

## **International Finance Facility for Education (IFFEd)**

### **The Impact on Debt Sustainability in LMICs**

August 2020

The debt burden of a number of developing countries has increased over the past 10 years, including LMICs, and is of concern to governments and civil society. Using data collected by the World Bank and the IMF, this note identifies the LMICs with larger debt burdens in 2018 and the categories of creditors that have contributed the most to this debt build-up. In addition, using common indicators<sup>1</sup> of potential debt distress and analysis carried out by the staff of the World Bank and the IMF, it identifies those countries where increases in debt appear most problematic and where vigilance around additional debt is required. Finally, the note carries out a very preliminary analysis of the impact of the COVID-19 crisis on the debt sustainability of LMICs.

#### **What is IFFEd?**

IFFEd is an innovative financing facility that seeks to increase the capacity of the Multilateral Development Banks (MDBs)<sup>2</sup> to provide additional lending from their standard non-

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<sup>1</sup> The most useful aggregate for assessing external debt sustainability is public and publicly-guaranteed private debt (PPG). These debts are guaranteed for repayment by a public entity. Public external debt is comprised of multilateral and bilateral loans and use of IMF credit. Publicly guaranteed private external debt reflects borrowing from the bond market and commercial banks, among other private agencies. External borrowing by private sector entities (without the guarantee of the government) can also affect debt sustainability. Non-guaranteed private sector borrowing is not a contingent liability of the government and, theoretically, companies can fail. But history shows that large companies and those central to the economy (in particular, banks and other financial institutions) are frequently bailed out or taken over by the government. Private non-guaranteed debt is thus often used as a secondary measure in debt sustainability stress tests.

<sup>2</sup> IFFEd's choice of the MDBs as implementing partners is based on three factors. First, MDBs can efficiently leverage IFFEd resources. Second, MDBs are already the most important providers of financial, programmatic and technical expertise in education. MDBs, on average, provided some \$3.5 billion per annum of financial support in education to developing countries during the 2015-2017 period.<sup>2</sup> Finally, MDBs have a wider set of expertise in areas that may be critical to improve learning outcomes in developing countries, such as public sector reform or public finance. MDBs have also strong expertise in the design and implementation of results-oriented programs and projects. As a collaborative platform, IFFEd has the additional advantage of improving coordination and collaboration between MDBs to optimize the three comparative advantages just mentioned.

concessional windows to support the education systems of LMICs. IFFEd will expand MDB lending capacity by strengthening their balance sheets using contingent commitments. Current estimates indicate that for each dollar of contingent support provided by IFFEd, MDBs will be able to lend four additional dollars, on average, to eligible countries.

IFFEd will also make the terms of MDB lending for education more favorable for LMICs by providing grants to be combined with MDB loans. IFFEd's current objective is that eligible LMICs would on average receive 1 dollar of grants per 4 dollars of MDB loans.<sup>3</sup> For example, if a country is eligible to receive \$100m in financing, \$80m will be received as loans and \$20m as grants. Given interest rates, MDB loan terms, and standard discount rates used by the IMF to estimate present values, the effective terms of this blend of grants and loans would be significantly less expensive than standard MDB non-concessional terms, indeed close to IDA hard terms, and far less expensive than market-rate financing from private lenders. Therefore, the additional debt incurred by LMICs for financing education with IFFEd supported loans will be smaller than for those borrowing at regular MDB rates or through private borrowing.

## The Aggregate Debt Situation in LMICs

At the end of 2018, LMICs had an outstanding external debt of close to \$1.66 trillion (see Table 1). About one half of it is long-term public or publicly guaranteed (PPG) debt. LMICs have also secured \$495 billion dollars in private non-guaranteed debt, up from about \$255 billion in 2010.<sup>4</sup> At this level of aggregation, the LMIC debt burden, while significant, seems manageable, with total external debt representing 29.3% of their combined GNI<sup>5</sup> and total

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<sup>3</sup> Donor interest in IFFEd is predicated on its focus on: (a) education — a growing sectoral priority among donors, (b) LMICs — with the largest number of children facing learning deficits, and (c) value for money. IFFEd's value for money is predicated on its financial leverage as well as its focus on improving the results orientation of MDB supported projects. Eligible countries will also commit to increasing their domestic resource dedicated to education to reach international recognized targets. Finally, IFFEd-supported projects need to be consistent with the beneficiary country's education sector plan or other similar strategic document.

<sup>4</sup> The remainder of total debt stocks comprises short-term debt and use of IMF credit. The list of countries for 2010 and 2018 is the same; it includes all 47 countries classified as LMICs by the World Bank in June 2020.

<sup>5</sup> Here and elsewhere in this note GNI is averaged over 2016-2018, to smooth its volatility.

debt service payments equaling 16.0% of the exports of goods, services and primary income in 2018. In present value (PV) terms, the future value of all debt service payments was even lower at 14.8% of LMICs’ combined GNI in 2018.

At the aggregate level, traditional multilateral creditors have not been a significant source of the recent expansion of the debt burden in developing countries generally and LMICs in particular. According to the World Bank,<sup>6</sup> the outstanding debt from multilaterals declined as a share of GDP by 7 percentage points between 2007 and 2016 across 37 LICs where continuous data is available. In contrast, loans extended by non-Paris Club bilaterals, commercial creditors and “plurilaterals” (non-traditional multilaterals) increased as a share of GDP by 7 percentage points from non-Paris Club bilaterals and by 3 percentage points from the other two categories.

In LMICs, the numbers suggest similar trends (table 2). The share of long-term private non-guaranteed (PNG) debt in the total debt of LMICs increased from 27.6 percent in 2010 to 29.9 percent in 2018. While the share of total PPG debt in the total debt increased from 50.6 percent to 51.7 percent during this same time period, the share of multilateral PPG debt *decreased* by 3.9 percentage points, implying that the share of other types of PPG debt, including bilateral (likely non Paris Club creditors) and private guaranteed creditors increased by 5.1 percentage points.

**Table 1: Selected External Debt Indicators, 2018**

	LIC	LMIC	UMIC
<i>US\$ millions</i>			
Total External Debt	\$144,122	\$1,657,871	\$5,893,720
Long-term Public & Publicly Guaranteed (PPG) Debt	\$112,660	\$857,423	\$1,924,479

<sup>6</sup> International Development Association and International Monetary Fund. *G 20 Note: Strengthening Public Debt Transparency – the Role of the IMF and World Bank*. June 13, 2018.

<i>Of which:</i>	\$52,168	\$307,728	\$295,706
Multilateral concessional PPG debt	\$43,476	\$132,685	\$12,679
Multilateral non-concessional PPG debt	\$8,691	\$175,042	\$283,027
Long-term Private Non- Guaranteed Debt	\$10,507	\$495,252	\$2,017,721
Short Term Debt	\$12,339	\$246,322	\$1,869,497
<i>Percent</i>			
Total Debt/GNI	35.3%	29.3%	27.3%
Present value of debt to GNI	24.6%	14.8%	10.0%
Long-term PPG Debt/Total Debt	36.2%	18.6%	5.0%
Multilateral PPG debt/Total debt	78.2%	51.7%	32.7%
Long-term PNG Debt/Total Debt	7.3%	29.9%	34.2%

Note: GNI is averaged for 2016-2018, Atlas method (current US\$).

Source: World Bank: International Debt Statistics, World Development Indicators.

At this level of aggregation, IFFEd would reflect only a de minimis level of additional debt. If IFFEd can backstop \$4 billion in additional multilateral debt, as currently planned in its initial five years, it would only represent an increase of about 0.24% of LMICs' total debt stock, or 0.47% of their PPG as of end-2018. As a share of a GNI of the IFFEd client group, the number is even smaller (0.07% of their GNI averaged over 2016-2018). Indeed, additional borrowings from the MDBs could lead to a reduction in the debt burden of developing countries by replacing more expensive debt.<sup>7</sup>

**Table 2. LMICs: Change in External Debt Indicators, 2010-2018<sup>8</sup>**

	2010	2018	Change, percent
<i>US\$ million unless otherwise stated</i>			
Total External Debt	\$923,542	\$1,657,871	80%
Long-term Public & Publicly Guaranteed (PPG) Debt	\$466,972	\$857,423	84%
<i>Of which:</i>			

<sup>7</sup> Center for Global Development, Justin Sandefur and Divyanshi Wadhwa. "Chart of the Week: A New African Debt Crisis" (2018) <https://www.cgdev.org/blog/chart-of-the-week-new-african-debt-crisis>

<sup>8</sup> The table uses the same 47 countries classified by the World Bank as LMICs in 2020 in both columns.

Multilateral concessional PPG debt	\$114,018	\$132,685	16%
Multilateral non-concessional PPG debt	\$93,885	\$175,042	86%
Long-term Private Non-Guaranteed (PNG) debt	\$254,510	\$495,252	95%
Short Term Debt	\$145,733	\$246,322	69%
Multilateral PPG debt/Total debt, percent	22.5%	18.6%	
Long-term PPG Debt/Total Debt, percent	50.6%	51.7%	
Long-term PNG debt/Total debt, percent	27.6%	29.9%	

Source: World Bank, International Debt Statistics.

Access to affordable financing should become even more attractive during the COVID-19 crisis due to the increase in the cost of private sector borrowing in those countries where risk premiums have increased more than the decline in base rates in advanced countries. MDB terms are becoming even more favorable than those of private commercial creditors, which will help preserve debt sustainability. Current debt-related concerns are focused much more on the private and non-Paris Club official creditors, who own the bulk of LMIC debt.

### Country by Country Analysis

While IFFEd’s aggregate impact will be marginal, its impact could be more significant in LMICs that have higher-than-average debt burdens, particularly if the country has significant financing needs in education and in response to COVID-19. The reverse could also be true – that is, the debt burden of some countries could be smaller than the average and hence they could absorb significant IFFEd resources to meet education financing needs. The MDBs will carefully monitor the debt sustainability of their clients, both at the aggregate and more importantly on the individual country level.

Table 3 shows selected countries (grouped by region) whose debt burden was above the median for LMICs (left panel) and below the median (right panel)<sup>9</sup>. This classification is based on the sum of the PV of all future debt service as a share of GNI. As a general indicator of debt burden, this indicator is preferable to the nominal debt to GNI indicator by accounting

<sup>9</sup> LMICs’ median for this indicator was 26.2 percent in 2018.

for the concessional element of debt. The difference between these two indicators will be large in countries with significant amounts of concessional debt with long repayment profiles and low interest rates (for example, IDA credits).

**Table 3: Debt Indicators for selected LMICs at end-2018**

		Total external debt		Present value of debt,		Total external debt		Present value of debt,
		\$ millions	% of GNI	% of GNI		\$ millions	% of GNI	% of GNI
<i>SAS</i>	Bhutan	\$2,549	114.4	89.9	Bangladesh	\$52,124	20.0	10.5
	Sri Lanka	\$52,626	62.6	40.9	Nepal	\$5,478	21.7	13.6
					India	\$521,391	20.6	7.0
<i>MENA</i>	Tunisia	\$34,661	88.3	58.3	Algeria	\$5,710	3.4	0.9
	Morocco	\$49,041	45.3	30.8	Egypt	\$98,705	36.8	27.6
<i>LAC</i>	El Salvador	\$17,486	73.8	50.6	Honduras	\$9,709	45.8	32.1
	Nicaragua	\$11,618	88.9	37.7	Bolivia	\$13,280	36.5	25.7
<i>ECA</i>	Ukraine	\$114,512	104.3	49.0	Uzbekistan	\$17,630	27.1	10.9
	Kyrgyz R	\$8,120	112.4	46.8				
<i>EAP</i>	Lao PDR	\$15,588	96.7	48.0	Philippines	\$78,824	20.7	12.3
	Mongolia	\$29,377	278.3	70.8	Solomon Is	\$389	31.3	6.5
<i>SSA</i>	Cabo Verde	\$1,735	99.0	88.1	Benin	\$3,691	39.6%	22.1
	Mauritania	\$5,218	105.5	82.8	Nigeria	\$47,047	12.4	4.9
	ST&P	\$250	65.3	57.5				

The left panel includes selected LMICs whose debt burden in 2018 was above the median PV/GNI for the group (26.2 percent). The right panel includes selected LMICs whose debt burden in 2018 was below the group median. GNI is averaged for 2016-2018. The countries have been color-coded with red indicating LMICs either already in debt distress or with high risk of it, orange with moderate risk and green with low risk as classified and published by the IMF/WB during 2018-2020. Black indicates sustainable debt situation as determined by the most recent IMF/World Bank DSA analyses.

Source: International Debt Statistics, World Bank.

Debt sustainability concerns would limit the borrowing ability of the most burdened countries in the left panel, or at least require careful consideration before they incur additional debt. The most burdened countries include small states that have frequently faced constraints to borrowing. Note that some of the more debt-burdened countries have indicators that suggest that borrowing at MDB terms, already cheaper than commercial sources, with blended grants (as IFFEd is designed to do) may be to their benefit. Indeed, for similar reasons it may even be beneficial for the countries with the highest debt burden to borrow from the MDBs with IFFEd support to protect education expenditures from cuts.

The less debt-burdened countries would be able to benefit significantly from IFFEd and include some of the most populous LMICs, including Bangladesh, Egypt, India, and Nigeria. As shown in Table 4, which identifies the 20 LMICs with the highest education finance needs, these countries would benefit the most from the additional education lending from MDBs.<sup>10</sup>

The first column shows annual financing needs in 2020 in millions of 2015 dollars while the second column show these same financing needs as a share of GDP. The third column is an index score estimated by the Education Commission that measures both education quality and population pressure (the higher the index score, the higher the need).<sup>11</sup> The average index across LMICs is 0.40, with a range between 0.00 and 0.70, thus the majority of the countries included in Table 4 have significant learning gaps and would be priority countries for additional resources as IFFEd makes them available.

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<sup>10</sup> Education Commission (2016). “The Learning Generation. Investing in Education for a Changing World.”

<sup>11</sup> Demographic pressure reflects a country’s ability to support its youth population and ambitious reforms to education systems. It is defined as a combination of normalized values of total youth population (ages 0 to 24 years old) and the ratio of children and youth (ages 3-18) to the working age population (ages 19-64) – i.e., the “youth dependency ratio.” A country is considered to be under increased demographic pressure if it has a large youth population and a high youth dependency ratio.

Education gaps reflects how far countries are from achieving their education goals, proxied by the education component of the World Bank’s Human Capital Index (HCI).<sup>11</sup> The Learning-Adjusted Years of School indicator of the HCI is the combination of two measurements of the quantity and quality of education. The quantity of education is measured as the expected number of years of school a child can expect to attain by age 18 given the prevailing pattern of enrollment rates across grades. The quality of education reflects ongoing work at the World Bank to harmonize test scores from major international student achievement testing programs.



Table 4: Selection of 20 High-need LMICs

	Financing Needs in 2020 (in 2015 \$)		Education
	\$ M	% GDP	Need Index
<b>Nigeria</b>	11,416	1.82%	0.70
<b>Pakistan</b>	1,805	0.54%	0.58
<b>Bangladesh</b>	1,511	0.58%	0.40
<b>Kenya</b>	1,461	1.64%	0.39
<b>Tanzania</b>	1,379	1.85%	0.64
<b>India</b>	1,106	0.03%	0.67
<b>Angola</b>	850	0.59%	0.70
<b>Cameroon</b>	575	1.35%	0.56
<b>Senegal</b>	471	2.00%	0.61
<b>Zambia</b>	464	1.34%	0.61
<b>Tunisia</b>	329	0.58%	0.34
<b>Cambodia</b>	300	1.19%	0.35
<b>Zimbabwe</b>	291	2.03%	0.48
<b>Benin</b>	233	1.77%	0.54
<b>Nepal</b>	186	0.78%	0.39
<b>Mongolia</b>	98	0.65%	0.12
<b>Cote d'Ivoire</b>	81	0.15%	0.66
<b>Timor-Leste</b>	74	3.93%	0.57
<b>Mauritania</b>	48	0.74%	0.68
<b>Comoros</b>	21	2.84%	0.54

All but nine<sup>12</sup> of the countries on this high-need list are likely to be able to receive significantly more funding for education from the MDBs without endangering debt sustainability, all other things being equal. Indeed, several countries with large needs are also among those with the most favorable PV of debt to GNI indicator, including many of the largest – Bangladesh, India, and Nigeria. In many of these countries, not only are the initial debt burden indicators favorable, but also the financing needs for education represent small shares of GDP and

<sup>12</sup> Zimbabwe is in arrears to the MDBs and will not be eligible for MDB loans.

would only marginally increase future debt burdens. At the same time, even excluding Nigeria, the financing needs of the countries mentioned above alone would be able to absorb all IFFEd's resources over the initial five-year programming period. IFFEd resources hence could be much larger than current plans and still be consistent with only providing support to countries with low risk of debt distress.

Nine countries on this list are problematic: Angola, Kenya, Mauritania, Mongolia, Pakistan, Senegal, Tunisia, and Zambia. Pakistan is currently implementing an IMF program, but IMF staff in conversations with the Education Commission [prior to the COVID crisis] indicated that Pakistan could absorb resources from the MDBs even during the program period, especially if blended with grants, to increase education spending that today represents only 2% of GDP. At first glance, Kenya and Tunisia's debt indicators suggest that they too could absorb additional MDB resources. Of course, in many of these countries new debt sustainability assessments will be needed, especially given the uncertainty surrounding the impact of COVID-19.

### **IFFEd Support and Debt Sustainability**

Given the varying debt burdens of LMICs and future uncertainties, IFFEd's design includes a requirement that MDBs conduct a debt sustainability analysis of potential client countries before IFFEd support is provided. In the case of IDA-eligible LMICs, such analysis is already updated each year by the IMF and the World Bank. The IMF and the World Bank also conduct debt sustainability analyses for the other LMICs, either as part of their surveillance mandate or as part of their internal credit risk analysis. MDBs will present the main results of this work in an annex to the investment cases that will be presented to IFFEd's Board seeking IFFEd support. If the country has a significant risk of debt distress, the analysis will also explain why IFFEd-supported education loans will not worsen debt sustainability. MDBs will also be able to modulate the value of the grant to be blended with the loan, in part as a result of debt sustainability concerns.

The IMF and World Bank debt sustainability analyses are best practice methodologies that are updated from time to time based on emerging risks in developing countries (see Annex 1). The DSA methodology for LICs and IDA-eligible countries has recently been updated to

include a better analysis of private sector debt and contingent liabilities, as well as a stronger analysis of debt-carrying capacity. The analysis of “market access” countries already included such work.

IFFEd is likely to serve as a critical instrument to preserve education spending during the COVID-19 crisis because it will provide countries with a combination of grants and already relatively inexpensive terms of MDB loans.

### **Conclusion**

On the aggregate and for many LMICs, IFFEd resources will not significantly increase the risk of debt distress. Indeed, large LMICs with low risk of debt distress have significant education financing needs and could potentially absorb all IFFEd’s planned resources during its initial five years. While some LMICs have debt indicators that are not as strong, it will be important that they not be automatically excluded from benefiting from IFFEd without first undertaking debt sustainability analysis and consulting as necessary with the IMF and the World Bank. Indeed, IFFEd may be *even more important* during the ongoing crisis to allow countries to maintain their spending on education, a sector that frequently suffers during periods of fiscal adjustment.

## **Annex 1. Short Overview of the Joint World Bank-IMF Debt Sustainability Framework**

Debt sustainability analysis aim to answer a deceptively simple question: when does a country's debt become so big that there is a strong likelihood that it will not be fully serviced?

Debt sustainability, however, is difficult to measure. Solvency is entirely forward-looking. For some countries, large debts can be paid back whereas in others, small debts may not be sustainable. The outcome depends on the country's capacity to service its debt in the future, including the very distant future. Most governments are indebted forever, and many external debts remain high for decades. Indeed, selected high income countries are more heavily indebted than some large developing countries in part because they have stronger institutions and can carry more debt.

To assess whether a country's current borrowing strategy may lead to future debt-servicing difficulties, World Bank debt experts, in close collaboration with the IMF, conduct annual, structured analyses called Debt Sustainability Analyses (DSA). As a result, a country is classified according to its risk of debt distress.

There are two different but related DSA procedures, one designed for countries with market access and another designed for IDA-eligible countries (the Debt Sustainability Framework). The main difference is that, in the case of countries with market access, the analysis concerns both the external debt and the internal public debt, and in the case of lower-income countries it concerns only the external debt, since many of these countries do not have internal debt markets.

The DSF classifies IDA-eligible countries based on their assessment debt-carrying capacity, estimates threshold levels for selected debt burden indicators, evaluates baseline projections and stress test scenarios relative to these thresholds, and then using indicative rules and staff judgement assigns risk ratings of external debt distress.

Indicators of debt burden are used to assess the capacity of a country to generate: 1) foreign exchange to meet external debt payments, in particular public and publicly guaranteed (PPG), and 2) public revenue to meet public debt obligations in both domestic and foreign currency.

These indicators are frequently a ratio between debt, either as a stock or as annual service obligations, and the resource base from which the debt will be serviced:

- The debt burden is measured either as a flow, that is, the debt service due during a particular, usually annual, period, or as a stock.
- Stock measures include both the nominal outstanding debt, and more accurately perhaps, the present value of all debt obligations that a country would have to service. The latter measure captures that some debt obligations have more favorable terms, either lower interest rates or longer maturities.
- The resource bases most frequently used are: 1) exports and good and services, including primary income, as a measure of foreign exchange availability, 2) public revenues, as a measure of public sector resources, and 3) GDP or GNI, as the broadest measure of the resource base of an economy to meet debt obligations.

### **Recent updates to the framework**

Since 2005, the economic environment in which many LICs operate has changed significantly, resulting in potentially important gaps in the DSF. Financing sources that have increased in importance include borrowing from non-Paris Club creditors, from domestic markets, and from international bond markets—most notably for “frontier” LICs that have attracted foreign portfolio investors. As a result, LICs are increasingly exposed to a wider set of vulnerabilities, including market volatility. The DSF, in previous form, lacked tools to assess these market-related risks.

In response, the IMF and World Bank implemented reforms to the DSF in July 2018. The reforms adapted the framework to the evolving circumstances facing LICs, making it more comprehensive (as was already the case of DSAs in market-access countries), more transparent, and yet simpler and easier to use. Main updates included:

- The number of debt indicators, thresholds, and standardized stress tests were reduced. One debt indicator—the present value of external debt to revenues—is no longer used. The number of thresholds were reduced from 24 to 12; the number of standardized stress tests were halved.

- The reformed DSF moved away from relying exclusively on the World Bank’s Country Policy and Institutional Assessment (CPIA)<sup>13</sup> as the measure for assessing debt-carrying capacity; a composite measure is now used instead, based on an expanded set of economic variables that includes the CPIA.
- Tailored scenario stress tests have been introduced to better evaluate specific risks of relevant for some countries — ex: natural disasters, volatile export prices, market-financing shocks, and contingent liability exposures.

## **Benchmarks**

The DSF for IDA-eligible countries would signal high risk of public debt distress if any of the four external debt burden indicators or the public debt indicator breach their corresponding thresholds; moderate risk if the thresholds were breached in stress tests; and low risk if the threshold was not breached in either the baseline or stress tests scenarios. Countries are considered in debt distress if they are already experiencing difficulties servicing their debt, as evidenced, for example, by the existence of arrears or ongoing or impending debt restructuring.

Countries rated as facing a moderate risk of debt distress are numerous and display a great diversity of debt vulnerabilities. The robustness of the debt position of a country at moderate risk of debt distress depends on the “space to absorb shocks” without being downgraded. Countries at moderate risk are those whose baseline debt burden indicators are below their respective thresholds while stress test scenarios push the indicators above the thresholds. The DSF uses indicative thresholds, linked to country classification, to analyze the risk of external and public debt distress. Thresholds are (statistically determined) bounds above which the risk of debt distress is considered elevated. Thresholds depend on countries’ debt carrying capacity as determined by its policy environment. Countries with stronger capacity benefit from higher thresholds— as follows:

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<sup>13</sup> The CPIA is an index of a country’s policy framework and capacity developed by the World Bank for internal purposes. It is updated every year.

	PV of external debt in percent of		External Debt service in percent of		PV of total public debt in percent of
	GDP	Exports	Export	Revenue	GDP
<b>Weak</b>	30	140	10	14	35
<b>Medium</b>	40	180	15	18	55
<b>Strong</b>	50	240	21	23	70