužna je da se pridržava GDPR-a jer će se kazna mjeriti u odnosu na globalni bruto prihod a ne na prihod koji se ostvaruje u određenoj zemlji gdje se desila povreda prava. GDPR je u funkciji građanina EU koji je u fokusu Uredbe a kojem se omogućava unificiran sistem zaštite ličnih podataka, baziran na osnovama lokalnog zakonodavstva, bez obzira gdje se njegovi lični podaci obrađuju.

Uredba o zaštiti podataka o ličnosti kao adekvatan odgovor na, prije svega, tehnološki razvoj automatske obrade ličnih podataka u cilju sprječavanja eventualnih zloupotreba, uvodi koncept obrade ličnih podataka po dizajnu i po pravilu (Privacy by design & Privacy by default) kao i pravo na zaborav



(right to be forgotten). Činjenica je da apsolutna zaštita ličnih podataka ne postoji ali i da GDPR propisuje procedure za prevenciju zloupotreba jer su sami subjekti u obavezi da dokažu da su preduzeli sve potrebne mjere kako ne bi došlo do povrede prava na zaštitu ličnih podataka.

GDPR, logično, najprije pogađa najveće zato najveći treba da budu i najspremniji za Uredbu. Sektorski gledano to su kompanije koje se bave telekomunikacijama, internet kompanije, bankarstvo, turizami dr. i koje u značajnom obimu obrađuju lične podatke građana EU.

Pojedinačni sektori (udruženja), prema GDPR-u treba da imaju Kodekse ponašanja koji se odnose na aktivnosti obrade ličnih podataka i koji doprinose pravilnoj primjeni Uredbe a na koje će saglasnost davati nadzorni organ za zaštitu ličnih podataka. Kodeksi se mogu, uz saglasnost nadzornog organa, prilagođavati odnosno mijenjati i dopunjavati. Nadzorni organ odobrava i korporativna pravila koja su pravno obavezujuća i primjenjuju se na svakog zainteresovanog člana povezanih društava odnosno grupe preduzeća koja obavljaju zajedničku privrednu djelatnost.



a very long and wide discussions on this topic. This is also supported by the fact that the GDPR is one of the most complex EU documents, which experienced some 4,000 amendments. Although it was adopted in 2016, its application has been postponed until the abovementioned date. Severe penalty provisions underlying the drafting of the Directive echoed and instigated entities to pay attention to the organisation of the personal data protection system in order to react in a timely manner and avoid fines that may reach up to 20 million euros or 4% of total gross income of a company in global terms.

What does it actually mean? Simply put, imposing a fine represents a huge impact on the operations of a company thereby compromising it as an unreliable and irresponsible legal entity for the clients whose data are processed. Thus, if a company does business in several countries (EU member states or third countries) and processes data of the EU citizens, it is obliged to comply with the GDPR since fines will be measured against global gross revenue rather than the revenue made in a specific country where rights were violated. GDPR is in the function of the EU citizen, who is in the focus of

the Regulation and who has the right to the uniform system of the personal data protection. This system is based on the local legislation regardless of the location where his data are processed.

General Data Protection Regulation introduces, as an adequate response primarily to the technological development of automated processing of personal data in order to prevent potential misuses, a concept of personal data protection/privacy by design and by default and the right to be forgotten. The fact is that there is no absolute personal data protection, and that the GDPR also prescribes the procedures for preventing misuses as the entities are obliged to prove that they have taken all measures necessary to prevent violation of rights to personal data privacy.

Logically speaking, GDPR first hits the largest companies, which have to be the most prepared for the Regulation. With regard to different industries, these are the companies engaged in the telecommunications, internet companies, banks, tourism, which to the significant extent process personal data of the EU citizens.

According to the GDPR, individual sectors (associations) should have their codes of conduct in place that refer to the activities of personal data processing and contribute to the proper implementation of the Regulation. Supervisory authority responsible for personal data protection will give approvals for these codes of conduct. Codes of conduct may, with the prior approval of the supervisory authority, be amended or extended. Supervisory authority approves also corporate rules that are legally binding and apply to

U Crnoj Gori posluju kompanije koje imaju izgrađen globalni imidž i prepoznatljivost kao sinonim za kvalitet usluge i pouzdanost. Sigurna sam da sebi neće dozvoliti luksuz da se ograde od Uredbe i zanemare ono što propisuje bez čekanja da se dogodi pojedinačni problem koji bi bio alarm. Svakako, na usklađivanju poslovanja sa Uredbom treba da

*“Ne možemo razumjeti, tumačiti i primjenjivati GDPR ako nijesu savladani osnovni pojmovi o zaštiti ličnih podataka i primijenjene nužne tehničke, kadrovske i organizacione mjere zaštite*

insistiraju i tzv. "majke kompanija" koje su sa sjedištem u EU i koje već imaju poslovnu politiku zaštite ličnih podataka baziranu na pravilima GDPR-a.

Dakle, i ovdje važi zlatno pravilo "bolje prevenirati nego rizikovati". Tog pravila bi trebalo da se pridržavaju kompanije iz Crne Gore koje posluju sa građanima EU i obrađuju njihove lične podatke ali najprije i da implementiraju standarde i realizuju obaveze koje trenutni zakonski akt o zaštiti ličnih podataka propisuje, što podrazumijeva da se implementacija GDPR-a vrši na dobrim

osnovama predviđenim nacionalnim zakonom. Ne možemo razumjeti, tumačiti i primjenjivati GDPR ako nijesu savladani osnovni pojmovi o zaštiti ličnih podataka i primijenjene nužne tehničke, kadrovske i organizacione mjere zaštite. Iz godine u godinu, bilježi se trend rasta svijesti o zaštiti ličnih podataka, kako kod rukovaoca zbirka

ličnih podataka tako i kod građana. Generalno gledano, nivo zaštite ličnih podataka kod privrednih subjekata koji posluju na teritoriji CG još uvijek nije zadovoljavajući, ali su pomaci i težnja za unapređenjem evidentni. Ono što treba istaći jeste kooperativnost kontrolisanih subjekata u postupanju po nalogu Agencije za zaštitu ličnih podataka i slobodan pristup informacijama kao nadzornog organa. S toga, za adekvatnu primjenu GDPR-a neophodna je edukacija zaposlenih (naročito pravnika, IT stručnjaka i svih onih koji neposredno obrađuju lične

podatke) koja je ključna i, svakako, finansijski dugoročno isplativija od plaćanja visokih kazni a u kojoj će Agencija za zaštitu ličnih podataka i slobodan pristup informacijama biti pouzdan partner.

Najvažniju ulogu u kompaniji, u segmentu zaštite ličnih podataka treba da ima DPO (Data Protection Officer) odnosno službenik za zaštitu ličnih podataka, kojeg u ovom trenutku imenovanog ima mali broj rukovaoca zbirka ličnih podataka u CG. GDPR službenika stavlja u centar korporativnog sistema zaštite ličnih podataka kao prvu kontakt

tačku sa licem čiji se podaci obrađuju. Dakle, službenika treba da imenuje svaka ozbiljna kompanija koju će na tržištu, između ostalog, preporučivati i sigurnost ličnih podataka klijenata, a što je i preporuka WP29 (Radne grupe iz člana 29). Pored imenovanja službenika, mjerilo da rukovalac ispunjava standarde zaštite ličnih podataka biće i sertifikat o adekvatnosti mjera zaštite ličnih podataka koji će se izdavati od strane tijela određenog nacionalnim zakonom na ograničeni vremenski period nakon čega se mora revidirati. DPO će imati neposredni kontakt kako sa licima čiji se podaci obrađuju tako i sa nadzornim tijelom za zaštitu ličnih podataka jer Uredba lice najprije upućuje na rješavanje problema obraćanjem kompaniji a tek nakon toga, ukoliko se ne riješi problem, na obraćanje nadležnom tijelu za zaštitu ličnih podataka.

Kompanija koja obrađuje podatke većeg broja lica, uključujući i građane EU koja drži do svoje reputacije i poslovanje bazira na povjerenju klijenata ne smije rizikovati da zbog neblagovremenog djelovanja dođe do povrede prava na zaštitu ličnih podataka odnosno kršenja GDPR-a.

Crna Gora kao zemlja koja teži članstvu u EU, svoje zakonodavstvo usklađuje sa evropskim što podrazumijeva da će u narednom periodu i Zakon o zaštiti podataka o ličnosti biti usklađen sa GDPR-om. Donošenjem novog Zakona biće riješene brojne dileme u vezi sa primjenom Uredbe u Crnoj Gori, propisana konkretna rješenja za sve rukovaoce koji posluju na teritoriji naše države i samim tim i građanima Crne Gore omogućen nivo zaštite u ovoj oblasti koji uživaju građani EU.



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any interested member of the group of undertakings or group of enterprises performing joint economic activity.

In Montenegro operate companies with the global image and recognizability as a synonym for the quality of service provided and reliability. We are confident that these companies will not allow themselves to circumvent the Regulation and neglect what is prescribed and they will not wait for individual problem to emerge. Surely, EU parent companies should also insist on aligning of the operations with the Regulation, being the companies that already have in place their business policies for the personal data protection based on the GDPR.

Thus, the golden rule “better prevent than risk” applies here as well. Companies in Montenegro that operate with the EU citizens and process their personal data should adhere to this rule. They should also implement standards and meet obligations prescribed by the current law on personal data protection. This implies that the GDPR is implemented on good bases stipulated by the national law. We cannot understand, interpret or implement the GDPR without understanding first the basic terms on the personal data protection and implementing necessary technical, staffing and organisational measures of protection. An uptrend of the awareness of the personal data protection has been evident over the years in both personal data filing system controllers and citizens. In general, the level of the personal data in economic entities operating at the territory of Montenegro has not been satisfactory yet, but steps forward that were made and aspiration to improve are obvious. Cooperation of the controlling entities and their compliance with the orders of the Agency for Personal Data Protection

and Free Access to Information, as a supervisory authority, should be highlighted. Therefore, employee training is necessary for adequate implementation of the GDPR (in particular, lawyers, IT experts and those directly processing personal data). This training is very important and cost-effective in a long run, rather than paying high fines. The Agency for Personal Data Protection and Free Access to Information will

*“We cannot understand, interpret or implement the GDPR without understanding first the basic terms on the personal data protection and implementing necessary technical, staffing and organisational measures of protection*

be a reliable partner in the training.

Data Protection Officer (DPO) should have the most important role in the company in the area of personal data protection. Unfortunately, there is a small number of controllers of personal data filing system in Montenegro. GDPR stipulates that the DPO is in the centre of the corporate system of the personal data protection as a first contact point with a person subject to data processing. Thus, DPO should be appointed by every serious company that will also recommend in the market, inter alia, the security of personal data of client as it is the recommendation WP29 (Article

29 Working Party). In addition to the DPO appointment, a certificate on adequacy of measures for personal data protection will be another benchmark indicating that the controller meets standards of personal data protection. This certificate will be issued by an authority designated by the national law for a limited period, after which it has to be revisited. DPO will have a direct contact with both persons subject to data

processing and supervisory authority for personal data protection. According to the Regulation, a person should address the company first to resolve the problem, and if the problem is not resolved, the person addresses the supervisory authority for personal data protection.

A company, which processes data of a large number of persons, including also EU citizens, protects its reputation, and bases its business on the clients’ confidence must not take any risks due to untimely action of breach of right to

the protection or violation of GDPR.

Montenegro, as a country aspiring to become EU member state, aligns its legislation with the EU Acqui. This means that the Law on Personal Data Protection will be aligned with the GDPR in the future. Numerous dilemma arising from the implementation of the Regulation in Montenegro will be resolved once the new Law is passed, whereby specific rules will be prescribed for all controllers operating in Montenegro, and Montenegrin citizens will enjoy the same level of protection in this area that EU citizens are enjoying.

# Otpornost na sajber kriminal glavni prioritet na globalnom nivou

Antonio Garcia Del Riego, menadžer za evropske korporativne poslove u banci Santander



Tokom poslednjih nekoliko godina, izvori i protok podataka i dalje rastu po značajnoj stopi, stvarajući pri tome ne samo nove poslovne mogućnosti već i ogromne potencijalne rizike. Sajber bezbjednost ključnih infrastruktura je stoga postalo pitanje od značajnog interesa za većinu kompanija, sektora i zemalja. Ovaj članak za časopis **Bankar**, dopušta mi da pošaljem poruku prijateljstva i saradnje sa finansijskim sektorom Crne Gore. Veoma sam zahvalan Nebojši Đokoviću na njegovom pozivu da podijelim sa vama moje stavove o potrebi formulisanja na praktičan način prijetnji koje proizilaze iz sajber rizika.

Finansijske kompanije, kao operateri i glavni korisnici tih ključnih globalnih infrastruktura, izložene su širokom dijapazonu sajber napada. Zaista, međunarodni regulatori, kao što je IOSCO, nedavno su opisali sajber napade kao jednu od glavnih prijetnji finansijskom sektoru „*ljudski element sajber rizika, u kombinaciji sa ubrzanim razvojem tehnologija na finansijskim tržištima, ukazuje da regulatori i tržišni učesnici treba da posvete brzu i kontinuiranu pažnju ovoj temi*“. U istom stilu, Bazelski komitet za superviziju banaka (BCBS), na poslednjoj konferenciji o budućnosti Bazela III, identifikovao je sajber rizik kao jedan od glavnih rizika u usponu u ovom sektoru: što se više klijenata i kompanija oslanja na digitalne platforme za izvršavanje transakcija finansijskih usluga, banke, budući da su jedine koje nude većinu proizvoda i usluga za javnost, postaju značajno ranjive na potencijalne sajber napade.

*“Naše zabrinutosti odnose se na sadašnje aranžmane za razmjenu informacija kojima nedostaje istinsko udruživanje na globalnom nivou koje pokazuje veoma ograničenu saradnju tokom incidenata, koje ima mali broj prekogranične razmjene informacija i ne postoji glas na globalnom nivou koji bi uticao na globalnu regulativu*

U tom smislu, jedan od glavnih prioriteta Santandera i finansijskog sektora uopšte je da se unaprijedi otpornost na sajber napade – koji se razumiju kao sposobnost kompanije da identifikuje, spriječi, opazi i odgovori na neuspjeh procesa ili tehnologije i oporavak, smanjujući štetu klijentima, reputacionu štetu i finansijski gubitak. Naše zabrinutosti, koje su podijeljene sa ostatkom finansijskog sektora, odnose se na sadašnje aranžmane za razmjenu informacija kojima nedostaje istinsko udruživanje na globalnom nivou, koje geografski ograničeno, koje pokazuje veoma ograničenu saradnju tokom incidenata, koje ima mali broj prekogranične razmjene informacija i ne postoji glas na globalnom nivou koji bi uticao na globalnu regulativu.

## PRISTUP REGULATORA NA OTPORNOST NA SAJBER NAPADE

Regulatori sada zahtijevaju, kako na globalnom tako i na evropskom nivou, pojačanu saradnju između sektora i nadležnih organa u dvije glavne oblasti: s jedne strane, u definisanju bezbjedonosnih zahtjeva, dok s druge strane zahtijevaju saradnju u pogledu razmjene informacija

i znanja kada dođe do sajber napada.

Što se tiče definisanja bezbjedonosnih zahtjeva, regulatori su saglasni da će različiti zahtjevi jurisdikcija povećati složenost i teret učesnika finansijskog sektora. Oni smatraju da je u interesu svih da se usvoje konzistentni međunarodni standardi

# Cyber-resilience as a global key priority

Antonio Garcia Del Riego, Managing Director  
European Corporate Affairs at Banco Santander

Over the last few years, data sources and flows have continued to increase at a formidable rate, creating not only new business opportunities but also vast potential risks. Cyber security of critical infrastructures has therefore become a matter of increased interest for most companies, industries and countries. This article for the Bankar, allows me to send a message of friendship and collaboration to the financial sector of Montenegro. I am very grateful to Nebojsa Djokovic for inviting me to share with you our views on the need to frame in a practical way the threats that emanate from cyber risks

Financial firms, as operators and major users of those critical global infrastructures, are exposed to a wide variety of cyber-attacks. Indeed, international regulators such as IOSCO have recently described cyber-attacks as one of the main threats for the financial industry “the human element of cyber risk, combined with rapidly evolving technologies in financial markets, suggests that this topic requires swift and sustained attention by regulators and market participants”. In the same vein, the Basel Committee on Banking Supervision (BCBS), on its last conference on the future of Basel III, identified cyber risk as one of the main emerging risks in the sector: as more consumers and businesses rely on digital platforms to transact financial services, banks, being the ones offering the most public-facing products and services, become increasingly vulnerable to potential cyber-attacks.

customer harm, reputational damage and financial loss. Our concerns, commonly shared with the rest of the financial sector, relate to current arrangements for information sharing that lack a true global join-up, is geographically restricted, that shows very limited cooperation during incidents, that has little cross-sector information sharing and that there is not a global voice to influence a global regulation.

## REGULATOR'S APPROACH TO CYBER-RESILIENCE

Both at a global and European level, regulators are now pushing for increasing cooperation between the industry and the authorities in two main areas: on one hand, in defining security requirements, and on the other hand, in sharing information and knowledge when cyber-attacks occur.

Concerning the former, regulators agree that different requirements among national jurisdictions will increase complexity and the burden for financial industry participants. In their view, it is in everybody's interests to adopt consistent international standards, such as the ones agreed by the CPMI and the IOSCO, in order to harmonize rules and remove barriers across countries. However, it is important for these

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kao oni koje su dogovorili CPMI i IOSCO, kako bi se usaglasila pravila i uklonile barijere među državama. Međutim, važno je da ova pravila i dalje budu zasnovana na principima i riziku i da ne budu previše propisujuća: brzo rastuće tehnologije će neizbježno natjerati da se ovi zahtjevi dalje razvijaju.

U pogledu važnosti razmjene informacija između nadležnih organa i sektora, regulatori insistiraju na potrebi rada na dva ključna pitanja: prvo, potreba da se poveća brzina kojom se informacije o prijetnjama mogu razmijeniti. Ovo zahtijeva usaglašavanje vrste tehničkih informacija koje se razmjenjuju i ako je moguće revidiranje Sporazuma o saradnji koji su potpisali nadležni organi i institucije kako bi bolje uredili razmjenu informacija. Drugo se odnosi na situaciju kada je problem otkriven i riješen. U tim slučajevima, neophodna je aktivna komunikacija između različitih sistema kako bi se osiguralo da kompanije mogu ponovo raditi u duhu povjerenja, bezbjednosti i koordinacije.

Na kraju, kao dio šireg pristupa sajber otpornost odnosno otpornosti na sajber napade, regulatori su također zabrinuti u vezi dostupnosti talenata u ovoj oblasti. Oni pozivaju privatni sektor da saraduje kako bi nastavio sa naporima da proširi vještine u vezi kibernetike koje su kreirali univerzitetski programi za mlade talente i zadrže postojeće zaposlene nudeći im mogućnost kontinuiranog usavršavanja.

### PRISTUP SEKTORA SAJBER OTPORNOST

U pogledu bezbjedonosnih zahtjeva, sektor tvrdi da je potrebno ulagati dalje napore naročito u oblasti usaglašavanja regulative. Takođe, akteri na finansijskom tržištu upozoravaju da postojeći propisi koji mogu ugroziti sajber bezbjednost i poslovanje (kao što su propisi koji

oslabljuju jaku autentifikaciju u skladu sa PSD2) treba da budu riješeni jer bi mogli nenamjerno da smanje efikasnost nekih od bezbjedonosnih kontrola. Potrebno je da se uradi detaljna procjena rizika po sajber bezbjednost kako bi se pronašla prava ravnoteža između bezbjednosti i efikasnosti u ciljevima politike, propisno uzimajući u obzir preuzete rizike za cjelokupni finansijski sistem.

Finansijske institucije pozdravljaju mogućnost postojanja zajedničkih grupa za razmjenu informacija, ali razumiju teškoće za održavanje povjerenja kada se krugovi prošire van granica države. Sumnje u vezi sa informacijama se mogu razmijeniti, sa kim i pod kakvim uslovima se sprečavaju naponi za efikasnu razmjenu informacija. Prema tome, oni pozivaju regulatore da obezbijede pravu klimu i uslove za razmjenu informacija između srodnih grupa u privatnom sektoru. Isto tako, sektor takođe podržava kreiranje privatno – javnih partnerstava između finansijskih institucija i državnih nadležnih organa na nivou Evropske unije koji bi mogli da služe kao efikasan posrednik u razmjeni informacija. Zaista, s obzirom da trenutno ne postoji mehanizam na nivou Evropske unije, ova inicijativa bi mogla da bude izvor značajnih bezbjedonosnih prednosti za države u Evropskoj uniji.

### MIŠLJENJE SANTANDERA

U skladu sa potrebama sektora, Santander podržava holistički pristup sajber otpornosti na osnovu međunarodne saradnje u cilju unaprjeđenja usaglašenosti. Mi smatramo da je težnja prema globalnoj sajber jurisdikciji najbolje rješenje za usitnjenost regulative.

S tim u vezi, mi zahtijevamo okvir koji će se zasnivati na principima za regulativu o sajber rizicima. Ista aktivnost koja nosi isti rizik treba da bude podložna istim

pravilima i zahtjevima. Rizici po sajber bezbjednost ne treba da zavise od veličine kompanije ili stoženosti njenog poslovnog modela; sve vrste kompanije moraju biti obavezni da identifikuju, štite, otkrivaju, odgovaraju na sajber napade i oporave se od istih.

U pogledu pitanja u vezi sa razmjenom informacija, vjerujemo da bi usaglašavanje zahtjeva i procesa o izvještavanju o incidentima bilo izuzetno korisno za smanjenje složenosti, povećanje pokretljivosti i uvećanje dodate vrijednosti. Podržavamo dvostrani snažni proces komunikacije između kompanija i supervizora; mi izvještavamo o incidentima, ali takođe očekujemo protok informacija u drugom smjeru, koje nas upozoravaju na pojavu problema, prijetnji i na mjere za sprečavanje tih prijetnji.

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rules to remain both principle and risk-based and not be excessively prescriptive: fast-growing technologies will inevitably force these requirements to evolve.

Regarding the importance of information-sharing between authorities and the industry, regulators insist on the need to work on two critical issues: on one hand, a first need is to increase the speed at which information about threats can be shared. This requires harmonizing the type of technical information that is being shared and possibly also revisiting the MOU (Memorandum of Understanding) arrangements that exist across authorities and institutions in order to better organize information-sharing. On the other hand, the second issue refers to the situation when a problem has been detected and resolved. In these cases, it is necessary to communicate actively across different ecosystems to ensure that firms restart in a trusted, safe and coordinated manner.

Finally, as part of a broader approach to cyber-resilience, regulators are also concerned about the availability of talent in this field. They call on the private sector to cooperate so that it continues its efforts to expand cyber skills by creating university programmes for young talents and retaining existing staff through ongoing certification opportunities.

**INDUSTRY'S APPROACH TO CYBER-RESILIENCE**

As regards security requirements, the industry claims that further efforts need to be made, particularly in the area of harmonization of regulation. Moreover, financial players warn that existing regulations which may hamper cyber security and business (such as rules weakening strong authentication under PSD2) will need to be addressed as they could inadvertently reduce the effectiveness of some security controls. There needs to be a thorough assessment of cyber security risks to find the right balance between security and efficiency in policy objectives, duly taking into account the risk taken for the whole financial system.

*“There needs to be a thorough assessment of cyber security risks to find the right balance between security and efficiency in policy objectives, duly taking into account the risk taken for the whole financial system*

Financial institutions do also welcome the possibility to join information-sharing groups but they acknowledge difficulties to maintain trust when circles enlarge and expand beyond a country. Doubts regarding what

information can be shared, with whom and under what conditions are hindering efforts to effective information sharing. Therefore, they call on regulators to ensure the right climate and conditions to exchange information between private sector peers. In the same vein, the industry does also support the creation of public private partnerships between fi-

nancial institutions and public authorities at EU level that could serve as an efficient broke of information. Indeed, since there is at present no European-level mechanism, this initiative could be a source of significant security advantages for countries in the EU.

**SANTANDER'S POSITION**

In line with the industry claims, in Santander we support a holistic approach to cyber resilience based on international cooperation with the aim of promoting harmonization. In our opinion, striving towards a global cyber jurisdiction is the best solution to regulatory fragmentation.

In this context, we call for a principle-based framework for cyber risks regulation. The same activity posing the same risk should be subject to the same rules and requirements. Cybersecurity risks should not depend on the company's size or the complexity of their business model; all types of companies must commit to identify, protect, detect, respond and recover from cyberattacks.

On the information-sharing issue, we believe that the harmonization of incident reporting requirements and processes would be highly beneficial to reduce complexity, increase agility and maximize value added. We support a two-way robust communication process between companies and supervisors: we report incidents, but we also expect information to flow in the other direction, alerting us to emerging issues, threats, or counter-threat measures.

# Roboti u bankarstvu



Zarija Milić, Addiko bank Podgorica, Organization/ TOM, IT, REM & Cash management Managing Director

Digitalna transformacija je daleko više od implementacije novog softvera, a smanjenje troškova samo je jedna u nizu prednosti koje ona donosi bankama. Ona podrazumijeva upotrebu postojećih tehnologija i informacija za unaprjeđenje ili zamjenu poslovnih procesa, kao i stvaranje okruženja za digitalno poslovanje u kome informacija ima centralnu ulogu. Jedan od primjera transformacije je i uvođenje robota u poslovne procese banke.

Zahvaljujući inovacijama i tehnologijama koje implementira u kontinuitetu, Addiko ima za cilj da postane straightforward banka, sa snažnom orijentacijom na klijenta. U pomoć

ostvarenju ove misije uključili smo i robote, čiji pomen izaziva različite asocijacije. Neko zamišlja robota koji radi na proizvodnoj traci u fabrici automobila ili elektronskih uređaja, a najveći broj vjerovatno zamišlja robota iz SF filmova našeg djetinjstva. Bilo da se radi o šarmatnom R2D2 ili robotu koji proizvodi nama omiljena VW vozila, u većini slučajeva termin robot ćemo povezati sa skupom mašinom koja na inteligentan način zamjenjuje čovjekov rad. Danas roboti brzo postaju sastavni dio mnogih back office službi u bankarskom sektoru, nemajući mnogo sličnosti sa onima koji su upravo opisani.

Tehnologija „robotska automatizacija procesa“ (RPA - Robotic Process Automation) je alat koji se koristi u cilju dublje optimizacije poslova, smanjenja troškova i ubrzanja poslovnih procesa.

RPA ima zadatak da replicira

repetitivne aktivnosti zaposlenih na informacionim sistemima i softverima. Robot u većini slučajeva nije tu da obezbijedi kompletnu automatizaciju, već da repetitivne manuelne zadatke svede na minimum. Na taj način se zaposleni oslobađaju vremenski zahtjevnih, rutinskih poslova, a banka smanjuje operativne troškove.

Za banke je RPA značajna i u domenu korisničkog iskustva – robotizacija omogućava bankarskim službenicima da se više fokusiraju na klijente i ponude kvalitetnije usluge, da budu fokusirani na svoj core business.

Roboti se koriste uglavnom kod zadataka koji uključuju i back end aplikacije koje nemaju aplikativne interfejsne ili bi njihov razvoj bio skup, u bankarskom svijetu to je tipično za core banking sisteme koji su obično „robustni“. Roboti mogu da se nadgrade na postojeće sisteme i predstavljaju odličan work around, omogućavaju da se uz relativno niske troškove poboljša poslovna efikasnost. Naravno, kao i kod svake druge tehnologije, za uspješnu implementaciju i očekivane rezultate potrebno je i razumijevanje

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# Robots in Banking Industry

Zarija Milić, Addiko Bank Podgorica, Organization/ TOM, IT, REM & Cash management Managing Director

Digital transformation goes far beyond the implementation of a new software, and reducing costs is just one of the advantages that this transformation brings to banks. It implies the use of the current technologies and information to upgrade or replace business processes, as well as to create an environment for digital operations where information has the central role. The introduction of robots in the business processes of the bank is one of the examples of this transformation.

Thanks to the innovations and technologies it implements in the continent, the Addiko Bank aims

at becoming a straightforward bank that is strongly client-oriented. In order to achieve this mission, we included robots, the mention of which entails different associations. Someone imagines a robot that is working on the production lane in a car factory or electronic devices factory, and probably the largest number of people imagine robot as it is presented in sci-fi movies from our childhood. Whether this is a charming R2D2 or a robot that produces favourite VW vehicles, the term robot in majority of cases will be connected with an expensive device which replaces the manual work in an intelligent way. Nowadays,

*“In most of the cases, the robot is not here to provide full automation, but to reduce repetitive manual tasks to a minimum. Thus, the employees are freed up from time-consuming, routine operations, and the bank reduces its operating costs*

robots are becoming very fast an integral part of many back offices in the banking sector having very few common features with those described above.

The Robotic Process Automation (RPA) is a tool used for deep optimisation of operations, cost reduction and acceleration of business processes.

The RPA is aimed at replicating repetitive activities of employees in the information systems and software. In most of the cases, the robot is not here to provide full automation, but to reduce repetitive manual tasks to a minimum. Thus, the employees are freed up from time-consuming, routine operations, and the bank reduces its operating costs.

The RPA is important for banks also from the users' experience aspect – robotisation enable banking staff to focus more on clients, offer more qualitative services and concentrate more on their core business.

Robots are mostly used with tasks that include also back-end applications, which do not have application interface or which development would be expensive – in the banking industry, it is typical for core banking systems that are usually robust. Robots can be upgraded to the existing systems and represent an excellent work around enabling the improvement of business efficiency with relatively small costs. Surely, as in any other technology, understanding of the technology – its advantages, specificities and limitation is needed for its successful implementation.

Almost every interaction of an employee with the computer where specific decision making is not

*“Robot kreira izvještaje dva puta u toku dana, a u generisanim izvještajima se pored statistike knjiženja, vidi i eventualna greška, detaljno opisana. Ovaj robot, pored automatizacije ima i funkciju ublažavanja operativnog rizika*

tehnologije – njenih prednosti, specifičnosti kao i ograničenja.

Robotizovati se može praktično sve što zaposleni radi u interakciji sa računarom, a gdje se ne zahtijeva donošenje specifične odluke (logovanje na neki sistem, kopiranje, prikupljanje i prebacivanje podataka, razne kalkulacije itd).

Mi smo u banci odlučili da robotizujemo proces knjiženja plata i rata za kredite u sektoru bankarskih operacija koje predstavljaju podršku poslovanju.

Robot, za potrebe zaposlenog, prikuplja fajlove sa unaprijed definisane lokacije koji sadrže podatke za knjiženje plata i rata kredita. Podatke dobijamo na osnovu dostavljenih naloga od strane poslodavaca koji su klijenti banke. Podatke koje je prikupio, robot knjiži u bankarski core sistem. U slučaju da su svi podaci dostavljeni od strane poslodavca korektni, robot može izvršiti knjiženje u potpunosti. U slučaju pojavljivanja pojedinačnih grešaka, robot iste detektuje i upozorava operatere da knjiženje za određene partije nije finalizovano. Robot kreira izvještaje dva puta u toku dana, a u generisanim izvještajima

se pored statistike knjiženja, vidi i eventualna greška, detaljno opisana. Ovaj robot, pored automatizacije ima i funkciju ublažavanja operativnog rizika. Knjiženjem isključivo tačnih i primjenjivih podataka, dobijenih od

strane klijenta, umanjuje se mogućnost pojavljivanja ljudske greške.

Generalno, postoje dvije vrste robota – oni koji su nadgledani od strane zaposlenih i oni koji se ne nadgledaju. Kod nadgledanih robota uloga zaposlenih je i dalje prisutna. Zaposleni ima zadatak da pokrene robota kako bi izvršio

repetitivni posao, dok se zaposleni u tom periodu bavi interesantnijim zadacima. Stavljanjem robota u funkciju, zaposleni se oslobađa često frustrirajućih poslova koji utiču na pad efikasnosti i motivacije. Ne nadgledani robot nudi unaprijed definisan algoritam po kom se robot pokreće sa servera kada se pojavi određeni događaj ili u vrijeme za koje je definisana neophodnost završetka određenog zadatka. Nakon obavljenog posla, ili niza poslova koji se nalaze na listi čekanja, robot se, opet po unaprijed definisanim pravilima vraća u „sleep mode“. U ovom modelu uloga zaposlenog, praktično više ne postoji.

Kako je ovo bio prvi proces koji smo robotizovali, odlučili smo se za implementaciju nadgledanog



required can be robotised (logging on to a system, copying, gathering and transferring of data, various calculations, etc.).

Our bank has decided to robotise the process of booking of salaries and loan instalments in the banking operations sector that represent the support to the core business.

A robot, for the requirements of an employee, gathers files from predefined location that contain data for booking of salaries and loan instalments. We obtain data based on the submitted orders by employers that are clients of the bank. Once it gathered data, the robot books them into the banking core system. Where all data submitted by the employer are correct, the robot may make complete booking. In

case of individual errors, the robot detects them and warns operators that the booking for certain sub-accounts has not been completed. The robot creates reports twice a day, and these generated reports contain, in addition to the accounting statistics, also potential error described in detail. In addition to the automation of the process, the robot has a function of mitigating operational risk. The possibility of human error is reduced by booking only accurate and applicable data obtained from the client.

*“The robot creates reports twice a day, and these generated reports contain, in addition to the accounting statistics, also potential error described in detail. In addition to the automation of the process, the robot has a function of mitigating operational risk”*



In general, there are two types of robots – those that are supervised by the employees, and those that are not supervised. In the case of supervised robots, the role of an employee is still present. An employee has a task to launch the robot, so it could perform a repetitive work while the employee does more interesting activity during that period. The employee is often freed up from doing frustrating operations that influence the fall in efficiency and motivation by putting the robot into the function. Unsupervised robot offers predefined algorithm for its launch from the server once a certain event appears or in period when it is defined the requirement of completing certain task. After completing the operation or a series of operations from the waiting list, the robot is returned to the sleep mode under predefined rules. The role of the employee in this model practically does not exist anymore.

Since this was the first process that we robotised, we have decided to implement a supervised robot in order to upgrade the process gradually, introduce the employees gradually with the technologies, and

## *“Naučili smo i da roboti ne otpuštaju zaposlene, već im daju šansu da se dalje razvijaju u segmentima koji su kreativni i stvaraju dodatnu vrijednost banci*

robotu, kako bi išli postepeno u dalja unaprjeđenja, postepeno upoznavali zaposlene sa tehnologijama i kako bismo ostvarili PoC, o čemu će biti riječi kasnije. Zaposleni u svakom trenutku može pokrenuti i zaustaviti robota, te preuzeti da obavi posao ručno u slučaju otkaza robota – roll back. Prilikom pregledanja i analize izvještaja koje robot generiše, zaposleni u konsultaciji sa supervizorom i u kontaktu sa kompanijom klijentom donosi odluku kako da nastavi dalje u procesuiranju neproknjiženih zahtjeva.

Mi smo kao RPA tehnologiju odabrali jednu od najreferentnijih tehnologija u bankarskom sektoru – čiji je implementator bio takođe renomirana kompanija. Kompanija koja je proizvela tehnologiju koju smo koristili je jedan od pionira robotizacije. Njihovo veliko iskustvo i portfolio patnera i klijenata – od kojih su mnogi iz bankarskog sektora Evropske unije bio je garant da će projekat biti uspješno implementiran.

Odabrana tehnologija može da automatizuje bilo koju aplikaciju i podrži bilo koju platformu (mainframe, windows, WPF, java, web, itd.) može biti pokrenuta na bilo kom okruženju (terminalski emulator, fat

(razvoj, testiranje, implementacija i produkcija) sa logičkim kontrolama pristupa, a uključuje i centralizovani interfejs za upravljanje na dogradnjama i unaprjeđenjima.

Imajući u vidu da na crnogorskom tržištu nijesmo uspjeli da nađemo relevantno znanje i iskustvo u procesu implementacije robota, zahtijevali smo da uz implementaciju dobijemo i learning support u dijelu upravljanja projektom implementacije kao i u operativnom dijelu.

Nakon prve implementacije, naš tim je krenuo u identifikaciju drugih potencijalnih kandidata za implementaciju robota na odabranim procesima.

Sama implementacija robota se radi po agilnom metodu a čitav proces zahtijeva intenzivnu interakciju između klijenta i vendara koji radi na razvoju. Robot, koji je razvijen za jednu funkcionalnost, u sebi sadrži visok procenat komponenti koje se mogu ponovo koristiti, pa se i time ubrzava uvođenje novog robota u istoj banci.

Prvi korak implementacije bio je PoC (Proof of Concept). Ovaj korak smo napravili kako bismo kolege upoznali sa RPA tehnologijom, s obzirom na to da nije postojalo

client, web pregledač, Citrix) i pruža mogućnost automatizacije svih aplikacija koje se koriste u okviru organizacije.

Ovaj alat je dizajniran za model multi environment-a

razumijevanje onog što ona u stvari nudi. Na ovaj način se zaposlenima približava ideja i svrha robota, koji ne služe da zamijene ljude, već da im oslobode vrijeme za produktivnije i kreativnije poslove.

Implementacija robota otpočela je detaljnom analizom procesa koji se robotizuje. Ova analiza je sadržala opis svih koraka koji proces čine i logiku koja stoji iza svakog od njih. Nakon ovoga uslijedilo je dokumentovanje analiziranog, a potom i implementacija.

Poslije implementacije i uspješno obavljenog testiranja, funkcionalnost se pušta u produkciju – go live faza. Ključna stavka u toku analize jeste mjerenje vremena trajanja svakog koraka, kako bi se rezultat uporedio sa trajanjem istog koraka nakon implementacije, a sve ovo u cilju identifikovanja unaprjeđenja procesa i kvaliteta servisa.

Ono što smo kao organizacija naučili tokom ovog projekta je da robot može da se iskoristi za automatizaciju različitih poslova u banci: obrada zahtjeva za kreditne kartice, finansijsko izvještavanje, razna knjiženja na strani klijenata – bilo da se radi o pravnim ili fizičkim licima, zatim za onboarding klijenata, detekcijuprevara, migracijepodataka koji se nalaze na različitim bankarskim aplikacijama, itd.

Naučili smo i da roboti ne otpuštaju zaposlene, već im daju šansu da se dalje razvijaju u segmentima koji su kreativni i stvaraju dodatnu vrijednost banci.

*“We have also learned that employees are not laid off by robots: instead, they provide an employee with an opportunity to develop further in the areas where they can be creative thereby creating value added to the bank*

to accomplish PoC, which will be discussed further in the paper. The employee may launch or stop the robot at any time, and take over from robot the work to do it manually in case of the robot failure - rollback. When reviewing and analysing the reports generated by the robot, the employee, in consultation with the supervisor and the company-client, passes a decision to continue processing the non-posted requests.

As an RPA technology we selected one of the most referenced technologies in the banking sector - which implementor was also a renowned company. The company that produced the technology used by us is one of the pioneers in the robotics. Their enormous experience and portfolio of partners and clients – many of which come from the banking sector of the European union – guaranteed to us that the project will be successfully implemented.

The selected technology can automate any application and support any platform (mainframe, windows, WPF, java, web, etc.); it can be launched in any environment (terminal emulator, fat client, web browser, Citrix), and it provides the possibility of automation of all applications used within an organisation.

This tool is designed for the multi environment model (development, testing implementation and production) with logical controls of access and it also includes centralised interface for managing upgrades and improvements.

Bearing in mind that we were not able to find relevant knowledge and experience for the implementation process of robot in the Montenegrin market, we also requested, together with the implementation, the learning support with regard to the implementation project management and operational part.

After the first implementation, our team started identifying other potential candidates from the implementation of a robot on selected processes.

The implementation alone is done using agile method, and the entire process requires intensive interaction between the client and developing vendor. The robot, which is designed for one functionality, contains high percentage of components to be used again, thereby accelerating the introduction of a new robot in the same bank.

The first step in the implementation was Proof of Concept (PoC). This step was made to introduce our

colleagues with the RPA technology, since there was no understanding of what this technology has been actually offering. In doing so, the idea and the purpose of robots is explained to employees, that they are not used to replace people but to free up their time for more productive and creative activities.

The implementation of robots started with a detailed analysis of the process being robotised. These analyses contained a description of all steps included in the process and logic behind each of them. The next phase included documentation of the analysed and its implementation.

After the implementation and successful testing, the functionality is released in the production – go live phase. The key item during the analysis was measurement of the duration of each step in order to compare the result with the duration of the same step after the implementation, which was aimed at identifying the improvements of processes and quality of service.

Lesson that we learned as an organisation from this project is that the robot can be used for automation of different operations in the bank: processing of credit card applications, financial reporting, various postings at the clients’ side – whether they are legal or natural persons, onboarding clients, fraud detection, data migrations that are on different banking applications, and the like.

We have also learned that employees are not laid off by robots: instead, they provide an employee with an opportunity to develop further in the areas where they are creative thereby creating value added to the bank.



Radmila Gaćeša

# Instrumenti za finansiranje trgovine

*“Savremeni svet karakteriše pre svega populacija od 7,7 milijardi ljudi koji žive u 206 država. Pri tome Svetska trgovinska organizacija broji 164 države članice i 23 države posmatrača. Već na bazi ovih činjenica može se zaključiti da danas preovladavaju ekonomije otvorenog tipa*

Pojam “Trade Finance” predstavlja skraćeni oblik pojma “Finance for Trade” što u prevodu znači finansiranje trgovine. Taj pojam se odnosi kako na trgovinske transakcije unutar jedne zemlje, tako i na prekogranične transakcije. Najjednostavniji oblik trgovine se odvija između prodavca i kupca, pri čemu se kao posrednici mogu uključiti banke odnosno druge finansijske institucije. Primarni cilj angažovanja posrednika je podrška obavljanju transakcija direktnim finansiranjem trgovine, kao i preporukama u vezi sa izborom instrumenta ili više instrumenata za nesmetano obavljanje pojedinačnih transakcija.

Međunarodna trgovina predstavlja razmenu kapitala, roba i usluga u prekograničnom prometu. Ista je u odnosu na trgovinu unutar jedne zemlje znatno složenija i istovremeno rizičnija. Razlozi za to su pre svega sistemske prirode, pri čemu se kontinuirano radi na unapređenju uslova za saradnju između zemalja kako u regionalnim okvirima, tako i na globalnom nivou. Savremeni svet karakteriše pre svega populacija od 7,7 milijardi ljudi koji žive u 206 država. Pri tome

Svetska trgovinska organizacija broji 164 države članice i 23 države posmatrača. Već na bazi ovih činjenica može se zaključiti da danas preovladavaju ekonomije otvorenog tipa (eng. Trading Nation).

Spoljnotrgovinska razmena može biti praćena korišćenjem:

- instrumenata platnog prometa: doznaka, inkaso, čekovi, menice, platne kartice;

- instrumenata Trade Finance: garancije, stendbaj akreditivi, dokumentarni akreditivi i Bankarska platna obligacija /obaveza.

Od svih navedenih instrumenata doznaka je globalno najčešće korišćeni instrument. To je istovremeno i najrizičniji instrument utoliko što uvozniku ne pruža nikakvu sigurnost da će unapred plaćena roba biti uredno isporučena, niti pak izvozniku da će isporučena roba biti plaćena u skladu sa ugovorom.

U cilju zaštite interesa svakog pojedinačnog učesnika u međunarodnoj trgovini činjeni su i dalje se čine napore radi strukturiranja odgovarajućih instrumenata. U tom pogledu od izuzetnog značaja su aktivnosti Međunarodne trgovinske komore (eng. International Chamber of Commerce - skraćeno ICC).

U nastavku će biti predstavljeni najznačajniji instrumenti Finansiranja trgovine.

**Bankarska garancija** ili **garancija** (eng. Letter of Guarantee skraćeno L/G) predstavlja najznačajniji

# Instruments for Trade Finance

Radmila Gaćeša

The term "Trade Finance" is the shortened form of the term "Finance for Trade". This concept refers to trade transactions within one country, as well as to cross-border transactions. The simplest form of trade takes place between the seller and the buyer, where such banks and other financial institutions may engage as intermediaries. The primary goal of engaging the intermediaries is to support the execution of transactions by financing of trade directly, as well as by giving recommendations with regard to the selection of instrument or several instruments for the smooth execution of individual transactions.

International trade represents the exchange of capital, goods and services in cross-border transactions. International trade is, compared to trade within a country, much more complex and at the same time riskier. It is primarily due to the systemic nature, whereas it is an ongoing improvement of the conditions for cooperation between countries both at the regional and global level. Nowadays, some 7.7 billion people living in 206 countries. In addition, the WTO has 164 members and 23 observer governments. Based on these facts, we can conclude that the open economies i.e. trading nations prevail in the world nowadays.

Foreign trade can be monitored using:

- payment system instruments: remittances, collection, cheques, bills of exchange, payment cards;
- instruments of Trade Finance: guarantees, standby letters of credit, documentary letters of credit and bank payment obligation / commitment.

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Remittances are widely used instrument in global terms of all of the abovementioned instruments. It is also the riskiest instrument in so far as the importer is provided with no assurance that prepaid goods will be delivered, nor the exporter is provided with the assurance that the delivered goods will be paid in accordance with the contract.

Efforts have been made and are continuing to be made to structure adequate instruments in order to protect the interests of each participant in international trade. In this respect, the activities of the International Chamber of Commerce (ICC) are extremely important.

The most important instruments of trade finance are presented below.

**Bank guarantee** or **letter of guarantee** (L/G) is the most important instrument that is regulated by the Uniform Rules for Demand Guarantees (URDG 758). The guarantee is an obligation of the issuing bank to make payment of accurately specified amount or maximum amount under certain conditions, and

*“Međunarodna trgovinska komora redovno preporučuje da se banke odnosno klijenti sa istog tržišta uzajamno informišu o svakom pokušaju zloupotrebe, budući da po pravilu falsifikatori ne odustaju posle prvog neuspelog pokušaja*

instrument garantovanja koji je regulisan Jednoobraznim pravilima za garancije na prvi poziv (Uniform Rules for Demand Guarantees URDG 758). Garancija predstavlja obavezu banke - garanta da izvrši plaćanje tačno određenog iznosa ili maksimalnog iznosa pod određenim uslovima a u korist korisnika garancije u slučaju neispunjenja ugovorne obaveze od strane nalogodavca, t.j. naručioca garancije..

Učesnici u garancijskom poslu su:

- Nalogodavac (Applicant),
- Banka-garant (Issuing Bank),
- Banka koja prima garanciju (Beneficiary,s Bank),
- Korisnik (Beneficiary).

Bitni elementi svake garancije su:

- pravni osnov za izdavanje garancije (komercijalni ugovor, profaktura, faktura, narudžbenica i dr.),
- definisan iznos,
- fiksiran rok važnosti garancije,
- ko plaća troškove garancije,
- identifikacija banke korisnika,
- eventualno postojanje klauzule umanjenja iznosa na koji glasi garancija po osnovu delimično izvršenog plaćanja od strane nalogodavca odnosno uvoznika.

Od posebnog značaja je definisanje dokumenta koji ima funkciju da omogući naplatu po osnovu zahteva za plaćanje po garanciji (tzv. protest garancije). Pravilo je da se Zahtev za naplatu upućuje na istovetan način i u istoj formi kao što je to slučaj sa samom garancijom. Kao forma se koristi SWIFT mreža ili tekst

štampan na memorandumu banke i potpisan od strane ovlašćenog ili ovlašćenih lica te banke. S tim u vezi veoma značajna napomena je da banka koja primi garanciju na memorandumu ino-banke najpre mora izvršiti identifikaciju potpisnika ino-banke, za šta joj na raspolaganju stoje sledeće mogućnosti: štampani Specimen lica ovlašćenih za potpisivanje konkretne ino-banke ili upućivanje SWIFT-poruke kojom se od dotične ino-banke zahteva da potvrdi da su garanciju primljenu putem pošte potpisala ovlašćena lica sa punim imenom i prezimenom, kao i funkcijom. Ovo je bitno da klijenti znaju budući da oba navedena procesa mogu potrajati dok se od ino-banke pribavi ažurna i konačna potvrda, što ponekad kod klijenta biva praćeno nestrpljenjem, posebno u slučaju kada od svog partnera iz inostranstva dobije fotokopiju garancije, za koju veruje da je odmah operativna.

Garancija je, kao i mnogi drugi instrumenti, praćena rizikom od prevarnih radnji. Oprez posebno nalažu sledeće situacije: upadljivo veliki iznosi koji dolaze od banaka sa kojima nije ranije ostvarena ozbiljnija saradnja, korišćenje memoranduma od strane ino-banke, za koje odmah postoji indicija da su falsifikovani-zloupotrebjeni, nereagovanje ino-banke u razumnom roku sa potvrdom autentičnosti potpisa ovlašćenih lica itd. U novije vreme je inicirana praksa korišćenja memoranduma sa specijalnim zaštićenim logom u svrhu izdavanja garancija u cilju zaštite interesa banke i klijenata banke. Oprez je neophodan u svim fazama važnosti garancije, budući da su prisutni brojni i permanentni pokušaji falsifikovanja tog instrumenta. S tim u vezi i informacija da Međunarodna trgovinska komora redovno preporučuje da se banke odnosno klijenti sa istog tržišta uzajamno informišu o svakom pokušaju zloupotrebe, budući da po pravilu falsifikatori ne odustaju posle prvog neuspelog pokušaja.

Kao izdavaoci garancija mogu se, u zavisnosti od propisa svake pojedinačne zemlje, pojaviti: banke, specijalizovane banke kao što su banke za razvoj, banke za osiguranje i finansiranje izvoza itd, zatim osiguravajuće, faktoring, forfeting ili lizing kompanije, pravna lica učesnici u spoljnotrgovinskim poslovima, kao i neka druga pravna lica. Otuda je praksa da se garancija izdata od strane banke uvek naziva bankarska garancija.



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Prema vrsti obaveze koju banka preuzima po osnovu izdate garancije postoje:

- činidbene garancije za:
  - ozbiljnost ponude - banka garantuje korisniku garancije isplatu ukoliko nalogodavac opozove ili izmeni ponudu posle roka za dostavu ponuda, ili ne ispunio uslove ugovora i slično;
  - dobro izvršenje posla - banka garantuje korisniku garancije da će nalogodavac izvršiti posao shodno ugovoru između nalogodavca i korisnika;
  - povraćaj avansa - banka garantuje korisniku garancije povraćaj avansa isplaćenog nalogodavcu ukoliko nalogodavac ne izvrši ugovorom preuzete obaveze;
  - oslobađanje garantnog depozita - kod investicionih radova investitori uobičajeno zadržavaju određeni iznos od svake obračunate situacije (5% -10%) kao obezbeđenje za dobro izvršenje posla;
  - otklanjanje nedostataka u garantnom roku;
- platne garancije kao što su:
  - garancije za uredno vraćanje kredita;
  - garancije za uredno plaćanje isporučene robe;
  - garancije za izmirenje carinskih obaveza i druge.

Garancija predstavlja instrument koji ne može biti opozvan, već važnost istog automatski prestaje protekom roka na koji je garancija izdata. Drugi način prestanka važnosti garancije je nastupanjem slučaja koji predstavlja osnov garantovanja, a po osnovu koga korisnik ima pravo da zahteva plaćanje od strane banke odnosno drugog izdavaoca garancije. Upućivanje zahteva korisnika garancije a posle isteka roka važnosti garancije ne proizvodi nikakvo dejstvo, te će u takvom slučaju banka odnosno drugi izdavalac garancije obavestiti korisnika garancije direktno ili preko njegove banke, da je takav zahtev neosnovan odnosno bespredmetan.

Sve napred navedeno ukazuje na neophodnost veoma detaljnih konsultacija između pravnih lica/preduzetnika i njihovih poslovnih banaka. To je od posebnog značaja za novoosnovana pravna lica/preduzetnike koji imaju nameru da se bave spoljnotrgovinskim poslovima. Poslovne banke kao garanti i njihovi klijenti kao inicijatori zahteva za garantovanje u korist trećih lica zaključuju ugovore kojima se definišu sve relevantne pojedinosti međusobnog dogovora.

Ukoliko u garancijski posao stupaju dve banke koje

nemaju uslova za direktno komuniciranje putem swift-a, praktikuje se obraćanje trećoj, dakle posredničkoj banci, a to je po pravilu banka sa kojom sarađuju obe banke uključene u garancijski posao. Smisao provere autentičnosti primljene garancije je da se otkloni rizik falsifikata. Garancijski poslovi koji se obavljaju putem swift-a ne zahtevaju proveru autentičnosti, t.j. smatraju se autentičnim, s obzirom na pouzdanost swift sistema.

**Stend-baj akreditiv** - Pored garancije postoji još jedan instrument koji praktično ima istu funkciju i isti se sreće pod nazivom Stend-baj akreditiv (eng. Stand-by Letter of Credit skraćeno SBLC). Naziv ovog instrumenta asocira na akreditiv, ali se zapravo radi o garanciji. Predmetni instrument je počeo da se koristi u SAD posle Velike ekonomske krize 1929-1933.godine sa ciljem da se eliminiše makroekonomski rizik od garantovanja za koje ni jedna institucija nije bila spremna da preuzme obaveznu plaćanja. Uvođenje SBLC je bilo praćeno prenosom nadležnosti za izdavanje garancija sa banaka na osiguravajuće kompanije. Danas se SBLC koristi širom sveta i to posebno u transakcijama u kojima učestvuje bar jedan američki entitet i u kojima je USD valuta plaćanja odnosno valuta naplate. I sam SBLC se izdaje kao instrument obezbeđenja, dakle sa namerom da ne bude korišćen, s tim da do korišćenja dolazi samo ukoliko glavni dužnik ne izvrši svoju obaveznu prema korisniku, a koja je definisana samim dokumentom o garantovanju.

**Dokumentarni akreditiv** ili samo akreditiv (eng. Letter of Creditskraćeno L/C) predstavlja istovremeno instrument bezgotovinskog plaćanja i instrument obezbeđenja. Primena ovog instrumenta je regulisana Jednoobraznim pravilima za dokumentarne akreditive (eng. Unifrom Customs and Practice UCP 600 Revision 2007 ICC Paris) u izdanju Međunarodne trgovinske komore (eng. International Chamber of Commerce skraćeno ICC).

Učesnici u akreditivnom poslu su:

- Nalogodavac - uvoznik robe ili usluga,
- Banka nalogodavca - akreditivna banka,
- Banka korisnika - banka izvoznika,
- Korisnik - izvoznik i
- konfirmirajuća - posrednička banka u slučaju konfirmirajućih akreditiva.

*“The International Chamber of Commerce regularly recommends to banks and customers coming from the same market to inform themselves about any attempt of misuse, since, as a rule, counterfeiters do not give up after their first failure*

in favour of the beneficiary of the guarantee in case of non-fulfilment of contractual obligations by the principal, i.e. applicant .

Participants in the guarantee business are:

- Applicant,
- Issuing bank,
- Beneficiary bank,
- Beneficiary.

The essential elements of each guarantee are:

- the legal basis for the issuance of guarantees (commercial contract, pro forma invoice, invoice, purchase orders, and others.)
- defined amount,
- fixed term of validity of the guarantee,
- who pays the cost of the guarantee,
- identification of the beneficiary bank,
- the possible existence of clauses for the reduction of amount guaranteed on the basis of partial payment by the applicant i.e. importer.

It is very important to define the document, which can allow the collection on the basis of requests for payment under the guarantee (guarantee protest). As a rule, the application for payment is referred to uniformly and in the same form as is the case with the guarantee. The SWIFT or text printed on the letterhead of the bank and signed by an authorised person(s) of the bank is used as a form. It is very important to note that the bank that receives a guarantee at the memorandum of a foreign bank must first make identification of the signatory foreign bank has following possibilities at

its disposal to do this: printed specimen of persons authorised to sign on behalf of the foreign bank or send SWIFT message requesting the respective foreign bank to confirm that the guarantee received by mail is signed by authorised persons with the full name and function. This is important for customers since it may take a while for both of these processes until updated and final confirmation is obtained from foreign bank. This is the reason why customers sometimes become impatient, especially in the case of their foreign partner obtains a copy of the guarantee, for which he believes that is immediately operational.

Guarantee is, as many other instruments, accompanied by the risk of fraudulent activities. The caution is specifically required in the following situations: extremely large amounts coming from banks with which a serious cooperation did not exist in the past; the use of the memorandum by the foreign banks for which there are indications that they are counterfeit-misused; inactivity of foreign bank within a reasonable time with a certificate of authenticity of signatures of authorised persons, and the like. The practice of using the memorandum with a special protected logo in order to issue a guarantee to protect the interests of banks and bank customers has been initiated recently. The caution is necessary in all important stages of the guarantee, since there are numerous and ongoing attempts to counterfeit the instrument. In this regard, the information that the International Chamber of Commerce regularly recommends to banks and customers coming from the same market to inform themselves about any attempt of misuse, since, as a rule, counterfeiters do not give up after their first failure.

The following institutions may appear, depending on the regulations of each country, as issuers of guarantees: banks, specialised banks such as development banks, banks for insurance and financing of exports, insurance companies, factoring, forfeiting and leasing companies, legal entities participants in foreign trade transactions, and some other legal entities. Hence, the practice of guarantees issued by banks is always called the bank guarantee.

According to a series of obligations that the bank takes over on the basis of issued guarantees are:

Akreditivi se mogu podeliti na:

- nostro ili uvozne akreditive koje otvara banka uvoznika - akreditivna banka i
- loro ili izvozne akreditive koje prima banka izvoznika odnosno korisnikova banka.

Bitni elementi akreditiva:

- vrednost robe/usluga odnosno ukupan iznos akreditiva,
- vrsta i detaljan opis robe/usluga na jeziku koji odaberu partneri,
- količina robe,
- vrsta pakovanja i ukupan broj paketa, koleta, vagona i sl.,
- vrsta prevoza, mesto otpreme i mesto isporuke - krajnja destinacija,
- rok/rokovi isporuke,
- mogućnost delimičnih isporuke,
- mogućnost pretovara robe,
- dokumenta: faktura, transportni dokument (tovarni list, špediterska potvrda, avionski tovarni list, brodski tovarni list-konosman, multimodalni transportni dokument - u slučaju da se roba prevozi najpre železnicom do luke A a potom brodom od luke A do luke B i sl), atesti, certifikati, protokoli o preuzimanju robe, menice, polise osiguranja, liste pakovanja, avizo izvršene isporuke i dr.,
- krajnji rok za prezentaciju dokumenata,
- model plaćanja po akreditivu: po viđenju (odmah po prezentaciji dokumenata, uz uslov da su u potpunosti u saglasnosti sa uslovima akreditiva), uz akcept, negociranjem, sa odloženim plaćanjem,
- važnost akreditiva - podrazumeva datum do koga je moguća prezentacija dokumenata o izvršenoj isporuci/isporukama roba/usluga i po pravilu to je datum koji je za 15 ili najviše 21 dan duži od poslednjeg roka za utovar robe, odnosno izvršenje usluga, što je sve naznačeno u tekstu akreditiva.
- vrsta akreditiva sa stanovišta njegove trajnosti: opozivi (akreditiv koji u svakom momentu može biti opozvan, praktično storniran po nalogu uvoznika uz posredovanje akreditivne banke, čime se izvoznik dovodi u nepovoljan položaj) ili neopozivi;
- vrsta akreditiva sa stanovišta mogućnosti promene korisnika akreditiva: prenosivi i neprenosivi.

Izvoznik može u dogovoru sa svojom bankom zahtevati

od uvoznika da obezbedi konfirmirani t.j. potvrđeni akreditiv. Konfirmacija se bazira na potrebi da se u akreditivni posao pored akreditivne i korisnikove banke uključi i treća banka. Po pravilu radi se u visoko rejtingovanoj banci ili prvoklasnoj banci (eng. first class bank) čije uključnje ima za cilj da garantuje izvesnost plaćanja utoliko što ta banka preuzima obavezu plaćanja po osnovu dokumenata prezentiranih od strane izvoznika a preko njegove banke.

Konfirmirani akreditiv je uvek neopoziv, dakle jednom otvoren ne može biti storniran, već prestaje da postoji isključivo istekom važnosti samog akreditiva, bez obzira na to da li je bilo realizacije odnosno plaćanja po istom.

Korisnikova banka ima obavezu da odmah po prijemu SWIFT-poruke o otvaranju akreditiva, bilo da je reč o konfirmiranom ili nekonfirmiranom, dakle direktnom akreditivu, o tome obavesti korisnika akreditiva, koji u najkraćem roku treba da potvrdi da prihvata akreditiv ili naznači sve elemente akreditiva koji moraju biti izmenjeni, uz precizno navođenje uslova koji su za njega prihvatljivi.

Konfirmirani instrumenti su veoma atraktivni sa stanovišta faktoringa i forfetinga. Razlog leži u činjenici da konfirmirani instrumenti nose znatno manji rizik u pogledu naplate potraživanja u odnosu na direktno izdat instrument. Efekat faktoringa ili forfetinga će u velikoj meri zavisiti kako od boniteta samog izvoznika, tako i od boniteta i/ili međunarodnog rejtinga konfirmirajuće banke.

**Bankarska platna obligacija/obaveza** (eng. Banking Payment Obligation skraćeno BPO) je potpuno novi instrument Trade Finance. BPO je prvi put zvanično predstavljen juna 2013. godine od strane Međunarodne trgovinske komore objavljivanjem Jednoobraznih pravila za Bankarsku platnu obligaciju (eng. Uniform Rules for Bank Payments Obligations skraćeno URBPO).

Pristup SWIFT TSU platformi omogućava bankama učešće u BPO transakcijama utoliko što sistem podržava neopozivu uslovnu obavezu banke kupca-uzvoznika u odnosu na banku prodavca-izvoznika da izvrši plaćanje po osnovu usklađenih dokumenata. Uslov usklađenosti se odnosi na podatke o izvršenoj isporuci, koje saopštava banka izvoznika, u odnosu na podatke koje saopštava banka uvoznika, a sve u vezi sa uredno izvršenom isporukom.

- performance bonds for:
  - tender guarantees - bank guarantees assure the payment to the guarantee beneficiary if the principal revokes or amends an offer after the deadline for tender submission, or do not fulfil the conditions of the contract;
  - Performance guarantees - bank guarantees to the guarantee beneficiary that the principal will be carried out the business in accordance with the contract signed between the principal and the beneficiary;
  - Advance payment guarantees - bank guarantees to the guarantee beneficiary reimbursement of the advance paid to the principal if the principal fails to perform the contractual obligations;
  - the return of guarantee deposit - with investment projects investors typically retain a certain amount of any accrued situations (5% -10%) as security for good performance;
  - elimination of defects within the guarantee period;
- payment guarantees such as:
  - guarantees for loan repayment;
  - the payment of delivered goods;
  - guarantees for settling customs duties and other.

The guarantee is an instrument that cannot be recalled, but its importance is automatically terminated within the period for which the guarantee was issued. Another way of expiration of the guarantee is the occurrence of a case that is the basis of guaranteeing based on which the beneficiary is entitled to demand payment by the bank or other issuer of the guarantee. If the guarantee beneficiary sends a request after the expiry of the guarantee if will not produce any effect, and the bank or other issuer of the guarantee will notify guarantee beneficiary directly or through his bank that such a claim is unfounded and pointless.

Thus, very detailed consultations between legal parties/ entrepreneurs and their commercial banks is necessary. This is particularly importance for new legal persons / entrepreneurs who intend to engage in foreign trade. Commercial banks as guarantors and their clients as the applicants for the guarantee in favour of third parties sign contracts which define all relevant details of mutual agreement.

If two commercial banks enter into the guarantee transaction that do not have condition to communicate directly via SWIFT, the practice is to involve the

third-intermediary banks which is, as a rule banks with which both banks involved in the guarantee transaction cooperation. Verification of the authenticity of the received guarantee is required for the removal of the counterfeit risk. Guarantee transactions that are executed via SWIFT do not require authenticity checking, i.e. they are considered authentic because of the reliability of the SWIFT.

**Stand-by letter of credit** - In addition to the guarantee, another instrument that practically has the same function and is the same is called Stand-By Letter of Credit (SBLC). The name of this instrument is associated with a letter of credit, but it is actually a guarantee. Its use started in the United States after the Great Depression in 1929-1933 in order to eliminate the macroeconomic risk of guaranteeing for which no institution was not ready to undertake payments. The introduction SBLC was accompanied by the transfer of authorities for issuing guarantees from banks to insurance companies. Nowadays, the SBLC is used worldwide, especially in transactions involving at least one of the US entity in which the USD currency is payment and collection currency. SBLC is issued as collateral, with the intention not to be used. It is used only if the principal debtor fails to perform its obligations towards the beneficiary, which is defined by the document on the guarantee.

**Documentary Letter of Credit** or letter of credit (L/C) is at the same time an instrument of cashless payment and security instrument. The application of this instrument is governed by the UNIFRA Customs and Practice UCP 600 Revision 2007 ICC Paris) published by the International Chamber of Commerce.

Participants in the letter of credit are the following:

- Principal - importer of goods or services,
- principal bank - the issuing bank,
- customer bank - the bank of the exporter,
- User - exporter and
- the confirming - intermediary bank in the case of confirming letters of credit.

Letters of credit can be divided into:

- nostro or import letters of credit opened by the importer bank - issuing bank and
- loro or export letters of credit received by the bank of the exporter or beneficiary's bank.

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The essential elements of letters of credit are as follows:

- value of goods / services or the total amount of letters of credit,
- types and a detailed description of the goods / services in a language chosen by partners,
- quantity of goods,
- types of packages and the total number of packages, wagons, etc.,
- means of transport, the city of departure and place of delivery - the ultimate destination,
- dates / delivery,
- the possibility of partial delivery,
- the possibility of transshipment of goods,
- documents: invoice, transport document (bill of lading, freight forwarding certificate, airway bill, ship bill of lading, multimodal transport document - if the goods are transported first by railroad to ports A and by boat from the port A to port B, etc.), attestation, certificates, protocols on the takeover of goods, bills of exchange, insurance, packing lists, aviso made deliveries,
- the deadline for the presentation of documents,
- payment mode under letter of credit: deposits (immediately at the presentation of documents provided that they fully comply with the terms and conditions of the letter of credit), with acceptance, negotiation, with a deferred payment,
- importance of the letter of credit - implies the date by which it is possible to present documents upon executed delivery / deliveries of goods / services and, as a rule, it is date which is by 15 or at a maximum 21 days longer than the last deadline for the shipping of goods or provision of services, which indicated in the body of the letter of credit.
- types of letters of credit from the point of their maturity: callable (letter of credit that can be called at any time, virtually reversed by the order of the importer with the intermediation of the issuing bank, which puts the exporter at disadvantage) or irrevocable;
- types of letters of credit from the standpoint of the ability to change the user of credentials: transferable and non-transferable.

The exporter may, in the agreement with its bank, ask the importer to provide confirmed letter of credit. The confirmation is based on the need to include the third

bank in the letter of credit operation in addition to the issuing and customer banks. As a rule, it is highly rated or first class bank whose inclusion is intended to guarantee the certainty of payment insofar as the bank assumes the obligation to pay on the basis of documents presented by the exporter and its banks.

Confirmed letter of credit is always irreversible, hence once opened cannot be reversed, but it ceases to exist when the letter of credit expires, regardless of whether it was the realization or the payment was executed under the same letter of credit.

Immediately upon the receipt of SWIFT message on opening letters of credit, whether it is a confirmed, or unconfirmed - direct letter of credit, the customer bank is obliged to notify beneficiary of the letter of credit thereof, who should confirm in the shortest period that it accepts the letter of credit or indicates all elements of the letter of credit that must be changed, with a precise indication of the terms and conditions acceptable to him.

Confirmed instruments are very attractive from the standpoint of factoring and forfaiting. The reason lies in the fact that confirmed instruments carry a much lower risk in terms of collection of receivables than instrument issued directly. The effect of factoring and forfaiting will largely depend on credit rating of the exporter, and the creditworthiness and / or international rating of the confirming bank.

**Bank payment obligations / commitments (BPO)** is a completely new instrument of trade finance. BPO was officially launched in June 2013 when the International Chamber of Commerce published Uniform Rules for Bank Payments Obligations (URBP).

Access to SWIFT TSU platform allows banks to participate in the BPO transactions in so far as the system supports an irrevocable conditional obligation of the bank buyer – the importer in relation to bank seller – the exporters to make payment on the basis of harmonized documents. The requirement of compliance refers to data on executed delivery, which is communicated by the bank of exporters, compared to data communicated by the bank of the importer, in conjunction with properly executed delivery.

In addition to the similarities between the documentary letter of credit and BPO, there are differences as follows:

Pored podudarnosti između dokumentarnog akreditiva i BPO, postoje i razlike:

- suštinska razlika je u definiciji koji učesnik transakcije je korisnik plaćanja. Sasvim je izvesno da je korisnik BPO upravo banka korisnika, što znači da se izvoznik/prodavac ne može obraćati direktno banci uvoznika odnosno kupca u vezi sa plaćanjem. U slučaju dokumentarnog akreditiva prodavac/izvoznik je taj koji očekuje odnosno potražuje plaćanje od banke uvoznika;
- dokumentacija:
  - dokumentarni akreditiv je uvek praćen dokumentacijom, čijom detaljnom kontrolom se utvrđuje podudarnost sa uslovima otvorenog i važećeg akreditiva, a na osnovu čega sledi plaćanje. U slučaju odstupanja od uslova akreditiva sledi stavljanje rezerve na prezentirana dokumenta, posle čega otpočinje proces koji može značiti:
    1. davanje saglasnosti od strane kupca/uvoznika njegovoj banci za skidanje rezerve na prezentirana dokumenta, te plaćanje,
    2. odbijanje kupca/uvoznika da njegovoj banci da saglasnost za skidanje rezerve na prezentirana dokumenta, te dogovor između kupca/uvoznika i prodavca/izvoznika u smislu slanja dokumenata na naplatu putem inkasa, što može biti praćeno značajnim produženjem roka naplate, značajnim povećanjem troškova naplate i drugim komplikacijama, a ponekad i trajnim izbegavanjem plaćanja od strane kupca/uvoznika.

*“Spremni za trgovinu” predstavlja novu programsku inicijativu Evropske banke za obnovu i razvoj. Putem ove inicijative EBRD pruža podršku malim i srednjim preduzećima i to kako u poslovanju u zemljama u kojima su osnovana, tako i u njihovom prekograničnom poslovanju*

Prednost koju BPO pruža u odnosu na dokumentarni akreditiv je u brzini kao i u znatno manjim troškovima, budući da u slučaju BPO ne postoji obaveza slanja dokumentacije iz zemlje izvoznika u zemlju uvoznika, a u slučaju konfirmiranog akreditiva, to može značiti uključanje u istu transakciju treće zemlje, kao zemlje sedišta konfirmirajuće banke.

- dokumentarni akreditiv pruža određenu sigurnost kako za prodavca/izvoznika da će realizovati naplatu po osnovu isporučene robe/izvršene usluge, tako i za kupca/uvoznika da će roba biti isporučena odnosno usluga biti izvršena na osnovu otpremnih dokumenata koja se prezentiraju banci kupca/uvoznika radi plaćanja. Razume se, čak i kod dokumentarnog akreditiva, kao daleko najpouzdanijeg instrumenta, postoje brojni rizici u smislu:
  - gubitka ili oštećenja robe u toku utovara, pretovara ili transporta, što se kompenzira po osnovu polise osiguranja koja je blagovremeno zaključena shodno ugovoru o kupoprodaji;
  - falsifikata dokumentacije u svim fazama realizacije ugovora o kupoprodaji;
  - i neki drugi.

Vreme će pokazati u kojoj meri će trend tehnoloških inovacija i unapređenja, kao i zahtevi izvoznika i uvoznika za korišćenjem bržih i jeftinijih metoda plaćanja, uticati na pozicioniranje BPO kao instrumenta plaćanja koji će moći da potisne i dalje neprikosnoveni dokumentarni akreditiv.

“Spremni za trgovinu” (eng. “Trade Ready”) predstavlja novu programsku inicijativu Evropske banke za obnovu i razvoj (eng. European Bank for Reconstruction and Development skraćeno EBRD). Putem ove inicijative EBRD pruža podršku malim i srednjim preduzećima (MSP) i to kako u poslovanju tih preduzeća u zemljama u kojima su osnovana, tako i u njihovom prekograničnom poslovanju. Istim programom je obuhvaćen i trening zaposlenih u preduzećima.

EBRD istovremeno omogućava povezivanje MSP sa lokalnim konsultantima i internacionalnim savetnicima u cilju transformacije brojnih segmenata poslovanja. Posebna pažnja posvećuje se stvaranju uslova za obezbeđenje finansiranja putem kreiranja realnih biznis planova, unapređenjem korporativnog upravljanja i drugim aktivnostima koje imaju za cilj rast i razvoj MSP.

- the main difference in the defining which participant in the transactions is the payment beneficiary. It is obvious that the BPO beneficiary is the bank of the beneficiary, which means that the exporter / seller cannot address directly to the bank of the importer or buyer with regard to the payment. In the case of documentary letter of credit, seller / exporter is the one expecting or claiming payment from the bank of the importer;
- Documentation:
  - documentary letter of credit is always accompanied by documentation, detailed control of which identifies the match with the terms and conditions of the open and valid letter of credit on the basis of which follows the payment. In the case of deviations from the terms and conditions of the letter of credit, the presented documents are taken with reserve and the process may be, which will mean:
    1. granting approval by the buyer / importer to his bank to reserve on presented document and payment,
    2. refusal of the buyer / importer to authorise his bank to remove the reserves on the presented documents, to refuse the agreement between the buyer / importer and dealer / exporter in terms of sending documents for payment by collection, which can be accompanied by significant extension of the period of collection, a significant increase in the cost of collection and other complications, and sometimes permanent avoidance of payment by the buyer / importer.

The advantage that BPO provides in relation to the documentary letter of credit is in speed as well as in significantly lower costs, since there is no obligation of sending documents from the exporting country to the importing country, and in the case confirmed letter of credit, this may mean involvement of the third country in the same transaction, as the country of the registered office of the confirming bank.

- documentary letter of credit provides a certain security that the seller / exporter will execute payment based on delivered goods / services rendered. Likewise, it provides a certain security for the buyer / importer that the goods will be delivered or services will be made on the basis of shipping documents that are presented to the bank buyer / importer for the payment. It is understood that, even in the documentary letter of credit, as far the most reliable instrument, there are many risks in terms of:
  - loss or damage to goods during loading, reloading or transportation, which is compensated on the basis of the insurance policy that is duly signed in accordance with the repurchase agreement;
  - counterfeit of documents in all phases of the repurchase agreement;
  - and some other risks.

Time will show to what extent the trend of technological innovation and improvement, as well as the requirements of exporters and importers for using faster and cheaper payment methods will influence the positioning of BPO as a payment instrument that will be able to replace still undisputed documentary letter of credit.

**Trade Ready** is a new programme initiative of the European Bank for Reconstruction and Development (EBRD). The EBRD the supports, via this initiative, small and medium-sized enterprises (SMEs) both in their operations in the countries in which they are established and in their cross-border operations. The same programme covered the training of employees in enterprises.

The EBRD also enables SMEs to connect with local consultants and international advisors in order to transform numerous

*“Trade Ready is a new programme initiative of the European Bank for Reconstruction and Development (EBRD). The EBRD the supports, via this initiative, small and medium-sized enterprises (SMEs) both in their operations in the countries in which they are established and in their cross-border operations*

Jedan od najznačajnijih ciljeva svakako predstavlja podizanje nivoa konkurentnosti MSP na stranim tržišta. U tom smislu EBRD se takođe stara za povezivanje MSP sa značajnim partnerima u realizaciji poslova uvoza, kao što su transportne i logističke kompanije odnosno privredne komore država sa kojima se uspostavljaju ili proširuju poslovne veze.

Za segment MSP takođe veliku podršku predstavlja angažovanje EBRD-a na otklanjanju pravnih i regulatornih prepreka za poslove lizinga i faktoringa, kao i za instrumente obezbeđenja (tzv. kolaterale) u određenim zemljama. S tim u vezi treba napomenuti da je EBRD pre izvesnog vremena u svoj portfolio usluga uključio i finansiranje faktoringa, sa ciljem da omogućiti aktivnije korišćenja inovativnih rešenja. Istom uslugom obuhvaćen je i faktoring u lokalnoj valuti koji je u ponudi za određene zemlje odnosno određene valute.

„Trade Ready“ takođe predstavlja mogućnost saradnje sa lokalnim bankama koje su pristupile EBRD-ovom Programu olakšica za spoljnotrgovinsku razmenu (eng. Trade Facilitation Programme skraćeno TFP). Ovaj program omogućava podršku spoljnotrgovinskom poslovanju korišćenjem najpouzdanijih instrumenata finansiranja spoljnotrgovinske razmene (eng. Trade Finance), kao što su: garancije i stend-baj akreditivi

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*“EBRD je za najaktivnije banke i njihove odabrane klijente omogućio pristup programu elektronske obuke u trajanju od godinu dana. Programom su obuhvaćeni svi standardni Trade Finance instrumenti, kao i Incoterms pravila, uz mogućnost sertifikovanja znanja pokazanog na testiranju*

(eng. Stand-by Letter of Credit skraćeno SBLC). U ovom momentu sledeće banke iz Srbije su aktivne u TFP programu: Komercijalna banka, Vojvođanska banka i Eurobanka. Imajući u vidu izuzetan značaj regionalnog povezivanja, te obim trgovinske razmene između zemalja u regionu, prilika je da se konstatuje da su u ovom programu zastupljene i banke iz sledećih susjednih zemalja i to: Makedonija sa 6 banaka, te Bosna i Hercegovina, Crna Gora i Hrvatska sa po 1 bankom.

Inicijativa za podršku prilikom pripremanja i realizacije spoljnotrgovinskih poslova uz korišćenje prednosti TFP programa može biti inicirana od strane izvoznika ili uvoznika. EBRD je za najaktivnije banke i njihove odabrane klijente omogućio pristup programu elektronske obuke (eng. e-learning) u trajanju od godinu dana. Programom su obuhvaćeni svi standardni Trade Finance instrumenti, kao i Incoterms pravila, uz mogućnost sertifikovanja znanja pokazanog putem testiranja.

Za uključivanje u program „Trade Ready“ zainteresovana MSP se mogu direktno prijaviti EBRD-u putem linka <http://www.ebrdtradepassport.com/>. Reč je o jednostavnom, brzom i efikasnom načinu za identifikovanje sopstvenih kapaciteta i slabosti pojedinačnog preduzeća. Pristup je dvojezičan: engleski i jezik zemlje u kojoj su registrovana MSP.

business segments. Special attention is paid to creating conditions for the financing by creating realistic business plans, improving corporate governance and other activities aimed at the growth and development of SMEs.

One of the most important objectives is to raise the level of competitiveness of SMEs in foreign markets. In this respect, the EBRD assists SMEs in connecting with significant partners in import operations, such as transport and logistics companies and chambers of commerce of the countries with which they establish or expand business connections.

Also, a great support for the SMEs is the involvement of the EBRD in eliminating legal and regulatory barriers for lease and factoring activities, as well as the security instrument (collateral) in certain countries. In this regard, it should be noted that the EBRD included in its portfolio of services the financing of factoring, in order to enable more active use of innovative solutions. The same service covered also offer of factoring in local currency for a particular country or a particular currency.

Trade Ready is also the possibility of cooperation with local banks that joined the EBRD Trade Facilitation Program (TFP). This programme provides the support to foreign trade operations using the most reliable instruments of foreign trade finance, such as guarantees and stand-by letters of credit (SBLC). Currently, the following banks in Serbia are active in the TFP: Commercial banka, Vojvođanska banka and Eurobanka. Bearing in mind the importance of regional connectivity and the volume of trade exchange between the countries in the region, it can be noted that banks from the following neighbouring countries are including in this programme: Macedonia with 6 banks, and Bosnia and Herzegovina, Montenegro and Croatia with 1 bank.

The initiative for providing support in preparing and executing foreign trade transactions with the use of the advantages of the TFP program can be initiated by the exporter or importer. The EBRD provided access to programme electronic training (E-learning) for the most active banks and their selected clients for a period of one year. The programme includes all

*“The EBRD provided access to programme electronic training (E-learning) for the most active banks and their selected clients for a period of one year. The programme includes all standard Trade Finance instruments, as well as the Incoterms rules, with the possibility of certification of the knowledge shown by testing*

standard Trade Finance instruments, as well as the Incoterms rules, with the possibility of certification of the knowledge shown by testing.

Interested SMEs can directly apply for the inclusion in the programme "Trade Ready" to the EBRD via link <http://www.ebrdtradepassport.com/>. It is a simple, fast and efficient way to identify their own capacities and weaknesses of individual companies. The access to the programme is: English and the language of the country in which SMEs are registered.

*“Time will show to what extent the trend of technological innovation and improvement, as well as the requirements of exporters and importers for using faster and cheaper payment methods will influence the positioning of BPO as a payment instrument that will be able to replace still undisputed documentary letter of credit*

# Odnosi robnog i uslužnog sektora – Balaša-Samjuelsonov efekt



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Produktivnost robnog i uslužnog sektora nacionalne privrede međusobno su povezani i uslovljeni. Ova činjenica od velike je važnosti za nacionalnu privredu jer može izazvati promjenu opšteg nivoa cijena i deviznih kurseva. Utvrđeno je da razlike u produktivnosti između ovih sektora nastaju kao rezultat uticaja više faktora. Na primjer, uticaj tehnologije intenzivniji je u sektoru proizvodnje u odnosu na sektor usluga, što dovodi do značajnijeg povećanja autputa u prvom sektoru i za rezultat ima povećani rasta zarada u njemu. Pored toga, uticaj priliva po osnovu izvoza roba takođe utiče na porast zarada u sektoru proizvodnje, koji se putem razmjene između robnog i uslužnog sektora prelijeva između njih, što dovodi do rasta cijena i zarada u uslužnom sektoru. Rast produktivnosti u proizvodnom sektoru izaziva rast inflacije u uslužnom sektoru.

Kada se ovaj efekat posmatra u međunarodnom kontekstu, povećanje produktivnosti u proizvodnom sektoru jedne zemlje izaziva promjene realnih deviznih kurseva, što dovodi do inflacije ili deflacije u posmatranoj zemlji. Ovaj efekat naglašava da će porast zarada u sektoru proizvodnje roba za posljedicu imati povećanje zarada i u sektoru usluga. Naglo povećanje produktivnosti, kao što je to slučaj u zemljama u razvoju, implicira brži rast opšteg nivoa cijena, odnosno inflacije. Do rasta opšteg nivoa cijena dolazi zato što zemlje u tranziciji počinju efikasnije da koriste faktore proizvodnje kao što su zemljište, rad i kapital. Rezultat rasta produktivnosti u robnom sektoru jeste povećanje zarada u oba sektora. Rast tih zarada ogleda se u povećanom intenzitetu tražnje, što za posljedicu ima veće korišćenje dobara i usluga, na šta cijene reaguju rastom. Očekivano,

ovaj efekat ima manji intenzitet u razvijenim zemljama zato što rast produktivnosti u njima nije tako visok. Ovaj efekat među-sektorske zavisnosti u pogledu produktivnosti i posljedice te zavisnosti na cijene i devizne kurseve uočili su mađarski ekonomista Bela Balaša i američki ekonomista Pol Samjuelson 1964. godine. Danas je Balaša-Samjuelsonov efekat jedan od najpoznatijih objašnjenja za promjenu pariteta kupovne moći (PPP), kao centralnog pojma međunarodne ekonomske teorije i politike. Zbog toga je istraživanje Balaša-Samjuelsonovog efekta izuzetno važno. Prisjetimo se da paritet kupovne moći na dugi rok treba da pokaže kretanje valuta u smjeru koji izjednačava korpe roba i usluga u bilo koje dvije zemlje (Milićević, 2018). Prema ovoj hipotezi, različiti nivoi cijena nastaju zbog razlike u produktivnosti u robnom i uslužnom sektoru među zemljama.

## OD TEORIJE ARBITRAŽE DO BALAŠA-SAMJUELSONOVOG EFEKTA

Teorija arbitraže se zasniva na zakonu jedne cijene, što znači da se cijene roba ne mogu bitno razlikovati u zavisnosti od mjesta trgovanja. Efekat arbitraže proizilazi iz činjenice da se roba može kupiti na lokaciji s najnižom cijenom. Logično, mogućnost arbitriranja dovodi kupce u situaciju da robe kupuju na lokacijama na kojima su najjeftinije. Međutim, zbog povećane potražnje cijene na tim lokacijama će rasti, tako da će u određenom trenutku doći do njihovog izjednačavanja među

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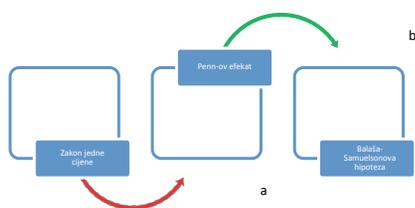
# ERSTE ZNAČI PRVI.

Po četvrti put, Erste banka proglašena je za **najbolju banku u Crnoj Gori**, od strane prestižnog časopisa "The Banker".



Nagradu je dodijelio The Banker, međunarodni finansijski časopis izdavačke grupacije Financial Times Group, na svečanosti održanoj u Londonu 29. novembra 2018.

različitim lokacijama. Dokaz da su nivoi potrošačkih cijena u zemljama s većim prosječnim prihodima sistematski viši nego u zemljama s nižim prihodima, poznat je kao Penov efekat (Penn effect). Tranzicija od zakona jedne cijene do Balaša-Samjuelsonove hipoteze prikazana je na sljedećem grafiku:



Grafik 1: Geneza Balaša-Samjuelsonove ideje

Kao što je prikazano na Grafiku 1, Penov efekat proizilazi iz narušavanja pretpostavki teorije arbitraže, odnosno zakona jedne cijene (tok a), dok, s druge strane, Balaša-Samjuelsonova hipoteza zapravo predstavlja specijalni slučaj Penovog efekta (tok b) i zasniva se na njemu.

Osnovna postavka Balaša-Samjuelsonovog modela bio je tradicionalni trgovački model rikardijanaca prilagođen da uključi i usluge. U svojoj teoriji, Balaša je pretpostavio dvije države, dva robna svijeta sa jednim oskudnim faktorom - radom i stalnim ulaznim koeficijentom tehnologije.

Većina današnjih analiza Balaša-Samjuelsonovog efekta ima problem s mjerenjima podataka jer se, kao što navode Klau i Mihaljek, „koriste

godišnji podaci nastali nakon 1990. godine pa se dodatni podaci ujedinjuju sa podacima drugih zemalja u tranziciji“ (Klau i Mihaljek, 2003). Kao dodatni problem vezan za analizu Mihaljek navodi i preveliku agregaciju sektorskih podataka jer je u nekim istaživanjima poljoprivreda svrstana u robni sektor, dok se u drugim klasifikuje kao rezidualni. Takođe, postoje i radovi koji ne analiziraju uslužni sektor jer autori smatraju da je uticaj tog sektora zanemarljiv.

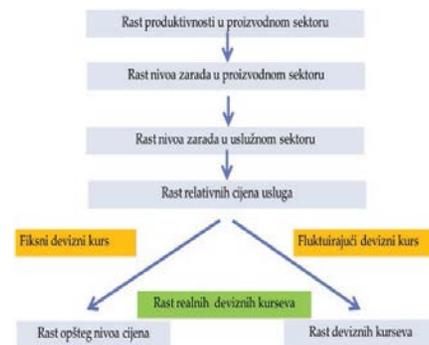
### OD BALAŠA-SAMJUELSONOVOG EFEKTA DO BALAŠA-SAMJUELSONOVOG MODELA

Da bismo objasnili zašto je nivo cijena u razvijenim zemljama viši nego u zemljama u razvoju, moramo razumjeti formu i strukturu Balaša-Samjuelsonovog modela. U modelu postoje dva sektora: robni - sa čijim proizvodima je lako trgovati i uslužni - koji je vezan za mjesto vršenja djelatnosti. Kako se zemlja razvija, ukupna faktorska produktivnost raste u oba sektora. Ovaj model pretpostavlja da je rast produktivnosti u sektoru usluga sporiji od rasta produktivnosti u robnom sektoru. Balaša i Samjuelson su bili prvi koji su primijetili da su razlike u sektorskom rastu produktivnosti povezane sa relativnim promjenama cijena između zemalja (Alberola i Tyrväinen, 1998). Pretpostavlja se da je rad mobilan faktor među sektorima, zbog čega nominalne plate

tehnološkog napretka koji ima mnogo veći uticaj na robni, nego na sektor usluga. Iz ovog zaključujemo da rast produktivnosti u sektoru roba utiče na uslužni sektor tako što izaziva rast inflacije u njemu. Međutim, rast produktivnosti ne izazivaju samo tehnološke inovacije, već i tražnja za dobrima i investicije.

Hipoteza produktivnosti se može podijeliti na dvije tvrdnje. Prva govori o razlici u rastu produktivnosti između dva sektora (razlike u sektorskoj inflaciji - dualna inflacija). Druga tvrdnja naglašava da dualna inflacija izaziva promjenljivost realnog deviznog kursa, koja se u slučaju Evropske monetarne unije ogleda u različitim stopama inflacije među zemljama članicama. Iz ovoga jasno vidimo da ovaj model ima široku primjenu. Naime, može se koristiti za analiziranje inflacionih razlika između sektora u zemlji, kao i za analizu razlika među zemljama.

Konceptualni prikaz Balaša-Samjuelsonovog efekta prikazan je sljedećim grafikom:



Grafik 2: Balaša-Samjuelsonov efekat- lanac kauzaliteta

Kao što prikazuje Grafik 2, uticaj promjene produktivnosti u proizvodnom sektoru odražava se na rast nivoa zarada u njemu, što dovodi do rasta nivoa zarada u uslužnom sektoru i rasta relativnih cijena u njemu. Takva promjena u sektoru usluga, u zavisnosti od aktuelnog režima deviznih kurseva, može dovesti do dva ishoda. U slučaju da u posmatranj zemlji postoji režim

*“Postavlja se pitanje šta se dešava sa zemljama u kojima je uslužni sektor dominantniji u odnosu na proizvodni. Kakav je uticaj prelivanja zarada iz uslužnog u robni sektor? Da li tada važi neki inverzni Balaša-Samjuelsonov efekat?”*

teže izjednačavanju. Primijetili su i da produktivnost teži bržem rastu u sektoru proizvodnje, zbog

# Tradable Goods and Non-Tradable Goods Sectors Relation – the Balassa-Samuelson Effect

Nikola Đalović, a M.Sc. student at the Faculty of Economy of the University of Montenegro

The productivity of tradable goods sector and non-tradable sector of the national economy is interconnected and qualified. This fact is very important for the national economy, as it may result in the change of overall level of prices and foreign exchange rates. It has been determined that the differences in productivity between these sectors are the result of the impact of several factors. For instance, the technological impact in the production sector is more intense than it is the case with the non-tradable goods sector, which results in more significant increase in output and increased wages in the production sector. In addition, the impact of inflow from export of tradable goods contributes to the increase in wages in the production sector, which spills over between these two sectors through their exchange. The growth in productivity in the production sector causes inflation growth in the non-tradable goods sector.

When this effect is viewed internationally, the increase in productivity in the production sector of a country leads to the changes in real foreign exchange rates, which results in inflation or deflation in the respective country. This effect highlights that the wage growth in the production sector of tradable goods will result in the wages growth also in the non-tradable goods sector. Sharp increase in productivity, as it is the case with the countries in transition implies faster growth in overall level of prices and/or inflation. The increase in overall level of prices results from more efficient use of the production factors by the countries in transition, such as land, labour and capital. The result of the productivity growth in tradable goods sector is the increase in wages in both sectors. The increase in the wages reflects in an increased intensity of demand which results in higher use of tradable and non-tradable goods leading to the rise in prices. As expected, the intensity of this effect is lower in developed countries since their productivity growth is not so high.

This effect of intersectoral dependence

with regard to the productivity and the consequence of such dependence on prices and foreign exchange rates were noted by a Hungarian economist Bela Balassa and an American economist Pol Samuelson in

1964. Nowadays, the Balassa-Samuelson effect is one of the most famous explanations for the change of the purchasing power parity (PPP), as a central term of international theory and policy. Therefore, the research of the Balassa-Samuelson effect is of extreme importance. Let us remind ourselves that the purchasing power parity should show, in a long run, the trend in foreign currencies towards equalising the basket of tradable and non-tradable goods sector in any of the two countries (Milićević, 2018). According to this hypothesis, different price levels occur due to the difference in productivity in tradable goods and non-tradable goods sectors across countries.

## FROM ARBITRAGE PRICING THEORY TO BALASSA-SAMUELSON EFFECT

The arbitrage pricing theory is based on the law of one price, which means that the prices of tradable goods cannot significantly differ depending on the trading location. The arbitrage effect arises from the fact that tradable goods can be purchased at the location with the lowest price. Logically, the possibility of arbitrage leads buyers to the situation in which they purchase tradable goods at the cheapest locations. However, due to the increased demand, the prices on such locations will increase leading, in a certain point of time, to their equalisation across different locations. The evidence that the levels of consumer prices in high income countries are higher than in lower income countries is known as the Penn effect. The transition from the law of one price to the Balassa-Samuelson effect is illustrated in the following graph:

*“Nowadays, the Balassa-Samuelson effect is one of the most famous explanations for the change of the purchasing power parity (PPP), as a central term of international theory and policy. Therefore, the research of the Balassa-Samuelson effect is of extreme importance*

fiksnih deviznih kurseva, doći će do porasta opšteg nivoa cijena, odnosno do porasta inflacije. S druge strane, ukoliko u datoj zemlji postoji režim fluktuirajućih deviznih kurseva, onda će doći do njihovog porasta.

Za Balaša-Samjuelsonov model uobičajena je pretpostavka postojanja male ekonomije sa dva faktora proizvodnje - rad i kapital. Pretpostavlja se i da u posmatranoj zemlji postoji puna zaposlenost u privredi u kojoj se proizvode dvije vrste proizvoda - robe (T) i usluge (N). Sektori se razlikuju po radnom intenzitetu produktivnosti.

Što se tiče tržišta rada, razmatraju se dvije mogućnosti. Prva odgovara standardnoj proceduri i pretpostavlja da je rad mobilan među sektorima. Nominalne plate su homogene jer se faktor rada može slobodno prelivati iz sektora u sektor  $w_T = w_N = w$ . Uvedena je i pretpostavka postojanja savršene konkurencije u sektoru roba. Radna snaga je mobilna na nivou nacionalne privrede, ali nije mobilna na međunarodnom nivou (Grauwe i Šnabl, 2005). Kada je produktivnost predstavljena produktivnošću rada  $q_i$ , dugoročno posmatrano, model ima sljedeću formu (Vidjeti Alberola, E. i Tyrväinen, T. "Is there scope for inflation differentials in EMU?" Bank of Finland, Helsinki (1998) str. 10.-12.):

$$p_{REL} = p_N - p_T = c + (\gamma/\theta)q_T - q_N \quad (1)$$

gdje je:

$p_{REL}$  - relativne cijene,

$p_T$  - cijene roba,

$p_N$  - cijene usluga,

$c$  - konstanta,

$\gamma$  - intenzitet produktivnosti u sektoru usluga,

$\theta$  - intenzitet produktivnosti u sektoru roba,

$q_T$  - količina roba,

$q_N$  - količina usluga.

Ova jednačina predstavlja standardni Balaša-Samjuelsonov model i u njemu konstanta  $c$  predstavlja realne kamatne stope, odnosno intenzitet faktora koji su nepromjenljivi.

Druga mogućnost se odnosi na dvije situacije na tržištu rada. Prva situacija je da rad nije homogen i da zavisi od ljudskog kapitala i vještine zaposlenog, dok druga naglašava nepostojanje pune zaposlenosti na tržištu. Da bismo izračunali ove mogućnosti moramo proširiti prethodnu jednačinu jer se kod analiza mnogih zemalja standardna Balaša-Samjuelsonova hipoteza odbacuje. Zbog toga je potrebno analizirati i prošireni Balaša-Samjuelsonov model. Razmatra se model s relativnim cijenama, produktivnošću i platama, kako što je prikazano jednačinom (2).

$$p_{REL} = p_N - p_T = c + (\gamma/\theta)q_T - q_N - \gamma(w_T - w_N) \quad (2)$$

gdje je:

$w_T$  - plate u robnom sektoru,

$w_N$  - plate u uslužnom sektoru.

U ovoj jednačini, za razliku od standardnog modela gdje zavisnu promjenljivu predstavljaju realne kamatne stope, figuriraju i plate, čije razlike među sektorima značajno utiču na realne cijene.

U proširenom modelu promjene plata među sektorima mogu biti čak i potpuno suprotne od predviđene inflacije. Ovo se dešava u situacijama kada rast nominalnih zarada u robnom sektoru prevazilazi rast nominalnih zarada u sektoru usluga.

## ZAKLJUČAK

Razmatranje razlika u maloprodajnim cijenama u literaturi je poznato kao Penov efekat. Pokušaj da se Penov efekat objasni većim varijacijama u produktivnosti između razvijenih i

manje razvijenih zemalja, u robnom sektoru posmatrano u odnosu na sektor usluga, doveo je do uočavanja Balaša-Samjuelsonovog efekta. U njegovoj osnovi je tendencija da su potrošačke cijene značajno veće kod razvijenih zemalja u odnosu na manje razvijene zemlje. Kvantifikacija Balaša-Samjuelsonovog efekta dovela je do formulacije Balaša-Samjuelsonovog modela. Evolucija ovog modela dovela je do razlikovanja njegove dvije forme - od osnovne (standardne) forme i proširene forme. U osnovi razlike između formi ovog modela nalazi se potreba da se modelira uticaj plata na promjene tražnje za uslugama na realni devizni kurs.

Da bi se analiza ovog efekta obavila na najbolji mogući način potrebno je precizno definisati činioce robnog i uslužnog sektora. Postojeća literatura ne nudi uniformnu klasifikaciju činilaca ovih sektora. Osim toga, postavlja se pitanje šta se dešava sa zemljama u kojima je uslužni sektor dominantniji u odnosu na proizvodni. Kakav je uticaj prelivanja zarada iz uslužnog u robni sektor? Da li tada važi neki inverzni Balaša-Samjuelsonov efekat? Ostaje nam da empirijski istražujemo.

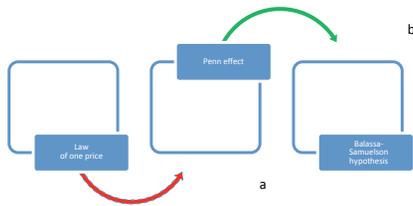
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Graph 1: Genesis of the Balassa-Samuelson idea

As illustrated above, the Penn effect results from the disruption of the assumptions of the arbitrage pricing theory, i.e. the law of one price (flow a), while, on the other hand, the Balassa-Samuelson hypothesis actually represents the special case of the Penn effect (flow b) and it is based on it.

The main assumption of the Balassa-Samuelson model was traditional Ricardian model of trade adjusted to include also non-tradable goods. In his theory, Balassa assumed two countries, two tradable worlds with only one factor – labour, and permanent input technology ratio.

The majority of current analysis of the Balassa-Samuelson effect has a problem with data measurement since, as stated by Klau and Mihaljek, “the annual data after 1990 are used, and additional data are combined with the data of other countries in transition” (Klau i Mihaljek, 2003). Mihaljek suggests excessive aggregation of sectoral data as additional problem with regard to the analysis, since agriculture was included in tradable sector in some researches, while in others it is classified as residual sector. In addition, there are papers that do not analyse non-tradable goods sector because the authors believe that the impact of this sector is insignificant.

**FROM THE BALASSA-SAMUELSON EFFECT TO THE BALASSA-SAMUELSON MODEL**

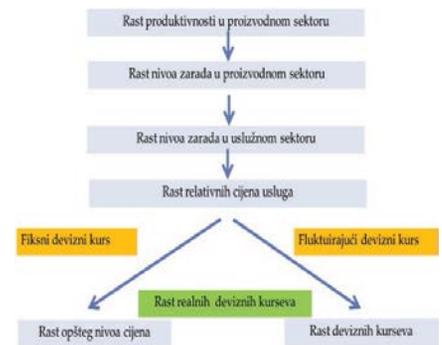
In order to explain why the level of prices is higher in the developed countries than in the developing countries, the form and structure of the Balassa-Samuelson model should be understood. There are two sectors in the model: tradable goods

sector – whose products are easily tradable, and non-tradable goods sector – which is connected with the location of performing an activity. As the country is developing, total factor productivity increases in both sectors. This model assumes that the increase of productivity in the non-tradable goods sector is slower than the increase of productivity in tradable goods sector. Balassa and Samuelson were the first to note that differences in the sectoral growth of productivity are connected with relative changes in prices across countries (Alberola and Tyrväinen, 1998). It is assumed that the labour is a mobile factor among sectors and that is why nominal wages tend to equalise. They also noted that the productivity strives to grow faster in the production sector due to technological progress which has much higher impact on tradable goods sector than on non-tradable goods sector. Therefore, it can be concluded that the increase in productivity in the tradable goods sector influences non-tradable goods sector by causing inflation growth in it. However, the increase in productivity is not caused only by technological innovations, but also the demand for goods and investments.

The hypothesis of productivity can be divided into two theorems. The first speaks about the difference in the increase in productivity between two sectors (differences in sectoral inflation – dual inflation). The second emphasises that dual inflation causes fluctuation of real foreign exchange

rate, which, in case of European Monetary Union, reflects in different inflation rates between member states. This clearly shows that this model is broadly applied. To wit, it can be used for analysing inflation risks between sectors in the country as well as for analysing differences across countries.

The conceptual illustration of the Balassa-Samuelson effect is shown below:



Graph 2: The Balassa-Samuelson effect – causality chain

As shown in the graph 2 above, the impact of the change in productivity in the production sector reflects on the increase in the level of wages in it, which leads to the rise in the level of wages in the non-tradable sector and rise in relative prices in it. Such a change in the non-tradable goods sector, depending on the current foreign exchange rate regime, may have two outcomes. If there is a regime of fixed foreign exchange rates in the observed country, the increase in overall price level will occur, i.e. inflation growth. On the other hand, if there is a regime of floating foreign exchange rates in respective country, it will result in their increase.

*“What happens with the countries in which non-tradable goods sector is more dominant than the production sector? What is the impact of wages spillover from non-tradable goods sector into tradable goods sector? Does any inverse Balassa-Samuelson effect prevail in such a situation?”*



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Usual assumption for the Balassa-Samuelson model is the existence of small economy with two factors of production – labour and capital. It is assumed that also in the observed country there is full employment in the economy which produces two types of products tradable goods (T) and non-tradable goods (N). Sectors differ by work intensity of productivity.

When it comes to labour market, two possibilities are considered. The first corresponds to standard procedure and assumes mobility of labour across sectors. Nominal wages are homogenous, as the labour factor can be spilled over freely across sectors  $w_T = w_N = w$ . The assumption of perfect competition in the tradable goods sector is also introduced. Labour force is mobile at the national economy level, but it is not mobile at the international level (Grauwe and Schnabl, 2005). When the productivity is presented by the labour productivity  $q_i$ , the model takes the following form in long run (see Alberola, E. and Tyrväinen, T. “Is there scope for inflation differentials in EMU?” Bank of Finland, Helsinki (1998) p. 10.-12.):

$$p_{REL} = p_N - p_T = c + (\gamma/\theta)q_T - q_N \quad (1)$$

where:

$p_{REL}$  – relative prices,

$p_T$  – traded goods prices,

$p_N$  – non-traded goods prices,

$c$  – constant,

$\gamma$  – productivity intensity in the non-traded goods sector,

$\theta$  – productivity intensity in the traded goods sector,

$q_T$  – quantity of traded goods,

$q_N$  – quantity of non-traded goods.

This equation is a standardised Balassa-Samuelson model where a constant  $c$  represents real interest rates i.e. intensity of factors that are constant.

The second possibility refers to two situations in the labour market. The first situation is that the labour is not homogenous and depends on human capital and skills of an employee, while the second emphasises inexistence of full employment in the market. The previous equation should be expanded in order to calculate these possibilities, since the standardised Balassa-Samuelson hypothesis is rejected when analysing many countries. Therefore, the expanded Balassa-Samuelson model should also be analysed. The model with relative prices, productivity and wages is discussed, as shown below by the following equation (2).

$$p_{REL} = p_N - p_T = c + (\gamma/\theta)q_T - q_N - \gamma(w_T - w_N) \quad (2)$$

where:

$w_T$  – wages in tradable goods sector,

$w_N$  – wages in non-tradable goods sector.

This equation includes, as contrary to standardised model where dependent variable is presented by real interest rates, also wages whose differences across sectors influence significantly real prices.

Changes in wages across sectors in the expanded model can be even opposite from the projected inflation. This occurs when the growth in nominal wages in tradable goods sector exceeds the growth in nominal wages in the non-tradable goods sector.

### CONCLUSION

The discussion of differences in retail prices in the literature is known as the Penn effect. An attempt to explain the Penn effect by higher variations in productivity between developed and less developed countries in the tradable goods sector compared to the non-tradable goods sector resulted in observing the Balassa-Samuelson effect. The trend that

the consumer prices are substantially higher in the developed countries than in less developed countries underlies this effect. The quantification of the Balassa-Samuelson effect resulted in the formulation of the Balassa-Samuelson model. The evolution of this model resulted in differentiating two forms of this model – basic (standardised) and expanded form. The need to model the impact of wages on the changes in demand for non-tradable goods on real foreign exchange rate is the basis of differences between these two forms.

In order to analyse this effect in the best possible way, a detailed definition of the factors of tradable goods and non-tradable goods sectors should be provided. The current literature does not offer uniform classification of the factors of these sectors. In addition, what happens with the countries in which non-tradable goods sector is more dominant than the production sector? What is the impact of wages spillover from non-tradable goods sector into tradable goods sector? Does any inverse Balassa-Samuelson effect prevail in such a situation? It is up to us to make empirical researches to find answers to these questions.

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Miodrag Kirsanov  
Centralna banka  
Crne Gore

# NOVČANICE OD 1. MAJA 1955. – O VREMENU KADA JE POLITIKA PREVIŠE UTICALA NA EKONOMIJU

Poslije prve serije novčanica koje je izdala Demokratska federativna Jugoslavija 1944. (u prometu od 20. aprila 1945.), o kojima smo ranije pisali i druge, koju je izdala Narodna banka FNRJ sa datumom 1. maj 1946. i novčanice od 1. maj 1953. (Bankar br. 8/2015 i 39/2017), prateći hronologiju, dolazimo do serije novčanica sa datumom 1. maj 1955.

U ovom periodu dogodile su se značajne promjene u političkom i bankarskom i sistemu Jugoslavije.

Ustavnim zakonom iz 1953. donijet je veliki broj izmjena Ustava Jugoslavije od 1946., sa ciljem uvođenja pojma samoupravljanja u ustavnu materiju Jugoslavije i njegovog ustanovljenja kao načina upravljanja na svim nivoima. Društvena svojina, nad svim materijalnim sredstvima, postala je osnova političkog i društvenog uređenja. Jugoslavija je nazvana socijalističkom, demokratskom, saveznom državom suverenih i ravnopravnih naroda u kojoj sva vlast pripada radnom narodu preko narodnih predstavnika.

Na bankarskom i monetarnom polju došlo je do ogromnih promjena. Najprije je izmijenjen status Narodne banke Jugoslavije koja je do tada bila konstituisana kao akcionarsko društvo. Uredbom Vlade FNRJ od 25. septembra 1946. njene akcije, kao i ostalih nelikvidiranih kreditnih ustanova: (Industrijske banke, Zanatske banke, Zadružne i poljoprivredne banke) postale su državna svojina. Dotadašnjim vlasnicima akcija isplaćena je nominalna vrijednost akcija u tim ustanovama.

Istovremeno je riješeno da se sva kreditna preduzeća iz državnog sektora (Industrijska banka Jugoslavije, Zanatska banka FNRJ, Poštanska štedionica FNRJ, Zadružna i poljoprivredna banka FNRJ, kao i republička kreditna preduzeća: Privredna banka NR Srbije, Privredna banka BiH, makedonska Stopanska Banka, Denarni zavod Slovenije i Privredna banka Crne Gore) pripoje Narodnoj banci Jugoslavije i posluju kao njene centrale za odnosne Republike. Njihovi dugoročni plasmani prenijeti su na Državnu investicionu banku FNRJ, koja je postala savezna Kreditna ustanova.

Nakon Rješenja Vlade FNRJ iz aprila 1952. Narodnoj banci pripojene su i državne banke za kreditiranje zemljoradničkih zadruga. Tek osnovane Komunalne banke su ukinute, a njihovo poslovanje preneseno na Narodnu banku. Ona je iste godine osnovala novu „službu društvene evidencije“ čiji je zadatak bio da prati i kontroliše cjelokupno privredno poslovanje privrednih preduzeća. Krajem te godine ona je imala 463 poslovne jedinice na teritorije cijele zemlje, čime je okončana potpuna centralizacija bankarskog sistema Jugoslavije. Centralna banka je, osim emisione, dobila i kreditnu funkciju.

# BANKNOTES OF 1 MAY 1955 – WHEN POLITICS HAD EXCESSIVE INFLUENCE ON THE ECONOMY

Miodrag Kirsanov  
Central Bank of Montenegro

After writing previously about the first series of banknotes issued by the Democratic Federal Yugoslavia in 1944 (in circulation since 20 April 1945) and the second series issued by the National Bank of FPRY on 1 May 1946 and the banknotes of 1 May 1953 (Bankar issues 8/2015 and 39/2017), following the chronology, we are describing now a series of banknotes of 1 May 1955.

A significant changes occurred in the political and banking systems, as well as the system of Yugoslavia. The Constitutional Law of 1953 introduced a large number of amendments to the Constitution of Yugoslavia from 1946, with the aim of introducing the notion of self-management into the constitution of Yugoslavia and its establishment as a method of governance at all levels. Social property over all material resources has become the basis of political and social organisation. Yugoslavia was called a socialist, democratic, federal state of sovereign and equal peoples in which all power belongs to the working people through the people's representatives.

Enormous changes also occurred in the banking and monetary area. First, the status of the National Bank of Yugoslavia was changed. Until that period, it had been established as a joint stock company. However, the Decree of the Government of the FPRY of 25 September 1946 prescribed that its shares and also shares of other illiquid credit institutions (Industrijskabanka, Zanatskabanka, Zadružnabanka and Poljoprivrednabanka) became social property. The current holders of shares were paid nominal value of shares that they had in these institutions.

Simultaneously, it was decided that all credit firms from the government sector (Industrijskabanka Yugoslavia, Zanatskabanka FPRY, Poštanska kaštedionica FPRY,

Zadružnabanka and Poljoprivrednabanka FPRY, as well as credit firms at the individual Republic's level such as: Privrednabanka NR Serbia, Privrednabanka Bosnia and Herzegovina, Macedonian Stopanska Banka, Denarnizavod Slovenia and Privrednabanka Montenegro) should be merged with the National Bank of Yugoslavia and operate as its branch offices from the respective Republic. Their long-term loans were transferred to the State Investment Bank FPRY (Državnainvesticionabanka FNRRJ), which became federal Credit institution.

Following the FPRY Government Resolution of April 1952, the state-owned banks for the lending of agricultural cooperatives also joined the National Bank. Then established Municipal banks were abolished and their business was transferred to the National Bank. In the same year, the National Bank established a new "social register service" whose task was to monitor and control the entire economic business of enterprises. At the end of the year, it had 463 business units across the country, thereby finalising the full centralisation of the banking system of Yugoslavia. The Central Bank, with the exception of the issuing function, also received a credit function.

The companies paid high taxes because they used state-owned production resources, so the company's

Preduzeća su plaćala visoke poreze jer su koristila sredstva za proizvodnju u vlasništvu države, pa su i resursi preduzeća bili korišćeni za nova ulaganja države. Na taj način, država je otvorila nova preduzeća, zaposlila radnike i upravu dala radničkim savjetima. Ovaj model je u to vrijeme bio veoma uspješan. Zanimljivo je da je tokom pedesetih jugoslovenska ekonomija je porasla brže nego bilo koja druga u svijetu.

Uslijedila je nova reforma, sada u smjeru decentralizacije bankarskog sistema i funkcija Narodne banke, do koje je doveo sistem samoupravljanja.

Na osnovu Uredbe o bankama i štedionicama iz januara 1954., do 1961. izvršena je decentralizacija i specijalizacija kreditne funkcije bankarskog sistema. Uvedene se nove kreditne organizacije, komunalne banke, gradske i zadružne štedionice. Narodna banka je ponovo postala centralna banka zemlje.

Zbog stalnih zahtjeva samoupravne zajednice za novim količinama novca, u posmatranom periodu, došlo je do enormnog rasta količine novca u opticaju. Sa 49.957,4 iz 1952. količina je 1954. narasla na 88.210,8 miliona komada novčanica i kovanica raznih apoena i godina izdanja (87.774,3 novčanica i 436,5 miliona kovanica).

U ovakvoj situaciji Narodna banka, na osnovu odluke Saveznog izvršnog vijeća od 31.08.1955., u platni promet uvodi četiri nove novčanice apoena 100, 500, 1000 i 5000 dinara, potpuno novog dizajna i tehnike izrade, kao i određenu količinu kovanica o kojima ćemo govoriti neki drug put. Istovremeno je povukla određenu količinu apoena starijih izdanja i tako, za kratko, smanjila količinu za 0,7%.

Pred nama su, poređane po apoenskoj strukturi novčanice izrađene u Zavodu za izradu novčanica Narodne banke FNRJ. Štampane su na najmodernijim mašinama iz toga vremena, tehnikom zbirne duboke štampe, koja je tada omogućavala izuzetno visok stepen zaštite od falsifikovanja.



#### 100 dinara 1. maj 1955. avers

**Dimenzije:** 127x60 mm, **Boja:** crvena;

**Avers** – lijevo Konavljanka – U pozadini stabla masline i obala mora, desno od nje tekst, od vrha na dolje: NARODNA BANKA/FEDERATIVNE REPUBLIKE JUGOSLAVIJE/slovna/brojčana/slovna vrijednost apoena/GUVERNER/Potpis: V. Guzina; Beograd/1 MAJ/1955; PRETSEDNIK UPRAVNOG ODBORA/potpis: D. Radosavljević/Serijski broj, numeracija: crvena, dva slova, 6 cifara/**Autori aversa:** M. Petrović – FEC; ZAVOD ZA IZRADU NOVČANICA NARODNE BANKE FNRJ, T. Krnjajić – SC.

**Revers:** u stilizovanom ramu: centralno, panorama Dubrovnika, oko nje, nazivi republika, iznad i ispod tekst, ćirilicom i latinicom: Socijalistička Federativna Republika Jugoslavija; lijevo i desno od nje brojčane i slovne oznake apoena, ćirilicom i latinicom; Slijedi klauzula o zabrani falsifikovanja;

**Autori reversa:** M. Petrović – FEC i B. Kocmut – SC.

**Papir:** bijeli papir sa crvenim i plavim UV vlaknima;

**Izdata:** na osnovu propisa objavljenog u Sl. listu FNRJ 40/55 i 17/57; povučena 49/67;

**U opticaju:** od 25.04.1957. do 30.04.1968.

**Tiraž:** 369.080,000; štampa: ZIN NB FNRJ Beograd.



#### 500 dinara 1. maj 1955. avers

**Dimenzije:** 135x64 mm, **Boja:** Zelena;

**Avers** – lijevo Djevojka sa srpom (žetelica); desno od nje tekst, od vrha na dolje: NARODNA BANKA/FEDERATIVNE REPUBLIKE JUGOSLAVIJE/ slovna/brojčana/slovna vrijednost apoena/

resources were used for new state investments. In this way, the state opened new companies, hired workers, and councils of workers managed the companies. This model was very successful at the time. Interestingly, during the 1950s, Yugoslav economy grew faster than any other in the world.

The new reform occurred after that period towards the decentralisation of the banking system and the mandates of the National Bank, which resulted from the self-management system.

Based on the Decree on Banks and Savings Banks from January 1954. The credit function of the banking system was decentralised and specialised. This activity was completed in 1961. New credit organizations, utility banks, municipal and co-operative savings banks were introduced. The National Bank had again become the central bank of the country.

Due to the constant demands of the self-governing community for new amounts of money in the observed period, there was an enormous increase in the amount of money in circulation. The volume amounted to 49,957.4 in 1952, rising to 88,210.8 in 1954 in millions of banknotes and coins of various denominations and years of issue (87,774 of banknotes and the 436,5 million coins).

In this situation, the National Bank, based on the decision of the Federal Executive Council of 31 August 1955, the payment operations introduced four new banknotes of 100, 500, 1000 and 5000 dinars with completely new design and production techniques, as well as a certain amount of coins, which will be discussed in some of the following issues. At the same time, it withdrew a certain amount of denominations of previous issues, and reduced the amount by 0.7% in short period of time.

The banknotes listed by denomination structure issued by the Bureau for Printing Banknotes of the National Bank FPRY were given below. They are printed on state-of-the-art machines from that time, by the deep printing technique, which then enabled an extremely high degree of protection against counterfeiting.



**100 dinars, 1 May 1955, reverse**

**Dimension:** 127x60 mm, **Colour:** red;

**Obverse** – the picture of a lady from Konavle is on the left - in the back are olive trees and sea shore, and to the right from the top to the bottom there is an inscription: NATIONAL BANK/ FEDERATIVE REPUBLIC OF YUGOSLAVIA /letter/numerical/letter value of denomination /GOVERNOR/Signature: V. Guzina; Belgrade/1 MAY/1955; PRESIDENT OF THE MANAGING BOARD/ signature: D. Radosavljević/Serial number, numbering: red, two letters, 6 numbers/Authors of the obverse M. Petrović – FEC; BUREAU FOR PRINTING BANKNOTES OF THE NATIONAL BANK OF THE FPRY; T. Krnjajić – SC.

**Reverse:** the panoramic view of Dubrovnik is in the central part of the stylised frame, surrounded by the names of the republics, with the inscription above and below the frame in Cyrillic and Latin: The Socialist Federative Republic of Yugoslavia; to the left and to the right of the frame was denomination written in Cyrillic and Latin in numbers and letters; followed by the clause against counterfeiting

**Authors of the reverse:** M. Petrović – FEC and B. Kocmut – SC.

**Paper:** white paper with red and blue UV threads;

**Issued:** Pursuant to the regulation published in Official Gazette of the FPRY 40/55, 17/57; withdrawn pursuant to the regulation, ref.no 49/67;

In circulation: from 25.04.1957 to 30.04.1968.

**Circulation:** 369.080.000; Printed by: ZIN NB FPRY Belgrade.



**500 dinars, 1 May 1955, reverse**

GUVERNER/Potpis: V. Guzina; Beograd/1 MAJ/1955; PRETSEDNIK UPRAVNOG ODBORA/potpis: D. Radosavljević/Serijski broj, numeracija: crvena, dva slova, 6 cifara/ ZAVOD ZA IZRADU NOVČANICA NARODNE BANKE FNRJ;

**Revers:** u stilizovanom ramu: centralno, panorama - kombajni, žetva, oko nje, nazivi republika, iznad i ispod tekst, ćirilicom i latinicom: Socijalistička Federativna Republika Jugoslavija; lijevo i desno od nje brojčane i slovne oznake apoena, ćirilicom i latinicom; Slijedi klauzula o zabrani falsifikovanja/

**Autori:** M. Petrović – FEC i T. Krnjajić – SC;

**Papir:** bijeli papir sa crvenim i plavim UV vlaknima;

**Izdata:** na osnovu propisa FNRJ 40/55 i 17/57; **Povučena:** na osnovu propisa 40 i 42/68, 32/69 objavljenih u Službenom listu;

**U opticaju:** od 25.04.1957. do 31.12.1968. naknadno mijenjana do 30.06.1975.;

**Tiraž:** 75.557,000;

**Štampa:** ZIN Beograd.

ODBORA/potpis: D. Radosavljević/Serijski broj, numeracija: crvena, dva slova, 6 cifara/ZAVOD ZA IZRADU NOVČANICA NARODNE BANKE FNRJ; **Revers:** u stilizovanom ramu: centralno, panorama Željezara u Zenici, nazivi republika, iznad i ispod tekst, ćirilicom i latinicom: Socijalistička Federativna Republika Jugoslavija; lijevo i desno od nje brojčane i slovne oznake apoena, ćirilicom i latinicom; slijedi klauzula o zabrani falsifikovanja;

**Autori:** M. Petrović – FEC i B. Kocmut – SC;

**Papir:** bijeli papir sa crvenim i plavim UV vlaknima;

**Izdata** na osnovu propisa FNRJ 40/55 i 17/57;

**Povučena** na osnovu propisa 40 i 42/68, 32/69 i 38/72 objavljenih u Službenom listu;

**U opticaju:** od 25.04.1957. do 31.12.1968. naknadno mijenjana do 30.06.1975.;

**Tiraž:** 210.995,000;

**Štampa:** ZIN Beograd.

Na aversu ove novčanice je portret Arifa Heralića koji je bio livac u Željezari Zenica. Autor fotografije je re-



### 1000 dinara 1. maj 1955. avers

**Dimenzije:** 143x68 mm, **Boja:** Braon;

**Avers:** – lijevo: livac – desno od njega tekst, od vrha na dolje: NARODNA BANKA/FEDERATIVNE REPUBLIKE JUGOSLAVIJE/ slovna/brojčana/slovna vrijednost apoena/GUVERNER/Potpis: V. Guzina; Beograd/1 MAJ/1955; PRETSEDNIK UPRAVNOG

porter N. Bibić, koji je objavio u dnevnom listu Borba 1954., a kasnije je iskorišćena za novčanicu od 1000 dinara. On je, kao invalid rada, umro u bijedi i isiromaštvu 1971. ne ostvarivši autorska prava na svoj lik. O njegovoj sudbini snimljen je dokumentarni film Devalvacija jednog osmijeha koji možete pogledati na: <https://www.youtube.com/watch?v=1GWSC2My9Hw>

**Dimensions:**135x64 mm, Colour: green;

**Obverse** – a picture of the Girl with a sickle (reaping machine) is on the left; an inscription from the top to the bottom to the right: NATIONAL BANK/ FEDERATIVE REPUBLIC OF YUGOSLAVIA /letter/numerical/letter value of denomination/ Signature: V. Guzina; Belgrade/1 MAY/1955; PRESIDENT OF THE MANAGING BOARD/ signature: D. Radosavljević/Serial number, numbering: red, two letters, 6 numbers/;

**Reverse:**the panoramic view – combines, harvest is in the central part of the stylised frame, surrounded by the names of the republics, with the inscription above and below the frame in Cyrillic and Latin: The Socialist Federative Republic of Yugoslavia; to the left and to the right of the frame was denomination written in Cyrillic and Latin in numbers and letters; followed by the clause against counterfeiting/

**Authors:** M. Petrović – FEC and T. Krnjajić – SC;

**Paper:** white paper with red and blue UV threads;

**Issued:** pursuant to the regulation published in Official Gazette of the FPRY 40/55, 17/57; **Withdrawn:** pursuant to the regulation published in Official Gazette of the FPRY 40, 42/68, 32/69;

**In circulation:** from 25.04.1957 to 31.12.1968, subsequently amended until 30.06.1975.

**Circulation:** 75.557,000;

Guzina; Belgrade/1 MAY/1955; PRESIDENT OF THE MANAGING BOARD/signature: D. Radosavljević/Serial number, numbering: red, two letters, 6 numbers/;

**Reverse:**the panoramic view of the Steel Plant in is in the central part of the stylised frame, surrounded by the names of the republics, with the inscription above and below the frame in Cyrillic and Latin: The Socialist Federative Republic of Yugoslavia; to the left and to the right of the frame was denomination written in Cyrillic and Latin in numbers and letters; followed by the clause against counterfeiting,

**Authors:** M. Petrović – FEC and B. Kocmut – SC;

**Paper:** white paper with red and blue UV threads;

**Issued** pursuant to the regulation published in Official Gazette of the FPRY 40/55, 17/57;

**Withdrawn** pursuant to the regulation published in Official Gazette of the FPRY 40, 42/68, 32/69, 38/72;

**In circulation:** from 25.04.1957 to 31.12.1968, subsequently amended until 30.06.1975;

**Circulation:** 210.995,000;

**Printed by:**ZIN Beograd.

The obverse shows a portrait of Arif Heralić who was a smelter in the Steel Plant Zenica. He was photographed by a journalist, N. Bibić, who published the photo in a daily newspaper Borba in 1954. This photo was

used for the banknote of 1000 dinars. As a disabled worker, he died in poverty in 1971 without obtaining any royalties for copyright. A documentary movie on his destiny Devaluation of a smile is available at://www.youtube.com/watch?v=1GWSC2My9Hw



**Printed by:**ZIN Beograd.

**1000 dinars, 1 May 1955, reverse**

**Dimensions:**143x68 mm, Colour: Brown;

**Obverse:** – to the left: a smelter – to the right is a text inscribed from the top to the bottom: NATIONAL BANK/ FEDERATIVE REPUBLIC OF YUGOSLAVIA /letter/numerical/letter value of denomination Signature: V.



**5000 dinars, 1 May 1955, reverse**



### 5000 dinara 1. maj 1955. avers

**Dimenzije:** 151x72 mm, **Boja:** plava;

**Avers:** lijevo: reljef Kosovka devojka, desno tekst, od vrha na dolje: NARODNA BANKA/FEDERATIVNE REPUBLIKE JUGOSLAVIJE/ slovna/brojčana/slovna vrijednost apoena/GUVERNER/Potpis: V. Guzina; Beograd/1 MAJ/1955; PRETSEDNIK UPRAVNOG ODBORA/potpis: D. Radosavljević/Serijski broj, numeracija: crvena, dva slova, 6 cifara/ZAVOD ZA IZRADU NOVČANICA NARODNE BANKE FNRJ; **Revers:** u stilizovanom ramu: centralno, panorama Skupština FNRJ, nazivi republika, iznad i ispod tekst, ćirilicom i latinicom: SOCIJALISTIČKA FEDERATIVNA REPUBLIKA JUGOSLAVIJA; lijevo i desno od nje brojčane i slovne oznake apoena, ćirilicom i latinicom; Slijedi klauzula o zabrani falsifikovanja; autori: M. Petrović – FEC i T. Krnjajić – SC. **Papir:** bijeli papir sa crvenim i plavim UV vlaknima; **Izdana** na osnovu propisa FNRJ 40/55 i 17/57; **Povučena** na osnovu propisa 40 i 42/68, 32/69 i 38/72 objavljenih u Službenom listu;

**U opticaju:** od 25.04.1957. do 31.12.1968., naknadno mijenjana do 30.06.1975.;

**Tiraž:** 64.585,000, **Štampa:** ZIN Beograd.

Na aversu ove novčanice nalazi se dio friza koji je Ivan Meštrović 1909. napravio kao dio reljefne dekoracije za Vidovdanski hram, a njegova ideja bila je da se podigne na mjestu odigravanja Kosovske bitke, između Laba i Sitnice na Kosovu.

Obije novčanice štampane su na dvije vrste papira. Prva vrsta je UV upijajuća, a druga UV reflektujuća. Kod apoena od 1000 i 5000 ova serija je obilježena brojem 2 u donjem desnom uglu štampanog polja.

Sa ovim novčanicama završava se emitovanje serije novčanica državnog i izdanja Narodne banke FNRJ. Izrada novih novčanica uslijedila je nakon donošenja Ustava 7. aprila 1963., kada je država dobila ime Socijalistička Federativna Republika Jugoslavija (SFRJ) pa ćemo opise njenih novčanica dati u nekom od narednih brojeva.

**Dimensions:** 151x72 mm, **Colour:** blue;

**Obverse** – the sculpture of the girl from Kosovo is on the left, while to the right is a text inscribed from the top to the bottom: NATIONAL BANK/FEDERATIVE REPUBLIC OF YUGOSLAVIA /letter/numerical/letter value of denomination Signature: V. Guzina; Belgrade/1 MAY/1955; PRESIDENT OF THE MANAGING BOARD/signature: D. Radosavljević/Serial number, numbering: red, two letters, 6 numbers; Reverse: the panoramic view of the Parliament of FPRY, is in the central part of the stylised frame, surrounded by the names of the republics, with the inscription above and below the frame in Cyrillic and Latin: The Socialist Federative Republic of Yugoslavia; to the left and to the right of the frame was denomination written in Cyrillic and Latin in numbers and letters; followed by the clause against counterfeiting; authors: M. Petrović – FEC and T. Krnjajić – SC.

**Paper:** white paper with red and blue UV threads;

**Issued:** pursuant to the regulation published in Official Gazette of the FPRY 40/55, 17/57;

**Withdrawn** pursuant to the regulation published in Official Gazette 40, 42/68, 32/69, 38/72;

**In circulation:** from 25.04.1957 to 31.12.1968, subsequently amended until 30.06.1975;

**Circulation:** 64.585,000,

**Printed by:** ZIN Beograd.

The obverse of this banknote displays a part of the frieze that was made by Ivan Meštrović in 1909 as a part of relief decoration for the Vidovdan Temple. His idea was to be built on the location of the Battle of Kosovo, between the Lab and the Sitnica in Kosovo.

Both banknotes were printed on two types of paper. The first type UV absorbent and the second was UV reflective. This series was marked by number 2 in lower right corner of printed field in denominations of 1000 and 5000 dinars

The printing of the series of banknotes of the state issue of the National Bank of FPRY ended with these banknotes. Printing of new banknotes occurred after the passing of the Constitution on 7 April 1963 when the state changed its name into the Socialist Federative Republic of Yugoslavia (SFRY). The description of banknotes of this series will be given in some of the following issues.



UDRUŽENJE BANAKA  
CRNE GORE  
ASSOCIATION OF  
MONTENEGRIN BANKS



*Srećna Nova godina  
i Božićni praznici!*

2019

MERRY CHRISTMAS  
AND HAPPY NEW YEAR!

**UDRUŽENI OKO  
ZAJEDNIČKOG  
CILJA**

Addiko Bank AD Podgorica  
Atlas Banka AD Podgorica  
Crnogorska komercijalna banka AD Podgorica  
Erste Bank AD Podgorica  
Hipotekarna Banka AD Podgorica  
Invest Banka Montenegro AD Podgorica  
Komercijalna Banka Podgorica  
Lovćen banka AD  
NLB Banka  
Nova banka AD Podgorica  
Societe Generale Montenegro  
Prva banka Crne Gore 1901.  
Universal Capital Bank  
Zapad Banka AD Podgorica  
Ziraat Bank