

Emerging Markets Local Currency Debt and Foreign Investors

Recent Developments

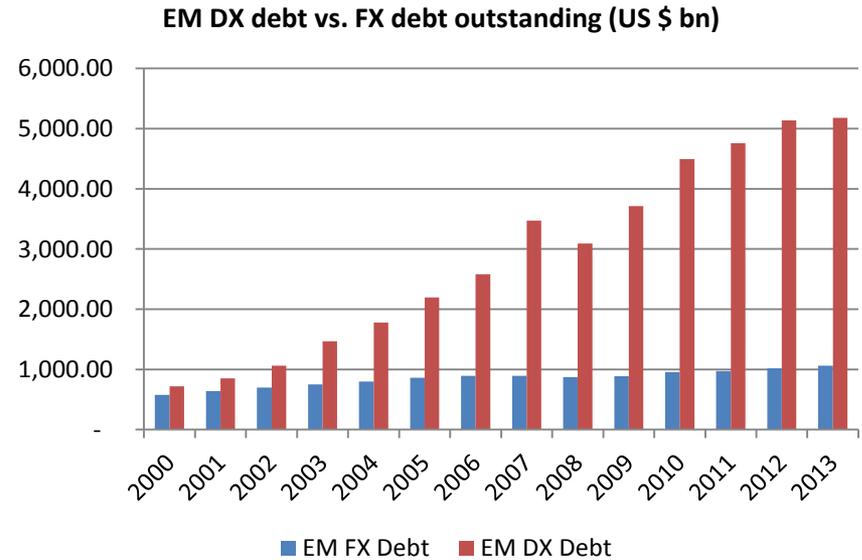
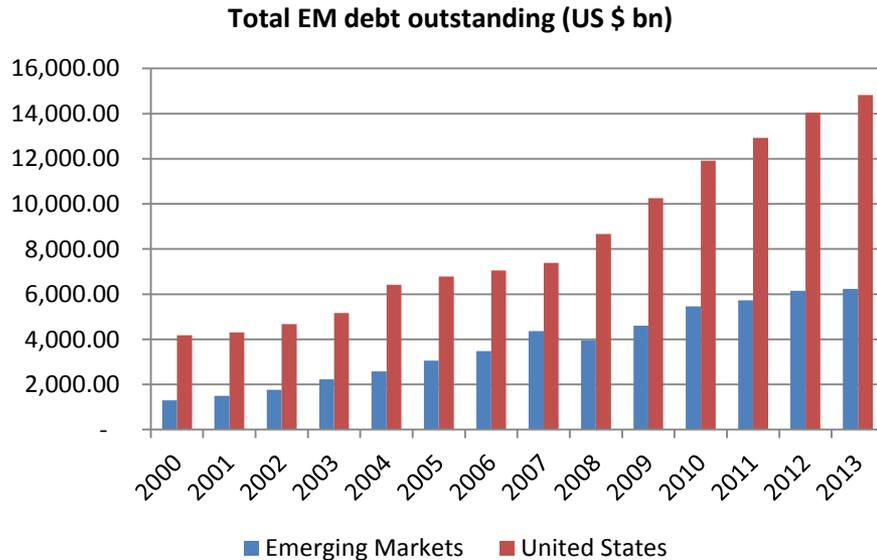


THE WORLD BANK

Treasury

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Explosive growth of EM local currency debt



EM DX debt: EM local currency domestic sovereign debt; FX EM: EM hard currency debt

Source: Bloomberg and WB staff calculations.

- ❑ The market capitalization of EM debt grew significantly during last 14 years. While sovereign debt outstanding for 55 emerging markets, amounted to \$1.3 trillion in 2000, 13 years later it had grown six-fold to \$6.3 trillion. With \$6.3 trillion, EM debt outstanding now almost half of the size of the US Treasury markets, the world biggest and most liquid market.
- ❑ Growth in EM debt outstanding driven by local currency debt (EMDX). While EM external debt (EMFX) almost doubled over this period from \$576 billion to \$1.0, EM local currency debt grew sevenfold from \$716 bn to \$5.2 trillion.

Market highly concentrated with 10 issuers accounting for 80% of debt outstanding

Table 1: 10 largest issuers of local currency sovereign debt (in US \$ billions)

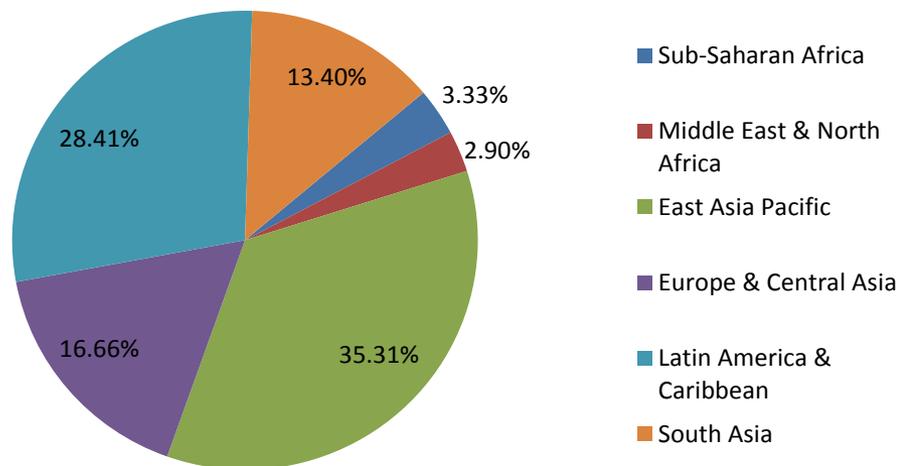
Country	DX Stock (USD billions)		DX Stock (% GDP)		EM DX Debt		Total Debt (USD billions)		Total Debt (% GDP)		Total Debt (% of total EM Debt)
	Dec-00	Dec-13	Dec-00	Dec-13	Dec-13	Dec-00	Dec-13	Dec-00	Dec-13	Dec-13	
	DX Stock (% of total)										
China	133.89	1,361.82	11.17%	14.74%	26.29%	139.20	1,363.49	11.62%	14.76%	21.85%	
Brazil	134.26	912.21	20.82%	40.62%	17.61%	216.13	986.88	33.52%	43.95%	15.82%	
India	11.92	618.04	2.50%	32.93%	11.93%	11.92	618.04	2.50%	32.93%	9.91%	
Mexico	59.64	306.68	8.72%	24.32%	5.92%	138.70	405.26	20.29%	32.14%	6.50%	
Turkey	15.77	243.74	5.92%	29.72%	4.70%	42.63	299.78	15.99%	36.55%	4.80%	
Poland	36.97	212.55	21.59%	41.07%	4.10%	50.58	299.88	29.53%	57.94%	4.81%	
Malaysia	44.24	160.93	47.17%	51.51%	3.11%	49.08	164.78	52.33%	52.74%	2.64%	
Russia	8.95	144.27	3.44%	6.88%	2.78%	98.51	237.71	37.93%	11.34%	3.81%	
South Africa	71.35	126.68	53.69%	36.13%	2.45%	75.40	139.03	56.75%	39.65%	2.23%	
Thailand	16.17	113.69	13.17%	29.36%	2.19%	18.13	113.79	14.77%	29.38%	1.82%	
					81.08%						74.19%

Source: Bloomberg and WB staff calculations.

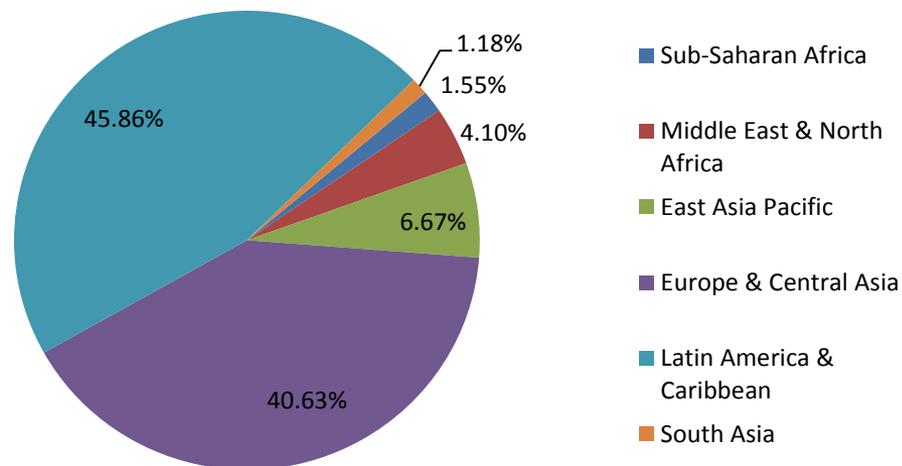
- ❑ With \$1.3 trillion, China's market cap of outstanding local currency debt largest in EM space.
- ❑ China, Brazil, and India alone account for over 50% of local debt outstanding and each have stock of local currency bonds that exceed \$500 mn.
- ❑ Also interesting to note that largest issuers of local currency debt also issue very little hard currency debt.
- ❑ Six of these issuers have investment grade ratings today (China, Brazil, Mexico, Poland, Malaysia, Thailand).

From a regional perspective, local currency debt outstanding concentrated in Asia

Total EM local currency debt breakdown, FY13



Total EM hard currency debt breakdown, FY13



- ❑ Asia dominates the EM tradable local currency debt market.
- ❑ While LatAm and European emerging market countries dominate the EM external debt market.

Foreign ownership of EM local currency debt has increased significantly over last 6 years

Table 2: Foreign ownership of EM local currency sovereign debt (in US \$ billions)

Country	DX Stock (USD billions)			Foreign Holdings (USD billions)		Foreign Holdings (% of DX stock)	
	Dec-06	Dec-13	Dec-13 % of GDP	Dec-06	Dec-13	Dec-06	Dec-13
China	448.09	1,340.27	14.50%	0.09	22.54	0.02%	1.68%
Brazil	511.84	859.48	38.27%	14.75	138.39	2.88%	16.10%
India	337.46	680.49	36.26%	0.89	8.36	0.26%	1.23%
Mexico	157.08	379.80	30.12%	11.90	140.04	7.57%	36.87%
Poland	120.55	191.17	36.94%	25.61	66.76	21.25%	34.92%
Turkey	153.15	189.78	23.14%	21.20	40.86	13.84%	21.53%
Malaysia	56.20	146.27	46.82%	4.72	43.00	8.40%	29.40%
Russia	39.05	120.57	5.75%	0.99	29.84	2.55%	24.75%
South Africa	63.89	114.34	32.61%	5.49	43.28	8.59%	37.85%
Thailand	48.78	104.04	26.87%	1.33	18.11	2.73%	17.41%
Philippines	43.48	84.08	30.91%	-	12.14	0.00%	14.44%
Colombia	37.87	82.35	21.78%	-	5.30	0.00%	6.43%
Indonesia	46.55	77.22	8.89%	6.11	23.17	13.12%	30.01%
Egypt	18.62	65.43	24.06%	3.46	0.14	18.57%	0.21%
Hungary	53.52	57.61	44.32%	15.42	23.25	28.81%	40.36%
Argentina	32.74	37.20	6.10%	5.50	1.19	16.80%	3.20%
Ukraine	-	30.06	16.94%	-	1.45	0.00%	4.83%
Romania	-	27.12	14.30%	-	6.05	0.00%	22.30%
Peru	3.70	12.81	6.33%	1.01	6.55	27.21%	51.08%
Lithuania	1.42	3.30	7.19%	0.02	0.53	1.26%	16.09%
Bulgaria	1.44	3.16	5.95%	-	0.03	0.00%	0.98%

DX stock includes federal government debt, of all maturities, amounts outstanding by issuer

Source: IMF Sovereign Investor Base Database for Emerging Markets, Arslanalp and Tsuda (2014)

- ❑ For a number of countries foreigners constitute an important part of the investor base.
- ❑ In 10 of 21 countries for which information was available, foreign investors hold at least 20% of outstanding local currency holding.
- ❑ In 6 countries, foreigners hold at least 30%.
- ❑ India and China, two largest local issuers have little foreign participation.

In response to an increase in investor appetite, local currency debt indices were developed

Table 3: EM debt indices by various index providers

Index Name	Ticker	Inception	Market Cap (USD billions)	Number of Constituents	Country Criteria	Liquidity Criteria	Instrument Criteria
J.P.Morgan Government Bond Index - Emerging Markets Broad/Diversified	GBI-EM	Jun-05	1,594	18	GNI per capita below the Index Income Ceiling (IIC) for 3 consecutive years.	i. Daily pricing available ii. Regularly traded in size at acceptable bid-offer spreads; readily redeemable for cash. iii. Low index replication costs.	i. Fixed coupon or zero coupon. ii. Bonds with option features are excluded. iii. At rebalance date, maturity > 13 months. iv. No explicit face value minimum.
J.P.Morgan Government Bond Index - Emerging Markets Global/Diversified	GBI-EM	Jan-06	993	16	i. GNI per capita below the Index Income Ceiling (IIC) for 3 consecutive years. ii. Accessible to majority of foreign investors. Does not include markets with capital controls.	i. Daily pricing available ii. Regularly traded in size at acceptable bid-offer spreads; readily redeemable for cash. iii. Low index replication costs.	i. Fixed coupon or zero coupon. ii. Bonds with option features are excluded. iii. At rebalance date, maturity > 13 months. iv. No explicit face value minimum.
J.P.Morgan Government Bond Index - Emerging Markets Diversified	GBI-EM	Jan-06	873	14	i. GNI per capita below the Index Income Ceiling (IIC) for 3 consecutive years. ii. Directly accessible. No impediments for foreign investors.	i. Daily pricing available ii. Regularly traded in size at acceptable bid-offer spreads; readily redeemable for cash. iii. Low index replication costs.	i. Fixed coupon or zero coupon. ii. Bonds with option features are excluded. iii. At rebalance date, maturity > 13 months. iv. No explicit face value minimum.
Citi World Government Bond Index	WGBI	Dec-84	20,361	23	i. Minimum A- by S&P, A3 by Moody's for entry. Below BBB- by S&P; below Baa3 by Moody's for exit. ii. Fully accessible to foreign investors.	No explicit liquidity criteria but minimum market size of at least USD 50 billion, EUR 40 billion, JPY 5 trillion for entry; below USD 25 billion, EUR 20 billion, JPY 2.5 trillion for exit.	i. Fixed coupon ii. Investment grade iv. Minimum maturity of 1 year. v. Minimum issue size varies by market.
Citi Emerging Markets Government Bond Index	EMGBI	Dec-07	918	14	i. Minimum C by either S&P or Moody's. ii. Fully accessible to foreign investors.	i. Minimum market size of at least USD 10 billion for entry; below USD 5 billion for exit. ii. Low index replication costs.	i. Fixed coupon ii. Minimum C by either S&P or Moody's. iv. Minimum maturity of 1 year. v. Minimum issue size varies by market.
Barclays Emerging Markets Local Currency Government Bond Index	EMLCTRUU	Jul-08	-	22	i. World Bank Income group classifications of low/middle income OR International Monetary Fund (IMF) classification as a non-advanced country. Additional countries that bond investors classify as EM. ii. Market investability	Minimum market size of at least USD5bn equivalent.	i. Fixed coupon Treasuries. Inflation-linked bonds excluded. Private placements ineligible. ii. Investment grade, high yield, and unrated securities permitted. iii. Minimum maturity of 1 year. iv. Minimum issue size varies by market.
Barclays Emerging Markets Local Currency Government Universal Bond Index	LCEMTRUU	Jul-08	-	25	i. World Bank Income group classifications of low/middle income OR International Monetary Fund (IMF) classification as a non-advanced country. Additional countries that bond investors classify as EM. ii. Market investability	Minimum market size of at least USD5bn equivalent.	i. Fixed coupon Treasuries. Inflation-linked bonds excluded. Private placements ineligible. ii. Investment grade, high yield, and unrated securities permitted. iii. Minimum maturity of 1 year. iv. Minimum issue size varies by market.

Source: World Bank staff compilation.

- Inclusion in bond index positive for country as it increases liquidity in local markets and demands for local bonds.

AUM benchmarked against the JP Morgan sovereign indices amounts to \$554 bn or 9% of outstanding debt

Table 4: AUM benchmarked to various JP EM debt indices (in US \$bn)

	2007	2008	2009	2010	2011	2012	2013	2014 (YTD)
Local market Debt	21	36	55	79	146	195	217	221
GBI-EM Global Div	6	14	36	57	127	175	197	195
GBI-EM Div	2	5	8	10	8	8	8	9
GBI-EM Broad Div	4	6	5	4	3	4	4	8
GBI-EM	9	9	6	7	7	8	8	8
GBI-EM Global	0	1	0	1	0	0	0	0
GBI-EM Broad	-	-	-	0	1	1	0	0
External Debt USD	178	181	150	192	231	293	293	310
EMBI Global Diversified	107	109	90	115	164	228	226	246
EMBI Global	62	63	52	67	68	64	67	63
EMBI+	9	9	7	10	0	0	0	1
Corporate External Debt	0	0	7	17	30	47	63	70
CEMBI Broad Diversified	-	-	6	12	17	30	40	46
CEMBI Diversified	-	-	1	5	6	12	17	19
CEMBI Broad	-	-	-	1	4	5	5	4
CEMBI	-	-	-	0	1	1	1	1
Local Currency Money Market								
ELMI+	0	16	10	20	26	25	25	23
Total	199	233	222	308	433	560	597	624

YTD 2014 as of the end of December

Source: JP Morgan

- External debt still dominates. Despite its significantly smaller size, assets managed against hard currency index amount to \$310 bn in 2014 up from \$178 bn in 2007. Market cap of debt of countries allocated to index amount to roughly \$830 mn, indicating that more than a third of outstanding debt is managed against the index.
- But assets managed against the EM local currency market index has increased ten fold from \$21 bn to \$221 in September 2014.

Informal surveys indicate that institutional investors either contemplate or have allocations to EMs

- ❑ Institutional investors important asset base. At the end of 2012, according to an IMF estimate, institutional asset base of selected advanced economies stood at roughly \$76 trillion. Therefore, even small moves of these investors can have significant implications for various markets.
- ❑ For some institutional investors, EM debt allocations part of strategic asset allocation (long-term view). For example, review of 16 large public US pension plans, 8 have strategic asset allocation to EM local bonds, 1 has opportunistic allocation. In most cases, allocation below 5%.
- ❑ Others use EM local bond opportunistically by broadening the fixed income mandate and then measure returns vs a hedged fixed income index.
- ❑ Many investors surveyed quote search for yield and diversification aspect as important component in their decision to move into asset class.

9 of 16 surveyed large US public pension plans have allocations to EM local currency sovereign debt and 8 of these are strategic allocations

Table 5: US pension fund exposure to EM local currency sovereign debt

No.	Fund Name	AUM (\$ billions)	Exposure to DX EMD?	Type of DX exposure (SAA or opportunistic)	Exposure to FX EMD?	Type of FX exposure (SAA or opportunistic)	Allocation hedged?	In % AUM
1	Federal Retirement Thrift	325.7	No	N/A	None	N/A	N/A	N/A
2	California Public Employees' Retirement System	262	Yes	Opportunistic	No	N/A	No, but by policy currency must be convertible.	0.05%
3	New York State and Local Retirement System (NY State Common)	176.8	No	N/A	None	N/A	N/A	N/A
4	California State Teachers	166	Yes	Opportunistic	No	N/A	No	0.10%
5	New York City Retirement Systems	143.9	No	N/A	None	N/A	N/A	N/A
6	Florida State Board	132.4	No	N/A	None	N/A	N/A	N/A
7	Teacher Retirement System of Texas	117.1	No	N/A	None	N/A	N/A	N/A
8	New York State Teachers	95.4	Yes	SAA	Yes	SAA - Global Fixed Income Securities	Yes, by policy	unclear
9	Ohio Public Employees Retirement System	88.5	Yes	SAA - Emerging Markets Debt	Yes	SAA - Emerging Markets Debt	Not completely - Non-U.S. dollar based. Target allocation of 5% (0-5% range) for the Defined accounts are limited to 25% of the Bond/IT Portfolio; 5% (2-10% range) for the Health Care Portfolio	
10	Wisconsin Investment Board	83.9	Yes	SAA	Yes	SAA	Permitted but not required as per investment guidelines.	0.36%, cannot exceed 10% of global bond portfolio
11	North Carolina Retirement Systems	80	No	N/A	No	N/A	N/A	N/A
12	Washington State Investment Board	79.3	Yes	Opportunistic	Yes	Yes	No, no formal policy across funds.	1.30%
13	New Jersey Public Employees' Retirement System	74.4	No	N/A	No	N/A	N/A	N/A
14	Oregon Public Employees	70	No	N/A	No	N/A	N/A	N/A
15	Ohio State Teachers	66	Yes	Opportunistic	Yes (majority)	SAA	No	0.36%
16	Virginia Retirement System	66	Yes	Opportunistic	Yes	SAA - Credit Strategies	Not required	0.71%
17	Massachusetts Pension Reserves Investment Management	53.2	Yes	SAA - Value-Added Fixed Income	Yes	SAA - Value-Added Fixed Income	No - by policy foreign investments are unhedged	Target allocation of 2% - 21% of Value Added Fixed Income Portfolio invested in EM FX debt. 16% in hard currency. VAM is 8.9% of total fund.
18	Iowa Public Employees' Retirement System	24.8	No	N/A	Yes	SAA - Credit Opportunities	N/A	N/A

Source: WB staff compilation from respective Plans' websites.