

Corporate Sustainable Bonds in Emerging Markets

AN ANALYSIS OF STATUS AND POTENTIAL







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Acknowledgements

This report was supported by the Technical Assistance Facility managed by International Finance Corporation in an effort to expand emerging market real sector green bond supply. This research publication is prepared under the leadership of Peter Cashion (Chief Investment Officer) and Quyen Thuc Nguyen (Senior Operations Officer). The authors are Yang Li and Andreas Wohlhueter, with support from IFC specialists Francisco Avendano, Denise Odaro, Riccardo Ambrosini, and Martin Dasek. The authors of this research express special appreciation to IFC Communication Team Henry Pulizzi and Rob Wright, editor Matthew Benjamin, and creative designers Sarah Hollis, Debra Malovany, Bruno Bonansea, Rwaida Gharib, and Jeff Lawrence.

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Abbreviations and Acronyms

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BIS Bank for International Settlements

CEMBI JP Morgan Emerging Market Corporate Bond Index

DM Developed marketEM Emerging market

HGAM HSBC Global Asset Management
IFC International Finance Corporation
IMF International Monetary Fund

REGIO Real Economy Green Investment Opportunity Fund

SDGs Sustainable Development Goals
TAF Technical Assistance Facility

WBG World Bank Group

WBG and IFC Regions

EAP East Asia and Pacific
ECA Europe and Central Asia

LAC Latin America and the Caribbean
MENA Middle East and North Africa

SA South Asia

SSA Sub-Saharan Africa

Key Takeaways

- → Emerging market green bond issuance reached \$52.2 billion in annual issuance volume in 2019; and between 2015 and 2019, on average more than 70 percent of annual issuance volume came from the corporate sector.
- → The emerging market sustainability bond market remains nascent, with a cumulative issuance of \$7.7 billion between 2016 and 2019. However, it continues to grow and expand in terms of issuing country, currency, and issuer type.
- → The fast-paced growth of the emerging market green bond market has remained uneven across different regions, with the East Asia Pacific – dominated by China – and Latin America and the Caribbean regions leading the way. In addition, government and financial institutions in developing countries have led the way in issuing green bonds, whereas real sector corporates have yet to catch up.
- → The Technical Assistance Facility focuses on unlocking the green and sustainability bond market potential in the real sector in three underdeveloped target regions: Europe and Central Asia, Middle East and North Africa, and Sub-Saharan Africa.
- → The collective bond market in these three regions amounted to \$494 billion in annual issuance in 2019, with positive progression in increasing credit rating quality, maturity profile, issuance currency, and issuer type. Real sector corporates contributed \$48 billion in annual bond issuance in 2019, or about 10 percent of the overall corporate bond market.
- → The Technical Assistance Facility has identified 10 promising emerging market target countries from these target regions based on their financial market readiness, capital market presence, bond issuing history, and real sector contribution; it aims to provide technical assistance to support their real sector corporates transition to more sustainable funding options.



SECTION 1:

Introduction

Since the first green bond was issued in 2007, green bonds have allowed issuers to fund environmentally friendly and climate-responsible projects globally. Green bonds issued out of emerging market (EM) countries allow investors to buy bonds that achieve a good yield that also may fight climate change and support the United Nations Sustainable Development Goals (SDGs). Although the EM green bond market has grown rapidly during the past five years, the majority of EM green bond supply has been from financial institution issuers, with far fewer non-financial firms such as utilities, agribusiness providers, and manufacturers — or real sector companies — coming to the market.

Against this backdrop, and in an effort to unlock the underdeveloped real sector segment, the Real Economy Green Investment Opportunity Fund (REGIO), anchored by HSBC and IFC, is the first global green bond fund targeting EM real sector companies.1 The capital raised by REGIO is expected to support well-diversified climate-smart investments in EMs around the world, not only making a vital contribution to the fight against climate change, but also further promoting sustainability-oriented capital markets in developing countries. In particular, REGIO aims to help address an overlooked aspect of demand for climate finance by providing an innovative, sector-diversified vehicle to institutional investors that currently lack the capability to invest in individual green bond transactions.

HSBC Global Asset Management (UK) Limited (HGAM UK) and IFC entered into a Service Agreement on July 1, 2020, under which IFC provides services through the newly created Technical Assistance Facility (TAF) designed to facilitate and accelerate the supply of green bonds issued by EM real sector borrowers to complement HGAM UK's investment activities including REGIO. Through this diversified fund and innovative partnership, HSBC and IFC are sending a clear message to the global market about the importance of creating viable markets for the development of climate-friendly

projects, as well as mobilizing capital to make meaningful progress toward achieving the SDGs.²

This research report, supported by the TAF, focuses on generating and disseminating country and industry-specific market intelligence, and identifying green and sustainability market opportunities at both the country and issuer levels, and by doing so stimulating the supply side of green and sustainability bonds in target EM countries.

As the first of a series, this research opens with an assessment of the overall EM bond market within the global context, followed by a brief introduction of the burgeoning EM green and sustainability bond market. It then takes a deep dive into the characteristics of bond markets in three target regions: Europe and Central Asia (ECA), Middle East and North Africa (MENA), and Sub-Saharan Africa (SSA). Finally, it provides an analytical approach to identifying and prioritizing 10 target EM countries from these regions with the most potential for future expansion of green and sustainability bond issuances by real sector companies.

[&]quot;Green bonds become real in emerging markets."2020. IFC. https://blogs.worldbank.org/climatechange/green-bondsbecome-real-emerging-markets?CID=IFC_LI_IFC_EN_EXT.

^{2 &}quot;IFC, HSBC Create First Green Bond Fund Focused on 'Real Economy' Issuers in Emerging Markets." 2019. IFC. https://ifcextapps.ifc.org/IFCExt/Pressroom/IFCPressRoom.ns-f/o/14FEF5C7A7CACFCF8525840F002CA127.



SECTION 2:

Global and EM Bond Markets Overview

The global bond market has more than doubled in size since 2004, as the total global outstanding value of bonds reached \$110.0 trillion at the end of 2019, compared with \$53.0 trillion in 2004. While developed market (DM) countries continue to be leading bond issuers, the share of EM countries also has risen steadily. From just \$1.5 trillion, or 3 percent of the global bond market, in 2004, EM countries grew their collective bond market to \$22.1 trillion in 2019, accounting for 20 percent of the global market (Figure 2.1, panel a).

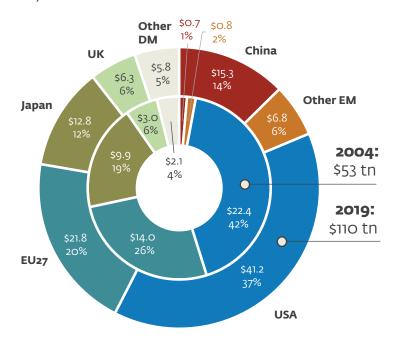
The EM bond market has grown steadily for the past six years at an annual compound growth rate of 9.7 percent, and reached \$22.1 trillion in 2019, from \$12.6 trillion in 2013. Both sovereign and corporate sectors have followed the overall trend of steady increases. However, EM corporate bonds denominated in local currencies (Figure 2.1, panel b) stood out, with a significant increase in the share of the overall EM bond market; that share exceeded 40 percent in 2018, up from 33 percent in 2013. This trend of continuous and persistent development of

EM bond markets – particularly in the EM corporate sector – has laid the foundation for EM countries to both enter and increase green and sustainability bond markets as viable and sustainable capital market solutions to combat climate change and meet SDGs,³

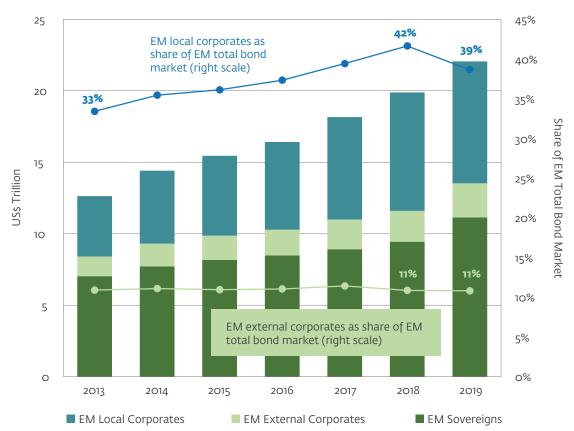
This research report focuses specifically on green and sustainability bonds. Please refer to Annex 2: Definitions for more information. Other bond instruments such as sustainability-linked and transition bonds are not included in this research.

Figure 2.1: Global and EM Bond Market Outstanding Value

a. Global bond outstanding value(US\$ trillion; percent)



b. Emerging market bond outstanding value



Sources: JP Morgan CEMBI Monitor, June 2020; Bank of International Settlements; IFC analysis.

Note: EU27 includes all 27 EU member countries, excluding the United Kingdom (UK). Bonds denominated in U.S. dollar are labeled "external" according to JP Morgan.

SECTION 3:

EM Green and Sustainability Bond Markets in the Global Context

The global green and sustainability bond market has experienced exponential growth over the past decade, from a negligible amount in 2012 to more than \$260 billion annual issuance in 2019 (Figure 3.1, panel a). While DM issuers remain the largest contributors, EM green bond issuers have rapidly caught up since 2015. Annual green bonds issued by non-supranational entities in EM countries expanded from just \$3.7 billion in 2015 to \$52.2 billion in 2019 (Figure 3.1, panel b).

The increased market share of green bonds issued by the EM corporate sector is also noteworthy. Since South Africa issued the first EM corporate green bond in 2012, EM corporates have remained the primary force behind the rapid growth of the EM green bond market, consistently contributing more than 70 percent of annual green bond issuance volume since 2015. Financial institutions in particular are at the forefront of issuing green bonds; they have accounted for more than half of EM green bond issuance volume between 2015 and 2019 (Figure 3.1, panel c).

East Asia and Pacific (EAP) has become the leading EM region in terms of annual green bond issuance volume, especially due to Chinese corporates coming to the market since 2015. As of 2019, 72.4 percent of EM green bond issuance could be attributed to EAP, while the other five regions together made up the remaining 27.6 percent (Latin America and the Caribbean at 10.2 percent, Europe and Central Asia at 7.2 percent, South Asia at 6.1 percent, Middle East and North Africa at 2.4 percent, and Sub-Saharan Africa at 1.7 percent) (Figure 3.1, panel d).

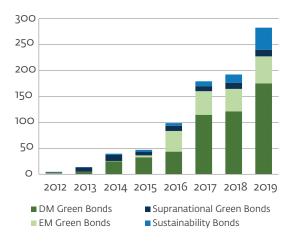
China's significant contribution to the EM green bond market is also reflected in the currency landscape, as the Chinese yuan contributed 77 percent of 2016's annual new green bond issuance within the entire EM market. As more and more EM countries have come to the green bond market, the currency composition has become more diverse and balanced; issuance of local currency denominated green bonds has continued to rise and reached 10 percent of the annual EM green bond market issuance in 2019, whereas hard currencies⁴ such as the US dollar (40 percent) and the euro (11 percent) remain the preferred currencies to meet EM countries' green funding needs (Figure 3.1, panel e).

A welcome development in the EM green bond market has been the widening of its maturity profile. Compared to 2015, EM green bonds at both ends of the maturity spectrum – under three years and above nine years – have increased their share in the new issuance market (Figure 3.1, panel f).

In this report, hard currencies are defined narrowly as both the US dollar and the euro. Authors of this report acknowledge that other currencies such as the British pound (GBP) and the Japanese yen (JPY) are often listed as other popular types of global reserve currencies along with the dollar and the euro. However, given the significant share of EM bonds denominated in either dollars or euros to access the global investor base, this report specifically breaks out these two currencies in relevant analyses.

Figure 3.1: Global and EM Green and Sustainability Bond Market Development

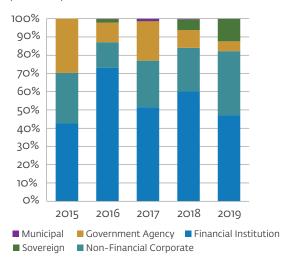
a. Global green and sustainability bond issuance (US\$ billion)



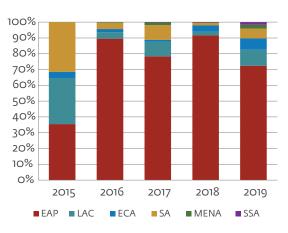
b. EM green bond annual issuance (US\$ billion)



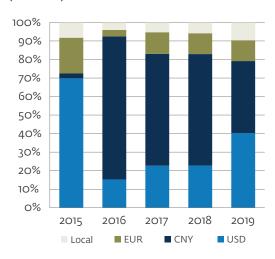
c. EM green bond issuance by issuer type (Percent)



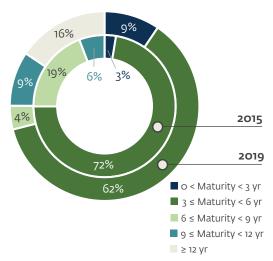
d. EM green bond issuance by region (Percent)



e. EM green bond issuance by currency (Percent)



f. EM green bond issuance by maturity band (Percent)



Sources: Bloomberg L.P.; Climate Bonds Initiative; Environmental Finance; and IFC analysis.

Another positive maturity feature across the EM green bond market is the significant share of green bonds with a maturity between three and six years – 72 percent in 2015 and 62 percent in 2019 – even though its overall market share has declined somewhat (Figure 3.1, panel f). This characteristic coincides with earlier observations that EM corporates are a main force driving the EM green bond market, as on average, the EM corporate sector has demonstrated a preference of issuing bonds with a five-year maturity.

The global sustainability bond market – in contrast to the green bond market – has remained in an early stage of development and only began to see a meaningful increase in issuance volume last year, reaching \$42 billion in 2019, but still only one sixth of green bond issuance that year (Figure 3.1, panel a).

EM sustainability bonds account for only a small portion of the global sustainability bond market, registering a cumulative issuance volume of \$7.7 billion between 2016 and 2019, from just 10 issuing EM countries excluding supranational entities (Figure 3.2, panel a).

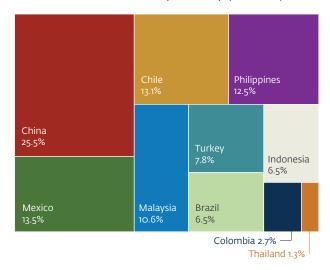
The nascent nature of the EM sustainability bond market is also reflected in the currency landscape, where US dollar denominated sustainability bonds continue to account for a considerable share of the market. Although the market has seen progress toward a more diverse currency makeup, US dollar-denominated issuance was still 77 percent of all new issuance in 2019 (Figure 3.2, panel b).

Similarly, the issuer base of the EM sustainability bond market also remains small, supported by financial institutions, government agencies, and non-financial companies (Figure 3.2, panel c), in sharp contrast to the variety of issuers observed within the more mature EM green bond market (Figure 3.1, panel c).

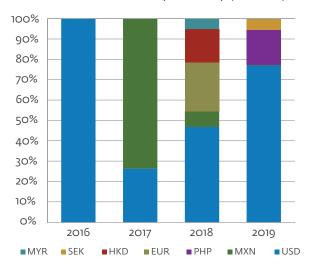
Sources: Bloomberg L.P.; and IFC analysis. Note: MYR = Malaysian ringgit. SEK = Swedish krona. HKD = Hong Kong dollar. EUR = euro. PHP = Philippine peso. MXN = Mexican peso. USD = US dollar.

Figure 3.2: EM Sustainability Bond Market Cumulative Issuance (2016-2019)

a. Cumulative issuance by country (Percent)



b. Cumulative issuance by currency (Percent)



c. Cumulative issuance by issuer type (Percent)





SECTION 4:

Target Regions: ECA, MENA, and SSA Bond Markets

The Technical Assistance Facility aims to specifically unlock the green and sustainability bond potential of relatively underdeveloped EM regions, and therefore focuses on providing technical assistance to three main target regions: Europe and Central Asia (ECA), Middle East and North Africa (MENA), and Sub-Saharan Africa (SSA). Priority has been given to these regions due to the relative underdevelopment of their green and sustainability bond markets.

The EM Bond Market in Target Regions

Between 2015 and 2019, the size of the EM bond market in the three target regions has seen a consistent upward trajectory, from a total annual issuance of \$289 billion to \$494 billion, with a minor and temporary setback in 2018 (Figure 4.1,

panel a). Among these three regions, ECA remains the leading region in terms of issuance and has continued to outpace both SSA and MENA; ECA accounted for more than 60 percent of the three regions' total bond market in 2019 (Figure 4.1, panel b).

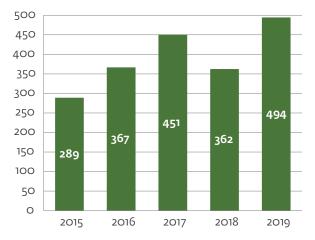
In terms of individual country issuance, Russia and Turkey have been the top two major EM countries within the target regions and are responsible for a large contribution from the ECA region. Turkey alone contributed \$162.1 billion in annual bond issuance, more than 30 percent of the \$494 billion total annual bond issuance volume from all three target regions in 2019 (Figure 4.1, panel c), most of which came from sophisticated financial institutions already active in both the conventional and green bond markets.

Hard currencies such as the US dollar and the euro have been the favored issuing currencies across the target regions between 2015 and 2019, sharing a significant 40 percent and 12 percent of the collective market, respectively. Within the local currency denominated market, the Turkish lira (TRY) and the Russian ruble (RUB) are ranked at the top, largely due to their relatively mature domestic bond markets and their active roles in the overall global bond market (Figure 4.2, panel a).

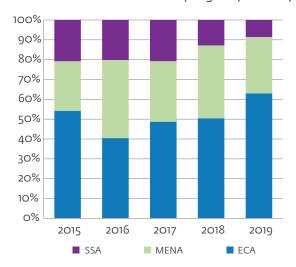
The maturity profiles of the three target regions have progressed with a steady composition during the studied period of 2015-2019, as a variety of issuers tend to bias toward different maturity bands. The share of longer-term bonds with a maturity of nine years or longer – which are often issued by various levels of government and government agencies – has been gradually shrinking, making room for the financing needs of the corporate sector, which issues relatively shorter-term bonds (Figure 4.2, panel b).

Another encouraging feature of the target regions' bond markets is the gradual improvement of credit ratings. First, this study has observed a positive trend of an increasing share of bonds obtaining credit rating assessments. In 2015, 74 percent of the overall bond market in the target regions had no credit rating. This percentage fell to 65 percent by 2019. Second, within the universe of rated bonds, bond quality continues to improve at both the top and bottom ends of the rating spectrum. The share of bonds rated at the AA range has grown to 18 percent of the total 2019 annual issuance volume, whereas the lowest-rated bond stopped at the B range, instead of the CCC and CC bands in preceding years (Figure 4.2, panel c).

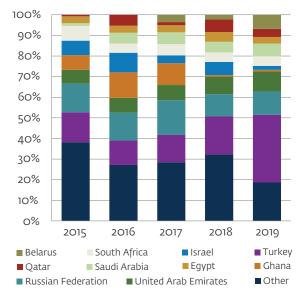
Figure 4.1: Target Region Bond Market Size a. Annual issuance volume (US\$ billion)



b. Annual issuance volume by region (Percent)



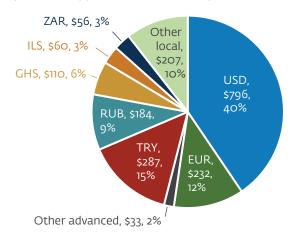
c. Annual issuance volume by leading countries (Percent)



Sources: Bloomberg L.P.; and IFC analysis.

Figure 4.2: Target Region (ECA, MENA, and SSA) Bond Market Characteristics

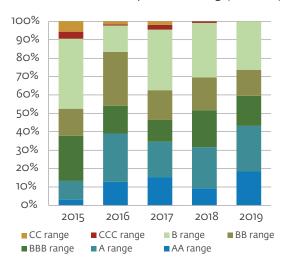
a. Cumulative issuance by currency (2016-2019) (US\$ billion; Percent)



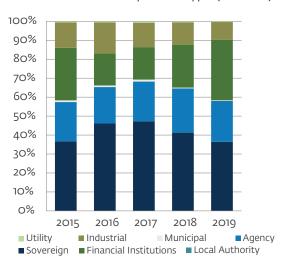
b. Issuance volume by maturity (Percent)



c. Issuance volume by credit rating (Percent)



d. Issuance volume by issuer type (Percent)



Note: Panel c only shows the credit rating breakdown of bonds with at least one credit rating available. Bonds without ratings are excluded. On average, about 65 percent of bonds over the period between 2016 and 2019 in these target regions do not have a credit rating. USD = US dollar. EUR = euro. TRY = Turkish lira. RUB = Russian ruble. GHS = Ghanaian cedi. ILS = Israeli new shekel. ZAR = South African rand. "Other advanced" currencies in this analysis includes the British pound (GBP), Swiss franc (CHF), Japanese yen (JPY), Australian dollar (AUD), Hong Kong dollar (HKD), Swedish krona (SEK), Norwegian krone (NOK), New Zealand dollar (NZD), and Canadian dollar (CAD). Sources: Bloomberg L.P.; and IFC analysis.

In terms of issuer base, both the public and corporate sectors have been participating in the target regions' bond markets. However, it is noteworthy that the corporate sector has returned robustly after a short period of retrenchment in 2017. As of 2019, bonds issued by corporates in the target regions reached 42 percent of the overall market, while bonds issued by different levels of government and government agencies were at 58 percent (Figure 4.2, panel d).

Real Sector Bond Market

Consistent with the global EM bond market, financial institutions in the three target regions have been pioneers and leading bond issuers. As of 2019, more than 30 percent of annual new issuance was contributed by financial institutions (Figure 4.2, panel d). However, the TAF focuses on the potential of the non-financial, or real sector, of these target regions, and aims to unleash the green and sustainability potential of real sector corporates.

Therefore, a deep dive into the current bond market standing of the real sector in the target regions is needed.

In 2019, bonds issued by real sector corporates across all three target regions shared only about 10 percent of these regions' total annual issuance volume, or \$48 billion, with real sector corporates in ECA the largest contributor, trailed by those in MENA and SSA (Figure 4.3).

Within the target regions, each region showcases different characteristics of its own respective bond market. Often led by Russia, ECA's bond market features a significant share of bond issuance from basic industry corporates. In contrast, MENA's bond market heavily tilts toward consumer non-cyclical and other industrial corporates. While SSA's bond market also has a large presence from basic industry corporates, it outshines its peers with a growing communications industry, thanks largely to South Africa (Figure 4.4 panel a).

In terms of issuing currencies, these three regions align with the overall observation that hard currencies occupy a meaningful share of the bond market and often are the go-to currencies. ECA alone, with its many more mature bond markets at the country level, has the smallest share of US dollar- or euro-denominated bonds, on average only around half of the issuance volume between 2015 and 2019. In comparison, issuers from MENA exhibit a preference for financing through such hard currencies, with more than 80 percent of the region's 2019 annual issuance volume denominated in either the US dollar or the euro. Historically, while SSA's bond market also has shown a reliance on resorting to hard currency-denominated bonds to meet funding needs, South Africa has been a leader in transitioning into issuing local currency denominated bonds (Figure 4.4, panel b).

In general, bonds issued within the target regions exhibit maturity profiles similar to the larger EM bond market, with an especially large cluster around the 3- to 6-year maturity band. However, a detailed look reveals that ECA, MENA, and SSA vary in bond maturity characteristics. Compared to peer EM countries in ECA or MENA, many developing countries in SSA have yet to develop more sophisticated domestic markets. Therefore, SSA features a number of stable recurring issuers – either from the public or the corporate sector – and

Figure 4.3: Real Sector Corporate Bond Issuance in Target Regions (ECA, MENA, and SSA)

(US\$ billion)



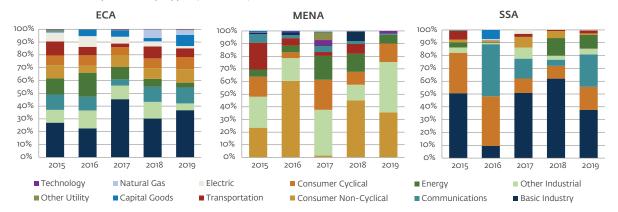
Sources: Bloomberg L.P.; and IFC analysis.

exhibits a relatively steady maturity profile across time (Figure 4.4, panel c). In comparison, bond maturity profiles progress and vary much more for issuers in ECA and MENA, as both regions observe an increase in the share of bonds with shorter-term maturities, especially around the 3- to 6-year band (Figure 4.4, panel c), indicating a rise in the number of new corporate issuers coming to the market.

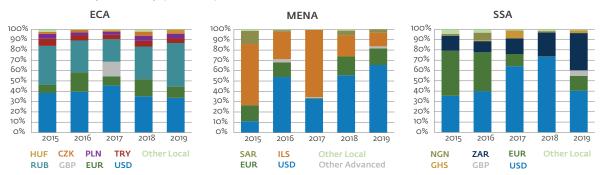
In terms of bond quality measured by credit ratings, all three target regions have experienced promising improvements. While in 2015, on average 80 percent of each respective region's new bond issuance did not receive any form of credit rating, this dropped to 65 percent, 59 percent and even 48 percent, respectively, for ECA, MENA, and SSA by 2019.

In addition, the bond market in each region has seen different degrees of credit rating improvement between 2015 and 2019. In ECA, the lowest rated bond stopped at the B range in 2019 instead of the CCC range from previous years, while the share of bonds rated between the BBB and BB bands rebounded to as high as 70 percent. In MENA, while there is an increase in bonds rated at the B range, 2019 also saw a significant rise in bonds rated at the BBB range, which remained either small or nonexistent during prior years. In SSA,

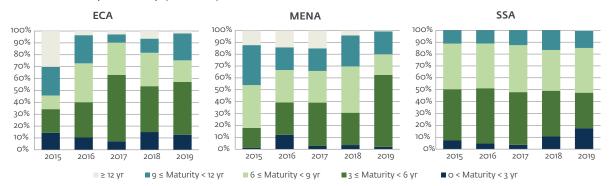
Figure 4.4: Target Region (ECA, MENA, and SSA) Real Sector Bond Market Characteristics a. Issuance volume by industry type (Percent)



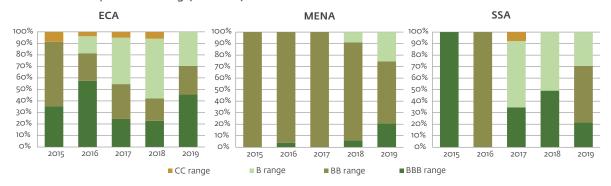
b. Issuance volume by currency (Percent)



c. Issuance volume by maturity (Percent)



d. Issuance volume by credit rating (Percent)



Note: USD = US dollar. EUR = euro. GBP = British pound. RUB = Russian ruble. TRY = Turkish lira. PLN = Polish zloty. CZK = Czech koruna. HUF = Hungarian forint. ILS = Israeli new shekel. SAR = Saudi riyal. ZAR = South African rand. GHS = Ghanaian cedi. NGN = Nigerian naira. Sources: Bloomberg L.P; and IFC analysis.

the credit rating landscape has continued to stabilize and improve over the same period between 2015 and 2019. As of 2019, bonds rated at or above the BB range accounted for 70 percent of the yearly new issuance, while bonds rated at the CCC range were phased out (Figure 4.4, panel d).

In short, while the overall bond market across the three target regions has considerable room to grow and mature further, especially in comparison to more sophisticated bond markets in the East Asia and Pacific and Latin America and the Caribbean regions, the quality of their regional bond markets has improved significantly, which is reflected in both the share of bonds rated as well as the progression toward better credit ratings. This welcome development signals that these three regions are ready to embrace further capital market deepening via thematic bond issuances, such as the green and sustainability bond instruments supported by the TAF.

Green and Sustainability Bond Market

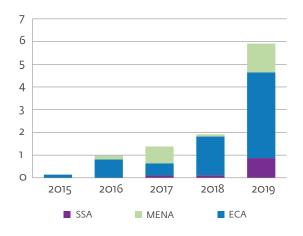
The green and sustainability bond market across the three target regions remains nascent, though it has grown rapidly over the past five years. Registering only \$0.1 billion in 2015, annual green bond issuance from the three regions has risen to \$5.9 billion in 2019 (Figure 4.5, panel a), or 11.3 percent of the overall EM green bond annual issuance during that year.

Even more nascent than the green bond market is the sustainability bond market in the target regions. Within the three target regions, Turkey has been the only country with an issuing history in this space (Figure 4.5, panel b).

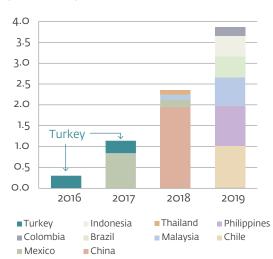
The lack of depth and breadth of both the green and sustainability bond markets in the target regions points to opportunities and justifies the objective of the TAF in aiming to unlock the green and sustainability potential of these regions.

Figure 4.5: Target Region (ECA, MENA, and SSA) Green and Sustainability Bond Market

a. Green bond annual issuance(US\$ billion)



b. Turkey is the only target country with sustainability bond issuance history (US\$ billion)



Sources: Bloomberg L.P.; Climate Bonds Initiative; Environmental Finance; and IFC analysis.

SECTION 5:

Target Countries: TAF Country Selection

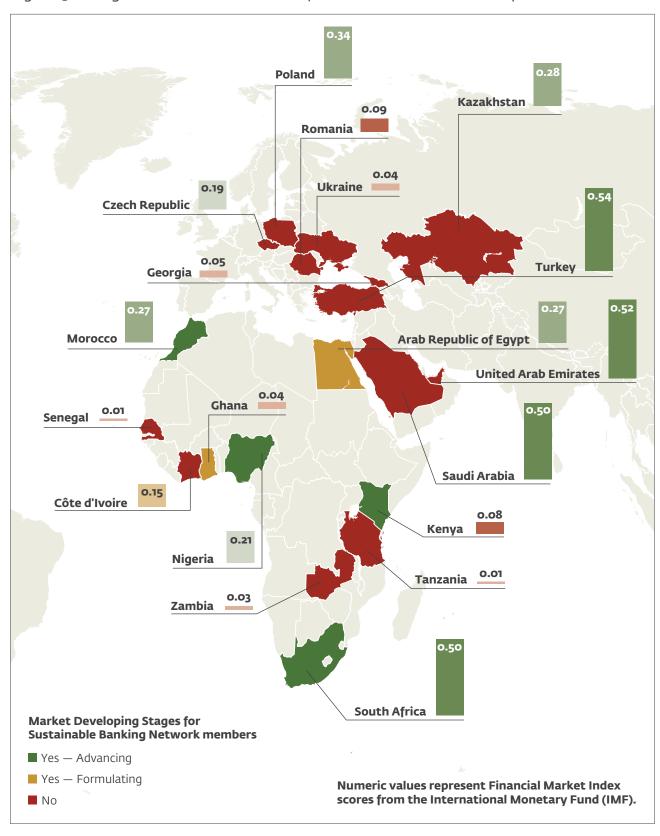
A cross the three target regions, a total of 98 emerging market countries and areas are included in this study (see Annex 3 for the full list). However, most of these countries lack a domestic bond market mature enough for a diverse array of regional and global investors. The TAF has identified 19 countries from the three regions and then prioritized 10 EM countries as the most promising candidates to receive technical assistance designed to unlock the green and sustainability bond potential in their domestic real sectors (See Annex 4 for a full list of the qualitative and quantitative criteria used for selection).

The first step of selecting the target countries entails looking at the financial market development in each EM country. Six target EM countries – South Africa, Nigeria, Ghana, Kenya, Morocco, and Egypt – are already members of the IFC-led Sustainable Banking Network at either an advancing or formulating stage (Figure 5.1). Further, based on the assessment of the IMF's Financial Market Index – which evaluates the maturity of a country's financial

market – nine EM countries received a score above 0.2, indicating a decent level of domestic financial market development. Those EM countries whose Financial Market Index scores are below 0.1 are selected and included largely based on a few existing corporate issuers that have been leaders in either domestic or regional bond markets, and therefore are considered qualified candidates for the TAF.



Figure 5.1: Target Countries and Criteria for Financial Market Development



Note: Data points indicate the Financial Market Index — a metric developed by the IMF to assess the degree of financial market development in each country. Most recent data are as of 2017. According to this metric, the higher the score, the more developed a country's financial market is.

Based on both qualitative and quantitative selection criteria, the TAF has prioritized 10 EM countries from the three target regions (labeled 1–10 in Figure 5.2) with the intention of providing needed training and technical assistance to them. These EM countries are Turkey, Poland, the Czech Republic, Ukraine, Kazakhstan, Morocco, Egypt, South Africa, Nigeria, and Ghana.

As the TAF aims to support the supply side of green and sustainability bond markets in target regions, it is worthwhile to evaluate the target countries' current standings in key market-oriented indices. The presence of an EM country in an industry-acknowledged index often serves as a good indicator of investor interest and a proxy of bond liquidity, especially given the liquidity requirements imposed by various indices.

Turkey, Poland, and South Africa are three leading EM countries that have presence across major EM corporate, sovereign, and environmental, social, and governance (ESG) indices from JPMorgan. In contrast, Côte d'Ivoire remains the only EM target country that has not made it to any of the leading indices examined in this study. The remaining 15 target EM countries have shown adequate presence across the same indices as of May 2020 (Figure 5.2, panel a). It is worth pointing out that, while both Ukraine and Ghana do not receive a Financial Market score above 0.2, they remain two EM country bond markets that attract sufficient international investors, demonstrated by their presence in three out of the four leading JPMorgan EM bond indices (Figure 5.2, panel a).

Figure 5.2: Market-Oriented Criteria for Selecting Target EM Countries a. Share in major bond market indices (Percent. As of end May 2020)

			Index Share (As of May 202	0)
		CEMBI BD (Corp USD)	JESG CEMBI (ESG corp USD)	JESG EMBI (ESG sov USD)	JESG GBI-EM (ESG sov local)
1.	Turkey	3.87%	4.95%	2.59%	1.92%
2.	Poland	0.24%	0.44%	2.32%	10.00%
3.	Czech Republic	0.08%	na	na	7.38%
4.	Ukraine	0.85%	1.29%	1.91%	na
5.	Kazakhstan	0.38%	0.43%	3.19%	na
6.	Morocco	0.61%	0.44%	0.30%	na
7-	Egypt	0.47%	0.07%	1.94%	na
8.	South Africa	2.55%	2.80%	2.35%	7.10%
9.	Nigeria	0.91%	0.74%	na	na
10.	Ghana	0.29%	0.50%	1.49%	na
11.	United Arab Emirates	4.26%	4.14%	5.00%	na
12.	Saudi Arabia	4.13%	3.04%	4.57%	na
13.	Georgia	0.19%	0.30%	na	na
14.	Romania	na	na	1.83%	3.76%
15.	Kenya	na	na	0.71%	na
16.	Tanzania	0.12%	0.11%	na	na
17.	Zambia	1.06%	na	0.17%	na
18.	Senegal	na	na	0.45%	na
19.	Côte d'Ivoire	na	na	na	na

Continued on the next page.

b. Issuer type breakdown in each target country (Percent. As share of total cumulative issuance 2015-2019)

		As %	share of t	otal bon	d issuand	ce (2015-2	019)
		Non- financial Corporates	Financial Institu- tions	Sover- eigns	Agency	Municipal	Local Authority
1.	Turkey	3.5%	57.7%	12.1%	26.7%	0.0%	0.0%
2.	Poland	13.9%	32.6%	38.2%	14.8%	0.5%	0.0%
3.	Czech Republic	38.2%	39.6%	5.0%	16.2%	0.0%	1.0%
4.	Ukraine	15.1%	0.4%	71.6%	12.6%	0.2%	0.0%
5.	Kazakhstan	10.3%	28.3%	22.9%	38.6%	0.0%	0.0%
6.	Morocco	4.9%	0.4%	40.2%	54.5%	0.0%	0.0%
7-	Egypt	0.5%	0.0%	99.5%	0.0%	0.0%	0.0%
8.	South Africa	28.8%	47.6%	13.5%	9.8%	0.3%	0.0%
9	Nigeria	18.3%	16.3%	60.9%	0.4%	3.9%	0.2%
10.	Ghana	2.6%	0.2%	95.9%	1.3%	0.0%	0.0%
11.	United Arab Emirates	8.4%	22.5%	19.6%	49.6%	0.0%	0.0%
12.	Saudi Arabia	7.7%	4.3%	67.1%	20.8%	0.0%	0.1%
13.	Georgia	19.8%	69.3%	0.0%	10.6%	0.0%	0.2%
14.	Romania	3.0%	13.9%	80.7%	0.0%	0.0%	2.4%
15.	Kenya	4.4%	2.5%	93.1%	0.0%	0.0%	0.0%
16.	Tanzania	43.6%	56.4%	0.0%	0.0%	0.0%	0.0%
17.	Zambia	46.8%	0.0%	53.2%	0.0%	0.0%	0.0%
18.	Senegal	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
19.	Côte d'Ivoire	2.6%	0.1%	97.3%	0.0%	0.0%	0.0%

Note: CEMBI BD is the JPMorgan Corporate Emerging Market Bond Index (Broad Diversified), an index capturing EM corporate bonds denominated in US dollars. JESG CEMBI is the JPMorgan Corporate Emerging Market ESG Bond Index, an index capturing EM corporate ESG bonds denominated in US dollars. JESG EMBI is the JPMorgan Sovereign Emerging Market ESG Index, an index capturing EM sovereign bonds denominated in US dollars. JESG GBI-EM is the JPMorgan Sovereign Emerging Market ESG Index, an index capturing EM sovereign bonds denominated in local currencies. "na" indicates that the target EM country has no presence in an index as of May 2020. Sources: JPMorgan, June 2020; Bloomberg L.P.; and IFC analysis.

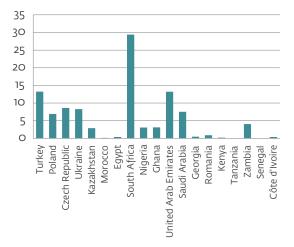
One factor to gauge the level of bond market development in a country is the composition of its issuer base. A diverse spectrum of issuers often indicates a well-established bond market. Focusing on the period between 2015 and 2019, this study finds that South Africa, Poland, the Czech Republic, Ukraine, and Nigeria (from the prioritized 10 EM countries), as well as Georgia, Tanzania, and Zambia (from the remaining 9 EM countries) are among the leading target EM countries with a meaningful share of cumulative bond volume issued by the non-financial corporate, or real sector (Figure 5.2, panel b).

While the share of corporate bonds issued by the real sector in each target country provides a development indicator of that country's real sector bond market, it is worth noting that, in terms of absolute volume, the landscape of promising candidates varies slightly from previous analysis. Although South Africa, Poland, the Czech Republic, and Ukraine continue to be leaders among their peers given the cumulative bond volume issued by their domestic real sector corporates, other EM countries such as Turkey, the United Arab Emirates, and Saudi Arabia stand out with significant issuance volumes.

Although the cumulative bond issuance volume from Turkey's real sector issuers accounts for only 3.5 percent of the overall bond market between 2015 and 2019 (Figure 5.2, panel b), it still amounts to \$13.2 billion, the second highest among both the prioritized 10 as well as all 19 target countries (Figure 5.3).

Similarly, the United Arab Emirates and Saudi Arabia from MENA do not possess a significantly large real sector issuer base compared to other types of domestic issuers, accounting for only 8.4 and 7.7 percent, respectively, of the cumulative issuance volume during the 2015-2019 period. However, in terms of absolute volume the two countries have contributed \$13.2 and \$7.5 billion cumulative issuance, respectively, from the real sector during the studied five-year period (Figure 5.3), and therefore deserve consideration for the TAF. However, given the relatively developed states of their bond markets, both the United Arab Emirates and Saudi Arabia are not considered priority countries from the three target regions.

Figure 5.3: Real Sector Cumulative Bond Issuance between 2015 and 2019 (US\$ billion)



Sources: Bloomberg L.P.; and IFC analysis.



SECTION 6:

Conclusion

he global green and sustainability bond market has grown rapidly as the world pays more attention to the negative impact and risks brought on by climate change. Developing countries, at the forefront of potential negative impact from climate change, have stepped up to meet this challenge with green bond issuance for more than a decade. Since the debut of the first emerging market corporate green bond from South Africa in 2012, the EM green bond market has expanded exponentially, reaching a record annual issuance of \$52.2 billion in 2019 and accounting for one-fifth of the world's total green bond issuance that year. The emerging market sustainability bond market, in contrast, remains relatively nascent, but has seen meaningful growth in recent years.

However, such fast-paced growth in the EM green bond market remains uneven across different EM regions, with East Asia Pacific – dominated by China – and Latin America and the Caribbean leading the way. In addition, government and financial institutions in developing countries have led the way in issuing green bonds, and real sector corporates have yet to catch up. Presented with the unbalanced

issuance landscape and dedicated to unleashing the green and sustainability bond potential in the real sector in the most underdeveloped EM regions, the Technical Assistance Facility led by IFC aims to provide crucial technical assistance to real sector issuers in three target regions: Europe and Central Asia, Middle East and North Africa, and Sub-Saharan Africa.

This research, supported by the TAF and the first of a series, evaluates the current bond market conditions of these three target regions and identifies 10 target countries as promising candidates for growing their future green and sustainability bond markets. This research has found encouraging development within the real sector bond market in the target regions at large, as well as in the identified target countries. In summary, the target regions have seen steady growth in real sector bond issuance between 2015 and 2019, continuously improving credit rating profiles, and diversification into additional currencies and industries.

Challenges remain, however, as many target countries continue to rely on government and financial institutions to support their domestic green bond markets; many countries have relatively nascent bond issuing experience from the real sector; and many lack the level of sophistication required to issue green and sustainability bonds. The TAF aims to provide technical assistance to potential issuers in these countries in order to address these challenges and guide them toward a more green and sustainable capital market development. This approach attempts to stimulate the supply side of the real sector green and sustainability bond markets in underdeveloped emerging market countries, and by doing so hopes to attract a wider global investor base to these markets.

Annex

ANNEX 1:

Data Sources and Methodology

This study primarily focuses on bond markets in Europe and Central Asia, Middle East and North Africa, and Sub-Saharan Africa, including all bond instruments issued by all participating issuers in the market (both government and corporate sectors) for the period between 2015 and 2019.

The study adopts the Bloomberg Barclays BCLASS classification to label bonds, with slight modification to distinguish municipal bonds from overall bonds issued by local authorities (See Annex 2 Definitions section for details).

This study uses the JP Morgan Emerging Market Index research database and Bank for International Settlements (BIS) database to gauge the global bond market size in terms of outstanding value.

ANNEX 2:

Definitions

Emerging market countries and areas selected in this study are defined as developing economies by the combined list of the World Bank Group members and the JPMorgan CEMBI Index. Most emerging market economies included in this study fall under the WBG-defined low-income, lower-middle-income, or upper-middle-income brackets, whereas high-income economies are often considered as developed market. However, this study also takes into account the definition of "emerging market" widely applied by global capital market participants, and therefore considers it appropriate to include the following economies, despite their "high-income" status: Bahrain, Croatia, Cyprus, the Czech Republic, Estonia, Hungary, Israel, Kuwait, Latvia, Lithuania, Malta, Mauritius, Oman, Poland, Romania, Qatar, Saudi Arabia, Seychelles, Slovak Republic, and the United Arab Emirates.⁵

Green bonds: fixed-income instruments with proceeds earmarked exclusively for new and existing projects that have environmental benefits. The International Capital Markets Association (ICMA) has developed four components under the Green Bond Principles (GBP): use of proceeds, process for project evaluation and selection, management of proceeds, and reporting. Several countries and jurisdictions have developed their own green bond guidelines, with various levels of alignment with the GBP.

Sustainability bonds: debt instruments whose proceeds finance and refinance a combination of green and social projects. ICMA has established the Sustainability Bond Guidelines that align with the four core components of the GBP and Social Bond Principles (SBP).

This study adopts the Bloomberg Barclays Classification System (BCLASS), with modification to distinguish municipal bonds from the larger "local authority" classification. Definition of each classification is listed below.

The full list of World Bank Country and Lending Groups can be found here: https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups

Sovereign: fixed-income securities issued directly by central governments.

Government Agency: fixed-income securities issued by entities that have a relationship with a governmental body.

Municipal: fixed-income securities issued directly by local authorities.

Local Authority: fixed-income securities issued directly by companies that are 50 percent or more owned by one or more local authorities.

Financial Institution: corporate securities issued by companies that provide debt financial products or services. This classification includes banks, brokerages, asset managers, exchanges, finance companies, insurance companies, REITs, and other companies that provide financial products or services.

Non-financial Corporate: corporate securities issued by companies that do not fall under "financial institution." This classification includes basic industry, capital goods, consumer cyclical, consumer non-cyclical, energy, technology, transportation, communications, utility, and other industrial. This classification is often considered the "real sector."

ANNEX 3:

The Scope of Target Region Bond Market in ECA, MENA, and SSA

This annex discloses all the countries and areas included in the bond market analysis in each target region (ECA, MENA, and SSA). Please note that not every country or area necessarily issues bonds.

- → Countries and areas in **red** (Kosovo and South Sudan) are not listed as independent countries in Bloomberg, but instead as part of Serbia's and Sudan's bond markets.
- → Country/area in **purple** (Western Sahara) is listed by Bloomberg as a separate entity from Morocco.
- → Countries in **blue** are developed ECA countries, which are not included in the regional bond market assessment.
- → Not every country/area issues any form of bonds between 2015 and 2019.

Europe and Central Asia [29]

Albania Germany **Netherlands Andorra** Gibraltar North Macedonia Armenia Greece **Norway Austria** Greenland Poland Azerbaijan Hungary **Portugal** Belarus **Iceland** Romania

BelgiumIrelandRussian FederationBosnia and HerzegovinaIsle of ManSan Marino

Bulgaria **Italy** Serbia

Channel Islands Kazakhstan Slovak Republic

Croatia Kosovo Slovenia
Cyprus Kyrqyz Republic Spain

Czech RepublicLatviaSwedenDenmarkLiechtensteinSwitzerlandEstoniaLithuaniaTajikistanFaroe IslandsLuxembourgTurkmenistan

FinlandMoldovaUkraineFranceMonacoUnited KingdomGeorgiaMontenegroUzbekistan

Sub-Saharan Africa [49]

Angola Gabon Rwanda

Benin Gambia, The São Tomé and Principe

Botswana Ghana Senegal Burkina Faso Guinea Seychelles Burundi Guinea-Bissau Sierra Leone Cabo Verde Somalia Kenya Cameroon Lesotho South Africa

Central African Republic Liberia South Sudan Chad Madagascar Sudan Comoros Malawi Tanzania Mali Togo Congo, Dem. Rep.

Congo, Rep. Mauritania Uganda Côte d'Ivoire Mauritius Zambia **Equitorial Guinea** Mozambique Zimbabwe

Eritrea Namibia Western Sahara Eswatini Niger Nigeria

Middle East and North Africa [21]

Ethiopia

Algeria Jordan Qatar

Bahrain Kuwait Saudi Arabia

Djibouti Lebanon Syrian Arab Republic

Egypt, Arab Rep. Tunisia Libya

United Arab Emirates Iran, Islamic Rep. Malta West Bank and Gaza Morocco Iraq

Israel Oman Yemen, Rep.

ANNEX 4:

All Criteria for Target Country Selection

Source: SBN; Bloomberg L.P.; Climate Bonds Initiative; Environmental Finance Magazine; JP Morgan, June 2020; IFC analysis.

	Country	Region	SBN member / SBN stage	Green Bond (US\$ bn, 2012-2019)	IMF Financial Market Index (2017)
1.	Turkey	ECA	No	0.10	0.54
2.	Poland	ECA	No	4.66	0.34
3.	Czech Republic	ECA	No	0.83	0.19
4.	Ukraine	ECA	No	0.36	0.04
5,	Kazakhstan	ECA	No	-	0.28
6.	Morocco	MENA	Yes / Advancing	0.36	0.27
7-	Egypt	MENA	Yes - Formulating	-	0.27
8.	South Africa	SSA	Yes / Advancing	2.16	0.50
9.	Nigeria	SSA	Yes / Advancing	0.14	0.21
10	Ghana	SSA	Yes - Formulating	-	0.04
11.	United Arab Emirates	MENA	No	1.86	0.52
12.	Saudi Arabia	MENA	No	-	0.50
13.	Georgia	ECA	No	-	0.05
14.	Romania	ECA	No	-	0.09
15.	Kenya	SSA	Yes / Advancing	0.04	0.08
16.	Tanzania	SSA	No	-	0.01
17.	Zambia	SSA	No	-	0.03
18.	Senegal	SSA	No	-	0.01
19.	Côte d'Ivoire	SSA	No	-	0.15

			vereign (Rating s of May		Index Share (As of May 2020)			
	Country	S&P	Moody's	Fitch	CEMBI BD (Corp USD)	JESG CEMBI (ESG corp USD)	JESG EMBI (ESG sov USD)	JESG GBI-EM (ESG sov local)
1.	Turkey	B+	B1	BB-	3.87%	4.95%	2.59%	1.92%
2.	Poland	A-	A2	A-	0.24%	0.44%	2.32%	10.00%
3.	Czech Republic	AA-	Aa3	AA-	0.08%	na	na	7.38%
4.	Ukraine	В	Caaı	В	0.85%	1.29%	1.91%	na
5,	Kazakhstan	BBB-	Вааз	BBB	0.38%	0.43%	3.19%	na
6.	Morocco	BBB-	Ваі	BBB-	0.61%	0.44%	0.30%	na
7-	Egypt	В	B2	B+	0.47%	0.07%	1.94%	na
8.	South Africa	BB-	Ваі	BB	2.55%	2.80%	2.35%	7.10%
9.	Nigeria	B-	В2	В	0.91%	0.74%	na	na
10	Ghana	В	В3	В	0.29%	0.50%	1.49%	na
11.	United Arab Emirates	AA	Aa2	AA	4.26%	4.14%	5.00%	na
12.	Saudi Arabia	A-	A1	А	4.13%	3.04%	4.57%	na
13.	Georgia	ВВ	Ba2	ВВ	0.19%	0.30%	na	na
14.	Romania	BBB-	Вааз	BBB-	na	na	1.83%	3.76%
15.	Kenya	B+	В2	B+	na	na	0.71%	na
16.	Tanzania	na	В1	na	0.12%	0.11%	na	na
17.	Zambia	CCC	Ca	CC	1.06%	na	0.17%	na
18.	Senegal	B+	Ba3	na	na	na	0.45%	na
19.	Côte d'Ivoire	na	Ba3	B+	na	na	na	na

Annex 4 continued.

		As	s % share o	f total bon	ıd issuance	e (2015-201	9)
	Country	Non- financial Corporates	Financial Institutions	Sovereigns	Agency	Municipal	Local Authority
1.	Turkey	3.5%	57.7%	12.1%	26.7%	0.0%	0.0%
2.	Poland	13.9%	32.6%	38.2%	14.8%	0.5%	0.0%
3.	Czech Republic	38.2%	39.6%	5.0%	16.2%	0.0%	1.0%
4.	Ukraine	15.1%	0.4%	71.6%	12.6%	0.2%	0.0%
5,	Kazakhstan	10.3%	28.3%	22.9%	38.6%	0.0%	0.0%
6.	Morocco	4.9%	0.4%	40.2%	54.5%	0.0%	0.0%
7-	Egypt	0.5%	0.0%	99.5%	0.0%	0.0%	0.0%
8.	South Africa	28.8%	47.6%	13.5%	9.8%	0.3%	0.0%
9.	Nigeria	18.3%	16.3%	60.9%	0.4%	3.9%	0.2%
10	Ghana	2.6%	0.2%	95.9%	1.3%	0.0%	0.0%
11.	United Arab Emirates	8.4%	22.5%	19.6%	49.6%	0.0%	0.0%
12.	Saudi Arabia	7.7%	4.3%	67.1%	20.8%	0.0%	0.1%
13.	Georgia	19.8%	69.3%	0.0%	10.6%	0.0%	0.2%
14.	Romania	3.0%	13.9%	80.7%	0.0%	0.0%	2.4%
15.	Kenya	4.4%	2.5%	93.1%	0.0%	0.0%	0.0%
16.	Tanzania	43.6%	56.4%	0.0%	0.0%	0.0%	0.0%
17.	Zambia	46.8%	0.0%	53.2%	0.0%	0.0%	0.0%
18.	Senegal	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
19.	Côte d'Ivoire	2.6%	0.1%	97.3%	0.0%	0.0%	0.0%

Annex 4 continued.

				ı	Non-fin	ancia	l Corpo	rate Se	ctor A	nalysis	(2015-20	019)			
	Country	Cumulative Issuance (USD bn)	Median Maturity (Year)	Local Currency (%)	Basic Industry	Capital Goods	Commu- nications	Consumer Cyclical	Energy	Other In- dustrial	Technol- ogy	Transpor- tation	Electric	Other Utility	Natural Gas
1.	Turkey	13.2	1.5	46.9%	0.7%	22.4%	11.4%	20.8%	13.3%	4.8%	0.0%	9.3%	9.7%	0.0%	0.4%
2.	Poland	6.9	3.0	68.5%	10.5%	1.9%	12.5%	11.9%	16.3%	26.4%	1.1%	1.2%	8.2%	0.0%	0.0%
3.	Czech Republic	8.6	5.0	26.5%	2.4%	4.1%	15.8%	12.8%	1.2%	21.5%	0.0%	0.5%	12.5%	2.5%	26.0%
4.	Ukraine	8.3	5.0	0.2%	47.9%	4.3%	0.0%	3.7%	0.0%	0.0%	0.0%	0.1%	17.3%	0.0%	0.0%
5,	Kazakhstan	2.9	5.0	26.5%	0.1%	0.0%	16.2%	0.0%	82.0%	0.0%	0.0%	0.0%	1.7%	0.0%	0.0%
6.	Morocco	0.1	17.5	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
7-	Egypt	0.4	4.9	0.0%	0.0%	0.0%	0.0%	73.6%	0.0%	26.4%	0.0%	0.0%	0.0%	0.0%	0.0%
8.	South Africa	29.4	3.0	28.5%	51.2%	0.2%	13.1%	24.8%	0.5%	2.0%	0.0%	2.9%	0.0%	0.0%	0.0%
9.	Nigeria	3.1	5.0	18.9%	0.0%	9.9%	68.7%	0.0%	12.4%	4.6%	0.0%	0.9%	0.8%	0.0%	0.0%
10	Ghana	3.1	3.0	46.2%	0.0%	0.0%	0.0%	0.0%	53.8%	42.6%	0.0%	0.3%	0.0%	0.0%	0.0%
11.	United Arab Emirates	13.2	5.0	1.4%	0.0%	0.0%	0.2%	18.2%	20.1%	27.2%	0.0%	27.8%	0.0%	0.0%	0.0%
12.	Saudi Arabia	7.5	5.3	48.6%	15.9%	1.4%	0.0%	1.8%	7.9%	31.4%	0.0%	13.8%	1.1%	10.8%	0.0%
13.	Georgia	0.5	3.0	24.6%	0.0%	0.0%	45.9%	5.6%	0.0%	26.1%	0.0%	0.0%	0.0%	3.3%	0.0%
14.	Romania	0.9	4.8	0.3%	0.0%	4.0%	93.2%	0.3%	0.0%	0.0%	0.0%	2.5%	0.0%	0.1%	0.0%
15.	Kenya	0.2	5.0	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.1%	0.0%	0.0%	0.0%	0.0%	0.0%
16.	Tanzania	0.0	5.0	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
17.	Zambia	4.1	7.0	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
18.	Senegal	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19.	Côte d'Ivoire	0.4	7.0	12.0%	88.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.5%	0.0%	0.0%	0.0%

ANNEX 5:

List of Identified Real Sector Corporate Issuers in Target EM Regions

Company Name	Country	Region	Sector
Avast PLC	Czech Republic	ECA	Industrial
Bidfood Czech Republic s.r.o.	Czech Republic	ECA	Industrial
Central European Media Enterprises Ltd	Czech Republic	ECA	Industrial
CETIN AS	Czech Republic	ECA	Industrial
EP Infrastructure AS	Czech Republic	ECA	Utility
Plzensky Prazdroj, a.s.	Czech Republic	ECA	Industrial
Severomoravske Vodovody a Kanalizace Ostrava AS	Czech Republic	ECA	Utility
ADES International Holding PLC	Egypt	MENA	Industrial
Dcarbon Egypt	Egypt	MENA	Technology
Eastern Co SAE	Egypt	MENA	
ElSewedy Electric Co	Egypt	MENA	Industrial
Oriental Weavers	Egypt	MENA	Industrial
Six of October Development & Investment	Egypt	MENA	Industrial
Talaat Moustafa Group	Egypt	MENA	Industrial
Telecom Egypt Co	Egypt	MENA	Industrial
Georgian Railway JSG	Georgia	ECA	Agency
Kosmos Energy Ghana HC	Ghana	SSA	Industrial
Tullow Oil PLC	Ghana	SSA	Industrial
Green Development Limited (GDL)	Ghana	SSA	Utilities
Amangeldy Gas LLP	Kazakhstan	ECA	Industrial
KazTransGas Aimak JSC	Kazakhstan	ECA	Agency
KazMunayGas National Co JSC	Kazakhstan	ECA	Agency
Kazakhstan Temir Zholy National Co JSC	Kazakhstan	ECA	Agency
Nostrum Oil & Gas PLC	Kazakhstan	ECA	Industrial
Tengizchevroil Finance Co International Ltd	Kazakhstan	ECA	Industrial
Africa Practice East Africa Ltd	Kenya	SSA	Commercial Services
East African Breweries Ltd	Kenya	SSA	Industrial
Safaricom, Ltd.	Kenya	SSA	Industrial
ASG Finance Designated Activity Co	Lithuania	ECA	Industrial
OCP SA	Morocco	MENA	Agency
Groupe Office	Morocco	MENA	Industrial
Ciments du Maroc SA	Morocco	MENA	Industrial
Cosumar	Morocco	MENA	Industrial
Maroc Telecom	Morocco	MENA	Agency
LafargeHolcim Maroc SA	Morocco	MENA	Industrial
TAQA Morocco SA	Morocco	MENA	Utility

Company Name	Country	Region	Sector
TOTAL Maroc SA	Morocco	MENA	Industrial
Dangote Cement PLC	Nigeria	SSA	Industrial
IHS Netherlands Holdco BV	Nigeria	SSA	Industrial
MTN Nigeria Communications Ltd	Nigeria	SSA	Industrial
Nestle Nigeria PLC	Nigeria	SSA	Industrial
Nigerian Breweries Plc	Nigeria	SSA	Industrial
SEPLAT Petroleum Development Co Plc	Nigeria	SSA	Industrial
Asseco Poland SA	Poland	ECA	Industrial
Budimex SA	Poland	ECA	Industrials
CCC SA	Poland	ECA	Industrial
CD Projekt SA	Poland	ECA	Technology
Ciech SA	Poland	ECA	Industrial
Cyfrowy Polsat SA	Poland	ECA	Industrial
Dino Polska SA	Poland	ECA	Industrial
Energa SA	Poland	ECA	Agency
Eurocash SA	Poland	ECA	Industrial
Grupa Azoty SA	Poland	ECA	Industrial
Grupa Lotos SA	Poland	ECA	Industrial
KGHM Polska Miedz SA	Poland	ECA	Industrial
LPP SA	Poland	ECA	Industrial
Orange Polska SA	Poland	ECA	Industrial
Oriflame Poland Sp zoo	Poland	ECA	Industrial
P4 Sp zoo	Poland	ECA	Industrial
PKP Cargo SA	Poland	ECA	Industrial
Polski Koncern Naftowy ORLEN SA	Poland	ECA	Industrial
Tauron Polska Energia SA	Poland	ECA	Utility
Digi Communications NV	Romania	ECA	Industrial
RCS & RDS SA	Romania	ECA	Industrial
Abdullah Al Othaim Markets Co	Saudi Arabia	MENA	Industrial
Advanced Petrochemical Co	Saudi Arabia	MENA	Industrial
Aldrees Petroleum and Transport Services Company SJSC	Saudi Arabia	MENA	Industrial
Almarai Co JSC	Saudi Arabia	MENA	Industrial
Arabian Cement Co/Saudi Arabia	Saudi Arabia	MENA	Industrial
Arabian Centres Co Ltd	Saudi Arabia	MENA	Industrial
City Cement Co	Saudi Arabia	MENA	Industrial
Dar Al-Arkan Sukuk Co Ltd	Saudi Arabia	MENA	Industrial
Eastern Province Cement Co	Saudi Arabia	MENA	Industrial
Etihad Etisalat Co	Saudi Arabia	MENA	Industrial
Fawaz Abdulaziz Al Hokair & Co	Saudi Arabia	MENA	Industrial
Jarir Marketing Co	Saudi Arabia	MENA	Industrial
Mobile Telecommunications Co Saudi Arabia	Saudi Arabia	MENA	Industrial
Mouwasat Medical Services Co	Saudi Arabia	MENA	Industrial

Company Name	Country	Region	Sector
National Industrialization Co	Saudi Arabia	MENA	Industrial
Rabigh Refining and Petrochemical Company	Saudi Arabia	MENA	Industrial
Sahara International Petrochemical Co	Saudi Arabia	MENA	Industrial
Saudi Airlines Catering Co	Saudi Arabia	MENA	Industrial
Saudi Arabian Fertilizer Co	Saudi Arabia	MENA	Industrial
Saudi Arabian Mining Co	Saudi Arabia	MENA	Industrial
Saudi Arabian Oil Co	Saudi Arabia	MENA	Agency
Saudi Basic Industries Corp	Saudi Arabia	MENA	Agency
Saudi Cement Co	Saudi Arabia	MENA	Industrial
Saudi Electricity Co	Saudi Arabia	MENA	Agency
Saudi Ground Services Co	Saudi Arabia	MENA	Industrial
Saudi Industrial Investment Group	Saudi Arabia	MENA	Industrial
Saudi Kayan Petrochemical Co	Saudi Arabia	MENA	Industrial
Saudi Pharmaceutical Industries and Medical Appliances Corp	Saudi Arabia	MENA	Industrial
Saudi Telecom Co	Saudi Arabia	MENA	Agency
Saudia Dairy & Foodstuff Co	Saudi Arabia	MENA	Industrial
Savola Group/The	Saudi Arabia	MENA	Industrial
Southern Province Cement Co	Saudi Arabia	MENA	Industrial
United Electronics Co	Saudi Arabia	MENA	Industrial
Yanbu Cement Co	Saudi Arabia	MENA	Industrial
Yanbu National Petrochemicals Company	Saudi Arabia	MENA	Industrial
Societe Nationale des Telecommunications du Senegal SA	Senegal	SSA	Industrial
Adcock Ingram Holdings Ltd	South Africa	SSA	Industrial
AECI Ltd	South Africa	SSA	Industrial
AFRICAN RAINBOW MINERALS LIMITED	South Africa	SSA	Industrial
Anglo American PLC	South Africa	SSA	Industrial
Anglo American Platinum Ltd	South Africa	SSA	Industrial
AngloGold Ashanti Ltd	South Africa	SSA	Industrial
Aspen Pharmacare Holdings Ltd	South Africa	SSA	Industrial
Assore Ltd	South Africa	SSA	Industrial
Astral Foods Ltd	South Africa	SSA	Industrial
Aurecon South Africa Pty Ltd	South Africa	SSA	Industrial
AVI Ltd	South Africa	SSA	Industrial
Barloworld Ltd	South Africa	SSA	Industrial
Bid Corp Ltd	South Africa	SSA	Industrial
Bidvest Group Ltd/The	South Africa	SSA	Industrial
Clicks Group Ltd	South Africa	SSA	Industrial
DATATEC LIMITED	South Africa	SSA	Industrial
Dis-Chem Pharmacies Ltd	South Africa	SSA	Industrial
Eskom Holdings SOC Ltd	South Africa	SSA	Agency
Exxaro Resources Ltd	South Africa	SSA	Industrial
Foschini Group Ltd/The	South Africa	SSA	Industrial

Company Name	Country	Region	Sector
Gold Fields Ltd	South Africa	SSA	Industrial
Growthpoint Properties Ltd	South Africa	SSA	Financial Institutions
Harmony Gold Mining Co Ltd	South Africa	SSA	Industrial
Impala Platinum Holdings Ltd	South Africa	SSA	Industrial
Imperial Logistics Ltd	South Africa	SSA	Industrial
KAP Industrial Holdings Ltd	South Africa	SSA	Industrial
Kumba Iron Ore Ltd	South Africa	SSA	Industrial
Lewis Group Ltd	South Africa	SSA	Industrial
Life Healthcare Group Holdings	South Africa	SSA	Industrial
Massmart Holdings Ltd	South Africa	SSA	Industrial
Mediclinic International PLC	South Africa	SSA	Industrial
Mercedes-Benz South Africa (Pty) Ltd	South Africa	SSA	Industrial
Motus Holdings Ltd	South Africa	SSA	Industrial
MTN Group Ltd	South Africa	SSA	Industrial
MTN Mauritius Investments Ltd	South Africa	SSA	Industrial
MultiChoice Group	South Africa	SSA	Industrial
Nampak Ltd	South Africa	SSA	Industrial
Naspers Ltd	South Africa	SSA	Industrial
Netcare Ltd	South Africa	SSA	Industrial
Nochua International	South Africa	SSA	Industrial
Northam Platinum Ltd	South Africa	SSA	Industrial
OCEANA GROUP LIMITED	South Africa	SSA	Industrial
Pepkor Holdings Ltd	South Africa	SSA	Industrial
Petra Diamonds Ltd	South Africa	SSA	Industrial
Pick n Pay Stores Ltd	South Africa	SSA	Industrial
Pioneer Foods Group Ltd	South Africa	SSA	Industrial
PPC Ltd	South Africa	SSA	Industrial
Prosus NV	South Africa	SSA	Industrial
Remgro Ltd	South Africa	SSA	Industrial
Reunert Ltd	South Africa	SSA	Industrial
Royal Bafokeng Platinum Ltd	South Africa	SSA	Industrial
Sappi Ltd	South Africa	SSA	Industrial
Sasol Ltd	South Africa	SSA	Industrial
Shoprite Holdings Ltd	South Africa	SSA	Industrial
SPAR Group Ltd/The	South Africa	SSA	Industrial
Sibanye Stillwater Ltd	South Africa	SSA	Industrial
Steinhoff International Holdings N.V.	South Africa	SSA	Industrial
Super Group Ltd/South Africa	South Africa	SSA	Industrial
Telkom SA SOC Ltd	South Africa	SSA	Industrial
Tiger Brands Ltd	South Africa	SSA	Industrial
Truworths International Ltd	South Africa	SSA	Industrial
Vodacom Group Ltd	South Africa	SSA	Industrial
Wilson Bayly Holmes - Ovcon Ltd	South Africa	SSA	Industrial

Company Name	Country	Region	Sector
Woolworths Holdings Ltd/South Africa	South Africa	SSA	Industrial
Helios Towers Ltd	Tanzania	SSA	Industrial
AG Anadolu Grubu Holding AS	Turkey	ECA	Industrial
Aksa Akrilik Kimya Sanayii AS	Turkey	ECA	Industrial
Aksa Enerji Uretim AS	Turkey	ECA	Utility
Alarko Holding AS	Turkey	ECA	Utility
Anadolu Cam Sanayii AS	Turkey	ECA	Industrial
Anadolu Efes Biracilik ve Malt Sanayii AS	Turkey	ECA	Industrial
Arcelik AS	Turkey	ECA	Industrial
Aygaz AS	Turkey	ECA	Industrial
Bera Holding AS	Turkey	ECA	Industrial
BIM Birlesik Magazalar AS	Turkey	ECA	Industrial
Brisa Bridgestone Sabanci Sanayi ve Ticaret AS	Turkey	ECA	Industrial
Coca-Cola Icecek AS	Turkey	ECA	Industrial
Dogan Sirketler Grubu Holding AS	Turkey	ECA	Industrial
EGE Endustri VE Ticaret AS	Turkey	ECA	Industrial
Enerjisa Enerji AS	Turkey	ECA	Utility
Eregli Demir ve Celik Fabrikalari TAS	Turkey	ECA	Industrial
Ford Otomotiv Sanayi AS	Turkey	ECA	Industrial
Gubre Fabrikalari TAS	Turkey	ECA	Industrial
Kardemir Karabuk Demir Celik Sanayi ve Ticaret AS Class A	Turkey	ECA	Industrial
KOC Holding AS	Turkey	ECA	Industrial
Konya Cimento Sanayii AS	Turkey	ECA	Industrial
Kordsa Teknik Tekstil AS	Turkey	ECA	Industrial
Koza Altin Isletmeleri AS	Turkey	ECA	Industrial
Koza Anadolu Metal Madencilik Isletmeleri AS	Turkey	ECA	Industrial
Logo Yazilim Sanayi Ve Ticaret AS	Turkey	ECA	Industrial
Mavi Giyim Sanayi Ve Ticaret AS Class B Shares	Turkey	ECA	Industrial
Mercedes-Benz Finansman Turk AS	Turkey	ECA	Industrial
Mersin Uluslararasi Liman Isletmeciligi AS	Turkey	ECA	Industrial
Migros Ticaret AS	Turkey	ECA	Industrial
MLP Saglik Hizmetleri AS	Turkey	ECA	Industrial
Otokoc Otomotiv Ticaret Ve Sanayi AS	Turkey	ECA	Industrial
Pegasus Hava Tasimaciligi AS	Turkey	ECA	Industrial
Petkim Petrokimya Holding AS	Turkey	ECA	Agency
Semtrio Sustainability Consultancy	Turkey	ECA	Commercial Services
Soda Sanayii AS	Turkey	ECA	Industrial
Sok Marketler Ticaret AS	Turkey	ECA	Industrial
Tat Gida Sanayi AS	Turkey	ECA	Industrial
TAV Havalimanlari Holding AS	Turkey	ECA	Industrial

Company Name	Country	Region	Sector
Tekfen Holding AS	Turkey	ECA	Industrial
Tofas Turk Otomobil Fabrikasi AS	Turkey	ECA	Industrial
Trakya Cam Sanayii AS	Turkey	ECA	Industrial
Tupras Turkiye Petrol Rafinerileri AS	Turkey	ECA	Industrial
Turk Hava Yollari AO	Turkey	ECA	Industrial
Turk Telekomunikasyon AS	Turkey	ECA	Industrial
Turkcell Iletisim Hizmetleri AS	Turkey	ECA	Industrial
Turk Traktor ve Ziraat Makineleri AS	Turkey	ECA	Industrial
Turkiye Sise ve Cam Fabrikalari AS	Turkey	ECA	Industrial
Ulker Biskuvi Sanayi AS	Turkey	ECA	Industrial
Yatas Yatak ve Yorgan Sanayi ve Ticaret AS	Turkey	ECA	Industrial
Zorlu Enerji Elektrik Uretim AS	Turkey	ECA	Utility
BFSE IIc	Ukraine	ECA	Industrial
Kernel Holding SA	Ukraine	ECA	Industrial
MHP SE	Ukraine	ECA	Industrial
Air Arabia PJSC	United Arab Emirates	MENA	Industrial
Arabtec Holding PJSC	United Arab Emirates	MENA	Industrial
Borr Drilling Ltd	United Arab Emirates	MENA	Industrial
DP World PLC	United Arab Emirates	MENA	Agency
DXB Entertainments PJSC	United Arab Emirates	MENA	Industrial
Emirates Telecommunications Group Co PJSC	United Arab Emirates	MENA	Agency
Gulf Marine Services PLC	United Arab Emirates	MENA	Industrial
Lamprell PLC	United Arab Emirates	MENA	Industrial
NMC Health PLC	United Arab Emirates	MENA	Industrial
Orascom Construction PLC	United Arab Emirates	MENA	Industrial



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