Global Debt Monitor
In Search of Sustainability

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Emre Tiftik, Director, Sustainability Research, etiftik@iif.com
Khadija Mahmood, Economist, kmahmood@iif.com
Raymond Aycock, Senior Research Analyst, raycock@iif.com
Editor: Sonja Gibbs, Managing Director, and Head of Sustainable Finance, sgibbs@iif.com

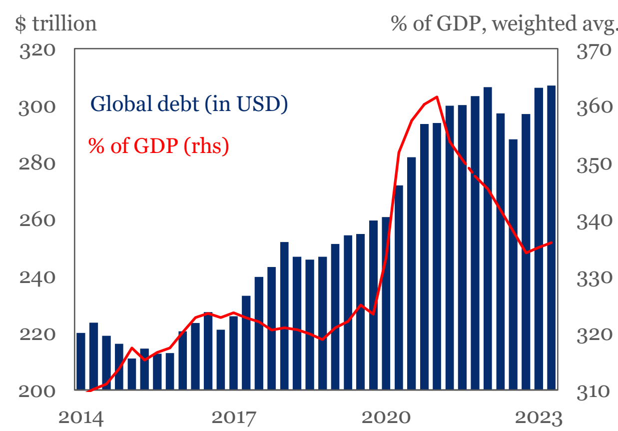
- In a higher-rate environment, the global debt stock rose by $10 trillion to a new record high of $307 trillion in H1 2023.
- Following seven consecutive quarters of decline, the global debt-to-GDP ratio has resumed its upward trajectory in H1 2023.
- High inflation, higher borrowing costs, and tighter lending standards have significantly curtailed bank credit creation in recent months. Expansion of private credit markets continues despite increased regulatory scrutiny.
- Consumer debt burdens remain largely manageable in mature markets, allowing additional room for further central bank tightening should inflationary pressures persist.
- As higher rates and higher debt levels push government interest expenses higher, domestic debt strains are set to increase. Yet, the international financial architecture is not adequately equipped to tackle unsustainable domestic debt levels.
- Heightened global efforts to reform multilateral development banks to scale up climate finance should accelerate the expansion of ESG debt markets.

Higher rates, higher debt: The global debt pile increased by some $10 trillion in the first half of 2023 (Chart 1). It now stands at a new all-time high of $307 trillion, which is a staggering $100 trillion more than it was a decade ago. Over 80% of the debt buildup came from mature markets in H1 2023, with the U.S., Japan, the UK, and France registering the largest increases. In emerging markets, the rise has been more pronounced in China, India, and Brazil.

Debt and inflation: After witnessing declines of seven consecutive quarters, the global debt-to-GDP ratio has resumed its upward trajectory in the first two quarters of this year, now hovering around 336%—up from 334% in Q4 2022. The sudden rise in inflation was the main factor behind the sharp decline in debt ratio over the past two years, allowing many sovereigns and corporates to inflate away their local currency liabilities. With wage and price pressures moderating (though not expected to return to target levels), we foresee the global debt ratio to surpass 337% by the end of the year.

Sharp slowdown in bank lending: The rise in debt ratios this year was more evident among governments and financial institutions. In contrast, prevailing macro headwinds, including tighter funding conditions, have led to a marked deceleration in bank credit expansion to households

Chart 1: Global debt-to-GDP resumed its upward trend in H1 2023



Source: IIF

Table 1: Sectoral Indebtedness*

$ trillion	Households		Non-financial corporates		Government		Financial sector		Total	
	Q2 2023	Q2 2022	Q2 2023	Q2 2022	Q2 2023	Q2 2022	Q2 2023	Q2 2022	Q2 2023	Q2 2022
Mature markets	39.4	38.1	48.8	47.6	61.1	59.4	57.8	54.3	207.0	199.4
Emerging markets	18.4	18.0	41.4	40.8	26.3	24.9	14.1	14.1	100.0	97.8
Global	57.7	56.1	90.2	88.4	87.3	84.3	71.9	68.3	307.1	297.2

*Source: IIF, BIS, IMF, Haver, National Sources. *Household debt incorporates outstanding bank loans. Financial sector debt and non-financial corporate debt incorporate cross-border and domestic bank loans as well as onshore/offshore outstanding bonds. Government debt is extrapolated from the IMF-WEO database. For details, see the "General Information" section of our database.*

and non-financial businesses (Chart 2). Notably, in the U.S., the continued expansion of private credit markets has offered a buffer for those businesses that have faced more stringent bank lending standards following the U.S. regional banking stress earlier this year.

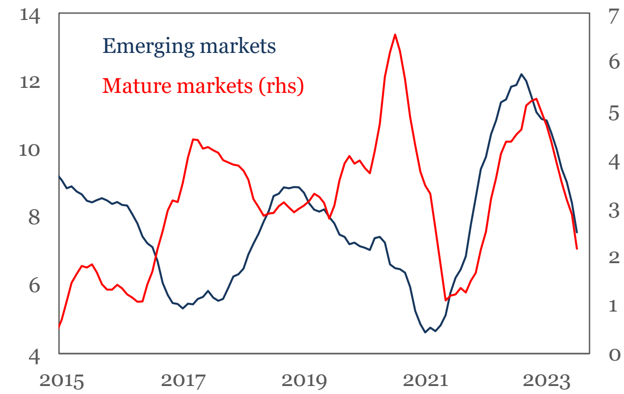
Consumer debt burdens stay largely manageable: The household debt-to-GDP in emerging markets remains above pre-pandemic levels, largely due to China, Korea, and Thailand. In contrast, the household debt ratio in mature markets has dropped to its lowest level in two decades in H1 2023. Should inflationary pressures persist in mature markets, the health of household balance sheets, particularly in the U.S., would provide a cushion for against further rate hikes (Chart 3).

EM domestic debt strains cloud the outlook: As international funding costs stabilize at higher levels, government debt in emerging markets (ex-China) has resumed its upward trend in H2 2022, registering a slight increase to 57% of GDP. This has coincided with a modest uptick in Eurobond issuance activity. Notably, Saudi Arabia, Poland, and Türkiye were the top borrowers from international markets, reflecting their substantial external borrowing needs. In contrast, this year has seen a sharp decline in sovereign borrowing from domestic markets, with issuance trailing 20% behind last year. However, given that interest expenses on local currency debt now make up over 80% of EM governments' total interest costs, domestic government debt levels are at alarming levels in many countries (Chart 4). Most worryingly, the global financial architecture is not adequately prepared to manage risks associated with strains in domestic debt markets; having a market-based framework to address unsustainable domestic debt levels could support initiatives to mobilize resources for development finance, including climate finance.

Much hinges on MDB reforms: The prolonged weakness in international capital flows into EMs (ex-China), which has persisted for over a decade, remains a substantial challenge when seeking to mobilize much-needed international capital for climate action. While the expansion of ESG debt markets has been encouraging for scaling up international capital, bridging large funding finance gaps depends on enhancing the capacity of MDBs to crowd in private capital at scale without pushing countries further into debt. These efforts would be helped by strengthening the dialogue between countries and their investors to develop new projects, funding mechanisms, and mainstream best practices.

Chart 2: Sharp slowdown in bank credit growth

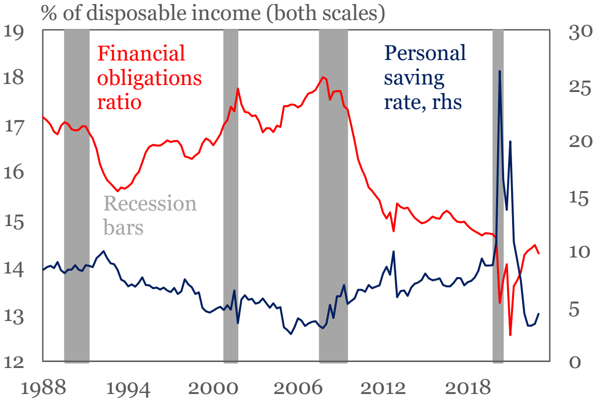
%yoy, bank lending to the private sector, 3mma, sample median



Source: Haver, IIF

Chart 3: U.S. consumer debt burden remains low

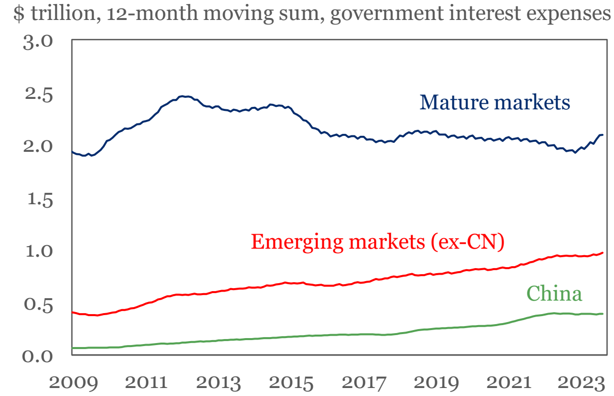
% of disposable income (both scales)



*Source: FRED, IIF; *ratio of aggregate debt payments to income*

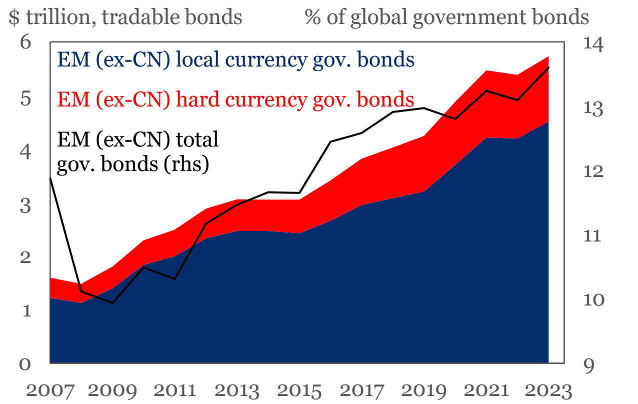
Chart 4: The surge in government interest expenses has been more pronounced in mature markets in recent months

$ trillion, 12-month moving sum, government interest expenses



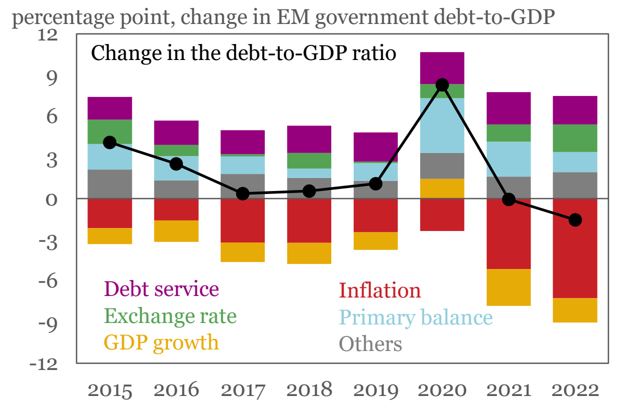
Source: Bloomberg, IIF

Chart 5: Sharp rise in EM government debt has been largely driven by borrowing from domestic debt markets



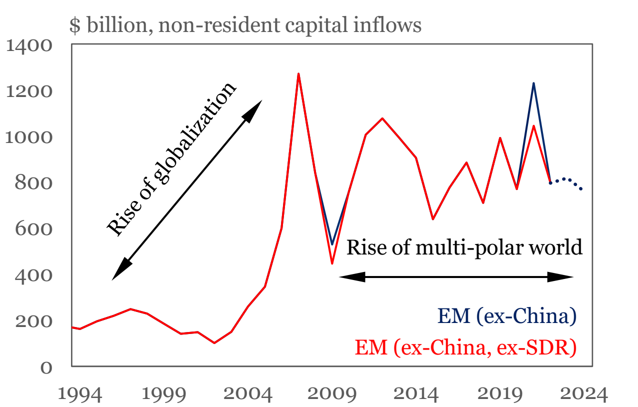
Source: Bloomberg, IIF

Chart 6: Higher inflation has allowed many EMs to inflate away debt in recent years



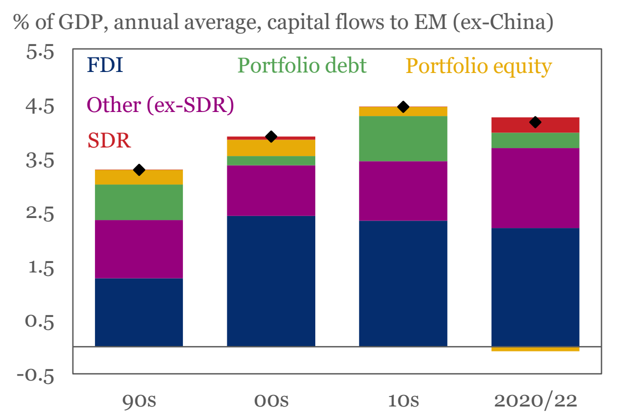
Source: FDL, IIF

Chart 7: International demand for EM assets remains vulnerable at a time of rising global polarization...



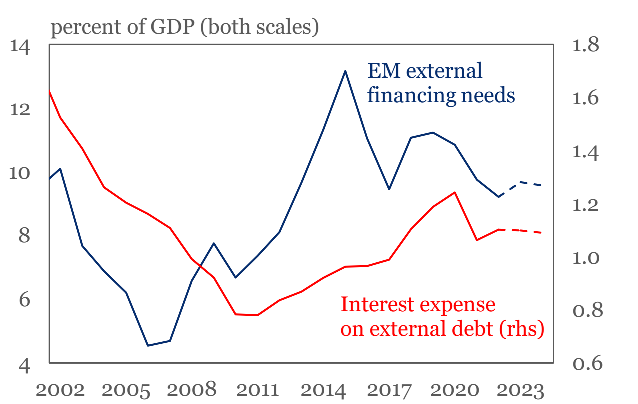
Source: IIF, IMF

Chart 8: ...and tighter international funding conditions



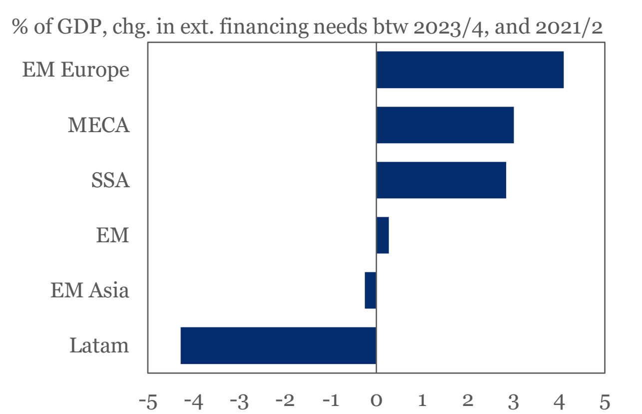
Source: IIF, IMF

Chart 9: External borrowing needs of emerging markets remain sizable, ...



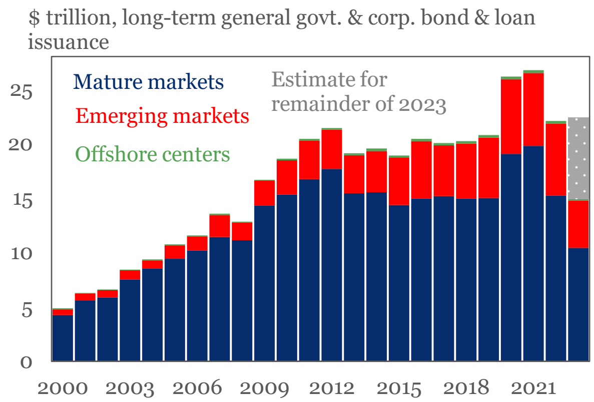
Source: IIF, IMF

Chart 10: ...with significant increases in EM Europe, SSA and Middle East & Central Asia



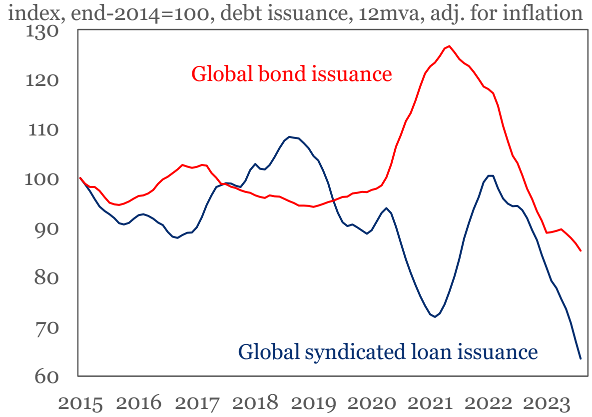
Source: IIF, IMF

Chart 11: Long-term bond and loan issuance runs slightly above pre-pandemic levels



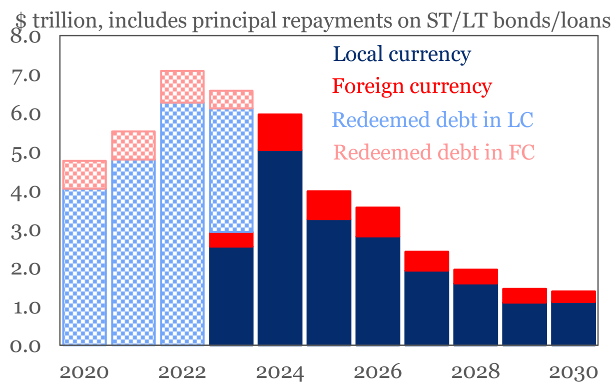
Source: Bloomberg, IIF

Chart 12: Banking sector stress, higher borrowing costs, and stubborn inflation dampen syndicated loan activity



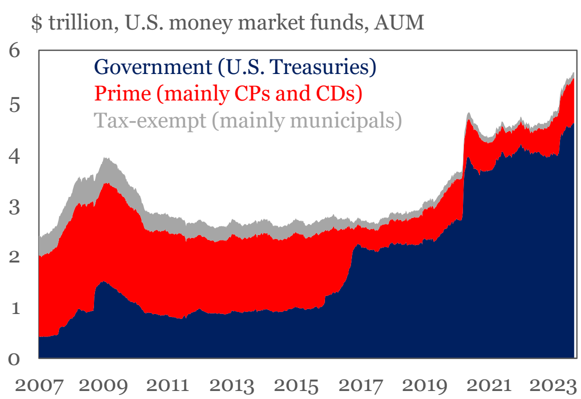
Source: Bloomberg, IIF

Chart 13: EMs face some $3 trillion of bond and loan redemption until year-end*



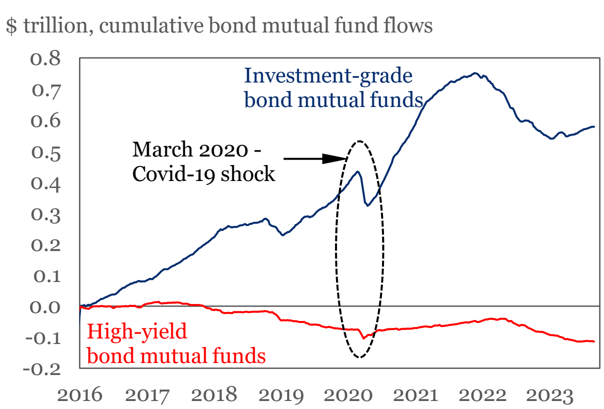
Source: Bloomberg, IIF. *The exhibit does not imply an improvement in funding strains starting in 2023. While local currency-denominated securities with a maturity less than 12 months are still an important source of funding in many jurisdictions, the redemption figures for 2023 will increase as we continue to see further issuance of short-term securities through 2023

Chart 14: Higher policy rates continue to drive massive appetite for money market funds...



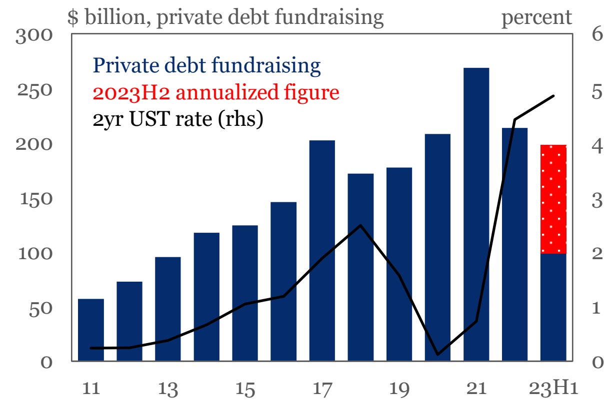
Source: ICI, IIF

Chart 15: ...while reducing the demand for bond mutual funds



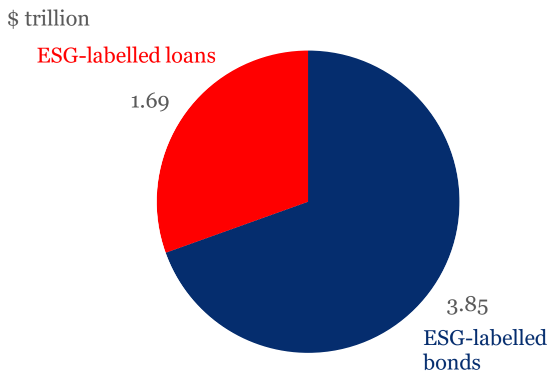
Source: ICI, IIF

Chart 16: Demand for private debt remains relatively strong despite sharp rise in funding costs



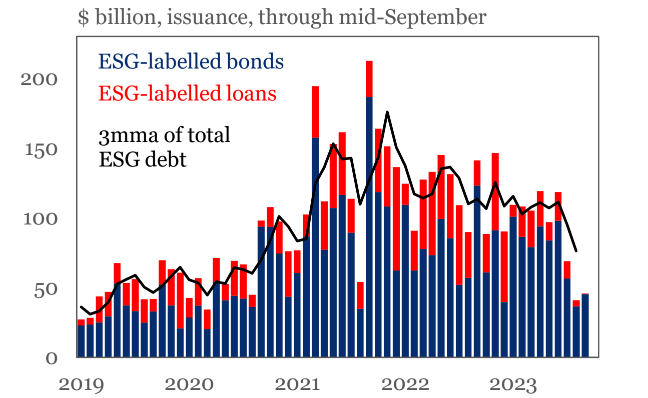
Source: PitchBook, IIF

Chart 17: By mid-September, the sustainable debt universe exceeded $5.5 trillion



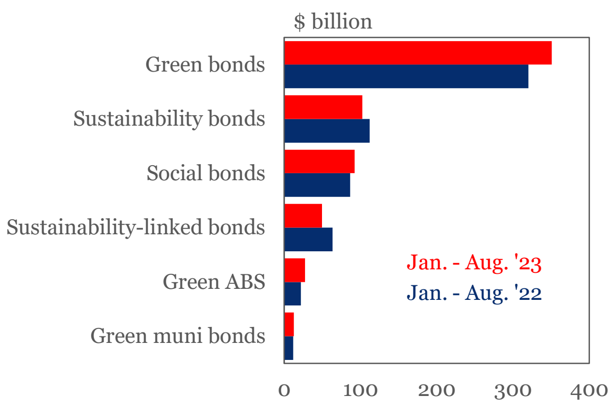
Source: Bloomberg, IIF Sustainable Debt Monitor database

Chart 18: In 2023, global ESG debt issuance surpassed $810 billion, largely driven by ESG bond market



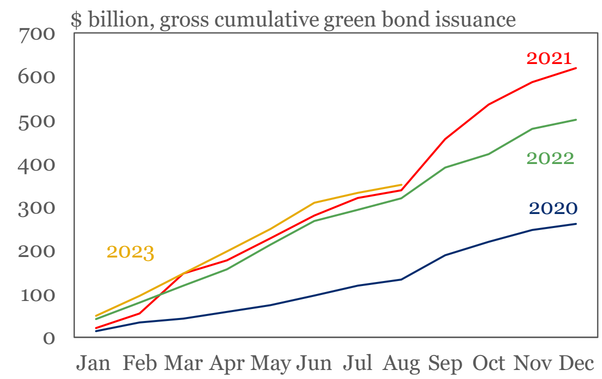
Source: Bloomberg, IIF Sustainable Debt Monitor database

Chart 19: ESG bond issuance amounted to $680 billion in 2023ytd, at par with levels seen a year ago



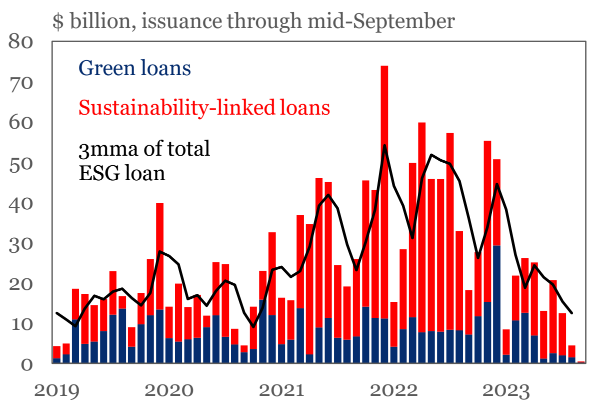
Source: Bloomberg, IIF Sustainable Debt Monitor database

Chart 20: Over $350 billion of green bonds were issued in 2023, led by sovereigns and financial corporates



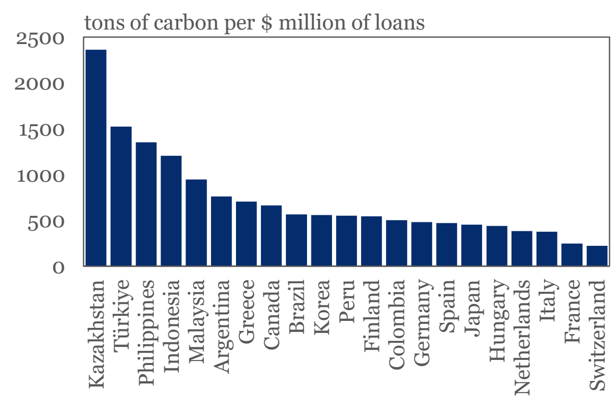
Source: Bloomberg, IIF Sustainable Debt Monitor database

Chart 21: In contrast, ESG loan issuance remains quite subdued at $130 billion



Source: Bloomberg, IIF Sustainable Debt Monitor database

Chart 22: Carbon footprint of commercial bank loans in emerging markets remains relatively high compared to their mature market peers



Source: Bloomberg, IIF

Table 2: Total Global Debt by Sector

% of GDP	Households		Non-financial corporates		Government		Financial Sector	
	Q2 2023	Q2 2022	Q2 2023	Q2 2022	Q2 2023	Q2 2022	Q2 2023	Q2 2022
Global	**61.9**	**63.4**	**94.7**	**96.4**	**97.2**	**99.2**	**82.1**	**82.6**
Mature markets	**70.9**	**73.9**	**89.4**	**93.7**	**115.5**	**119.9**	**109.4**	**109.9**
U.S.	74.0	76.0	75.3	79.4	118.6	121.0	79.9	77.7
Euro Area	55.4	58.5	98.7	104.7	93.7	101.1	108.9	112.1
Japan	59.6	65.1	116.1	116.8	239.4	244.0	205.4	201.5
UK	80.3	84.3	64.1	69.6	89.1	100.5	159.1	173.0
Emerging markets	**46.9**	**46.0**	**103.7**	**101.1**	**66.7**	**64.4**	**36.4**	**36.8**
EM Asia	59.8	58.5	132.6	128.5	75.4	71.6	45.1	45.0
China	63.7	61.3	164.3	158.0	80.2	74.5	48.6	47.4
Hong Kong	96.0	94.5	264.8	289.5	67.6	79.1	148.6	164.4
India	37.8	35.7	55.5	52.5	84.3	82.7	2.7	2.9
Indonesia	16.1	16.5	23.6	25.2	37.8	39.4	6.3	7.4
Malaysia	67.5	69.3	58.3	64.8	63.3	62.6	26.5	23.6
Pakistan	2.2	2.4	10.8	11.2	74.5	74.8	1.3	0.9
Philippines	13.2	14.8	28.7	31.2	57.3	57.6	8.8	10.4
S. Korea	101.7	105.2	120.9	116.0	48.3	45.4	88.2	87.0
Singapore	48.3	51.2	130.2	132.6	171.1	160.4	167.4	186.7
Thailand	86.8	89.0	84.5	88.7	54.0	53.9	33.5	33.5
Vietnam	25.8	26.2	113.8	105.2	37.9	38.6	4.4	5.0
EM Europe	20.8	20.6	63.5	62.7	32.8	32.4	15.9	16.8
Czech Republic	32.0	33.7	50.5	51.0	39.1	38.7	32.9	35.2
Hungary	17.5	19.9	76.1	83.7	62.3	67.6	9.1	11.2
Poland	24.5	29.7	38.0	41.9	43.3	46.4	23.6	24.9
Russia	22.5	19.4	78.0	67.4	22.3	19.1	9.1	6.7
Turkey	12.6	13.2	54.2	67.4	38.6	40.5	20.1	26.8
EM Latam	24.3	24.5	40.6	41.3	64.1	65.4	24.2	27.7
Argentina	4.0	4.4	17.7	18.1	73.6	74.3	9.1	9.5
Brazil	32.7	33.6	52.1	51.9	86.0	88.8	40.5	46.2
Chile	45.7	45.2	96.1	103.6	34.7	36.2	46.8	55.2
Colombia	27.0	29.3	31.0	33.3	61.3	63.4	4.2	5.8
Mexico	16.7	15.2	22.6	22.4	38.9	38.2	8.8	10.0
Peru	13.8	13.9	42.8	47.3	33.8	34.9	7.7	9.4
AFME	20.1	19.8	43.6	43.3	47.6	48.3	16.6	16.3
Egypt	8.6	8.9	21.8	21.0	81.2	82.5	5.2	4.0
Ghana	2.6	2.8	13.3	14.1	95.8	88.2	3.9	5.0
Israel	42.7	44.5	69.4	71.1	58.7	64.4	11.4	10.5
Kenya	11.1	11.3	20.1	18.8	68.6	67.6	2.2	2.0
Nigeria	12.9	7.4	9.0	10.5	39.1	37.7	9.9	5.4
Saudi Arabia	12.9	13.7	61.3	57.4	24.3	25.3	6.0	5.1
South Africa	34.2	34.3	33.3	32.2	74.4	71.5	34.6	29.3
UAE	21.4	21.3	58.4	62.7	30.3	32.5	44.6	55.6

Sources: IIF, BIS, Haver, National Sources.

Table 3: Currency Breakdown of EM Sectoral Debt														
% of GDP	**Non-financial corporates**				**Government**				**Financial Sector**				**Households**	
As of Q2-2023	LC	FC	o/w USD	o/w EURO	LC	FC	o/w USD	o/w EURO	LC	FC	o/w USD	o/w EURO	LC	FC
Emerging markets														
EM Asia														
China	159.7	4.6	3.9	0.5	79.0	1.2	0.9	0.3	44.4	4.2	3.2	0.3	63.7	0.0
Hong Kong	55.5	209.3	148.4	38.9	59.8	7.8	4.2	1.5	40.9	107.7	83.2	8.9	93.1	2.9
India	48.3	7.2	6.1	1.0	82.0	2.3	2.3	0.0	0.6	2.1	1.7	0.2	37.8	0.0
Indonesia	15.9	7.8	6.9	0.8	29.9	7.9	6.4	1.1	2.4	4.0	3.8	0.2	15.8	0.3
Malaysia	44.7	13.6	11.1	0.0	61.1	2.3	1.8	0.0	11.4	15.1	12.2	1.4	67.2	0.3
S. Korea	99.0	21.9	17.9	3.2	47.3	1.0	0.5	0.4	69.5	18.7	14.8	2.6	100.9	0.9
Singapore	69.2	61.0	55.1	2.5	171.1	0.0	0.0	0.0	48.2	119.3	77.6	14.1	40.8	7.5
Thailand	72.0	12.6	11.1	0.5	53.5	0.4	0.4	0.0	25.4	8.1	6.9	0.3	86.6	0.2
EM Europe														
Czech Republic	22.6	27.9	0.8	26.2	38.7	0.4	0.0	0.4	27.5	5.4	0.2	5.0	31.9	0.1
Hungary	41.4	34.7	10.3	24.4	46.1	16.2	7.2	8.4	4.4	4.6	0.9	3.5	17.5	0.1
Poland	24.9	13.1	0.9	12.1	32.3	11.0	1.8	8.9	16.6	7.0	0.7	3.2	19.0	5.5
Russia	65.3	12.7	6.1	5.8	18.9	3.4	2.9	0.5	7.3	1.8	1.6	0.1	22.4	0.0
Turkey	32.9	21.3	8.7	12.3	12.7	25.9	17.4	5.0	2.9	17.1	12.5	4.4	12.5	0.0
EM Latam														
Argentina	12.2	5.5	5.3	0.1	26.0	47.6	43.0	1.4	8.4	0.7	0.3	0.1	3.9	0.1
Brazil	38.9	13.2	11.9	1.0	82.0	4.0	3.2	0.8	33.9	6.5	5.9	0.2	32.7	0.0
Chile	63.4	32.7	31.6	0.4	23.4	11.2	7.6	3.6	39.3	7.5	6.2	0.2	43.7	2.0
Colombia	19.9	11.1	10.2	0.5	39.0	22.3	19.0	0.8	0.4	3.8	3.7	0.1	26.9	0.1
Mexico	9.5	13.1	11.2	1.2	32.5	6.5	4.9	1.0	6.5	2.3	1.7	0.4	16.7	0.0
Peru	22.5	20.3	19.9	0.4	17.4	16.4	14.2	2.2	2.5	5.2	5.0	0.1	12.9	0.9
AFME														
Israel	49.3	20.1	13.6	5.8	50.5	8.3	5.5	2.7	7.9	3.5	2.9	0.5	42.6	0.2
S. Arabia	51.6	9.8	9.4	0.3	15.6	8.7	8.7	0.0	0.7	5.3	4.7	0.1	12.9	0.0
S. Africa	17.8	15.4	9.3	4.6	66.8	7.5	7.4	0.2	24.3	10.3	4.6	1.0	33.9	0.3

Sources: BIS, Haver, National Sources, IIF estimates

**LC=local currency; FC=foreign currency*