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Capital Raising for Financing Serbian Economy

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Abstract
The paper points out the importance and necessity of application of new models for providing funding that would enable Serbia to finance the development of the economy as well as projects of national importance. In addition to the permanent loans, Serbia should take advantage of issuing bonds in the national and international financial market. The capital required for funding infrastructure, industry and the development of entrepreneurship, agriculture and tourism may be obtained from domestic and foreign investors. Project finance, asset securitization, diaspora bonds and the GDP-indexed bonds are sources of capital applied to a greater or lesser extent by other countries in transition. The possibility of establishing special trusts for the securitization of commercial mortgage loans such as Real Estate Mortgage Investment Conduit (REMIC) and Real estate investment trusts (REITs) would bring additional capital for financing the economy in Serbia. Future-Flow Securitizations can use Diversified Payment Right (export earnings, foreign direct investment inflows, workers' remittances) as an asset for the issuance of bonds, credit card merchant voucher receivables, hotel revenues, vacation ownership receivables, future revenues from agriculture, repurchase agreements and warehouse receipts.

Keywords
Asset securitization, future-flow securitizations, diaspora bonds, GDP linked bonds, project finance.

Introduction

Development of economy requires capital for financing industry and infrastructure projects (roads, ports, airports, bridges, railroads, telecommunications, etc.), development of energy sector (hydroelectric plants, oil and gas pipelines), development of infrastructure, tourism, entrepreneurship, small and medium-sized enterprises, and construction of public facilities (hospitals, schools, prisons), etc. Like other transition countries, in addition to loans, Serbia should make use of other forms of capital raising. Capital can be raised by issuing bonds on the national and international financial markets. Bonds can be issued based on securitization of various assets, diaspora bonds, GDP-indexed bonds and project finance bonds.

Transition countries have been applying asset securitization for over 20 years, including loan securitization (mortgage, student, agricultural loans, etc), equipment leasing, receivables from credit cards, receivables from telephone services, workers' remittances, foreign direct investments and export receivables. The collateral for securitization in transition countries may include future income from agriculture, repurchase agreements, warehouse receipts, and future income generated by hotels can be used as well. Diaspora bonds are used by Israel, India, Sri Lanka, Ghana, etc., and the raised capital is used for infrastructure projects. GDP indexed bonds are used by Bulgaria, Bosnia and Herzegovina, Argentina, and Greece. Project financing is used by Russia, China, Brazil, Poland, the Czech Republic, Mexico and Turkey.

1. Loans as collateral for issuing bonds

Mortgage loans and loans for small and medium sized enterprises are a particularly significant factor for the development of the Serbian economy. Also, development of Serbian agriculture requires issuing pool bonds based on agricultural loans.

A commercial mortgage loan is a loan approved for the purchase of assets generating revenue (CRE, commercial real estate). Loans are, in most cases, used for the purchase or construction of plants, business premises, warehouses and flats for leasing, hotels, restaurants, shopping malls, hospitals, etc. These loans are used for issuing commercial mortgage-backed securities (CBMS), debt instruments using commercial real estate as collateral. CBMS can be issued in a pool with one or more loans. Payments to investors depend on cash flows raised from the commercial assets. CBMS consist of several tranches, with different risks and returns. If banks in Serbia could sell commercial mortgage-backed loans (to private or public special purpose vehicle (SPV)), they could also approve new commercial loans to the Serbian economy.

The possibility of establishing special securitization trusts such as Real Estate Mortgage Investment Conduit (REMIC) and Real estate investment trusts (REITs) would provide additional capital for financing the Serbian economy. Real Estate Mortgage Investment Conduit (REMIC) is a trust established with a sole objective – to securitize commercial mortgage-based loans. REMICs buy commercial mortgage-based loans from banks and issue commercial mortgage-backed securities (CBMS) against these. REMICs invest in agencies, housing and commercial mortgages and securities. REMICs play a significant role in the development of tourism in the USA. These trusts buy mortgage loans for hotel construction and issue collateralized mortgage obligations (SMOs). 110 billion dollars of mortgage loans for the development of tourist accommodation has been approved and securitized through REMICs (Sullivan, 2011).

Real estate investment trusts (REITs) are companies investing in real estate yielding revenue. REITs buy and rent accommodation and commercial real estate. REITs invest in hotels, shopping malls, rental flats, business premises, mortgage-based securities, etc. REITS raise capital by issuing shares and bonds (CBMS). In the USA, they are exempt from federal income tax at the corporate level. To achieve tax exemptions, they have to pay minimum 90% of the taxed income to shareholder, and invest more than 75% of capital in real estate (Fabozzi, 2002, p. 297). In addition to investing in real estate and land, they also purchase mortgage-backed securities. REITs are, therefore, investors financing the issuers of mortgage-secured securities. Depending on the portfolio, there are several types of REITs: REITs investing in industrial facilities, warehouses, business premises, development land etc. (industrial REITs), then REITs purchasing real estate of all types and earn income by renting them (equity REITs). Mortgage REITs invest in mortgage-based securities, approve mortgage loans, securitize mortgage loans and mortgage-backed securities. Residential REITs invest in residential facilities such as houses and flats. There are also REITs investing in hospitality facilities such as hotels, resorts, etc. (lodging REITs).

In order to reduce unemployment, the state should enable and stimulate individuals to start their own business. State support stimulates entrepreneurships and establishment of small and medium-sized enterprises. Entrepreneurs and SMEs use banking loans. They are, in most cases, commercial mortgage loans. Poland, the Czech Republic and Bulgaria securitized loans for SMEs in 2006. Raiffeisen bank performed a synthetic securitization of loans for small and medium sized enterprises based on the loan pool worth 450 million euros approved by Raiffeisen in Poland and the Czech Republic. The hedger is KfW Bankengruppe, which issued bond tranches and transferred the credit risk from the asset pool to investors. The bonds were purchased by KfW Bankengruppe, the European Investment Fund and Raiffeisen International. The hedge buyers (and loan originators) are banks from the Czech Republic (Raiffeisen Bank as. Czech Republic) and Poland (Raiffeisen Bank Polska S.A.). The first loans for SMEs in Bulgaria were securitized by ProCredit Bank Bulgaria in May 2006. ProCredit Bank AD Bulgaria sold loans to the Amsterdam-based ProCredit Company B.V. trust. The trust issued BBB rated bonds, as assessed by the FitchRatings agency. The guarantee was provided by the European Investment Fund (EIF) and KfW Bankengruppe. ProCredit Bulgaria used the revenues from securitization for approving new loans to small and medium-sized enterprises (First Synthetic Securitization, 2008, p. 12).

Securitization of agricultural loans enables raising capital for financing agriculture. In Brazil, Agrosec Securitizadora Company buys agricul-

tural loans from banks and issues securities (certificado de recebíveis do agronegócio, Certificates of Agribusiness, CRA). The first issue by Brazil Agrosec Securitizadora Company was worth 50 million dollars, and the collateral was livestock. In Brazil, 2001 saw the establishment of Credit rights investment funds (FIDCs), closed- and open-type fund specialising in investing in securities financing agriculture (Herscovici, Herszkowicz, & Stacchini, 2008, p. 35). As Serbia grants subsidies for agricultural loans, the collateral for the first securitization could be subsidies loans. Loans for financing agriculture in Serbia are short-term and long-term. Loans can be approved for the purchase of seeds, fertilisers, land, livestock, long-term plantations, construction of facilities, purchase of machinery etc. Short-term subsidised loans have the repayment periods of three, six, nine and twelve months, and can be securitized based on revolving structure.

2. Future flow securitization

Future-flow securitization enables financing based on revenue generated in the future. It is very popular in transition and developing countries, as it enables eliminating the country risk, by applying offshore SPV. More than 400 securitizations have been performed so far in transition and developing countries (ranked by agencies) based on assets to be generated in the future, and at least 80 billion dollars has been raised (Ketkar & Ratha, 2009, p. 34). It is applied by the countries of Latin America, Africa and Asia.[1] Securitization is performed based on Diversified Payment Right (DPR) flows, receivables against credit cards (VISA, MC), warehouse receipts and repurchase agreements, aeroplane tickets, international telephone bills, etc. In addition to these assets, Serbia can use fees for gas transport and contracts between Srbijagas and final consumers.

DPR flows

Diversified Payment Right (DPR) flows include money transfers from foreign banks to domestic banks. The transfer of funds is performed based on payment orders given by a private or corporate person to a foreign bank. Payments are done based on trade, service rendered, orders from expatriates sending money to families in the home country, etc. In effect, DPR flows include export receivables, foreign direct investments and workers' remittances. These cash flows enable banks in transition countries to raise capital based on the estimated expected inflow of foreign currencies from various sources. Securitization enables the banks to issue bonds based on expected transfers from foreign banks. The bank of the transition country sells future receivables that it will have from foreign banks. DPR securitization has been performed by banks in Brazil, Guatemala, Peru, Jamaica, Russia, Kazakhstan and Turkey.

A bank wishing to raise capital sells the right to entire future rights based on foreign transfers to the offshore trust (special purpose vehicle, SPV). SPV issues bonds and forwards the capital from the sale to the bank in the transition country. Collateral includes money flows arriving from correspondent banks from highly developed countries of Europe and the USA. The correspondent bank forwards the funds to the SPV. Bonds based on DPR securitization have a higher rating than the rating of the transition country.

Banco do Brasil performed DPR securitization in 2002 and raised 450 million dollars. The transaction had Baa1 and BBB rating (Moody's and Standard & Poor's). Other Brazilian banks (Banespa, Bradesco, Itau, Unibanco) also used DPR securitization and raised over 5 billion dollars. The Turkish Garanti Bank performed securitization, but arranged its own DPR securitization. In 2013 they raised 1 billion dollars, and 550 million dollars during 2014 by means of DPR securitization (Asian Development Bank, 2007, p. 30).

Collateral for securitization can comprise entire DPR flows, but it can also be only a segment of these flows, such as export receivables and workers' remittances.

Export receivables from the sale of goods (oil, gas, coffee, produce, raw materials, minerals etc.) can be collateral for issuing bonds. If the securitization is done based on export of commodities, the foreign buyers of commodities will transfer the funds to the SPV, as it is the new owner of the receivable. SPV issues securities denominated in hard currency. The currency of the transition country is unstable and this is the way of avoiding currency rate change risk. Future receivables based on contracts (for the sale of commodities etc). are guarantee to investors in bonds that liabilities will be met. Mexico is among the first countries that performed securitization based on the sale of oil. The Pemex company sells oil, and Pemex Finance Ltd is an offshore trust issuing

[1] Mexico, Brasil, Argentina, Venezuela, Chile, Columbia, Costa Rica, El Salvador, Guatemala, Honduras, Jamaica, Panama, Peru, India, China (Hong Kong), Malaysia, Indonesia, Kazakhstan, Egypt, Nigeria

bonds. The collateral for bonds is contracts with oil buyers, which effect the payment to the offshore account. Serbia can also use the benefits of securitization of export-based receivables.[2]

Workers' remittances are funds sent by the diaspora to the home country. Remittances are of national significance for transition and developing countries. Remittances enable development and reduce poverty, featuring as a constant inflow of funds. Workers' remittances are a stable source of foreign currency inflow, and thus investment capital. Countries with a large diaspora receive dozens of billions of dollar every year. According to the data from 2013, countries with the largest inflow of capital via remittances are India (71 billion dollars), China (60 billion dollars), the Philippines (26 billion), Mexico (22 billion), Nigeria (21 billion), Nigeria (21 billion dollars) and Egypt (20 billion dollars) (World Bank, 2013, p. 4).

Securitization of remittances provides a relatively stable inflow of capital for a bank in a transition country. The bank sells its future receivables against workers' remittances to a trust located in a tax haven, which issues bonds. Remittance securitization means that all receivables from future remittances from expatriates are transferred to a separate trust, established in order to issue bonds to investors. Foreign banks through which expatriates sell money transfer the money to the trust. The offshore trust enables a reduction in the credit risk related to the bank in the transition country. Remittance securitization yields benefits to banks: in addition to capital inflow that can be invested as loans, banks extend loan maturity and decrease debt costs, as bonds have investment ranking. Improvement in the rating of bonds can be achieved by guarantees of multilateral agencies and the IFC.

In 2002, Banco do Brasil sold future income from the remittances of Brazilian workers employed in Japan. The receivables were transferred to the trust Nikkei Remittance Rights Finance Company, on the Cayman Islands. Another trust, based in New York, issues bonds to investors and raises 250 million dollars. Banco do Brasil transfers workers' remittance to a separate account run by a New York-based trust. The principal and interest are paid to investors from the account. Apart from Banco do Brasil, securitization of workers' remittance was also performed by other banks in Latin America. Banco Cuscatlan's (El Salvador) in 1998, Banco Salvadoreno's in 2004, Banco de Credito del Peru's (Peru) in 2005, and Banco Bradesco's (Brazil) in 2007 with the largest amount of 400 million dollars (Ratha, n.d., p.5).

African Export-Import Bank (Afreximbank) played the key role in financing against remittances in Africa. In 1996, African Export-Import Bank (Afreximbank) approved a loan to a bank in Ghana, and the collateral was workers' remittances transferred through Western Union. In 2001, African Export-Import Bank (Afreximbank) arranged the securitization when the value of issued bonds was 50 million dollars, based on remittances transferred through Moneygram (Shimeles, 2010, p. 5). In 2004, African Export-Import Bank (Afreximbank) approved a loan of 40 million to an Egyptian bank, based on remittances transferred through Western Union (Mohapatra & Ratha, 2011, p.14). Between 1994 and 2000, Mexico, Turkey and El Salvador raised 2.3 billion dollars based on the securitization of workers' remittances (Ratha, n.d., p. 4). This form of financing is also used by banks in Kazakhstan, Brazil, Peru, and Panama.

International institutions also saw the importance of the securitization of workers' remittances. In 2010, IFC approved a loan of 30 million dollars to the Fedecredito cooperative from El Salvador. Remittances of workers from El Salvador working abroad were the collateral. The raised funds are used for loans to entrepreneurs and population in low income brackets. Fedecredito is a cooperative owned by 55 credit unions and banks from El Salvador mobilising savings deposits of 600.000 low-income members accounting for one-quarter of workers in this country. IFC approved the loan, and later Fedecredito was able to finance itself with the help of investors on the financial market (International Finance Corporation, 2010).

Serbia is a country with a significant inflow of foreign currency from workers' remittances, and banks can raise capital to use it for approving loans to retail and corporate clients. According to the data from the National Bank of Serbia, between 2007 and 2013 Serbia saw the transfer of remittances at the amount of 19.55 billion euros, with a peak in 2009, when 3.24 billion euros was transferred to Serbia from abroad.

[2] For instance, export of ores, non-metals and minerals (e.g. zeolite) that Serbia abounds in

Credit and debit cards

Payments for products and services by credit cards can also be used as collateral for issued bonds (credit card merchant voucher receivables). Based on payments effected by credit cards, banks can issue bonds and raise capital. Popular tourist destinations or growth in the number of tourists in a particular country offers the opportunity to banks to use this financing method. Credit and debit cards are used for paying the services of tourist agencies, hotels, restaurants, air, rail or road transport, car rental, collecting cash from ATMs, etc. Cards are used for shopping, amusement parks, health care services, petrol stations, etc.

Banco de Credito del Peru sold its future receivables from Visa credit cards to BCLO Master trust. Based on these receivables, the trust issues bonds and sells them to investors. Income from the sale of securities is forwarded by the trust to Banco de Credito del Peru. Visa undertakes an obligation to transfer the credit card payments to the trust, instead of transferring them to Banco de Credito del Peru. This is a way of eliminating the country risk. BCLO Master trust, which receives funds from Visa, is outside Peru's jurisdiction. After paying the interest and the principal to investors, the remaining funds are forwarded by the trust to Banco de Credito del Peru. The trust issued securities in November 1998, with maturity date in November 2005. The credit rating of the securities was AAA, determined by Standard & Poor's. The securities were insured by Multilateral Investment Guarantee Agency (MIGA), meaning unconditioned guarantee of timely payment of interest and principal to investors. For the investors, the guarantee eliminates political risk and risk associated to the asset itself. Therefore, the rating of securities depends on the rating of Multilateral Investment Guarantee Agency (MIGA) (Ketkar & Ratha, 2004-2005, p. 11).

In 2000, FirstRand Bank of South Africa issued bonds at the value of 250 million dollars based on receivables from Visa, MasterCard and Cirrus. Trust FirstRand 2000-A, B Receivables Trust issued bonds rated BBB+ by Standard & Poor's. In 2001, Jamaican Credit Card Merchant Voucher Receivables Master Trust issued bonds worth 125 million dollars, maturing in 2006. The collateral comprised all current and future receivables of Commercial Bank Jamaica Ltd. (NCB) denominated in dollars by Visa International and MasterCard International Inc. The trust that is the owner of receivables and the issuer is on Cayman Islands and MasterCard and VISA transfer all future payments to SPV (Kochubka, Flores, & Olivares, 2001, p. 8).

In addition to receivables from credit cards, another instrument that can be used for raising capital is securitization of hotels' future receivables.

Hotel revenues

Hotel revenues are also used as collateral for issued bonds. Hotel construction is based on the securitization of future revenues that the hotel will earn when it starts working. The US legal framework enables the bonds issued for financing hotel construction to be tax exempt if the hotel is the property of the state or local government. Although the owner of the hotel is a state authority, they cannot build a hotel, nor can they manage it. The state or the city enters partnerships with private companies – well-known hotel chains (Sheraton Operating Corporation, Hilton Hotels Corporation Hilton Hotels Corporation, Hyatt Corporation, etc.). Once the hotel has been built, a state authority becomes the owner, and the hotel chain undertakes to manage the hotel, under its own name. As they are not owners of the hotel, they earn profit based on management commission. In order to build a hotel, the city establishes a trust with the task to finance and build a hotel, but also to be the owner. Assets owned by the SPV are total future revenues of the hotel to be built (room rental, restaurants, coffee bars, auxiliary services (parking, hair stylists, massage, spa centre, laundry washing and ironing, etc. The trust's liabilities are bonds issued by the trust. The city's assets are protected this way, as investors in securitized bonds can claim their receivables only from the SPV, rather than the city budget. Thus, investors in bonds can reimburse themselves only from the hotel's revenues, not from other revenues from the city's budget. The bonds are issued in several tranches and subordination is used. Lower tranches often also have additional insurance, as they are riskier. The last (ownership) tranche is mostly purchased by the hotel chain that will be managing the hotel after construction. Cities in the USA that developed conference tourism attract large numbers of visitors, which makes a positive impact on the local economy. The tourists use accommodation facilities, but spend money in shops and restaurants, rent cars, etc.

In 1999, the city of Sacramento in the USA issued bonds through a trust: senior (92.8 million dollars) and subordinated bonds (4.1 million dol-

lars) to finance the construction of a 500-room hotel for conference tourism. After the construction, the hotel will be managed by Sheraton Operating Corporation. The hotel owner is the Sacramento Hotel Corporation, established by the city of Sacramento. The bonds are secured by the hotel's revenues and net profit of the parking facility owned by the city of Sacramento. In 2001, the city of Austin, Texas, established the Austin Convention Enterprises Inc. trust with the aim of financing and building a hotel and a parking facility. The Austin Convention Enterprises Inc. trust issued bonds worth 265 million dollars, used for the construction of an 800-room hotel and underground parking facility under the hotel, with 600 parking spaces. The owner of the hotel is the city of Austin, actually, its SPV, and the hotel will be managed by Hilton Hotels Corporation. The bonds were issued in three tranches, and the third tranche was purchased by Hilton and the contractor (Magan, Davis, Israel, & Liever, 2001-2002, p.47).

Revenues from tolls

The state can raise capital based on the securitization of revenues from tolls. The raised capital can be used for road construction and maintenance, but for other purposes as well. The Standardard & Poor's has estimated that 92 billion dollars will be necessary in the USA by 2020 for the maintenance of the existing roads and bridges (Mitchell, 2006). One of the solutions for capital raising can be the securitization of toll revenues. Chicago and Indiana performed securitization based on future toll revenues. Chicago was the first in the USA to privatize toll revenues. The transaction included the right to charge toll on the Chicago Skyway bridge. In 2005, Skyway Concession Company, LLC (SCC) gained the right to charge toll for the period of 99 years, and the city of Chicago gained 1.83 billion dollars. The concessionaire bears the operating costs and bridge maintenance costs. Securitization of future toll revenues is used in Mexico, Japan, China, Hong Kong and Dubai. The Dubai government raised 800 million dollars based on the securitization of the motorway toll revenues. Dubai remains the owner of the motorway and manages it. The trust issued bonds worth 800 million dollars. Citibank, Commercial Bank of Dubai, Dubai Islamic Bank and Emirates NBD arranged the transaction, whereas the bond issue was signed by the syndicate of regional and international banks (Sharif, 2011).

Revenues from agriculture

Future flow securitization enables farmers to sell to the SPV the future receivables (that is, revenues) from the sale of their produce. By selling future revenues, the farmer gets funds and can use them for financing production. The SPV issues bonds based on receivables that will emerge in the future. As the rights to sell the merchandise are transferred to the trust, buyers of the produce pay the merchandise to the SPV, which then pays the liabilities to investors.

The Peruvian Drokasa company (2005) uses future flow securitization for financing. Through its subsidiary, Agrokasa, they produce and export asparagus and grapes. The collateral for bond issue comprises contracts made by Drokasa with produce buyers. Drokasa gains funds, and the SPV issues the bonds. The buyers pay the funds under contracts to the SPV. In practice, SPV can factor the receivables from the sale of wheat, soybean, maize, fruit, vegetables, livestock, etc. SPV sells bonds to investors during the sowing season or at the initial stage of cattle growing. For instance, a cattle farmer growing cattle for meat industry can sell his future revenue to the SPB and obtain funds immediately. When the buyer buys the cattle, the money will be forwarded to the SVP. Payment to investors is done when the SPV receives the income from the sale of cattle. The essence is that the sale of future revenues has enabled the farmer to get funds for financing the production. A fruit farmer can also sell the future income to SPV before the harvest and sale of fruit. The buyers of fruit will be paying to SPV, which will pay the investors. The fruit farmer receives the funds before the harvest, enabling him to finance production (purchase of machinery, new seedlings, chemicals, workforce wages etc.).

The collateral for securitization in agriculture may be repurchase agreement and warehouse receipts. In the case of repurchase agreement, the seller sells commodities and undertakes the obligation to repurchase it. Securities can be issued based on repurchase agreement. The bank or SPV that bought the repurchase agreement can use them as collateral and issue securitized securities. This is the way sugar mills were financed in Mexico in 1996. The mills sold sugar to the bank with the obligation to repurchase, and the bank issued securitized bonds at the value of 400 million dollars (ACE Global Depository, n.d., p.2). Therefore, the sugar repurchase agreement is collateral for issued securities Securitization of repurchase agreements is also done in Columbia, when fi-

nancing livestock (livestock securitization). Cattle farmers sell cattle to the SPV, and undertake to purchase it in the future. Based on livestock repurchase agreement, the SPV issues securitized securities. Although they have sold the cattle to the SPV, the farmers have the obligation to raise and tend the cattle. SPV controls whether are raising the cattle well, i.e. growing it appropriately. The farmers grow the cattle for 11 months, repurchase it from the SPV and sell on the market. National Agriculture and Livestock Exchange (BNA) plays the leading role in securitization and selects farmers by certain criteria (Rutten, 2001, p.6).

Financing can also be done through securitization where the collateral is warehoused merchandise, i.e. warehouse receipt. Inventory is the collateral based on which the SPV issues securities. The warehoused merchandise is the guarantee to investors that liabilities to them will be met. If the SPV does not pay the interest and the principal, the buyers of securities have the right to reimburse themselves from the collateral – the stored goods. Securitization based on maize inventories is done in Venezuela. By selling the warehouse receipt to the SPV, the farmer gets funds immediately and has no credit liabilities.

Financing the gas pipeline through Serbia

Serbia can securitize future flows that will be achieved after the construction of the gas pipeline. The collateral can be transport fees and contracts that Srbijagas has with final consumers. Funds from the sale of bonds can be used for constructing the gas pipeline. The income that Serbia will be gaining in the future, after the completion of the pipeline, will be used for paying the investors. The collateral for bonds can be funds that Serbia will be charging for transport of gas through the pipeline. In the second case, the collateral comprises Srbijagas' contracts with gas consumers on the territory of Serbia. The contracts are collateral, because they are evidence that gas will be distributed and paid for. Future flow securitization would enable raising capital based on issue of bonds that have a higher credit rating than Serbia. The essence is that rating is determined based on the collateral.

3. Diaspora bonds

Countries that have a numerous diaspora in highly developed countries can use them to raise capital by issuing diaspora bonds. Issue of these bonds is based on the desire of expatriates to help their home county. Diaspora bonds provide a stable and inexpensive source of external financing. The revenue from bonds is used by the issuing countries for the development of infrastructure, energy sector and other projects of national significance. Issue of bonds enables raising hard currency, as the expatriates live in highly developed countries (the USA, the EU, Japan, etc.). In practice, there are cases then the diaspora gives the so-called patriotic discount, meaning that some of the investors do not submit coupons for collection at maturity. The first diaspora bonds were issued by Japan and China in the 1930s. Today, by far the greatest issuer of these bonds is Israel, and they are also used as a capital raising method by Egypt, India, Ethiopia, Sri Lanka and Ghana.

Over the period of 30 years, Israel has raised 25 billion dollars from expatriates. Between 1983 and 2003, diaspora bonds accounted for 20-35% of Israel's external debt (Kayode-Anglade & Spio-Garbrah, 2012, p.2). In 1951, Israel established the Development Corporation for Israel (DCI) with the aim of raising capital from the Jewish diaspora. Bonds of various characteristics were issued over decades. Up to the early 1970s, Development Corporation for Israel (DCI) issued bonds with fixed interest rates and maturity periods of 10 to 15 years. In mid-1970s, bonds were issued with maturity periods of 5,7 and 10 years, denominated to 150,000, 250,000 and 1,000,000 dollar. In that period, the target investor group comprised banks and finance companies in the USA. From 1980 till 1999 the focus is once again on individuals. Israel issues bonds with floating rate and nominal value of 25,000 dollars, and later also with reduced amount of 5,000 dollars. The maturity periods of these bonds were 10 and 12 years. Israel's experience shows that it is desirable for nominal value of bonds to be adapted to both individual and institutional investors comprising the diaspora. 200 million dollars worth of bonds were never submitted for collection.

Table 1 Bond issues of Israel and India

Israel	India
25 billion dollars total issue	11 billion dollars total issue
annual issues since 1951	individual issues in 1991, 1998 and 2000
loans for development	support to balance of payments
high but declining patriotic discount	small patriotic discount
bonds with fixed and floating rate	fixed-rate bonds

maturity periods 1 to 20 years with payment on maturity date	maturity periods 5 years with payment on maturity date
sold by Development Corporation for Israel (DCI)	sold by State Bank of India (SBI) and international banks
target group: diaspora, but other investors as well	diaspora only
non-transferable	non-transferable

Source: Ketkar & Ratha, 2007, p.10

India issued diaspora bonds three times. The first time in 1991, it issued India Development Bonds (IDBs) worth 1.6 billion dollars. The second time, in 1998, India issued Resurgent India Bonds (RIBs) worth 4.2 billion dollars. The third issue was made in 2000, with India Millennium Deposits (IMDs), worth 5.5 billion dollars. The issuer of diaspora bonds is State Bank of India (SBI). Bonds-are mid-term, with maturity up to 5 years. They are issued in hard currencies: dollar, pound sterling, euro, and yen. So far India has raised over 11 billion dollars selling bonds to the diaspora. All three types of bonds that India issued brought the investors a higher yield than corporate bonds of the countries they are living in. For instance, when RIBs were issued in 1998, with the return rate of 7.75% to a bond denominated in dollars, the return on BB ranked American corporate bond was 7.2%.

Ethiopia issued bonds (Millennium Corporate Bond) in 2008, with the aim of financing the public Ethiopian Electric Power Corporation (EEPCO). Also, it issued bonds (Grand Renaissance Dam Bond) in 2011 for the construction of dam on the river Nile.

Table 2 Issues of Ethiopian bonds

	Millennium Corporate Bond	Grand Renaissance Dam Bond
Purpose	Ethiopian Electric Power Corporation	financing the dam on the Nile
Currency	dollar, euro, pound sterling, other hard currencies, and BIR	dollar, euro, pound sterling, or BIR
Minimum denomination	100 dollars, minimum purchase 500 dollars	50 dollars, euros or pounds
Maturity period	5,7 and 10 years	5 or 5-10 years
Interest	4%, 4,5%, and 5%	5 years LIBOR + 1.25% 6-7 years LIBOR + 1.5% 8-10 years LIBOR + 2%
Payment of bonds	At maturity, the holder may: charge for the bond in foreign currency, buy another bond of the same nominal value, deposit in foreign currency or BIR, and pay import liabilities	at maturity
Interest	annual	semi-annual
Interest payment	BIR, deposit in foreign value or BIR, transfer across the border	in the currency of the bond
transferability	transferable	transferable – two to three owners
tax	interest on funds is exempt from income tax	income exempt from all taxes

Source: Kayode-Anglade & Spio-Garbrah, 2012, p. 5

Egypt sold bonds to the diaspora in the 1970s. In 2007, Ghana issued bonds worth 50 million dollars (the Golden Jubilee), which it offered not only to retail clients in Ghana, but to diaspora as well. In 2001 Sri Lanka issued Sri Lanka Development Bonds and raised 580 million dollars. South Africa issued Reconciliation and Development (R&D) bonds offered to domestic investors and the diaspora. Diaspora bonds were also issued by Nepal, Kenya and South Africa.

Diaspora is very loyal, especially in situations when the state cannot borrow capital from other sources. Israel, India and Ethiopia used diaspora bonds when they difficulties borrowing from other external sources.[3]

4. GDP growth indexed bonds

Transition countries can use financing based on indexing debt to the GDP of the issuing country. A GDP-linked bond[4] is a debt instrument issued by the state. Payment of bonds depends on the trend of the issuing country's gross domestic product. GDP-linked bonds are floating bonds where the coupon depends on the growth rate of a country. So, the coupon paid to the investors depends on the state in the country's economy, i.e.

[3] Israel sold diaspora bands in 1973 during the Yom Kippur War and in 2001 after the terrorist attack in the USA. In 2001 the diaspora purchased bonds worth 1.14 billion dollars, whereas 2000 saw the sale of 785 million worth of bonds.

[4] Also referred to as GDP.indexed bonds, GDP-linked security, GDP-indexed security, GDP-linked warrants (GLWs).

growth or fall in the GDP. Thus, GDP-linked bonds reduce the issuing country's liabilities to investors when the GDP declines. At the time of slow or negative growth, GDP-linked bonds reduce the likelihood of default and debt crisis (Griffith-Jones & Sharma, 2006, p. 2).

Transition countries started issuing bonds in accordance with the Brady Value Recovery Rights (VRRs) during the 1990s. These are bonds with special warranties, enabling increased payments to investors if the issuing country's GDP grows to a particular level. Costa Rica, Bulgaria, and Bosnia and Herzegovina issued GDP growth indexed bonds (GDP-linked warrants, GLWs or GDP VRRs). According to the Bulgarian model, if the GDP growth exceeds a particular level, investors get additional 0.5% interest for every 1% growth in FDP. In June 2005, Argentina issued GDP-linked bonds with maturity period of 30 years. The bonds were issued with the purpose of reprogramming due liabilities. The bonds bring the investors additional profit if the GDP grows more than the Argentinean government has foreseen. In February 2012 Greece issued GDP-linked bonds.

Warrants provide investors with another benefit – they can be traded separately from the financial instrument with which they were issued. Therefore, by separating from the bond, the warrant becomes an independent financial instrument. Oil exporters such as Mexico, Nigeria and Venezuela issue warrants linked to the price of oil (oil warrants). The issuers will pay the investors additional funds if the price of a particular commodity grows to a defined level. Warrants enable additional payments to investors if the issuing country earns additional income from exports.

5. Project finance

Project finance enables financing large infrastructural projects (road network, bridges, tunnels, railroads, ports, etc), development of energy sector (oil and gas exploitation, construction of refineries, gas and oil pipelines, electrical plants, etc.), telecommunications, transport, agriculture etc. Project finance is used by highly developed countries, but also India, China, Malaysia, Taiwan, Viet Nam, Brazil, Mexico, Chile, Peru, Poland, the Czech Republic, Turkey and Morocco.

Project capital is based on equity and debt capital. Equity capital is provided by sponsors, but also by investors who buy shares, but do not manage the construction of the project. Equity capital accounts for about 30% of the total required capital for project financing. As equity capital is not sufficient for project finance, debt finance is used as well. Debt financing implies using loans and bonds. The creditors are commercial and investment banks, multilateral and bilateral institutions, export agencies, insurance companies, investment, pension and hedge funds, and other investors. Commercial banks' loans are the most important source of project finance. As these high-value projects, credits are approved by syndicated banks. Multilateral and development financial institutions and development agencies in most cases provide loans, guaranties, provide counselling services and insurance. Commercial banks and multilateral agencies together credit high-value project by applying the so-called A/B credit structure.

Capital raising is done through a project company, a specially established trust (Special Purpose Vehicle, SPV). So, this is an off-balance-sheet transaction, because financing is done through the SPV. The sponsor does not take loans directly, but through the project company. If the project sponsor goes bankrupt, the investor's receivables are protected, as they will be reimbursed from the asset which is in the SPV's balance sheet. The sponsor's other creditors do not have the right to reimburse themselves from the trust's assets. The SPV issues shares and bonds and takes loans from banks. The SPV is the owner of the entire project's assets and liabilities. Assets are comprised of all receivables that will be incurred in the future when the project is finished (e.g. contracts for transport of oil or gas, contracts with final consumers, etc. The SPV's liabilities are bonds (project CDO) that it has issued, as well as taken loans. In practice, an SPV is formed with the aim of buying the taken loan from the banks. The aim is to refinance at lower interest rate (Forrester, n.d.). Payment of liabilities based on taken loans, issued securities, dividends and costs will be effected based on the project's future flows. Collateral for loans and bonds includes real estate, right to oil and gas wells, leasing, licences, concessions, contracts with final consumers, etc. Based on the collateral, the SPV issues bonds (project collateralized debt obligation (CDO) or project finance CDO).

The assets which are the collateral for securitised securities may be a single project loan, or loans financing several different projects, i.e. different project finance loans. In 1996, the Argentinean company Transportadora de Gas del Norte S.A. (TGN) performed securitization based on a

single loan. International Finance Corporation (IFC) approved the loan to TGN, which was then sold to the SPV that issued the bonds. In 1998, Credit Suisse First Boston issued the first package of bonds with loans from project finance (Project Funding Corp. I). the collateral was a pool with 41 loans (Credit Suisse First Boston, 1998, p.13).

Conclusion

The aim of this article is to point out the significance of issuing various types of bonds, whereby Serbia would raise the necessary capital for the development of agriculture and projects of national significance. Starting from the experience of transition countries and financial instruments that they apply, it is obvious that there are sources of capital that Serbia can use. Capital for financing infrastructure, industry, entrepreneurship, agriculture and tourism is available from domestic and international investors. Serbia should finance infrastructure projects, improve its energy sector, finance the development of small and medium-sized enterprises, agriculture, tourism and public facilities. Securitization of the current and future assets, sale of bonds to the diaspora, GDP-linked securities and project finance are sources that other transition countries use for raising capital to a greater or lesser extent.

Commercial mortgage loans and loans for SMEs are especially important for the development of the Serbian economy. commercial mortgage loans are intended for the purchase or construction of plants, business premises, warehouses, rental flats, hotels, restaurants, shopping malls, hospitals etc. Commercial mortgage-backed securities (CMBS), debt instruments with commercial real estate as collateral, are issued based on these loans. The possibility of establishing special securitization trusts such as Real Estate Mortgage Investment Conduit (REMIC) and Real estate investment trusts (REITs) would bring additional capital for financing agriculture in Serbia.

Future flow securitization can use assets for issuing bonds in the form of DPR flows (revenues from import, foreign direct investments, future receivables from the use of credit cards, revenues from hotels, revenues from agriculture, repurchase agreements and warehouse receipts, revenues from tolls etc. It is very popular in transition and developing countries, as it enables eliminating the country risk by using offshore SPVs. Also, the advantage of future flow securitization is that issued bonds have a higher rating than the rating of the issuing country. It is used by the countries of Latin America, Asia and Africa. Development and transition countries have so far completed over 400 securitizations based on assets to emerge in the future, and over 80 billion dollars have been raised. Serbia can use the securitization of future revenues from agriculture, as it enables farmers to obtain funds immediately and use them for financing production. Numerous successful examples of securitization in agriculture are found in the countries of Latin America. Also, securitization of toll revenues may bring capital to Serbia, due to a large number of foreign citizens using Serbian motorways.

Diaspora bonds are used by Israel, India, Sri Lanka, Ghana, etc., and the raised capital is used for infrastructure projects. The diaspora is highly loyal, especially in situations when the state cannot borrow capital from other sources. New ideas for raising capital from the diaspora are emerging in practice. A very interesting idea is establishing funds to be financed by the diaspora, with the aim of investing in the country of origin. Given that the Serbian diaspora is numerous (about 4 million Serbs are estimated to be living outside Serbia), it can be a significant source of capital.

Serbia can also issue GDP-indexed bonds, as these have been used successfully by other countries. These bonds are issued by Bulgaria, Bosnia, Argentina and Greece. Project finance is used by highly developed countries, but also Russia, China, Brazil, Poland, the Czech Republic, Mexico, Turkey, etc. It enables financing projects in the energy sector, but also road infrastructure and agriculture. SM

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