



BANK OF ENGLAND

Special Topic: Incorporating domestic arrears in the BoC-BoE sovereign default database

David Beers¹, Elliot Jones² and John Walsh³
June 2020 (updated September 2020)

From the inception of the BoC-BoE database in 2014, its coverage has been based on a broad definition of sovereign default—one that tracks both interruptions of scheduled debt service and changes in debt payment terms that result in creditor losses. For defaults involving private creditors, this includes marketable debt denominated in foreign and local currency. Still, other government fiscal actions suggest that the sovereign default perimeter should be extended further. Notably, there is substantial evidence that late payments by governments for goods and services—called domestic, fiscal or expenditure arrears—also create obligations to domestic creditors that are effectively in default and must ultimately be resolved.

Both the definition and the determination of domestic arrears are relatively straightforward, at least in theory (Flynn and Pessoa 2014). Arrears are generally defined as any overdue payments for legally mandated or contractually required expenditures, including pensions, salaries, other services and capital outlays. The time frame in which late payments become arrears is typically governed by local law—most often penalties and interest charges can accrue when payments are late by more than 30 or 90 days. When arrears accumulate over a number of years or their legality is disputed, governments and their creditors usually rely on domestic courts or ad hoc tribunals to reconcile and confirm claims before resolving them. Once finalized, these obligations are settled by some combination of cash payments and the issuance of new debt to creditors. Given the often extended time frame between when arrears emerge and when they are settled, it is clear that the domestic creditors involved incur material losses. Like conventional sovereign debt, however, outright repudiations of domestic arrears appear to be relatively rare.⁴

The clearance of arrears, and the adoption of policies to discourage them from recurring, are frequently objectives of the International Monetary Fund's (IMF) country programs. This is

¹ Bank of England. Email: david.beers@bankofengland.co.uk

² Bank of England. Email: elliot.jones@bankofengland.co.uk

³ Bank of Canada. Email: jwalsh@bank-banque-canada.ca

⁴ Currency confiscations documented in the BoC-BoE database could be vehicles for at least partial repudiation of arrears.

not surprising, given the adverse impact that government arrears have on private sector activity in affected countries.⁵ But at the same time, IMF documents highlight that domestic arrears, like conventional sovereign defaults, often persist and recur. And like conventional defaults, arrears involve a broad spectrum of developing, emerging-market and (although less frequently) high-income sovereigns.

Until recently, the published IMF data on domestic arrears had limitations. The data reported usually identified *flows* of arrears, not *stocks*, based on government estimates subject to change. Moreover, since the IMF rarely reported estimated stocks of arrears, comparisons with the value of conventional sovereign debt in default were challenging. But IMF practice has changed: it now regularly reports domestic arrears data on a stock basis and explicitly incorporates them into the data on public debt. As a result, we can begin to compare data on arrears with the conventional defaults we currently report in the BoC–BoE sovereign default database.

Table 1 below highlights the 2018 domestic arrears data we compiled for 71 sovereigns from recent IMF Article IV and program documents.⁶ It includes the US-dollar value of stocks of arrears and their shares of each country’s gross domestic product (GDP) and public debt. In the 2020 BoC–BoE database, the new 2018 domestic arrears dataset is available in a separate tab, DOMARS, at the bottom of the downloadable spreadsheet. We plan to track arrears annually for each sovereign that incurs them in a new “domestic arrears” category of the database. We will also include arrears data we are able to gather for earlier years. With this wider coverage, we have two aims: first, to provide a more comprehensive picture of the scale of historical sovereign debt in distress; and, second, to evaluate whether domestic arrears are best viewed as a coincident indicator or as a driver of conventional sovereign defaults.

⁵ For a recent discussion, see P. N’Diaye et al., “Background Paper: Annex Chapter 3—Domestic Arrears in SSA,” Regional Economic Outlook: Sub-Saharan Africa, International Monetary Fund (October 2019): 27–58.

⁶ The relevant sources are included in the country listings in the appendix of the BoC–BoE Sovereign Default Database: Methodology, Assumptions and Sources.

Table 1: Domestic Arrears, 2018

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	4.1	4336	3.9	112,152	89.0	105,902
Antigua & Barbuda	1.1	17	1.2	1,441	89.5	1,610
Argentina	0.1	317	0.1	447,278	86.1	519,487
Bahamas	2.9	356	3.4	10,550	84.5	12,485
Barbados	12.0	610	9.5	6,394	125.7	5,087
Benin	0.3	47	0.8	5,850	41.0	14,269
Bosnia	1.4	288	4.2	6,916	34.3	20,162
Burkina Faso	0.8	115	1.9	6,065	42.9	14,138
Cameroon	2.4	957	6.2	15,317	39.1	39,137
CAR	5.8	132	11.6	1,139	49.9	2,280
Chad	2.6	292	5.5	5,337	48.3	11,051
Colombia	1.9	6327	3.7	172,768	52.2	330,974
Comoros	1.8	21	8.6	248	21.0	1,184
Congo, Rep.	14.5	2100	20.5	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
Djibouti	2.3	68	4.9	1,402	48.0	2,923
Ecuador	1.0	1127	2.3	49,629	45.8	108,398
Equatorial Guinea	9.0	2119	35.7	5,942	43.3	13,734
Eswatini (Swaziland)	6.7	317	19.0	1,667	35.2	4,731
Gabon	3.0	510	5.0	10,237	60.7	16,875
Gambia	1.8	29	2.1	1,407	86.6	1,625
Ghana	0.7	488	1.3	38,847	59.3	65,518
Greece	1.3	2746	0.7	403,400	184.9	218,230
Grenada	2.0	24	3.2	752	63.5	1,185
Guinea	1.6	373	8.1	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	82	6.8	1,208	44.5	2,713
Liberia	3.4	110	8.5	1,296	39.9	3,248
Madagascar	0.5	76	1.4	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	204	1.4	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
Nigeria	1.8	7222	6.7	108,546	27.3	398,186
Pakistan	2.6	8092	3.6	225,528	71.7	314,588
Palau	2.8	8	11.2	71	25.1	284
Panama	2.3	1500	5.1	29,697	39.5	65,055
Papua New Guinea	0.2	36	0.4	8,228	35.5	23,185
Rwanda	1.3	121	3.1	3,867	40.7	9,510
St. Maarten	2.9	28	5.4	519	54.4	954
St. Vincent & Gren.	1.0	8	1.3	604	74.5	811
Sao Tome	8.7	37	11.7	315	74.5	423
Senegal	0.7	164	1.1	14,463	61.6	23,498
Serbia	0.0	8	0.0	27,563	54.5	50,509
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
Solomon Islands	0.7	10	7.7	130	9.4	1,378
South Africa	1.1	4079	2.0	208,769	56.7	368,135
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
Tanzania	2.2	1244	5.5	21,202	37.3	56,852
Togo	7.6	406	10.0	4,080	76.2	5,358
Uganda	3.0	843	7.3	11,631	41.4	28,116
W. Bank & Gaza	18.4	2767	46.0	6,016	40.0	15,039
Zambia	1.5	1482	7.1	20,871	78.1	26,720
Zimbabwe	0.5	108	1.4	7,781	37.1	20,997
Totals	3.7	\$152,264	5.8	\$2,644,493	63.8	\$4,143,270

Our main findings:

- In aggregate, the stock of identified fiscal arrears was sizable in 2018, amounting to US\$152 billion, 3.7% of the group's GDP and 5.8% its public debt.
- By comparison, global defaults on conventional debt in that year totalled US\$396 billion. Excluding Greece's exceptional reprofiling of its official debt, defaults amounted to US\$285 billion.
- Consequently, identified arrears in 2018 were equivalent to 38% of all conventional debt then in default.
- Domestic arrears are correlated with conventional defaults: over half of the sovereigns in default in 2018 also had fiscal arrears.
- As a share of public debt, arrears ranged widely in 2018—from 0.1% (Argentina) to 62.2% (Iran).
- The true scale of domestic arrears in 2018 was almost certainly higher globally, as the data does not cover all potential cases. For example, neither Lebanon nor Venezuela, where arrears in 2018 may have been, and could still be,

substantial, report them to the IMF. In Lebanon's case, this may change if its request for a Fund programme proceeds; the story in Venezuela probably awaits resolution of its internal political stalemate.