The BoC-BoE Sovereign Default Database: What's New in 2020?

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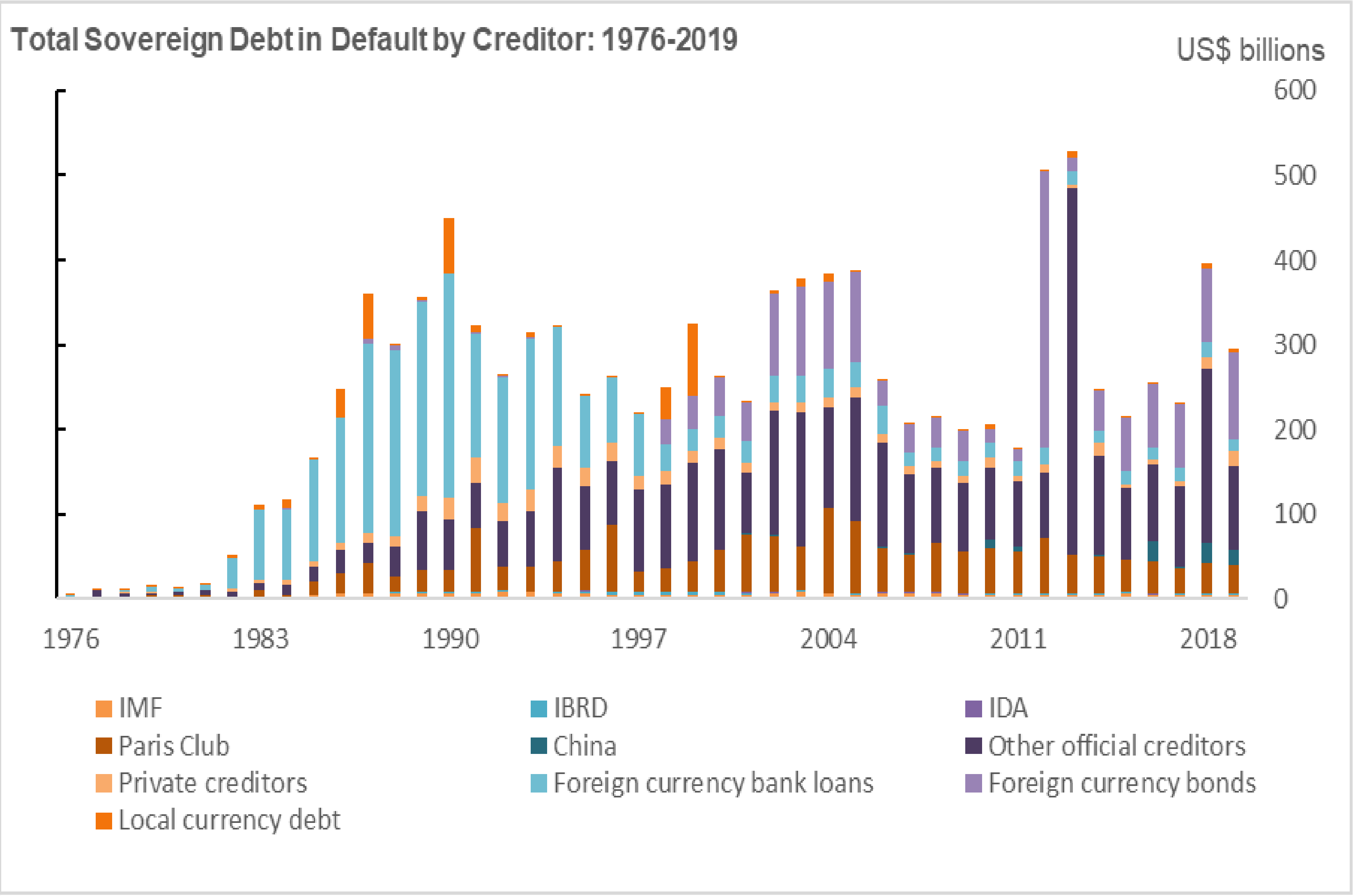


Overview

- Disclaimer
- What is the BoC-BoE sovereign default database?
- What does it look like?
- Why is it needed?
- How is it compiled?
- What trends does it highlight?
- What’s new this year? How might the database further evolve?
- Default prospects 2020-2025

Views of the authors do not necessarily reflect those of the Bank of Canada and the Bank of England.

About the BoC-BoE Database

- A time series (starting in 1960) covering *all* types of sovereign (and other *fiscally autonomous* territory) debt owed to official and private creditors identified as being in default.
- Data—23k+ entries—is compiled county-by-county, aggregated globally, and updated annually in nominal U.S. dollars.
- Data and associate research is downloadable and available online at the BoC and BoE websites:
- https://www.bankofengland.co.uk/statistics/research-datasets and https://www.bankofcanada.ca/2020/06/staff-analytical-note-2020-13/
- First developed by me and colleagues at the Bank of Canada and published in 2014 and since then compiled in partnership with the Bank of England.

What does it look like (1)?

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Database of Sovereign Defaults										
Last Update: 19-Aug-2019										
A. Summary Data										
Total Debt in Default (US$ mil) by Creditor	199254	207962	171382	503999	525919	242032	211410	270991	225313	383611
- IMF	4504	4472	4510	4550	4599	4362	6428	4114	4238	4203
- IBRD	565	631	701	761	888	852	873	896	919	954
- IDA	1149	1265	1414	1496	1203	1337	1356	1452	1547	1665
- Paris Club	48900	53661	48003	63752	44439	43914	35240	35319	26917	33889
- China	0	3098	6135	307	0	1620	43	25193	2698	22440
- Other official creditors	81398	91494	73652	75422	431256	113687	84761	88357	93400	200774
- Private creditors	8002	12159	4717	11437	4722	14909	3479	27505	5604	9786
- FC Bank Loans	17660	18563	18215	18639	15345	14832	14527	13381	14832	16107
- FC Bonds	36632	15787	13923	327536	15216	46515	64700	74516	75155	87825
- LC Debt	444	6832	112	99	8251	4	3	258	3	5953
Total Debt in Default (US$ mil) by Debtor	199254	207962	171382	503999	525919	242032	211410	270991	225313	383611
- Advanced economies	0	0	0	312420	355519	0	3325	25904	46602	160889
- Emerging/frontier markets	95625	86542	61417	69406	69283	111844	110466	138883	81131	118622
- HIPC countries	22179	24397	12903	12287	8822	8798	9460	9264	13366	16659
- Other developing countries	81450	97023	97062	109887	92294	121390	88160	96941	84213	87441
Default Rates (%)										
- % of all Sovereigns	47.4	45.1	47.2	47.2	48.6	44.9	45.3	43.9	43.5	39.7
- % of Paris Club Debt	14.3	15.2	11.6	16.0	11.9	14.4	11.3	11.7	8.6	10.8
- % of World Public Debt	0.4	0.4	0.3	0.8	0.9	0.4	0.4	0.4	0.3	0.6
- % of World GDP	0.3	0.3	0.2	0.7	0.7	0.3	0.3	0.4	0.3	0.5
Total Number of Sovereigns	213	213	214	214	214	214	214	214	214	214
Sovereigns in Default	101	96	101	101	104	96	97	94	93	85
- IMF	3	3	3	3	3	3	4	3	2	2
- IBRD	1	1	1	1	2	1	1	1	1	1
- IDA	4	5	4	6	5	5	5	5	5	5
- Paris Club	18	19	13	12	9	10	11	10	10	10
- China	0	6	4	3	0	2	2	5	6	7
- Other official creditors	95	88	92	88	95	90	87	86	84	73
- Private creditors	55	54	51	50	46	44	42	43	45	42
- FC Bank Loans	7	7	7	6	4	5	5	5	5	7
- FC Bonds	7	7	6	7	8	4	6	7	9	7
- LC Debt	3	3	2	2	3	2	2	3	2	3
Outstanding Paris Club Debt (US$bil)	342	353	414	398	373	304	311	301	313	315
Gross World Public Debt (US$bil)	45110	50774	57117	59433	60184	62060	59556	62756	65476	69439
Gross World Product (US$bil)	60394	66025	73245	74639	76770	78852	74689	75735	80145	84740

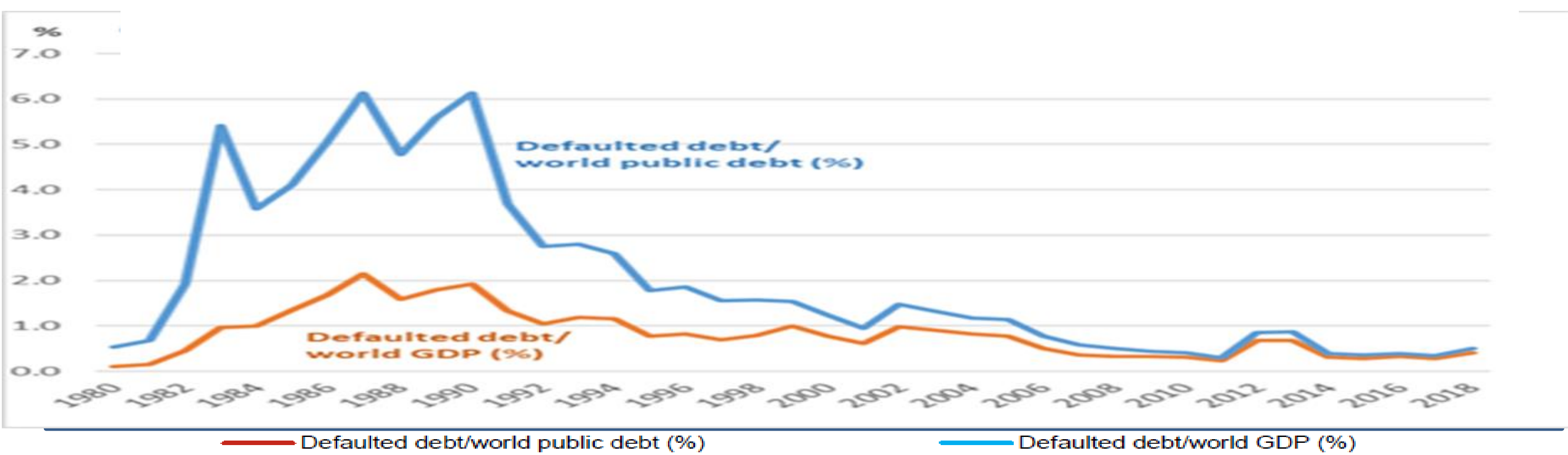
What does it look like (2)?

B. Sovereign Debt in default (US$ mil) by Issuer	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018p
Angola	**391**	**360**	**322**	**310**	**333**	**316**	**284**	**3378**	**101**	**3703**
- Paris Club	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
- China								*3100*		
- Other official creditors	*29*	*38*	*13*	*13*	*25*	*12*	*12*	*12*	*3*	*3*
- Private creditors	*361*	*322*	*309*	*297*	*308*	*304*	*272*	*267*	*98*	*3700*
- LC debt	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Antigua and Barbuda	**707**	**684**	**515**	**0**	**3**	**19**	**20**	**64**	**154**	********
- Paris Club	*0*	*110*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
- Other official creditors	*316*	*287*	*278*	*0*	*3*	*19*	*20*	*64*	*154*	******
- FC bank loans	*358*	*244*	*193*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
- FC bonds	*33*	*43*	*44*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Argentina	**36732**	**18068**	**17696**	**17750**	**17839**	**55874**	**44536**	**47301**	**3411**	**1238**
- IMF	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
- IBRD	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
- Paris Club	*3156*	*3165*	*3150*	*3113*	*3074*	*9690*	*15*	*15*	*15*	*15*
- Other official creditors	*2411*	*2521*	*2369*	*2266*	*2182*	*30*	*0*	*0*	*0*	*0*
- Private creditors	*260*	*169*	*187*	*82*	*13*	*11*	*10*	*11*	*11*	*10*
- FC bank loans	*894*	*851*	*701*	*708*	*727*	*98*	*94*	*92*	*92*	*90*
- FC bonds	*29808*	*11218*	*11177*	*11482*	*11838*	*46041*	*44414*	*47180*	*3290*	*1120*
- LC debt	*203*	*144*	*112*	*99*	*5*	*4*	*3*	*3*	*3*	*3*
Armenia	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
- Other official creditors	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
- Private creditors	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Azerbaijan	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
- Other official creditors	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Bangladesh	**8**	**26**	**25**	**25**	**25**	**25**	**16**	**15**	**16**	********
- Other official creditors	*8*	*26*	*25*	*25*	*25*	*25*	*16*	*15*	*16*	******
- Private creditors	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Barbados	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6886**
- Other official creditors	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*69*
- FC bonds	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*642*
- FC bank loans	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*225*
- LC debt	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*5950*

Why a Sovereign Default Database?

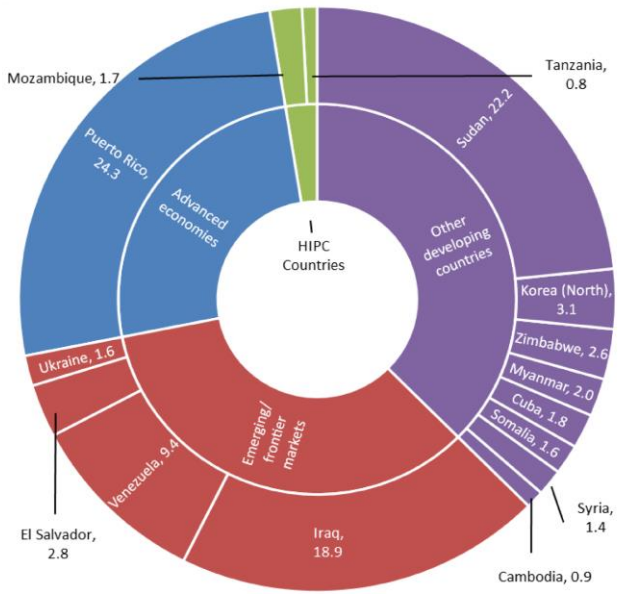
- Other sovereign default datasets in the public domain typically are point-in-time and focus on *market* debt.
- The BoC-BoE database is the *only* database covering all types of sovereign debt in default and their evolution over time, including obligations due *official creditors*.
- Thus, it gives a truly comprehensive picture to help analysis of the economic and financial impacts of sovereign defaults.

Sovereign debt in default as a share of world public debt and world GDP



How is the Database compiled?

- We use a *broad* default definition, i.e. both payment defaults and changes in payment terms that result in NPV creditor losses.
- Our information comes mainly from public sources – MLIs, the Paris Club, other bilateral official creditors, CRAs, private creditors, debt-distressed governments, the media, think tanks, and academic research papers.
- A key building block is annual IBRD data on loan arrears to official and private creditors, which we treat as residuals after deducting defaulted debt due, e.g., the Paris Club, China, bond and bank creditors.



- *For many sovereigns, defaults recur or persist over <u>long periods</u>. The DRC, Zimbabwe, Sudan, Yemen, and Cuba are examples but there are others (see also slide 10).*
- *Wars, revolutions, weak governance the main drivers.*
- *External efforts to strengthen debt management in LICs have had limited impact. We simply don’t have all the tools to tackle these issues!*

Key trends

- Global default footprint still low, @ 0.4% of global public debt in 2019, down from 0.5% in 2018, and vs. a peak in 1990 of 6.1%.
- 2019 outcome mainly reflects Greece’s big restructuring of debt owed official EU creditors (US$111 billion) in 2018 dropping out of the total.
- By value, the default distribution remains *highly skewed*: in 2019 the top 3 governments (Puerto Rico, Venezuela and Sudan) accounted for about 59% of total debt in default, and the top 10 for 88%.
- The data help highlight strains on the Paris Club-led contractual approach to debt workouts.
- The Club’s share of all official debt in default has fallen from 40% to 25% over the past decade. The share involving defaults on loans from other bilateral official creditors–notably China, India and the Gulf states–has grown.

China v Paris Club Data

Default data for China's official loans—included for the first time last year—is available since 2000.

- Data is partial, point-in-time, mainly debtor disclosures of debt write-downs or restructurings, not ongoing arrears.
- Earliest data mainly reflects HIPC debt relief.
- There are similar issues with Paris Club debt in default, where data is usually disclosed only when debt is restructured, and public reporting by members of arrears is also limited.

Still, the China and Paris Club data does highlight important trends:

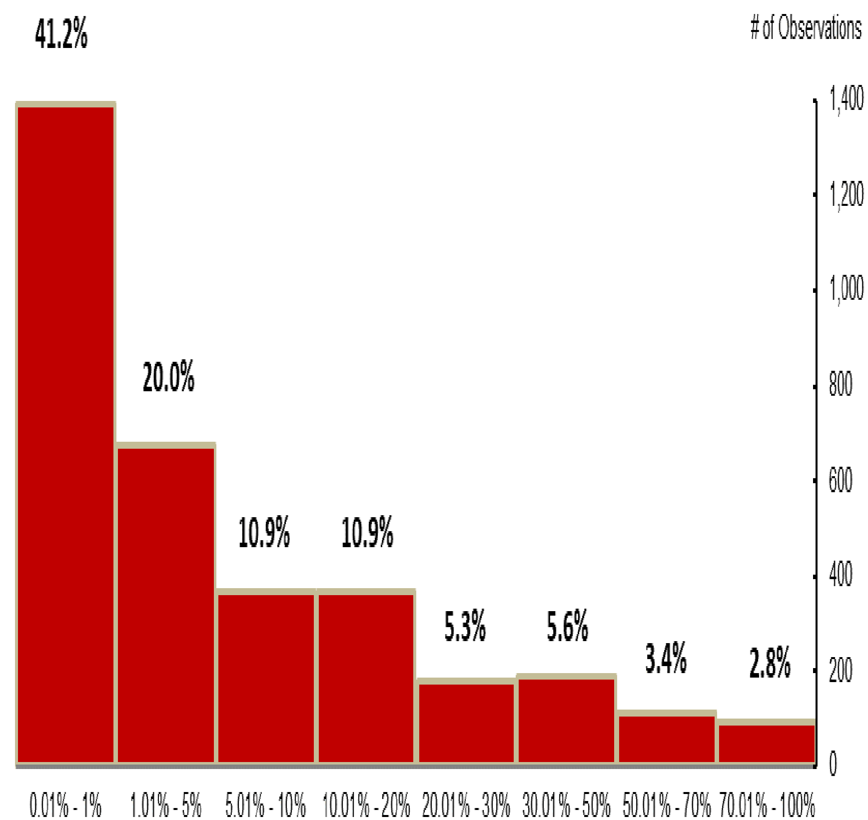
- Paris Club debt in default has been stable over the past decade, much of it of longstanding (e.g.. Sudan); its outstanding loans, @US$300 billion, also are static.
- Since 2010, disclosures about Chinese loans in default have been increasing, along with rising BRI lending.
- Big recently defaults involve Venezuela ($19.0 bn), Ethiopia ($3.3), Angola ($3.1), Congo ($1.6 bn), Cuba ($3.0), Sri Lanka ($1.5) Cameroon ($1.1), and Ecuador ($1.0).
- Despite criticism, not much evidence of *predatory* lending by China. Notably, it appears to have granted debt relief to HIPCs on terms comparable to the Paris Club's.
- Except in scale, China's recent lending behaviour is not unlike that of traditional official bilateral creditors; DSSI debt deferrals may be an exception.
- China evidently does not (yet) see its interests as aligned with those of the Paris Club.
- So much is at stake on how quickly China learns from its own debt restructuring experiences that multilateral approaches can deliver sustainable outcomes for both sovereign creditors and debtors.

US$ billions

Shares of Public Debt in Default

- In 2019 we included total govt debt data to analyse shares in default in more detail.
- The histogram chart shows default shares since 1960: 3,379 observations for 141 sovereigns.
- Most commonly, sovereigns “selectively” default on part of their debt.
- Reflecting this, default shares are skewed towards lower values. 72% of observations are equal to, or below, 10% of total debt. The remaining 28% range between 10 and 100%.
- Of these, 6.2% defaulted on debt between 50 and 100% of the total.
- The highest shares, 70% and above, are most often associated with sovereigns facing severe political conflict and/or economic distress.

Chart 5: Distribution of Sovereign Default Shares in Government Debt, 1960 - 2018



Percentages shown on top of the histogram bars refer to shares in the total number of observations.
Source: BoC-BoE Database

Last observation: 2018

How is the Database evolving?

- Since 2018 we’ve included separate data on Chinese official loans gathered from the Centre for Global Development, Rhodium Group, IMF, debtor governments and other sources.
- We’ve also added central government debt stocks to the country data to facilitate analysis of the *shares* of debt in default.
- Libya is a new addition in 2019, bringing the total number of sovereigns that have defaulted since 1960 to 147.
- This year we’ve also introduced the first data on *domestic arrears*–e.g. late payments for goods and services. When lawfully contracted, arrears are also government obligations effectively in default, often cleared through issuance of *securitised* debt (see next page).
- From next year, we plan to include arrears for the years 2005-2020 and, later, for previous years–a *very* big project.
- Other suggestions welcome!

Domestic arrears, cont.

Fiscal Arrears 2018	% GDP	Stock of arrears ($ mil)	Arrears/Public Debt (%)	Public Debt ($ mil)	Public Debt (% gdp)	GDP ($ mil)
Albania	1.8	271	2.6	10,529	69.9	15,059
Angola	4.4	4100	4.1	99,816	105.9	94,253
Argentina	0.1	317	0.1	447,278	86.1	519,487
Barbados	12.0	610	9.5	6,394	125.7	5,087
Benin	0.2	34	0.6	5,850	41.0	14,269
Burkina Faso	0.8	115	1.9	6,062	42.9	14,138
Cameroon	2.3	900	5.9	15,317	39.1	39,137
CAR	3.9	89	7.8	1,139	49.9	2,280
Chad	2.2	246	4.6	5,337	48.3	11,051
Comoros	1.8	21	8.6	248	21.0	1,184
Congo, Rep.	14.5	1691	16.5	10,246	87.8	11,664
Congo, DR	6.6	3109	43.1	7,205	15.3	47,099
Cote d'Ivoire	0.2	98	0.4	23,097	53.2	43,408
Curaçao	0.5	16	0.9	1,707	54.6	3,128
Ecuador	1.0	1127	2.3	49,629	45.8	108,398
Equatorial Guinea	9.0	1236	20.8	5,942	43.3	13,734
Gabon	3.0	510	5.0	10,237	60.7	16,875
Gambia	1.8	29	2.1	1,407	86.6	1,625
Guinea	1.6	192	4.2	4,623	38.2	12,099
Guinea-Bissau	12.2	174	18.9	919	64.3	1,429
Honduras	1.1	261	2.7	9,559	40.2	23,803
Iran	20.0	89211	62.2	143,539	32.2	446,105
Iraq	1.3	2915	2.6	110,441	49.3	224,228
Jamaica	0.3	50	0.3	14,589	94.4	15,461
Jordan	0.5	196	0.5	39,800	94.4	42,291
Kenya	1.0	879	1.7	52,886	60.1	87,928
Laos	1.3	236	2.3	10,362	57.2	18,120
Lesotho	2.0	54	4.5	1,208	44.5	2,713
Liberia	3.4	110	8.5	1,296	39.9	3,248
Madagascar	0.5	71	1.3	5,527	45.7	12,090
Malawi	1.4	98	2.1	4,769	62.9	6,901
Mali	0.3	52	0.8	6,404	37.3	17,180
Moldova	0	3	0.1	3,355	29.7	11,309
Mozambique	0.75	108	0.8	14,372	99.8	14,396
Nauru	43.9	49	21.7	226	58.3	112
Nicaragua	3.8	498	7.9	6,270	47.8	13,118
Niger	1.8	167	3.3	5,007	53.8	9,299
Pakistan	2.6	8092	3.6	225,528	71.7	314,588
Panama	2.3	1500	5.1	29,697	39.5	65,055
St. Maarten	2.9	28	5.4	519	54.4	954
Sao Tome	8.7	37	11.7	315	74.5	423
Senegal	0.7	164	1.1	14,463	61.6	23,498
Sierra Leone	1.0	416	16.2	2,571	63.0	4,082
Somalia	1.5	69	1.4	4,766	101.0	4,721
South Sudan	7.3	254	17.5	1,450	41.7	3,477
Sudan	0.6	220	0.3	66,613	185.6	35,891
Sri Lanka	0.6	533	0.7	74,039	83.3	88,901
Suriname	4.0	137	5.5	2,495	72.8	3,427
Uganda	3.0	843	7.3	11,631	41.4	28,116
Zambia	1.5	401	1.9	20,871	78.1	26,720
Zimbabwe	0.5	108	1.4	7,781	37.1	20,997
Totals	**4.8**	**$122,646**	**7.6**	**$1,605,333**	**63.1**	**$2,544,556**

Our main findings:

- ✓ Identified arrears were sizable in 2018 at @$122 billion, 4.8% of the group's public debt and 7.6% of their aggregate GDP.
- ✓ In comparison, global defaults were $396 billion; excluding Greece, they were $285 billion.
- ✓ So identified arrears were 31% of conventional debt in default, and excluding Greece, they were 43%.
- ✓ Domestic arrears are correlated with conventional defaults: over half of sovereigns in default in 2018 also had domestic arrears.
- ✓ The true scale of arrears in 2018 was higher. On top of these 51 cases, we've since spotted another 17!
- ✓ Looking ahead, we plan to backfill the dollar amounts of prior arrears cases in future updates of the database.
- ✓ We also want to determine to what extent arrears are a leading or a coincident indicator of conventional sovereign default.

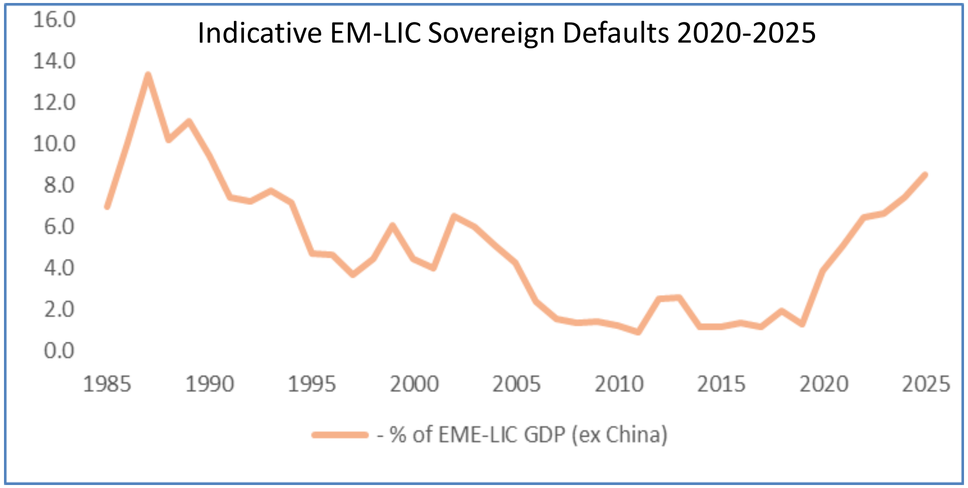
Sovereign Defaults 2020-2025: How Big?

Even before COVID-19, defaults were already set to rise in 2020. My current estimate is that they will be around $800 billion, nearly 3x the level in 2019:

- Recent defaults by Argentina, Ecuador and Lebanon were already on the cards in 1Q20.
- Argentina's and Ecuador's workouts have been completed relatively quickly – perhaps because COVID-19 motivated bond creditors to do deals.
- Lebanon's workout, meanwhile, is contentious domestically and likely to drag on beyond this year.
- On the downside, with COVID-19 raising questions about medium-term debt sustainability in these and other sovereigns, we're likely to see more recurring debt restructuring cases.
- The sudden stop in 1Q2020 cross-border EM capital flows, which has only partly unwound, will also help drive defaults higher, given elevated EM-LIC debt burdens
- Near-term IMF/WB and G20 assistance, combined with QE by AEs, can slow but not overturn, the deterioration in credit fundamentals.

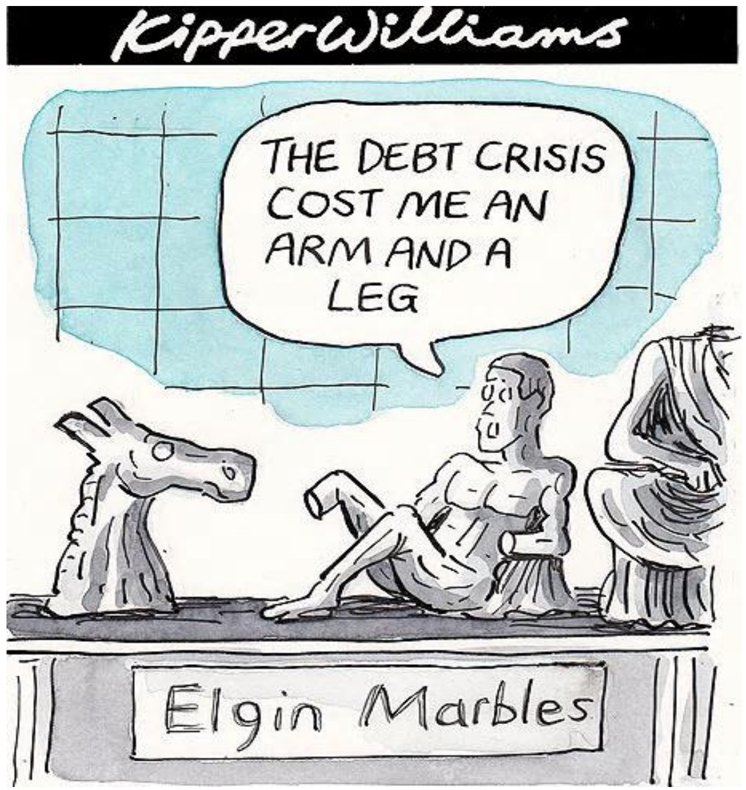
Prospects in 2021-2025

- In a moderate *stress scenario*, the EM-LIC average credit rating falls two notches (from BB-) to single-B.
- Annual defaults could easily reach $2.5 to $3 trillion annually, @10% of developing country (ex-China) GDP, close to the crisis levels of the 1980s (see chart).



- This scenario does not include EA sovereigns. A future restructuring involving Italy (2020 debt is @ $2.6 trillion), for example, would be a huge global shock, dwarfing EM and LIC defaults, and do lasting damage to the creditworthiness of other Eurozone sovereigns.
- The potential for similar in scale to the 1980s highlights weaknesses in the multilateral framework for managing them:
- Weak incentives doe debtor governments and creditors to act pre-emptively;
- The reluctance of China and other new bilateral lenders to join the Paris Club;
- The IMF's constrained balance sheet and stretched staffing will challenge its capacity to oversee multiple restructurings involving a wide range of sovereigns and bilateral official and private creditors;
- Tackling these issues is vital to containing fallout rising sovereign financial distress.

Comments? Questions?



Thank you!