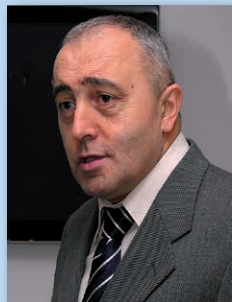


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# DOLAR KAO SVETSKA REZERVNA VALUTA - IZAZOVI I PERSPEKTIVE

*Rad je deo istraživanja na projektu 179065 Ministarstva prosvete, nauke i tehnološkog razvoja Republike Srbije "Uloga države u novom modelu rasta privrede Srbije".*

## Rezime

Američki dolar je stekao status svetske rezervne valute u bretonvudskom sistemu i zadržao ga do danas. Ovakva pozicija u međunarodnim finansijama ima svoje prednosti i manjkavosti kako za SAD kao emitenta ove valute, tako i za ostatak sveta koji je koristi u trgovini, čuvanju vrednosti i raznim finansijskim operacijama i obračunima. Raspadom bretonvudskog sistema dotadašnji režim fiksnih deviznih kurseva zamenjen je fluktuirajućim deviznim kursovima. Nezavisno do ove promene, dolar je nastavio da igra ulogu svetske rezervne valute. Brojne bankarske i valutne krize posle prelaska na sistem fluktuirajućih deviznih kurseva, kao i preokreti u međunarodnim tokovima kapitala, naveli su zemlje u razvoju i zemlje u tranziciji da povećavaju svoje devizne rezerve. U nastojanju da sačuvaju njihovu vrednost, centralne banke zemalja uglavnom ih plasiraju u državne hartije od vrednosti SAD, kao likvidnu i pouzdanu aktivu. Međutim, zbog rizika koji nosi oslonac na jednu nacionalnu valutu u ulozi svetske rezervne valute, postoje brojni predlozi o reformi međunarodnog monetarnog sistema. Prema tekućim tendencijama u svetu, najozbiljniji kandidati za status svetske rezervne valute u budućnosti su dolar, evro i kineski juan.

**Ključne reči:** dolar, devizne rezerve, rezervna valuta, kapital, hartije od vrednosti, međunarodne finansije, zemlje u razvoju, zemlje u tranziciji, evro, juan

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# DOLLAR AS THE WORLD'S RESERVE CURRENCY - CHALLENGES AND PROSPECTS

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## Summary

The US dollar gained the status of the world's reserve currency in the Bretton Woods system and has preserved it until the present day. Such position in international finance entails both advantages and disadvantages to the USA as the issuer of this currency, and to the rest of the world using it in trading, as store of value, and for the purpose of various financial operations and transactions. After the collapse of the Bretton Woods system, the regime of fixed FX rates was replaced by floating FX rates. Yet, regardless of this change, the dollar kept its role of the world's reserve currency. Numerous banking and currency crises following the transfer to the floating FX rates regime, along with the shifts in international capital flows, forced the developing countries and countries in transition to increase their FX reserves. In the tendency to store their value, central banks usually invest them into US Treasury securities, as liquid and reliable assets. However, due to the risk incurred by the reliance on a single national currency in the role of the world's reserve currency, there have been many proposals to reform the international monetary system. According to the current global tendencies, the most serious candidates for acquiring the status of the world's reserve currency in the future are the dollar, the euro, and the Chinese yuan.

**Keywords:** dollar, FX reserves, reserve currency, capital, securities, international finance, developing countries, transition countries, euro, yuan

**JEL:** F31, F32, F42, E52, E58

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## Uvod

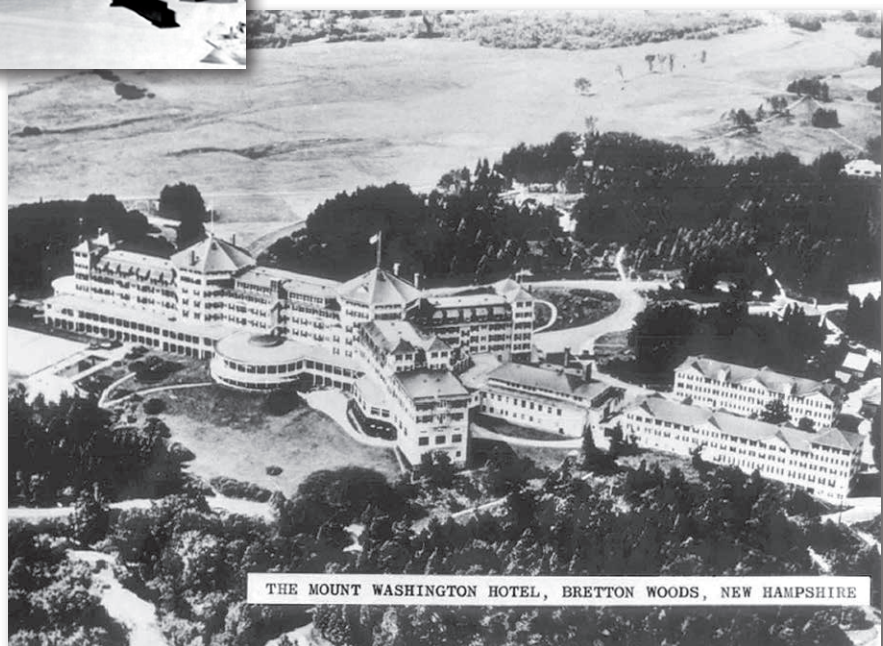
Pozicija dolara kao svetske rezervne valute građena u bretonvudskom periodu još uvek je aktuelna, mada u određenoj meri umanjena. Neke druge konvertibilne valute (funta sterlinga, nemačka marka i japanski jen) nisu uspele da ga značajnije ugroze na ovom tronu. Pozicija koju je stekao u međunarodnoj trgovini održava se i danas zbog uhodanih postupaka obračuna i mehanizama međunarodnih plaćanja. Njegova dominacija u svetskim deviznim rezervama ima slabe strane za zemlje sa velikim iznosima rezervi. Pokazalo se da u vreme krize raste rizik kolebanja vrednosti dolara, što može ugroziti vrednost rezervi (njihovu kupovnu snagu). Uprkos ovim rizicima, održavanje međunarodne likvidnosti i dan danas zavisi od raspoloživih iznosa dolara. Bankarske i valutne krize u svetskoj privredi, koje su se javljale nakon raspada bretonvudskog sistema, kao i neizvesnosti u pogledu tokova kapitala, podstakli su zemlje u razvoju (ZUR) i zemlje u tranziciji (ZUT) na povećanje deviznih rezervi. Smatralo se da veće devizne rezerve

predstavljaju garanciju da se zemlja može lakše suočiti sa teškoćama koje donosi prekid priliva kapitala. U nastojanju da sačuvaju vrednost svojih deviznih rezervi, centralne banke zemalja su ih uglavnom plasirale u državne hartije od vrednosti (HoV) SAD, kao likvidnu i pouzdanu aktivu. To ujedno znači da je dolar predstavljao ključnu valutu deviznih rezervi u svetu. Tako je i danas, uprkos činjenici što je evro takođe postao svetska rezervna valuta. Globalna finansijska kriza iz 2008. godine pojačala je diskusije o potrebi reforme međunarodnog monetarnog sistema (MMS), jer su se ispoljile slabosti oslonca na dolar kao svetsku rezervnu valutu. Rizik slabljenja dolara nametnuo se kao veliki problem za zemlje sa najvećim svetskim deviznim rezervama, pre svega za Kinu. Sem toga, velika svetska tražnja za dolarskim HoV povezana je sa rastom budžetskog deficita i deficita tekućeg računa SAD, što može ugroziti spoljnu solventnost ove zemlje. Ovo je jedan od razloga da se traga za novim rešenjima u MMS-u, pri čemu se računa i sa opcijom da više valuta deli ulogu svetske rezervne valute. U literaturi postoji mišljenje da bi u skorijoj budućnosti ulogu svetske rezervne valute mogle da dele tri nacionalne valute: dolar, evro i kineski juan. Predmet istraživanja u ovom radu je uloga dolara u MMS-u i njegov status svetske rezervne valute. Cilj analize je da se ispita u kojoj meri i u kojim segmentima je dolar i dalje svetska rezervna valuta, kao i da se ocene njegove perspektive u ovoj ulozi.



Jula 1944. godine delegati iz 44 zemlje saveznice okupili su se u Bretonvudu, SAD, na Monetarnoj i finansijskoj konferenciji Ujedinjenih nacija. Delegati su potpisali Sporazum kojim je uspostavljen system pravila, institucija i procedura za regulisanje međunarodnog monetarnog sistema. U Bretonvudu su osnovani Međunarodni monetarni fond (MMF) i Međunarodna banka za obnovu i razvoj (IBRD).

In July 1944 delegates from 44 Allied nations gathered in Bretton Woods, US, for the United Nations Monetary and Financial Conference. The delegates signed the Agreement setting up a system of rules, institutions, and procedures to regulate the international monetary system. The planners at Bretton Woods established the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (IBRD).



## Introduction

The position of the dollar as the world's reserve currency built in the Bretton Woods era is still ongoing, though somewhat diminished. Some other convertible currencies (e.g. pound sterling, Deutschmark and Japanese yen) have failed to substantially threaten its throne. The position it acquired in international trade has been maintained until today due to the well-established transaction procedures and international payment mechanisms. Its domination in the world's FX reserves has certain downsides for the countries with large amounts of reserves. It turned out that during the crisis the risk of the dollar value fluctuations increases, thereby jeopardizing the value of reserves (their purchasing power). Despite these risks, the maintenance of international liquidity even today depends on available dollar amounts. The banking and currency crises in the global economy, which occurred after the collapse of the Bretton Woods system, along with the uncertainties in terms of capital flows, forced the developing countries and countries in transition to increase their FX reserves. It was believed that higher FX reserves serve as a guarantee that a country can more easily face the difficulties that any disruptions in capital inflows may bring. In the tendency to store the value of their FX reserves, central banks typically invested them into US Treasury securities, as liquid and reliable assets. At the same time, this meant that the dollar was the key currency when it came to the world's FX reserves. It remains so today, despite the fact that the euro has also become the world's reserve currency. The 2008 global financial crisis has fuelled discussions about the necessity of reforming the international monetary system (IMS), bearing in mind that the shortcomings of relying on the dollar as the world's reserve currency were manifested. The risk of dollar depreciation imposed itself as a major problem for countries with the highest FX reserves in the world, first of all, China. Moreover, the high global demand for dollar securities is linked with the increase of the USA budget deficit and current account deficit, which may jeopardize this country's external solvency. This is one of the reasons why new solutions are still being

sought for the IMS, including the option of several currencies sharing the role of the world's reserve currency. In the relevant literature there is the opinion that in the foreseeable future the role of the world's reserve currency could be shared by three national currencies: the dollar, the euro, and the Chinese yuan. The subject of this paper's research is the role of the dollar in the IMS and its status of the world's reserve currency. The objective of our analysis is to examine in what degree and in which segments the dollar is still the world's reserve currency, and to assess its prospects in this role. The first part of the paper indicates the tendencies of capital flows as the reason for holding high amounts of FX reserves. The second part refers to the examination of tendencies in respect of the world's FX reserves formation, whereas the third part deals with the role and prospects of the dollar as the world's reserve currency. The fourth part is dedicated to the processes of internationalization of the yuan.

## International Capital Flows and the World's FX Reserves

A currency acquires the status of a world's reserve currency if it can perform the basic domestic functions - unit of account, medium of exchange and store of value - at the global level as international money. When foreign entities, first of all central banks, wish to hold their FX reserves in a foreign currency, it means that the concerned currency has the status of a world's reserve currency. Another significant proof that a currency is a world's reserve currency is the fact that it is frequently used in international financial transactions. Today, this role is played by the US dollar and the euro. The international status of the dollar was established by the Bretton Woods monetary system. Before the outbreak of the global financial crisis in 2008, there were some expectations for the euro to overtake the dollar in its role of the world's reserve currency. Today the question is whether the euro will survive as the single Eurozone currency, and the Chinese yuan has been increasingly mentioned as the future rival to the dollar in its role of the world's reserve currency. The growth of global FX reserves following the 1997 Asian financial crisis and the decline of

U prvom delu rada se ukazuje na tendencije kretanja kapitala kao razloga za držanje većih iznosa deviznih rezervi. Drugi deo se odnosi na ispitivanje tendencija formiranja svetskih deviznih rezervi, dok se u trećem delu obrađuju uloga i perspektive dolara kao svetske rezervne valute. Četvrti deo je posvećen procesima internacionalizacije juana.

## Međunarodno kretanje kapitala i svetske devizne rezerve

Jedna valuta stiče status svetske rezervne valute ako osnovne domaće funkcije - sredstvo obračuna, sredstvo razmene i sredstvo očuvanja vrednosti - može da vrši na svetskom nivou kao međunarodni novac. Kada subjekti u inostranstvu, pre svega strane centralne banke, žele da svoje devizne rezerve drže u stranoj valuti, onda je to znak da dotična valuta ima status svetske rezervne valute. Drugi važan dokaz da jedna valuta predstavlja svetsku rezervnu valutu je činjenica da se ona često koristi u međunarodnim finansijskim transakcijama. Danas ovu ulogu imaju SAD dolar i evro. Međunarodni status dolara utvrđen je u bretonvudskom monetarnom sistemu. Pre izbijanja globalne finansijske krize 2008. godine bila su ispoljena očekivanja da bi evro mogao da pretekne dolar u ulozi svetske rezervne valute. Danas se često postavlja pitanje da li će evro opstati kao jedinstvena valuta evro zone, a kao budući rival dolaru u ulozi svetske rezervne valute sve češće se spominje kineski juan. Rast svetskih deviznih rezervi posle azijske finansijske krize iz 1997. godine i nestašica međunarodne likvidnosti tokom globalne finansijske krize iz 2008. godine, podstakli su diskusije o slabostima MMS-a, čiji je osnovni stub dolar kao svetska rezervna valuta.

Nestabilni tokovi kapitala mogu biti razlog za povećanje deviznih rezervi, jer se na taj način otvara mogućnost za ublažavanje posledica iznenadnih promena pravca i dinamike kretanja kapitala. Na međunarodne tokove kapitala, posebno sredstava iz bankarskih izvora, značajno utiču domaći finansijski uslovi u razvijenim zemljama (Cerutti, Claessens

i Ratnovski, 2014, str. 6). Sa problemom promenljive dinamike kretanja kapitala posebno se susreću ZUR sa nedovoljno razvijenim finansijskim sektorom (Dell'Araccia i ostali, 2008, str. 4). Ove zemlje su suočene sa pitanjem kako da ublaže poremećaje tokova kapitala. Odgovor na ovo pitanje niti je jednostavan niti jednoznačan. Jedna mogućnost je da predvide buduće poremećaje i blagovremeno preduzmu odgovarajuće mere u cilju sprečavanja posledica iznenadnih preokreta tokova kapitala, a druga je da se oformi odgovarajući multilateralni okvir, koji bi posedovao amortizere za slučajeve velikih oscilacija tokova kapitala. Ni jedna od ovih mogućnosti ne zavisi samo od ZUR i ZUT, već podrazumeva aktivnu ulogu razvijenih zemalja. Međutim, čak i kad bi ZUR i ZUT dobro procenile koji segmenti tokova kapitala pokazuju izrazitu nestabilnost, verovatnoća da same reše ovaj problem bez koordinacije sa razvijenim zemljama je mala. Od značaja za rešavanje problema je i ocena da li oscilacije u tokovima kapitala nastaju zbog kretanja globalne likvidnosti, ili su posledica teškoća sa kojima se suočavaju zemlje primaoci kapitala.

Međunarodno kretanje kapitala pokazuje da su oscilacije priliva kapitala u ZUR rasle uporedo sa liberalizacijom njihovog računa kapitala i povećavale rizik za ove zemlje ukoliko nastane finansijska kriza. Do izbijanja azijske finansijske krize neto priliv kapitala u ZUR bio je u usponu, pa je u 1997. godini činio 5,1% njihovog BDP-a (eng. gross domestic product - GDP), ali je zbog povećanih rizika posle ove krize priliv smanjen na 2,7% BDP-a u 2000. godini. Zatim je usledio preokret i priliv kapitala je porastao na 7,7% BDP-a 2007. godine, da bi, usled izbijanja svetske finansijske krize bio prepolovljen na oko 3,6% BDP-a u 2009. godini<sup>1</sup>. Velike oscilacije tokova kapitala u ovim zemljama povećale su volatilnost deviznih kurseva njihovih valuta, što je svakako uticalo na finansijsku i ukupnu makroekonomsku stabilnost ZUR i ZUT. Oscilatorni tokovi kapitala i posle krize iz 2008. godine nametnuli su pitanje da li je moguće uspostaviti multilateralni regulatorni okvir za upravljanje kretanjem kapitala, odnosno da li je potrebna međunarodna koordinacija

1 Podaci su navedeni prema World Bank, *Global Development Finance 2011*.

international liquidity during the 2008 global financial crisis fueled the discussions about the weaknesses of the IMS, whose main pillar is the dollar as the world's reserve currency.

Volatile capital flows can be the reason for increasing FX reserves, given that this generates a possibility for mitigating the consequences of sudden changes in the direction and dynamics of capital movements. International flows of capital, especially assets from banking sources, are substantially affected by domestic financial conditions in the developed countries (Cerutti, Claessens and Ratnovski, 2014, p. 6). The problem of volatile capital flows is particularly prominent in the developing countries with insufficiently developed financial sectors (Dell'Ariccia et al, 2008, p. 4). These countries are facing the issue of how to moderate turbulent capital flows. The solution is neither simple nor single-faceted. One possibility is to anticipate future turbulences and timely undertake appropriate measures to prevent the consequences of sudden shifts in capital flows, and the other is to form a suitable multilateral framework that would contain buffers for the cases of major oscillations in capital flows. Neither of these possibilities simply depends on developing and transition countries, but requires an active role on the part of the developed countries. However, even if developing and transition countries properly assessed which segments of the capital flows demonstrate extreme volatility, the probability of them solving this problem without any coordination with developed countries would be low. Also relevant for solving this problem is the assessment of whether oscillations in capital flows occur as a consequence of global liquidity or the difficulties faced by the countries receiving capital.

International capital flows indicate that the oscillations of capital inflows into developing countries have been increasing in parallel with the liberalization of their capital accounts, thereby increasing the risk for these countries in case of a financial crisis. Up until the outbreak of the Asian financial crisis the net capital inflow in developing countries has been on

the rise, hence in 1997 it amounted to 5.1% of their gross domestic product - GDP, but due to the increased risks after this crisis the inflow dropped to 2.7% of GDP in 2000. This was followed by a shift and a growth of capital inflow which reached 7.7% of GDP in 2007, only to be halved due to the global financial crisis, amounting to 3.6% of GDP in 2009<sup>1</sup>. Major oscillations in capital flows in these countries increased the volatility of their currencies' FX rates, which certainly affected the financial and overall macroeconomic stability of developing and transition countries. Oscillatory capital flows even after the 2008 crisis raised the issue of whether it is possible to establish a multilateral regulatory framework for capital flows management, i.e. whether an international coordination of monetary policies is required (Taylor, 2013, p. 15). The request for establishing multilateral control of international capital flows is often stated as an integral element of the IMS reform, and it is frequently indicated to the fact that there has been no powerful empirical evidence about the favorable effects of capital account liberalization (IMF, 2012, p. 6).

The inflow of private capital into developing countries has been revived after the latest crisis, hence in the period from 2010 to 2013 on average it amounted to about 6% of their GDP (World Bank, 2014, p. 96). The inflow of capital in some developing countries in the pre-crisis period ended up in FX reserves, with no additional pressure on the expansion of the current account deficit. However, in other countries, in parallel with the capital inflow the current account deficit did expand. In both cases, external shocks transferred to the countries with foreign debts. The countries with higher balance of trade deficit were facing higher risk exposure due to capital flight. It turned out that countries with a stable inflow of foreign direct investments, a lower net inflow of private capital, and higher FX reserves endured the shock of the 2008 global financial crisis more easily. The dynamic growth of net private capital inflows in the transition countries of Central and Eastern Europe in the period from 2000 to 2007 increased the sensitivity of these

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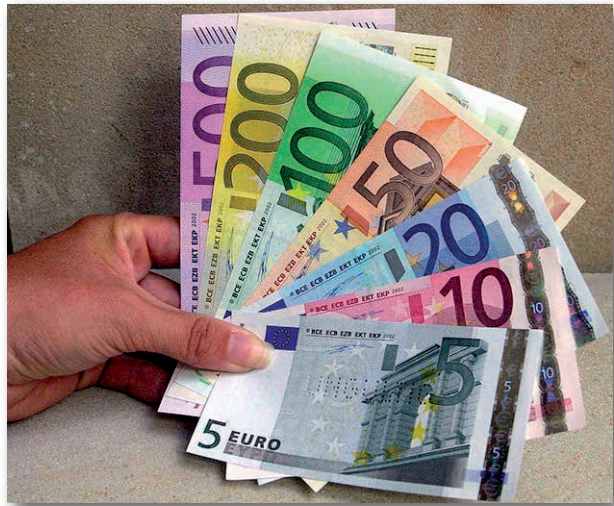
1 The data are stated according to World Bank, *Global Development Finance 2011*.

monetarnih politika (Taylor, 2013, str. 15). Često se zahtev za uspostavljanje multilateralne kontrole međunarodnog kretanja kapitala navodi kao integralni element reforme MMS-a, a neretko se ukazuje i na činjenicu da nema snažnih empirijskih dokaza o povoljnim efektima liberalizacije računa kapitala (IMF, 2012, str. 6).

Priliv privatnog kapitala u ZUR posle najnovije krize je oživeo, tako da je u periodu 2010-2013. godine u proseku iznosio oko 6% njihovog BDP-a (World Bank, 2014, str. 96). Priliv kapitala kod nekih ZUR u periodu pre krize delom je završio u deviznim rezervama, bez dodatnog pritiska na širenje deficita tekućeg računa. Međutim, kod drugih zemalja je paralelno sa prilivom kapitala došlo do širenja deficita tekućeg računa. I u jednom i u drugom slučaju, spoljni šokovi su se prenosili na zemlje zadužene u inostranstvu. Pri tome su zemlje sa većim deficitom trgovinskog bilansa bile više izložene riziku usled bega kapitala (eng. capital flight). Pokazalo se da su zemlje sa stabilnim prilivom stranih direktnih investicija (SDI), manjim neto prilivom privatnog kapitala i većim deviznim rezervama lakše podnele udar svetske finansijske krize iz 2008. godine. Dinamičan porast neto priliva privatnog kapitala u ZUT centralne i istočne Evrope u periodu 2000-2007. godine pojačao je osetljivost ovih zemalja tokom krize iz 2008. godine. Uprkos velikoj dubini i brojnim instrumentima finansijskog tržišta, volatilni tokovi kapitala takođe su doneli probleme razvijenim zemljama tokom krize iz 2008. godine. Poseban problem za ZUT leži u tome što priliv kapitala nadilazi njihove apsorpcione kapacitete, i time povećava osetljivost ovih zemalja na kretanje kapitala. Neto tokovi

privatnog kapitala u ovim zemljama u periodu 2000-2010. godine, stavljani u odnos sa njihovim agregatom novčane mase M2, bili su znatno veći nego kod razvijenih zemalja (Claessens i Ghosh, 2013, str. 92). Na priliv kapitala u ZUR deluju unutrašnji i spoljni faktori. U istraživanju Svetske banke, koje je objavljeno u publikaciji *Global Economic Prospects: Coping with Policy normalization in high-income countries* (World Bank, 2014, str. 100), ocenjuje se da su globalni faktori opredelili 60% priliva kapitala u ZUR u periodu 2009-2013. godine, dok se ostatak od 40% duguje domaćim faktorima. S obzirom da ZUR neznatno utiču na spoljne faktore, nesumnjiva je potreba da izgrade amortizere za slučajeve iznenadnih preokreta u tokovima kapitala. Empirijska iskustva takođe potvrđuju da su ZUR sa velikim deviznim rezervama bile u mogućnosti da intervencijama na deviznom tržištu ublaže nagli pad vrednosti nacionalne valute usled bega kapitala.

Uprkos uvreženom stavu da veće devizne rezerve pružaju širi manevarski prostor u slučaju krize, u literaturi su ipak podeljena



mišljenja o tome da li su one olakšale ZUT-u udar finansijske krize iz 2008. godine. Rose i Spiegel (2010), na primer, smatraju da devizne rezerve nisu predstavljale glavni zaštitni faktor u vreme finansijske krize, dok Frankel i Saravelos (2012, str. 229) dokazuju da su zemlje sa većim deviznim rezervama tokom finansijske krize bile izložene manjim rizicima. Empirijska istraživanja koja su preduzeli Dominguez i ostali (2012), mada sprovedena na manjem uzorku, pokazuju da su nivo deviznih rezervi i njihovo upravljanje tokom globalne

countries during the 2008 crisis. Despite the substantial depth and numerous instruments of the financial market, volatile capital flows during the 2008 crisis caused certain problems in the developed countries as well. A particular problem for transition countries lies in the fact that the capital inflow exceeds their absorption capacities, thereby increasing the vulnerability of these countries to capital movements. Net private capital flows in these countries in the period from 2000 to 2010, in



relation to their M2 money supply aggregates, were substantially higher than in developed countries (Claessens and Ghosh, 2013, p. 92). Capital inflow in developing countries is affected by both internal and external factors. The World Bank's study, published in *Global Economic Prospects: Coping with Policy Normalization in High-Income Countries* (World Bank, 2014, p. 100), assessed that the global factors accounted for 60% of capital inflow in developing countries in the period from 2009 to 2013, whereas the remaining 40% was accounted for by domestic factors. Given that developing countries affect external factors only negligibly, there is an unquestionable need for them to create buffers in case of sudden shifts in capital flows. Empirical experiences have also confirmed that developing countries with high FX reserves were in the position to moderate sudden depreciation of their national currencies caused by capital flight by employing FX market interventions.

Despite the deeply rooted belief that higher FX reserves provide more room for maneuver in case of a crisis, the opinions in reference literature are divided as to whether they have actually helped transition countries face the shock of the 2008 financial crisis. Rose and Spiegel (2010),

for instance, claim that FX reserves were not a major protection factor during the financial crisis, whereas Frankel and Saravelos (2012, p. 229) have verified that countries with higher FX reserves were exposed to lower risks during the financial crisis. Empirical studies conducted by Dominguez et al. (2012), though on a smaller sample, indicate that the level of FX reserves and their management during the global financial crisis demonstrated a positive correlation with the growth of GDP. These authors have established that FX reserves in transition countries increased up to the point when their GDP started to decline (Dominguez et al, 2012, p. 399).

Volatile capital flows with sudden shifts indicate that the IMS failed to create an environment that would be characterized by macroeconomic and financial stability, thereby supporting the strong and stable economic growth worldwide. Monetary policy in developed countries has often boosted international capital flows, causing sudden leaps and drops in capital inflow, primarily in developing countries. This particularly refers to the US monetary policy, which has been shaping the monetary environment in the most part of the post-war period (World Bank, 2011, p. 133). Frequent banking and currency crises following the disintegration of the Bretton Woods system, in combination with high oscillations in FX rates, had an adverse effect on economic growth. The relevant literature failed to provide powerful evidence that capital account liberalization and financial globalization have a direct positive impact on economic growth in developing countries. Recently, there have been some views claiming that, under certain circumstances, full mobility of capital is even unsolicited, since it increases

finansijske krize ispoljili pozitivnu korelaciju sa rastom BDP-a. Ovi autori su utvrdili da su devizne rezerve ZUT rasle sve do tačke kad je njihov BDP počeo da opada (Dominguez i ostali, 2012, str. 399).

Promenljivi tokovi kapitala sa naglim zaokretima pokazuju da MMS nije uspeo da izgradi okruženje koje bi karakterisala makroekonomska i finansijska stabilnost, što bi podržalo jak i stabilan privredni rast u svetu. Monetarna politika u razvijenim zemljama često je pokretala međunarodne tokove kapitala, izazivajući nagle skokove i padove u prilivu kapitala, pre svega u ZUR. To se posebno odnosi na monetarnu politiku SAD, koja je oblikovala monetarno okruženje u većem delu posleratnog perioda (World Bank, 2011, str. 133). Učestale bankarske i valutne krize u periodu posle kraha bretonvudskog sistema i visoke oscilacije deviznih kurseva nisu se povoljno odrazile na privredni rast. U literaturi su izostali snažni dokazi da liberalizacija računa kapitala i finansijska globalizacija imaju direktno pozitivno dejstvo na privredni rast ZUR. U novije vreme se javljaju i stavovi po kojima, pri određenim okolnostima, potpuna mobilnost kapitala nije čak ni poželjna jer pojačava osetljivost na finansijske krize (Furceri, Guichard i Rusticelli, 2011, str. 11). Kontinuiran priliv kapitala u velikim iznosima dovodi do apresijacije nacionalne valute, sa pratećim efektima u vidu smanjivanja izvozne konkurentnosti i povećanja deficita tekućeg računa. To se desilo sa ZUT centralne i istočne Evrope posle otvaranja njihove privrede i liberalizacije računa kapitala. Mada priliv kapitala uvećava domaću štednju i investicije, eruptivni prilivi i veliki deficiti tekućeg računa povećavaju osetljivost zemlje u slučaju izbijanja krize i naglog bega kapitala. Da bi se ublažili ovi rizici, zemlje treba da sprovode makroekonomsku politiku, koja u određenim slučajevima podrazumeva i privremeno korišćenje instrumenata za usmeravanje tokova kapitala, kako bi se održala makroekonomska i finansijska stabilnost. U arsenal mera makroekonomske politike spada i politika deviznih rezervi, koje mogu umanjiti posledice naglog bega kapitala. Ublažavanje volatilnosti tokova kapitala moglo bi da smanji potrebu ZUR i ZUT za opreznim deviznim

rezervama. Većina ZUR i ZUT već je preduzela određene korake u pravcu integracije u svetsku privredu, ali je finansijska kriza iz 2008. godine podstakla mnoge zemlje da ponovo uvedu mere zaštite od preteranog priliva i odliva kapitala. Za ove zemlje je važno da razvijaju finansijski sistem, koji će olakšati posredovanje kapitala i omogućiti njihovim preduzećima da lakše dođu do sredstava za finansiranje investicija, odnosno koji će i preduzećima i domaćinstvima olakšati strukturiranje i upravljanje porfoliom (IMF, 2012, str. 12). Finansijska tržišta ZUT su znatno produbljena u periodu posle 2000. godine, ali su brojni segmenti i dalje manje razučeni od onih u razvijenim industrijskim zemljama. Mada produbljivanje finansijskog tržišta ZUT nije garancija da će iz toga proisteći veća finansijska stabilnost, u Izveštaju Međunarodnog monetarnog fonda iz aprila 2014. godine (*Global Financial Stability Report Moving from Liquidity - to Growth-Driven Markets*) se navodi da postoje empirijski dokazi da dublje finansijsko tržište može povećati makroekonomsku elastičnost (IMF, 2014, str. 76). Međutim, u istoj studiji se zapaža da se dublja finansijska tržišta ZUT mogu suočiti sa većom volatilnošću tokova kapitala, ako globalni investitori odluče da se sa njih povuku i poslovanje nastave na stabilnijim i pouzdanijim finansijskim tržištima razvijenih zemalja, gde se očekuju manji cenovni udari (Ibid., str. 76). Očigledno je da dublje i više liberalizovano finansijsko tržište pruža veće mogućnosti da kapital napusti zemlju u slučaju pogoršanja opštih prilika. Iz toga se stiče utisak da ZUT još uvek imaju potrebu da poseduju veće devizne rezerve, kojima bi mogle da intervenišu na deviznom tržištu i spreče preterane oscilacije deviznog kursa u slučaju naglih preokreta tokova kapitala, kao i da zadrže eksternu likvidnost.

Ekspanzivna monetarna politika SAD poslednjih nekoliko godina (u literaturi označena kao *Quantitative Easing*), obeležena skoro nultim prinosima, podstakla je finansijski kapital na plasman u zemlje sa većim prinosima. ZUT i ZUR pokazale su se kao dobra zamena za razvijene zemlje, jer su imale više stope privrednog rasta i stabilno ekonomsko okruženje. Lim, Mohapatra i Stocker (2014, str. 3) su pomoću ekonometrijskog modela ispitivali priliv kapitala u ZUR u periodu 2000-2013.

sensitivity to financial crises (Furceri, Guichard and Rusticelli, 2011, p. 11). Continuous inflow of capital in large amounts causes appreciation of the national currency, with the side effects in the form of lowered export competitiveness, and increased current account deficit. This happened to transition countries in Central and Eastern Europe after the opening of their economies and liberalization of their capital accounts. Although the capital inflow boosts domestic savings and investments, the eruptive inflows and large current account deficits heighten the country's sensitivity in case of a crisis or sudden capital flight. In order to mitigate these risks, countries should conduct macroeconomic policy which in certain cases implies temporary usage of instruments for capital flow management, with a view to maintaining macroeconomic and financial stability. The range of macroeconomic policy measures includes the policy of FX reserves that may alleviate the consequences of a sudden capital flight. Moderating the volatility of capital flows could reduce the needs of developing and transition countries for prudential FX reserves. Most developing and transition countries have already taken certain steps towards their integration into the global economy, but the 2008 financial crisis encouraged many countries to reinstitute the measures of protection against excessive capital inflows and outflows. It is important for these countries to develop their financial systems that would facilitate intermediation of capital and enable companies easier access to investment finance, i.e. that would make portfolio structuring and management easier for companies and households (IMF, 2012, p. 12). Financial markets of transition countries have been substantially deepened after 2000, yet numerous segments have still remained less elaborate than those in developed industrial countries. Although the deepening of the financial market in transition countries is no guarantee that it will generate higher financial stability, the IMF Report from April 2014 (*Global Financial Stability Report Moving from Liquidity - to Growth-Driven Markets*) states that there is empirical evidence indicating that a deeper financial market can boost macroeconomic elasticity (IMF, 2014, p. 76). However, the same study offers an observation that deeper

financial markets in transition countries may face higher volatility of capital flows, if global investors decide to withdraw from them and continue their operations in the more stable and reliable financial markets of developed countries, where they can expect less intense price shocks (Ibid., p. 76). Evidently, a deeper and more liberalized financial market offers more opportunities for capital to leave the country in case of a deterioration of general circumstances. This generates the impression that transition countries still have the need to hold higher FX reserves that they could use for FX market interventions, thereby preventing excessive FX rate fluctuations in case of sudden shifts in capital flows, at the same time preserving their external liquidity.

The expansive US monetary policy in the past several years (referred to in literature as "quantitative easing"), having recorded almost zero revenues, stimulated the investment of financial capital into countries with higher revenues. Developing and transition countries turned out to be a sound replacement for developed countries, given their higher economic growth rates and stable economic environment. Lim, Mohapatra and Stocker (2014, p. 3) used the econometric model to examine the inflow of capital into developing countries in the period from 2000 to 2013. They determined that 62% of the achieved capital inflow growth, which in the observed period amounted to about 5% for an average developing country, was due to the altered general monetary conditions, whereas at least 13% was due to the additional effect of expansive monetary policy. These results suggest that a change in the course of monetary policy of the US and other developed countries could lead to a sudden halt in capital inflow into developing countries. This is what actually tempts developing and transition countries to continue accumulating their FX reserves, as a safe source of international liquidity in case of any shifts in capital flows.

## **Tendencies of the World's FX Reserves**

Taught by the consequences of the 1997 Asian financial crisis when the IMF imposed

godine. Utvrdili su da se 62% ostvarenog porasta priliva kapitala, koji je u posmatranom periodu iznosio oko 5% za prosečnu ZUR, duguje izmenjenim opštim monetarnim uslovima, dok najmanje 13% predstavlja dodatni efekat ekspanzivne monetarne politike. Ovi rezultati sugerišu da bi promena kursa monetarne politike u SAD i drugim razvijenim zemljama mogla dovesti do naglog zaustavljanja priliva kapitala u ZUR. To zapravo ZUR i ZUT stavlja u iskušenje da i dalje povećavaju svoje devizne rezerve, kao siguran izvor međunarodne likvidnosti u slučaju preokreta u tokovima kapitala.

## Tendencije svetskih deviznih rezervi

Poučene posledicama azijske finansijske krize iz 1997. godine, kad je MMF nametnuo oštre uslove zemljama koje su mu se obratile za korišćenje kredita, ZUR su povećavale svoje devizne rezerve. U periodu od 2000. do 2013. godine ukupne svetske devizne rezerve su porasle oko šest puta, pri čemu su u razvijenim zemljama povećane oko 3 puta, a u ZUR i zemljama sa tržištem u nastajanju (eng. emerging countries) skoro 11 puta (tabela 1).

i dalje dominantna valuta svetskih deviznih rezervi. Regionalni raspored svetskih deviznih rezervi ukazuje da je njihov najveći rast registrovan u azijskim zemljama (pre svega u Kini). Prebacujući znatne iznose deviznih rezervi u američke državne HoV, zemlje sa velikim deviznim rezervama takođe nastoje da spreče jačanje nacionalnih valuta, podržavajući time izvoznu konkurentnost i privredni rast. Mada držanje deviznih rezervi podrazumeva određene oportunitetne troškove, nije beznačajna verovatnoća da su upravo zahvaljujući deviznim rezervama ZUR i ZUT uspele da sačuvaju finansijsku stabilnost odmah po izbivanju svetske finansijske krize iz 2008. godine. Povećavajući stanje deviznih rezervi, ZUT su istovremeno ojačale vodeću ulogu dolara u međunarodnim finansijama (Prasad, 2014, str. 12). Međutim, veliki holderi američkih državnih HoV izloženi su riziku da dolar izgubi na vrednosti, pa se povremeno mogu čuti njihova neslaganja sa monetranom politikom SAD. To je razlog zbog koga se u novije vreme registruje diverzifikacija deviznih rezervi, uz smanjivanje udela dolara. Međutim, mogućnosti diverzifikacije za sada nisu velike, jer i neke konvertibilne valute razvijenih

Tabela 1. - Međunarodne rezerve po grupama zemalja

Region	Ukupne rezerve (u mlrd. \$)	Alocirane rezerve (u mlrd. \$)	Valutna struktura alociranih rezervi (u procentima)					
			SAD dolar	Funta	Jen	Švajcarski franak	Evro	Ostale valute
1	2	3	4	5	6	7	8	9
<b>Krajem 2000</b>								
Svet	1.936	1.518 (78,5)	71,1	2,8	6,0	0,3	18,3	1,5
Razvijene zemlje	1.217	1.107 (90,7)	69,7	2,8	7,3	0,3	18,4	1,5
ZUR i zemlje sa tržištem u nastajanju	718	410 (57,2)	74,9	2,7	2,6	0,2	18,0	1,6
<b>Krajem 2013</b>								
Svet	11.674	6.221 (53,3)	61,2	4,0	3,9	0,2	24,4	6,3
Razvijene zemlje	3.817	3.391 (88,8)	62,0	3,1	4,7	0,2	24,7	5,3
ZUR i zemlje sa tržištem u nastajanju	7.856	2.830 (36,0)	60,1	5,2	3,0	0,1	24,1	7,5

Napomene: Alocirane devizne rezerve su devizne rezerve sa poznatom valutnom strukturom. U koloni 3 u zagradi su dati podaci koji pokazuju udeo alociranih u ukupnim deviznim rezervama.

Izvor: Podaci iz baze COFER MMF-a preuzeti sa: <http://www.imf.org/external/np/sta/cofer/eng/cofer.pdf>. Pristup 2. juna 2014. godine.

U tabeli 1. je data i valutna struktura alociranih deviznih rezervi (deo deviznih rezervi sa poznatom valutnom strukturom), iz koje se može zapaziti da je američki dolar

zemalja sa visokim rejtingom ne poseduju zadovoljavajuću likvidnost, što umanjuje njihovu poželjnost u formiranju deviznih rezervi ZUT i ZUR.

tough conditions to the countries applying for its loans, developing countries kept increasing their FX reserves. From 2000 to 2013 total FX reserves in the world increased by about six times - in developed countries by about 3 times, and in developing countries and emerging markets by almost 11 times (Table 1).

Treasury securities are exposed to the risk of dollar depreciation; hence they occasionally voice their disagreement with the US monetary policy. This is the reason behind the recent diversification of FX reserves, with a decreasing share of the dollar. Nevertheless, possibilities for diversification are not that large yet, given

Table 1. International reserves per groups of countries

Region	Total reserves (in \$ bn)	Allocated reserves (in \$ bn)	Currency structure of allocated reserves (in percent)					
			USA Dollar	Pound	Yen	Swiss Franc	Euro	Other currencies
1	2	3	4	5	6	7	8	9
<b>End of 2000</b>								
World	1,936	1,518 (78.5)	71.1	2.8	6.0	0.3	18.3	1.5
Developed countries	1,217	1,107 (90.7)	69.7	2.8	7.3	0.3	18.4	1.5
Developing countries and emerging markets	718	410 (57.2)	74.9	2.7	2.6	0.2	18.0	1.6
<b>End of 2013</b>								
World	11,674	6,221 (53.3)	61.2	4.0	3.9	0.2	24.4	6.3
Developed countries	3,817	3,391 (88.8)	62.0	3.1	4.7	0.2	24.7	5.3
Developing countries and emerging markets	7,856	2,830 (36.0)	60.1	5.2	3.0	0.1	24.1	7.5

Notes: Allocated FX reserves are the FX reserves with known currency structure. The data in column 3, in brackets, are the ones indicating the share of allocated in total FX reserves.

Source: The data from the IMF COFER database were downloaded from: <http://www.imf.org/external/np/sta/cofer/eng/cofer.pdf>. Accessed on 2 June 2014.

Table 1 also features the currency structure of allocated FX reserves (section of FX reserves with known currency structure), which suggests that the US dollar is still the dominant currency of the world's FX reserves. The regional distribution of the world's FX reserves indicates that their largest growth has been recorded in Asian countries (primarily in China). Converting considerable amounts of FX reserves into the US Treasury securities, the countries with high FX reserves also strive to prevent the appreciation of national currencies, thereby supporting export competitiveness and economic growth. Although holding FX reserves implies certain opportunity costs, we cannot disregard the probability of developing and transition countries having managed to preserve financial stability upon the outbreak of the 2008 global financial crisis due to their FX reserves. Having increased the FX reserves, transition countries at the same time strengthened the leading role of the dollar in international finance (Prasad, 2014, p. 12). However, major holders of the US

that some convertible currencies of developed countries with high rating are insufficiently liquid, which lowers their attractiveness in the formation of FX reserves of developing and transition countries.

The position of FX reserves in the world has increased even when measured based on select macroeconomic parameters: import of goods and services, GDP, and foreign debt (Table 2). The ratio between FX reserves and foreign debt is used as an indirect indicator of how regularly a country would be able to settle its foreign debt liabilities in case of any difficulties in the current FX inflow. In that case the country would rely on its FX reserves. The growth of FX reserves in transition economies and developing countries according to this ratio is impressive, and suggests that total foreign debts of this group of countries are fully covered by their FX reserves.

The indicator calculated as a ratio between FX reserves and import of goods and services shows how many months of import are covered by the FX reserves. Based on this indicator it is

Stanje deviznih rezervi u svetu uvećano je i kad se posmatra u odnosu na izabrane makroekonomske parametre: uvoz robe i usluga, BDP i spoljni dug (tabela 2). Odnos između deviznih rezervi i stanja spoljnog duga služi kao indirektni pokazatelj koliko bi zemlja mogla da uredno izmiruje svoje obaveze po spoljnom dugu ukoliko se pojave problemi u tekućem deviznom prilivu. U tom slučaju zemlja bi se oslonila na devizne rezerve. Rast deviznih rezervi u tranzicionim privredama i ZUR prema ovom odnosu je impresivan i pokazuje da su ukupni spoljni dugovi ove grupacije zemalja u celini pokriveni njihovim deviznim rezervama.

Pokazatelj izračunat kao odnos između deviznih rezervi i uvoza robe i usluga pokazuje koliko meseci uvoza robe i usluga pokrivaju devizne rezerve. Na osnovu ovog indikatora ocenjuje se koliko bi zemlja bila u stanju da funkcioniše bez većih poremećaja ukoliko podbaci devizni priliv od izvoza robe i usluga. I prema ovom pokazatelju ZUT i ZUR su ispoljile značajan napredak, jer je posmatrani odnos porastao sa 3,3 meseca iz 2000. na 8,7 meseci u 2013. godini. Ovaj rast uverava strane poverioce da su privrede posmatranih zemalja sposobne da uredno servisiraju svoje obaveze po stranom dugu, i povećava njihovu spremnost da ovim zemljama ponude nova sredstva po povoljnijim uslovima. Ovaj pokazatelj indirektno je značajan i za strane direktne investitore koji u veličini deviznih rezervi zemlje domaćina vide garanciju da neće biti suočeni sa problemima prilikom repatrijacije profita i kapitala.

Razmere porasta deviznih rezervi ilustruje i njihovo stanje stavljeno u odnos prema BDP-u. Rast ovog pokazatelja kod ZUT i ZUR od oko 3 puta od 2000. do 2013. godine znatno je veći nego kod razvijenih zemalja gde je, u istom posmatranom periodu, iznosio manje od dva puta. Porast deviznih rezervi u ZUR i ZUT duguje se njihovoj povećanoj opreznosti, jer se pokazalo da u vreme krize zemlje sa većim deviznim rezervama imaju veći manevarski prostor u održavanju privrednog rasta. Prema

nekim ranijim procenama, na opreznosne devizne rezerve otpada između jedne polovine i dve trećine ukupnih svetskih deviznih rezervi (Obstfeld et al., 2008, str. 5).

Tabela 2. - Devizne rezerve u odnosu na izabrane pokazatelje

	u procentima	
	2000	2013
	<b>Svet</b>	
Meseci uvoza robe i usluga	2,9	6,2
U procentima od BDP-a	5,9	15,8
U odnosu na ukupni spoljni dug	-	-
	<b>Razvijene zemlje (G7)</b>	
Meseci uvoza robe i usluga	2,4	3,3
U procentima od BDP-a	4,7	8,4
U odnosu na ukupni spoljni dug	-	-
	<b>ZUT i ZUR</b>	
Meseci uvoza robe i usluga	3,3	8,7
U procentima od BDP-a	10,9	27,4
U odnosu na ukupni spoljni dug	30,2	112,5

Napomena: Klasifikacija zemalja je prema IMF, World Economic Outlook Database. Izvor: Podaci za devizne rezerve su iz baze podataka MMF-a preuzete sa: <http://www.imf.org/external/np/sta/cofer/eng/cofer.pdf>. Ostali podaci su preuzeti sa: <http://www.imf.org/external/pubs/ft/weo/2014/01/>. Pristup 2. juna 2014. godine.

Uprkos apsolutnom porastu, svetske devizne rezerve još uvek su male ako se posmatra njihov iznos prema ukupnoj aktivi banaka, a skoro da deluju beznačajno kod se njihov iznos uporedi sa ukupnim iznosom emitovanih obveznica i akcija u svetu (Mohan, Debabrata i Kapur, 2013, str. 26). Ističući da rast deviznih rezervi nije nadvisio rast ostalih finansijskih instrumenata i tržišta, pomenuti autori smatraju da teze o tome da rast deviznih rezervi predstavlja rizik MMS-a nemaju osnova, i da je njihov rast zapravo posledica stanja u MMS-u, a ne uzrok njegovih manjkavosti. Na istoj liniji zaključivanja su mišljenja po kojima globalne neravnoteže tekućeg računa nemaju mnogo zajedničkog sa krizom (Shin, 2012). Ipak, iskustva kazuju da velike neravnoteže tekućeg računa, koje su često povezane sa pogrešnom alokacijom kapitala, mogu biti jasan predznak buduće finansijske krize (Gagnon, 2014, str. 4). Pre izbijanja krize javnih dugova u evrozoni, deficiti tekućeg računa pet perifernih zemalja su dostigli visok iznos u odnosu na njihov BDP: 14,8% u Grčkoj, 11,4% u Portugalu, 9,8% u Španiji, 5,5% u Irskoj, i 2,1% u Italiji (podaci se odnose na 2007-2008) (Cline, 2014, str. 88).

Bussiere i ostali (2013, str. 34) su zaključili da je finansijska kriza iz 2008. opravdala

assessed for how long a country would be able to function without major disturbances in case of a lower FX inflow from the import of goods and services. According to this indicator, too, developing and transition countries have achieved substantial progress, given that the observed ratio increased from 3.3 months in 2000 to 8.7 months in 2013. Such a growth assures foreign creditors that the economies of the observed countries are capable of regularly servicing their foreign debt liabilities, thereby increasing their readiness to offer new funds to these countries under more favorable conditions. This indicator is also indirectly relevant for foreign direct investors, who perceive the amount of FX reserves of the host country as guarantee that they will not be facing any problems in the process of repatriation of profits and capital.

The proportions of FX reserves growth are also illustrated by their amount put in relation to GDP. The growth of this indicator in developing and transition countries by about 3 times from 2000 to 2013 is considerably larger than in developed countries where, in the same observed period, it amounted to less than two times. The rise of FX reserves in developing and transition countries is owing to their increasingly prudential approach, since it turned out that during a crisis countries with higher FX reserves have more room for maneuver when it comes to maintaining economic growth. According to some earlier estimates, prudential FX reserves account for between one half and two thirds of total FX reserves in the world (Obstfeld et al., 2008, p. 5).

Table 2. FX reserves in relation to selected indicators

in %

	2000	2013
<b>World</b>		
Months of importing goods and services	2.9	6.2
In percent of GDP	5.9	15.8
In relation to total foreign debt	-	-
<b>Developed countries (G7)</b>		
Months of importing goods and services	2.4	3.3
In percent of GDP	4.7	8.4
In relation to total foreign debt	-	-
<b>Transition and developing countries</b>		
Months of importing goods and services	3.3	8.7
In percent of GDP	10.9	27.4
In relation to total foreign debt	30.2	112.5

Note: Classification of countries according to the IMF, World Economic Outlook Database. Source: The data on FX reserves are from the IMF database downloaded from: <http://www.imf.org/external/np/sta/cofer/eng/cofer.pdf>. Other data downloaded from: <http://www.imf.org/external/pubs/ft/weo/2014/01/>. Accessed on 2 June 2014.

Despite the absolute growth, global FX reserves are still low if their amount is set against the total banks' assets, and they almost seem negligible if compared with the total amount of issued bonds and shares in the world (Mohan, Debabrata and Kapur, 2013, p. 26). Underlining that the FX reserves growth did not exceed the growth of other financial instruments and markets, the concerned authors claim that the theses about the FX reserves growth posing a risk to the IMS are unfounded, and that their growth is actually a consequence of the IMS condition, and not the cause of its shortcomings. Along the same lines of thought are the opinions according to which global current account imbalances do not have much in common with the crisis (Shin, 2012). Nevertheless, experiences have shown that major current account imbalances, often related to the misallocation of capital, may be a clear signal of the future financial crisis (Gagnon, 2014, p. 4). Prior to the public debt crisis in the euro area, current account deficits of five peripheral countries reached high amounts in

povećavanje deviznih rezervi, jer su zemlje sa većim iznosima deviznih rezervi, kao procenat kratkoročnog duga, bile manje pogođene u odnosu na ostale zemlje, ceteris paribus. Manja otvorenost kapitalnog računa, prema nalazima pomenute studije, pojačava ove efekte. Azijske zemlje, poučene iskustvima azijske finansijske krize iz 1997. godine, znatno su unapredile svoje makroekonomske performanse. Povoljniji bilansi tekućeg računa i porast deviznih rezervi pre izbijanja finansijske krize iz 2008. godine su direktan odgovor na nestašicu dolarske likvidnosti tokom azijske krize iz 1997. godine (Park, Ramayandi i Shin, str. 138).

### **Uloga i perspektive dolara u međunarodnim finansijama**

Značajna karakteristika rasta svetskih deviznih rezervi je u tome što je američki dolar i dalje ključna valuta u kojoj se drže ove rezerve (tabela 2). Razloge zbog čega je dolar svetska rezervna valuta treba tražiti u činjenici da je privreda SAD još uvek najjača u svetu, ali i da ova zemlja emituje dovoljan obim HoV koje glase na dolar i time zadovoljava rastuću svetsku tražnju. U literaturi je uobičajena ocena da je tržište američkih državnih HoV duboko i likvidno, što omogućava investitorima širom sveta da ove HoV brzo i bez rizika pretvore u novac. Na ovom mestu iskrsava pitanje da li dolar danas ima dobru zamenu u ulozi svetske rezervne valute. U odgovoru na ovo pitanje može se istaći da sem evra, iza koga takođe stoji likvidno i duboko finansijsko tržište, ostale valute nisu ozbiljniji kandidati da ugroze dolar u ulozi svetske rezervne valute. Doduše, sudbina evra je neizvesna, jer je evrozona u tenzijama zbog državnih dugova svojih perifernih članica, i zbog usporenog i neujednačenog oživljavanja privrednog rasta (Di Mauro i Pappadá, 2014). Posle evra, najznačajnija valuta na međunarodnoj finansijskoj sceni je britanska funta. Međutim, pošto se privreda Evropske unije (EU) nalazi u teškoćama, to ni finansijska dubina aktiva denominiranih u funtama nije dovoljna za njen jači upliv u područje svetske rezervne valute. Japanski jen takođe ne može značajnije da se probije u MMS-u jer su državni dugovi ove zemlje u odnosu na njen BDP najveći na svetu, što odvraća investitore

od aktiva koje su denominirane u ovoj valuti. Kineska valuta, renminbi, pokazuje ambicije regionalne internacionalizacije, ali se njen veći međunarodni uspon može očekivati u meri smanjivanja devizne kontrole i produbljivanja unutrašnjeg finansijskog tržišta, na jednoj strani, i jačanja kineske privrede u regionu i svetu, na drugoj strani.

Velika svetska tražnja za dolarskim HoV omogućava SAD da državne obveznice proda po nižoj kamatnoj stopi nego što bi to bilo moguće kad bi došlo do malaksavanja svetske tražnje za ovim hartijama. Eventualno smanjivanje tražnje ovih HoV verovatno bi se odrazilo i na kamatne stope korporativnih obveznica, tako da bi se uvećali troškovi investiranja u američkoj privredi. Posledice na konkurentnost američke privrede bi se brzo osetile, što bi se odrazilo na njen položaj na svetskom tržištu. To su važni razlozi zbog kojih je SAD zainteresovana da njena valuta i dalje ima poziciju svetske rezervne valute. Investitori smatraju da su američke državne HoV (US Treasuries) sem visoke likvidnosti, veoma pouzdane. Na to upućuje i nalaz Krishnamurthy i Vissing-Jorgensen (2013, str. 235), po kome su prinosi ovih hartija smanjeni u proseku za 73 bazna poena godišnje u periodu 1926-2008. godine, od čega se 46 baznih poena odnosi na likvidnost, a 27 na sigurnost. Ovi autori su izračunali da je Vlada u istom periodu na ime kamate uštedela oko 0,25% američkog BDP-a godišnje.

Dolar po brojnim pokazateljima i dalje ima ključnu ulogu u međunarodnim finansijama. Sem dominantne pozicije u fakturisanju međunarodne trgovine (pre svega trgovine naftom i ostalim berzanskim proizvodima), dolar je glavna valuta svetskog deviznog tržišta, a oko 60% međunarodnih bankarskih depozita glasi na dolar, dok je 61% alociranih deviznih rezervi takođe denominirano u dolarima (grafikon 1). Velika zastupljenost dolara u deviznim transakcijama povezana je sa njegovim udelom u fakturisanju međunarodne trgovine, pre svega u trgovini naftom i ostalim berzanskim proizvodima (Goldberg, 2011, str. 5). Svaka zemlja u svetu teži da u svojim deviznim rezervama raspolaže dolarskom aktivom da bi se obezbedila za potrebe plaćanja uvoza energetskih sirovina, jer se svetska

relation to their GDP: 14.8% in Greece, 11.4% in Portugal, 9.8% in Spain, 5.5% in Ireland, and 2.1% in Italy (the data refer to 2007-2008) (Cline, 2014, p. 88).

Bussiere et al. (2013, p. 34) concluded that the 2008 financial crisis justified the increase of FX reserves, because the countries with higher amounts of FX reserves, as a percentage of short-term debt, were less affected than other countries, *ceteris paribus*. Capital accounts open to a smaller degree, according to the findings of the above study, amplify these effects. Asian countries, taught by the experiences of the 1997 Asian financial crisis, considerably improved their macroeconomic performance. Enhanced current account balances and higher FX reserves before the outbreak of the 2008 financial crisis are a direct response to the shortage of dollar liquidity during the 1997 Asian crisis (Park, Ramayandi and Shin, p. 138).

### **Role and Prospects of Dollar in International Finance**

A significant characteristic of the global FX reserves growth is the fact that the US dollar is still the key currency in which these reserves are held (Table 2). The reasons for dollar being the world's reserve currency should be sought in the fact that the US economy is still the most powerful in the world, and that the US issues a sufficient volume of dollar-denominated securities, thereby satisfying the increasing global demand. The common assessment in reference literature is that the US Treasury securities market is deep and liquid, enabling investors all over the world to convert these securities into cash quickly and with no risks entailed. The question can be raised whether the dollar today has a sound potential replacement in its role of the world's reserve currency. As a response, it can be emphasized that except for the euro, also backed by a deep and liquid financial market, other currencies are not serious candidates that could challenge the dollar's role of the world's reserve currency. Admittedly, the fate of the euro is uncertain, due to the tensions in Eurozone caused by the public debts of its peripheral member states, and due to the slow and uneven revival of economic growth (Di Mauro and Pappadá, 2014). After euro, the

most significant currency at the international financial scene is the British pound. However, bearing in mind that the European Union's economy has been facing difficulties, not even the financial depth of pound-denominated assets would suffice to bring it substantially closer to the role of the world's reserve currency. Neither can the Japanese yen make a considerable breakthrough into the IMS because this country's public debt in relation to its GDP is the highest in the world, discouraging investors from assets denominated in this currency. The Chinese currency, the renminbi, has demonstrated the ambition towards a regional internationalization, but its more important international ascent can be expected in reducing FX controls and deepening the internal financial market, on the one hand, and in strengthening the Chinese economy in the region and worldwide, on the other hand.

Huge global demand for dollar-denominated securities enables the US to sell its T-bonds at a lower interest rate than it would be possible if the global demand for these securities abated. Any potential decline in demand for these securities would probably affect the interest rates on corporate bonds, hence increasing the costs of investment in the US economy. The consequences for the US economy's competitiveness would be immediately felt, which would impact its position in the global market. These are the significant reasons why the US is interested in keeping its currency in the position of the world's reserve currency. Investors believe that the US Treasury securities are highly liquid and very reliable. This is confirmed by the findings of Krishnamurthy and Vissing-Jorgensen (2013, p. 235), stating that the revenues on these securities have been reduced on average by 73 basis points per year in the period from 1926-2008, out of which 46 basis points refer to liquidity and 27 to safety. These authors calculated that the Government in the same period saved about 0.25% of the US GDP per year from interest.

Based on numerous indicators, the dollar still plays the key role in international finance. In addition to holding the dominant position in international trade invoicing (primarily trade in oil and other stock exchange products), the dollar is the major currency at the global FX

trgovina ovim proizvodima po inerciji fakturiše u dolarima. Moglo bi se reći da su dolari potrebni da bi se zadovoljila nezasita glad za naftom (Schulz, 2009, str. 465). Eventualno korišćenje i drugih valuta za fakturisanje trgovine naftom, ili povećana uloga barter aranžamana u ovoj trgovini, mogli bi smanjiti svetsku tražnju za dolarima. Ako se ima u vidu da bi prelazak na drugu valutu u fakturisanju međunarodne trgovine energetskim sirovinama zahtevao da se svi akteri u trgovini prilagode novim konvencijama i pravilima trgovine, kao i novim instrumentima, očigledno je da bi takav zaokret bio zahtevan i komplikovan. Time se objašnjava inercija u korišćenju dolara kao vodeće valute fakturisanja međunarodne trgovine. Tokom naftne krize iz 1970-ih bilo je pokušaja da se smanji zastupljenost dolara u fakturisanju trgovine naftom, ali bez većeg uspeha. Mnoge zemlje, sem SAD, svoj javni dug uvećavaju emisijom HoV koje su denominirane u dolarima. Dolar je takođe dominantna posredna valuta (eng. vehicle currency), koja služi za obračune međunarodnih plaćanja između banaka (McKinnon, 2009, str. 47).

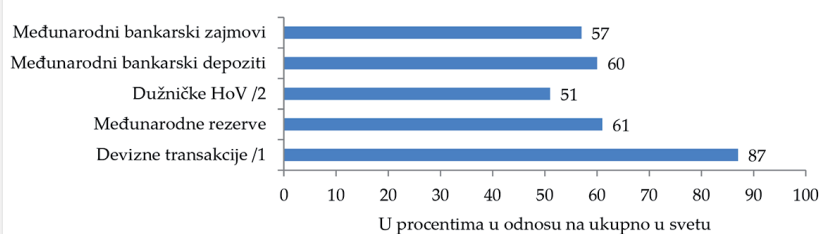
unela je nemir kod velikih holdera američkih državnih HoV (pre svega, u slučaju Kine i Rusije). Na svetskim finansijskim tržištima osetila se strepnja šta bi se moglo desiti sa deviznim kursom dolara ako Kina počne da izbacuje na tržište američke državne HoV iz svojih deviznih rezervi. Ovakav scenario je nosio rizik poremećaja u međunarodnim plaćanjima, što je moglo da potkopa globalnu finansijsku stabilnost i znatnije oteža oporavak svetske privrede. Ovo bi se moglo nazvati savremenom verzijom Trifinove dileme, jer rastuća tražnja međunarodne likvidnosti (da bi se zadovoljili povećani zahtevi ZUT i ZUR za deviznim rezervama) obara kamatne stope u američkoj privredi, što podstiče širenje deficita tekućeg računa i javnog duga SAD. U nekom momentu strani investitori mogli bi izgubiti poverenje u solventnost SAD, što bi moglo da bude uvod u krah dolara (Benassy-Quere i Forouheshfar, 2013, str. 2). Dok se to ne dogodi, međunarodni status dolara omogućava bankama i kompanijama iz SAD da vrše međunarodne transakcije u svojoj valuti. Za njih ne postoji rizik deviznog kursa jer nisu

prinudene da svoju valutu konvertuju u druge valute, čime se smanjuju troškovi poslovanja.

Vodeći svetski holderi američkih državnih HoV strahovali su da bi pad međunarodne vrednosti dolara znatno umanjio realnu kupovnu moć njihovih deviznih rezervi. Ekspanzivna monetarna politika Fed-a, obeležena istorijski niskim kamatnim

stopama, i kolebanje vrednosti dolara na svetskim berzama, spadaju u posledice finansijske krize iz 2008. godine. Mada je ovakva politika pomogla američkoj privredi da se oporavi od finansijskog šoka iz 2008. godine, ona je istovremeno povećala mogućnost da akteri u privredi donose pogrešne investicione odluke, dok su niski prinosi državnih HoV podstakli agresivnije investiranje u rizičnije instrumente koji nose višu kamatnu stopu. Usled toga dolazi do pojačane volatilnosti u međunarodnim tokovima kapitala. Uprkos tome, svetska

Grafikon 1: Dolar u međunarodnim finansijama



Napomene: /1 Udeo u 200% (svaka transakcija podrazumeva dve valute); /2 Hartije od vrednosti denominirane u stranoj valuti i prodate van zemlje emitenta.

Izvori: ECB (2013) za dužničke HoV (str. 68, tabela A4), međunarodne bankarske zajmove (str. 76, tabela A10) i međunarodne bankarske depozite (str. 77, tabela A11); BIS (2014, str 1., tabela 1) za devizne transakcije (podatak se odnosi na april 2013. godine); IMF (COFER) za međunarodne rezerve (podatak se odnosi na kraj 2013. godine) (tabela 1. u tekstu).

Zastupljenost dolara na svetskim tržištima kapitala pokazuje da je svetska tražnja za američkim državnim HoV (T-bills, US Treasury bonds) jaka, i da to smanjuje njihove prinose ispod ravnotežne stope prinosa na međunarodnom tržištu kapitala (IMF, 2010, str. 9). To sa svoje strane podstiče širenje američkog budžetskog deficita i nosi rizik da eventualna nemogućnost njegovog urednog servisiranja preraste u nepoverenje tržišta u dolar kao sredstvo očuvanja vrednosti. Svetska finansijska kriza iz 2008. nastala na tlu SAD,

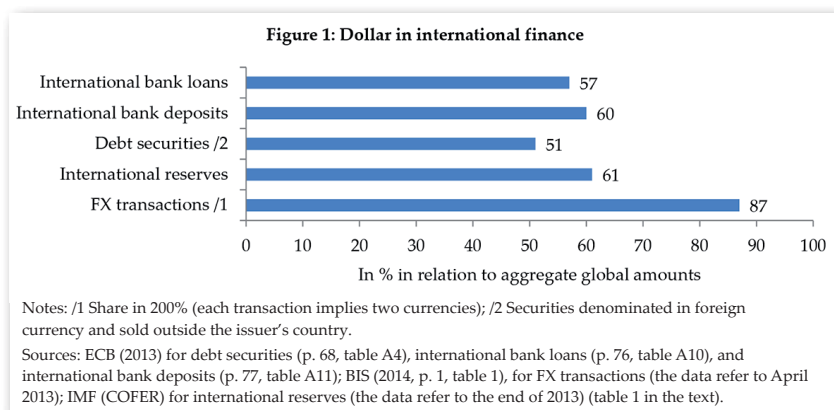
market, with about 60% of international bank deposits and 61% of allocated FX reserves being denominated in dollars (Figure 1). Such a huge presence of the dollar in FX transactions is related to its participation in international trade invoicing, primarily when it comes to trade in oil and other stock exchange products (Goldberg, 2011, p. 5). Each country in the world tends to hold dollar-denominated assets in its FX reserves in order to be safe when it comes to the payment of import of energy raw materials, given that the world trade in these products is, automatically, invoiced in dollars. One could say that dollars are needed to satisfy the unquenchable greed for oil (Schulz, 2009, p. 465). Potential usage of other currencies to invoice oil trade, or an increased role of barter arrangements in this trade, could lower the global demand for dollars. If we bear in mind that a transfer to another currency in the invoicing of international trade in energy raw materials would require all stakeholders to adjust to the new conventions and trading rules, as well as new instruments, it is obvious how demanding and complicated such a shift would be. This explains the inertia in using dollars as the leading currency for international trade invoicing. During the oil crisis in the 1970s there were some attempts to reduce the presence of the dollar in oil trade invoicing, yet with no major success. Many countries, in addition to the US, increase their public debt by issuing dollar-denominated securities. The dollar is also the dominant vehicle currency, used for the purpose of calculating inter-bank international payments (McKinnon, 2009, p. 47).

the US Treasury securities is strong, and that it brings their yields below the equilibrium rate of return at the international capital market (IMF, 2010, p. 9). This, in turn, triggers the expansion of the US budget deficit and entails the risk of potential inability of its regular servicing developing into the general distrust of the market in the dollar as store of value. The global financial crisis which originated in 2008 at the US soil caused some uneasiness on the part of major holders of the US Treasury securities (first and foremost, China and Russia). The stakeholders at the global financial markets felt certain apprehension as to what could happen to the dollar FX rate if China begins to sell the US Treasury securities from its FX reserves. Such a scenario would entail the risk of turmoil in international payments, which could undermine the global financial stability and substantially aggravate the recovery of the global economy. This could be interpreted as a contemporary version of the Triffin dilemma, given that the growing demand for international liquidity (with a view to meeting the higher demands of developing and transition countries for FX reserves) lowers the interest rates in the US economy, which triggers the expansion of the US current account deficit and public debt. At some point foreign investors could lose their trust in the US solvency, which might be an introduction into the crash of the dollar (Benassy-Quere and Forouheshfar, 2013, p. 2). Until this happens, the international status of the dollar enables banks and companies from the US to perform international transactions in their currency. They are not exposed to the

FX rate risk since they are not forced to convert their currency into other currencies, which cuts the operational costs.

Major holders of the US Treasury securities in the world feared that a drop in international value of the dollar would considerably reduce the real purchasing power of their FX reserves. The

expansive monetary policy of the Fed, marked by historically low interest rates, along with the



The presence of dollars on the global capital markets indicates that the global demand for

tražnja za američkim državnim HoV ne jenjava. Veća diverzifikacija deviznih rezervi bila bi moguća ako bi postojala odgovarajuća zamena za dolarske HoV u pogledu likvidnosti i sigurnosti. Dubina američkog tržišta državnih HoV je ono što posebno privlači investitore zbog lakoće utrživosti ovih finansijskih instrumenata, pa bi eventualna zamena za dolar u ulozi svetske rezervne valute morala da ponudi slične mogućnosti. Ovo tržište po svojoj veličini znatno nadilazi tržišne volumene državnih HoV u evrozoni i Japanu, što predstavlja važnu karakteristiku koju vrednuju potencijalni investitori. Raznovrsnost finansijskih instrumenata i velika dubina američkog tržišta kapitala omogućava stranim investitorima da smanje troškove strukturiranja svog portfelja. Veći izbor međunarodnih finansijskih instrumenata sa sličnim rizicima i likvidnošću kao američke državne HoV, mogao bi vremenom da utiče na smanjivanje obima svetskih deviznih rezervi u odnosu na svetski BDP. Investiranje siromašnijih zemalja u rezervne aktive sa niskim kamatnim stopama ujedno znači da se veća štednja od investicija u tim zemljama prelijeva u razvijene zemlje, stvarajući značajne makroekonomske troškove za zemlje iz kojih odlaze ova sredstva. Time se potvrđuju ocene da akumuliranje deviznih rezervi kao vid opreznosti usled nepoverenja u MMS stvara značajne troškove. Rodrik (2006, str. 2) ove troškove iskazuje kao razliku između prinosa na likvidne rezervne aktive i troškova pribavljanja sredstva na stranom tržištu, i označava ih kao socijalne troškove. Polazeći od ovog pristupa, isti autor je utvrdio da su ovi troškovi za ZUR u vreme pisanja navedenog rada iznosili oko 1% godišnje.

Rizik držanja američkih državnih HoV u deviznim rezervama ZUT i ZUR sa suficitom tekućeg računa mogao bi se, po mišljenju Bayoumi i Ohnsorge (2013, str. 16), ublažiti tako što bi ove zemlje liberalizovale svoje račune kapitala i time podstakle rezidente da više investiraju u inostranstvo. Spomenuti autori smatraju da bi Kina posredstvom liberalizacije računa kapitala mogla da podstakne neto odliv portfolio investicija i time umanjiti pritisak na centralnu banku da investira u američke državne HoV. Međutim, Bayoumi i Ohnsorge (2013, str. 5) podsećaju da iskustva

drugih zemalja pokazuju da je liberalizacija računa kapitala često bila praćena deviznom ili bankarskom krizom. Pri tom se krize ne moraju javiti odmah po liberalizaciji računa kapitala. Ovi autori (*ibid.*, str. 5) navode kao primer slučaj Velike Britanije i Japana, u kojima su bankarske krize nastale desetak godina posle liberalizacije računa kapitala.

Tokom finansijske krize banke su nastojale da privuku što više dolara sa tržišta kapitala u zamenu za svoje HoV koje glase na dolar, što je izazvalo nestašicu dolara (McCauley i McGuire, 2009, str. 89). Ovi autori posebno ističu da su evropske banke imale snažnu ekspanziju na međunarodnom tržištu kapitala, koja se pretvorila u akumuliranje dolarskih HoV u iznosima koji su bili veći od njihovih depozita u dolarima. Ovu razliku su nadoknadile pozajmicama na međubankarskom tržištu. Snažna tražnja dolara doprinela je apresijaciji ove valute u drugoj polovini 2008. godine. Fed je, po oceni pomenutih autora, nastojao da umanjiti nestašicu dolara odobravanjem kredita centralnim bankama mnogih zemalja. Brojne kompanije u svetu čiji su dolarski dugovi dospeli za otplatu, suočene sa nestašicom dolara i njegovom apresijacijom, pribavljale su sredstva na tržištu kapitala u drugim valutama. Svetska tražnja dolara svojevrsna je potvrda dominacije ove valute u međunarodnim finansijama.

Finansijska kriza ponovo je oživila diskusije o troškovima i koristima oslonca MMS-a na jednu nacionalnu valutu. Neki autori, između ostalih Eichengreen (2011) i McKinnon (2012), smatraju da MMS zasnovan na dolaru poseduje zadovoljavajuću stabilnost, zbog vodeće uloge SAD u svetskoj privredi. Drugi istraživači pak smatraju da SAD imaju neodmerenu privilegiju u MMS-u, i da bi trebalo uspostaviti neki oblik kolektivne kontrole međunarodne likvidnosti.

Privatni investitori (investicioni fondovi, penzioni fondovi, osiguravajuća društva i dr.) prilikom izbora aktive u kojoj žele da drže svoja sredstva opredeljuju se za onu koja je likvidna i kojom se može lako trgovati na finansijskom tržištu. Nije teško dokazati da ove kriterijume najbolje ispunjavaju američke državne HoV koje glase na dolar.

U novije vreme oživele su ideje o supstitucionom računom, preko koga bi se

volatility of the dollar value on the world's stock exchanges, are some of the consequences of the 2008 financial crisis. Although such policy has helped the US economy recover from the 2008 financial shock, at the same time it increased the possibility of stakeholders in the economy making wrong investment decisions, while the low revenues on the US Treasury securities stimulated more aggressive investments in riskier instruments bringing higher interest rates. This has intensified the volatility of international capital flows. Nevertheless, the global demand for the US Treasury securities has not subsided. Higher diversification of FX reserves would be possible if there were a suitable replacement for dollar securities in terms of liquidity and safety. The depth of the US Treasury securities market is what particularly attracts investors due to the easy marketability of these financial instruments, which is why a potential replacement for the dollar in its role of the world's reserve currency would have to offer similar possibility. According to its size, this market substantially exceeds the market volumes of government securities in Eurozone and Japan, which is an important characteristics valued by potential investors. Diversity of financial instruments and the considerable depth of the US capital market enable foreign investors to reduce the costs of structuring their portfolio. A wider choice of international financial instruments with similar risks and liquidity as the US Treasury securities could, over time, facilitate the reduction in the volume of global FX reserves in relation to the global GDP. Investments of poorer countries in reserve assets with low interest rates at the same time imply that the excessive savings from investments in those countries spill over into developed countries, thereby generating considerable macroeconomic costs for the countries from which these funds flee. This confirms the assessment that the accumulation of FX reserves as a form of prudence caused by the distrust in the IMS entails substantial costs. Rodrik (2006, p. 2) expresses these costs as a difference between yields on liquid reserve assets and costs of procuring funds at a foreign market, designating them as social costs. Based on this approach, the same author established that these costs for developing countries at the

time when he was writing the concerned paper amounted to about 1% per annum.

The risk of holding the US Treasury securities in FX reserves of transition and developing countries with the current account surplus, according to Bayoumi and Ohnsorge (2013, p. 16), could be mitigated if these countries liberalized their capital accounts, thus encouraging its residents to invest abroad to a higher degree. These authors believe that China could stimulate a net outflow of portfolio investments by liberalizing its capital account, thereby alleviating the pressure on the central bank to invest in the US Treasury securities. However, Bayoumi and Ohnsorge (2013, p. 5) remind us that the experiences of other countries show that a capital account liberalization was often accompanied by an FX or banking crisis. In such cases, the crises do not have to occur immediately after the capital account liberalization. These authors (Ibid., p. 5) state the example of Great Britain and Japan, where the banking crises occurred some ten years after the capital account liberalization.

During the financial crisis banks were striving to attract as much dollars as possible from the capital market in replacement for their dollar-denominated securities, which caused a shortage of dollars (McCauley and McGuire, 2009, p. 89). These authors particularly underline that the European banks recorded a powerful expansion at the international capital market, which turned into the accumulation of dollar securities in the amounts higher than their dollar deposits. This difference was compensated through borrowing at the interbank market. The intense demand for dollars contributed to this currency's appreciation in the second half of 2008. According to the assessment of the above authors, the Fed tended to relieve the shortage of dollars by granting loans to the central banks of many countries. Numerous companies in the world whose dollar-denominated debts matured for repayment, faced with the shortage of dollars and its appreciation, procured funds in other currencies at the capital market. The global demand for dollars is a kind of a confirmation of this currency's domination in international finance.

The financial crisis reignited the discussions about the costs and benefits of the IMS reliance

višak likvidnih dolarskih rezervi pretvorio u specijalna prava vučenja (eng. Special Drawing Rights - SDRs) (McCauley i Schenk, 2014). Mada ova ideja opsega reformatore MMS-a još od 1970-ih godina, za njenu realizaciju postoje brojne prepreke. Nespremnost SAD da na svoja pleća prihvate devizni rizik ove operacije često se navodi kao razlog za odbijanje ove ideje (Farhi i ostali, 2011, str. 45; Kenen, 2010). Čak i kad bi se ova ideja prihvatila u MMF-u, bile bi potrebne godine da se ostvari postepeno pretvaranja dolara u SDR.

Ako bi Kina, kao svetski lider po visini deviznih rezervi, koje su uglavnom denominirane u dolarima, odlučila da trenutno proda američke državne HoV, dosta je izvesno da bi vrednost dolara naglo opala. Iz toga proističe zaključak da zemlje sa velikim deviznim rezervama koje su plasirane u dolarske HoV, mogu da utiču na devizni kurs dolara. Ovaj uticaj na kurs ne mora se poklapati sa kretanjem tekućeg računa SAD. Nije redak slučaj da azijske zemlje sa velikim dolarskim rezervama intervenišu na deviznom tržištu sprečavajući jačanje nacionalnih valuta prema dolaru, i time podržavaju rast izvoza. U tom slučaju SAD kao emitent rezervne valute ima pasivnu ulogu u politici deviznog kursa dolara (Herring, 2012, str. 30).

Status dolara kao svetske rezervne valute najčešće se posmatra povezano sa deficitom tekućeg računa i budžetskim deficitom SAD. Takav pristup pokreće pitanje da li SAD mora kontinuirano da ostvaruje trgovinski deficit kako bi dolar imao status svetske rezervne valute? Ako se ima u vidu da je u posleratnom periodu SAD imala trgovinski suficit, dok je ostatak sveta do dolarskih sredstava dolazio kroz investicione tokove, ne bi se moglo zaključiti da uvećanje deviznih rezervi u svetu, koje glase na dolar, danas podrazumeva trgovinski deficit SAD. Međutim, danas se uglavnom smatra da zemlje koje imaju suficit tekućeg računa u razmeni sa SAD mogu da uvećaju svoje devizne rezerve. S druge strane, SAD svoj kontinuiran trgovinski deficit lako finansiraju: državne i korporativne dužničke instrumente prodaju stranim centralnim bankama. Na taj način vlada SAD, njena domaćinstva i korporativni sektor stiču mogućnost da se više zaduže, po prilično niskim kamatnim stopama. Međutim, preterano

niske kamatne stope i manje zahtevni kreditni uslovi u SAD stvaraju zadovoljavajuće uslove za pojavu "naduvanih" aktiva (eng. bubbles), sa skoro neizbežnim posledicama po finansijsku stabilnost. Kriza može odvratiti privatne strane investitore od namere da svoja sredstva ulažu u SAD, ali ne odvrća strane centralne banke koje akumuliraju devizne rezerve kao i pre krize. Snažna tražnja za dolarskim HoV omogućava SAD da stimuliše svoju privredu bez rizika da će to usloviti pad vrednosti dolara. Zadužujući se u inostranstvu, SAD finansira deficit svog tekućeg računa i budžetski deficit. Međutim, nagomilavanje spoljnog duga povećava teret njegovog servisiranja u narednim godinama. Doduše, treba imati u vidu da su ovi troškovi niži nego što bi bilo da dolar nije rezervna valuta. Eventualna nemogućnost urednog servisiranja državnog duga mogla bi ugroziti poziciju dolara kao svetske rezervne valute.

## Internacionalizacija juana

Posle smirivanja finansijske krize iz 2008. godine ukazano je na neusklađenosti između rastuće uloge Azije u svetskoj privredi i dominacije dolara u MMS-u (Bénassy-Quéré i Pisani-Ferry, 2011). Da bi se ovaj raskorak smanjio, Kina je već preduzela značajne mere u pravcu internacionalizacije juana. Neke od tih mera su: izvoznici mogu da robu koju prodaju fakturišu u juanima; postepeno se otvaraju vrata za priliv stranog kapitala (juan se koristi za obračun investicija preko ofšor zona); sa centralnim bankama glavnih trgovinskih partnera otvaraju se bilateralni svop aranžmani u juanima, čime se omogućava obračun i plaćanje u juanima u međusobnoj trgovini. Takođe se širi krug valuta za koje se juan direktno razmenjuje bez posredništva dolara. Mada je po mišljenju brojnih autora internacionalizacija juana još uvek dalek cilj (Prasad i Ye, 2012), početni koraci su već učinjeni. Rastuća uloga Kine u svetskoj privredi (vodeći svetski izvoznik i dinamičan rast njenog BDP-a) otvara mogućnost da kineski juan postane vodeća valuta u Aziji, a na duži rok i svetska rezervna valuta. Velika zavisnost Kine od izvoza i uvoza robe i usluga, kao i diverzifikovana robna razmena po zemljama, otvaraju mogućnost da juan stekne ulogu međunarodnog sredstva razmene (Li, 2014,

on a single national currency. Some authors, including Eichengreen (2011) and McKinnon (2012), consider that the IMS based on the dollar features a satisfactory stability, due to the leading role of the US in the global economy. Other researchers, however, believe that the US has an unfair privilege in the IMS, and that some sort of collective control of international liquidity should be introduced.

When choosing assets in which to hold their funds, private investors (investment funds, pension funds, insurance companies, etc.) opt for those that are liquid and easily tradable at the financial market. It is not difficult to prove that the US Treasury dollar-denominated securities best fulfil these criteria.



Recently the idea about substitution accounts originated, through which any excess of liquid dollar reserves would be turned into Special Drawing Rights - SDRs (McCauley and Schenk, 2014). Although this idea has been pressuring the reformers of the IMS since the 1970s, there are numerous obstacles to its implementation. Unwillingness of the US to accept the burden of this operation's FX risk is frequently stated as a reason to reject this idea (Farhi et al, 2011, p. 45; Kenen, 2010). Even if this idea were accepted by the IMF, it would take years to achieve the gradual conversion of dollars into SDRs.

If China, as the world's leader according to the amount of FX reserves, mostly denominated in dollars, decided to instantly sell its US Treasury securities, it is highly probable that the dollar would undergo a sudden depreciation. This leads to the conclusion that the countries with high FX reserves invested in dollar securities could affect the dollar's FX rate. This impact on the FX rate does not have

to coincide with the trends in the US current account values. It often happens that Asian countries with huge dollar reserves intervene at the FX market, preventing the appreciation of national currencies against the dollar, thereby supporting the growth of export. In that case the US, as the issuer of the reserve currency, plays a passive role in the dollar FX rate policy (Herring, 2012, p. 30).

The status of the dollar as the world's reserve currency is most often observed in relation to the US current account deficit and budget deficit. Such an approach raises the issue of whether the US must record a continuous trade deficit in order for the dollar to keep its status of the world's reserve currency. Bearing in mind that

the US recorded a trade surplus in the post-war period, whereas the rest of the world obtained dollar funds through investment flows, we cannot conclude that the increase of the global FX dollar-denominated reserves today implies a trade deficit of the US. However, today it is mostly considered that countries with a current account surplus can increase their FX reserves in their exchange with the US.

On the other hand, the US has no trouble financing its continuous trade deficit: it sells its government and corporate debt instruments to the central banks of foreign countries. Thus, the US government, the households and the corporate sector get the possibility to borrow more, at pretty low interest rates. Nevertheless, the excessively low interest rates and less demanding credit terms in the US generate the favorable conditions for the occurrence of asset bubbles, with almost unavoidable consequences for financial stability. The crisis may avert private foreign investors from the intention to invest their funds in the US, but it does not avert foreign central banks from accumulating FX reserves like before the crisis. The powerful demand for dollar-denominated securities enables the US to stimulate its economy with no risk that it would condition a depreciation of the dollar. Borrowing abroad, the US finances its current account deficit and its budget deficit. However, the accumulation of its foreign debt

str. 50). Tome ide u prilog i makroekonomska stabilnost koja karakteriše kinesku privredu poslednjih nekoliko godina. Značajan napredak je registrovan u izgradnji finansijskog sistema, u kome dominiraju banke. Međutim, tržište kapitala još uvek je nerazvijeno. Dalja finansijska liberalizacija otvorila bi prostor za internacionalizaciju juana, ali bi ujedno povećala rizik preokreta u tokovima kapitala. Stoga izgleda razumljivo što se kineske monetarne vlasti opredeljuju za postepeno ukidanje ograničenja na tokove kapitala (postepena liberalizacija). Mada kontrola kapitala usporava proces internacionalizacije juana, ona umanjuje rizike nagle internacionalizacije valute. Svesni rizika da bi povećana internacionalizacija juana u režimu otvorenih tokova kapitala mogla dovesti do apresijacije ove valute, koja bi destimulisala izvoz zbog gubitka izvozne konkurentnosti, monetarne vlasti Kine ne žure sa liberalizacijom računa kapitala (praktična posledica globalne finansijske integracije je otežana sterilizacija intervencija na deviznom tržištu u cilju stabilizacije deviznog kursa) (Devereux i Yetman, 2014, str. 7). Ove okolnosti mogu usporiti ali ne i odložiti liberalizaciju kineske valute u budućnosti. Na to ukazuje i rastuće korišćenje juana u fakturisanju

međunarodne trgovine Kine od 2010. godine, ali i brojni regionalni ekonomski i finansijski sporazumi koje je potpisala Kina sa azijskim zemljama. Postepena liberalizacija računa kapitala takođe je otvorila prostor za rast ofšor tržišta juana, naročito u vidu porasta depozita koji glase na juan u Hong Kongu, Kina. Ovi procesi predstavljaju prve korake konvertibilnosti kineske valute. Može se očekivati da će Kina preko ovog finansijskog centra graditi puteve internacionalizacije svoje valute.

### Zaključne napomene

Ključna svetska rezervna valuta i dalje je dolar. Ovaj status je stekao u posleratnom periodu i zadržao ga do danas. Njegova hegemonija u fakturisanju međunarodne trgovine i deviznim transakcijama povezana je sa dugogodišnjim korišćenjem ove valute za obračune i plaćanja u svetu. Dominacija dolara u strukturi svetskih deviznih rezervi takođe potvrđuje njegov značaj u ulozi međunarodnog čuvara vrednosti. Dok zemlji emitentu ove valute, SAD, međunarodna uloga dolara donosi značajne koristi, mnoge zemlje sa velikim deviznim rezervama u ovoj valuti se suočavaju



Kineska Centralna banka  
Central Bank of China

increases the burden of its servicing in the forthcoming years. Yet, one should bear in mind that these costs are lower than they would be if the dollar were not a reserve currency. Any potential inability to regularly service the public debt could jeopardize the position of the dollar as the world's reserve currency.

### **Internationalization of Yuan**

After the 2008 financial crisis calmed, there was a discrepancy between the growing role of Asia in the global economy and the domination of the dollar in the IMS (Bénassy-Quéré and Pisani-Ferry, 2011). In order to reduce this gap, China has already undertaken significant measures towards the internationalization of the yuan. Some of these measures include the following: exporters can invoice their goods in yuans; the inflow of foreign capital is gradually encouraged (the yuan is used for the calculation of investments via offshore zones); bilateral swap arrangements in yuans are signed with the central banks of major trading partners, which enables the calculation and payment in yuans in their mutual trading transactions. Moreover, there has been an expansion of the range of currencies for which the yuan can be directly exchanged with no intermediation of the dollar. Although many authors believe the internationalization of the yuan is still a distant goal (Prasad and Ye, 2012), the initial steps have been made. The growing role of China in the global economy (based on the dynamic growth of its GDP and the fact that it is the leading world's exporter) opens the possibility for the Chinese yuan to become the leading currency in Asia, and in the long run, even the world's reserve currency. The intensive dependence of China on the export and import of goods and services, along with its diversified commodity exchange with different countries, open the possibility for the yuan to acquire the role of the international medium of exchange (Li, 2014, p. 50). Also beneficial for this goal is the macroeconomic stability characterizing the Chinese economy in the several past years. Substantial progress has been recorded in the development of the financial system, dominated by banks. However, the capital market has still remained undeveloped. Further financial

liberalization would generate room for the internationalization of the yuan, but at the same time it would increase the risk of sudden shifts in capital flows. Therefore, it seems reasonable that the Chinese monetary authorities have chosen to gradually abolish capital flows limitations (gradual liberalization). Even though the control of capital slows down the yuan internationalization process, it reduces the risks of sudden internationalization of this currency. Aware of the fact that the intensified internationalization of the yuan within the open capital flows regime poses the risk of this currency's appreciation, which would discourage exports due to the loss of export competitiveness, the Chinese monetary authorities do not want to rush the capital account liberalization (a practical consequence of the global financial integration is an aggravated sterilization of FX market interventions with a view to FX rate stabilization) (Devereux and Yetman, 2014, p. 7). Such circumstances may slow down, but cannot altogether suspend the liberalization of the Chinese currency in the future. This has been indicated by the increasing usage of the yuan in the invoicing of international trade with China since 2010, but also by the numerous regional, economic and financial agreements signed by China with Asian countries. Gradual liberalization of the capital account has also generated room for a growth of the offshore yuan market, especially in terms of the growing yuan-denominated deposits in Hong Kong, China. These processes represent the first steps towards the Chinese currency's convertibility. It may be expected that through this financial centre China will be building roads towards the internationalization of its currency.

### **Concluding Remarks**

Dollar is still the key reserve currency in the world. It acquired this status in the post-war period, and has preserved it until the present day. Its hegemony in the process of invoicing of international trade and FX transactions is related to the long-term usage of this currency for calculations and payments worldwide. The domination of the dollar in the structure of the world's FX reserves also confirms its

sa rizicima kolebanja njegove vrednosti, posebno u vreme krize. Uprkos prigovorima o neodmerenim privilegijama SAD zbog ključne uloge dolara u MMS-u i svetskoj likvidnosti, ova valuta još uvek nema dovoljno snažnog rivala koji bi je potisnuo uz uloge svetske rezervne valute. Povećanje deviznih rezervi u ZUR i ZUT uglavnom se pretvara u plasmene ovih sredstava u američke državne HoV, pre svega zbog njihove likvidnosti i pouzdanosti. Rast tražnje američkih državnih HoV u svetu omogućava SAD da, putem snižavanja kamatnih stopa na ove papire, smanje troškove finansiranja rastućeg budžetskog deficita. Centralne banke u svetu skoro da nemaju alternativu da sprovedu jaču valutnu diverzifikaciju svoje aktive, već su uglavnom upućene na američke državne HoV (tržište isto tako kvalitetnih nemačkih državnih HoV je malo po dubini da bi moglo konkurisati američkom tržištu). To omogućava da dolar i dalje zadrži položaj dominantne valute svetskih deviznih rezervi. Mada je evro u određenoj meri takođe postao međunarodna valuta, skorašnja

kriza državnih dugova evrozone zaustavila je njegov uspon u ulozi svetske rezervne valute. Zahtevi za reformom MMS-a uglavnom se obrazlažu konstatacijama da je dolar kao nacionalna valuta stožer međunarodne likvidnosti, i da se zbog toga javljaju problemi u ciklusima kriza, kad se oseća nestašica dolara na svetskom tržištu. Neki pokušaji da se kreiranje međunarodne likvidnosti stavi pod kontrolu MMF-a i da se specijalna prava vučenja afirmišu kao svetska rezervna aktiva, spotiču se na brojnim pitanjima praktičnog sprovođenja ove ideje. Za sada izgleda realnije da bi u budućnosti moglo doći do smanjivanja međunarodne uloge dolara na račun porasta pondera evra (pod pretpostavkom da se evrozona oporavi od sadašnje krize) i kineskog juana. Imajući u vidu teškoće kroz koje prolazi evrozona, kao i činjenicu da je proces postupne internacionalizacije juana vezan za region Azije, velika je verovatnoća da će dolar u neposrednoj budućnosti i dalje biti ključna svetska rezervna valuta.

significance in the role of the international store of value. Whereas the international role of the dollar brings considerable benefits to the issuer of this currency, i.e. the US, many countries with large FX reserves in this currency face the risks of its value's volatility, especially at the times of crisis. Despite the objections concerning the unfair privileges of the US owing to the key role of the dollar in the IMS and global liquidity, this currency still does not have a sufficiently powerful rival that would replace it in its role of the world's reserve currency. The increase of FX reserves in developing and transition countries mostly transforms into placements of these funds into the US Treasury securities, primarily due to their liquidity and reliability. The growing demand for the US Treasury securities in the world enables the US to cut the costs of financing its increasing budget deficit by lowering the interest rates on these securities. Central banks in the world practically have no alternative for conducting a more intensive currency diversification of their assets, instead being forced to predominant turn to the US Treasury securities (the market of equally good German government securities is not deep enough to compete with the US market). This is what enables the dollar to keep its position of the dominant currency of the

world's FX reserves. Although the euro has to some degree become an international currency, the recent public debt crisis in Eurozone put a stop to its ascent to being a world's reserve currency. The requests for a reform of the IMS are mostly justified by statements to the point that the dollar as the national currency is the pillar of international liquidity, which is what causes problems in the form of cyclical crises, any time a shortage of dollars is felt at the global market. Some attempts to put the creation of international liquidity under the control of the IMF and to promote Special Drawing Rights as the world's reserve assets, have stumbled at countless issues related to the practical implementation of this idea. For now it seems more realistic that in the future there could be a reduction of the international role of the dollar in favor of the higher weight of the euro (under the assumption that Eurozone recovers from the present crisis) and the Chinese yuan. However, bearing in mind the difficulties Eurozone is going through, and the fact that the process of gradual internationalization of the yuan is related to the region of Asia, it is highly probably that the dollar will still be the key world's reserve currency in the foreseeable future.

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