

Global Debt Monitor

Sustainability Matters

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- The global debt-to-GDP ratio hit a new all-time high of over 322% in Q3 2019, with total debt reaching close to \$253 trillion: EM debt exceeded \$72 trillion (223% of GDP) while debt in mature markets topped \$180 trillion (383% of GDP) in Q3 2019.
- With debt sustainability squarely in focus, financing for urgent environmental concerns—and for the Sustainable Development Goals more broadly—will be hard to come by, particularly for some emerging and frontier economies.
- Case in point: nearly half of cross-border flows related to China’s Belt and Road Initiative are directed to regions that are exposed to a significant level of climate change risk. A number of these countries also have high and rising debt levels.
- We have added Ukraine to our debt currency breakdown database and launched a new tracker for debt of state-owned enterprises (SOEs) across key EMs including BRICS, Indonesia, Malaysia, and Turkey. Comments and suggestions welcome!

• **Global debt hit all-time high of nearly \$253 trillion in Q3 2019:** Total debt across the household, government, financial and non-financial corporate sectors surged by some \$9 trillion in the first three quarters of 2019 (Table 1). By sector, general government (+\$3.5 trillion) and non-financial corporates (+\$3 trillion) saw the biggest increases, helping bring the overall global debt-to-GDP ratio to a fresh high of over 322% (Chart 1).

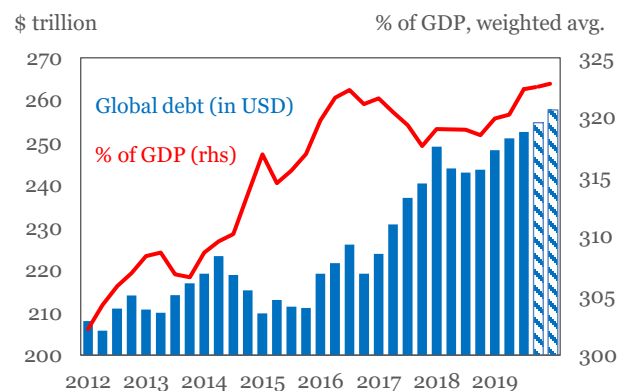
• **Debt looks set to grow faster in 2020:** Spurred by low interest rates and loose financial conditions, we estimate that total global debt will exceed \$257 trillion in Q1 2020, driven mainly by non-financial sector debt (now approaching \$200 trillion).

• **Diminishing returns on new debt:** Preliminary data for full year 2019 suggest that the global debt-to-GDP ratio grew at its fastest pace since 2016—even as global growth fell to its slowest pace since the 2008-2009 financial crisis (Chart 2).

• **All sectors loading up:** Household debt-to-GDP reached a record high in Belgium, Finland, France, Lebanon, New Zealand, Nigeria, Norway, Sweden and Switzerland. Non-financial corporate debt to GDP topped in Canada, France, Singapore, Sweden, Switzerland and the U.S. (Table 2). Government debt-to-GDP hit an all-time high in Australia and the U.S.

• **EM debt has risen more than twofold since 2010, to \$72 trillion:** The surge has been driven mainly by the sharp buildup in non-financial corporate debt (up \$20 trillion to over \$31 trillion). This is a contrast to mature markets, where the government sector has been the biggest driver. Ex-financial sector, the total EM debt-to-GDP ratio reached an all-time high of 187%, ranging from 53% in Nigeria to over 365% in Hong Kong. FX debt in EMs soared to \$8.3 trillion in Q3 2019—\$4 trillion higher than a decade ago. Dollar debt accounts for over 85% of this increase.

Chart 1: Global debt hits a fresh record of 322% of GDP



Source: IIF, BIS, IMF

Table 1: Sectoral Indebtedness*

\$ trillion	Households		Non-financial corporates		Government		Financial sector		Total	
	Q3 2019	Q3 2018	Q3 2019	Q3 2018	Q3 2019	Q3 2018	Q3 2019	Q3 2018	Q3 2019	Q3 2018
Mature markets	34.3	34.0	43.1	42.5	52.5	50.4	50.2	50.1	180.1	176.9
Emerging markets	13.2	11.8	31.3	28.9	16.7	14.8	11.3	10.6	72.5	66.1
Global	47.5	45.8	74.4	71.3	69.2	65.2	61.5	60.7	252.6	243.0

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 with IMF-WEO database. For details, see the “General Information” section of our database.

The Global Debt Monitor and updated global debt database are available to IIF members on our website at <https://www.iif.com/publications/global-debt-monitor>. If you would like to receive regular updates about this publication, please subscribe [here](#).

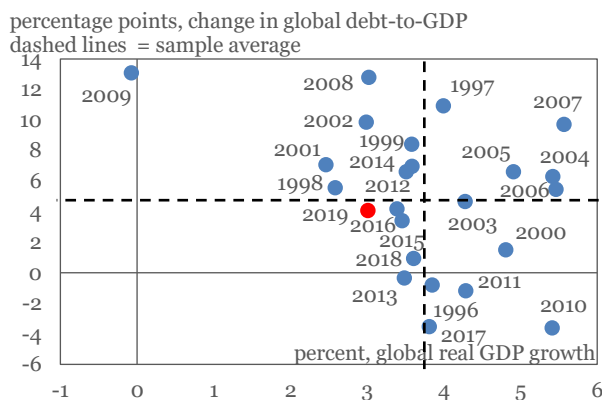
- **China's debt is fast approaching 310% of GDP—one of the highest in emerging markets:** Following a marked slowdown in 2017/18 during the big push for deleveraging, debt accumulation in China picked up again in 2019, notably in the non-financial corporate sector. Government debt grew at its fastest annual pace since 2009. Household debt and general government debt are now at all-time highs of 55% of GDP.

- **Our new tracker suggests that SOE debt now account for over 60% of all non-financial corporate debt across major emerging markets,** ranging from 20% in Turkey to over 85% in South Africa (Chart 3). While EM corporate debt has risen sharply over the past decade, the buildup in general government debt has been more muted. However, this breakdown masks the actual footprint of sovereigns in the rapid accumulation of EM debt. While there is no publicly available aggregate data to compare across countries, firm level data suggest that nearly \$12 trillion of the over \$19 trillion increase in EM non-financial corporate debt since 2009 can be attributed to state-owned/controlled enterprises. The case of China has been particularly interesting in this context: despite a sharp drop in the number of SOEs from over 53,000 in 2000 to about 19,000 at present, purely state-owned and state-controlled firms now account for over 70% of non-financial firms by asset size. Our estimates suggest that SOEs with majority state ownership make up over 35% of non-financial firms' debt in China. Including all firms with any level state ownership, this ratio exceeds 80%—[see our new SOE debt database](#).

- **High debt levels exacerbate concerns about financing for the Sustainable Development Goals (SDGs):** The ambitious SDG agenda requires the quick mobilization of international and domestic resources to finance some \$42 trillion of [SDG-related infrastructure investments](#) by 2030 across key sectors including energy, telecommunications, transportation and water. While this represents a tremendous opportunity for investors, countries with limited borrowing capacity could face severe challenges in meeting development finance needs. Funding strains could be particularly high for countries that remain far from their SDG targets while also having relatively high debt levels: this group includes Lebanon and Malaysia (Chart 4). Against this backdrop, achieving the SDG agenda will require strengthening public finances and improvements in corporate governance to foster investor confidence in financing sustainable infrastructure projects.

- **Refinancing risk at high levels:** Over \$19 trillion of syndicated loans and bonds will mature this year across emerging and mature markets, with EMs accounting for 30% of that (Chart 10). Redemptions are high for China, India and Brazil within emerging markets and for U.S., Japan and Germany within mature markets.

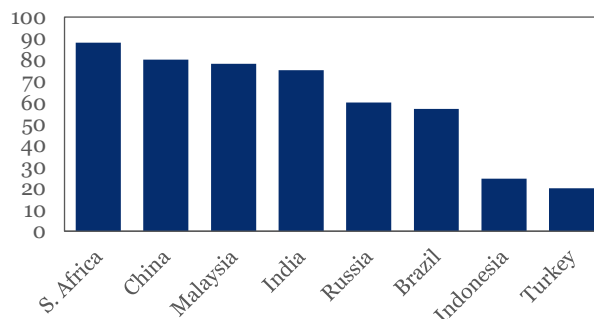
Chart 2: Debt is piling up at the fastest rate since 2016



Source: IMF, BIS, IIF

Chart 3: State-owned enterprises have been a huge driver of the growth in overall EM corporate debt

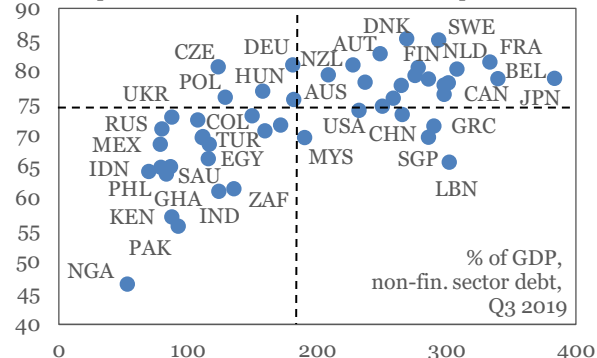
percent, share of SOE debt in total non-fin. corp. debt, Q3 2019; based on EM firms listed on domestic stock exchanges



Source: Bloomberg, IIF; *Firms are classified as SOE if the state owns a positive share of equity.

Chart 4: Financing the sustainable development goals could push global debt levels still higher

SDG composite index, 2019, dashed lines = sample median

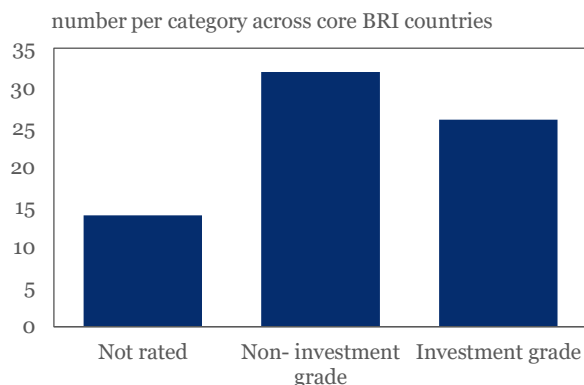


Source: SDSN, IIF. SDG index score could be interpreted as the percentage of achievement.

Special Feature: Sustainability and China's Belt and Road Initiative

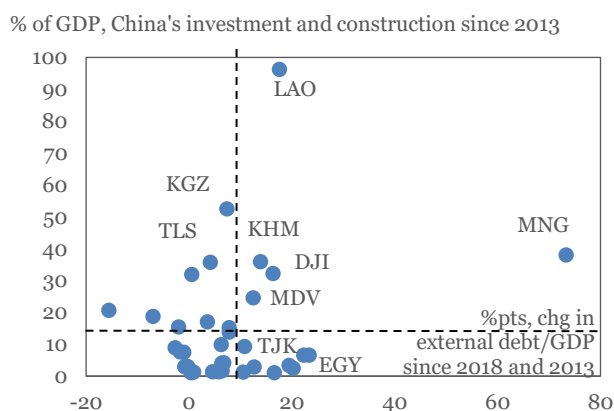
- Ambitious goals:** The Belt and Road Initiative (BRI) aims to strengthen China's inter-regional connectivity by fostering economic development and infrastructure investment. Since its inception in 2013, some \$690 billion has been [directed](#) to overseas investment and construction contracts in over 105 countries globally.
- No clear definition of "BRI project":** BRI is a very high political priority for Chinese leadership. However, BRI projects are generally not centrally directed and have been mainly developed and managed by local authorities. This lack of centralization has led to a lack of clarity around the BRI label, in part reflecting local authorities' efforts to show their commitment to the central government's priorities and to acquire additional financing from government policy banks. Given this backdrop, we have restricted our sample to 72 BRI countries which are widely cited in leading [policy reports](#).
- Concern about debt vulnerabilities:** Over 60% of the 72 core BRI countries in our sample are either non-rated or have a non-investment grade rating on their long-term foreign currency debt (Chart S.1). This group of 44 countries has received more than \$280 billion of direct investment (including construction contracts) from China through BRI-labeled projects.
- BRI lending has been accompanied by a hefty external debt buildup** in Mongolia, Laos, Djibouti, Cambodia, and the Maldives. While Kyrgyzstan and Timor-Leste have seen robust BRI lending inflows (over 30% of their aggregate GDP), the rise in their external debt-to-GDP ratio since 2013 is below the sample average of 8 percentage points (Chart S.2).
- Abundant liquidity spurred by direct loans from China** appears to be coinciding with a sharp rise in general government debt in Djibouti, Tajikistan, Mongolia, Uzbekistan, the Maldives, Kenya and Pakistan (Chart S.3).
- Nearly 45% of BRI lending is exposed to significant climate change risks:** We estimate that some \$200 billion of BRI projects to date has been directed to climate-stressed regions, including Maldives, Myanmar, Timor-Leste, Bangladesh, and Ethiopia (Chart S.4). Failing to address physical environmental risks is a significant downside risk for BRI infrastructure projects, highlighting the importance of promoting climate-resilient infrastructure investment.
- However, the BRI could play an important role in mitigating climate risk:** Over 80% of BRI-related overseas investment flows to date have been directed to sectors that have high carbon footprints (chart S.5). Given the program's scale and ambition, BRI projects are thus very exposed to climate transition risk that could arise from changes in climate policy, technology and market sentiment. Aligning BRI projects with climate goals would therefore make a tremendous contribution to scaling up sustainable finance.

Chart S.1: Most core BRI countries are below investment grade, or not rated



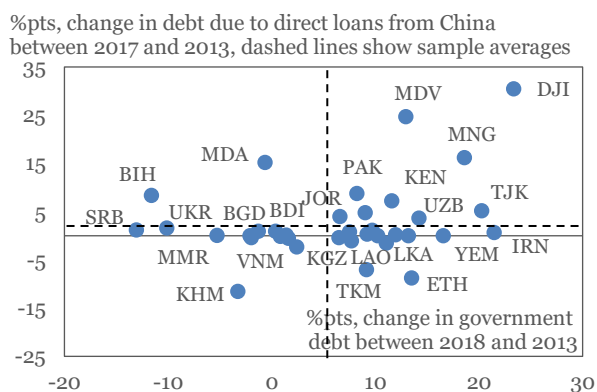
Source: IIF, Bloomberg, Fitch, Moody's, S&P Global

Chart S.2: For some countries, BRI-related financing has added significantly to debt levels



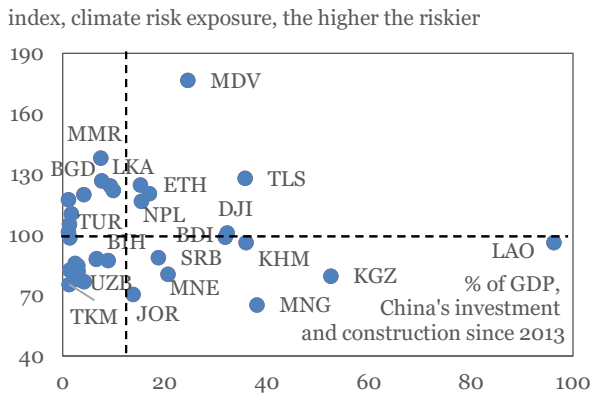
Source: IIF, World Bank, China Global Investment Tracker

Chart S.3: Direct loans from China account for the bulk of the rise in debt in Djibouti and Maldives



Source: IIF, Horn, Sebastian, Carmen M. Reinhart, and Christoph Trebesch. 2019. "China's Overseas Lending." NBER Working Paper No. 26050.

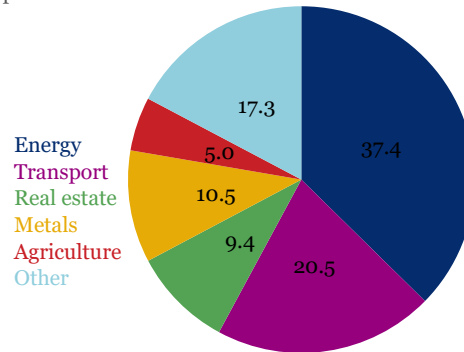
Chart S.4: BRI-related flows by climate risk exposure



Source: IIF, China Global Investment Tracker, Notre Dame Global Adaptation Index

Chart S.5: BRI-related flows have a large carbon footprint

percent of BRI investment and construction contracts



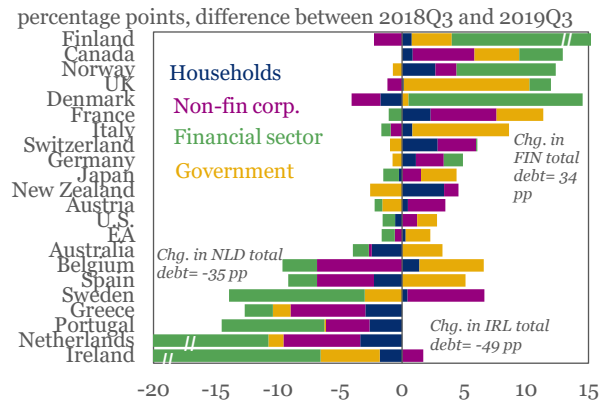
Source: IIF, China Global Investment Tracker

Table S.1: The Belt & Road Heat Map – Sustainability Considerations

	Change in general government debt-to-GDP between 2013 and 2018, %pts	Change in total external debt-to-GDP between 2013 and 2018, %pts	China investment flows, accumulated since 2013, percent of GDP	Change in debt-to-GDP due to direct loans from China between 2013 and 2017, %pts	Climate risk exposure, index, the higher the riskier
Armenia	12.0	10.6	n.a.	0.2	82.5
Azerbaijan	10.2	20.3	2.5	0.0	85.9
Bangladesh	-1.3	-1.7	7.6	1.0	126.8
Belarus	9.0	12.7	2.9	4.8	79.7
Bhutan	2.1	12.0	n.a.	n.a.	118.5
Bosnia	-11.6	-2.7	8.9	8.4	87.4
Brunei	0.4	0.6	31.9	0.9	99.0
Cambodia	-3.3	13.9	36.0	-11.5	96.3
Djibouti	23.4	16.4	32.2	30.5	101.0
Egypt	7.5	23.4	6.6	0.8	88.1
Ethiopia	13.5	7.9	15.3	-8.8	124.9
Iran	21.5	-0.2	3.0	0.7	84.8
Jordan	6.6	7.8	13.8	4.0	70.5
Kenya	11.6	10.8	9.3	7.2	124.3
Kyrgyzstan	2.4	7.4	52.5	-2.3	79.7
Laos	7.7	17.6	96.3	-1.1	96.3
Lebanon	13.2	8.2	n.a.	0.0	81.2
Maldives	13.0	12.5	24.5	24.7	176.6
Mongolia	18.6	73.4	38.1	15.2	65.3
Montenegro	9.2	-15.5	20.6	16.2	80.5
Myanmar	-5.3	-1.0	7.5	-0.5	138.1
Pakistan	8.2	3.6	17.0	8.8	120.4
Serbia	-13.0	-7.0	18.7	1.2	88.9
Sri Lanka	11.1	6.3	9.9	-1.5	122.1
Tajikistan	20.3	22.3	6.6	5.2	88.3
Timor-Leste	6.0	4.2	35.7	n.a.	128.1
Turkey	1.4	16.6	1.1	0.1	101.5
Uzbekistan	14.2	19.5	3.4	3.7	77.9
Vietnam	0.8	6.4	4.1	-0.1	120.0
Yemen	16.6	6.5	1.7	0.0	110.5

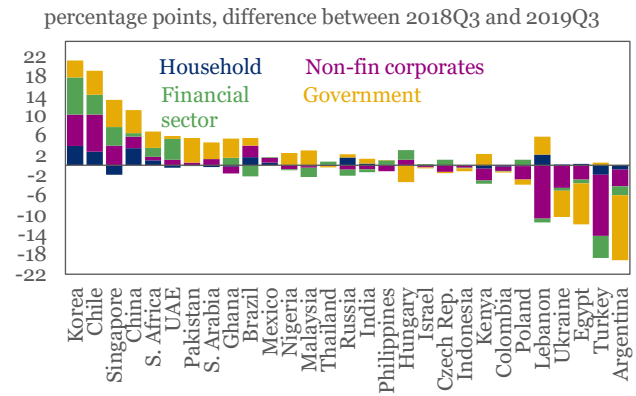
Source: IMF, World Bank, China Global Investment Tracker, China Debt Stock Database, Notre Dame Global Adaptation Index; top 10 countries = red; bottom 10 countries = green, the rest of the countries = yellow

Chart 5: Sharp rise in debt in Finland, Canada and France



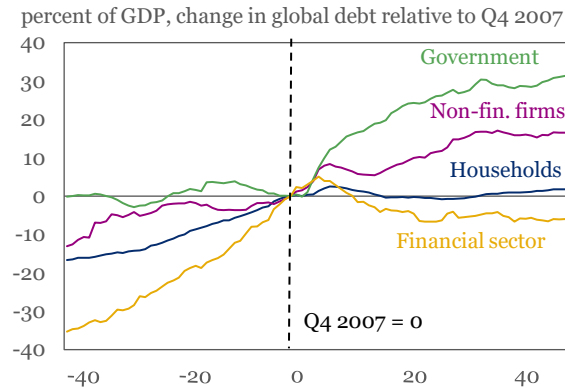
Source: BIS, Fed, ECB, BoJ, Haver, IIF.

Chart 6: Falling debt ratios for Egypt, Turkey and Argentina



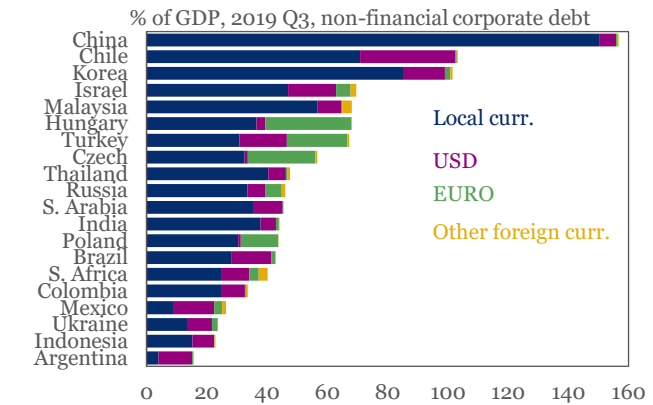
Source: BIS, Haver, IIF.

Chart 7: Hidden risk lurking in government and non-financial corporate sectors



Source: BIS, IMF, IIF.

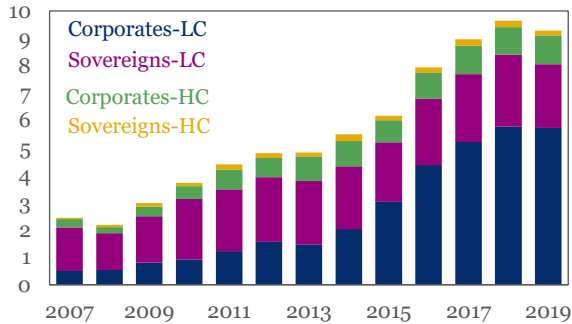
Chart 8: High reliance on FX debt across non-financial firms in EM Europe and Latin America



Source: BIS, IMF, National source, IIF.

Chart 9: 2019 issuance remains slightly below par

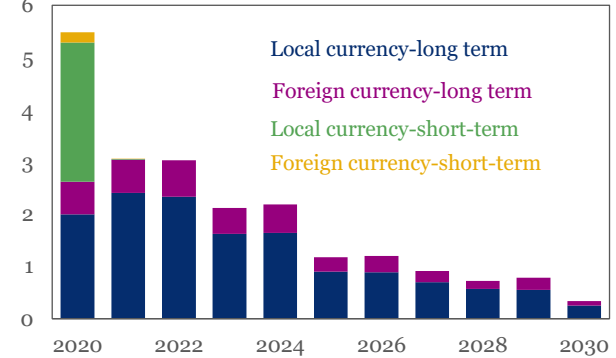
USD trillion, 12-month moving sum, EM30 corp and sov bonds and loans, includes ST securities



Source: Bloomberg, IIF; HC = hard currency, LC = local currency

Chart 10: EM redemption risk is high in 2020*

USD trillion, includes bonds and loans, EM30



Source: Bloomberg, IIF; The exhibit does not imply an improvement in funding strains starting in 2021. With local currency-denominated securities with a maturity less than 12 months still an important source of funding in many jurisdictions, the redemption figures for 2021 will increase as we continue to see further issuance in short-term securities through 2020.

Table 2: Total Global Debt by Sector

% of GDP	Households		Non-financial corporates		Government		Financial Sector	
	Q3 2019	Q3 2018	Q3 2019	Q3 2018	Q3 2019	Q3 2018	Q3 2019	Q3 2018
Global	60.2	59.6	92.5	91.6	88.3	86.0	81.4	81.7
Mature markets	72.2	72.3	91.3	90.6	109.9	107.5	109.0	109.7
U.S.	74.2	74.8	74.2	73.0	101.8	100.2	77.1	78.1
Euro Area	57.8	57.6	107.9	108.5	100.3	98.3	122.6	123.6
Japan	55.3	55.6	101.9	100.3	226.3	223.4	157.0	158.3
UK	83.8	83.6	81.5	82.6	110.3	100.2	178.0	176.3
Emerging markets	40.3	38.4	94.4	93.4	52.1	49.9	35.1	34.8
EM Asia	50.8	48.1	123.2	121.2	54.0	50.5	43.0	42.2
China	55.4	51.9	156.7	154.4	53.6	49.0	42.8	42.1
Hong Kong	77.3	71.0	227.1	223.4	62.6	66.2	133.5	149.7
India	11.5	11.2	44.2	45.0	68.1	67.2	4.0	4.6
Indonesia	16.9	17.0	22.9	23.3	29.7	30.3	9.1	9.2
Malaysia	67.8	68.0	68.1	68.4	54.2	51.2	30.5	32.4
Pakistan	2.7	2.8	14.0	13.4	75.6	70.6	0.8	0.9
Philippines	16.3	16.2	30.9	32.1	39.2	39.2	11.8	10.9
S. Korea	95.1	91.2	101.6	95.3	40.2	36.7	88.8	81.3
Singapore	52.6	54.5	117.8	113.9	115.4	109.9	187.7	184.0
Thailand	68.4	68.3	47.6	47.8	33.6	33.8	38.9	38.2
EM Europe	20.3	20.1	51.6	55.7	30.4	30.5	19.1	20.4
Czech Republic	31.9	32.0	56.7	58.0	34.7	35.0	36.1	35.0
Hungary	18.1	18.1	68.1	67.0	71.5	74.9	24.7	22.8
Poland	35.0	35.2	43.8	46.5	50.0	51.0	24.5	23.3
Russia	18.3	16.8	46.0	46.9	15.2	14.6	10.7	11.9
Turkey	14.1	16.0	67.3	79.7	35.0	34.5	27.5	31.9
Ukraine	5.9	5.7	23.8	28.3	57.8	63.1	11.1	11.7
EM Latam	23.7	22.7	38.1	36.8	66.8	67.3	27.8	28.8
Argentina	6.2	7.1	15.6	18.9	85.7	98.8	7.0	8.8
Brazil	28.7	27.1	42.9	40.6	87.9	86.3	40.4	42.7
Chile	47.2	44.5	103.3	95.8	31.2	26.3	50.2	46.2
Colombia	27.0	27.3	33.6	34.5	50.3	50.5	5.3	5.4
Mexico	16.7	16.1	26.4	25.4	35.3	35.4	16.6	16.5
AFME	20.3	20.3	41.8	42.1	41.1	40.1	13.8	13.0
Egypt	7.3	7.0	21.9	24.8	86.6	94.8	5.1	5.9
Ghana	2.5	2.8	17.9	19.2	62.8	58.8	4.1	2.6
Israel	41.6	41.8	69.6	69.9	60.4	60.6	10.6	10.4
Kenya	7.2	7.9	19.0	21.4	61.3	59.0	1.5	2.1
Lebanon	54.5	52.3	93.4	104.2	154.1	150.5	8.3	9.1
Nigeria	15.6	15.5	8.3	9.1	29.2	26.8	4.3	4.4
Saudi Arabia	11.6	12.0	45.5	44.3	21.8	18.5	3.9	3.9
South Africa	34.2	33.2	40.2	39.5	61.1	57.8	25.4	23.5
UAE	22.3	22.7	69.2	68.1	19.9	19.3	47.1	42.9

Sources: IIF, BIS, Haver, National Sources.

Table 3: Currency Breakdown of EM Sectoral Debt

% of GDP	Non-financial corporates				Government				Financial Sector				Households	
	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
As of Q3 2019														
Emerging markets														
EM Asia														
China	150.4	6.3	5.5	0.6	53.2	0.5	0.4	0.0	36.7	6.1	4.8	0.6	55.4	0.0
Hong Kong	33.8	193.3	156.4	26.5	60.8	1.8	1.6	0.0	27.1	106.4	80.6	11.9	74.6	2.7
India	37.9	6.3	5.1	1.0	66.3	1.9	1.9	0.0	0.9	3.1	2.8	0.2	11.5	0.0
Indonesia	15.2	7.7	7.2	0.2	21.0	8.7	7.2	1.0	4.2	4.9	4.7	0.1	16.6	0.3
Malaysia	56.7	11.5	8.1	0.2	52.1	2.1	1.6	0.0	10.7	19.8	14.9	2.1	67.5	0.3
S. Korea	85.1	16.5	14.0	1.7	39.8	0.4	0.3	0.1	62.2	26.6	21.4	3.4	94.5	0.6
Singapore	62.6	55.2	47.4	3.5	115.4	0.0	0.0	0.0	45.8	141.9	104.6	14.8	41.5	11.1
Thailand	40.5	7.1	5.8	0.4	33.4	0.1	0.1	0.0	32.1	6.8	6.1	0.4	68.2	0.1
EM Europe														
Czech Republic	32.5	24.2	1.1	22.3	30.9	3.8	0.0	3.7	31.1	4.9	0.4	4.5	31.9	0.1
Hungary	36.5	31.6	2.9	28.6	55.6	15.9	10.3	5.1	8.5	16.2	7.9	8.1	18.0	0.1
Poland	30.4	13.4	0.9	12.4	34.2	15.9	2.2	13.0	16.1	8.3	1.3	2.8	22.8	12.2
Russia	33.5	12.5	5.9	5.6	11.8	3.4	3.2	0.2	6.7	4.0	3.2	0.5	18.2	0.1
Turkey	30.8	36.5	15.8	20.0	17.9	17.1	10.4	5.1	5.3	22.2	17.1	5.0	14.1	0.0
Ukraine	13.4	10.3	8.3	1.9	24.9	32.9	27.1	5.8	0.8	10.2	5.5	4.3	4.6	1.3
EM Latam														
Argentina	4.0	11.6	11.1	0.4	16.4	69.3	53.9	6.9	2.1	4.9	1.1	0.1	5.9	0.3
Brazil	28.1	14.9	13.3	1.3	87.2	0.6	0.5	0.1	31.9	8.5	8.1	0.2	28.7	0.0
Chile	70.9	32.4	31.6	0.5	25.0	6.1	3.4	2.7	40.5	9.7	8.1	0.2	45.3	1.9
Colombia	25.0	8.6	7.6	0.4	34.7	15.7	14.6	0.8	0.7	4.6	4.6	0.0	26.9	0.1
Mexico	9.0	17.3	13.4	2.7	28.3	7.0	4.9	1.4	13.9	2.7	2.2	0.4	16.7	0.0
AFME														
Israel	47.0	22.7	15.9	4.8	52.7	7.7	4.8	2.8	9.1	1.4	1.2	0.2	41.4	0.2
S. Arabia	35.6	9.9	9.6	0.2	11.4	10.4	10.4	0.0	1.1	2.7	2.4	0.1	11.6	0.0
S. Africa	25.0	15.2	9.2	3.0	53.5	7.6	6.7	0.5	14.2	11.1	5.3	1.0	33.8	0.4

Sources: IIF, BIS, Haver, National Sources, IIF estimates

*LC=local currency; FC=foreign currency