



FORMER YUGOSLAV REPUBLIC OF MACEDONIA

July 2014

SELECTED ISSUES

This selected issues paper on Former Yugoslav Republic of Macedonia was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on June 17, 2014.

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International Monetary Fund
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FORMER YUGOSLAV REPUBLIC OF MACEDONIA

SELECTED ISSUES

June 17, 2014

Approved By
European Department

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REMITTANCES AND ECONOMIC DEVELOPMENT IN FYR MACEDONIA

A. Introduction

1. **Workers' remittances have represented by far the most important financing flow in the balance of payments of Macedonia in recent years.** They have superseded both official and other private capital flows to cover trade deficits hovering around 20 percent of GDP. In view of their sheer magnitude, the long-run impact of remittances on the domestic economy warrants investigation from at least two angles. From a development perspective, remittances can be expected to play a crucial role in poverty reduction, consumption smoothing, and the funding of small-scale investment projects, thus alleviating financial constraints for underserved segments of the population and ultimately allowing for better risk diversification within the public debt portfolio. From a risk perspective however, beyond being potentially volatile and rather unpredictable, remittances may artificially support excess private demand for extended periods of time, which prevents the adjustment of relative prices and the efficient allocation of labor and resources across sectors, thus structurally undermining external competitiveness and potential growth.

2. **We investigate the macroeconomic impact of remittances on long-run external sustainability and growth.** In the remainder of this paper, we present, first, stylized facts pertaining to the characteristics of remittances in Macedonia, highlighting their countercyclicality and importance in sustaining the purchasing power of domestic agents. Second, we rely on a literature review to help set up a theoretical framework for assessing their macroeconomic impact, highlighting the possible risk of "Dutch disease" developments. Third, we use a BVAR model to empirically investigate both hypotheses of countercyclicality and Dutch disease effects. Fourth, we put forward a few policy options that may be explored to better harness remittances to support investment and long-term growth.

B. Stylized Facts

3. **Macedonia has a long standing tradition of emigration.** Since the late 19th century, successive waves of migration have been caused by conflicts—the Balkan Wars (1912–1913), the First and Second World Wars, the Greek civil war (1945–1949), the Kosovo conflict and the 2001 internal security crisis—by the 1963 earthquake, as well as, on a continuous basis since the 1960s, by poor general economic and social conditions. The main countries of residence are reported to be Australia, Italy, Switzerland, Germany, the United States, Canada, and Turkey. Emigration is estimated to have accelerated over the last two decades with an overall outflow of about 200,000 people (Bornarova and Janeska, 2012). The level of education of migrating workers has increased in the recent period highlighting the key challenge of "brain drain."

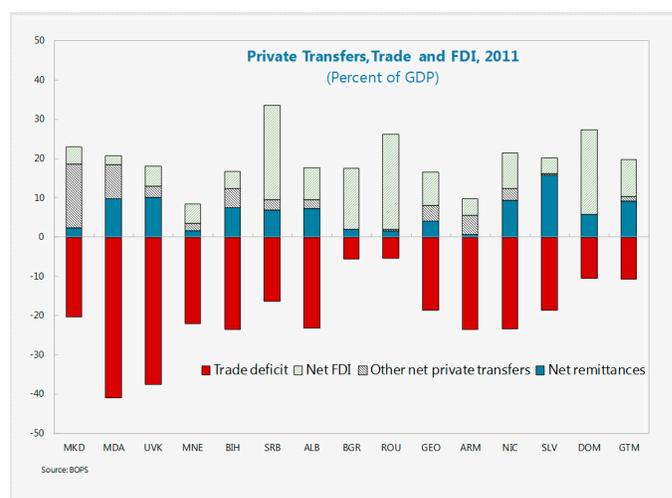
4. **The size of the diaspora remains uncertain.** According to official policies, "Macedonians" abroad include citizens as well as individuals with ethnic-Macedonian ancestry who identify

themselves as Macedonians regardless of their citizenship. Data issues include the absence of a population census since 2002, statistics from the Minister of Internal Affairs based on individual declarations of absence from the country for at least three months (this results in only 125,000 Macedonians officially living abroad), Macedonians being registered as Yugoslavians and various other origins, or adopting the citizenship of their host country. Flow data do not coincide with stock data on migrants. Based on official statistics from the countries of destination, it is commonly estimated that up to 550,000 Macedonians are established abroad, bringing the emigration rate above 25 percent (Bornarova and Janeska, 2012). This entails structural losses for the economy with respect to, among other factors, the labor force participation, employment, and pension liabilities.

5. **Private transfers including remittances are a major source of financing for the large trade deficit.**

Private transfer inflows have represented a stable and major source of financing of external accounts over the past decade. Among comparator countries, Macedonia stands out for the amount of private transfers in percent of GDP (in the last ten years, they have fluctuated between 13 and 21 percent of GDP). The country is also an exceptional case insofar as remittances and other private transfer inflows are large enough to almost cover the entire trade deficit, thus making a key contribution to reserve accumulation and external stability in the context of the peg to the euro. Other than exports, private transfers

constitute the largest source of foreign exchange for Macedonia. As a fairly stable source of financing, private transfers have contributed to the economy's resilience to the crisis.



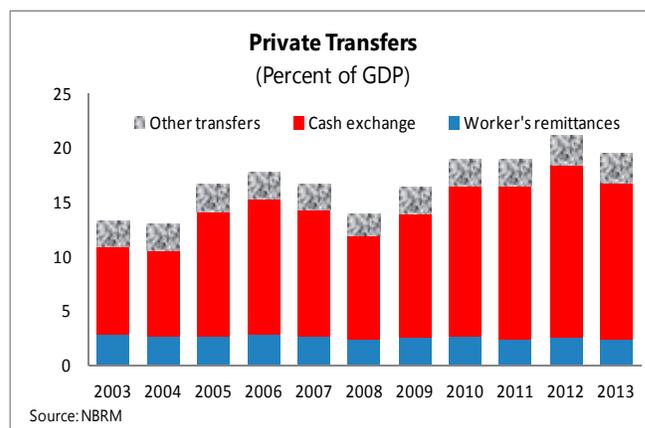
6. **Officially recorded workers' remittances are only a small share of private transfers.** In application of the Balance of Payments Manual, the National Bank of the Republic of Macedonia (NBRM) breaks down private transfers into two items:

- "Workers' remittances" coming through official channels and reported as such by individuals. These flows represent about 2.5 percent of GDP. The data source is the banks' International Transactions Reporting System (ITRS), which includes money transfers through banks and through fast money transfer counters;
- "Other transfers" which are made up of two underlying items: (i) "net cash exchange" (the largest share of private transfers) recorded by banks and private exchange offices. This is considered the main source of private transfers from Macedonian migrants, but through informal channels. Based on that assumption, the NBRM includes such cash exchange in the current account; (ii) "other private transfers," which include rents, pensions, disability

assistance coming from abroad, gifts to individuals, and other private transfers received by resident companies (for instance, donations).

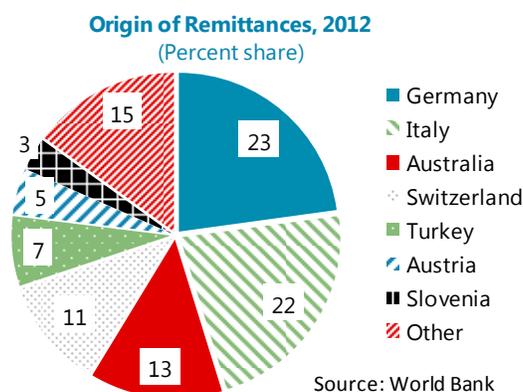
7. **Measuring the actual flows of remittances remains challenging.** The main issue consists of quantifying the respective shares of the three components of cash exchange transactions:

genuine remittances, transactions reflecting the unrecorded export of goods and services such as health care provided to non-residents, and funds released from dormant savings in foreign currency. For 2013, it is estimated that out of 19 percent of GDP of private transfers (close to the 2010–2012 annual average), 14 percent of GDP came from cash exchange developments, of which 4 percent of GDP were likely remittances, the rest being related to unreported economic activity and release of savings. Along with workers’ transactions via banks, using these conservative



assumptions would tentatively bring the total amount of remittance flows to about 6.5 percent of GDP, significantly higher than FDI. Confronted with these data issues, the authorities have made several attempts to improve the measurement of remittances. In 2007, the NBRM used the findings of a survey-based study by the Centre for Economic Analyses (CEA) to extrapolate the surveyed sample with data on households from the ongoing 2011 census and data on migrants from the Agency for Migration. The interruption of the census put an end to this project. In 2011, the NBRM initiated a new survey supported by an external consultancy; yet, absent a recent census, the central bank found the preliminary findings inconclusive.

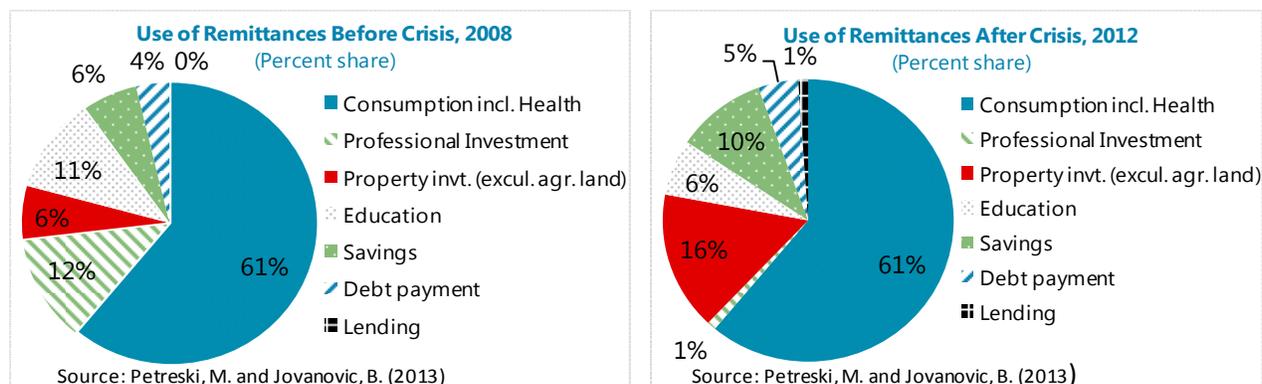
8. **Most remittances are sent from Western Europe.** Based on the World Bank’s estimates, more than 70 percent of remittances come from Western Europe (more than 60 percent from EU countries). While Germany, Switzerland, and Italy are undoubtedly the most prominent contributing countries, other survey-based sources also list the United States as a secondary remittance sending country (see, for instance, Roberts et al., 2008).



Box 1. Recent Survey-Based Studies on the Diaspora and Remittances

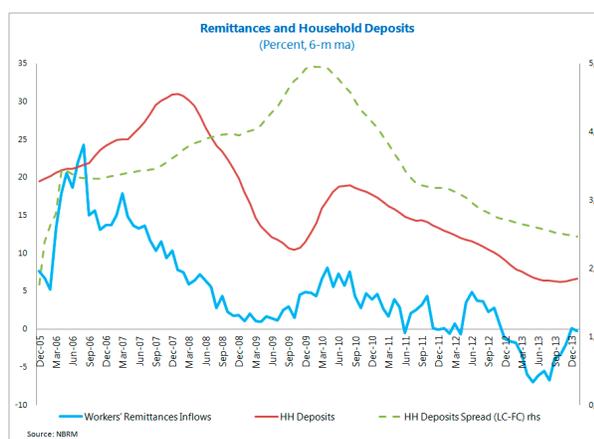
- The USAID financed a research study by the Center for Economic Analysis (Roberts et al., 2008) on the determinants and trends in remittance flows in Macedonia, for the benefit of the National Bank of the Republic of Macedonia. It built on a survey led in June–September 2007 by the specialized agency IDSCS on 1,046 remittance recipient households and 200 remittance senders.
- Mughal, Cipuncheva and Abazi (2008) of the South East European University of Tetovo examined the impact of migration on the standards of living in FYR Macedonia, mainly drawing upon a Quality of Life Survey conducted in July–August 2008 using a regional representative sample of 2,797 households.
- Petreski and Jovanovic (2013) investigated the impact of remittances on poverty and income inequality through two different household surveys conducted in 2008 (1,211 households) and in late 2012 (1,000 households).
- In 2013, the Economic Chamber of North-West Macedonia and the USAID Small Business Expansion Project surveyed 60 companies or individuals from the diaspora that had already invested in the Polog region (area of Tetovo and Gostivar) to seek their profile, motivation, and assessment of the business environment.

9. **Evidence-based research shows that remittances are mostly used for smoothing current consumption** (Box 1). Available survey-based research indicates that remittances reduce poverty and mainly affect consumption. Roberts et al. (2008) indicates that nearly 43 percent of the recipients receive at least EUR 1,000 annually, while 39 percent of the respondents reported that remittances constitute half of their disposable income; the average amount declared by recipients was US\$2,486. Regarding the use of these flows, current spending was considered the highest priority (74.1 percent), followed by savings (13.7 percent), home construction (8.8 percent), and house maintenance (5.7 percent). By contrast, investment was not considered an important use by recipients. Based on two different surveys conducted in 2008 and in late 2012, Petreski and Jovanovic (2013) find that remittances reduce both poverty and income inequality and point to the resilience of remittances devoted to consumption through the crisis. Ghaffar Mughal A., Cipuncheva H. and Abazi H. (2008) also illustrate the poverty reduction and consumption smoothing role of remittances. These findings are in line with the fairly strong consensus in the literature on the consumption bias of remittances. The assumed countercyclical role of remittances in smoothing consumption and accumulating housing and real estate assets in Macedonia is also consistent with the resilience of these transfers observed through the crisis, in particular their nominal increase during the 2009–2010 downturn. This suggests that remittances constitute compensatory rather than opportunistic transfers.



10. Remittance flows also interact with domestic monetary and financial conditions.

Remittances appear highly correlated to household deposits and broad money developments and, hence, are likely to have a positive impact on the liquidity of the banking system. The start of monetary policy relaxation by the central bank at end-2009 triggered a decline in the currency spread of deposits, which coincided with a slowdown in remittance transfers. Besides their countercyclical, altruistic behavior, this would suggest that at least part of the remittances are interest rate-sensitive flows, reflecting to some extent portfolio decisions.



C. Macroeconomic Impact – Theoretical Considerations

11. **The impact of remittance flows on long-term growth in emerging economies remains an open field for research.** The theoretical and empirical literature can be organized along two lines of consideration. On the one hand, remittances have been found to foster economic convergence by supporting the purchasing power of domestic agents and alleviating financing constraints, thus shoring up small-scale investment projects of entrepreneurs unable to access credit. On the other hand, evidence suggests that remittances may artificially sustain excessive domestic demand over extended periods of time, thus preventing the adjustment of relative prices and distorting resource allocation across economic sectors, ultimately hurting external competitiveness. Cross-country studies bring about very mixed results, contingent on the observed characteristics of the recipient economies and the postulated motives underpinning migrant workers' decision to remit.

12. The literature emphasizing the positive impact of remittances on growth distinguishes between their effects on consumption or investment, associated with counter-cyclical or pro-cyclical patterns.

Building on microeconomic surveys on the determinants of remittances (e.g., Lucas and Stark, 1985), the first strand of literature generally seeks to identify whether remittances are channeled towards consumption or investment. These alternative uses appear to depend on the altruistic or self-interested motivations of migrant workers, but also on the degree of financial sophistication of the recipient economy. To the extent that migrants pursue the altruistic objective of sustaining their relatives' income at home, remittances can be expected to be conducive to consumption smoothing, thus containing the rise of inequality in the face of economic downturns. In this respect, they would be assumed to be strongly countercyclical with regard to domestic economic conditions. Conversely, when motivated by self-interest, migrants may send money home for investment or portfolio allocation purposes, in which case remittances would tend to exhibit some more pro-cyclical patterns, improving along with the business climate and weakening in difficult times. The latter impact on investment may be all the more important in that agents are financially constrained in the recipient economy.

13. Empirical evidence suggests that remittances may both support consumption smoothing and small-scale investment in countries with underdeveloped financial systems.

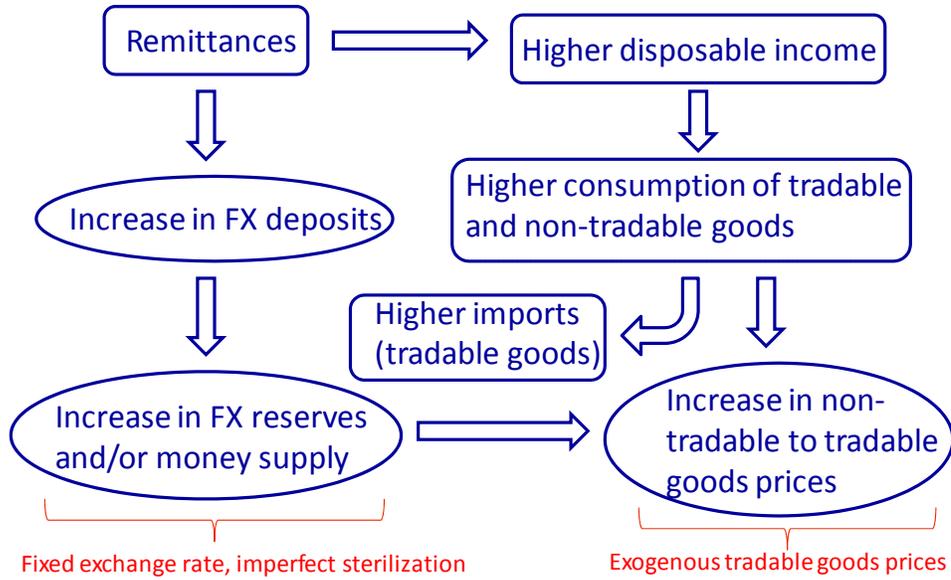
Conducting a panel data analysis for a broad range of Asian countries over the period 1993–2003, Jongwanich (2007) finds that remittances have a significant impact on poverty reduction through consumption smoothing, but only marginally affect investment. This result is consistent with the economics of family-based model developed by Chami, Fullenkamp, and Jahjah (2005), which characterizes remittances as “compensatory transfers” that should not be expected to serve as a source of capital for development in the first place. Nevertheless, a large body of microevidence suggests that remittances may, in practice, exert a positive impact on entrepreneurship, labor supply, and investment by alleviating widespread financing constraints in developing countries (IMF, 2005). Controlling for endogeneity between remittances and the degree of financial development within a panel framework including about 100 developing countries, Giuliano and Ruiz-Arranz (2009) argue that remittances boost investment and long-term growth in economies with underdeveloped financial sectors by helping local entrepreneurs circumvent collateral constraints due to inefficient credit markets. Likewise, Catrinescu et al. (2006) find that remittances have a weakly positive impact on long-term growth in a range of developing countries, all the more so that policies are put in place to improve the business environment and harness investment. Conducting a dynamic panel data analysis for about 80 developing countries, Bjuggren, Dzansi and Shukur (2010) also find that remittances can be key to relaxing financial constraints to investment under conditions of poor intermediation, further pointing out that their marginal importance decreases along with improvements in institutional frameworks and the functioning of credit markets. However, reviewing, in turn, the effects of remittances on capital accumulation, the labor force growth, and total factor productivity growth for a panel of emerging countries, Barajas et al. (2009) highlight their effectiveness in consumption smoothing in the short run, but find, “at best,” no impact on long-term growth.

14. **The “Dutch disease” literature emphasizes the negative impact of remittances on long-term competitiveness and growth** (Box 2). Notwithstanding their positive impact on poverty and inequality reduction in the short run, the second strand of literature underscores that exogenous remittances may exacerbate domestic price distortions and sectoral resource allocation within recipient countries, thereby undermining potential growth in the long run, as in the case of other financial inflows or the discovery of natural resources. According to this so-called “Dutch disease” paradigm, the increase in households’ disposable income due to remittance inflows triggers an expansion of aggregate demand (spending effect), which falls both on the tradable and non-tradable goods sectors. For exogenously given prices of tradable goods, and assuming that all non-tradable goods are produced domestically with limited resources, such excess demand exerts upward pressure on the relative price of non-tradable goods in terms of tradable goods, i.e. on the domestic component of the real exchange rate. Over time, the associated increase in the compensation of production factors in the non-tradable sector induces some labor shedding and reallocation of resources toward this sector (resource movement effect), whereas the excess demand for tradable goods can be straightforwardly satisfied by an increase in imports. Overall, the combination of an appreciated real exchange rate, higher imports, and shrinking export capacities results in a structural deterioration of the trade balance, commensurate with the amount of spending caused by the remittance inflows.

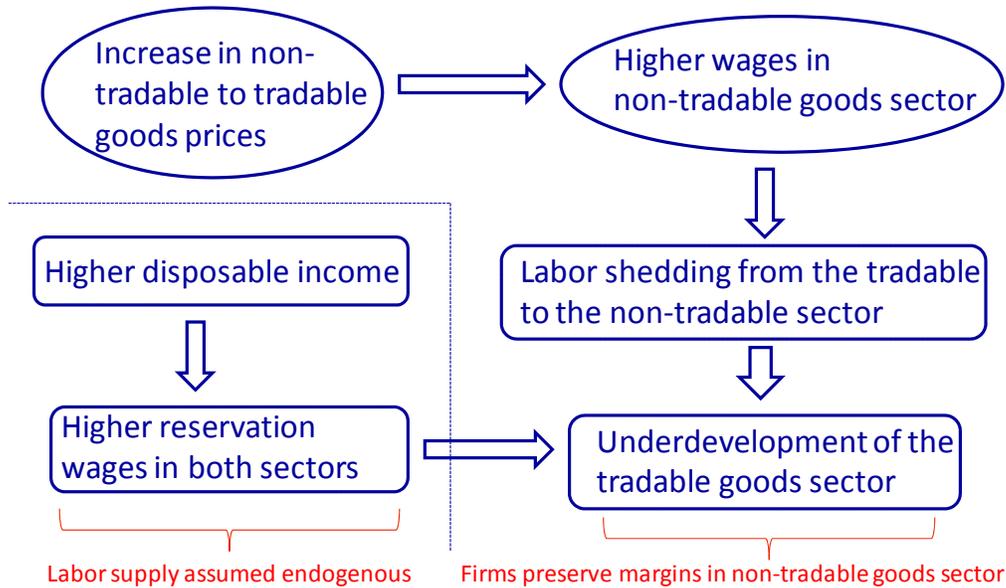
15. **The magnitude of the economic and financial distortions associated with remittances is contingent on country-specific characteristics.** First, the larger the share of household consumption devoted to non-traded goods and the smaller the elasticity of substitution in the production of tradable versus non-tradable goods, the larger the real exchange rate appreciation and loss of competitiveness in exports following an inflow of remittances. Second, the negative impact of remittances on the tradable goods sector is likely to be magnified when the labor supply is endogenous to the income level. In this case, the higher reservation wages associated with such ‘windfall’ income may lead to a decline in the overall labor supply, which is likely to trigger upward pressures on wages expressed in terms of tradable goods prices. As the resulting higher production costs can be accommodated by second-round price increases in the non-tradable goods sector but not, by assumption, in the tradable goods sectors, the decrease in profitability brings about a further contraction of the latter sector in spite of higher demand. More generally, the shortfall of labor supply undermines the overall growth potential of the economy. Third, the dynamics at play strongly depend on the exchange rate regime. Under flexible exchange rates, remittance inflows translate into short-term, upward pressure on the nominal exchange rate (assuming that there is no sterilization), further exacerbating the immediate loss of export competitiveness if wages do not adjust downwards. Under fixed exchange rates, the accumulation of reserves will tend to generate an increase in nominal money supply in a more gradual way, increasing the overall liquidity of the financial sector and generating across-the-board inflationary pressures, notably on the prices of those limited resources that may be used for the production of both tradable and non-tradable goods.

Box 2. Dutch Disease Mechanics

Short-term 'spending' effect

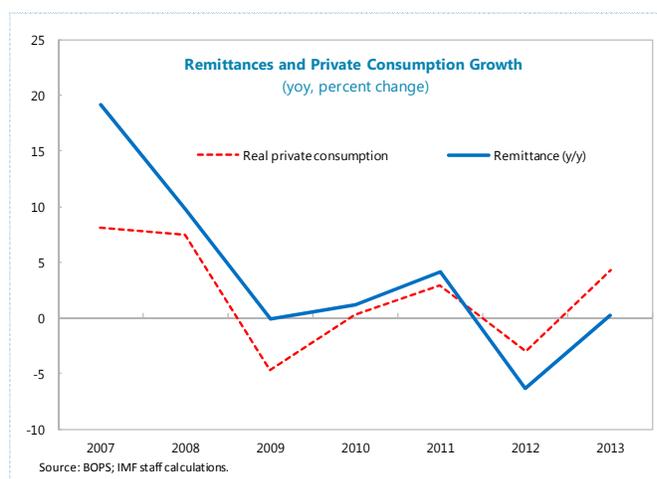


Long-term 'resource movement' effect

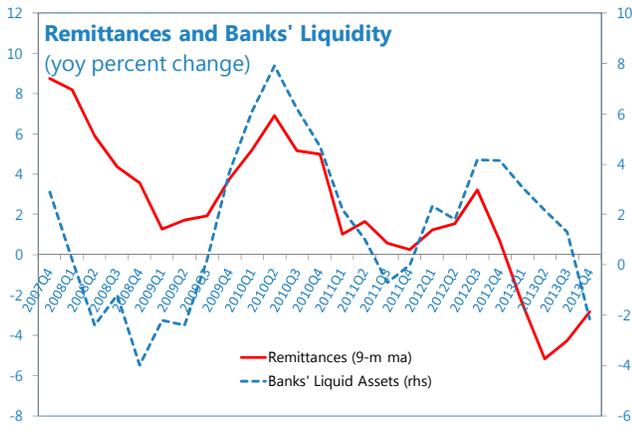


16. **Remittances are generally found to trigger Dutch disease-types of developments in emerging economies.** Investigating the prevalence of Dutch disease effects in a sample of Latin American countries, Almuedo-Dorantes and Pozo (2004) find that a doubling of workers' remittances lead to an overvaluation of the exchange rate by 22 percent. Analyzing the transmission channels of remittances into the Salvadorian economy by means of a vector autoregression (VAR) model, Caceres and Saca (2006) point to an appreciation of the real exchange rate as well as increases in imports and consumer prices, intensified by the reaction of the central bank, following remittance inflows. Also, in the case of El Salvador, Acosta, Larrey, and Mandelbam (2009) estimate a two-sector dynamic stochastic general equilibrium model using Bayesian techniques to show that remittances directly lead to an increase in the relative price of non-traded goods, hence causing some resource reallocation toward this sector. Similarly, for a range of Latin American countries, Lopez, Molina, and Bussolo (2007) find that remittances trigger some significant real exchange rate appreciation. However, focusing on Cape Verde, Bourdet and Falk (2006) provide a more balanced assessment: while confirming an adverse effect of remittances on external competitiveness, the authors also highlight the successful, mitigating impact of well-targeted policy measures aimed at improving the attractiveness of the export sector. By contrast, relying on a very disaggregated cross-national dataset of industry value added growth data for a large panel of developing countries, Rajan and Subramanian (2005) find that, unlike private capital and aid flows, remittances do not actually hurt overall competitiveness—a result that the authors tentatively attribute to the fact that the expansion of domestic demand associated with remittances could be mostly directed toward unskilled labor-intensive activities provided by local microenterprises (such as home repair and refurbishment); this, therefore, puts no pressure on other relatively scarce resources within the recipient economy.

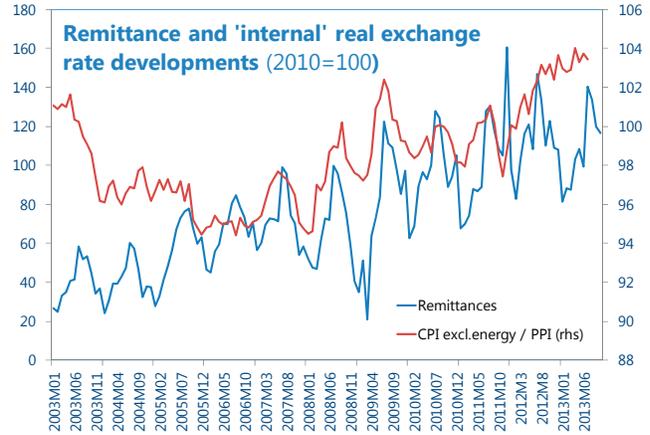
17. **Stylized facts on Macedonia suggest that remittances may be expected to have both a countercyclical consumption-smoothing impact in the short run, while undermining external competitiveness by supporting excess liquidity in the long run.** The countercyclical behavior of remittances during the 2008–2009 crisis episode highlights the likely altruistic motivations of Macedonian migrant workers remitting money home, while surveys tend to confirm the use of remittances for consumption purposes, in a context where structural unemployment remains pervasive throughout the country. With regards to possible Dutch disease type of symptoms, it should be observed that, given the impossibility to fully sterilize financial flows over extended periods of time within the fixed exchange rate regime, remittances are likely to represent a key explanatory factor of the extremely high, and trend increasing level of liquidity observed in the banking sector over the last few years, partly reflecting the increase in the money supply. Also, the “internal” component of the real exchange rate, i.e., a proxy for the prices of non-tradable to tradable



goods appears to have appreciated with remittance inflows, with correlation peaking after about nine months.

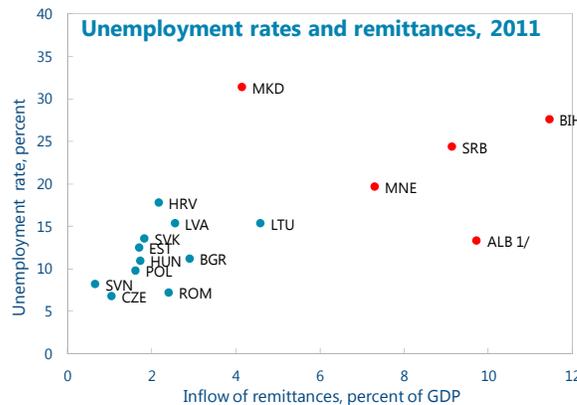


Source: NBRM.



Sources: NBRM; and staff calculations.

In the medium to long-run, remittances also appear positively correlated to low employment levels across comparable countries, including FRY Macedonia, lending strength to the view that they may exert upward pressures on reservation wages—notwithstanding the impact of other structural factors constraining labor market developments.



Sources: country authorities and labor force surveys; World Bank; and Eurostat.

D. Macroeconomic Impact – Empirical Analysis

Model and Data

18. **We use a mixed-frequency structural VAR (SVAR) model for our analysis of Macedonia’s remittances.** The VAR model is an effective tool for studying complex dynamic interrelation in data. By estimating the impulse response functions using VAR, we can trace out the effect of policy, as well as that of real and nominal innovations, on remittances. The aim of the model is threefold: first, to evaluate the cyclical properties of remittances with respect to the aggregate home economy demand and EU demand; second, to understand the savings channel of

remittances; and third, to assess the Dutch disease hypothesis by looking at the relationship between non-tradable to tradable (NT/T) prices and remittances. SVAR models are particularly useful, as they impose very few restrictions on the dynamics of the system and are considered to perform reasonably well in forecasting. The data span covers the period 2005M08 to 2013M07. The model consists of two blocks—a home economy and a foreign economy— see Taheri Sanjani and Solmaz (2014), Österholm and Zettelmeyer (2008), and Abrego and Österholm (2008). To avoid the curse of dimensionality, the size of the model is kept minimal. Specifically, we only use real EU GDP in the foreign economy block and use real Macedonia GDP, real Macedonia consumption, remittances, NT/T prices, and interest rate differentials (the spread between Macedonia’s short-term rates and three-month Euribor) in the home economy block. Hence,

$$Y(t) = [\text{GDP}_{\text{MKD}}, C_{\text{MKD}}, \text{NT/T prices}, \text{Remittances}, \text{IR differential}, \text{GDP}_{\text{EU}}].$$

Note that we further decompose private transfers into “workers’ remittances” and “other transfers” to explore to what extent measurement issues might affect our findings; these results are discussed in the robustness analysis section. The data is obtained from Haver analytics. NT/T prices are proxied by the ratio of CPI over PPI, excluding the energy sector.¹ Given the data availability limitations that we faced for PPI weights, we use a simple average to construct our tradable sector prices. Our measure of remittance contains both workers' remittances and the other transfers.²

Model and Identifications

19. **Developments abroad are assumed to exogenously impact the domestic economy.** We use zero restrictions to impose no spillovers from the domestic economy to the external block; however, the external bloc does affect the domestic economy. We estimate the model using the Bayesian shrinkage technique proposed by De Mol, Giannone, and Reichlin (2008) and Banbura, Giannone, and Reichlin (2010). Under the shrinkage technique, the model's coefficients shrink toward a parsimonious naive benchmark and hence reduce estimation uncertainty. Essentially, we set the shrinkage parameter so as to avoid over-fitting. Shrinkage is a device for reducing estimation uncertainty via the imposition of priors.

For $Y(t)$ being the vector of endogenous variables with n entries, assume the economy evolves as:

$$Y(t) = c + AY(t - 1) + e(t)$$

$$e \sim N(0, S)$$

where $e(t)$ is a vector of exogenous shocks, S is the covariance matrix of shocks, and c, A contain the model's unknown parameters. We use one lag of variables. The level variables are detrended by

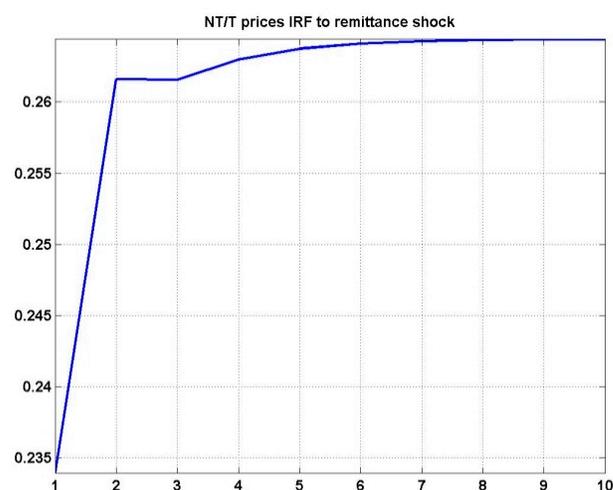
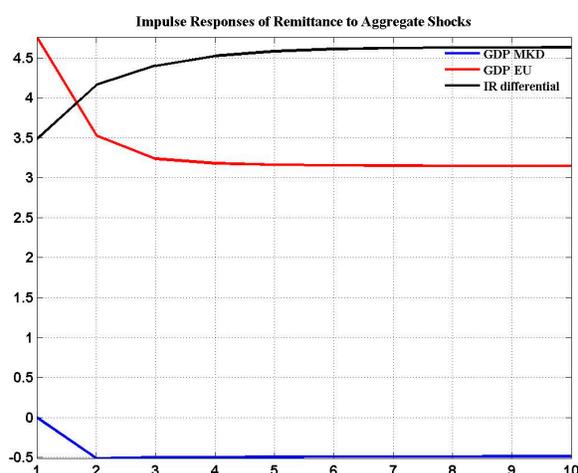
¹ It appears that remittance is correlated with nine-lag prices. Therefore, our price measure is a nine-lagged forward CPI/PPI (excluding energy).

² We further adjust the level of remittances to 2010 following the CPI methodology which is adjusted to 2010. Hence, we scale the remittances such that 2010M06=100.

taking 100 log of their first difference, while the rates remain untransformed. Next, we discuss the cumulative median impulse response functions (IRFs) to one-percent exogenous increase in the individual variables of the model.

Impulse Response Analysis

- **Remittances appear to be countercyclical with respect to Macedonian GDP and procyclical with respect to EU GDP.** To assess



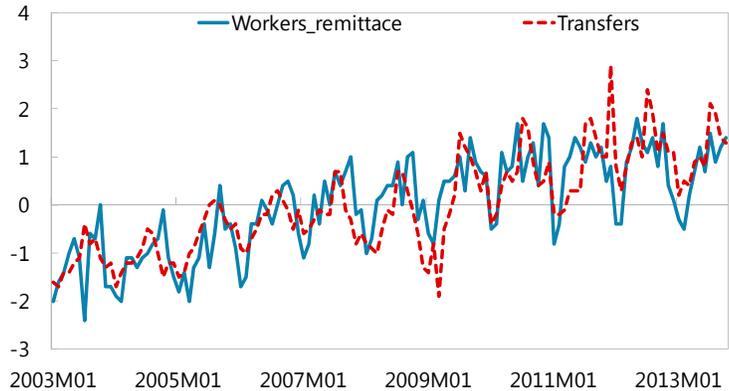
the cyclical properties of remittances, we compute the IRFs to exogenous shocks in Macedonia GDP and EU GDP. The GDP shock is a linear combination of shocks that have moved GDP historically. This can be interpreted as a business cycle shock and is closely linked to the notion of cyclical shock in Giannone, Lenza, and Reichlin (2012). Investigating IRFs allows us to uncover the relationship between the domestic/external business cycle and the remittances. A countercyclical response to shocks in the domestic economy is consistent with a stabilizing role of remittances and in line with findings in the literature. Noteworthy is the role of “push” factors—the elasticity of the response to EU shocks is significantly higher.

- **Remittances are interest rate-sensitive.** An exogenous increase in the interest rate differential encourages migrant workers to choose their home economy for saving.
- **Remittances do put some upward pressure on the internal real exchange rate.** The IRF analysis presents mild evidence of Dutch disease effects on the Macedonian economy. Exogenous shocks originating in remittances push the prices in the non-tradable goods sector higher than in the tradable goods sector; however, the elasticities are small.

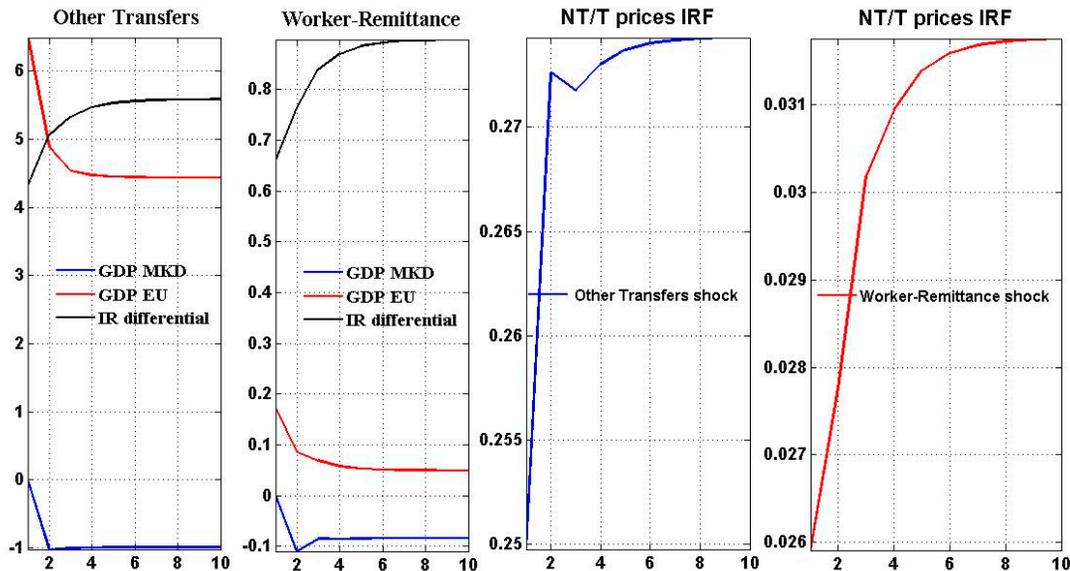
- **Finally, the results are robust to different specifications of the “remittances” variable.**

Subcomponents of remittances are strongly correlated. The figure in right hand side presents the normalized worker’s remittances and other transfers. The correlation factor is 0.77. They further respond similarly to different exogenous shocks, although the magnitude of the response is different: the IRFs of workers’ remittances exhibit a smaller elasticity than other transfers’ IRFs.

Subcomponents of Remittances are correlated



Sources: Haver, SSO, IMF staff calculation, Data is normalized.



E. Policy Implications – Managing Remittances

20. **The Macedonian authorities have become increasingly aware of the potential contribution of the diaspora to economic development.** An inter-ministerial working group on migration policy was established in September 2008. It drafted the first “Resolution of migration policy (2009–2014),” which was adopted by the Parliament in 2009 and implemented through a five-year action plan. It contributes to the country’s “Migration profile” issued by the International Organization for Migration that aims to support evidence-based migration policymaking. The

absence of representatives from the Central Bank and the Ministry of Finance illustrates, however, the working group's focus on legal and institutional aspects rather than on macroeconomic issues.³ The government also appointed several representatives of the diaspora as Ministers in charge of attracting FDI. The Agency for Emigration of the FYR Macedonia has a broad mandate to facilitate the involvement of the diaspora in economic development. It connects associations of Macedonians and diaspora businesses abroad and, in collaboration with all municipalities, collects data on investments made locally by the diaspora. In addition, a number of ongoing initiatives combine actions from NGOs, chambers of commerce, small businesses, bilateral donors, and municipalities.

21. **The proper measurement of remittances is essential for estimating their impact on the economy and making optimal policy decisions.** There is broad consensus in the literature as well as at policy-making levels on the uncertainty of the true magnitude of remittances. Considering the critical nature of remittances for the Macedonian economy, domestic surveys on recipient households should be conducted on a more frequent basis. These should be combined with a comprehensive census of the diaspora through consular offices, so as to allow a better understanding of the location, skills, and experience of migrants. The Indian government, for instance, did such an exercise, which resulted in the creation of a Ministry of Overseas Indian Affairs (MOIA) in 2004 (IOM and MPI, 2012).

22. **Strong political engagement in support of diaspora projects is key** (Box 3). It is critical for the government to signal the importance of engaging with the diaspora on economic development, in a cost-effective manner. Ways of engaging typically include setting up diaspora-centered institutions—at the *Ministry level* (such as in Bangladesh, India, Indonesia, Pakistan, and Sri Lanka), at the *sub-ministry level* (like in the Philippines, via special offices under the Departments of Labor and Employment and Foreign Affairs, or China), or at the *local level*. Goals and mandates may differ—from information on local employment opportunities for overseas students, to investment opportunities, migrant protection (legal advice), or promotion of cultural ties. Tapping in to diaspora human capital through scholar recruitment, the covering of moving costs, the funding start-ups and setting up of partnerships in innovative research, and so forth, are ways to promote diaspora engagement. The maintenance of an enquiry portal for local investment opportunities as well as the creation of a “one-stop” shop for diaspora entrepreneurs could also significantly foster interest in investment (IOM and MPI, 2012). Policies on migration, remittances, and the diaspora would need to be integrated into a national development strategy. Diaspora investment should be raised as a policy priority to a level similar to the attraction of FDI, in the context of a public-private collaborative strategy to promote investment in productive capacities that would respond to both external and internal demand. For instance, India and China have given diaspora investors high priority for establishing operations in the special export processing zones (UNCTAD, 2012). The ongoing project in Tetovo's free economic zone could be a leading initiative in this respect.

³ It is composed of representatives from the Ministries of the Interior, Foreign Affairs, Economy, Labor and Social Affairs, Education, Justice, the State Statistical Office, the government secretariat for EU issues, and international and regional specialized institutions.

Box 3. Some Initiatives for Mobilizing Diaspora Funds Towards Investment

- The *Diaspora Invest Initiative* is a partnership initiated through the USAID 4-year Small Business Expansion project with the Economic Chamber of North-West Macedonia (OEMVP), the Center for development of the Polog region, and nine municipal offices for local development, and is supported by German cooperation (GIZ). Its aim is to improve communication and networking between local and diaspora businesses, organize trips in countries of destination, propose evidence-based policy measures, establish a partnership with the Norwegian NORMAK Invest group that manages Tetovo's free economic zone, open diaspora regional offices, and develop innovative financing of local projects. This initiative is intended to partner with the two other Macedonian chambers of commerce (the *Economic Chamber of Macedonia* and the *Macedonian Chambers of Commerce*).
- The *Macedonian Diaspora Business Center* (MDBC) was established in 2004 as a part of the Macedonian Chambers of Commerce. It aims at helping build a bridge between Macedonian companies and international companies linked to the diaspora.
- The USAID-supported *SEAF Macedonia Fund* is setting up a fund for small scale projects financed by SEAF, individuals from the diaspora, and members of the association Macedonia 2025. The targeted size of the Fund of (EUR 10 to 15 million) will include complementary funds from domestic private financial institutions. Projects will be selected through *Homestrings*, the London-based platform that facilitates diaspora investment in their home countries. USAID provides some guarantees to the scheme.
- *Macedonia 2025* is an NGO founded in 2007 whose mission is to position Macedonia as a preferred destination for foreign direct investment, to promote transparency in government and corporate sector operations and to strengthen linkages with the diaspora. It has offices in Canada and the United States.
- The *National Entrepreneurship and Competitiveness Council* (NECC) is an NGO gathering 17 members, including business associations, the Macedonian Development Bank, the three Chambers of commerce, and the Faculty of Economics. Though non-governmental, it is chaired by Mr. Peshevski, Vice Prime Minister in charge of economic affairs. It aims at promoting a strong public/private policy dialogue. One of the 9 NECC's internal committees is on domestic and foreign investment and works on defining policy priorities to support diaspora investment.

23. **The mobilization of diaspora savings for private and public investment would maximize the long-term benefits of remittances** (Box 4). The challenge is to combine relatively small amounts of personal savings into a larger flow of capital, either through private investment vehicle, or through a public instrument. With respect to the latter, the securitization of diaspora funds can be an alternative instrument of sovereign borrowing to finance public investment. While many countries use foreign currency deposits to attract foreign currency inflows, diaspora bonds are typically long-dated and redeemable only upon maturity, making them less volatile and more suitable to financing investment. Israel and India have been long-time users of diaspora bonds, over time issuing upwards of US\$25 billion and US\$11 billion, respectively. African countries with large infrastructure needs and a large diaspora in advanced countries have also looked to tap that source of funding. The latter is a way to pool and channel remittances into activities that promote long-run economic development such as improving public infrastructure. Diaspora purchases of bonds issued by their country of origin are likely to be driven by a desire to contribute to the development of the home economy. Thus, there is often an element of charity (so called *patriotic discount*, see below). This allows the issuing country to leverage the charity element and combine relatively small amounts of personal savings into larger flows of capital, thereby securing a stable and cheap source

of external finance. Other benefits may also accrue—the issuance of diaspora bonds may have a favorable impact on the countries' sovereign rating, although that does not seem to have supported ratings in India and Israel (Ketkar and Ratha, 2007).

24. **Increasing the formality of transfers is important for leveraging remittances.** The formalization of remittance transfers makes the process more secure, easily monitored, and potentially makes access to finance more effective (for country experiences of financial institutions' remittance-based products and mechanisms, see, for instance, Comstock, Iannone, and Bhatia, 2009). Policies geared towards increased competition among financial institutions lead to more innovative and cheaper technology for money transfers. From a monetary policy perspective, channeling remittances through the financial system limits the risk of unexpected swings in cash exchanges which may complicate liquidity management.

25. **Macroeconomic policy measures can limit the counterproductive side effects of remittances inflows.** One challenge is to find ways to mitigate the appreciating effect of remittances flows on the equilibrium real exchange rate so as to compensate the economy's tradable goods sector for the loss of competitiveness that it may suffer from the exchange rate appreciation. While remittances should not be taxed directly, empirical studies suggest that shifting towards consumption-based taxation may provide the correct incentive: it can help mitigate a possible overheating impact on domestic demand, while reaping the benefits from a resulting increase in private saving and investment (Chami et al., 2008).

26. **Strong public infrastructure and institutions are pivotal for attracting private investment.** Any loosening of the government budget constraint due to remittances must be used to channel remittances into activities that promote long-run economic development, while preserving their poverty-reducing effects in the short run. One way by which governments can use public expenditure to enhance the development impact of remittances is to improve public infrastructure, both physical infrastructure and public institutions. This recommendation echoes the migration and development literature, which typically finds that poor physical infrastructure and poor governance are the main factor discouraging private investment. The more remittances a country receives, the higher the quality of the country's public infrastructure must be in order to induce a given amount of investment from individuals. The attraction of remittances thus raises the hurdle that governments must overcome in order to facilitate growth. Using improvements in public infrastructure and institutions to increase the return for private investment appears crucial in light of the difficulty in finding a robust positive effect of workers' remittances on economic growth (see, for instance, Catrinescu et al., 2006).

Box 4. Lessons Learned from Experience with Diaspora Bonds

- *Open the sale to all, but market strategically to the few.* The most successful diaspora bonds were open to all investors. For example, Israel does not restrict the investor base, but road shows and bond features (including the pricing) were mostly aimed at Israeli nationals.

Diaspora Bonds. Issuance since 2000 1/

Country	Date of Issuance	Amount and Currency	Maturity	Interest Rate	Special Features
India	2000	\$5.5 billion (USD/EUR/GBP)	5 years	Fixed, 8.5 %	For the Indian Diaspora in the US
Sri Lanka	2006	\$105 million		Libor + 1.485 %	
South Africa?	2006??				
Sri Lanka 2/	2013	\$50 million \$25 million	3 yrs 5 yrs	Variable, Libor + margin	
Ethiopia	2008	unknown	5, 7, 10 yrs	Fixed, 4%, 4.5%, and 5% depending on maturity	Limited to Ethiopians with access to FX Not specific to the Diaspora, regular issuance
Israel	2010	EUR 1.5 billion	10 yrs	Fixed, 4.625 %	
Ethiopia	2011	Amount unknown (but project cost was \$4.8 billion)	5-10 yrs	5yr: Libor + 1.25%, 6-7 yr: Libor +1.5 %, and 8-10yr: Libor +2%	Sovereign Instrument
Zimbabwe	2011	\$68 million	3 years	Fixed, 8.5%	Issued by CBZ, floated on the Cayman Stock Exchange.
Zimbabwe	forthcoming, 2014	\$200 million			Issued by CBZ, guaranteed by the African Export and Import Bank.
Nigeria	forthcoming, 2014	\$ 100-300 million			
Jamaica	Reportedly planned				

Sources: AfDB (2012), Ketkar and Ratha (2007), Central Bank of Sri Lanka, allAfrica.com,

1/ Israel has been issuing diaspora bonds since 1951; India issued two large diaspora bonds in 1991 (\$1.6 billion) and 1998 (\$5.8 billion).

2/ Sri Lanka has been issuing diaspora bonds (Sri Lankan Development Bonds) since 2001.

- *Emotional affiliation does not eliminate the need to make a financial return.* The pricing of diaspora bonds generally reflects some *patriotic discount* which accrues to the issuer. However, this should not be taken for granted. Ethiopia's 2008 Diaspora Bond did not meet expectations in terms of revenue generation, partly because of a difficult political situation, concerns about the capacity to pay, and the credit guarantee of the government and partly because the fixed bond yields of 5 percent were similar to yields on certificates of deposits in the resident country of migrants.
- *Transparency in the use of proceeds is critical.* Diaspora bonds are generally issued for the purposes of financing projects appealing to the diaspora, such as infrastructure projects, housing, and social amenities. It is important that the issuing country acknowledges being accountable to this group of investors.
- *Project-oriented diaspora bonds have good prospects for success.* The outcome is tangible to bondholders and progress is verifiable even from a distance. A shared vision among the population (however defined) and the potential investors is important.

A mapping of the country's nationals abroad is needed to identify a critical mass of solvent diaspora members. Surveys of the diaspora's characteristics in a few critical destination countries are important, as are reviews of the means for transferring remittances. The latter data-gathering exercise can inform the design of the Diaspora Bond—for example, the Commercial Bank of Ethiopia covered any remittance fees associated with the purchase of the 2011 Diaspora Bond.

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