



IMF Working Paper

First-Time International Bond Issuance—New Opportunities and Emerging Risks

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Monetary and Capital Markets Department

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Authorized for distribution by Luc Everaert

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Abstract

International bond issuance by debut issuers has risen in recent years. The uptick was a result of both demand and supply factors. The search for yield and demand for portfolio diversification have resulted in demand-driven easy financing conditions. At the same time, rising financing needs for many debut issuers, coupled with reduced access to concessional financing, relatively undeveloped domestic markets, and a favorable interest rate environment have made international bonds an attractive financing alternative for many countries. As bonds issued in the international markets are typically denominated in hard currencies, have large volumes and a bullet structure, exposure to exchange rate and refinancing risk has increased. Therefore, risk-mitigating policy actions are needed to prepare for redemption, support debt sustainability, and secure adequate debt management capacity.

This paper was modified on 09/22/2014 to reflect factual corrections on page 16 with regard to the names of banks involved in bond issuances.

The views expressed herein are those of the author and should not be attributed to the IMF, its Executive Board, or its management.

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I. INTRODUCTION

International bond issuance by debut issuers has risen in recent years. This movement is a result of both demand and supply factors. The search for yield and demand for portfolio diversification have resulted in demand-driven easy financing conditions. At the same time, rising financing needs for many debut issuers, coupled with reduced access to concessional financing, relatively undeveloped domestic markets, and a favorable interest rate environment have made international bonds an attractive financing alternative.

While international bond issuance carries potential benefits for frontier markets, this trend is associated with risks that have to be mitigated. As bonds issued in the international markets are typically denominated in hard currencies, have large volumes and a bullet structure, exposure to exchange rate and refinancing risk has increased. Even though the resulting risks have not yet risen to systemic levels¹, mitigating policy actions are needed to prepare for redemption, secure adequate debt management capacity and support debt sustainability.

The objectives of the paper are to explore the rationale behind this movement, to analyze the possible implications of such issuances on risks facing the sovereign, and to suggest policy actions to mitigate them. The paper will explore the extent to which debut issuers have accessed international markets and the reasons behind this movement. It will also analyze how these bonds fared in terms of pricing and evaluate possible implications of such issuances for the rising exchange, interest rate, and refinancing risks on the sovereign balance sheets. The paper then suggests some policy actions to mitigate the main risks.

II. COUNTRY COVERAGE

The country sample comprises 23 countries that issued in the international market for first time since 2004². The amount issued since then totals about 14 billion U.S. dollars.³ The paper includes countries that meet the following criteria: (1) placed a financial instrument in the international market for the first time since 2004; (2) the issued amount is at least 200 million U.S. dollars⁴; (3) the proceeds of the issuance were devoted to either covering the financing needs or as a debt management operation; and (4) the instrument was issued by the central government⁵. An expanded version of the table below appears as Table A1 in Annex I.

¹ The sum of issuance over the last decade (US\$14 billion) represents less than 3 percent of the market capitalization of emerging market bonds. The market capitalization of JP Morgan's EMBIG was US\$579 billion at end-April 2013.

² Or have re-entered the market after a long hiatus. The selected period was chosen in such a way as to include approximately the same horizon before and after the financial crisis (taking as 2008 as the reference year).

³ Until December 2013.

⁴ A minimum size is required from investors as liquidity is a relevant aspect of a financial instrument.

⁵ Excludes issuances made by public entities, such as September 2013 bond issued by a state agency in Mozambique or the August 2012 issuance of the government-guaranteed loan by Angola.

Table 1. Summary of First-Time Issuances**Summary table: Country coverage ^{1/ 2/}**

Country	Issue Year	Nominal GDP (in US\$bn) ^{3/}	GDP per capita (US\$, PPP 2005) ^{4/}	Size (\$ mn.) ^{5/}	Size (in % of GDP)	Tenor (years)
Albania	2010	12.7	8,059	407	3.2	5
Armenia	2013	10.1	5,727	700	7.0	7
Belarus	2010	63.3	13,427	600	0.9	5
Bolivia	2012	27.4	4,552	500	1.8	10
Ecuador	2005	80.9	8,393	650	0.8	10
Gabon	2007	18.4	13,864	1,000	5.4	10
Georgia	2008	15.9	5,086	500	3.1	5
Ghana	2007	38.9	1,764	750	1.9	10
Honduras	2013	18.4	3,614	500	2.7	10
Jordan	2010	31.2	5,298	750	2.4	5
Mongolia	2012	10.3	4,708	1,500	14.6	10
Montenegro	2010	4.3	10,711	254	5.9	5
Namibia	2011	12.3	6,453	500	4.1	10
Nigeria	2011	268.7	2,294	500	0.2	10
Pakistan	2004	231.9	2,491	500	0.2	5
Paraguay	2013	26.0	5,290	500	1.9	10
Rwanda	2013	7.2	1,167	400	5.5	10
Senegal	2009	13.9	1,675	200	1.4	5
Seychelles	2006	1.0	23,277	200	19.4	5
Sri Lanka	2007	59.4	5,384	500	0.8	5
Tanzania	2013	28.2	1,380	600	2.1	5
Vietnam	2005	138.1	3,133	750	0.5	10
Zambia	2012	20.5	1,475	750	3.7	10

^{1/} All countries in the sample placed international bonds through public offerings, with the exception of Tanzania, which issued an instrument via private placement. Tanzania is included in the sample since its private placement represents an external market-based source of financing for the sovereign.

^{2/} Most of the issuances were denominated in US dollars with the exception of Albania and Montenegro that issued in Euros.

^{3/} WEO (IMF). Data for 2012.

^{4/} WDI (WB). Data for 2012.

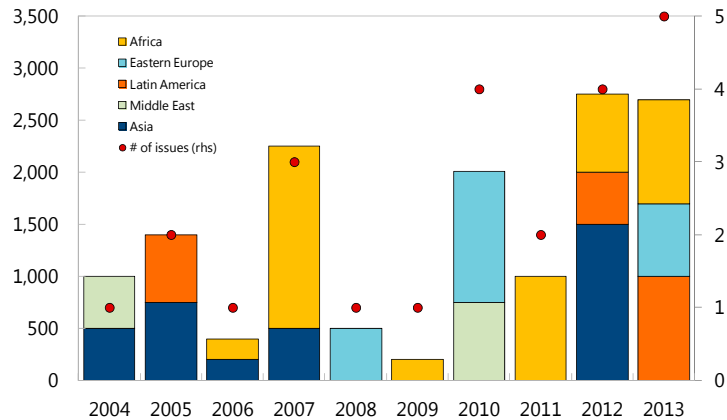
^{5/} Mongolia issued two bonds: a 10Y bond for \$1,000mn and a 5Y bond for \$500mn.

III. THE ISSUANCES

A. Stylized Facts

Over the last decade 23 EMs and LICs have issued bonds internationally for the first time or have re-entered the market after a long hiatus.⁶ The issuers are diverse both geographically, spanning countries from Africa, Asia, Europe, Latin America and the Middle East, and in terms of income levels. Africa accounted for the biggest proportion of issuance (36 percent), both in number of issuances (9) and the gross amount (US\$4.9 billion), which is not surprising given the size of the continent, and its level of financial development.

Timeline of International Bond Issuance
(in millions of US dollars)



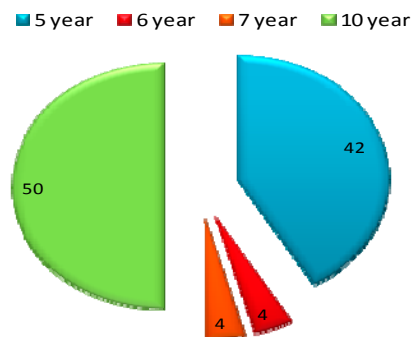
Source: Dealogic and IMF staff calculations.

Debut international bond issuances have been triggered by both demand and supply factors

and moved with the tide of investors' risk appetite over the last eight years. Debut sovereign issuances slumped dramatically during the height of the global financial crisis, when investors retreated from risky asset classes. In 2008 and 2009 only two countries - Georgia and Senegal - tapped the international capital market. As risk appetite improved, and investors resumed their "search-for-yield" in a low interest rate environment, sovereigns' redirected again their attention to this market and first-time international bond issuance has picked up – fourteen different sovereigns have tapped the international capital markets since 2010, issuing a total of US\$8.5 billion (or US\$564 million on average per issuance).

The majority of the bonds have been U.S. dollar-denominated, fixed-coupon bullet securities, with maturity ranging from 5 to 10 years and sub-investment grade rating. While governments have more control over the structure of their domestic debt, the characteristics of the instruments issued in the external market are largely defined by the practices established by the international financial centers. Externally issued debt tends to be medium to long-term, fixed rate, and denominated in hard currencies (though only half of the country sample issued at 10 years).

Maturity
(in years and percent of total issuers)

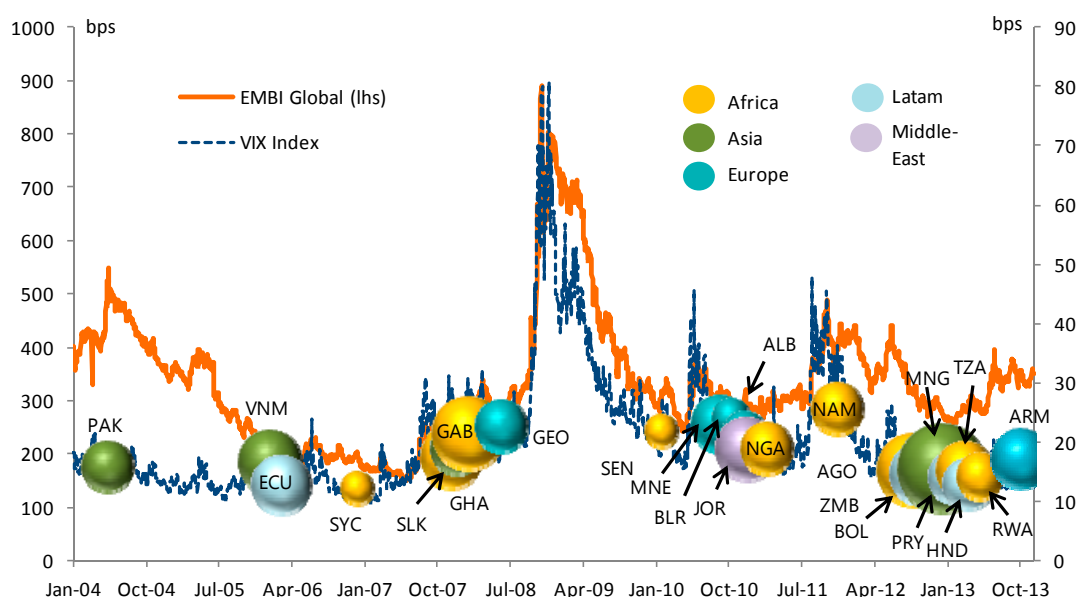


⁶ Ecuador can be classified as "reentering the market after a long hiatus", as it had only previously issued in 1997. Guatemala is excluded as it had issued on an ongoing basis since 1997, and is not considered a newcomer by investors. Sri Lanka is included as its pre-2004 issuance was for a very small amount.

All of new issuances during this period were in U.S. dollar (with the exception of Euro-denominated bonds issued by Montenegro and Albania), as this market is the most liquid. Average issue size shows some regional heterogeneity, with Asian countries issuing in larger amounts than European countries. Issued bonds have ranged in size from US\$200 million to US\$1,000 million, with the larger bonds having been issued by either large economies or resource-rich countries—Mongolia, Zambia and Gabon.

There is some evidence of bunching of issuance in some regions. For example, Belarus, Montenegro and Albania entered the market within a span of three months in 2010. Similarly, Bolivia, Paraguay and Honduras had their first issuances within a span of four months. While this almost simultaneous entry to the international markets could be partly explained by the macroeconomic environment (favorable country prospects and supportive external environment), it is also possible that once one country in the region starts looking into entering the market, regional peers want to follow suit (Figure 1).

Figure 1. Timeline of First-Time Issuances by Region, 2004-13



Source: Bloomberg and Dealogic.

B. Rationale for Issuance—Demand and Supply Factors

The recent spike in issuance can be explained by demand and supply factors. The search for yield, ample international financial liquidity, and demand for portfolio diversification has resulted in demand-driven easy financing conditions. This supportive external environment was coupled with relatively favorable country prospects. Many developing countries over the last decade have shown a good record of economic performance, prudent fiscal policies, which, combined with continued economic stress in many major advanced economies, made them attractive destinations for investors' capital.

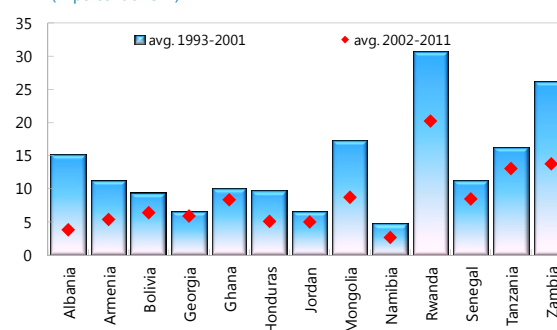
One of the main reasons debut issuers tapped international markets was to raise resources, which are not available in the local markets, for infrastructure projects.

Given the absence of funding in the local markets at the volume necessary to cover large infrastructure projects, many countries had to turn to international markets. This was the case for most of African issuers, such as Zambia and Senegal, but also for some Latin American ones, like Paraguay and Bolivia.

Significant development needs, coupled with a decline in concessional financing, made international bonds an attractive financing alternative. Many first-time issuers either have graduated or are about to graduate from low to middle income status, and, as a result, are seeing declines in concessional multilateral funds available to them. Hence, rising financing needs for many debut issuers, coupled with reduced access to concessional financing, relatively undeveloped domestic markets, and a favorable interest rate environment have made international bonds an attractive financing alternative.

Issuing global bonds enables these issuers to diversify their investor base and exploit fewer credit constraints in a more liquid global bond market. Moreover, by issuing bonds in whichever currencies have the lowest cost of capital, debut issuers are better able to reduce the borrowing costs assuming no significant currency depreciation over the life of the bond.

Net Official Development Assistance Received
(In percent of GNI)



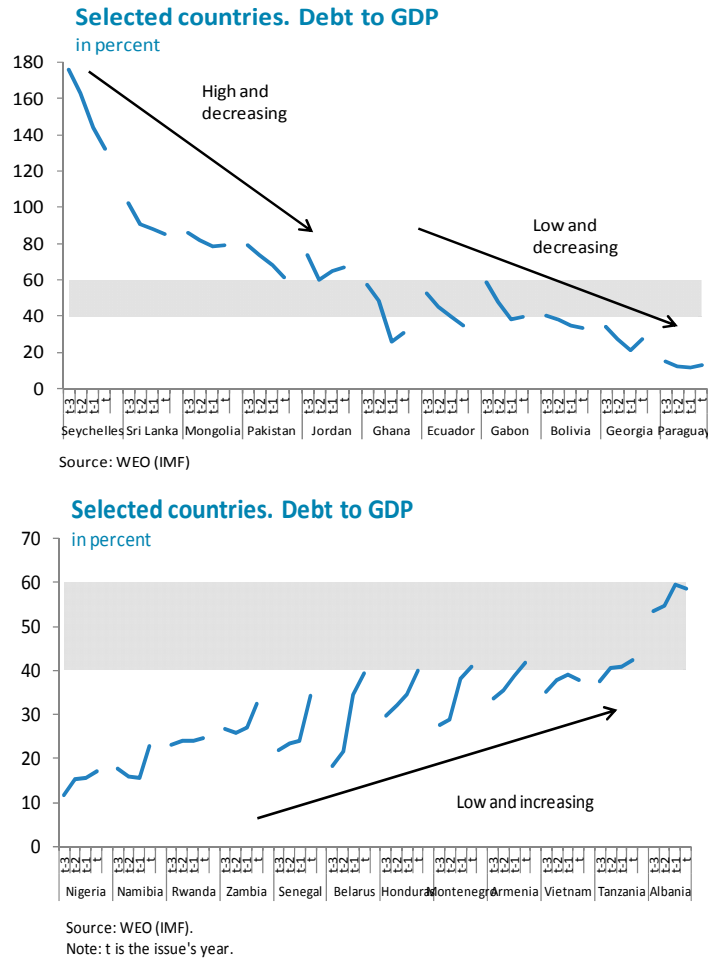
Sources: World Development Indicators.

Some debut issuers issued international bonds to help fund the budget, repay arrears or create a benchmark for the corporate sector. Some countries were planning to use at least a part of the proceeds for budgetary purposes, or, as in the case of Honduras, to cover arrears. International bonds have also been issued as part of debt restructuring process, as for instance Seychelles (2010), and Gabon (2007). Others, like Nigeria, wanted to create reference bonds (benchmarks) for the corporate sector. Bolivia, for instance, explicitly acknowledged in its interactions with market participants that it planned to use the new international bond to attract to attention of international investors to the country.

Debt relief under the HIPC and MDRI initiatives allowed some frontier markets to reduce their debt to GDP ratios, giving them more flexibility to borrow at nonconcessional terms. Almost half of first-time issuers have debt to GDP ratios below 60 percent, low debt services as well as relatively smooth debt redemption profiles, which provides some room to borrow at non-concessional terms⁷ (Figure 2).

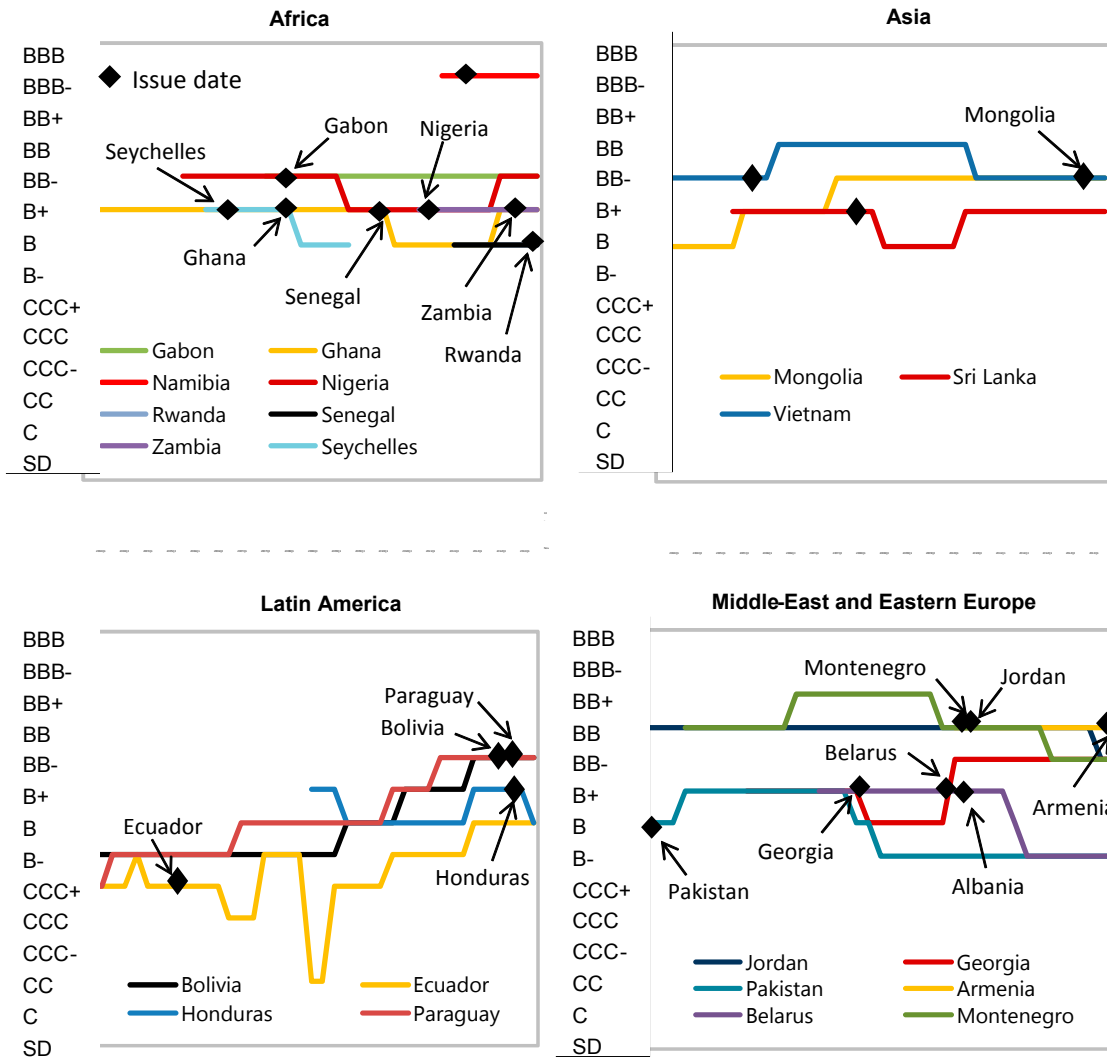
⁷ There are some exceptions. Seychelles reached a debt to GDP of 132 percent in the year of the bond issuance (though declining from almost 176 percent three years before, no shown in the text graph). Sri Lanka, Mongolia, Pakistan and Jordan had debt ratios between 60-100 percent of GDP.

Figure 2. Debt Evolution Before the Global Bond Issuance



An improvement in credit rating in some cases preceded first issuances, especially in Latin America. Since credit ratings represent rating agencies' opinions about countries' current economic health and future prospects, an upgrade sends a positive signal to investors. Figure 3 shows that first time issuance in some cases happened after a credit rating upgrade (particularly in Latin America), with almost half of the countries reaching a BB- or higher at the time of issuance (upper level of HY ratings). This is particularly the case in Latin American and Asian countries but less the norm in African and Eastern Europe and Middle-East. This fact seems to suggest that countries attempt to secure a minimum credit rating in order to provide investors with a reasonable level of comfort while building the reputation for future bond issuances.

Figure 3. Sovereign Credit Ratings of First-Time Issuers and Issue Date, 2004-December 2013



Sources: S&P; and Moody's Ratings.

Note: Ratings at the end of each quarter. The rating was computed based on the highest of the two agencies.

IV. MACROECONOMIC CONDITIONS AT THE TIME OF ISSUANCE

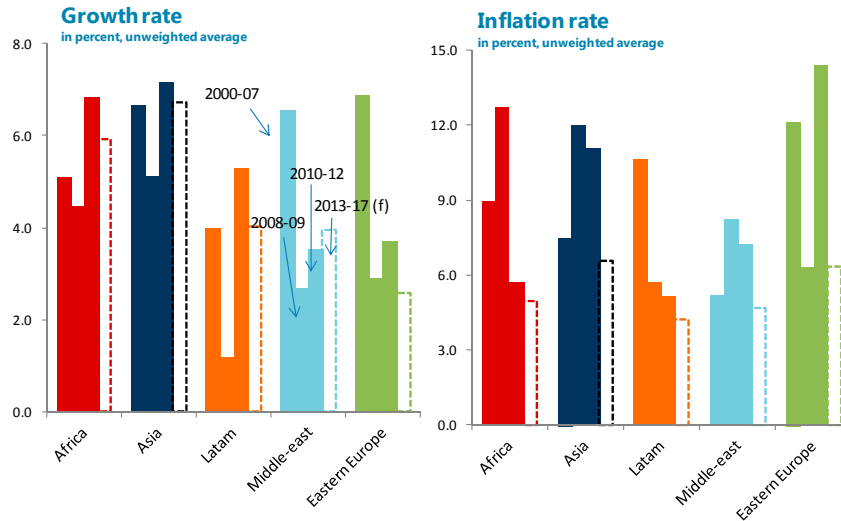
While first-time issuers are not a homogeneous group, some common themes are emerging. At the time of issuance growth and inflation dynamics were positive in all the regions, while there was more heterogeneity in fiscal and current account variables.

In the run-up to the issuance, countries across the regions⁸ have shown an improvement in growth and price volatility in the period prior to the bond issuance. Growth and

⁸ See Table 1 for country sample and grouping.

inflation performances enhanced investors' perception of debut issuances in risk-reward terms. Inflation (and inflation volatility) has steadily declined since early 2000, reaching values in line with more advanced EMs. Moreover, higher growth rates reduced the likelihood of debt sustainability problems (Figure 4).⁹

Figure 4. Growth and Inflation Rates by Region



Some parallels can be drawn between a spike in international bond issuance by frontier markets in the last decade and major build-up of debt in the emerging markets in the 1990s. As in 1990s, the recent spike in international bond issuance has in many instances been preceded by debt relief operations. Debt relief operations in the 1990s (the Brady Plan) had a similar effect and led to a rapid accumulation of external debt following the temporary relief. Debut issuers, just as EMs of the 1980s and 1990s have issued international bonds in foreign currencies (mostly U.S. dollars). For a more detailed comparison between frontier markets of today and emerging markets of the 1990s (Box 1).

⁹ More than 50 percent of countries projected to grow at least by 5 percent in the next 5-year period.

Box 1. Original Sin: A Case of Déjà Vu?

As in 1990s, the recent spike in international bond issuance has in many instances been preceded by debt relief operations. Debt relief operations that had improved sustainability indicators, reduced the debt overhang, and improved growth prospects have enabled many countries to tap international markets for the first time this decade. Likewise debt relief operations in the 1990s (the Brady Plan) had a similar effect and led to a rapid accumulation of external debt following the temporary relief.

Debut issuers, just as EMs of the 1980s and 1990s have issued international bonds in foreign currencies (mostly U.S. dollars). This can be partly explained by issuers having revenues in foreign currency and hence having incentives to match these revenues with foreign-currency cash outflows in order to balance the foreign-exchange exposure. Second, there might be limited appetite for government securities in the local currency market, and issuers may wish to tap broader and more liquid markets in the major international currencies. The domestic currency markets are often too thin and shallow, or virtually absent, in particular for long-term maturities. Third, they may have some opportunistic reasons and attempt to lower the cost of servicing their debt by exploiting lower interest rates in a foreign currency.

Borrowing in foreign currencies can also be a result of the “original sin” of the first-time issuers.¹⁰ These sovereigns might be willing but unable to borrow in local currency in the international markets due to investors’ lack of trust in the sovereign based on their past transgressions—their “original sin.” This problem (described in the seminal work by Eichengreen & Hausmann (1999)) leads to external debt accumulation and currency mismatches on the balance sheets down the road. If the country’s external debt is denominated in foreign currency the real exchange rate depreciation will make it more difficult to service this debt.

Another explanation for the difficulty in borrowing in one’s own currency is limited benefit to portfolio diversification faced by investors. The established practice in the international financial centers is to operate in a limited number of major currencies. As a result developing countries, which are latecomers to the international financial game, face an uphill battle when attempting to add their currencies to the international portfolio.

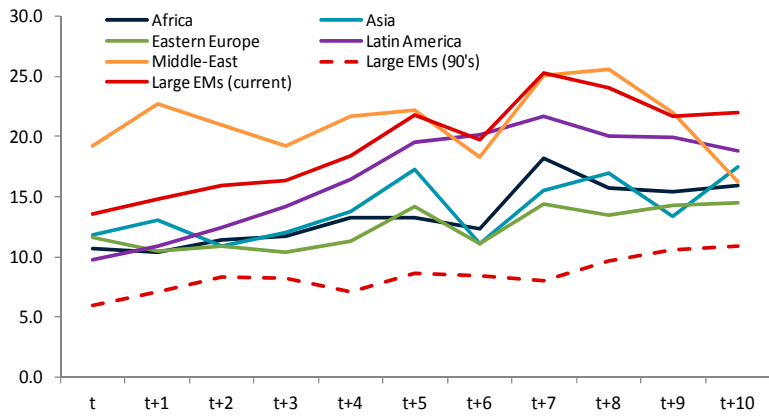
Similarities/Differences	First Issuers	EMs 1980s and 1990s
Debt restructurings prior to global bond issuance	Debt relief operations that improved debt sustainability indicators market access / Improved macro conditions.	Brady Plan—Mexico, Argentina, Brazil debt restructurings followed by a rapid accumulation of debt.
Borrowing in foreign currencies	“Original sin” problem and limits to portfolio diversification. Lower interest rate on FX bonds. Lack of (?) Revenues in foreign currency. Shallow domestic markets.	“Original sin” problem and limits to portfolio diversification. Lower interest rate on FX bonds. Lack of (?) Revenues in foreign currency. Shallow domestic markets.
Similar strategic considerations	Governments wanted to diversify the investor base and exploit more liquid foreign bond markets. Lower external borrowing costs.	Governments wanted to diversify the investor base and exploit more liquid foreign bond markets. Lower external borrowing costs.
Interest rate risk	Perspective of QE unwinding.	Paul Volcker’s aggressive monetary policy.
Reserves	In most cases debut issuers have ample reserves.	Reserve accumulation was not sufficient to deal with external shocks.

Unlike first-time issuers of the 1980-90s, today’s debut issuers have ample and rising reserves. First-time issuers of today have been accumulating international reserves since early 2000, which should shelter them from “sudden stop-type” events that characterized the 1990’s.

Unlike first-time issuers of the 1980-90s, today’s debut issuers have ample and rising reserves. On the external front, first-time issuers have been accumulating international reserves since early 2000. Although some of them have had current account deficits, these countries have been able to finance their external gaps through FDI and official financing. These “buffer stocks” have naturally hedged them from “sudden stop-type” events that characterized the 90s. Moreover, for some regions reached levels of reserves in foreign currency that compared well with more advanced and larger EM countries.

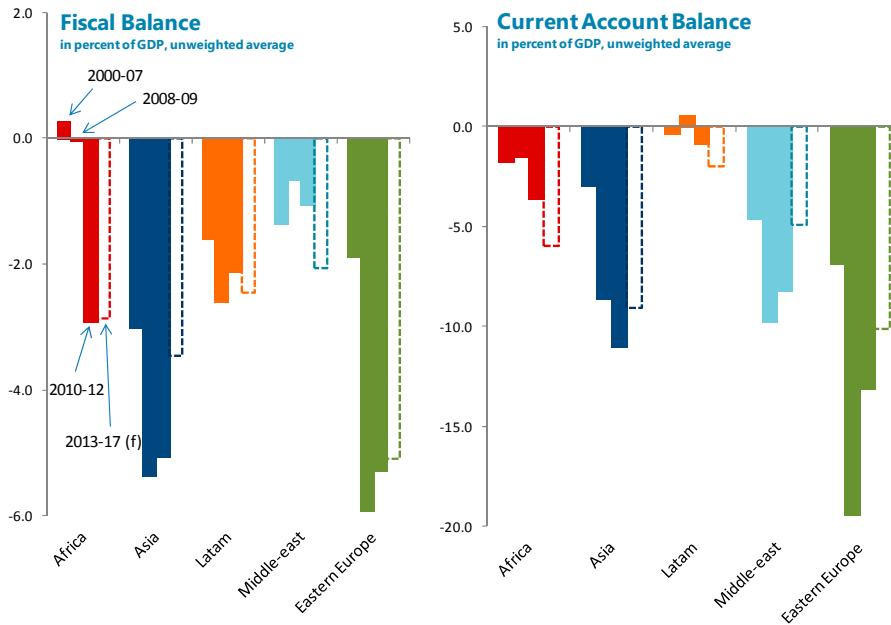
Selected countries. International Reserves

average, in percent of GDP



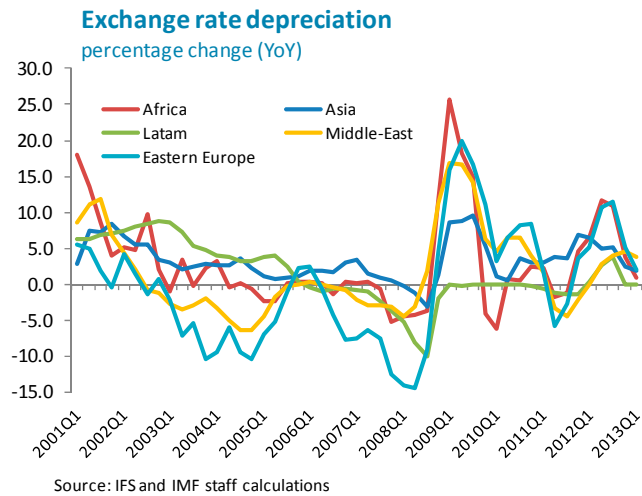
Source: IFS (IMF) and IMF staff calculations.
 Note: Large EMs comprise of Argentina, Brazil, Mexico, Russia and Thailand and the 90's refers to the period 1990-2000. For others regions the series refers to the 2002-2012 period.

Figure 5. Fiscal Balance and Current Account Balance



Source: WEO and IMF staff calculations.

Better fundamentals have also been reflected in reduced exchange rate volatility, with the exception of a temporary spike at the time of the financial crisis. Nevertheless, recent fears triggered by QE tapering announcements in the US at the end of May made the exchange rate volatility in some regions to bounce back. Nevertheless, in those countries with market-determined exchange rates, these fluctuations may have helped isolate the economies from the external shocks while boosting competitiveness, if monetary conditions were fine-tuned to avoid deterioration in inflation expectations.



Despite the many similarities, recent developments highlight the heterogeneity of first-time issuers. Initial conditions as well as expected performances vary greatly across and within regions. Fiscal balances, current accounts and debt levels are, in part of the sample, worsening though growth prospects are still positive. Moreover, exchange rate volatility has recently risen as financial and real conditions in advanced economies are still on a bumpy road, which could bring about difficulties in managing a sovereign debt portfolio with increasing exposure to external factors.

V. EVALUATION OF THE DEBUT ISSUANCES

A. Pricing

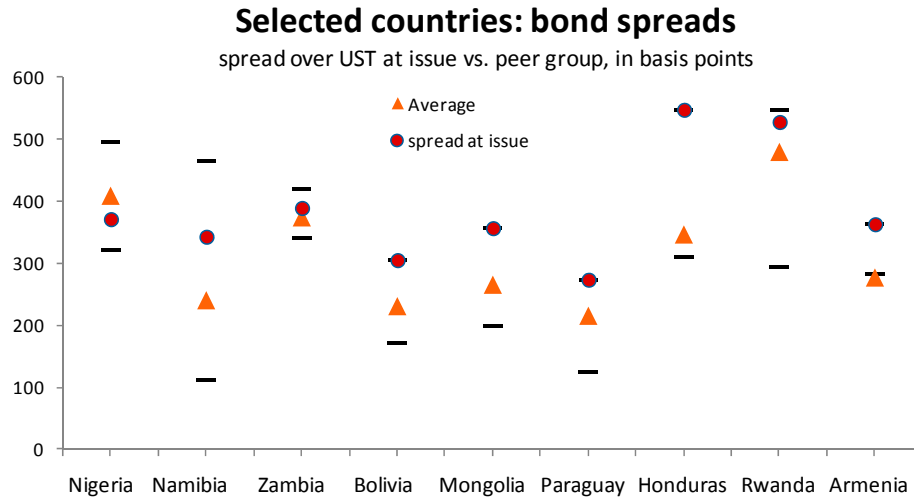
Taking advantage of the international low interest rate environment, first-time issuers were able to tap the markets at historically very low rates. The search for yield and demand for portfolio diversification have resulted in demand-driven easy financing conditions. As shown in Figure 6, this had allowed most debut issuers to access the market at only slightly higher yield than their peers' secondary market references (defined by the same credit ratings on the issue date).

It is natural to expect that first time issuers have to pay a “New-issue” premium as compared to the existing bonds of peer countries. Usually, international bond issuances by emerging markets carry a premium over the benchmark rates to reflect the new supply.¹¹ When first accessing the international markets, issuers also have to pay a slightly higher

¹¹ This is true even for the reopening of existing bonds. The size of the new issue premium is a function of many factors, but most importantly, market conditions at the time of issuance.

yield, with respect to similar existing financial products, to entice investors to buy their bonds. For our sample of first-time issuers, the new issue premia paid for these debut issuers have averaged about 50 basis points over the secondary market yield of similarly rated countries¹².

Figure 6. Bond Pricing at Issuance



Source: Bloomberg; and IMF staff calculations.

A yield much higher than expected based on “new-issue premium” may be interpreted as evidence of mispricing, although the results should be interpreted with caution as dispersion of spreads within a peer group is often large.¹³ Based on this indicator, bond issuances of Honduras and Mongolia appear to be mispriced—i.e., their yields were a lot higher for a similar rated country, even after controlling for possible “new-issue premium.” Namibia is another example of a spread being much larger than the average spread for the peer group. However, caution is needed before reaching any strong conclusions, as the dispersion of the spreads for this peer group is large.

In some instances poor performance of the bond at issuance could be the result of debt management choices. The case of Tanzania illustrates the importance of properly managing the debut issuance, and is further explained in Box 2.

There are limitations in trying to determine mispricing by looking at credit ratings alone. As Figure 6 also suggests, credit ratings cannot explain all of the observed variation in pricing, as deviation between the minimum and maximum yields is often large for similarly

¹² Notice that this “novelty” premium is different from a regular “new issue” premium paid by a country that taps the market frequently. However, both types of premia are time-varying depending on market conditions. The estimation of the 50 bps was derived from computing the average premium that these countries paid at issue date over their peer group (notice that the peer group varies by country as credit rating and issue date differ across countries).

¹³ In many cases, mispricing can also be observed by looking at the performance of the bond in the days following issuance. A severe correction of the yield relative to its peers can be interpreted as possible evidence of mispricing. Figure 3 in the appendix provides some illustrations of this.

rated countries. Ratings do not adequately capture all the changes in fundamentals, institutional characteristics and political risks.

Box 2. Study Case of Bond Issuances—Tanzania

On February 27, 2013, the Government of Tanzania (GoT) issued a U.S. dollar-denominated floating rate note (FRN) in the amount of US\$ 600 million. The note matures in March 2020 and is indexed to a 6-month Libor plus 600 basis points. At the time of the issuance, 6 month LIBOR rate was at 0.46 percent. The note has an amortizing structure, with the first repayment commencing on the third anniversary of the issuance date, making the average life of the note 5 years. It was issued as a private placement under the English law and was unrated.

The deal compares poorly relative to the trading levels of its peers, taking into account the longer remaining maturities of the comparators and a more benign current international environment.¹⁴ A preliminary calculation of the swap spread indicates a 5-year US Treasury note plus 632 basis points.¹⁵ Table 1 presents key information on comparators in sub-Saharan Africa and Figure 1 presents the historical yields on comparator issuers.

Table 1. Key Parameters for Comparator Issuers in Sub-Saharan Africa

Concept	Tanzania	Ghana	Zambia	Nigeria	Senegal	Senegal (old)
Coupon / Maturity	6.46% 2020	8.5% 2017	5.375% 2022	6.75% 2021	8.75% 2021	8.75% 2014
Issue date	Feb-13	Oct-07	Sep-12	Jan-11	May-11	Dec-09
Issue size (million US\$)	600	750	750	500	500	200
Yield at issue	6.45	8.5	5.625	7.126	9.339	9.473
Spread at issue (in bps)	600	394	384	372	596	691
Rating (M/SP/Fitch)	NR	-/B/B+	-/B+/B+	B+/BB-	B1/B+/-	B+
Remaining average life (yrs)	5.0	4	10	8	8	n.a
Current yield	6.46	4.841	5.438	4.426	6.688	n.a
Reference US Treasury	0.78	0.78	1.88	1.565	1.565	n.a
Spread (in bps)	632	406	356	286	512	n.a
Lead Manager	Standard Bank	Citi/UBS	Deutsche/ Barclays	Deutsche/ Citi	Standard Chartered Bank and Standard Bank	Citi

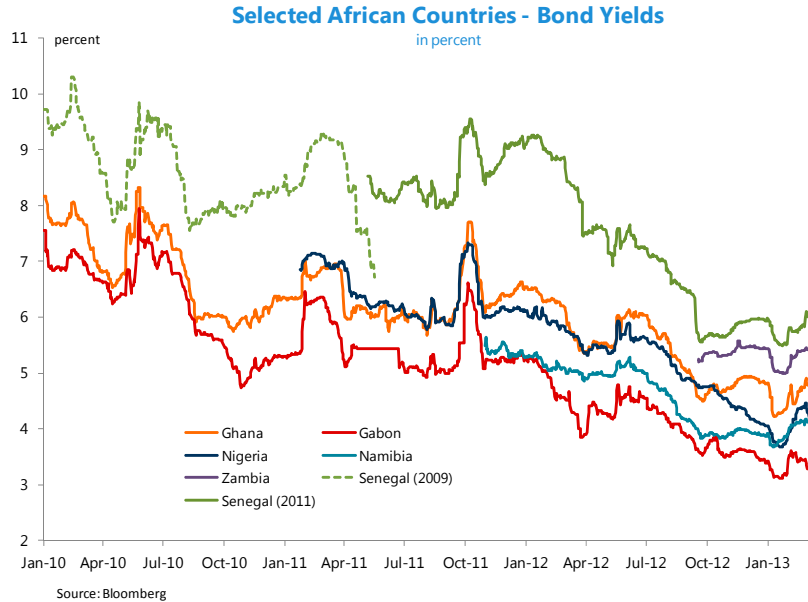
*The final maturity of the bond is 7 years but due to the amortizing structure, the average life is 5 years.

A floating interest rate structure of the bond is especially risky at a time when short-term interest rates are at a historical low, and rates are likely to rise. As such, the structure has a high interest rate risk. On the other hand, the authorities may have opted for the FRN because it was not possible to either obtain longer maturities given the lack of credit rating or even a fixed-rate instrument for 5-years.¹⁶ This indicates that the market did expect significant credit differentiation among peers, taking into account fundamentals and the lack of credit rating, charging a higher compensation for credit risk. *However, main features of the deal such as being a private placement rather than a Euro or Global bond (which reduce competition among investors), the FRN structure (rather than a plain-vanilla structure), and the amortization structure (rather than a bullet bond) all added to the poor pricing of the deal.*

¹⁴ The 10Y US Treasury rate was trading at 4.5 and 3.4 percent in 2007 and 2011 respectively when Ghana and Nigeria issued their bonds, whereas it was 1.9 percent at the time of the deal.

¹⁵ The spread for Tanzania is the fixed rate equivalent of the floating rate note. That is, had Tanzania issued a fixed rate note, the equivalent pricing would have been US Treasury 5 year note (0.78 percent on issue date), plus a 632 basis point spread. This is equivalent to 6 month Libor (0.46 percent at issue date) plus the 600 basis point spread.

¹⁶ Capital Economics had an indicative yield for a 10 year Eurobond for Tanzania at 8 percent, which implied a spread over US Treasury of about 6.25 percent, compared to 5.6 percent yield for Zambia, or a spread of 3.85 percent.



If the authorities were to consider swapping into fixed rate debt, there will be an additional transaction fee, and they may be required to post collateral and mark-to-market. There is no system or capacity to handle this in Tanzania. To avoid the need to mark-to-market with high frequency, investment banks have proposed (in other countries) to post upfront cash deposit in a segregated account with the investment bank (with little or no interest paid), but this implies negative carry and is expensive. Further, the Government Loans, Guarantees and Grants Act (as amended in 2003) does not provide an explicit authority for the Minister to enter into swap transactions.

Contributors: Gabriel Presciuttini and Eriko Togo.

B. Is the Secondary Market Pricing of the Debut-Bonds Aligned with Fundamentals?

Prior empirical literature on determinants of emerging market bond spreads has established several explanatory variables. The seminal paper of Edwards (1985) used a panel regression that linked spreads with country-specific fundamentals such as external debt, debt service and investment ratio. Eichengreen and Mody (1998) showed that in addition to country fundamentals, the external interest rate environment is also an important determinant of spreads. Hartelius et al. (2008) further expanded the list of global factors and county-specific fundamentals that have significant effect on spreads. Specifically, they find a higher global risk aversion is associated with higher country risk premium.

To better understand whether the pricing of bonds issued by debut issuers is in line with fundamentals, the spreads are regressed on explanatory variables suggested by prior empirical research. For this analysis, an econometric exercise on a panel of 23 frontier markets and 21 emerging market comparators over a period 2000-2013 is carried out. Secondary market bond spreads are regressed on macroeconomic variables, fiscal and debt variables, measures of institutional quality and measures of global market volatility and liquidity. The purpose of this exercise is to evaluate whether, even after controlling for macro and fiscal fundamentals, institutional and political risk, and global liquidity and volatility, the frontier markets are traded at a premium over other EM markets. The variables used in the regression and their sources are summarized in Table 2.

Table 2. Summary of Variables and Data Sources

Variables	Source
Bond yields	Dealogic and Bloomberg
Growth rate (IP growth)	Haver and WEO (IMF)
Quality of Institutions	ICRG database
Inflation	INS (IMF)
M2 to GDP	IIFS and WEO
Current account to GDP	IIFS and WEO
Debt to GDP ratio	Haver and WEO
Federal funds rate	Bloomberg
VIX	Bloomberg

Spreads are affected by both domestic and global factors. In line with previous literature on spread determinants¹⁷, we formulate and test the priors that spreads first issuers pay are determined by the country's fundamentals ("long-run effects on spreads"), global financial variables ("short-term effects on spreads") and a country-dependent "first-time issuers' premium." Country's macroeconomic fundamentals, fiscal and external sustainability, financial depth, and good institutions are expected to affect the yields on government bonds. Low inflation, associated with a prudent monetary policy, and robust economic growth are expected to promote investor confidence and decrease interest rates. Better fiscal health (higher fiscal balances and low levels of debt to GDP) is expected to decrease spreads. Deeper and more liquid financial markets (as proxied by M2 to GDP) are expected to reduce spreads. At the same time, global volatility and liquidity conditions are also expected to affect spreads. Spreads are expected to rise in periods of volatility (captured by VIX index), or when there is a liquidity shortages (captured by Federal funds rate) and to rise more significantly among first issuers as compared to other emerging markets.

Based upon prior research¹⁸ on spread determinants, the following priors can be formulated:

- Higher economic growth (proxied by growth in industrial production) creates more favorable conditions for safer and less costly borrowing practices from the government's point of view and reduces the cost of debt in the secondary market;
- Better quality of institutions (proxied by ICRG index) should decrease country risk premia and lead to a reduction in spreads;

¹⁷ For a comprehensive study on determinants of emerging market sovereign bond spreads that distinguishes between fundamentals and financial stress variables, see Bellas, Papaioannou and Petrova (2010).

¹⁸ See among others Beber, Brandt and Kavajecz (2009), Hallerberg and Wolff (2008).

- Higher debt-to-GDP ratio implies an increase in sovereign risk, making government bonds less attractive for investors and causing spreads to rise;
- Better fiscal situation (proxied by fiscal balance to GDP ratio) should decrease to probability of default, hence decreasing spreads;
- Higher current account deficits might raise concerns over financing and lead to an increase in spreads;
- Higher inflation (expectations) should be associated with an increase in spreads, since it is associated with increased macroeconomic uncertainty;
- Drop in global liquidity (proxied by an increase in the Federal funds rate) should be associated with an increase in spreads; and
- Finally, greater investor uncertainty (as captured by VIX index) will increase spreads, especially for debut issuers.

The priors are tested using a panel of first-time issuers and emerging market comparators over 2000-2013 period (Table 3). The analysis is done on a quarterly frequency, since many of the macro variables are not available on a higher frequency. The country sample is in the Annex Table A2. It includes all first-time issuers as defined above and EM comparator countries from all the regions. The priors are tested using random effect estimation with heteroskedasticity-robust cluster-adjusted standard errors. While fixed effect estimation is typically used in the spreads literature to control for unobserved country heterogeneity, this estimation technique is not optimal in the presence of a time-invariant variable (first issuers dummy). When time-invariant variables are present in the regression, researchers have used either random effect estimation, pooled OLS, or the Hausman-Taylor estimator. Table 4 reports the results of alternative estimation techniques (OLS and the Hausman-Taylor), which could be used as a robustness check. Alternative estimation methods give broadly similar results and do not change the main conclusions.

The results broadly confirm to these priors. Improvement in the quality of institutions reduces spreads (as expected), and the effect is statistically significant at the 5 percent level. Growth rate is negative and statistically significant at the 10 percent level, suggesting that spreads narrow as growth improves. Inflation is not statistically significant. An increase in financial depth (captured by an increase in M2 to GDP ratio) is associated with a decline in spreads but the result is not always statistically significant. Debt to GDP ratio is statistically significant at the 1 percent level, suggesting that countries with a higher level of indebtedness see an increase in secondary market spreads. Market volatility (captured by VIX) is positive and statistically significant at the 1 percent level in all specifications, suggesting that spreads rise during a period of increased uncertainty. A drop in global liquidity (captured by higher Federal funds rate) is associated with an increase in spreads and the result is highly statistically significant at 1 percent confidence level.

Table 3. Determinants of Spreads Over EMBI
(Random effects panel regression, robust standard errors)

	(1)	(2)	(3)	(4)	(5)	(6)
Growth	-0.004 (0.042)	-0.080** (0.042)	-0.085* (0.028)	-0.055 (0.038)	-0.059 (0.039)	-0.063* (0.039)
Quality of institutions	-0.745* (0.461)	-0.268* (0.143)	-0.314** (0.147)	-0.309** (0.137)	-0.288** (0.141)	-0.308** (0.140)
Inflation	0.049 (0.094)	0.013 (0.098)	0.108 (0.115)	0.038 (0.115)	0.041 (0.117)	0.041 (0.118)
M2 to GDP	-0.068*** (0.027)	-0.062** (0.025)	-0.043 (0.031)	-0.036 (0.036)	-0.034 (0.029)	-0.032 (0.028)
Current account to GDP		-0.083 (0.097)	-0.107 (0.089)	-0.099 (0.085)	-0.106 (0.085)	-0.108 (0.081)
Debt to GDP		0.278** (0.121)	0.276** (0.118)	0.293** (0.116)	0.300*** (0.116)	0.301*** (0.114)
Federal funds rate			0.285** (0.137)	0.488*** (0.121)	0.494*** (0.120)	0.513*** (0.118)
Fiscal balance to GDP			0.041 (0.054)	0.036 (0.052)	0.033 (0.052)	0.034 (0.051)
Global volatility (VIX)				0.137*** (0.032)	0.139*** (0.033)	0.114*** (0.031)
Debut issuer dummy					5.657* (3.628)	-0.114 (1.805)
Interaction (Debut issuer dummy*VIX)						0.284** (0.129)
Constant		18.505** (6.594)	19.953*** (7.359)	15.646** (6.368)	13.029* (7.127)	14.861** (6.972)
Observations		874	815	815	813	813
Wald Chi ²		23.510	76.33	71.04	59.89	64.5
Prob > Chi ²		0.000	0.000	0.000	0.000	0.000

Notes:

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Notes: Estimations based on quarterly data during 2000-2013 period; random effect panel regression with heteroskedasticity-robust cluster-adjusted standard errors.

Sources: Bloomberg, Haver Analytics, World Economic Outlook, World Development Indicators, ICRG database, and IMF staff calculations.

Table 4. Robustness Check—Alternative Estimation Techniques

	RE	OLS	HT
Growth	-0.059 (0.039)	-0.038 (0.033)	-0.066*** (0.019)
Quality of institutions	-0.288** (0.141)	-0.285*** (0.053)	-0.287*** (0.062)
Inflation	0.041 (0.117)	0.136* (0.081)	0.013 (0.044)
M2 to GDP	-0.034 (0.029)	-0.023*** (0.009)	-0.110*** (0.027)
Current account to GDP	-0.106 (0.085)	0.209*** (0.050)	-0.179*** (0.045)
Debt to GDP	0.300*** (0.116)	0.152*** (0.028)	0.316*** (0.016)
Federal funds rate	0.494*** (0.120)	0.213** (0.090)	0.417*** (0.097)
Fiscal balance to GDP	0.033 (0.052)	0.236*** (0.062)	0.024 (0.039)
Global volatility (VIX)	0.139*** (0.033)	0.119*** (0.024)	0.135*** (0.018)
Debut issuer dummy	5.657* (3.628)	2.165** (1.062)	5.087 (7.643)
Constant	13.029* (7.127)	18.992*** (4.104)	16.578*** (5.689)
Observations	813	813	813
Adjusted R-squared		0.422	
Prob>F		0.000	
Wald Chi ²	59.89		981.14
Prob>Chi ²	0.000		0.000

Notes:

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Notes: Estimations based on quarterly data during 2000-2013 period; Random effect regression has cluster-adjusted standard errors. In Hausman-Taylor regression, Federal funds rate and VIX are specified as exogenous and first-issuers dummy is constant.

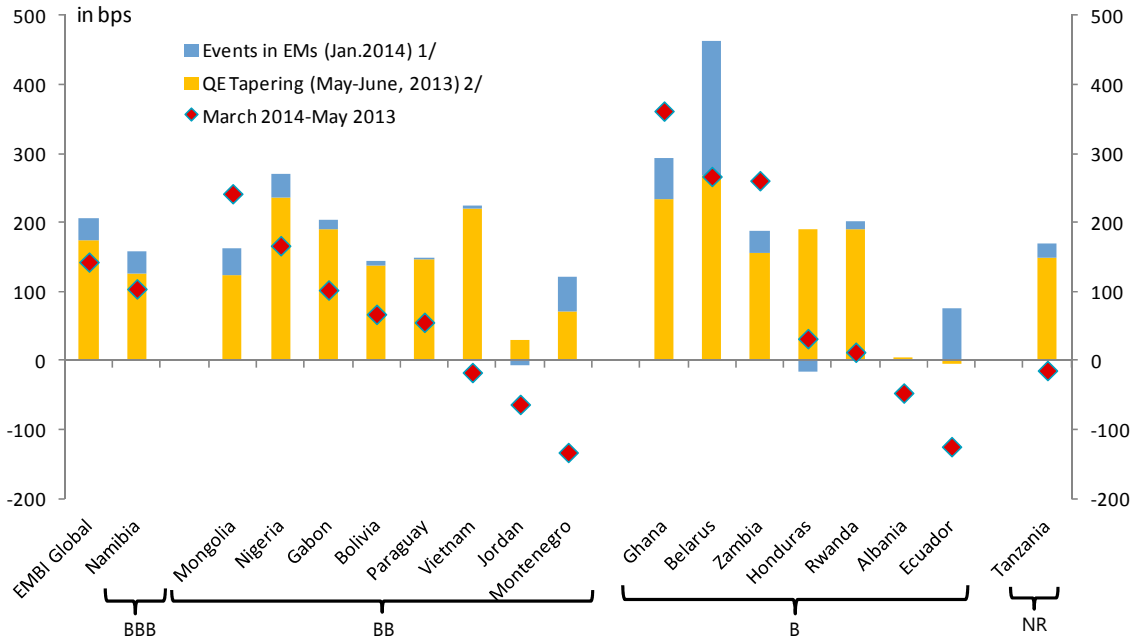
The dummy on first time issuers is positive and statistically significant at the 10 percent level, suggesting that even after controlling for macroeconomic fundamentals, fiscal variables, and institutional quality, first issuers bonds are trading at a higher spread over EMBI. An interaction term (VIX multiplied by first issuers dummy) is positive and statistically significant at 5 percent confidence level; suggesting that increase in spreads is even more pronounced in times of stress for first issuers.

In line with the previous literature, we find that macroeconomic fundamentals, level of financial development, general risk aversion, and institutional characteristics play a major role in explaining governments bond yields differentials. The results are especially strong for institutional quality, level of indebtedness, and global liquidity and volatility conditions. However, the regression results suggest that first time issuers still trade at spreads notably wide of the EMBI, after controlling for other factors. The higher spreads may reflect their weaker credit profile, poorer secondary market liquidity, lesser transparency, and lack of capital market financing track record.

C. Performance of Debut Issuers in the Recent Selloffs

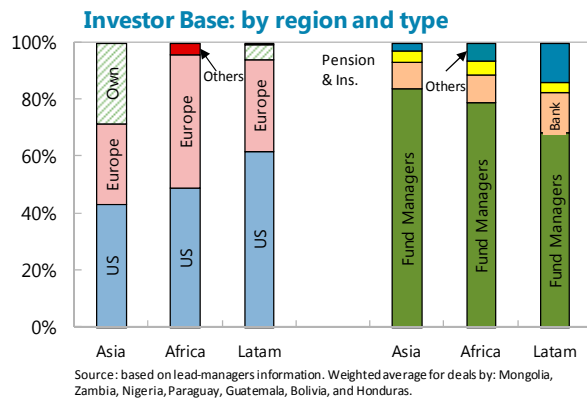
While debut issuers did not sell-off more dramatically than the more frequent higher credit quality issuers during the two recent selloffs (Figure 7), it remains to be seen how they fare in a more prolonged period of repricing. Notwithstanding some cross-country differences, on average debut issuers were able to withstand the shock not worse, and in some cases better than the more liquid issuers. For instance, during the first period (May-June 2013) the median increase was 143 and 190 basis points for BB and B-rated vis-à-vis 173 basis points for the EMBI index. For the second period (January 2014), the median increase was 10 and 31 basis points, respectively vis-à-vis 33 basis points for the EMBI index. Finally, the performance for the entire period (May 2013 – March 2014), first issuers shown an increase by 61 and 32 basis points compared to 143 for the EMBI index. Nevertheless, it is important to highlight that these figures hide a wide dispersion within and between groups. In the recent sell-off, investors across the board, particularly cross-over investors and hedge funds, first sold the most liquid assets. Bonds of debut issuers are less liquid and represent a tiny fraction of investor portfolios, which protected them from a more dramatic sell-off in the initial stage. It remains to be seen what would happen in a more sustained sell-off, especially should investors perceive deterioration in the relative credit quality of debut issuers.

Figure 7. Recent Bond Market Sell-Offs



Source: Bloomberg and IMF staff calculations.
 1/ Refers to a series of events in EM economies, which comprises political events in Turkey, lower growth expectation in China and Brazil, devaluation in Argentina, among others.
 2/ Refers to the distressed period driven by Bernanke's speech about tapering.

Any differing secondary market trading dynamics could be partly explained by differences in the investor base of debut issuers and frequent issuers. In recent years investors in global investment grade credit have crossed over to purchase investment grade and relatively liquid emerging market debt (i.e., Mexico, Brazil, Russia, etc.) in their search for yield (referred to as cross-over investors), but have not purchased the lower credit quality debt in emerging markets (which includes the vast majority of debut issuers). Similarly, hedge funds also participate in the more liquid emerging markets. In contrast, the investor base for debut issuers has continued to be dominated by exclusively dedicated, real money investors. Therefore, the investor base for debut issuers is more stable even though their bonds are less liquid. U.S. investors dominate Asian and Latin American frontier markets, while the African market is split almost evenly between American and European investors.



Source: based on lead-managers information. Weighted average for deals by: Mongolia, Zambia, Nigeria, Paraguay, Guatemala, Bolivia, and Honduras.

VI. UNDERSTANDING RISKS

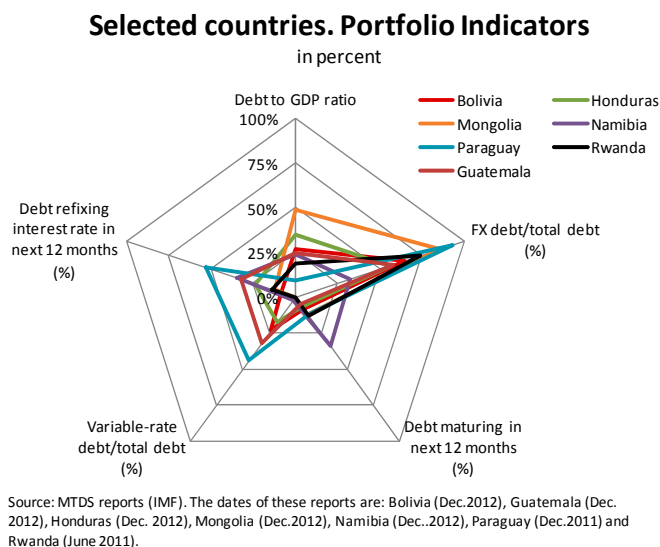
Despite many similarities, different countries have been exposed to different levels of risk. While one can argue for the need to monitor risks on a regional level (particularly Africa and Latin America), specific country conditions and different starting points call for a case by case analysis. In this sense, it is important to take a look at each of the main risks derived from an international bond issuance.

Risk to fiscal sustainability

Due to market practices external bonds are issued in large amounts¹⁹, which in some cases can represent a significant share of the respective country's GDP. This can have a profound impact not only on the debt sustainability of these countries, but also hinder the formation of efficient debt portfolios.

Large amounts may undermine fiscal sustainability and reduce the room for maneuver when dealing with external shocks. The case of Seychelles is an indicative illustration of the point, as the country issued a bond in 2006 representing around 20 percent of GDP and had to restructure this same bond when the global financial crisis hit (Box 3 for details). Although to a lesser extent, other countries have also been issuing bonds with very large amounts, such as Mongolia (17.2 percent of GDP), Gabon (5.4 percent of GDP), and Rwanda (5.5 percent of GDP).

The amount issued in comparison to the existing debt stock also represents a relevant increase in the stock of the debt for some countries. While the cases mentioned above are emblematic (Seychelles, Mongolia, Gabon, and Rwanda), others are not far behind (Namibia, Paraguay, Ghana). For others, there are relevant DSA vulnerabilities that need to be properly considered for the issuance. Figure 8 below shows the share of the international issuance as a share of the GDP and as a percent of total debt stock for these countries.



¹⁹ Market practices provide for a minimum amount that has to be issued. Also, since the preparation work involved in placing a bond internationally is quite extensive, countries prefer big issuances from economies of scale point of view.

Box 3. Short Story of a Bond Debut—Seychelles, 2006-08

On September 27, 2006, the Government of Seychelles issued a 5-year U.S. dollar-denominated for US\$ 200 million. This marked a new era of international bond issuances in the Euro market, since this was the first bond issued by a Sub-Saharan Africa country since early 90's where debut bonds had been placed by Tunisia, Morocco and South Africa, and Egypt in 2001.

The new instrument's original maturity date was October 3, 2011 and was issued at 99.5 dollar per each 100 of face value, with a coupon of 9.125 percent and a yield to maturity of 9.47 percent, which represented a spread over US benchmark of 470 basis points. It was issued in the Euro market under the English law and was rated B by S&P.

According to the prospectus of the new bond, the proceeds would be used to refinance certain private loans, begin resolution and repayment of certain arrears and general government purposes. Lehman Brothers was the lead manager of the transaction. The transaction was considered a success as it reached an order book of \$340 millions, with 80 percent of the new issue bought by European investors and the remaining 20 percent equally split between US investors and others.

A particular aspect of the issuance was that it represented approximately 22 percent of GDP, which is the largest amount in relation to the size of the economy, ever issued by a debut country (see table 1). This figure is more than double of the second country and far from the rest of the countries that issued for first time since 2004. This fact seems relevant since Seychelles had, at the end of 2005, external debt and public debt ratios of 58.9 and 175 percent of GDP respectively²⁰. Moreover, when rating the bond, the S&P report stated that “the resultant shortage of foreign currency has directly contributed to the arrears on public sector foreign debt to multilateral and bilateral lenders... In addition; this shortage constrains growth by preventing imports and deters foreign investment due to the difficulty of repatriating profits”²¹.

In 2007-08, the situation turned sour when the sharp rise in commodities prices led to larger imports, depleting international reserves to less than one month of imports, adding to low growth and government revenues (due to a fall in tourism), which led the country to an unsustainable situation. Moreover, and as part of the Article IV consultation, Fund staff pointed out that the country had carried out “expansionary fiscal and monetary policies that have been incompatible with the maintenance of the pegged exchange rate...”²².

In July 2008, Seychelles missed principal payments for €55 millions (approx. \$80 millions) of a privately placed amortizing note due in 2011. In October, it missed an interest payment on its global bond due in 2011²³. In March 2009, the government announced the external debt restructuring comprising the global bond, 2 external loans and notes, totaling \$320 millions. The debt exchange took place between December 2009 and February 2010 with a face value haircut of 50 percent²⁴. The rating on Seychelles was withdrawn while it was still in default.

In October 2008, the country requested a Stand-by program to the Fund in the midst of a balance of payment and public debt crisis. In December 2009, a successor EFF program with the Fund is approved with the aim at consolidating macroeconomic stability and support the public debt restructuring process, among other areas²⁵.

²⁰ Sources: Bond prospectus and Moody's (March 2009).

²¹ S&P. “Republic of Seychelles US\$200 Million Global Bonds Issue Rated 'B'” October 1, 2006.

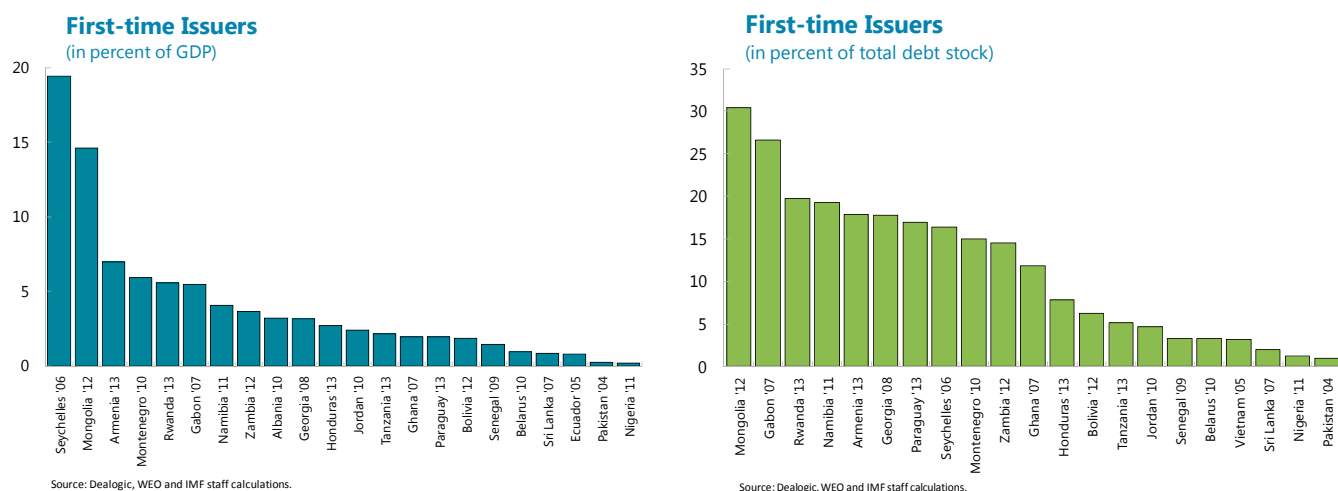
²² Seychelles 2008 Art. IV Report (December 2008).

²³ Moody's. Sovereign Default and Recovery Rates, 1983-2008 (March 2009).

²⁴ Das, U., Papaioannou, M. and Trebesch, C. Sovereign Debt Restructuring 1950-2010: Literature Survey, Data and Stylized Facts.

²⁵ Republic of Seychelles: Letter of Intent, Memorandum of Economic and Financial Policies, and Technical Memorandum of Understanding. October 31, 2008.

Figure 8. Relative Size of Bond Issuances



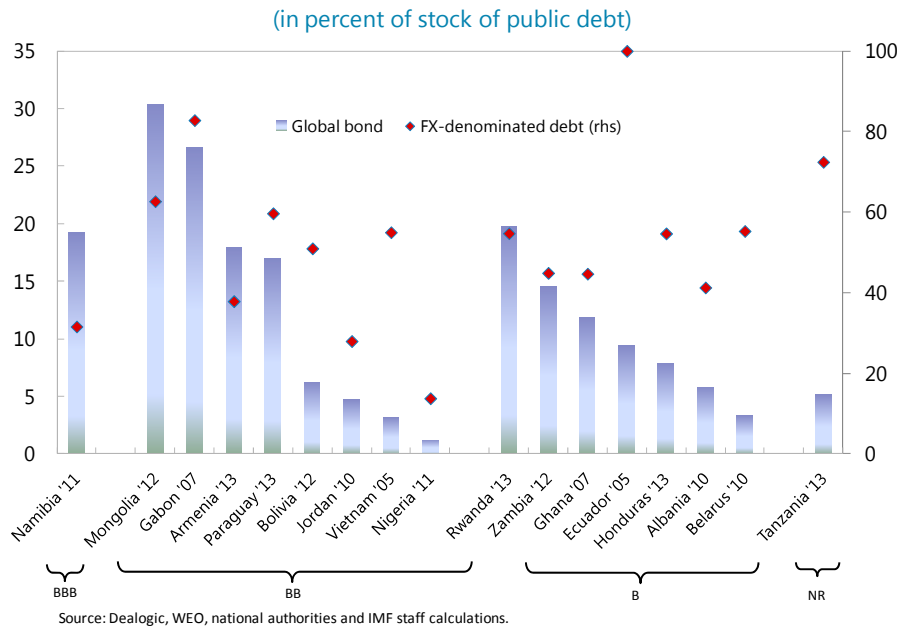
Exchange rate risk

Given the large volumes involved, placing a global bond has important implications for the debt composition and the redemption profile. Exposure to exchange rate depreciation is the most prominent risk facing these countries. As mentioned in Das, Papaioannou, and Polan (2008) global bond issuance may worsen the currency mismatch of government liabilities and revenues, thus increasing the risk of a depreciation of the currency leading to high ex post debt servicing costs. Even prior to their entry into international markets, these countries had a significant exposure to currency risk in their portfolios (on average, foreign currency debt represents around 50 percent of total debt—Figure 9). The currency composition shows a prevalence of USD and Euros in the debt outstanding. The share of foreign currency-denominated debt only increased with the issuance of Eurobonds.

The rise in currency risk is a major issue, as excessive exposure to the U.S. dollar in the past was the trigger of many debt crises (see Box 3). Given that the exchange rate in developing countries tends to be countercyclical (depreciating in bad times), a negative external shock could lead to a currency depreciation, GDP contraction, reduced or even negative growth and a spike in debt-to-GDP ratio, and debt servicing costs. Some countries (e.g. Gabon, Tanzania) already had a high share of FX-denominated debt, which only increased with the issuance of a global bond. For other countries, where FX-denominated debt represented a smaller share of the debt portfolio (e.g. Nigeria and Ghana), the external bond may increase the vulnerability of the debt profile²⁶.

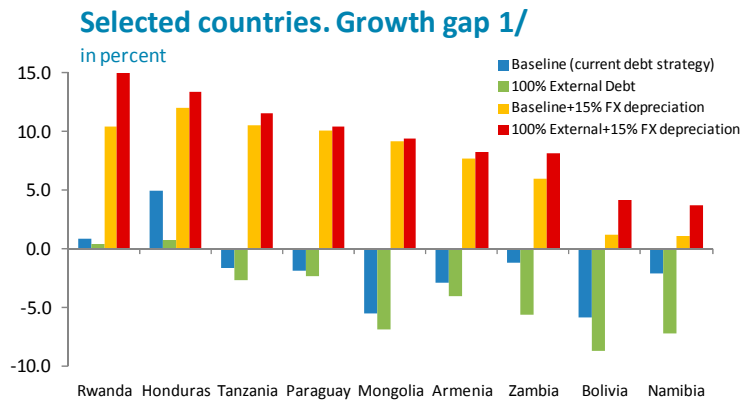
²⁶ Oil-exporters are better prepared to cope with external shocks as tax revenues (thus, debt service) are hedged against FX fluctuations.

Figure 9. Selected International Bond issuance and Exposure to Foreign Currency



Changing current debt strategies toward external debt might undermine debt sustainability if not properly managed (text figure). To prevent the debt ratios from rising in case of exchange rate shocks, first-time issuers have to maintain robust growth rates.

Under the baseline DSA scenario, most countries have sufficient growth to prevent the debt ratio from rising. Under normal conditions, a debt portfolio that consists entirely of external debt would save on the interest bill. However, should an external shock materialize and the exchange rate depreciate, a big growth gap would open up, that would be especially pronounced for countries with a significant share of external dollar debt²⁷.



1/ Growth gap is the difference between the required (implied) growth rate that makes the debt to GDP ratio remains constant (at current level) and the average expected growth rate, over the projection period.

²⁷ A negative growth gap means that a country may grow less than the expected growth rate over the projection period and still keeps the debt to GDP ratio constant. In a scenario of 100% external debt, some countries would benefit from lower interest rates as the external bond has lower costs than the domestic alternative. However, this gain would be more than offset if a large depreciation takes place.

Refinancing risk

Equally relevant from a risk perspective is the impact of these issuances on the maturity profile of the debt. Following market preferences, the majority of first-time issuers are issuing bullet bonds, which amortize entirely on one specific date in the future. As can be shown in Figure 10, as a result of a global bond issue, the projected amortization increases dramatically in that year. If not properly addressed and incorporated in their medium-term debt strategy, this amortization spike will generate large refinancing risks for these countries, and will also increase balance of payments risks, as the bonds need to be redeemed in hard currency. In a situation of market closure in those years, it will be hard to find alternative sources of financing. Even if market access is maintained, the issuance might happen at rates higher than the current bonds. In that sense, amortizing bonds can be seen as having an advantage of smoothing the repayment profile, making reopening easier, and decreasing information asymmetry between the issuer and investors (Das, Papaioannou, and Polan (2008).

Interest rate risk

A spike in global interest rates is not likely to produce an immediate increase in borrowing costs, but will affect the refinancing risk in the medium-term. Since the majority of debut issuances took a form of fixed rate instruments (Tanzania is a notable exception) the risk from a spike of global rates is mitigated. However, in the medium-term, these countries might face the problem of trying to refinance their Eurobonds in an environment of higher interest rates, declining growth, and waning investors' interest.

Lastly, for most cases the international issuance is a way to deal with the reduction in the availability of concessional and semi-concessional funding. Therefore, it represents substitution of cheap funding sources for a more expensive one²⁸. Concessional debt has been essential for keeping the borrowing costs low. However, larger financing needs as well as reduced availability of concessional funding sources may prompt countries toward even more borrowing in international markets. The situation is especially problematic for countries with lower credit ratings. Figure 11 shows the issuance costs vis-à-vis the implied cost of the debt for each of the countries analyzed. It can be seen that, for most of the cases, this marginal funding cost is above the implied interest paid on the stock of debt.

²⁸ Note that for some cases the external bond might still represent a cheaper alternative than the domestic market. In others, the domestic market might not be an alternative at all.

Figure 10. Impacts on Refinancing Risk

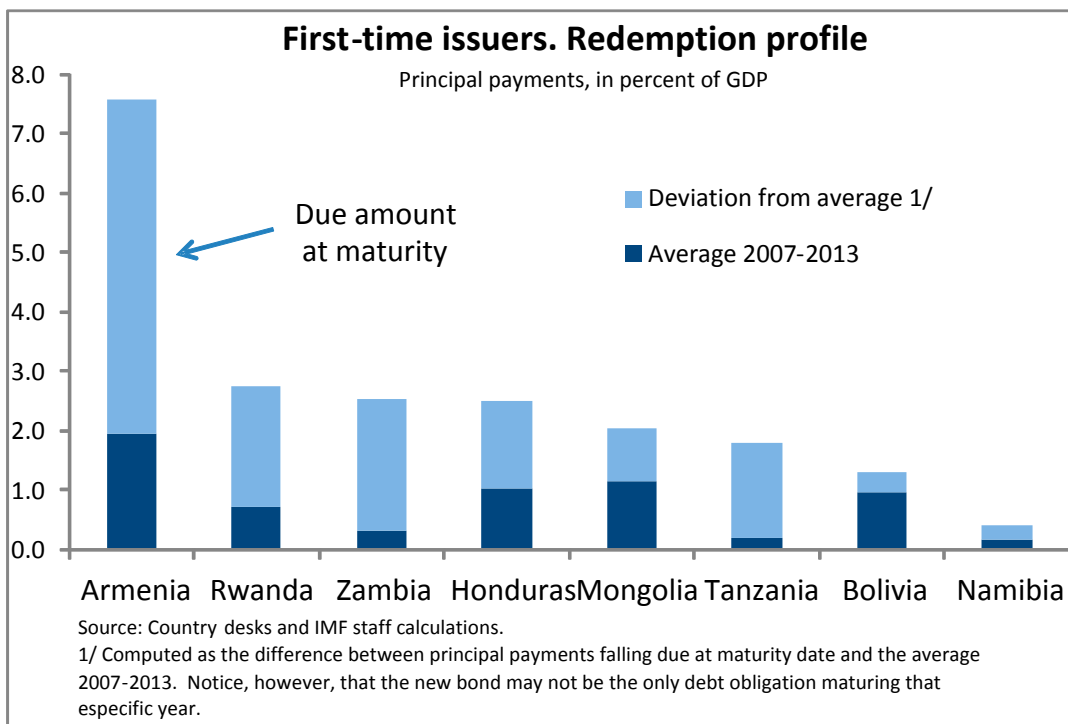
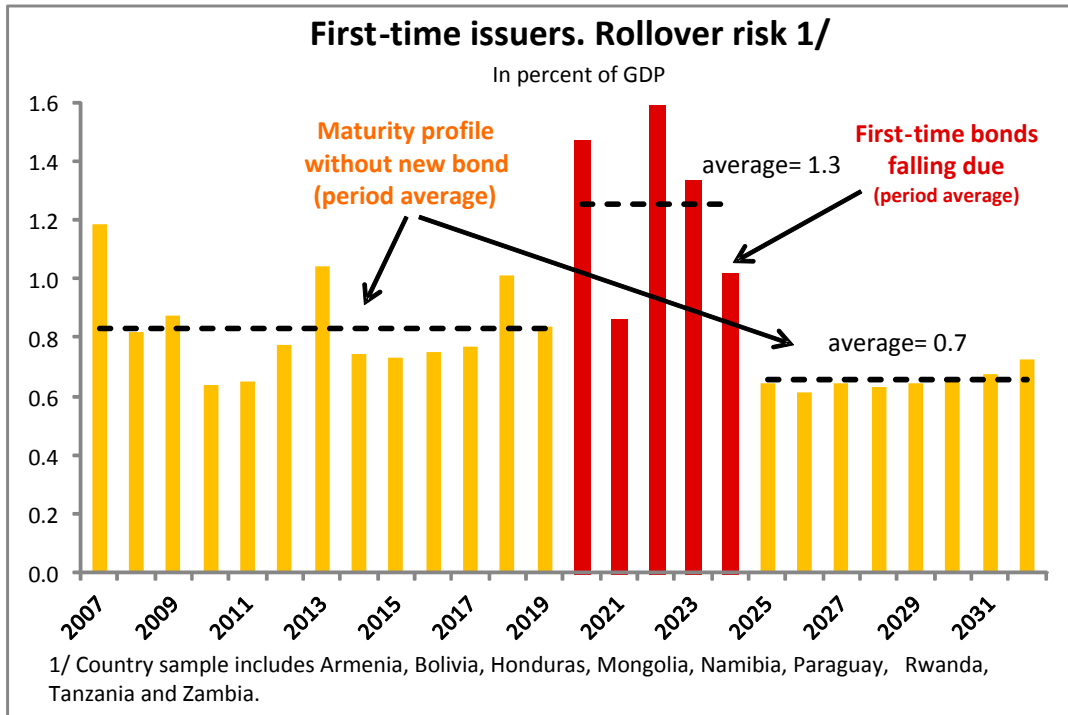
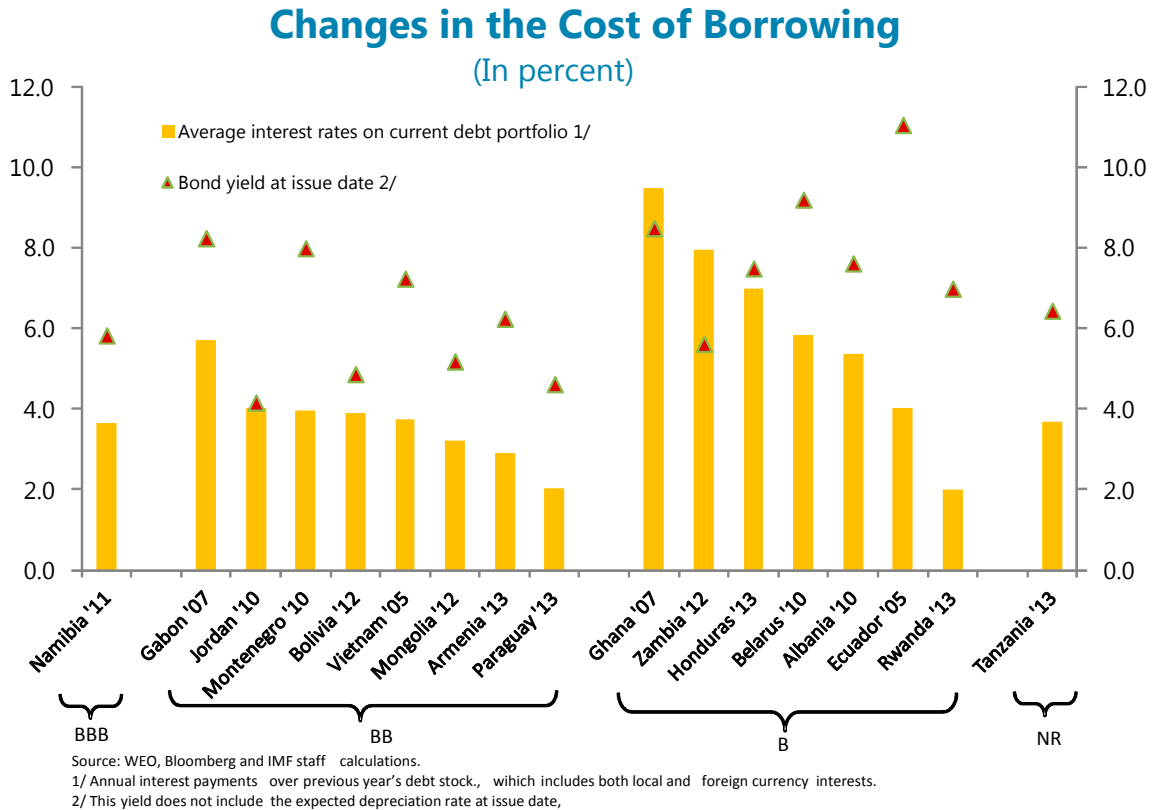


Figure 11. Impact of Global Bond Issuance on the Cost of Borrowing



The risks mentioned above become more critical as many of these countries have a limited debt management capacity and lack proper governance arrangements. In many of the first-time issuers, the debt management capacity in place is limited, and often the required skills to undertake a thorough and comprehensive analysis are not present. That increases not only the risks of a poorly executed transaction but, also of undermining the fiscal and external sustainability of a country. Moreover, the institutional arrangements needed to ensure that the proceeds from the issuance are used for intended purposes might be lacking. Should the money not be used for growth-enhancing investment projects, a concern can be raised over government's ability to pay back the bond at maturity.

Managing the risks ahead of issuance—Best practices on debut issuance²⁹

Issuing a bond in the international markets requires that a number of preconditions are met and that previous actions are taken well in advance. In this regard, a group of strategic and tactical considerations need to be analyzed by countries that want to issue an international bond for the first time. These considerations can substantially reduce the resulting risks stemming from the issuance, as well as contribute for a lower cost for the new bond.

²⁹ Please see "Strategic Considerations for First-Time Sovereign Bond Issuers", IMF Working Paper, 2008.

Strategic considerations

It is important to ensure that careful strategic analyses are undertaken before the decision to issue is taken. While these analyses are not an impediment for the issuance to take place, neglecting them can considerably undermine the capacity to repay the bond at maturity, and lead to risky and/or unsustainable debt structures.

Conducting debt sustainability exercises could be helpful in reducing risks of debt distress. These exercises should carefully evaluate the future payment capacity under different macroeconomic scenarios, its budgetary constraints, and the use of the proceeds. It would also provide important inputs for the definition of the issuance size, to avoid increasing the debt size above the country's capacity to repay the debt.

A comprehensive medium-term debt strategy exercise is important to assess the impacts of the external bond on the cost-risk trade-offs of the debt composition³⁰. This exercise should evaluate whether, among different alternative funding strategies, a bond issuance provides an attractive cost-risk trade-off. It should evaluate more precisely some issues that a debt sustainability exercise does not cover, such as the exchange rate risk and the refinancing risk of an international bond. Only after considering the results of the above analyses the country should contemplate more concrete steps. At that time, action needs to be taken on the practical side of the issuance.

Operational considerations

On the operational side, a number of steps should be implemented ahead of issuance to help reduce its costs.³¹ These include a solid preparation on the legal aspects involved in such issuance, proper marketing process of the country and of the transaction (which includes securing the best possible credit rating, as well as an investor relations program that deepens communication channels with investors and other stakeholders, as well as hiring of financial advisors that can provide independent advice (from the lead managers) at the issuance. Depending on the stage of the country in the process, these steps can take several months to be accomplished.

Securing a credit rating is one of the most important prerequisites that has to be met ahead of the possible issuance. Some countries decided to go ahead and raise funds in the international market without this step and have ended up paying higher rates than could otherwise be the case (e.g., Tanzania and Angola). Therefore, the sooner the country engages in this process the better.

Related to the above, engaging in investor relations' activities can bring additional investors to the transaction and reduce its costs. Improving a country's image in the international investor community is very important. For this reason, it is advisable that

³⁰ The IMF has delivered a series of joint missions with the World Bank to help countries formulate a sound medium-term debt management strategy.

³¹ Also on this issue, the IMF has provided TA to countries considering issuing bonds in the international market for the first time.

countries proactively engage in investor relations' activities, to better market the positive aspects of the credit and pursue higher demand and better pricing conditions.

Preparing all the legal documentation is a necessary step that requires a timely execution. Preparing legal documentation for an international bond issuance requires specific expertise, which might not be held by the government's lawyers. Therefore, it is important to have these experts participating as early as possible in the process, so they have enough time to discuss all the clauses in the contract.

Hiring financial advisors can be beneficial by helping to familiarize authorities with the process and with the particularities of the international markets. These advisors should be agents different from those hired by the country to lead the transaction. While this represents an extra cost for the issuer, it would nonetheless allow for assistance on several parts of the process, as well as on an impartial view on the specific details of the transaction.

Managing risks after the issuance

The country should be prepared to be subjected to greater scrutiny from market participants after the issuance. Once the bond is issued, economic performance and policies will be subject to a closer look from several stakeholders, be they the international investors or the press. That will call for more careful considerations on the decisions to be taken and on the communication of these decisions.

The role of investor relations and market monitoring will need to receive special attention. The debt managers should start monitoring on a regular basis the secondary market dynamics of the international bond to gauge market perceptions toward the country that could have an impact on other areas of the economy. Also, an active investor relation can help improve market perception about the country and contribute to reduce the yields traded on the market and increase appetite for a potential new bond.

Efforts will need to be devoted to address ahead of time the refinancing risks. While an efficient investor relation program can be beneficial to increase the likelihood of the bonds being successfully rolled over at maturity, this cannot be granted, as international markets close from time to time. Therefore, authorities need to consider preemptive measures. In that regard, some countries establish a sinking fund, by which money is put aside regularly to repay the bond. Another alternative is to make use of active liability management operations to exchange the instrument about to mature to new longer term securities.

The points above imply that proper staff qualification becomes more relevant. The choice of issuing an international bond raises a series of new issues that require specific expertise, which brings to the fore the importance of retaining qualified personnel. Before issuing the international bond, the debt managers should be aware that this step will generate that a series of new actions and decisions to be taken in consequence of it.

VII. CONCLUSION

A wave of first-time issuance has been gaining momentum in recent years and is likely to continue, as some countries are moving for a second wave of issuance. Having been interrupted during the peak of the global crisis, issuance has resumed in 2010 with several new sovereigns coming into the market. Moreover, a group of debut issuers have started to issue their second-time bonds. Ghana, Gabon, Honduras and Bolivia have recently issued their second international bonds, and at least Senegal and Tanzania are considering tapping this market one more time in the near future.

However, whether the rush of borrowing in the external markets is sustainable over the medium-to-long term is open to question. The previously accommodating external environment is changing - as borrowing costs are rising and investor interest is waning—and healthy economic growth may falter, which would make it harder for countries to service their loans.

In addition, stricter liquidity conditions are likely to be the norm from now on. The prospects of a tighter of monetary policy in the United States has already increased international borrowing costs across the board and this movement will likely continue in the next years. Therefore, even if this process is handled smoothly, it is possible to expect higher interest rates when it is time to refinance these instruments.

Moreover, while this funding alternative has the potential to allow countries to meet infrastructure and other pressing needs earlier, it comes with risks. These risks stem mainly from the fact that such issuance represents a large proportion of the GDP for many of these issuers, and also a significant proportion for the debt that is concentrated in one single instrument. Among these risks are concerns about the sustainability of the debt, about the excess exposure to foreign currency risk, and rising vulnerabilities in the redemption profile of the debt, given the creation of a significant amount at one single point in time.

Some of the vulnerabilities have already manifested themselves during the crisis. For example, the Seychelles defaulted on a \$230 million Eurobond in October 2008, following a sharp fall in tourism revenues during the global financial crisis and years of excess government spending. The default led to debt restructuring and government spending cuts. Moreover, political instability in some countries presents an additional risk for borrowers and lenders alike.

Also, and despite uneven fiscal conditions across regions going forward, countries would be faced with large or larger fiscal deficits, which could lead to more issuance in external markets. Fiscal conditions are deteriorating in some regions, in particular in Middle-East, Latin America, Africa and Oceania, whereas are slightly improving in Asia and Eastern Europe. In this context, we should expect that these regions tap the market whenever international condition remains benign.

On a policy level, a few aspects need to be considered:

- **The international issuance needs to be put into a broader debt management / DSA context.** Countries should avoid tapping international markets based on opportunistic views. While short-term cost is an important consideration, it is essential to evaluate the medium-term impacts for the cost-risk trade-offs of the debt composition, as well as to ensure that the financing will not threaten the debt sustainability of the country.
- **Countries must start to prepare themselves ahead of time for the redemption of these instruments.** While time has not yet come for most of the debut bonds to mature, previous restructuring cases show that the risks associated to paying them back cannot be underestimated. Refinancing risks will be high in about ten years time, when first bonds start to mature, and might come at an environment of much higher interest rates. Therefore, countries need to be aware of the importance to be prepared to face these future challenges, either by building hard currency buffers or by implementing liability management operations.
- **Finally, countries need to be mindful of best principles in the operational steps for issuing debut bonds.** These operational steps are important in avoiding excessive costs. Lack of attention to this principle has led some countries to pay interest rates above what they possibly could, and use less than optimal bond structure. Moreover, neglecting best practices can also damage the country's image.

ANNEX I. ADDITIONAL TABLES AND FIGURES

Annex Table 1. First Sovereign Debt Issuances in International Markets

	Region	Country	Date	Year	Yield at issue	Size (\$ mn.)	Tenor (years)	Maturity Date	Spread (in bps.)	Offer Price (%)	Size (% GDP) 1/	Moodys (rating at issue)	S&P (rating at issue)	Currency	Governing Laws	Inv. Grade	Issue Type	Market
Run-up financial crisis	Middle-East	Pakistan	12-Feb-04	2004	6.8	500	5	19-Feb-09	370	100.0	0.2	B2	B	USD	England	N	Fixed rate	Euro market
	Asia	Vietnam	27-Oct-05	2005	7.2	750	10	15-Jan-16	256	98.2	0.5	Ba3	BB-	USD	New York	N	Fixed rate	Euro market
	Latin America	Ecuador	7-Dec-05	2005	11.1	650	10	15-Dec-15	623	91.7	0.8	Caa1	CCC+	USD	New York	N	Fixed rate	Euro market
	Africa	Seychelles	27-Sep-06	2006	9.5	200	5	3-Oct-11	470	99.5	19.4	n.a.	B	USD	England	N	Fixed rate	Euro market
	Africa	Ghana	27-Sep-07	2007	8.5	750	10	4-Oct-17	387	100.0	1.9	n.a.	B+	USD	England	N	Fixed rate	Euro market
	Asia	Sri Lanka	17-Oct-07	2007	8.3	500	5	24-Oct-12	397	100.0	0.8	n.a.	B+	USD	New York	N	Fixed rate	Euro market
	Africa	Gabon	6-Dec-07	2007	8.3	1,000	10	12-Dec-17	426	100.0	5.4	n.a.	BB-	USD	New York	N	Fixed rate	Euro market
	Middle-East	Georgia	7-Apr-08	2008	7.5	500	5	7-Apr-13	474	100.0	3.1	n.a.	B+	USD	England	N	Fixed rate	Euro market
After financial crisis	Africa	Senegal	15-Dec-09	2009	9.5	200	5	22-Dec-14	691	98.0	1.4	n.a.	B+	USD	England	N	Fixed rate	Euro market
	Eastern Europe	Belarus	26-Jul-10	2010	9.2	600	5	3-Aug-15	727	99.0	0.9	B1	BB	USD	England	N	Fixed rate	Euro market
	Eastern Europe	Montenegro	7-Sep-10	2010	8.0	254	5	14-Sep-15	666	99.5	5.9	Ba3	BB	EUR	England	N	Fixed rate	Euro market
	Eastern Europe	Albania	28-Oct-10	2010	7.6	407	5	4-Nov-15	587	99.5	3.2	B1	B+	EUR	England	N	Fixed rate	Euro market
	Middle-East	Jordan	8-Nov-10	2010	4.2	750	5	12-Nov-15	301	98.9	2.4	Ba2	BB	USD	England	N	Fixed rate	Euro market
	Africa	Nigeria	21-Jan-11	2011	7.1	500	10	28-Jan-21	372	98.2	0.2	Not rated	B+	USD	England	N	Fixed rate	Euro market
	Africa	Namibia	27-Oct-11	2011	5.8	500	10	3-Nov-21	336	98.1	4.1	Baa3	Not rated	USD	England	Y	Fixed rate	Euro market
	Africa	Zambia	13-Sep-12	2012	5.6	750	10	20-Sep-22	384	98.1	3.7	Not rated	B+	USD	England	N	Fixed rate	Euro market
	Latin America	Bolivia	22-Oct-12	2012	4.9	500	10	29-Oct-22	306	100.0	1.8	B3	BB-	USD	n.a.	N	Fixed rate	Euro market
	Asia	Mongolia	29-Nov-12	2012	5.2	1,000	10	5-Dec-22	358	100.0	9.7	B1	BB-	USD	New York	N	Fixed rate	Euro market
	Asia	Mongolia	29-Nov-12	2012	4.2	500	6	5-Jan-18	354	100.0	4.9	B1	BB-	USD	New York	N	Fixed rate	Euro market
	Latin America	Paraguay	17-Jan-13	2013	4.6	500	10	25-Jan-23	275	100.0	1.9	Ba3	BB-	USD	n.a.	N	Fixed rate	Euro market
	Latin America	Honduras	12-Mar-13	2013	7.5	500	10	15-Mar-24	548	100.0	2.7	B2	B+	USD	New York	N	Fixed rate	Euro market
	Africa	Tanzania	27-Feb-13	2013	6.5	600	5	27-Feb-20	600	100.0	2.1	Not rated	Not rated	USD	n.a.	N	FRN 2/	Private placement
	Africa	Rwanda	25-Apr-13	2013	7.0	400	10	2-May-23	516	98.2	5.5	Not rated	B	USD	England	N	Fixed rate	Euro market
Eastern Europe	Armenia	20-Sep-13	2013	6.3	700	7	30-Sep-20	413	98.6	7.0	Ba2	Not rated	USD	England	N	Fixed rate	Euro market	

Source: Dealogic

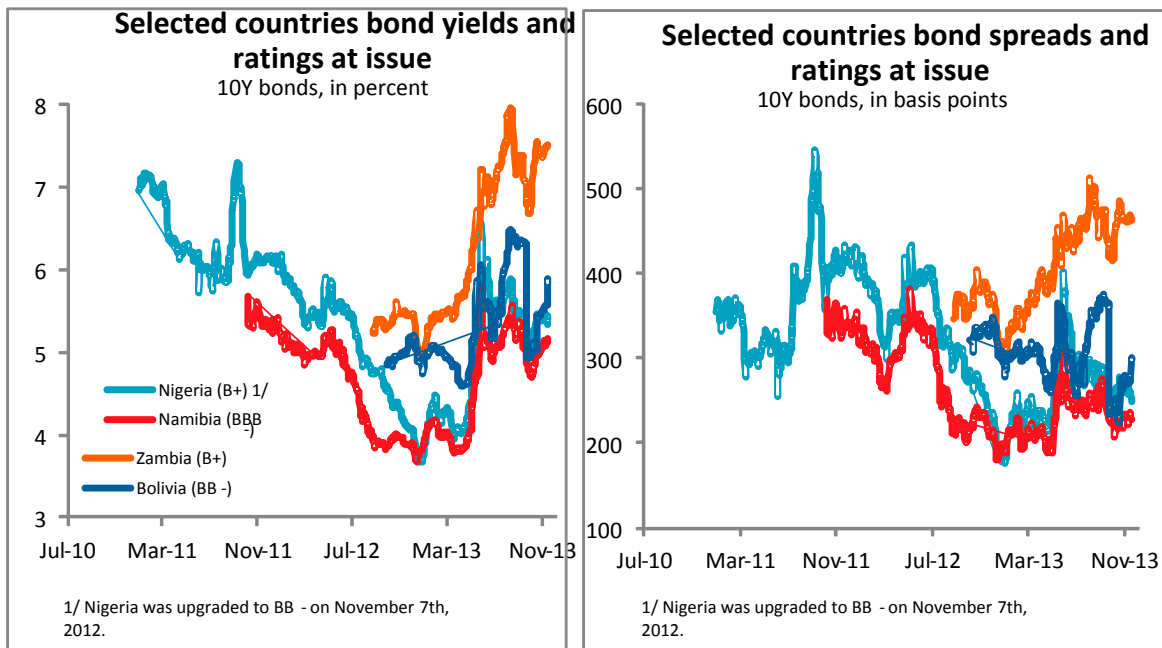
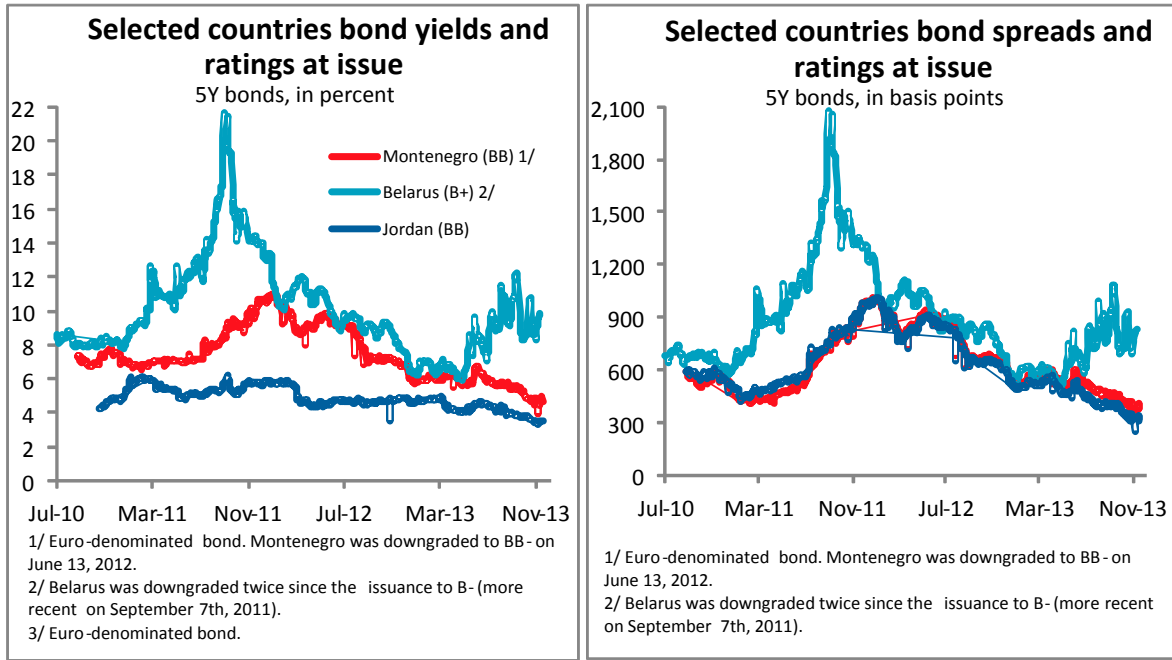
1/ The GDP figure correspond to the year prior to the issuance.

2/ Floating rate note.

Annex Table 2. Country Sample in the Regression Analysis

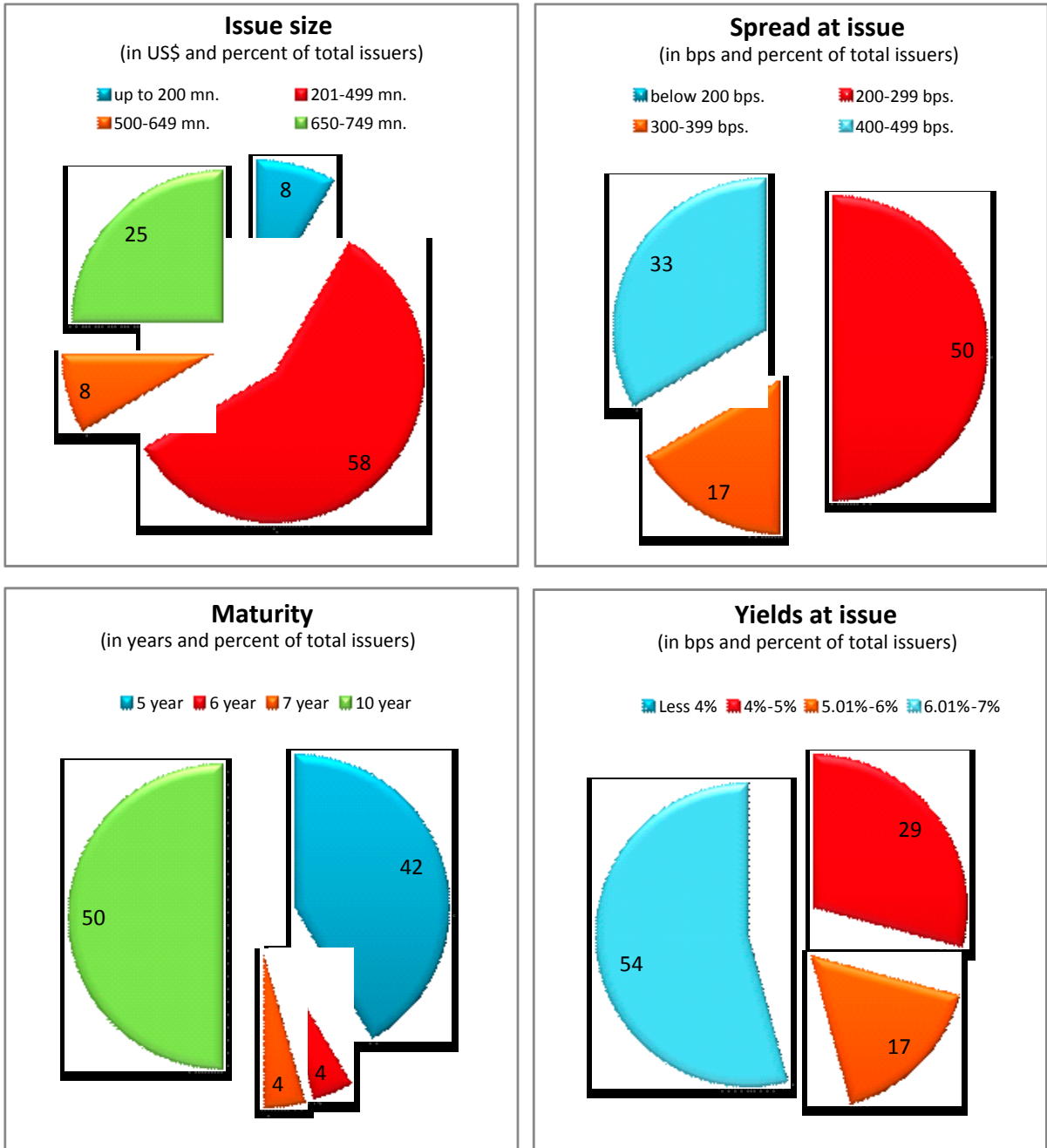
Africa:	Europe and Middle East:
Angola	Albania
Gabon	Belarus
Ghana	Croatia
Namibia	Czech Republic
Nigeria	Georgia
Rwanda	Hungary
Senegal	Montenegro
Seychelles	Poland
South Africa	Serbia
Tanzania	Slovak Republic
Zambia	Turkey
	Jordan
	Pakistan
Latin America:	Asia:
Argentina	China
Bolivia	Fiji
Brazil	India
Chile	Indonesia
Colombia	Malaysia
Ecuador	Mongolia
Guatemala	Philippines
Honduras	Sri Lanka
Mexico	Thailand
Paraguay	Vietnam
Uruguay	
Venezuela	

Annex Figure 1. Selected Countries—Bond Yield and Spreads Performances of Recent Issuances, July 2010-2013



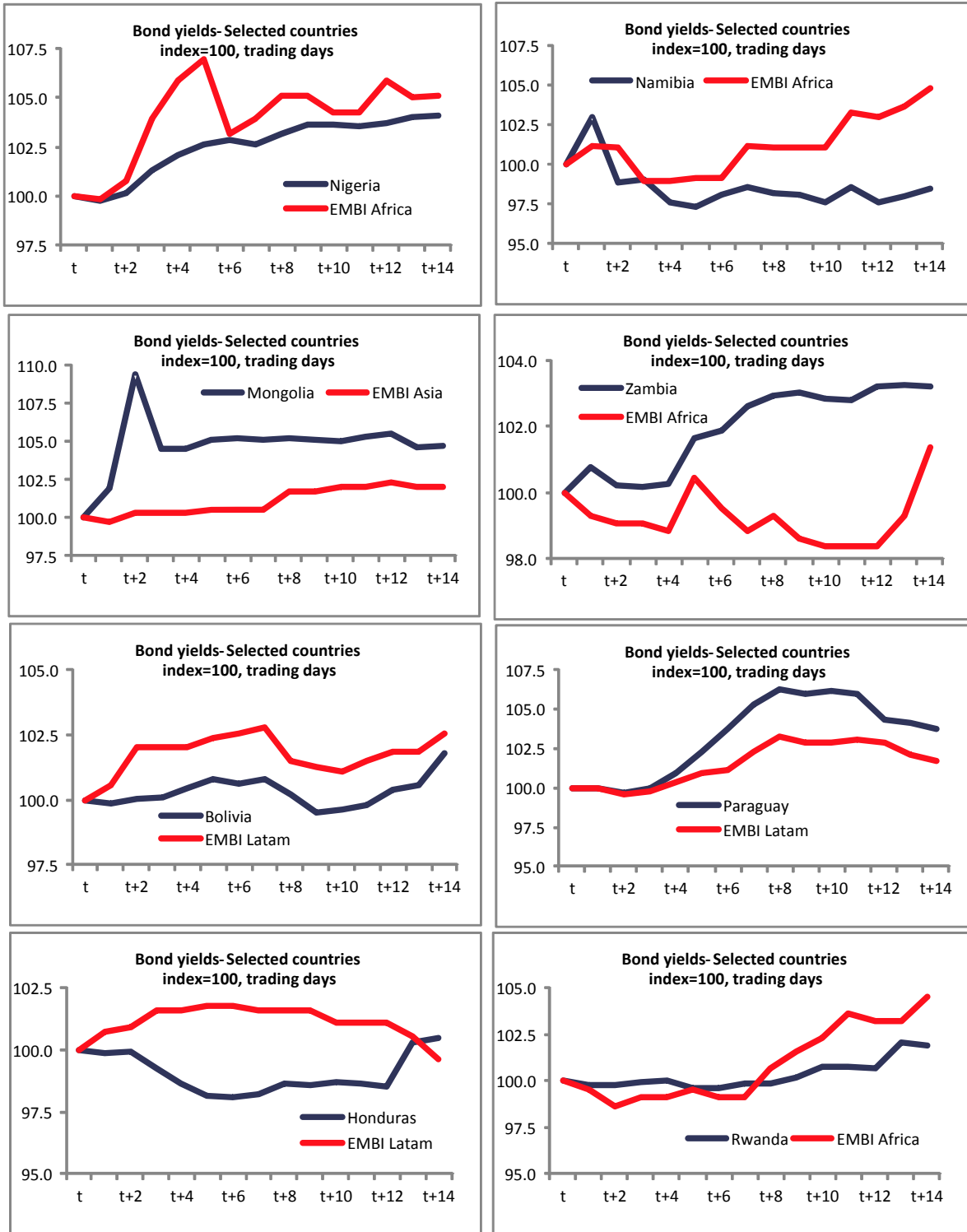
Source: Bloomberg and IMF staff calculations.
 Note: spreads were computed using relevant dollar and euro benchmarks with similar maturities
 Maturities are at issue date.

Annex Figure 2. Financial Characteristics of First-Time International Sovereign Issuances, 2004-2013



Source: Dealogic; and IMF staff calculations

Annex Figure 3. First-Time Issuers Bond Yield Performance vs. Regional Countries 1/



Source: Bloomberg; and IMF staff calculations.
1/ t=0 refers to issue date.

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