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## MACROECONOMIC DEVELOPMENTS AND PROSPECTS IN LOW-INCOME DEVELOPING COUNTRIES—2018

### EXECUTIVE SUMMARY

This paper is the fourth in a series that examines macroeconomic developments and prospects in Low Income Developing Countries (LIDCs). LIDCs are Fund member countries where gross national income (GNI) per capita lies below a threshold level and where external financial linkages and socioeconomic indicators have not lifted them into emerging market status. There are 59 countries in the LIDC grouping, accounting for about one-fifth of the world's population and 4 percent of global output (see Annex 1).

The paper examines macroeconomic trends across LIDCs in recent years, contrasting key features of the current situation with the period prior to the 2014 decline in commodity prices. Particular attention is given to the evolution of fiscal positions and public debt levels, including detailed analysis of the drivers of debt accumulation and the current severity of debt vulnerabilities. The analysis is grounded in, and draws on, the analysis and databases used to compile the *World Economic Outlook*: this report drills down into the WEO database to look in detail at the experience of LIDCs.

#### **Macroeconomic Developments and Outlook**

Growth in LIDCs picked up in 2017, but significant differences persist between countries heavily dependent on commodity exports and other countries. Growth is slowly recovering in most commodity exporters, but median growth is still down some 2 percent from 2010-14 levels in non-fuel commodity (NFC) exporters, and much more markedly so in the handful of LIDC fuel exporters. Average growth in countries not dependent on commodity exports remains robust (on the order of 6 percent), albeit with significant variation across countries.

A similar divide between commodity exporters and other countries is at play in fiscal performance since 2010-14, although fiscal pressures are intensifying (and public debt levels rising) more broadly across LIDCs. Widening fiscal deficits (in over two-thirds of LIDCs) are fully accounted for by higher public investment levels in about 30 percent of cases, and by falling public savings in almost half of cases.

Financial sectors stresses have materialized in about 30 percent of countries—again mainly in commodity exporters—with the key drivers being the deteriorating quality of

loan portfolios and tighter funding conditions, both often linked to the weakened fiscal position of governments. Problem banks have so far been handled by national authorities at modest fiscal cost in the preponderance of cases.

Looking ahead, average growth in LIDCs is set to reach 5.2 percent in 2018, up from 4.7 percent in 2017. Fiscal positions are projected to improve somewhat among commodity exporters and remain unchanged elsewhere; debt accumulation would slow markedly if fiscal plans are implemented as planned. Key domestic risks to the outlook are fiscal policy slippages (recorded in both 2016 and 2017), conflict and social unrest, and other non-economic shocks. A further pick-up in oil prices would improve the outlook for fuel exporters, albeit without resolving solvency problems for countries in debt distress.

The combination of sluggish per capita income growth and falling investment levels observed across many LIDCs represents an important set-back in the first years of pursuit of the Sustainable Development Goals (SDGs). Declining flows of development assistance and remittances to LIDCs are troubling developments, putting pressures on national budgets and balance of payments positions. Many LIDCs, notably fragile states, are falling behind—even as countries such as Bangladesh, Ethiopia, and Cote d'Ivoire record strong and sustained income growth.

### **Rising Debt Vulnerabilities**

Public debt and debt service levels have risen across a wide range of LIDCs since end-2013. The key drivers of rising debt levels have been adverse exogenous shocks (falling commodity prices, civil conflict) and looser fiscal policies, with fraud/corruption playing a key role in a handful of cases.

Rising debt levels have led to increased debt vulnerabilities in many countries. While debt vulnerabilities remain contained in the majority of LIDCs, some 40 percent of LIDCs now face significant debt-related challenges, up from 21 percent in 2013. Nine of twelve countries that moved from “low/moderate risk” to “high risk/in debt distress” are in sub-Saharan Africa.

There are downside risks to this assessment of debt vulnerabilities, with some likelihood that fiscal adjustment and growth projections will fail to materialize, causing more countries to move into debt distress/high risk of debt distress in the coming years. Projections are predicated on fiscal consolidation in the majority of cases at moderate or high risk of distress and on stronger trend growth in several countries where sizeable fiscal consolidation is planned.

Countries now at high risk of debt distress face a tight fiscal envelope with limited borrowing space. Investment projects need rigorous assessment and prioritization if this limited space is to be used effectively to support growth. Increasing space for

public investment will require efforts to boost public savings, including by expanding domestic revenue mobilization.

Countries at low/moderate risk of debt distress have more space to fund public investment via borrowing—but room for maneuver is narrowing in many cases, underscoring the importance of using new borrowing on commercial terms to finance only investment projects with credibly high economic rates of return.

The composition of public debt in LIDCs has been shifting over time, with larger shares of public debt being held by non-Paris Club official bilateral creditors, by foreign commercial creditors, and by domestic creditors (mainly banks). Enhanced reliance on commercially-priced debt has translated into higher debt servicing costs and risks, while new challenges have arisen for potential debt resolutions.

The increasing importance of non-Paris Club bilateral lenders and plurilateral creditors, including in difficult debt cases, points to the need for these creditors to exercise due diligence in their lending decisions and to develop modalities for engaging in debt restructuring operations. Lenders should consider the benefits of subscribing to principles for sustainable lending and borrowing, such as those being championed by the G-20, and of working with existing international fora for creditor information sharing and coordination.

There are important gaps in the available data on public and publicly-guaranteed debt (PPG) in LIDCs. Coverage of public sector entities is usually too narrow, while public guarantees are often not adequately captured, contributing to unfavorable debt surprises as public liabilities accumulate outside the perimeter of measured debt.

Tackling gaps in the data on PPG debt available to finance ministries and the Bretton Woods institutions is a high priority. Further effort is needed to strengthen the compilation and monitoring of public debt and guarantees in LIDCs, supported by well-established technical assistance instruments (such as the IMF-World Bank Debt Management Facility). Creditors can contribute in this regard, including by facilitating the sharing of information with international financial institutions.

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**CONTENTS**

Acronyms and Abbreviations	7
<b>CHAPTER 1: MACROECONOMIC DEVELOPMENTS: UNEVEN GROWTH, FISCAL PRESSURES</b>	<b>8</b>
A. Introduction	8
B. The External Environment Facing LIDCs	10
C. Recent Developments in LIDCs	12
D. The Outlook	29
E. Conclusions and Policy Messages	32
<b>CHAPTER 2: RISING DEBT VULNERABILITIES</b>	<b>33</b>
A. Introduction	33
B. Stylized Facts on Debt Accumulation in Recent Years	35
C. Evolution of Debt Vulnerabilities and Risks to the Outlook	42
D. The Changing Composition of Public Debt and its Implications	50
E. Public Sector Debt Data Gaps and Lack of Transparency	52
F. Conclusions and Policy Recommendations	54
<b>BOXES</b>	
1. What are Low-Income Developing Countries?	9
2. The Experience of Fragile States	14
3. Growth Differences Across Regions and Time	15
4. Fund Financing for LIDCs: Recent Trends	28
5. Debt Developments Under Fund-Supported Programs	41
6. Selected Recent Debt Difficulty Cases	45
7. Debt Reduction in LIDCs Without Debt Relief or Restructuring	49
<b>FIGURES</b>	
1. External Economic Environment	11
2. Global Financial Conditions	11
3. Official Development Assistance and Remittance Flows in LIDCs	12

4. Real GDP Growth in LIDCs _____	12
5. Real GDP Growth: Non-Fuel Commodity vs. Diversified Exporters _____	13
6. Per Capita Real GDP _____	16
7. LIDCs: Recent Fiscal Trends—Revenue, Expenditure and Fiscal Balance _____	17
8. Fiscal Pressures: Drop in Grants and Increase in Interest Payments _____	17
9. Government Revenues _____	18
10. Public Investment _____	18
11. Public Savings, Investment and Overall Fiscal Balance _____	19
12. Public Debt in LIDCs _____	20
13a. LIDC Current Account and FDI _____	21
13b. Changes in Current Account Balance, 2010–14 Average to 2017 _____	21
14a. Real Exchange Rate Developments in Commodity Exporters _____	22
14b. Real Exchange Rate Developments in Diversified Exporters _____	22
14c. 2017 Real Exchange Rate Changes in LIDCs with at Least 10 Percent Appreciation or Depreciation _____	22
15. LIDCs: Stock of Reserves, 2000–17 _____	23
16. Inflation in LIDCs by Exchange Rate Regime _____	23
17. Policy Interest Rates for Countries with an Explicit Numerical Target on Inflation _____	24
18a. Change in Real Credit to the Private Sector _____	24
18b. Non-Performing Loans _____	24
19. Financial Sector Stress _____	25
20. Drivers of Financial Sector Stress Since End-2015 _____	25
21. Change in Real Credit to the Private Sector _____	26
22. Underlying Causes for Rising Concerns Over the Next 12–18 Months _____	27
23. Growth Decline Vulnerability Index _____	31
24. Public Debt in LIDCs, 2000-17 _____	35
25. Public Debt in LIDCs, 2013-17 _____	35
26. Median Public Debt Accumulation in Different Groups _____	36
27. Increase in Public Debt Levels, 2013–17 _____	37
28. Median Interest Expense _____	38
29. Interest Expense to Revenue _____	38
30. Gross Financing Needs _____	38
31. Diversified Exporters – Debt Decomposition _____	39
32. Commodity Exporters – Debt Decomposition _____	39
33. Evolution of Risk of Debt Distress _____	42
34. Distance to Solvency Indicator Thresholds _____	44
35. Distance to Liquidity Indicator Thresholds _____	44
36. Projected Versus Historical Cumulative Change in Debt _____	47
37. PPP Capital Stock _____	53

**TABLES**

1. Comparison of Projection Vintages _____	10
2. Selected Macroeconomic Indicators _____	30
3. DSA Downgrades in 2014-17 _____	43
4. Total Public and Publicly Guaranteed Debt by Creditor, 2007–16 _____	51

**APPENDICES**

I. Methodological Notes on Realism Tools Used to Examine WEO Forecasts _____	56
II. Coverage of Public Sector Debt in LIDCs _____	57
III. Multilateral and Plurilateral Lending Institutions _____	58
IV. Debt Developments in PRGT-Eligible Small States _____	59

**ANNEX**

I. Update of the Low-Income Developing Countries Grouping _____	62
References _____	69

## Acronyms and Abbreviations

AMs	Advanced Markets
APD	Asia Pacific
AREAER	Annual Report on Exchange Arrangements and Exchange Restrictions
DFI	Development Finance Institutions
DSA	Debt Sustainability Analysis
DSF	Debt Sustainability Framework
EMs	Emerging Markets
EMBI	Emerging Market Bond Index
FDI	Foreign Direct Investment
FSAP	Financial Sector Assessment Program
FSI	Financial Soundness Indicators
GDVI	Growth Decline Vulnerability Index
IDA	International Development Association
IFS	International Financial Statistics
LICs	Low Income Countries
LIDCs	Low-Income Developing Countries
MCD	Middle East and Central Asia
NFC	Non-fuel Commodity Exporter
PPP	Purchasing Power Parity
PPPs	Public-Private Partnerships
PRGT	Poverty Reduction and Growth Trust
SBA	Stand-By Arrangement
SCF	Standby Credit Facility
SDR	Special Drawing Right
SSA	Sub-Saharan Africa
TA	Technical Assistance
WEO	World Economic Outlook
WHD	Western Hemisphere

# CHAPTER 1: MACROECONOMIC DEVELOPMENTS: UNEVEN GROWTH, FISCAL PRESSURES

## A. Introduction

1. **Growth in LIDCs picked up in 2017, but significant differences persist between diversified and commodity exporters.**<sup>1,2</sup> The sizeable commodity terms of trade shock from mid-2014 continues to play an important role in influencing economic performance, with commodity exporters generally experiencing slower growth than countries less dependent on commodity exports (“diversified” exporters). But there is significant diversity in economic performance within these country groups, with investment levels (favorably) and weak institutions/conflict (adversely) having an important influence on underlying growth.
2. **The same divide is at play in fiscal performance, although fiscal pressures are mounting more broadly across LIDCs.** Fiscal imbalances have increased in the preponderance of LIDCs in recent years, driven by a mix of revenue declines (more common in commodity exporters) and spending increases (more common in diversified exporters). Wider fiscal deficits are fully accounted for by higher investment levels—the scaling-up narrative—in 30 percent of cases, but reflect only declines in public savings (revenues less current spending) in close to half of the cases. Higher borrowing levels have been reflected in rising public debt levels in many countries (see chapter 2).
3. **Inflation has remained contained in most LIDCs, providing space for easing of monetary policy in several countries.** That said, 13 (of 59) LIDCs recorded double-digit inflation rates in 2017 (up from 10 in 2017), with inflation drifting upwards in some large commodity exporters, flagging the need for proactive stabilization efforts to restore price stability.
4. **Financial sector stresses have materialized in some 30 percent of LIDCs,** with the key drivers being the deteriorating quality of loan portfolios and tighter funding conditions (often linked to the weak fiscal position of governments). Problem banks have so far been handled by national authorities with little fiscal cost in the preponderance of (but not all) cases.
5. **The global economic environment is becoming more supportive for LIDCs,** with global growth picking up and commodity prices significantly improved from 2016 troughs. External borrowing conditions have also improved for those LIDCs with some access to commercial financial markets. However, both aid inflows (since 2013) and remittances from abroad (since 2015) have

<sup>1</sup> The data and projections in this report draw on the database for the January 2018 IMF WEO update (IMF 2018); for most LIDCs, projections have not been updated since the October 2017 WEO.

<sup>2</sup> LIDCs are a heterogeneous group of countries, as illustrated Box 1. The report uses both PPP GDP-weighted averages and medians to identify patterns: the former gives a better picture of the evolution of group aggregates but is strongly influenced by developments in several large economies; medians capture the experience of the “typical” LIDC, but give equal weight to the experiences of very small and very large economies.

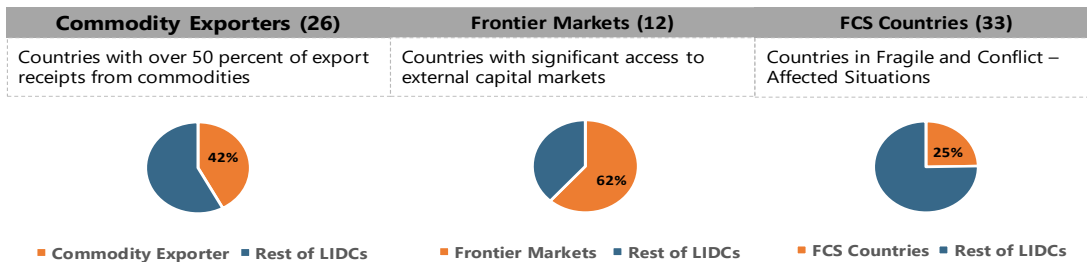
been declining in nominal (USD) terms, putting pressures on budgetary and balance of payments positions in aid-reliant countries.

**Box 1. What are Low-Income Developing Countries? 1/**

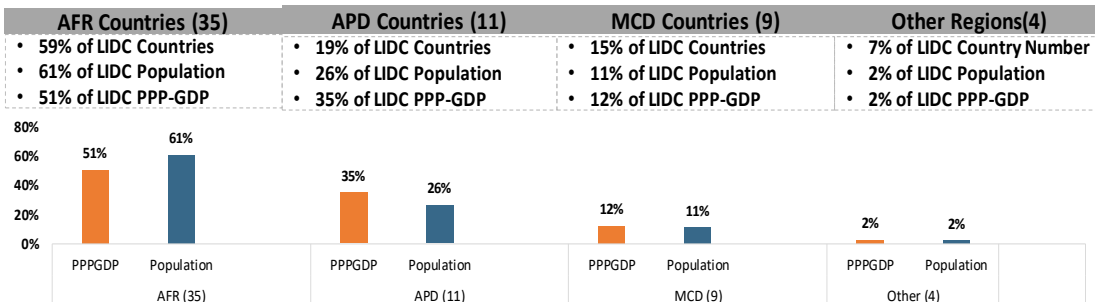
**The term “LIDC” refers to countries with low per capita Gross National Income and comparatively weak socioeconomic indicators.** The list of LIDCs was revised in 2017 and now includes 59 countries, down from 60 as Bolivia and Mongolia were dropped, reflecting strong income growth in recent years, and Timor-Leste was added (Annex 1). LIDCs account for about one-fifth of the world’s population and 4 percent of global output (PPP-based).

**As in past reports, we divide LIDCs into sub-groups to better understand cross-cutting factors driving economic developments.** *Commodity exporters* are countries where commodities account for at least half of goods and services, with all others classified as *diversified exporters*. 2/ *Commodity exporters* where fuel exports comprise at least half of exports are classified as *fuel exporters*, while the rest are classified as *non-fuel commodity exporters*. There are 6 fuel exporters, accounting for 25 percent of LIDC PPP GDP and 17 percent of population; this group is dominated by Nigeria (22 percent of LIDC GDP and 13 percent of population). Non-fuel commodity exporters account for 17 percent of LIDC GDP and 27 percent of population; while diversified exporters account for 58 percent of LIDC GDP and 56 percent of population. Other groupings include: (i) *frontier market economies*, characterized by more developed financial systems and closer linkages to international financial markets; 3/ and (ii) *fragile states*, which have weak institutional capacity, armed conflict, or both. The following chart shows the relative GDP shares of select LIDC sub-groups.

**Importance of LIDC Sub-Groups**  
(PPP-GDP in percentage of total LIDC PPP-GDP)



**Breakdown of LIDCs By Region**



1/ Prepared by Atticus Weller and Weijia Yao (SPR).

2/ A more accurate but cumbersome label would be “countries less reliant on commodity exports.” Some countries in this grouping are heavily reliant on a few non-commodity exports (e.g., garments in Bangladesh and Haiti).

3/ For definitions of these groupings, see IMF (2014a).

**6. Against this backdrop, average growth in LIDCs is set to reach 5.2 percent in 2018, up from 4.7 percent in 2017.** Fiscal positions are projected to improve somewhat among commodity exporters, with little change among diversified exporters; average public debt levels would remain substantially unchanged from 2017, conditional upon implementation of the targeted fiscal programs. Key external risks include a reversal of the partial recovery in commodity prices and an unexpectedly sharp tightening of global financial conditions, with a stronger recovery in commodity prices an upside risk for commodity producers. The main domestic risks are fiscal policy slippages (which were sizable in 2016-17), conflict and social unrest, and other non-economic shocks. Achieving fiscal policy targets is an imperative if the broad-based debt accumulation of recent years is to be contained (see chapter 2).

## B. The External Environment Facing LIDCs

**7. The global environment is becoming more supportive for LIDCs, with global growth on a somewhat higher trajectory than anticipated a year ago** (Table 1, Figure 1). Current and prospective growth has picked up more strongly than expected from its 2016 trough, which together with an expected expansion of global trade will support LIDC export growth. Meanwhile, inflation remains weak across advanced and most emerging market economies, implying minimal external pressure on price levels in LIDCs.<sup>3</sup>

**8. Pressures on commodity producers eased in 2017, as both fuel and most non-fuel commodity prices rebounded from 2016 lows** (Figure 1, Panel C). The recovery has been particularly marked for metals, such as aluminum, copper and iron, while agricultural commodity prices have been broadly flat, following a recovery in 2016.<sup>4</sup> Nonetheless, fuel prices are still down by 40 percent from their 2010-14 averages, and non-fuel commodity prices down 18 percent.

**9. External financial conditions have also improved for LIDCs with market access.** Portfolio inflows increased significantly from 2016, helped by several sizable sovereign bond issuances (Cote d'Ivoire, Honduras, Nigeria, Senegal and Tajikistan). Bond spreads for both commodity and diversified exporters have narrowed significantly since 2016. FDI and other inflows increased modestly (Figure 2), with FDI flows having remained robust for several years.

**Table 1. Comparison of Projection Vintages**

	2010-14	2015	2016	2017	2018	2019
				Projections		
<b>Global Growth (Percent)</b>						
October 2014	3.9	3.8	4.0	4.1	4.0	4.0
October 2015	4.0	3.1	3.6	3.8	3.9	4.0
October 2016	4.0	3.2	3.1	3.4	3.6	3.7
October 2017	4.0	3.4	3.2	3.6	3.7	3.7
January 2018	4.0	3.4	3.2	3.7	3.9	3.9
<b>Petroleum Price (APSP; USD)</b>						
October 2014	99.0	99.4	97.3	95.4	94.2	93.2
October 2015	97.7	51.6	50.4	55.4	59.8	62.2
October 2016	97.7	50.8	43.0	50.6	53.1	54.4
October 2017	97.7	50.8	42.8	50.3	50.2	50.5
January 2018	97.7	50.8	42.8	52.7	58.9	56.4
<b>Nonfuel (Commodity) Price (Index, 2013=100)</b>						
October 2014	101.2	93.0	92.3	91.5	90.9	90.3
October 2015	101.0	79.8	75.7	76.0	75.9	75.5
October 2016	101.1	79.2	77.1	77.7	77.2	77.0
October 2017	101.2	79.3	77.8	83.3	83.8	83.4
January 2018	101.3	79.3	78.0	83.1	82.7	83.5

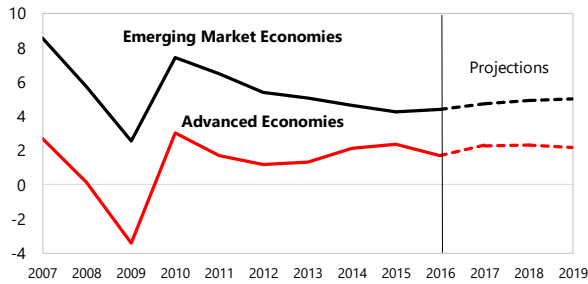
Sources: WEO (October 2014, October 2015, October 2016, October 2017, and January 2018 Update).

<sup>3</sup> See IMF (2018) for a recent discussion of global economic developments.

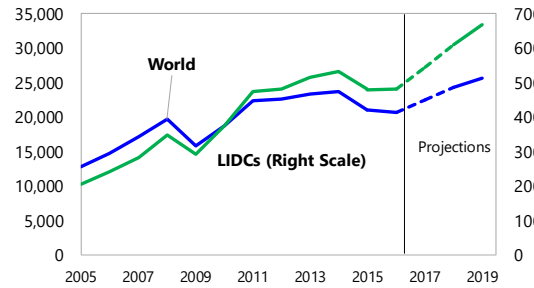
<sup>4</sup> For example, the price of copper rose by close to 30 percent in 2017, providing a boost to copper exporters such as the Democratic Republic of Congo and Zambia.

**Figure 1. External Economic Environment**

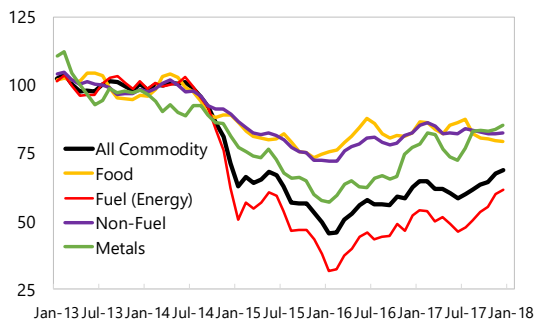
**Panel A. Advanced & Emerging Market: Real GDP Growth**  
(Percent, PPP GDP-weighted averages)



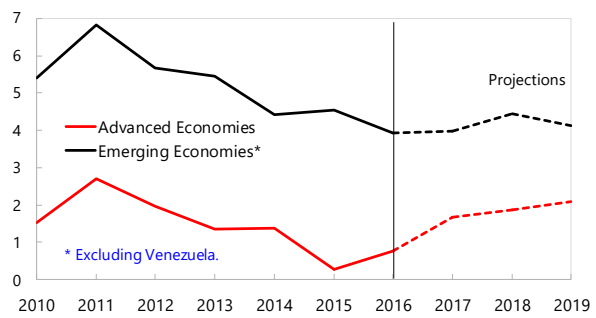
**Panel B. Exports of Goods and Services**  
(Billions of U.S. dollars)



**Panel C. Commodity Prices**  
(Index: 2013 = 100)



**Panel D. Inflation in Advanced and Emerging Markets**  
(Percent, weighted averages, unless otherwise indicated)



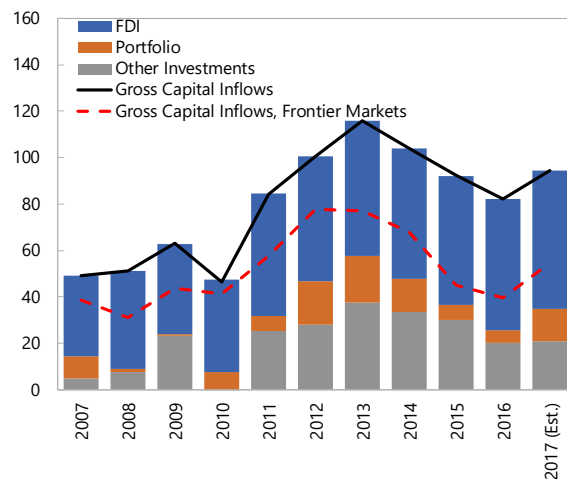
Sources: WEO and IMF staff estimates.

**Figure 2. Global Financial Conditions**

**Panel A. Sovereign Bond Spreads in Frontier Markets 1/**  
(Basis points)



**Panel B. Private Capital Flows to LIDCs**  
(Billions of U.S. dollars)

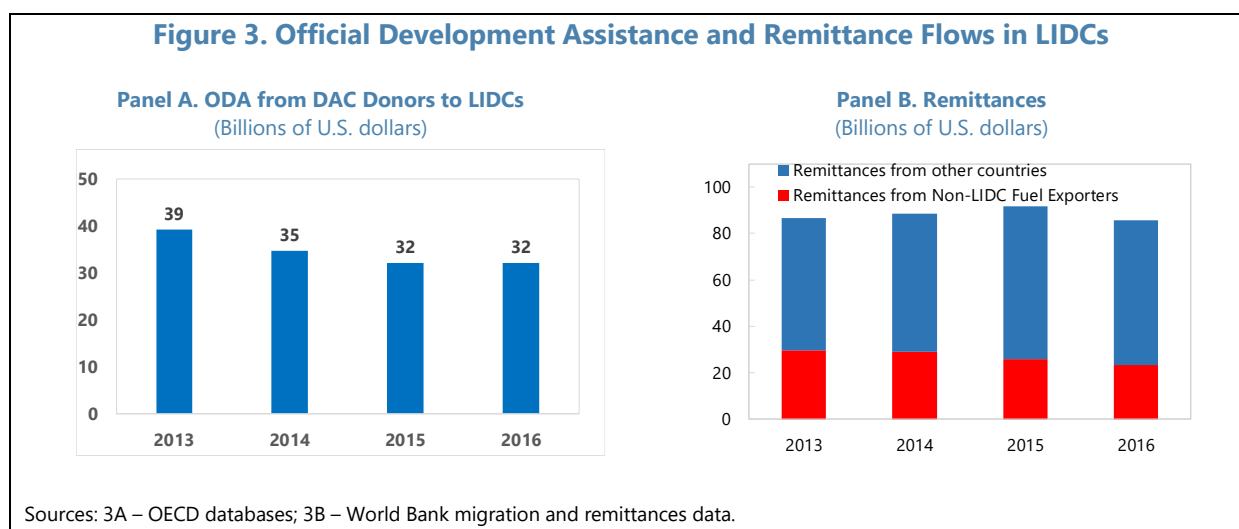


Sources: Bloomberg; JP Morgan; Federal Reserve Economic Data (FRED); International Financial Statistics (IFS); WEO; OECD; and IMF staff estimates.

1/ The sample of frontier market LIDCs comprises Mozambique, Nigeria, and Zambia (commodity exporters); Cameroon, Cote d'Ivoire, Ghana, Tanzania, and Vietnam (diversified exporters).

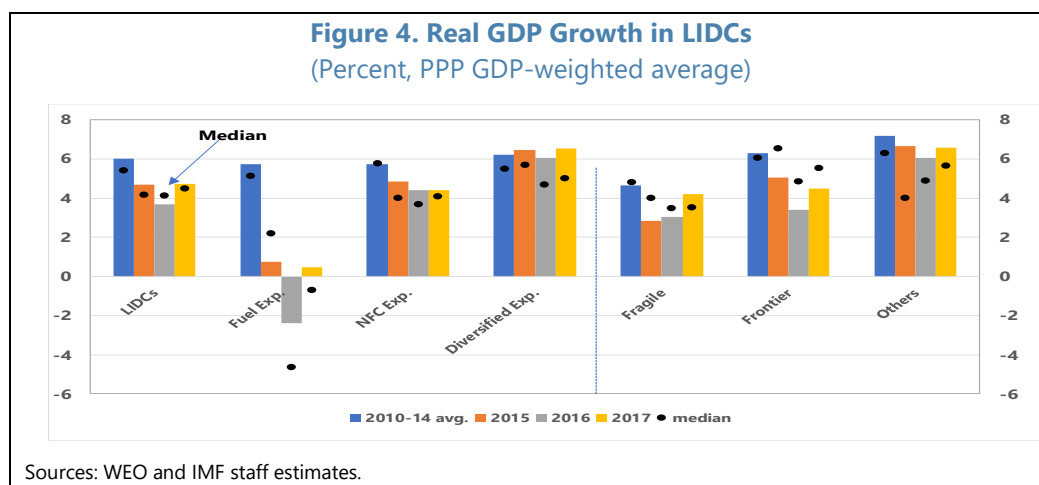
**10. However, transfers—including aid flows and remittances—have declined, putting pressures on budget and balance of payments positions** (Figure 3).

- Aid flows to LIDCs in 2016 were unchanged in dollar terms from 2015 levels, but have slipped significantly since 2013—declining from 2.2 percent of LIDC GDP in 2013 to 1.8 percent in 2016, a relative decline likely to have continued since then.<sup>5</sup>
- Remittance flows in 2016 were down 6½ percent in dollar terms from 2015 levels (from 5 percent of GDP in 2015 to 4.7 percent in 2016). Remittance flows from non-fuel exporting host countries declined in 2016, having risen steadily through 2015; remittances from fuel exporting host countries have been falling since 2013.



**C. Recent Developments in LIDCs**

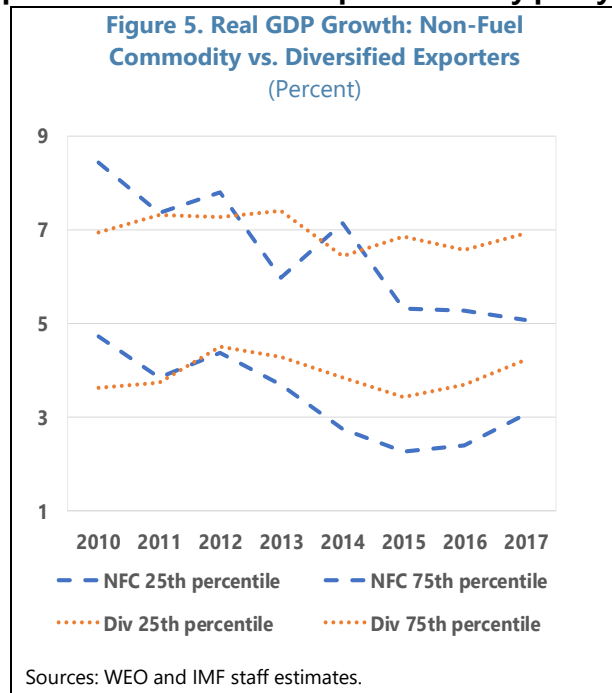
**Persistent Performance Divide between Commodity and Diversified Exporters**



<sup>5</sup> The data cited, from *OECD Development Co-operation Report 2017*, cover official development assistance (ODA) to LIDCs from members of the OECD Development Assistance Committee.

**11. Growth in LIDCs is estimated at 4.7 percent in 2017, with most LIDCs recording higher growth than in 2016** (Figure 4). The aggregate patterns hide marked differences between *fuel exporters* (where growth has collapsed since 2014); *non-fuel commodity (NFC) exporters* (where growth has averaged about 4.5 percent in 2016–17, down from close to 6 percent earlier in the decade); and *diversified exporters* (where growth has remained around 6.5 percent, helped by vigorous growth in the larger countries). Fragile states typically experienced slower growth than other LIDCs, as examined in IMF (2014b) (see Box 2).

**12. The growth differential between NFC exporters and diversified exporters is only partly accounted for by commodity price developments** (Figure 5). Excluding the oil exporters, econometric analysis suggests that there is not a close linkage between the size of the terms of trade shock experienced since 2013 and the change in the growth rate since then.<sup>6</sup> Looking further back, growth in NFC exporters has lagged that in diversified exporters over an extended period (2000–14). Contributory factors likely include greater prevalence of fragile states among commodity exporters (73 percent, compared to 42 percent for diversified exporters), lower capital intensity and smaller firms in commodity exporter manufacturing firms,<sup>7</sup> and somewhat higher frequency of fixed exchange rate regimes (73 percent, compared to 67 percent for diversified exporters).



**13. Growth performance in LIDCs varies across regions, but this is largely explained by export structures** (Box 3). LIDCs in Asia/Pacific recorded average growth of over 6.5 percent in 2017, unchanged from its long-term trend; by contrast, growth has fallen well below its long-term average in Sub-Saharan Africa (SSA). The divergent experiences are explained in the main by i) the greater prevalence of commodity exporters in SSA compared to Asia/Pacific and ii) the large weight of Nigeria (hit hard by the fall of oil prices) in SSA GDP. The weighted-average growth rates of diversified exporters in SSA are close to those recorded in Asia/Pacific, while growth rates among NFC exporters are higher in SSA.

<sup>6</sup> Given the sharp drop in oil prices, the majority of NFC exporters experienced an improvement in the terms of trade as a result of the asymmetric drop in commodity prices from 2014.

<sup>7</sup> Based on the World Bank Enterprise Survey, an analysis of the manufacturing sector (controlling for industry, time fixed effects, and country characteristics) suggests that firms in LIDC commodity exporters are smaller and have lower capital intensity than LIDC diversified exporters and non-LIDC commodity exporters. Access to finance and electricity appear to be the two most binding constraints for firms in commodity exporters.

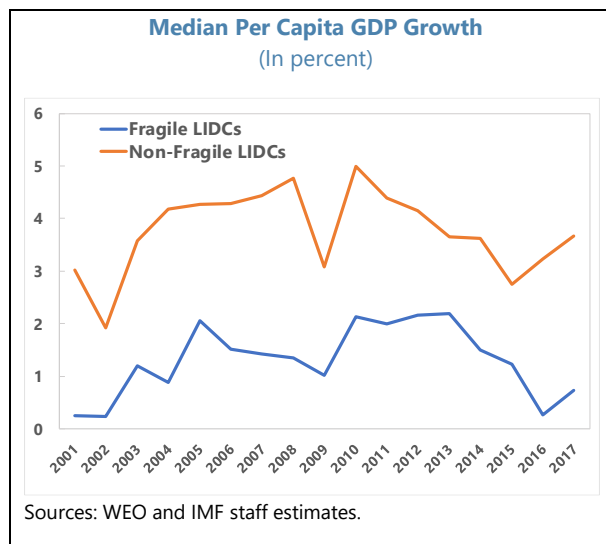
### Box 2. The Experience of Fragile States 1/

**For analytical purposes, the Fund defines countries in fragile situations (FS) on the basis of weak institutional capacity and/or experience of conflict.** Weak institutional capacity is assessed using the World Bank Country Policy and Institutional Assessment (CPIA) score (three-year average score of 3.2 or lower), while conflict is proxied by the presence of a UN and/or regional peace-keeping or peace-building operation over the preceding three years. 2/ 3/

**As of December 2017, there were 33 LIDCs in fragile situations,** with 21 in SSA, 5 in Asia/Pacific, 6 in the Middle East/Central Asia, and 1 in the Western Hemisphere. Collectively, they account for 7 percent of the world population and 0.7 percent of world GDP.

**Fragile states typically record lower growth and attract less FDI than other LIDCs.** Institutional weakness, domestic conflict, poor security situations, and political uncertainty tend to discourage business investment and encourage emigration of the better-educated. Median per capita income in FS LIDCs is just over half that of other LIDCs, while per capita income increased by a modest 19 percent between 2002-17, as compared with 67 percent in non-fragile LIDCs. Annual FDI flows into FS LIDCs were some 0.8 percent of GDP lower than in non-FS LIDCs over that period.

**The IMF is committed to close engagement with countries in fragile situations.** A Capacity Building Framework has been designed to support institution-building, strengthen outcome monitoring, and enhance coordination with other development partners; the approach is being piloted in several fragile states, and entails intensified engagement in key areas (in some cases by deploying long-term advisors), providing more hands-on training, and strengthening the links with surveillance/program operations. In FY2017, the Fund delivered more than a quarter of its technical assistance and about a fifth of its training to FS, while one-third of FS LIDCs were in some form of program engagement with the Fund at end-2017.



Fund Program Engagement (current or planned)	19
ECF Programs	10
SMP	3
All fragile LIDCs	33

Note: As of December 2017.

1/ Prepared by Kevin Greenidge and Ermal Hitaj (SPR).

2/ IMF (2011, 2012, and 2015b).

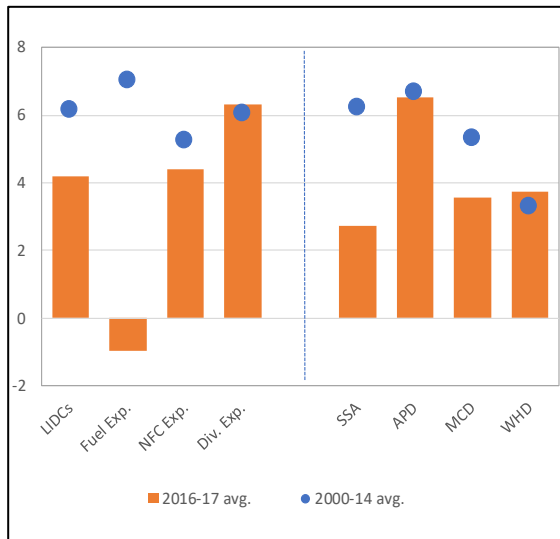
3/ The CPIA assesses countries against a set of 16 criteria grouped in 4 clusters: economic management, structural policies, policies for social inclusion and equity, and public sector management and institutions.

**Box 3. Growth Differences Across Regions and Time 1/**

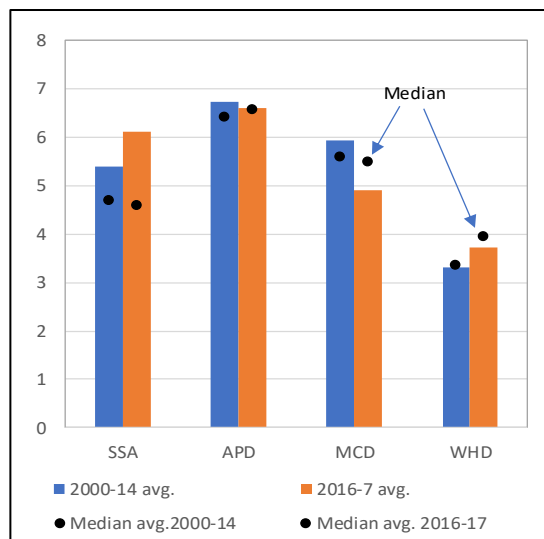
**The recent growth decline in LIDCs relative to previous years, and differences in growth patterns across regions, can be explained in large part by the slowdown in commodity exporters.**

- While growth rates in fuel exporters and NFC exporters in 2016-17 were below the 2000-14 averages, there was no significant differences in the pace of growth for diversified exporters.
- The better performance in the Asia-Pacific region relative to Sub-Saharan Africa is due largely to export orientation: only a quarter of APD countries are commodity exporters, compared to half in SSA, while fuel exporters have a high weight in SSA GDP.
- Growth in the Middle East and Central Asia region has slipped below longer-term averages, due in part to the greater prevalence of conflict and fragility.
- Growth in the three Western Hemisphere LIDCs improved relative to longer-term averages, but lagged other regions.

**Long-Term Trends in GDP Growth in LIDCs**  
(Percent, PPP GDP-weighted average)



**GDP Growth in Diversified Exporters**  
(Percent, PPP GDP-weighted average)



Sources: WEO and IMF staff estimates.  
1/ Prepared by Svitlana Maslova (SPR).

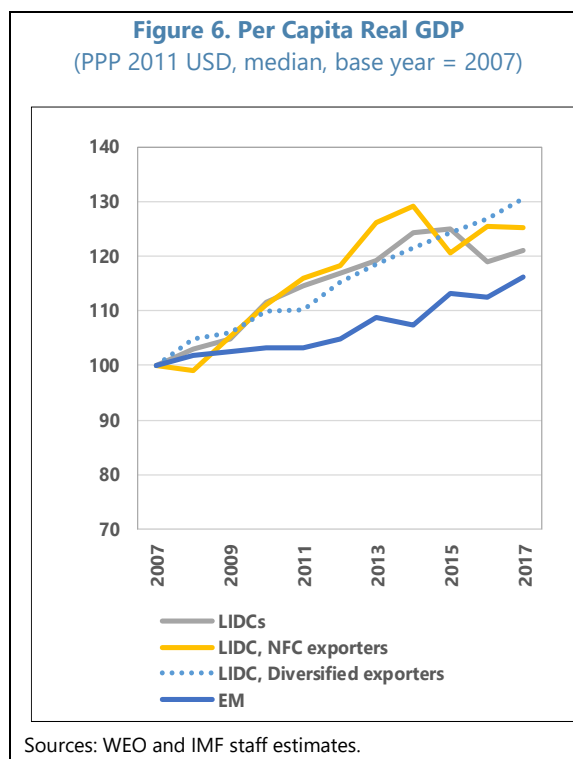
**14. LIDCs have had a mixed performance over the past decade on convergence of per capita output towards EM median levels.**

NFC exporters have given up some of the gains since 2014 as their growth has slowed, while diversified exporters have made steadier gains (Figure 6). Slowing growth in NFC exporters represents a setback for pursuit of the sustainable development goals.

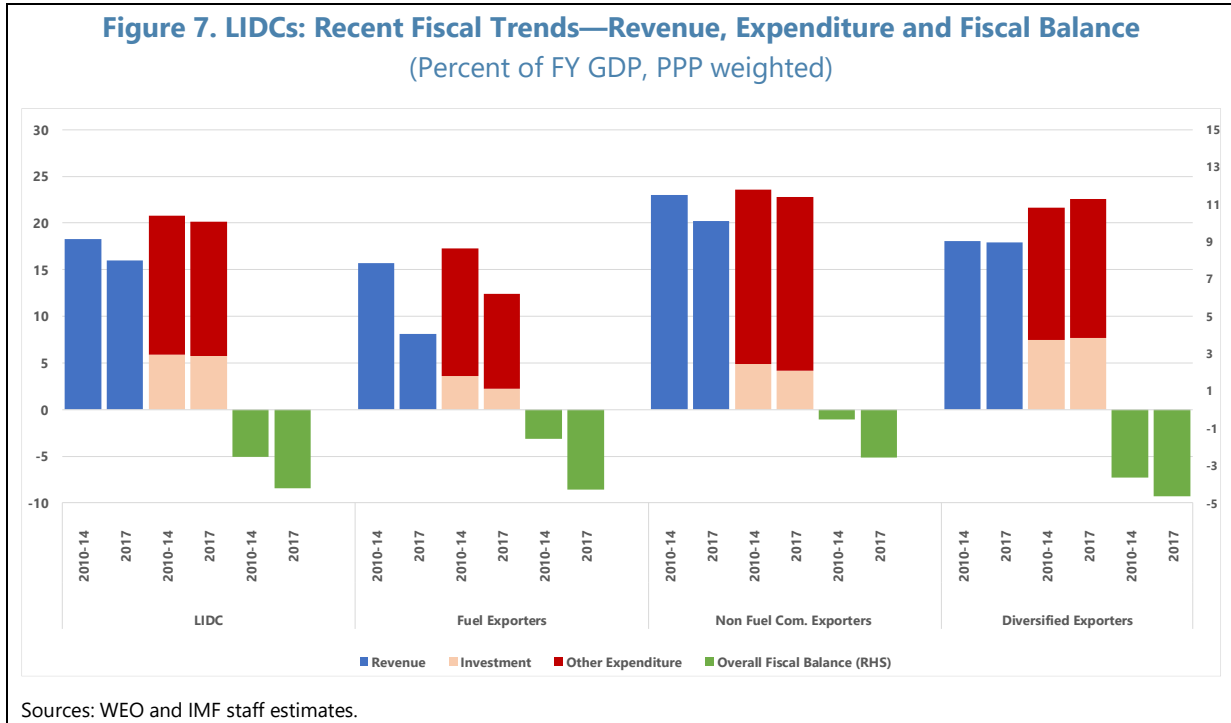
**Weakening Fiscal Positions**

**15. Fiscal balances have deteriorated in 70 percent of LIDCs and across all country groups in recent years** (Figure 7). Aside from fuel exporters, the factors at play varied markedly across countries:

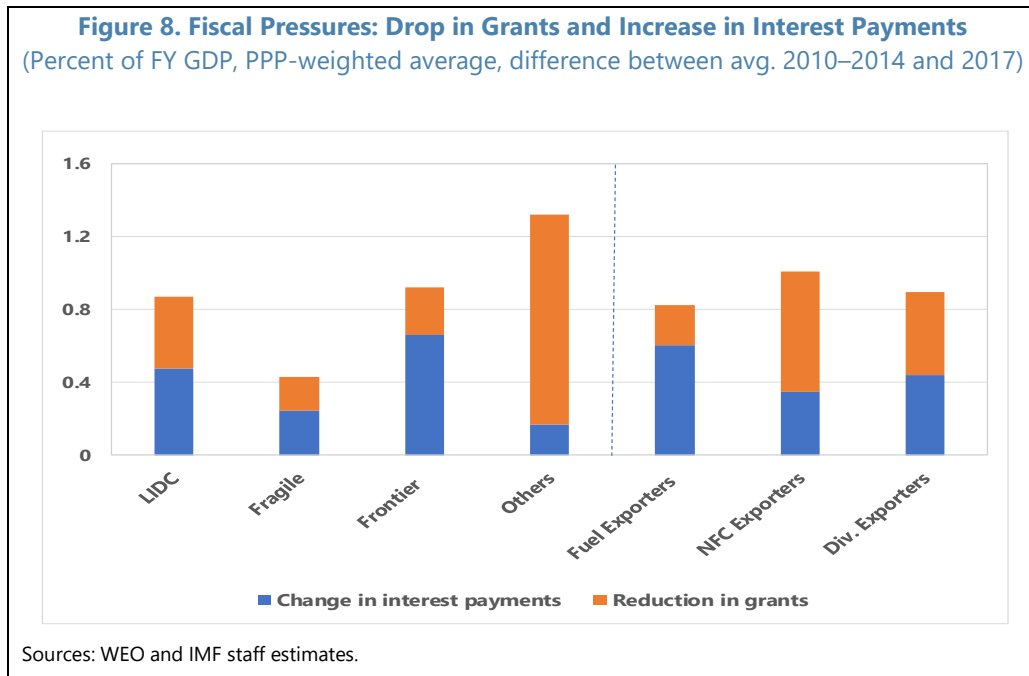
- Among the six fuel exporters, fiscal balances declined in four countries from 2010-14 to 2017, driven by a median decline of revenues of close to 8 percent of GDP; financing constraints forced fiscal tightening in two cases.
- Among the 20 NFC exporters, fiscal balances deteriorated in 15 countries, by an average of 2.5 percent of GDP. Declining revenues was the main contributory factor in 8 of these 15 countries, with higher spending more important in the other 7.
- Among the 32 diversified exporters, fiscal balances weakened in 21 countries, by an average of 1.7 percent of GDP. Higher spending was the main factor behind the decline in 13 of these 21 countries and declining revenues in 8 cases.
- The presence of an IMF program appears to have a significant influence on fiscal developments: 13 of the 18 countries that recorded stronger fiscal balances in 2017 relative to 2010-14 had IMF programs in place in 2017 (as compared with 14 of the 40 countries that recorded weaker fiscal balances).<sup>8</sup>



<sup>8</sup> Drawing stronger conclusions about the impact of Fund programs would require a comprehensive statistical analysis. IMF programs in this context means Fund-supported arrangements under the SCF, ECF, and PSI facilities.



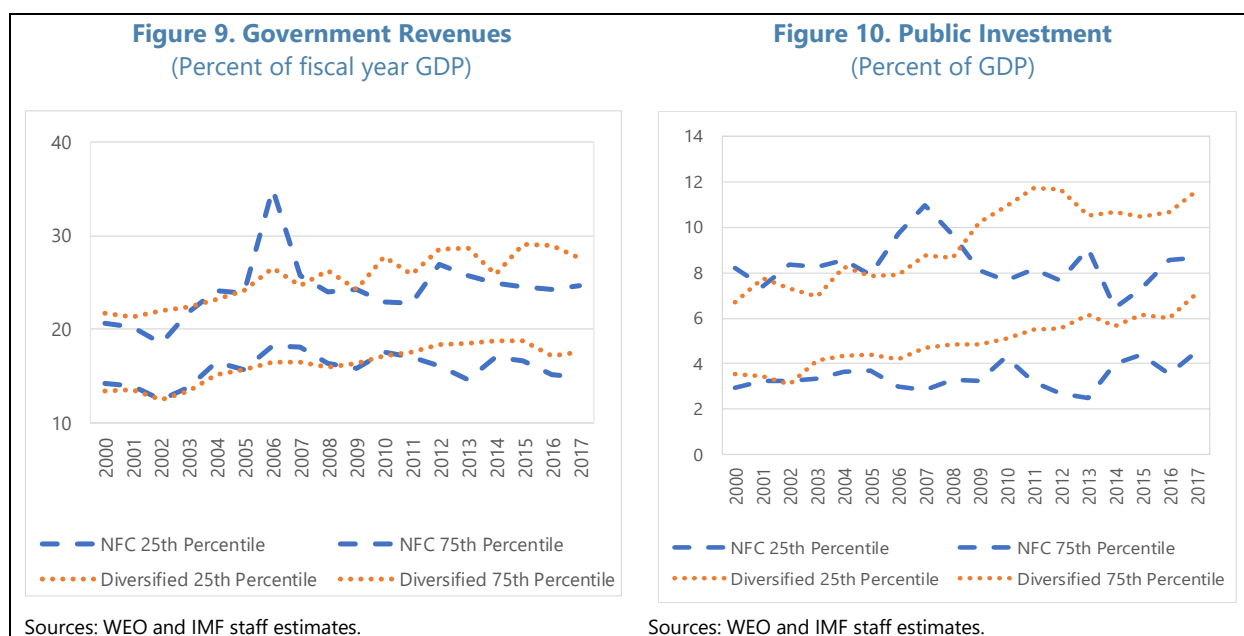
**16. Lower grants and higher interest expenditures contributed to the fiscal pressures** (Figure 8). Grants to LIDCs dropped from 1.2 percent of GDP on average in 2010-14 to 0.9 percent in 2017. At the same time, interest outlays increased by about 0.5 percent of GDP, on the back of higher debt stocks and increased reliance on more expensive commercially-placed debt. The combined impact of those developments on budgets ranged from 0.8 percent of GDP in fuel exporters to around 1 percent in NFC exporters.



## Budgetary Revenues and Investment

**17. Budget revenue performance has been mixed in recent years, with revenue-GDP ratios falling in NFC exporters and rising in diversified exporters** (Figure 9). But experiences varied markedly within the country groups, reflecting both the specifics of tax and export structures and policy efforts to boost revenue mobilization.

- The median revenue-GDP ratio was 19.1 percent of GDP in NFC exporters in 2017, down from 21.1 percent in 2010-14. But 2017 revenues exceeded 2010-14 averages in 9 of 20 cases.
- For diversified exporters, the median revenue-GDP ratio was 23.6 percent of GDP in 2017, up from 21.6 percent in 2010-14. The revenue improvements was somewhat concentrated in smaller countries; the weighted-average revenue-GDP ratio rose 1 percent. The revenue ratio increased in 16 of 32 countries.



**18. Public investment levels have typically moved in the same direction as budgetary revenues**, again with marked diversity within country groupings (Figure 10):

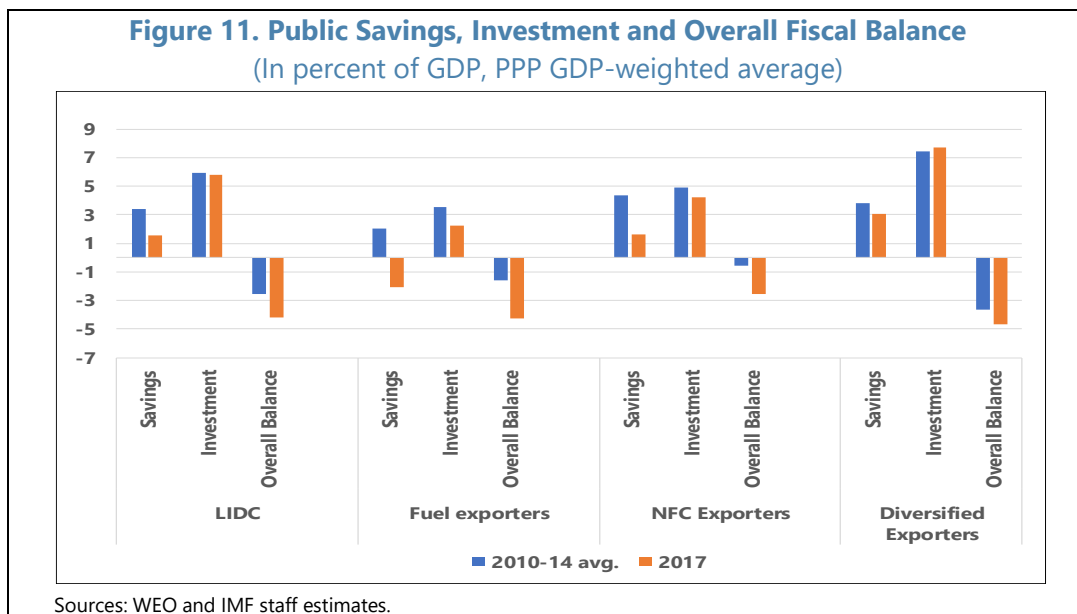
- Among NFC exporters, the median investment-GDP ratio was 5.2 percent of GDP in 2017, down from 5.7 percent in 2010-14 (with a slightly larger decline in the weighted average). But revenue levels rose in nine NFC countries, facilitating higher public investment in seven cases; investment cuts were recorded in a majority of the cases where revenues fell.
- In diversified exporters, median investment was 8.3 percent of GDP in 2017, up from 6.9 percent in 2010-14—although, again, increases were concentrated in smaller countries, with the GDP-weighted average increasing only modestly. In the majority of countries where revenues rose (fell), investment levels also increased (declined).

## Public Savings and Investment

**19. The narrative of using public borrowing to scale-up public investment is often cited as a justification for running higher deficits (and accumulating debt) in developing countries.** To establish the relevance of this narrative for recent developments in LIDCs, it is useful to look at the evolution of public saving and investment levels, making use of the fact that the change in the fiscal deficit equals i) the change in public investment less ii) the change in public savings (budgetary revenues minus current spending).<sup>9</sup>

**20. Widening fiscal deficits are fully accounted for by higher levels of public investment in a minority of cases.** Looking at 34 cases where fiscal balances deteriorated between 2010-14 and 2017,<sup>10</sup> public investment increased by more than the fiscal deterioration in 10 cases, increased by less than the fiscal deterioration in 8 cases, and declined in 16 cases. Interestingly, the presence of an IMF arrangement in 2017 was most likely in the first group (7 of 10 cases) and least likely in the third group (3 out of 16 cases).

**21. Aggregated figures show significant declines in both investment and public savings among fuel and NFC exporters, with a modest increase in investment and drop in public savings among diversified exporters** (Figure 11). But the heterogeneity in the experiences of the 34 countries where deficits widened underscores the importance of policy choices in explaining outcomes:



<sup>9</sup> The fiscal deficit equals public investment less public savings (defined as budgetary revenues less current spending); the change in the deficit thus equals the change in investment minus the change in public savings.

<sup>10</sup> Deficits rose in 40 countries over the period; public investment data are available for 34 of these.

- The 10 countries where rising deficits were fully accounted for by higher public investment include 2 NFC exporters (Guinea-Bissau, Mali) and 8 diversified exporters (Cameroon, Cote D'Ivoire, Kenya, Madagascar, along with Bangladesh, Moldova, Nepal, and Nicaragua).
- The eight countries where rising deficits reflected a mix of rising investment and falling public savings include five NFC exporters (Burkina Faso, Niger, Sierra Leone, Zambia, Zimbabwe), and three diversified exporters (Benin, Comoros, Tajikistan).
- The 16 countries where deficits rose and investment declined include 3 fuel exporters, 6 NFC exporters, and 7 diversified exporters.

**22. In summary, although investment would almost certainly have been lower across these 34 countries had borrowing levels not increased,** only in a minority of cases was the incremental borrowing used entirely to finance investment scaling-up.

**23. The fiscal trends discussed above have contributed to a significant increase in public debt levels in LIDCs in recent years** (Figure 12).

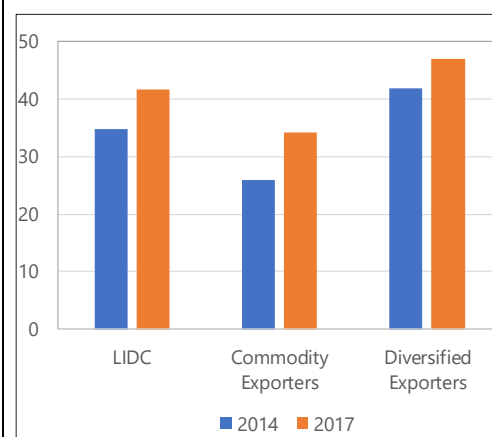
The evolution of debt stocks and debt vulnerabilities is analyzed in chapter 2 below.

### Improving External Position in Commodity Exporters

**24. Commodity exporters—especially fuel exporters—have achieved significant external adjustment in the last two years,** reflecting sizeable import compression and the partial recovery of commodity prices (Figure 13a). For fuel exporters, the current account balance has returned to a small surplus; for NFC exporters, the current account deficit has steadily narrowed from the 2015 trough; and for diversified exporters, the current account deficit has fluctuated from year to year, with little net change from the years prior to the commodity price decline. Looking at the structural changes in the current account position from 2010-14 through 2017 (Figure 13b):

- The position of fuel exporters has (unsurprisingly) weakened somewhat, with large declines in exports of goods and services offset by import compression and an improvement on the income/transfer account (likely helped by falling profit transfers to oil parent companies).
- NFC exporters, in the aggregate, have seen about a 1 percent of GDP improvement in the current account deficit (some 4 percent of GDP in 2017), with import compression yielding an improvement in the trade balance (despite weaker exports), partly offset by a decline on income/transfers from abroad. Foreign direct investment levels are down significantly from 2010-14 levels, contributing to weaker investment and growth.

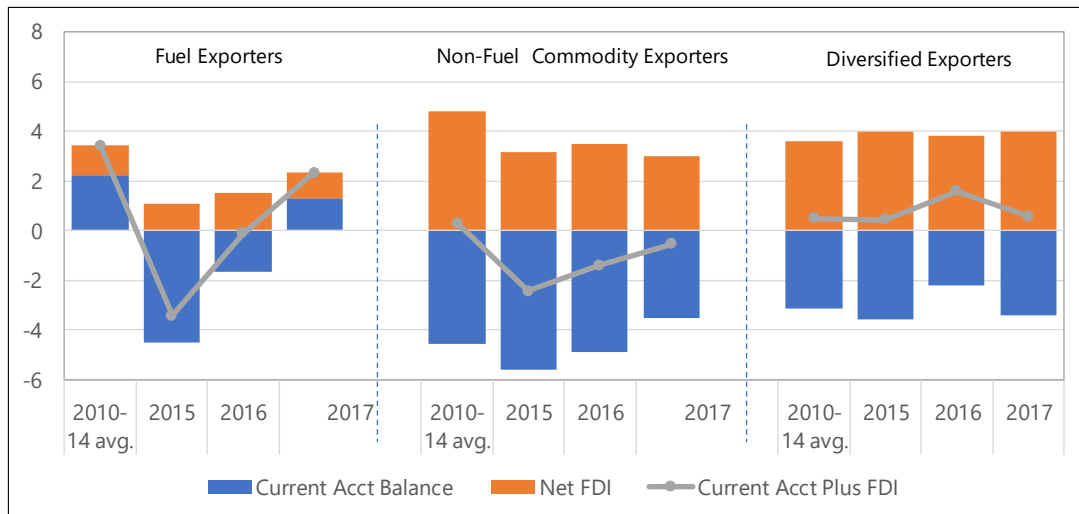
**Figure 12. Public Debt in LIDCs**  
(Percent of GDP, PPP GDP-weighted average)



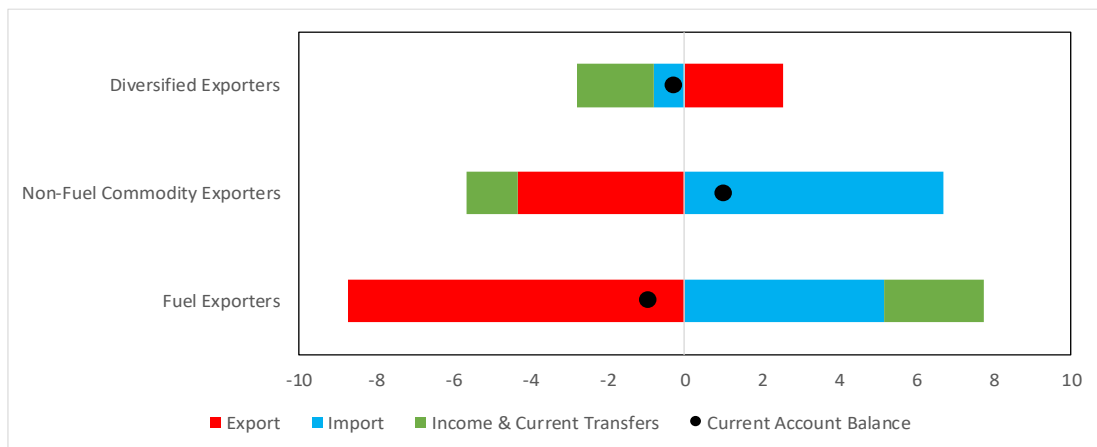
Sources: WEO and IMF staff estimates.

- Diversified exporters have also seen little net change in the current account deficit (some 3½ percent of GDP in 2017), but with rising exports driving an improvement in next exports, offset by a sizable decline in income/transfers abroad (likely linked to the weakening of aid flows and remittances). Foreign direct investment levels are up slightly from 2010-14 levels.

**Figure 13a. LIDC Current Account and FDI**  
(Percent of GDP, PPP GDP-weighted average)



**Figure 13b. Changes in Current Account Balance, 2010–14 Average to 2017**  
(Percentage of GDP, PPP GDP-weighted average)

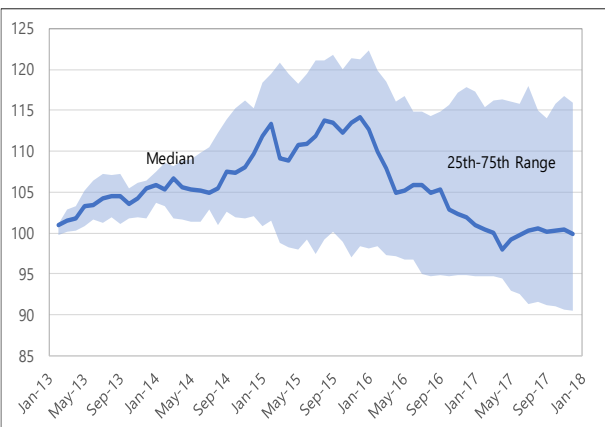


Sources: WEO and IMF staff estimates.

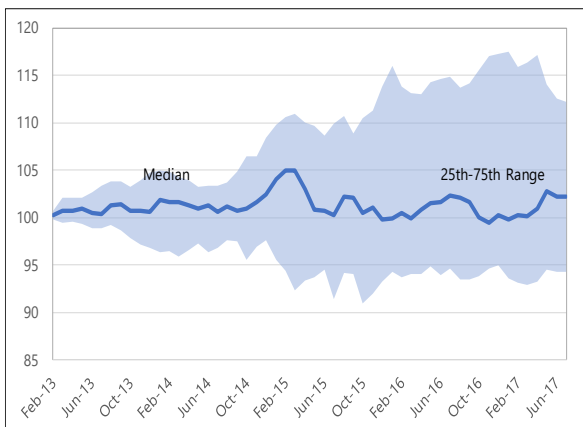
**25. Commodity exporter adjustment was supported by real exchange rate depreciation**

(Figure 14). In the median commodity exporter, the real exchange rate (RER) depreciated by about 11 percent between December 2015 and December 2016 but has since stabilized, while the RER has been largely range bound in diversified exporters over the past two years. There was significant variation around the median in both groups, as illustrated in Figure 14c.

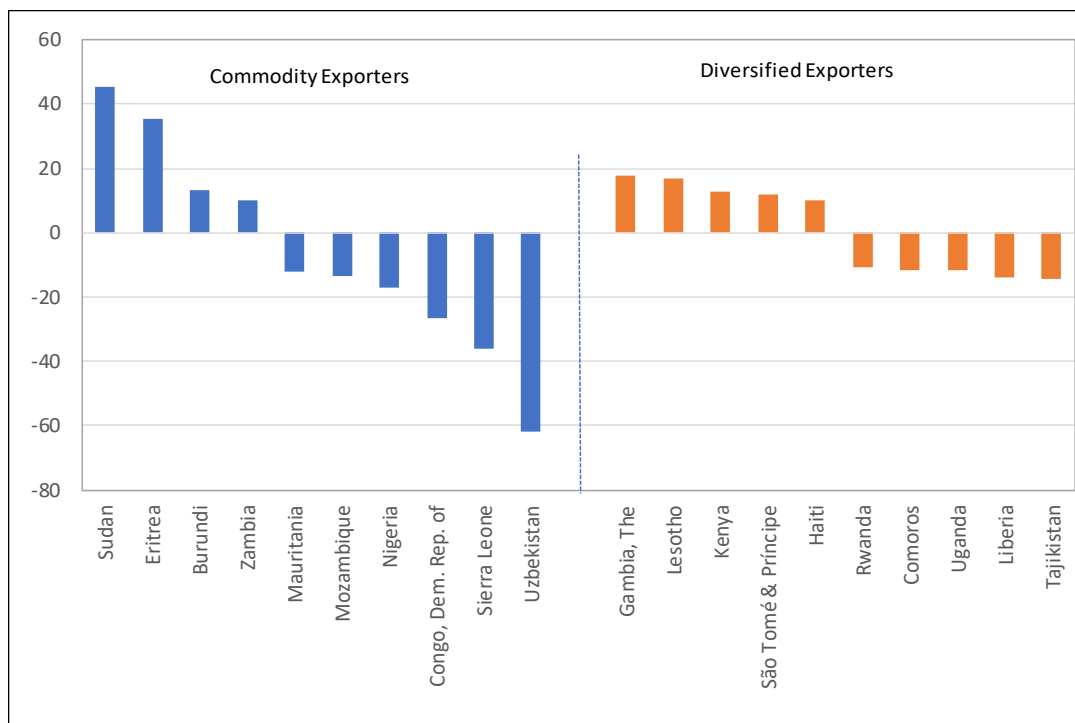
**Figure 14a. Real Exchange Rate Developments in Commodity Exporters**  
(Jan-2013=100)



**Figure 14b. Real Exchange Rate Developments in Diversified Exporters**  
(Jan-2013=100)



**Figure 14c. 2017 Real Exchange Rate Changes in LIDCs with at Least 10 Percent Appreciation or Depreciation 1/**  
(Percent, as of December 2017)

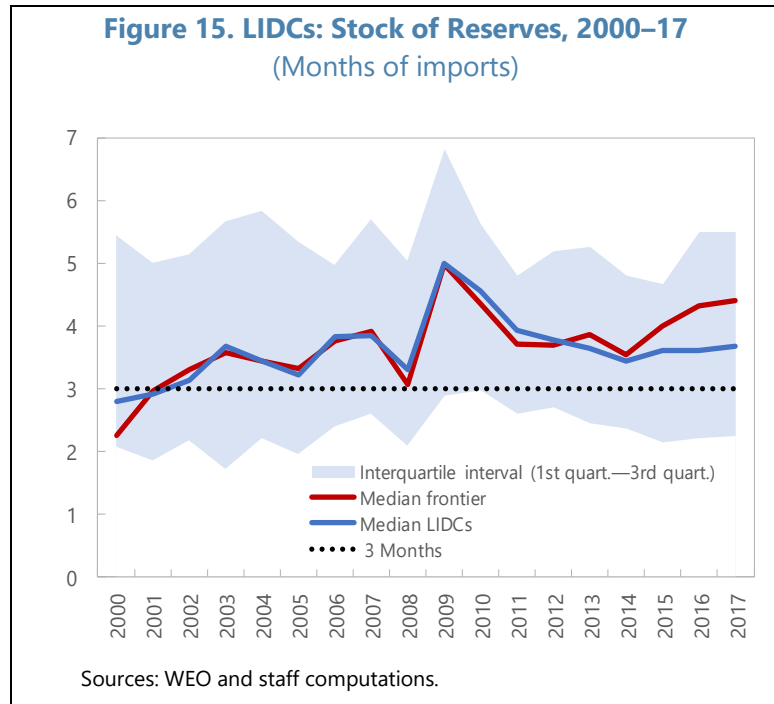


Sources: Information Notice Services and IMF staff calculations.  
1/ Compared to December-2015. Positive numbers mean appreciation.

**26. Foreign reserve levels (in terms of import coverage) have remained broadly unchanged for the median LIDC, but experience varies across countries** (Figure 15). The median

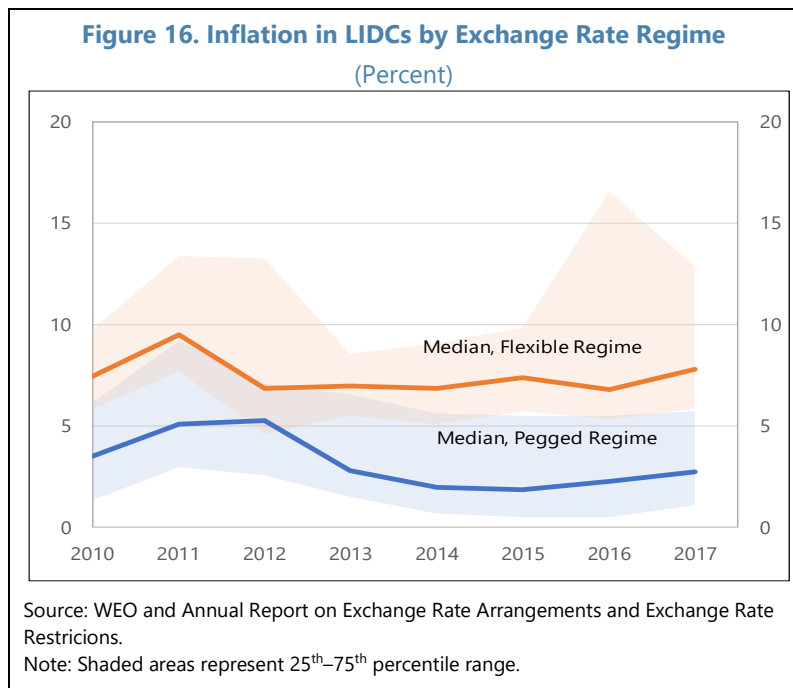
level of import coverage has shown little change since 2013, albeit improving somewhat for frontier markets. But reserve coverage is estimated to have been less than the conventional benchmark of three months of imports of goods and services in 21 countries at end-2017 (down from 24 at end-2016), with a median level of 1 month in the bottom quartile. Reserve coverage levels are more often low in fragile states (60 percent are below the benchmark) and in countries hit most severely by the decline in commodity prices.

**Stable Inflation but Sluggish Credit Growth**



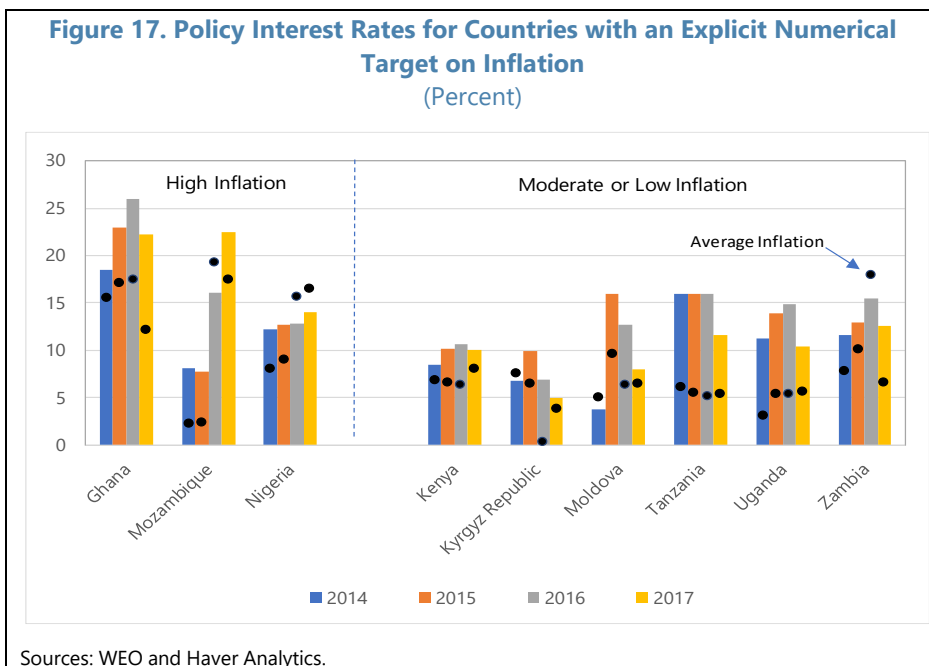
**27. Inflation has remained contained in most LIDCs, albeit with some notable exceptions**

(Figure 16). Median inflation was 5.6 percent in 2017, little changed from 5.3 percent in 2016; consistent with long-standing patterns, pegged rate regimes had lower inflation. The dispersion of inflation rates narrowed in 2017, as several countries (e.g., Malawi and Zambia) succeeded in reducing high inflation. However, 13 countries continued to have inflation over 10 percent in 2017 (up from 10 in 2016), while 4 had inflation above 20 percent (up from 2). Inflation was most severe in countries affected by conflict (South Sudan, Yemen).

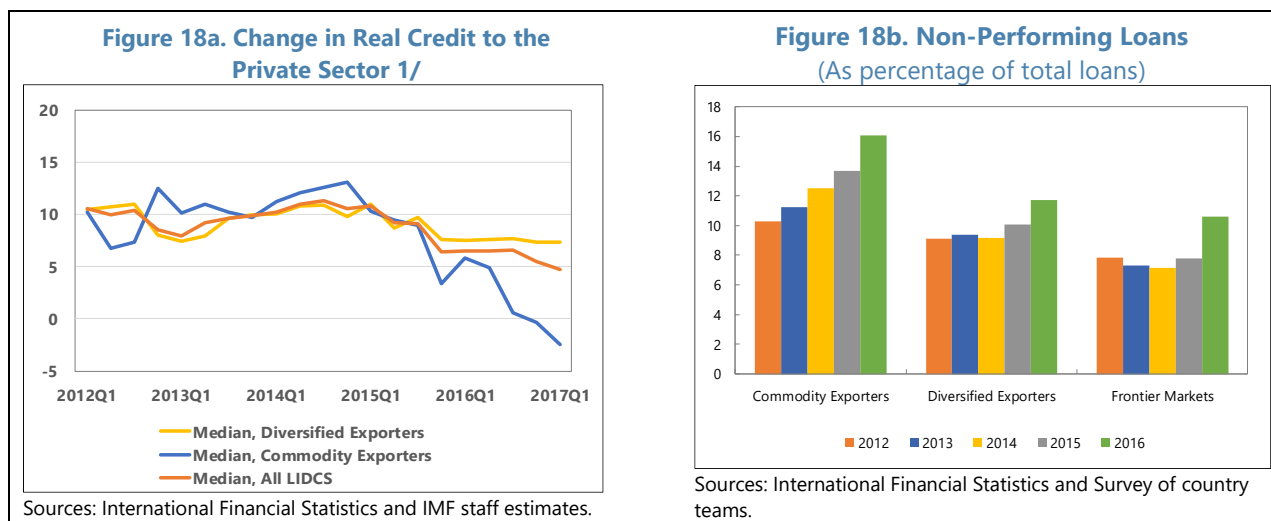


**28. Easing of monetary policies contributed to a decline in real interest rates in many countries.**

In the nine countries with flexible exchange rates and explicit inflation targets, the direction of change in central bank policy rates was generally in line with inflation objectives: the seven countries with lower average policy rates in 2017 than 2016 had declining or low to moderate inflation (below 8 percent); while the two with higher average rates (Mozambique and Nigeria) had high inflation (Figure 17). The median real policy rate in this group fell from 6.3 percent in 2016 to 4.9 percent in 2017.

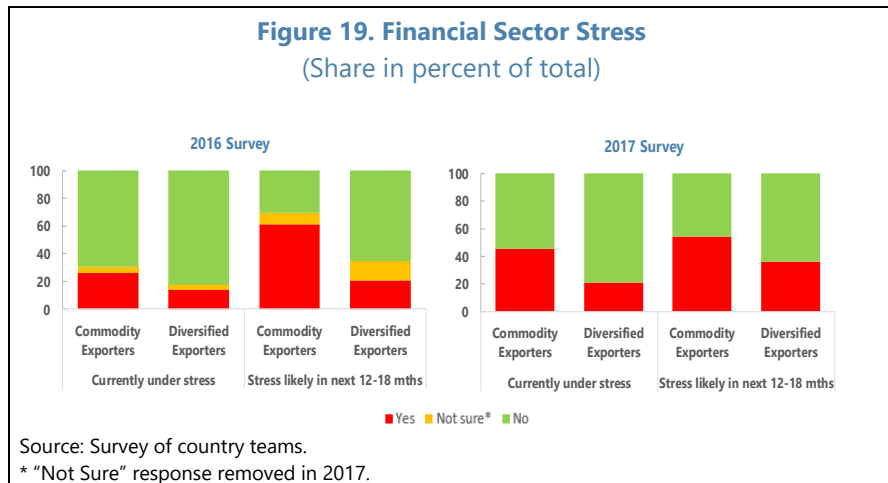


**29. Growth in credit to the private sector varies between commodity and diversified exporters,** with the real stock of credit declining in 2017 in the former, while growing at a slightly slower pace in the latter during 2016-17 (Figure 18). The divergent patterns reflect both weakened banking systems/rising NPLs and slower growth in commodity exporters. There was considerable variation around the median, with 11 countries registering growth in real credit above 10 percent (including Cambodia, Nepal, Myanmar, and Cote d’Ivoire) and eight experiencing a decline in excess of five percent (Zambia, Mozambique, Moldova). The median ratio of private sector credit to GDP across LIDCs remained flat at 25.7 percent in 2016, still up by more than five percentage points since 2011.



**Financial Sector Stability: Staff Assessment of Emerging Financial Sector Stress**

**30. The number of LIDCs experiencing financial sector stress is rising, with some 30 percent of countries now assessed to be in stressed situations.**<sup>11</sup> A fall 2016 survey of IMF country teams concluded that some 20 percent of LIDCs were experiencing financial sector stress, with that number expected to rise to about 40 percent over the next 12-18 months. In a similar survey undertaken a year later,

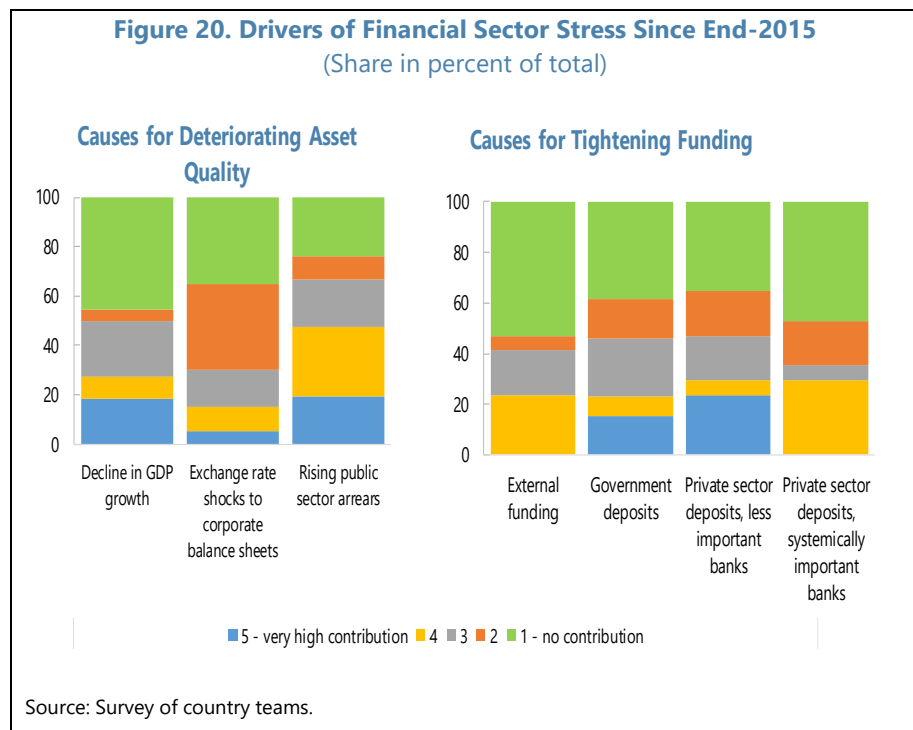


financial systems in some 30 percent of countries were assessed to be experiencing stress, with that number expected to rise to 45 percent by end-2018. Stress situations are more likely to be observed in commodity exporters, but are also increasing in frequency in other countries (Figure 19).

financial systems in some 30 percent of countries were assessed to be experiencing stress, with that number expected to rise to 45 percent by end-2018. Stress situations are more likely to be observed in commodity exporters, but are also increasing in frequency in other countries (Figure 19).

**31. The main drivers of rising stress levels are deteriorating loan quality and tighter funding conditions**

(Figure 20). Drivers of deteriorating asset quality include i) weak fiscal positions, as governments accumulate arrears to private companies, impairing their ability to service debt (e.g., Chad, Malawi, Zambia); ii) sluggish economic activity (Congo Republic, Malawi, Nigeria); and iii) the impact of exchange rate depreciation on corporate balance sheets and finances (Nigeria and



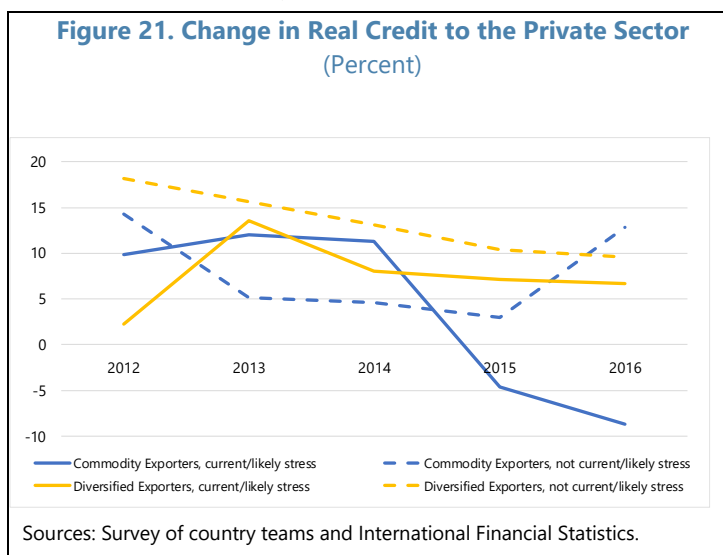
Mozambique). Factors behind tighter funding include (i) weak fiscal positions (as government

<sup>11</sup> The analysis of financial stress draws on a survey of 55 IMF country teams and on country data on financial soundness indicators. Financial sector stress need not result in a financial sector crisis, but flags the need for intensified regulatory attention and (potentially) intervention to manage stresses and maintain financial stability.

deposits are drawn down); (ii) private deposit withdrawals (more of a concern for small banks); and (iii) reduced access to external funding in a handful of cases (Burundi, Congo Republic, Zimbabwe).

**32. Growth of credit to the private sector has predictably been lower in countries where financial systems are under stress.**

A cross-check of reported stress against independent data on credit growth shows a negative relationship between stress and credit growth (Figure 21)—with the relationship most pronounced for commodity exporters, where credit has been shrinking in systems under stress.



**33. Heightened financial stress has led to bank failures in 18 LIDCs since 2015,**

while interventions have been deployed to prevent bank failures in a further 8 countries. Interventions have included placing banks under temporary administration, the provision of emergency liquidity assistance, forced mergers, and required recapitalization. Interventions have had significant fiscal costs in two countries (some 6 percent of GDP in both cases), while fiscal costs in a third country could reach as high as 13 percent of GDP by end-2018.

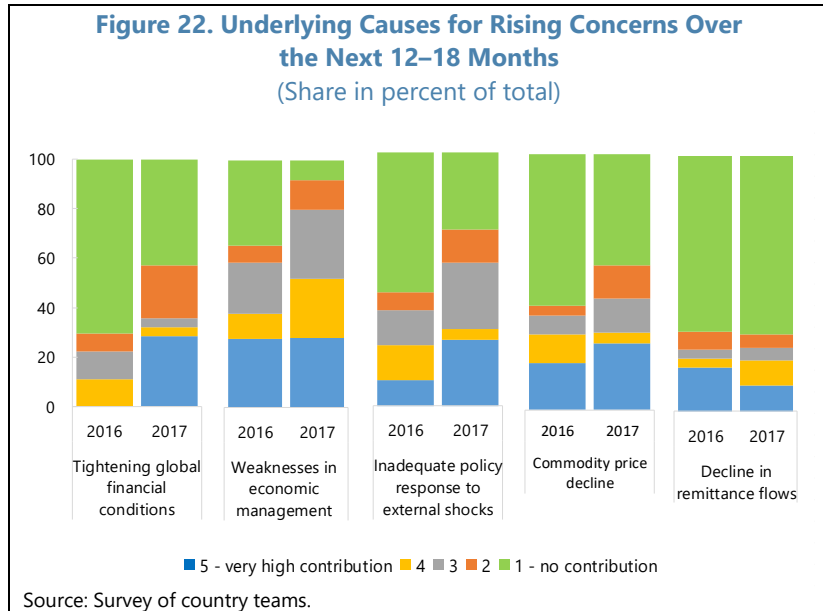
**34. Concerns about the health of non-bank financial institutions (NBFIs), including micro-finance institutions, have also increased substantially since end-2015.**

NBFIs are a significant feature of financial systems in about one-half of LIDCs, although banking systems usually play a dominant role (in quantitative terms) in financial intermediation.<sup>12</sup> Stress on NBFIs is assessed to have increased in 16 countries since end-2015, although staff rated the vulnerability of NBFIs as being high in only 6 countries.

<sup>12</sup> See IMF (2017a, Section 2.B) for further discussion.

**35. Looking ahead, weak economic management is viewed as a key contributor to rising concerns about financial sector stress,** with tighter global financial conditions and commodity price declines also seen as important risks (Figure 22). Compared with results of the 2016 survey, concerns about the likely impact of each of these risk factors has increased.

**36. Rising financial sector stresses pose a sizeable challenge for regulatory authorities.** Tackling budgetary arrears, via fiscal policy adjustments, is an over-arching priority in many countries. Intensified supervision, the scaling back of regulatory forbearance, and the strengthening of bank resolution mechanisms are also seen as key priorities by IMF country teams. Weaknesses in regulation and supervision systems in LIDCs, and how they can best be tackled, are discussed in IMF (2017a, Section 2.C).



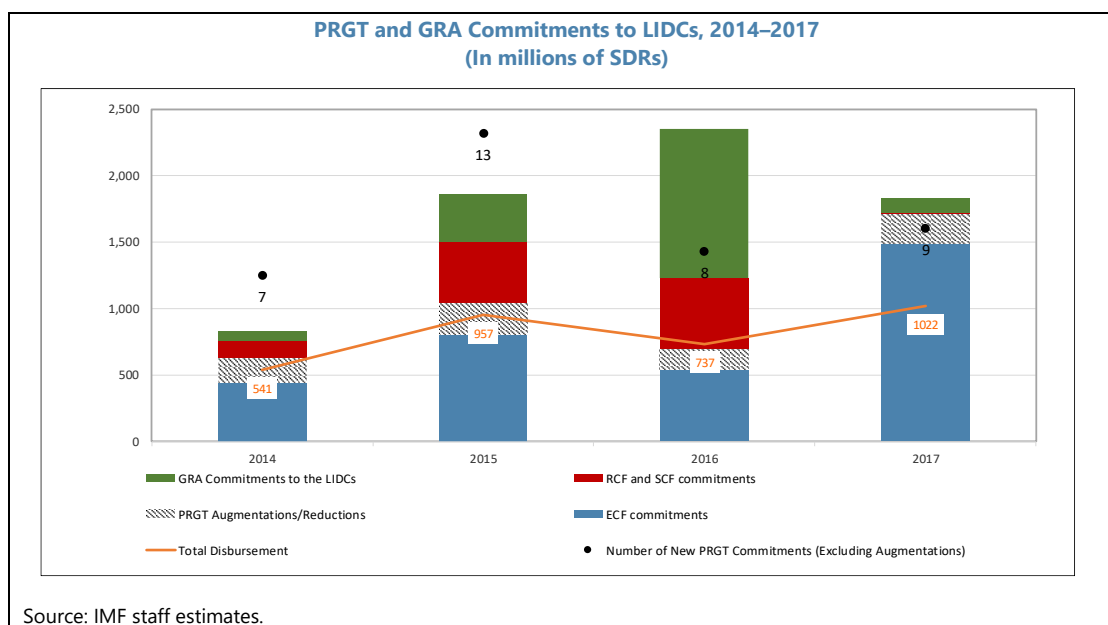
**IMF Financial Support for LIDCs**

**37. Reflecting the ongoing economic difficulties in many LIDCs, new IMF lending commitments to LIDCs remained high relative to historic averages in 2017.** The IMF approved eight new financial arrangements with LIDCs in 2017, along with one drawing under the Rapid Credit Facility; there were also five augmentations of financial support under existing programs. Countries that are members of the two CFA currency zones accounted for five of the eight new arrangements (two in CEMAC, three in WAEMU) and for four of the five augmentations (two in CEMAC, two in WAEMU). All new commitments of financial support were to countries in Africa (see Box 4).

### Box 4. Fund Financing for LIDCs: Recent Trends 1/

**New IMF lending commitments to LIDCs have increased significantly in recent years**, although interpretation of trends is complicated by a large precautionary blended arrangement with Kenya in 2016.

**Nine countries received new commitments of financial support from the Fund in 2017**, totaling SDR 1.8 billion (with SDR 1.7 billion from the PRGT), well above the 2010-16 average of SDR 1.3 billion. Disbursements to LIDCs amounted to SDR 1 billion, up from the 2010-16 average of SDR 0.7 billion.



**Most of the new commitments in 2017 were provided through the Extended Credit Facility, an instrument to provide somewhat longer-term concessional financing (repaid over 5½-10 years).**

- Eight new ECFs were initiated in 2017, totaling SDR 1.5 billion, almost half of which was accounted for by programs with two CEMAC members (Cameroon, Chad). New ECFs were also approved for six other African countries (Benin, Guinea, Mauritania, Niger, Sierra Leone, and Togo).
- An RCF of SDR 12 million was provided to support The Gambia, a fragile country buffeted by shocks.
- There were also five augmentations of access under existing arrangements, totaling SDR 332 million: Cote d'Ivoire (of which SDR 108 million was financed from the GRA), the Central African Republic (twice), Madagascar, and Mali.

**The majority of the IMF's financial assistance to LIDCs in 2017 was directed to countries in fragile situations.** Separately, five out of the eight new ECFs were provided to members of the two large African currency unions, CEMAC and WAEMU.

**Several requests for new Fund financial assistance are expected in 2018**, particularly from commodity exporters undertaking continued adjustment efforts. That said, new commitments can fluctuate markedly from year to year, even as actual disbursements show less volatility.

1/ Prepared by Svitlana Maslova (SPR).

## D. The Outlook

**38. Against the backdrop of a global economic upswing and some recovery in commodity prices, the (weighted) average growth rate across LIDCs is projected to rise by half a percentage point in 2018, to 5.2 percent** (Table 2).<sup>13</sup> Supply-side factors supporting the pick-up in growth include a rebound in the volume of fuel production (*Nigeria, Republic of Congo*) and the easing of drought conditions that had depressed agricultural output (*Kenya, Malawi, Zambia*).<sup>14</sup>

**39. Inflation patterns are expected to show some improvement in 2018**, albeit with the median inflation rate set to ease only marginally from 5.4 percent in 2017 to 5.3 percent in 2018. PPP GDP-weighted average inflation—which has been systematically higher than the median rate in recent years, reflecting elevated inflation rates in several large commodity exporters (including *Nigeria, Sudan, and DRC*)—is expected to decline from 10.3 percent to 8.8 percent, helped by the easing of price pressures in *Ghana, Kenya, and Mozambique*. Inflation would remain in double-digits in 10 countries (down from 13 in 2017)—including *Ghana, Nigeria, and Sudan*—and above 20 percent in 4 cases (unchanged from 2017).

**40. Fiscal balances are expected to improve somewhat in commodity exporters in 2018, but show little change among diversified exporters.** A pick-up in both growth and export prices should contribute to improved fiscal positions in fuel exporters, with policy tightening set to yield smaller deficits in NFC exporters (with more marked improvements in smaller countries). Fiscal deficits in diversified exporters are expected to remain largely unchanged from 2016-17 levels—still about one percent of GDP above 2010-14 levels. The modest projected improvement in fiscal positions would slow, but not halt, the increase in public debt levels in many countries; the (weighted) average public debt-GDP ratio is forecast to rise by a half a percentage point, to 41 percent of GDP. The aggregate picture outlined here is not a “passive policy scenario”, but rather envisages fiscal consolidation in many LIDCs, particularly commodity exporters; chapter 2 looks more closely at the assumptions underpinning the fiscal and debt projections.

**41. Current account positions are expected to weaken among commodity exporters**, as stronger domestic demand leads to some reversal of the import compression of recent years. Staff projections also envisage some widening of current account deficits in diversified exporters, facilitated by higher external borrowing. Import coverage ratios would strengthen somewhat on average; the number of countries with import coverage ratios of less than 3 months of goods and services would decline from 21 countries in 2017 to 19.

<sup>13</sup> The median growth rate is projected to rise by a similar margin, from 4.5 to 5 percent. The divergences between weighted-mean and -median measures of growth point to the sluggish pace of recovery in large commodity exporters (with smaller countries growing at a faster pace) and the strong pace of growth in large diversified exporters (with smaller countries growing at a slower pace).

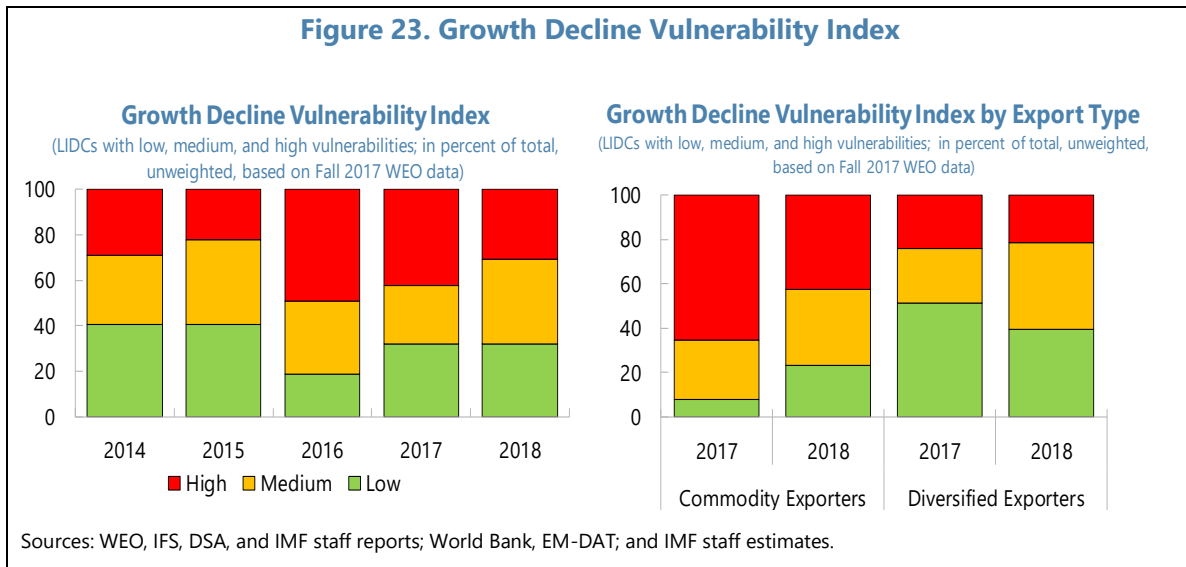
<sup>14</sup> The recent pick-up in oil prices suggests some upside potential in the outlook for fuel producers.

**Table 2. Selected Macroeconomic Indicators**

<b>PPP-GDP Weighted Averages</b>						
	2010-14	2015	2016	2017	2018	2019-21
				Projections		
<b>Growth (Percent)</b>						
<b>LIDCs (59)</b>	<b>6.0</b>	<b>4.7</b>	<b>3.7</b>	<b>4.7</b>	<b>5.2</b>	<b>5.3</b>
Commodity Exporters (26)	5.7	2.4	0.4	2.1	3.3	3.5
Fuel Exporters (6)	5.7	0.7	-2.4	0.4	2.4	2.5
Non-Fuel Exporters (20)	5.7	4.8	4.4	4.4	4.4	4.7
Diversified Exporters (33)	6.2	6.4	6.0	6.5	6.5	6.5
<b>Inflation (Percent)</b>						
<b>LIDCs</b>	<b>9.3</b>	<b>7.4</b>	<b>9.9</b>	<b>10.3</b>	<b>8.8</b>	<b>7.9</b>
Commodity Exporters	11.1	9.9	16.4	16.9	14.1	12.2
Fuel Exporters	10.3	11.4	20.4	18.4	14.7	14.0
Non-Fuel Exporters	12.2	7.6	10.6	14.8	13.3	10.0
Diversified Exporters	7.9	5.5	5.3	5.7	5.2	5.1
<b>Fiscal Balance (Percent of GDP)</b>						
<b>LIDCs</b>	<b>-2.5</b>	<b>-4.1</b>	<b>-4.4</b>	<b>-4.2</b>	<b>-4.1</b>	<b>-3.7</b>
Commodity Exporters	-1.2	-4.1	-4.2	-3.6	-3.2	-2.8
Fuel Exporters	-1.6	-5.1	-5.5	-4.3	-4.0	-3.4
Non-Fuel Exporters	-0.5	-2.5	-2.4	-2.6	-2.2	-1.9
Diversified Exporters	-3.6	-4.2	-4.6	-4.6	-4.7	-4.2
<b>Current Account Balance (Percent of GDP)</b>						
<b>LIDCs</b>	<b>-1.9</b>	<b>-4.2</b>	<b>-2.6</b>	<b>-2.3</b>	<b>-3.1</b>	<b>-3.5</b>
Commodity Exporters	-0.3	-4.9	-3.0	-0.7	-2.1	-3.0
Fuel Exporters	2.3	-4.5	-1.6	1.3	-0.5	-0.2
Non-Fuel Exporters	-4.5	-5.6	-4.9	-3.5	-4.2	-6.6
Diversified Exporters	-3.1	-3.6	-2.3	-3.4	-3.7	-3.8
<b>Memorandum Items</b>						
	2010-14	2015	2016	Median		
				Projection		
<b>Growth (Percent)</b>						
<b>LIDCs</b>	<b>5.4</b>	<b>4.0</b>	<b>4.1</b>	<b>4.5</b>	<b>5.0</b>	<b>5.3</b>
Commodity Exporters	5.5	3.2	3.2	3.8	4.1	4.7
Fuel Exporters	5.1	2.2	-4.6	-0.7	2.6	3.9
Non-Fuel Exporters	5.8	4.0	3.7	4.1	4.6	4.7
Diversified Exporters	5.3	5.7	4.7	5.0	5.3	5.6
<b>Inflation (Percent)</b>						
<b>LIDCs</b>	<b>5.7</b>	<b>5.3</b>	<b>5.2</b>	<b>5.4</b>	<b>5.3</b>	<b>5.0</b>
Commodity Exporters	6.0	5.0	5.3	6.3	8.2	6.1
Fuel Exporters	5.6	7.9	4.3	8.7	8.4	6.9
Non-Fuel Exporters	6.1	3.4	6.1	6.3	8.2	6.1
Diversified Exporters	5.7	5.3	5.2	4.5	5.0	5.0
<b>Fiscal Balance (Percent of GDP)</b>						
<b>LIDCs</b>	<b>-2.5</b>	<b>-3.1</b>	<b>-4.5</b>	<b>-3.7</b>	<b>-3.6</b>	<b>-2.8</b>
Commodity Exporters	-1.8	-3.4	-4.8	-3.9	-3.3	-2.8
Fuel Exporters	-1.0	-7.0	-13.2	-0.1	-2.8	-1.2
Non-Fuel Exporters	-1.9	-3.2	-4.4	-4.4	-3.3	-2.9
Diversified Exporters	-2.9	-2.8	-4.1	-3.7	-3.8	-2.9

Sources: World Economic Outlook and IMF staff estimates.

**42. Key external risks to the outlook for LIDCs include reversal of the recovery in commodity prices and an unexpectedly sharp tightening of global financial conditions; a stronger pick-up of commodity prices would favor stressed commodity exporters.** The main domestic risks are fiscal slippage (relative to current targets), internal conflict (including spillovers from neighbors), weather shocks, and rising financial sector stress. The Growth Decline Vulnerability Indicator (GDVI)—an index constructed by staff to assess vulnerability to a sharp decline in growth stemming from external shocks—shows some improvement as of 2018, most notably in commodity exporters (Figure 23).<sup>15</sup>



**43. Fiscal slippages were common among LIDCs in 2016 and 2017,** most noticeably among commodity exporters. The median fiscal deficit exceeded one-year forward projections by 1.2 percent annually in NFC exporters, with slippage typically larger in smaller countries;<sup>16</sup> deviations were more modest among diversified exporters, averaging 0.35 percent of GDP. A repeat of such slippages in 2018 could provide some short-term stimulus to output, at the cost of rising debt levels that would be more difficult to finance—with output costs (from fiscal stress and/or retrenchment) likely pushed to 2019 or 2020.

**44. The growth projections may also contain some upward bias,** at least for countries undertaking fiscal adjustment (see chapter 2 below). The track record of projections in 2016-17 provides some support for this position, with shortfalls concentrated in 2016. For NFC exporters, the median growth rate fell short of one-year forward projections by an average of 0.75 percentage

<sup>15</sup> The GDVI is based on an assessment of vulnerabilities at the sectoral level, focusing on the external, fiscal, and “real economy” sectors (the last reflecting a composite of growth performance, institutional capacities and income inequality). The index is mapped into risk ratings of low, moderate, and high. The methodology has been outlined in previous IMF reports (see IMF, 2014a). Work is currently underway to augment or replace the GDVI with a dashboard of indicators showing the risk of external, fiscal, inflation, and financial crises.

<sup>16</sup> Fiscal slippage for 2016 is the difference between the deficit realized in 2016 and the deficit projected in the Fall 2015 WEO; slippage in 2017 is the difference between the current projection for 2017 and the projection in the Fall 2016 WEO. Growth shortfalls are defined in a similar manner.

points in 2016-17, with larger shortfalls in smaller countries; the corresponding average shortfall was 0.5 percent for diversified exporters.<sup>17</sup>

## E. Conclusions and Policy Messages

**45. The declines in commodity prices from mid-2014 had substantial effects on economic performance in LIDCs**—effects that continue to be seen in differentiated economic performance in 2017-18. Countries dependent on commodity exports are growing at a significantly slower pace than in 2010-14, even excluding the harder-hit oil exporters; countries less reliant on commodity exports are growing at some 6 percent per annum—a pace maintained since 2010—albeit with weaker performance in smaller countries. But there is significant variation in country experiences within these group, with policies and institutional capacity influencing performance.

**46. The combination of sluggish per capita income growth and falling investment levels, observed across a sizeable number of LIDCs, represents a significant set-back in the first years of pursuit of the Sustainable Development Goals (SDGs).** Declining aggregate levels of remittances and aid inflows to LIDCs are particularly troubling developments, if sustained. Falling aid flows to the world’s poorest countries raises questions about commitments to “leave no-one behind.” Many LIDCs, notably fragile states, are falling behind—even as countries such as Bangladesh, Ethiopia, and Cote d’Ivoire continue to record strong and sustained income growth.

**47. The key macroeconomic policy challenges for all LIDCs are to achieve sustainable fiscal positions, devote increasing resources to development spending (including infrastructure), and safeguard financial sector stability.** The gravity of these challenges varies markedly across countries: the policy actions needed are familiar, and include boosting domestic revenue mobilization to create fiscal space, enhancing the efficiency of public spending, and maintaining effective oversight of financial systems—issues at the heart of the IMF’s policy dialogue with LIDCs.

**48. Reducing high inflation levels and rebuilding foreign exchange buffers are priorities for some LIDCs:** double-digit inflation persists in one-fifth of countries, while reserve coverage is low in about one-quarter of cases. Monetary tightening, supported by fiscal adjustment, is called for in such cases—with Fund-supported arrangements a potentially valuable source of support.

**49. The extended adverse fall-out from the commodity price declines is a reminder of some wider policy messages for LIDCs** (IMF 2017a): i) the importance of economic diversification for growth and resilience over the medium-term; and ii) the need to build strong reserve buffers and maintain borrowing space in “good times” in countries where exports remain highly concentrated.

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<sup>17</sup> The scale of economic contraction in fuel exporters was much larger than anticipated in 2016, followed by a much slower-than-expected rebound in 2017. Nigeria’s experience dominates weighted-average measures for this grouping; fragility and conflict can significantly influence the behavior of medians.

## CHAPTER 2: RISING DEBT VULNERABILITIES

### A. Introduction

**50. This chapter examines the evolution of public debt levels in LIDCs in recent years and assesses its implications.** A broad-based increase in debt levels across LIDCs has attracted attention from many observers, who have raised concerns about the threat to fiscal sustainability, the diversion of scarce budgetary resources to meet debt service obligations, and the heightened risks associated with changes in borrowing structure.<sup>18</sup>

**51. The analysis builds on the findings of a 2015 IMF-World Bank paper on the same topic** (IMF-WB, 2015).<sup>19</sup> The 2015 study found that debt ratios and vulnerabilities had declined during 2007-14, helped by HIPC/MDRI debt relief and robust growth, while flagging the emerging risks to debt positions from the sharp declines in commodity prices and from expanded commercial borrowing by frontier economies and some commodity exporters. The 2015 paper also pointed to an ongoing shift in the composition of external public debt away from traditional creditors towards commercial and non-Paris Club bilateral lenders – a trend that has gathered pace in the intervening years.

**52. The chapter's main findings are as follows:**

- Debt and debt service levels have risen across a wide range of LIDCs since end-2013. The key drivers of rising debt levels have been adverse exogenous shocks (falling commodity prices, civil conflict) and looser fiscal policies, with fraud/corruption playing a key role in a handful of cases. Larger fiscal deficits are fully explained by the increase in public investment in about 30 percent of cases, and partially explained in one quarter of cases (chapter 1)—with investment falling in the remainder.
- Rising debt levels have resulted in increased debt vulnerabilities in many countries. While debt vulnerabilities remain contained in the majority of LIDCs, some 40 percent of LIDCs now face significant debt-related challenges, up from 21 percent in 2013. Ten of the thirteen countries that have moved into the “high risk” or “in debt distress” categories are in sub-Saharan Africa. Debt levels are projected to fall gradually over the coming years, but, in many cases, this is predicated on significant fiscal consolidation and a solid pick-up in growth.
- LIDC debt is increasingly held by non-Paris Club official bilateral creditors, by foreign commercial creditors, and by domestic creditors (mainly banks). Enhanced reliance on commercially-priced debt has translated into higher debt servicing costs and risks, while new

<sup>18</sup> See for example Jubilee Debt Campaign (2017), UNCTAD (2016), and Financial Times (2017).

<sup>19</sup> The country coverage in the present paper is somewhat narrower, excluding several small states that have access to the IMF's concessional facilities but whose per capita income levels lie well above the LIDC threshold.

challenges have arisen for potential debt resolutions. The deepening of domestic financial markets has allowed governments to more actively tap into domestic savings.

- There are important gaps in the available data on PPG in LIDCs. The coverage of public sector entities is typically too narrow, while the coverage of guarantees is limited, if not omitted—contributing to unfavorable debt surprises as public liabilities accumulate outside the “perimeter” of measured debt. There are also important gaps in information on the terms and conditions of loans and the extent of collateralization—gaps usually revealed only belatedly when countries experience debt distress and begin to default.

**53. Key policy messages include:**

- Countries in high risk of debt distress face a tight fiscal envelope, with limited borrowing space. Increasing public savings over time is needed to create space for raising public investment. In the meantime, investment projects need careful assessment and prioritization if the limited borrowing space is to be used to effectively support growth.
- Countries in low/moderate risk of debt distress have some room to scale up public investment via borrowing—but the room for maneuver is narrowing in many cases, again underscoring the importance of using new borrowings to finance only investment projects with credibly high economic rates of return. Where deficits have increased, in most cases this reflects at least in part a decline in public savings—raising debt levels without expanding the capacity to meet debt service obligations.
- The increasing importance of non-Paris Club bilateral lenders and plurilateral creditors, including in difficult debt cases, underscores the importance of these creditors exercising due diligence in their lending decisions and in developing contingency plans for engaging in debt restructuring deals. Lenders need to consider the potential benefits of subscribing to principles for sustainable lending and borrowing, such as those being championed by the G-20; and working with existing international fora for creditor information sharing and coordination.
- Greater transparency on the scale and terms of lending is needed to avoid further debt surprises and support cooperative solutions to debt workout situations. Lenders can play an important role in this regard, including by sharing information with international financial institutions. More effort is needed to strengthen the compilation and monitoring of public debt and guarantees in LIDCs; there are well-established technical assistance vehicles to deliver this assistance, but a coordinated push from IMF and World Bank staff may be needed to accelerate progress.

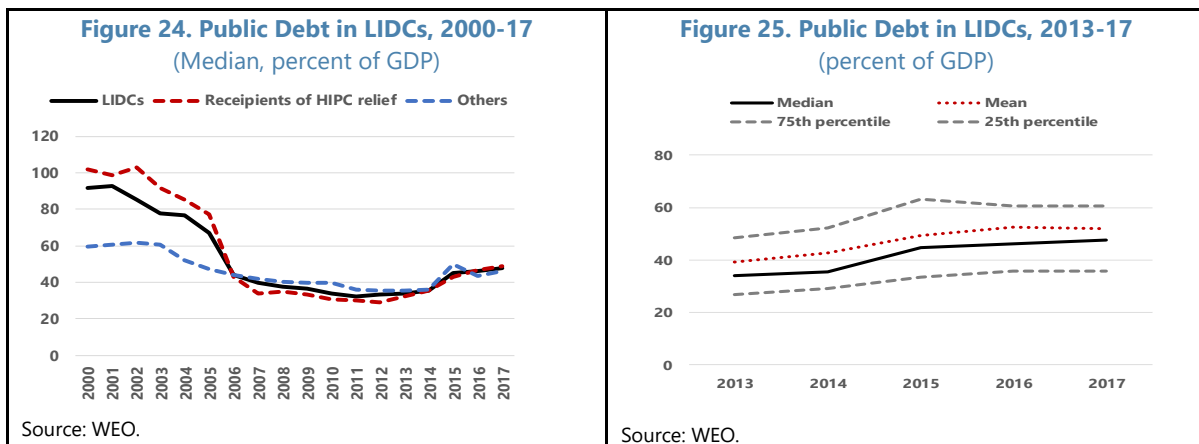
## B. Stylized Facts on Debt Accumulation in Recent Years

**54. This section examines the evolution of public debt levels in recent years, drawing on the data used by IMF country teams in country-level macroeconomic projections.** The coverage of public debt varies markedly across countries in terms of institutional coverage of the public sector (central government, state/local governments, extrabudgetary operations, state-owned enterprises) and the inclusion of government guarantees—with coverage typically being narrow in most LIDCs (Appendix 2). The scale and implications of inadequate coverage of public sector liabilities for assessment of public debt sustainability are discussed in section E below.

### Evolution of Debt<sup>20</sup>

**55. In the past four years, public debt has risen substantially across a range of LIDCs, having fallen steadily for many years on the back of strong growth and debt relief.<sup>21</sup>**

- From the early 2000s through end-2013, the median public debt-GDP ratio for LIDCs declined from a high of 94 percent of GDP in 2001 to some 33 percent of GDP during 2010-13 (Figures 24-26).
- From end-2013 to end-2017, the median public debt-GDP ratio increased by 13½ percentage points in LIDCs, to reach 47 percent of GDP. The debt-GDP ratio increased by at least 10 percentage points in 29 countries; increased by less than 10 percentage points in 19 countries; and declined/remained unchanged in 8 countries.<sup>22</sup>

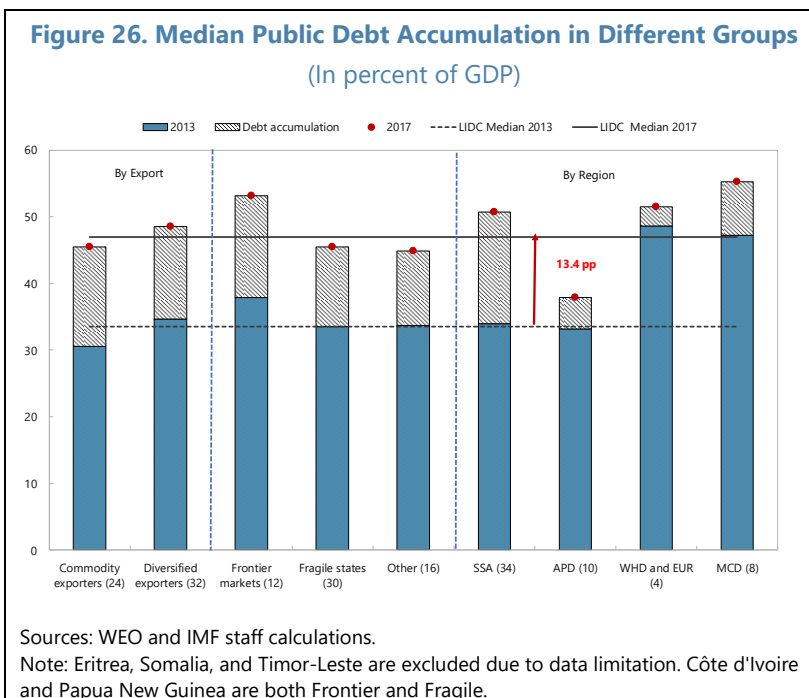


<sup>20</sup> Appendix 4 describes debt developments in the 13 small states that are eligible for concessional PRGT financing but are not classified as LIDCs.

<sup>21</sup> The WEO database, from which debt measures are drawn here, records debt at its nominal (face) value. For countries with sizeable amounts of concessional external debt, the present value of external debt (the focus of analysis in DSAs) may be significantly less than its face value. WEO data are used here because they are available at a higher frequency and are more up to date than DSA data.

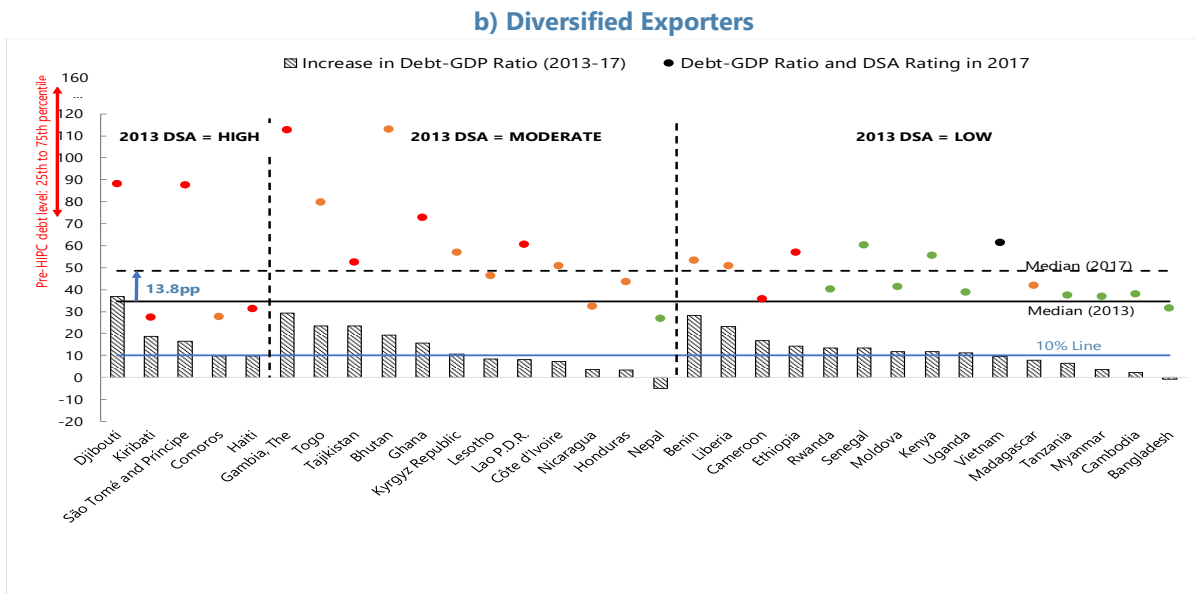
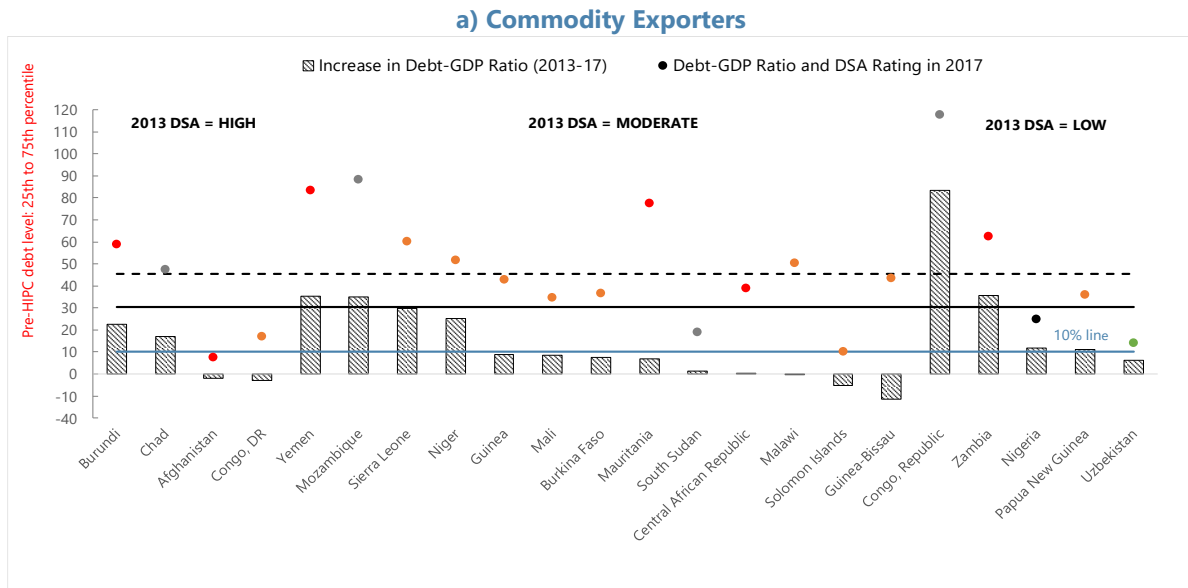
<sup>22</sup> Adequate data are not available in the WEO database for 3 of the 59 LIDCs (Eritrea, Somalia, and Timor-Leste); the first two of these countries have been in debt distress for many years.

- Among regions, LIDCs in sub-Saharan Africa have recorded the fastest rise in debt levels.
- Median debt levels have risen markedly, from already elevated levels, in the Middle East/Central Asia.
- Debt levels increased more modestly among Asia/Pacific LIDCs, and remain substantially lower than in other regions.
- Debt has remained broadly unchanged, at elevated levels, in the handful of LIDCs in other regions.



**56. The debt buildup has been broad-based but slightly larger among commodity exporters** (Figure 27). Among the 24 commodity exporters, debt rose by a median 15 percent of GDP, compared to 13¾ percent in diversified exporters; the 2014 commodity price shock and its impact on domestic fiscal positions contributed to this difference. Debt levels increased by similar magnitudes in frontier markets and fragile states, with somewhat smaller debt accumulation in other countries.

**Figure 27. Increase in Public Debt Levels, 2013–17 1/**  
(Percent of GDP)

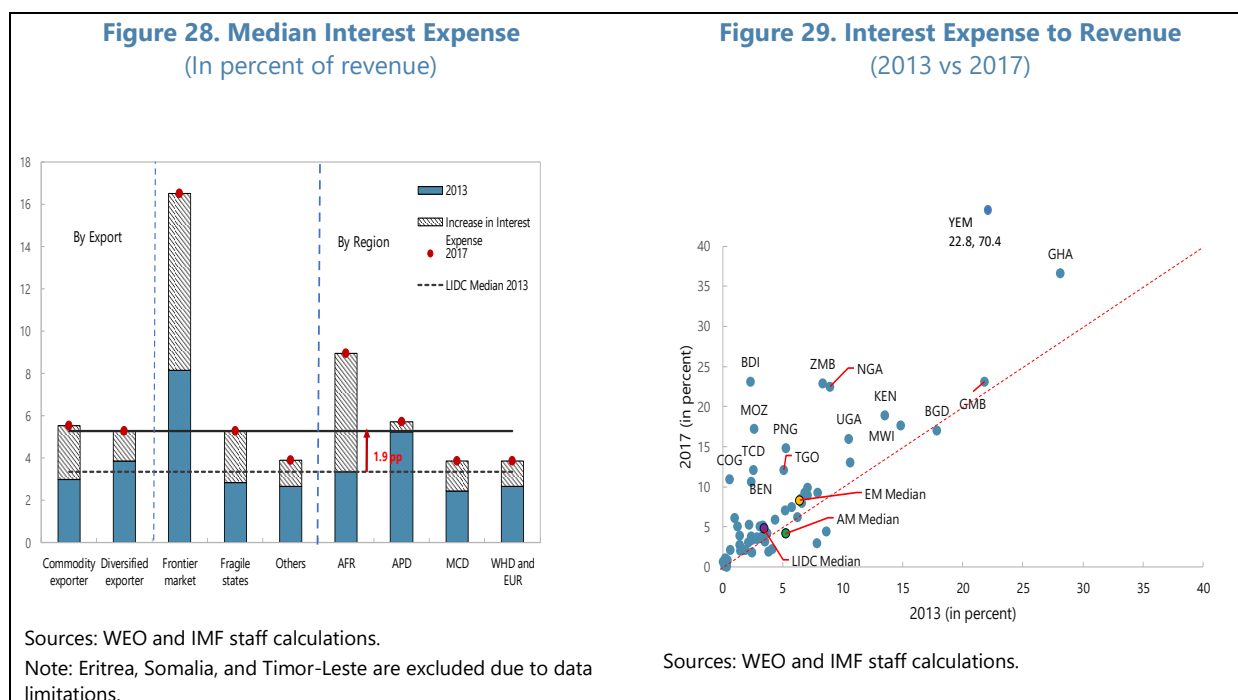


Sources: WEO and IMF staff calculations.

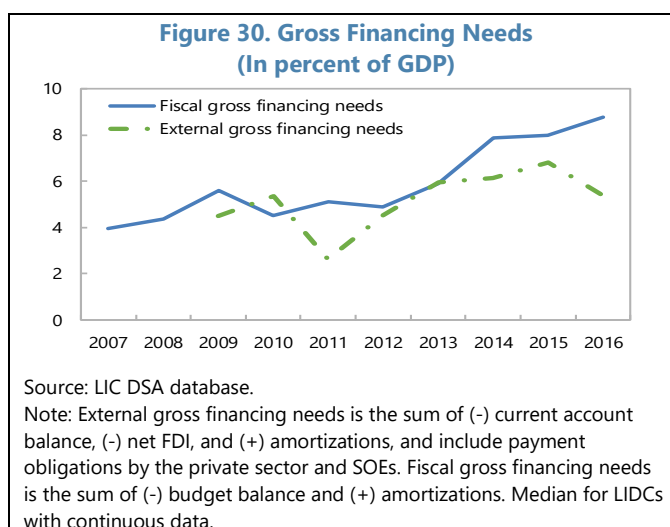
Note: Eritrea, Somalia and Timor-Leste are excluded due to lack of data. Sudan and Zimbabwe are excluded as these countries were already in debt distress in 2013. Pre-HIPC debt levels denotes distribution of total public debt/GDP for HIPC relief countries in 1996.

1/ Grey, red, orange and green color represent "in debt distress/in transition", "high", "moderate" and "low" risk, respectively. Ethiopia was assessed as high risk in its latest DSA, which was approved in Jan. 2018. Two countries are in transition and are not yet formally rated in the DSA, but moving towards distress. As Nigeria and Vietnam do not use LIC DSA anymore, their 2017 DSA ratings are based on last published DSA.

**57. Interest expense as a share of budgetary revenue has risen broadly in line with debt levels** (Figures 28 and 29). Median interest outlays rose to 5.3 percent of revenues in 2017, up 2 percentage points from 2013—which is above the advanced economy median ratio of 4.1 percent but below the 8.3 percent ratio observed in emerging markets. It is noteworthy that the sharpest increases in interest expense have occurred in frontier markets (e.g., Ghana) where external borrowing on commercial terms has contributed to higher interest outlays, while elevated inflation (and hence domestic interest rates) have played a key role in some cases. In some commodity exporters, particularly fuel exporters such as Chad and Nigeria, a sharp decline in resource-related revenues has also pushed up the ratio of interest outlays to budgetary revenues.



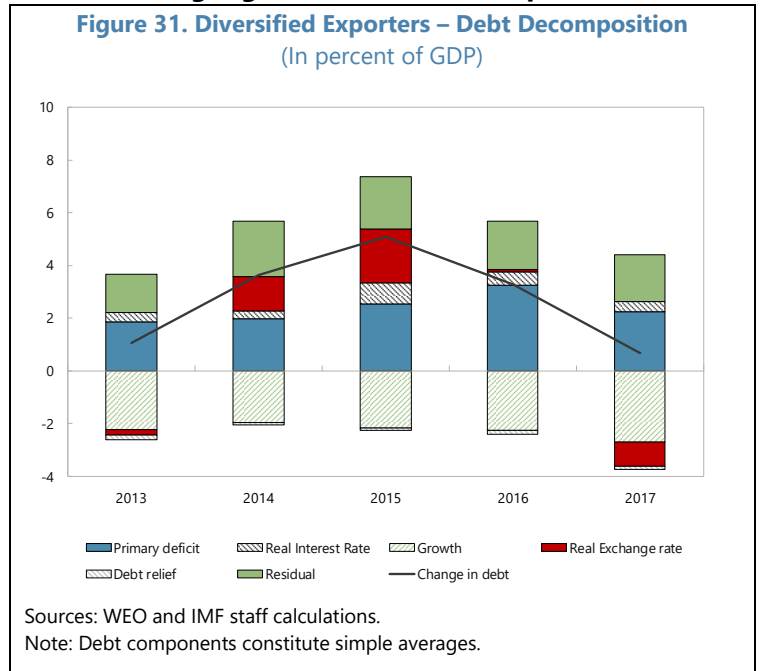
**58. Gross fiscal and external financing needs have also grown in tandem with rising debt** (Figure 30). Fiscal financing needs approached 9 percent of GDP in 2016, the highest level in at least a decade, in part reflecting the increased role of shorter-term domestic debt (see Section D below). External financing needs began to deteriorate with the collapse in commodity prices and widening current account deficits, but improved slightly in 2016.



**Drivers of Debt**

**59. A decomposition of debt dynamics across LIDCs highlights the role of fiscal policies and of the commodity price shock in driving up debt:**

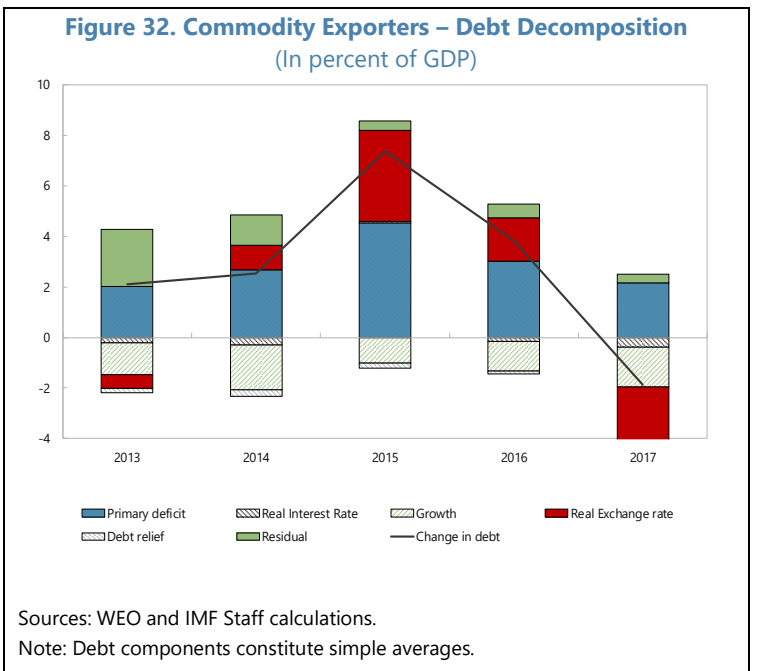
- The growth-interest rate dynamics were generally benign, with the favorable impact of GDP growth more than outweighing the adverse impacts of interest obligations (thanks in part to concessional borrowing terms).
- In diversified exporters, sustained large fiscal primary deficits have been the main driver of debt increases across the years, with residuals featuring significantly (Figure 31). Residuals mainly capture fiscal operations not included in primary deficits.



- In commodity exporters, the commodity price shock had a major impact on debt dynamics, contributing to sluggish growth and sharply higher fiscal deficits in 2015, with gradual policy adjustment thereafter. The commodity price shock also contributed to real exchange rate depreciation that further raised the debt burden (Figure 32).

**60. An analysis of key debt drivers in the 29 countries where the debt-GDP ratio has risen by at least 10 percent of GDP provides more granular insights:**

- Four countries were affected by internal conflict (Yemen and Burundi) or epidemics (Liberia, Sierra Leone); in the aftermath, the debt increased by 35 percent of GDP in Yemen and an average of 22 percent of GDP in the two Ebola-hit countries.
- In three cases, fraud/corruption made a key contribution to the debt buildup. In Mozambique, unreported debt, and the depreciation that ensued when it was disclosed, were key drivers of



debt accumulation; in Moldova, fraud in the banking system led to a large government bailout; and in The Gambia, serious governance issues and embezzlement of funds including of SOEs contributed to the surge in public debt.

- Six commodity exporters (Chad, Republic of Congo, Niger, Nigeria, Papua New Guinea, and Zambia), half of them oil exporters, were badly hit by the sustained decline in commodity prices.<sup>23</sup> Dollar GDP fell relative to 2013 levels (by a median 16 percent of GDP), as did fiscal revenue (by a median 4½ percent of GDP). With generally sluggish fiscal adjustment, the median debt-GDP ratio for these countries is now 23 percent of GDP above 2013 levels.
- In the remaining 16 countries (all but one diversified exporters), larger (on and off-budget) fiscal deficits were a key contributor to debt accumulation.<sup>24</sup> Larger deficits reflected weaker fiscal revenue in roughly half of these countries, due to a variety of factors including (i) shocks to growth (e.g., a liquidity crunch in Zimbabwe, delays in the start of natural resource production in Sao Tome and Principe) and (ii) weaknesses in revenue administration (e.g. Benin). Larger deficits also reflected (i) current spending overruns (e.g. transfers to SOEs and a rising civil service wage bill in Ghana, elevated spending on goods and services in Kyrgyz Republic); and (ii) higher capital spending (e.g. large hydropower investment in Bhutan, large transportation projects in Djibouti and Kenya, and expansion of the national airline in Rwanda).

**61. Higher levels of public investment contributed to the build-up of debt levels in many countries, but were a key driver in only a minority of cases.** Fiscal balances deteriorated in 40 LIDCs between 2010-14 and 2017.<sup>25</sup> Only in 30 percent of cases was the deterioration fully matched by higher investment, while public investment levels declined in almost half of the cases (see chapter 1, paragraphs 18-22 for a fuller discussion).

**62. The increase in debt over recent years has exceeded projections.**

- WEO projections of late 2013 envisaged little change in LIDC debt ratios through end-2017, compared with a realized median increase of 14 percent of GDP. The Fall 2015 WEO projections (predicated on much lower levels of commodity prices) also underpredicted end-2017 median debt, albeit by a much smaller 4 percent of GDP.
- The source of the projection errors during this period are broadly similar to the drivers of debt accumulation discussed above.<sup>26</sup> Looking at the 28 countries where 2017 debt levels exceeded 2013 projections by at least 10 percentage points of GDP, the commodity price decline and various non-economic shocks (conflict, epidemics, instances of fraud/corruption) were important

<sup>23</sup> Countries selected into this group are commodity exporters with terms of trade declines of 5 percent or more.

<sup>24</sup> Benin, Bhutan Cameroon, Djibouti, Ethiopia, Ghana, Kenya, Kiribati, Kyrgyz Republic, Senegal, Sao Tome and Principe, Rwanda, Tajikistan, Togo, Uganda, and Zimbabwe.

<sup>25</sup> Adequate public investment data are available for 34 countries.

<sup>26</sup> In addition to Eritrea, Somalia, and Timor-Leste, the analysis of projection errors also excludes Afghanistan, Kiribati, and South Sudan, again due to data constraints.

causes of the “debt surprise” in 13 cases.<sup>27</sup> Weaker-than-projected fiscal policies, including extra-budgetary operations, were key factors behind the debt surprise in 15 countries.

**63. Fund financial arrangements have helped contain debt accumulation, but there have been significant slippages vis-à-vis debt objectives in a sizeable number of programs** (Box 5). Fund programs are associated with stronger fiscal performance (and hence less debt accumulation), as discussed in chapter 1, but debt objectives were missed by non-trivial margins in over one-third of recent arrangements with LIDCs.

#### Box 5. Debt Developments Under Fund-Supported Programs 1/

*A survey of Fund financial arrangements since 2010 indicates that debt accumulation exceeded program targets in a considerable number of cases: the key explanatory factors included adverse external shocks and fiscal policy deviations (both budgetary and extra-budgetary).*

- Public debt developments in 23 LIDCs engaged with the Fund through a financial arrangement during 2010-16 were examined (27 programs in total). 2/ These programs typically aimed to contain debt through a combination of fiscal restraint and growth-enhancing structural reforms. Specifically, 16 programs envisaged a reduction in the public debt-GDP ratio over the course of program, with a median decline of 2.3 percent of GDP per year, while 11 programs envisaged debt burdens increasing at a median rate of 1.5 percent per year. Some of these 11 programs envisaged substantial investment spending, e.g. for reconstruction in Haiti.
- *Debt-burden targets were missed by at least 3 percent of GDP in 10 of the 27 programs.* 3/ A review of staff documents for these programs point to shocks as key factors in contributing to unexpected debt accumulation in 8 cases; internal conflict, epidemics, severe drought, and marked deterioration of the terms of trade contributed importantly to target misses. In 5 cases, weak fiscal policies—fiscal policy slippages, materialization of contingent liabilities, and elevated SOE borrowings—played a key role. The largest misses came in programs with Yemen (2014-16) and the Central African Republic (2012-14), reflecting the impact of armed conflict; and the Gambia (2012-15), reflecting governance weaknesses in SOEs and fiscal slippages.
- *Debt accumulation was lower during program periods than outside program periods.* In programs that envisaged a falling debt burden, debt increased at a median rate of 1.1 percent of GDP during program years, compared with a median increase of 1.7 percent of GDP during non-program years in the same countries. Where programs envisaged an increase in the debt burden, debt also grew more slowly during program years (by 1.8 percent of GDP per year) than in non-program years (3.3 percent of GDP per year) in the same countries. 4/ When PSI-supported arrangements are included, the difference between program and non-program years narrows, but the qualitative findings remain unchanged.

1/ Prepared by Samuel LaRussa (SPR).

2/ ECFs and SCFs approved after 1/1/2010 and concluded before 12/31/2016. Includes precautionary and blend arrangements. Excludes 3 programs for countries expected to receive debt relief. Years were classified as program years when a country had a program for more than six months, and as non-program years otherwise.

3/ Deviations are calculated as the median difference across programs between observed and programmed debt accumulation.

4/ Of the 16 LIDCs with programs that projected a decrease in debt-to-GDP, 13 experienced at least one non-program year between 2010 and 2016. Of the 9 LIDCs with programs that projected an increase in debt-to-GDP, 7 experienced at least one non-program year.

<sup>27</sup> This list has a large overlap with the list of 29 countries where debt rose by more than 10 percent of GDP.

## C. Evolution of Debt Vulnerabilities and Risks to the Outlook

**64. We turn in this section to examine the evolution of debt vulnerabilities in LIDCs, drawing on the outputs of staff debt sustainability assessments (DSAs).** DSA analyses assess the current and projected evolution of debt levels in present value terms, thereby making due allowance for the concessionality of a significant (but declining) share of external debt—the burden of which is significantly less than commercial debts with a similar face value.

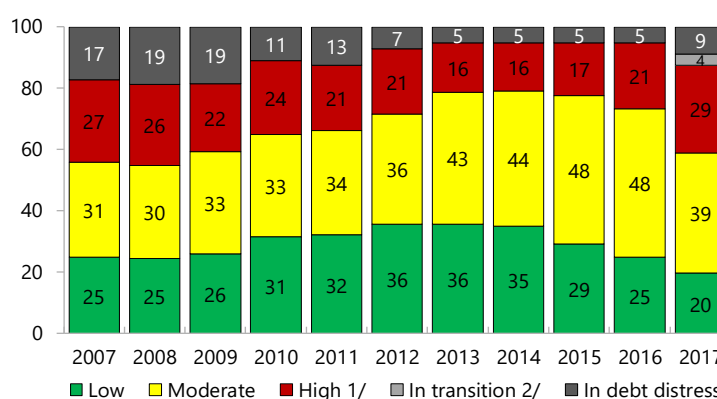
### Evolution of Debt Vulnerabilities

**65. The rising debt levels discussed in the preceding subsection have been reflected in increased debt vulnerabilities in many LIDCs and in a series of DSA rating downgrades (Figure 33).** Two-fifths of LIDCs now face significant debt challenges; three-fifths remain at low or moderate risk of debt distress, although safety margins have been eroded in many cases.

**66. Eight countries (14 percent of LIDCs for which DSAs are available) are now in**

**debt distress.**<sup>28, 29</sup> There were 4 countries in debt distress (Eritrea, Somalia, Sudan, and Zimbabwe) in 2013. By end-2017, Chad and South Sudan had been rated as in debt distress, while the Republic of Congo and Mozambique were in default to creditors and are classified here as in debt distress.

**Figure 33. Evolution of Risk of Debt Distress**  
(in percent of PRGT-Eligible LIDCs with DSAs)



Source: LIC DSA database.

1/ Ethiopia was assessed as high risk in its latest DSA, which was approved in Jan., 2018.

2/ In transition countries are not yet formally rated in the DSA, but moving towards distress.

<sup>28</sup> The number of LIDCs for which DSAs have been prepared has changed over time. As of now, DSAs are available for 56 of the 59 LIDCs. LIC DSAs are no longer available for Nigeria and Vietnam, where the DSA methodology for market access countries is now being used.

<sup>29</sup> In this report, countries are said to be in debt distress when a) the most recent DSA yields an assessment of “in debt distress” or b) countries have defaulted on sizeable payments for a sustained period since the most recent DSA. Examples of the latter include Mozambique and Republic of Congo, while Somalia (for which no recent DSA is available) has been in default to the bulk of its creditors for many years.

**67. Sixteen countries (29 percent of LIDCs with DSAs) are assessed to be facing high risk of debt distress.** Since 2013, nine countries have shifted from moderate to high risk of debt distress (Table 3) – the Central African Republic (2014); Cameroon, Mauritania, and Ghana (2015); Yemen (2016); The Gambia, Lao P.D.R., and Zambia (2017); and Ethiopia (2018).<sup>30</sup> Only in two were larger fiscal deficits linked to higher public investment, either in full (Cameroon) or in part (Zambia).

**68. Some 22 countries (39 percent of LIDCs with DSAs) are assessed to be at moderate risk of debt distress,** including 5 countries rated at low risk and 2 countries rated at high risk in 2013.

**Table 3. DSA Downgrades in 2014–17**

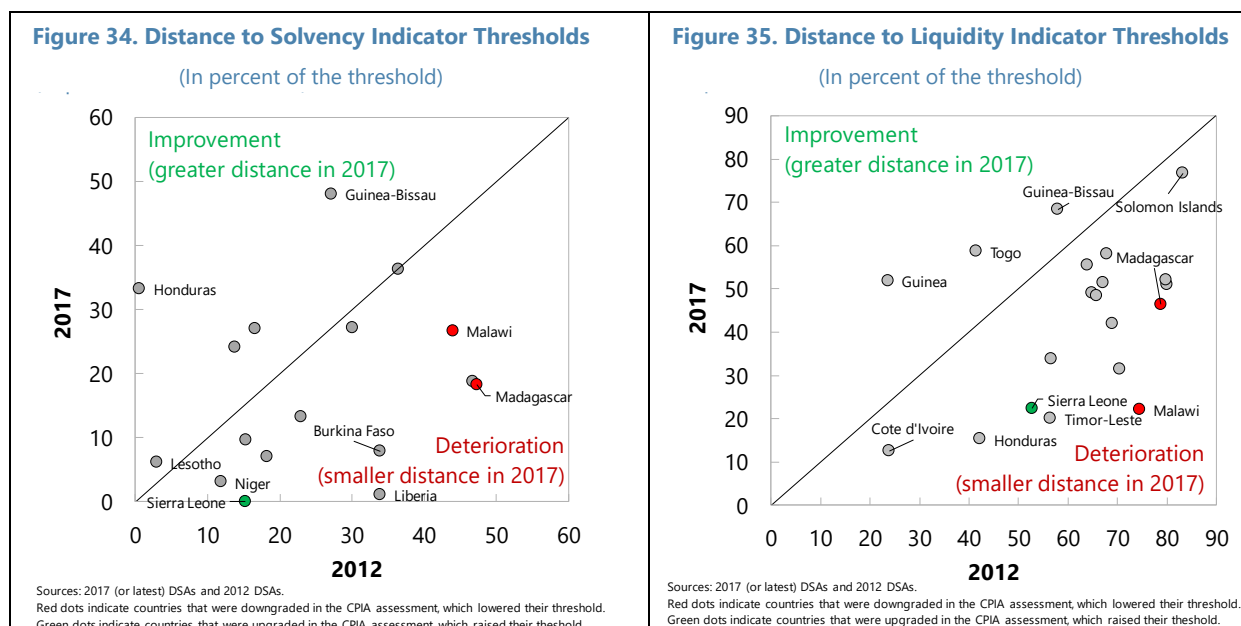
Country	2013	2014	2015	2016	2017	Export	Development	HIPC
Chad	[H]	H	H	H	D	Fuel	Fragile	HIPC
South Sudan		M			D	Fuel	Fragile	non-HIPC
Central African Republic	[M]	H	H	H	H	Diamond	Fragile	HIPC
Mauritania	[M]		H	H	H	Nonfuel	DM	HIPC
Ghana	M	M	H	H	H	Diversified	Frontier	HIPC
Haiti	[H]	H	M	H		Diversified	Fragile	HIPC
Yemen	M	M		H		Fuel	Fragile	non-HIPC
Gambia, The	M		M		H	Diversified	DM	HIPC
Lao P.D.R.	M	M			H	Diversified	DM	non-HIPC
Cameroon	L	M	H		H	Diversified	DM	HIPC
Zambia	L	L	M		H	Copper	Frontier	HIPC
Congo	L	L	M			Fuel	Fragile	HIPC
Ethiopia	L	L	M	M	H	Diversified	DM	HIPC
Liberia	L	L	M	M		Nonfuel	Fragile	HIPC
Madagascar	[L]	L	M	M	M	Diversified	Fragile	HIPC
Timor-Leste	L	L		M		Fuel	Fragile	non-HIPC
Benin	[L]		L		M	Diversified	DM	HIPC

Note: D: distress, H: high, M: moderate, L: low, DM: developing market. Blank indicates there was no DSA in that year. Rating in parenthesis indicate rating in the last DSA available before 2013. Ethiopia was assessed as high risk in its latest DSA, which was approved in Jan., 2018.  
Source: 2013-17 DSAs.

- The median increase (over 2013-17) in public debt levels for countries that have remained at moderate risk of debt distress throughout the period is 8 percent.
- For these countries, the “distance” of current debt solvency indicators in the baseline scenario from the threshold levels associated with high risk of debt distress has narrowed in a majority of cases, and in a preponderance of cases regarding liquidity indicators (see Figures 34 and 35).<sup>31</sup> Further upward drift in projected debt indicators over time (relative to the current baseline) would indicate an increased likelihood of downgrades to “high risk” in the period ahead.
- The shift of five countries from low to moderate risk of debt distress since 2013 reflects a mix of factors, including lower oil prices (Timor-Leste) and the Ebola outbreak (Liberia). Debt accumulation was linked in part to higher public investment levels in Benin and Madagascar.

<sup>30</sup> Cameroon and Zambia were rated at low risk of debt distress in 2013, moving via moderate to high risk by 2017.

<sup>31</sup> In two cases, the distance has narrowed due to the tightening of DSA thresholds caused by an unfavorable change in the assessment of the quality of the countries’ policies and institutions, rather than debt accumulation.



**69. Eleven LIDCs (20 percent of LIDCs with ratings) are assessed to be at low risk of debt distress**, all but one of which were similarly rated in 2013. Almost all are diversified exporters; a more than proportional share lies in Asia. They split into two groups:

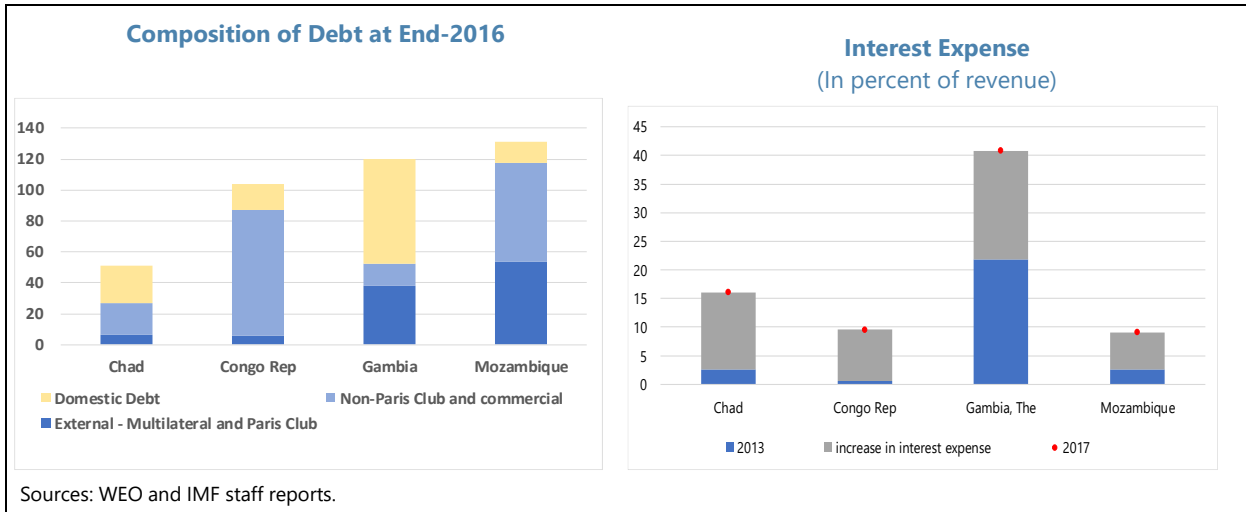
- Debt levels have remained broadly unchanged in four countries (Bangladesh, Cambodia, Myanmar, and Nepal), with fiscal deficits close to debt-stabilizing levels and distances from “high risk” thresholds having changed little since 2013.
- Debt levels have risen significantly in the other seven countries, often reflecting a renewed investment push financed through increased commercial borrowing, including from domestic markets (as in Kenya and Uganda). As a corollary, the safety margins (distances of debt burden indicators from threshold levels that flag elevated risk) have narrowed, but not sufficiently to create serious stresses under adverse shock scenarios.

**70. Most of the countries that have moved into high risk of debt distress or into debt distress since 2013 are in sub-Saharan Africa:** specifically, 10 of these 13 countries are in SSA, consistent with the patterns of debt accumulation across regions discussed earlier. Conflict and political turmoil contributed significantly to the deteriorating debt positions in 4 of the 13 countries (Central African Republic, The Gambia, South Sudan, and Yemen). Box 6 takes a closer look at the factors that pushed some of these countries into debt difficulties.

**71. The likelihood of a country facing a challenging debt situation is similar for LIDCs that benefited from HIPC debt relief and for those that did not.** Fourteen of the 34 LIDCs that received HIPC/MDRI debt relief are now in debt distress (Chad, Mozambique, Republic of Congo) or at high risk of debt distress (Afghanistan, Burundi, Cameroon, Central African Republic, Ethiopia, Ghana, The Gambia, Haiti, Mauritania, Sao Tome and Principe, and Zambia). The ratio of stressed countries to all post-HIPC countries (two-fifths) is similar to that for LIDCs as a whole.

**Box 6. Selected Recent Debt Difficulty Cases 1/**

**The commodity price shock, delayed policy response, and lack of control over SOE spending are key themes behind the batch of recent new cases of debt difficulties.** This box explores the factors that contributed to debt difficulties in three of the four countries that have recently fallen into debt distress (Chad, Republic of Congo, Mozambique), and another country that came close to it (The Gambia). 2/



**Chad:** Despite a dramatic fiscal adjustment in 2015-16 following the fall in oil prices, the considerable contraction in oil revenue together with the burden of external debt service led to an unsustainable debt position. Public debt increased significantly in 2013-14 following two non-concessional advance oil sale operations to cover budget shortfalls as revenues collapsed following a decline in oil volumes, and to finance the purchase of Chevron’s shares in Chad’s largest oil consortium. A rescheduling agreement in 2015 consolidated the two advance sale operations, but restructuring fees led to an increase in the present value of debt. Even with HIPC and MDRI debt relief in 2015 and debt rescheduling, Chad has been unable to service its debt, with external payment arrears accumulating in 2016-17. Domestic debt has also increased sharply, from 9 percent of GDP in 2013 to 24 percent in 2016 due to statutory advances from BEAC (the regional central bank) and issuance of domestic debt on the CEMAC regional market. Chad has restructured its advances from BEAC and some official external debt, and discussions are underway to restructure its commercial debt.

**Republic of Congo:** The fuel price collapse, delayed policy response, and real depreciation were the main forces behind the public debt increase. Debt had declined to just over 20 percent of GDP in 2010 when Congo reached the HIPC Completion Point, and 34 percent in 2013; since then it has shot up to more than 115 percent of GDP, with private and non-Paris Club bilateral creditors holding the lion’s share of total debt. Congo was highly vulnerable to oil price shocks, with oil generating two-thirds of fiscal revenue; moreover, on the eve of the oil price decline, it undertook a massive pro-cyclical scaling up of public investment and public-sector wage increase. After the oil price had dropped, Congo initially maintained spending by drawing on the country’s assets at the central bank and abroad, statutory advances from regional central bank, oil-backed loans from oil trading companies and accumulation of domestic arrears. Depreciation of the euro against the U.S. dollar, particularly in 2015, and an economic contraction added to debt ratios. Congo is in arrears to official bilateral, multilateral and external private creditors, with whom it is seeking to engage to restructure its debt.

### Box 6. Selected Recent Debt Difficulty Cases (concluded)

**The Gambia:** Debt increased primarily due to fiscal slippages and shocks largely stemming from serious governance problems, including unbudgeted support to SOEs and embezzlement of wider state revenues by the previous administration. Weak growth associated with poor harvests and, in 2017, the negative impact of political turmoil on tourism also contributed. Borrowing was mostly through costly short-term treasury bills, with domestic debt rising from 33 percent of GDP at end-2012 to 62 percent of GDP at end-2016. Interest payments on domestic debt consumed 42 percent of government revenue in 2016. Commercial banks hold about three-quarters of T-bills (around one-third of assets) and additional SOE debt. While their willingness to take on sovereign debt acts as an absorber to fiscal shocks, their high exposure to the sovereign represents a potential source of financial stability risk.

**Mozambique:** The jump in total public debt from 53 percent of GDP in 2013 to 128 percent at end-2016 reflects a delayed fiscal policy response to weaker commodity prices, poor expenditure control related to SOEs, and real exchange rate depreciation in 2016. Domestic debt of SOEs, amounting to 10 percent of GDP has also been included in the coverage of total public debt for end-2016. Depreciation from 2013 to 2016 added 51 percent of GDP to public debt; primary deficits 21 percent (as Mozambique failed to cut spending to offset a 5.3 percent of GDP revenue decline between 2013 and 2016), and initially undisclosed external loans to 2 SOEs a further 11 percent. The freeze of aid disbursement by donors after the SOE loans were disclosed added to fiscal and depreciation pressures; and the debt burden was exacerbated by a growth slowdown (from 7.1 percent in 2010-14 to 5.2 percent in 2015-16). Mozambique is currently in arrears with six official creditors, on Eurobond coupons, and on the recently disclosed loan to SOEs, and is seeking to restructure its debts.

1/ Prepared by Haimanot Teferra.

2/ A country is assessed to be in debt difficulty if it is classified as being in debt distress in its latest DSA or if it is in default on or has restructured (or announced its intention to restructure) its public debt.

## Risks to the Outlook

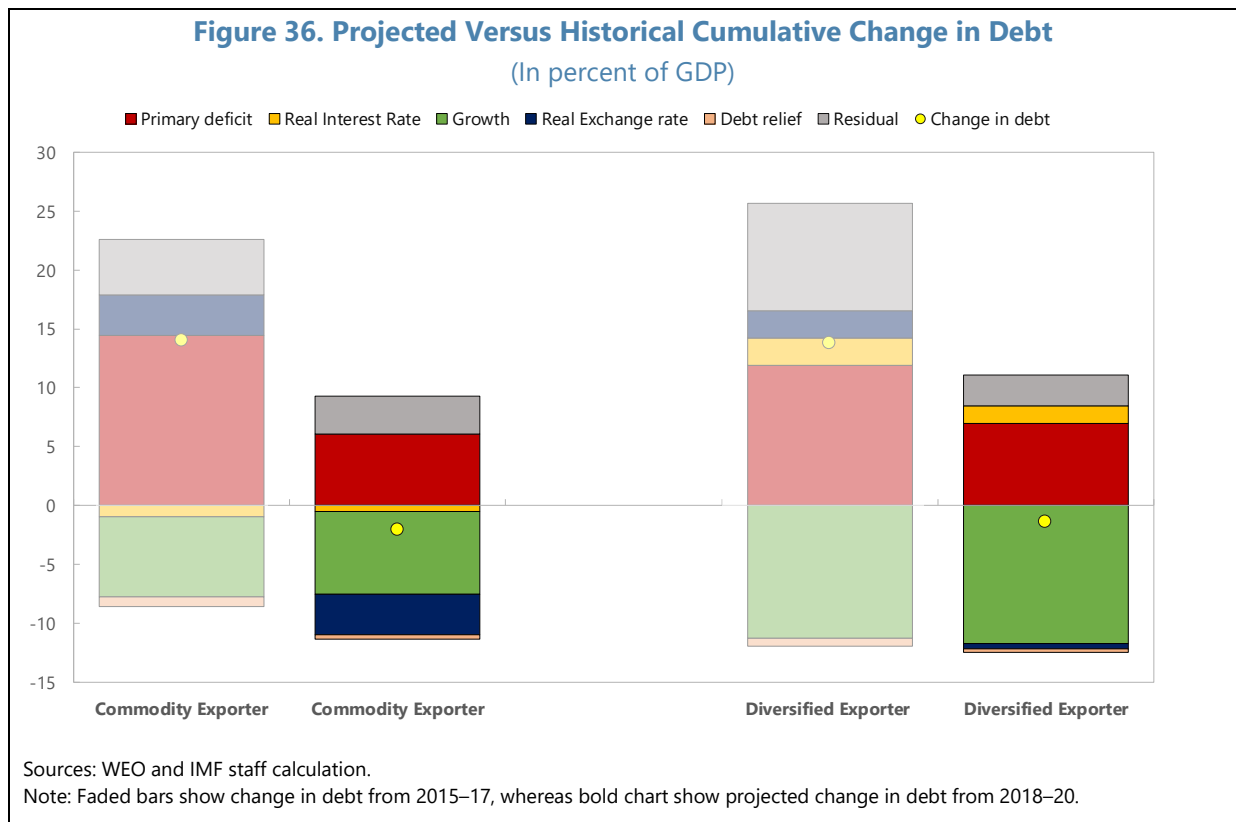
**72. To recap, some 40 percent of LIDCS are now at high risk of/in debt distress, while some 60 percent are assessed to be at low or moderate risk.** Severe difficulties are concentrated in a minority of cases—a mix of new problem cases (such as Chad, Mozambique, and Republic of Congo), conflict-affected countries (such as C.A.R. and Yemen), and several long-standing high debt/arrears cases (such as Sudan and Zimbabwe).

**73. The assessment of risks is based on current staff projections for individual LIDCs,** which collectively envisage that debt burdens will reverse their upward trend and begin to ease.<sup>32</sup> For LIDCs as a group, the median debt level is projected to decline by 2 percent of GDP over the next 5 years—predicated on stronger growth (up by 0.7 percentage points), improved fiscal balances (up by 1 percent), and stable real exchange rates. Debt-GDP ratios are predicted to peak in about half of all LIDCs in 2017 or 2018.

**74. There are downside risks embedded in these forecasts that warrant mention,** aside from the risks to the global economic outlook (discussed in IMF (2018)). Comparison of the drivers of debt accumulation during 2015-17 (actual) with 2018-20 (projections) highlights the assumed

<sup>32</sup> The discussion of debt projections, which draws on country team projections in the WEO database, is based on the evolution of nominal debt stocks, rather than the present value measures used in DSAs.

differences in economic performance between the two periods (Figure 36). For commodity exporters, debt levels are projected to decline modestly, based on sizeable improvements in fiscal balances and a reversal of real exchange rate depreciations. For diversified exporters, debt levels are set to stabilize, based on marked improvements in fiscal balances, together with some pick-up in growth (from already elevated levels). The broad-based increase in fiscal deficits in recent years, even in fast-growing economies (chapter 1), underscores the fact that staff projections (and hence sustainability assessments) are predicated on a significant shift in fiscal policy compared to the recent past.



**75. Narrowing the focus to countries at moderate or high risk of distress, there are indications of downside risks to the growth projections:**

- Staff projections for 2018-20 envisage improved fiscal balances in more than two-thirds of LIDCs at moderate or high risk of debt distress, while average growth is set to exceed the levels achieved in 2010-14. The growth pick-up is larger in the 11 countries undertaking large fiscal adjustment (2 percent of GDP or more), where the median growth rate is to rise 2 percentage

points above the average over the last decade.<sup>33</sup> Given plausible multiplier effects from fiscal consolidation, this surge in growth seems to be at risk, absent a sizable boost to export prices.

- Public sector capital stocks in these LIDCs are expected to grow more slowly over the next five years relative to the average over the last decade.<sup>34</sup> As a corollary, capital accumulation will contribute less to growth—implying that the surge in total factor productivity, labor, or private investment will need to be very large by past standards if the growth pick-up is to be realized.

**76. A look at specific country cases where debt burdens are projected to decline substantially suggests that outturns may disappoint in these cases.** Current projections envisage that 9 LIDCs will reduce debt-GDP ratios by at least 10 percentage points during 2016-21 without recourse to debt relief or restructuring. The historical experience is not encouraging in this regard:<sup>35</sup>

- Since 2000, fewer than 20 percent of the cases where staff projections envisaged a decline in the public debt-GDP ratio of 10 percent or more in LIDCs without debt relief or restructuring were eventually realized.
- Large debt reductions where debt relief or restructuring play no role are rare: the entire WEO dataset contains only ten such cases for LIDCs. The seven cases since 2000 where such a reduction was achieved reflected a mix of favorable circumstances and strong policies (Box 7).<sup>36</sup> Key factors included favorable prices for export commodities, negative real interest rates on debt, and sustained fiscal tightening: one-off factors (such as financial repression in Myanmar, privatization receipts in Djibouti) also played a role.

**77. In conclusion, current staff assessments of debt sustainability, based on staff projections of the medium-term outlook for LIDCs, are subject to some important downside risks.** A key takeaway is the overarching importance of achieving higher growth and/or targeted fiscal consolidation in countries where debt has reached, or is nearing, the debt risk thresholds, thereby containing the increase in debt burdens.

<sup>33</sup> In Fund arrangements with LICs since 1989, fiscal adjustments of at least 2 percent of GDP over a three-year period was seen in only a quarter of cases, most often in times of strong global growth.

<sup>34</sup> Capital stocks were forecast using WEO public investment projections, standard depreciation assumptions, and initial values given by an FAD dataset. See Appendix 1 for methodological notes. The estimations are subject to significant uncertainty

<sup>35</sup> The analysis of the historical record builds on IMF (2014b). Specifically, it defines large debt reductions as events where the debt-GDP ratio fell by at least 10 percent of GDP, with a decline occurring every year for at least five consecutive years. The term “debt restructurings” relates to events identified by Cruces and Trebesch (2013) and Das, Papaioannou and Trebesch (2012). Restructurings by official creditors include only debt treatments by Paris Club members and relief provided under the MDRI.

<sup>36</sup> The three such debt reductions observed prior to 2000 are excluded from the analysis due to data limitations.

### Box 7. Debt Reduction in LIDCs Without Debt Relief or Restructuring 1/

We examine here the seven cases where substantial and sustained debt reduction was achieved without debt relief/restructuring since 2000.

- *Papua New Guinea, Uzbekistan, Solomon Islands*: The decline in debt burdens was facilitated by rising prices of export commodities, backed by fiscal policies that saved a good part of the associated increase in budgetary resource revenues.
- *Nepal*: Fiscal consolidation made an important contribution to debt reduction, helped by an increase in tax revenue (underpinned by a surge in relatively easy to tax imports and some revenue administration measures) and expenditure restraint that partly reflected limited capacity to execute investment spending.
- *Djibouti, Lao PDR*: High investment levels produced robust GDP growth that lowered debt ratios. In Lao, major hydroelectric works proceeded with a large private investment component; in Djibouti, privatization receipts contributed to debt reduction even as large public investment weighed on the fiscal accounts.

In all cases, negative real interest rates helped lower debt—exceptionally so in the case of Myanmar, where very high inflation in an environment of financial repression eroded the burden of domestic public debt—while the accounting contribution of growth to debt reduction exceeded 10 percentage points of GDP in all countries other than Papua New Guinea.

#### Debt Reduction Events Without Restructuring

Country	Myanmar	Papua New Guinea	Lao, PDR	Uzbekistan	Nepal	Solomon Islands	Djibouti
Year of peak debt	2001	2001	2002	2002	2003	2004	2009
Year of trough	2008	2008	2008	2013	2011	2016	2016
	(in percent of GDP)						
Cumulative reduction	-163.0	-25.3	-45.5	-51.4	-28.8	-62.8	-27.7
Est. contribution from:							
Primary deficits	18.7	-31.9	14.4	-41.9	-1.1	-34.1	57.9
Interest-growth differential	-233.5	-10.1	-69.8	-73.2	-35.8	-43.8	-23.3
Real interest rate	-154.2	-2.7	-37.7	-58.0	-21.8	-19.7	-7.0
Real growth	-79.3	-7.4	-29.8	-15.2	-14.0	-24.1	-16.3
Exchange rate 2/	40.1	-7.3	-12.4	27.5	-1.7	-7.3	0.0
Other factors	11.6	24.0	20.0	36.2	9.8	13.5	-62.2

Sources: World Economic Outlook and Fund staff estimates.

1/ Data on fiscal revenues, expenditures, and primary balances unavailable in WEO dataset.

2/ Valuation effects on stocks. Where unavailable in WEO, shares of FX debt estimated based on data in Article IV staff reports.

1/ Prepared by Geoffrey Keim (SPR).

## D. The Changing Composition of Public Debt and its Implications

**78. LIDCs have obtained expanded access to credit from both non-traditional external creditors and from deeper domestic financial markets.** The expansion of available borrowing opportunities has provided LIDCs more room to expand development-oriented spending and address infrastructure gaps. But long-term growth is enhanced only if borrowed funds are used productively, yielding a high economic rate of return that exceeds borrowing costs; as was noted above, higher budgetary borrowing levels have been associated with a drop in public investment in many LIDCs.

**79. Many LIDCs have tapped into these new sources of credit, with the result that the composition of public debt in LIDCs has changed substantially.** The trend towards increased borrowing from non-Paris Club (NPC) bilateral official creditors, commercial creditors, and domestic markets described in IMF-WB (2015) has gathered pace, while new regional creditors are playing a larger role in some countries (Table 4, left panel).

- Traditional multilateral creditors have declined in importance as a source of credit—largely reflecting HIPC/MDRI debt relief—while “plurilateral” creditors have expanded lending activities in LIDCs. (See Appendix 3 for a listing of multilateral and plurilateral lenders.)
- NPC bilateral creditors are now the dominant source of official bilateral credits to LIDCs, with the shrinking share of Paris Club creditors since 2013 reflecting limited extension of new credits. In a handful of countries, mainly commodity exporters, NPC official creditors now account for over half of the external debt stock.
- External borrowing from commercial creditors has grown quickly from a low base, taking various forms, including Eurobonds and syndicated loans in frontier market economies. Commodity traders are among the “other” commercial creditors who have extended sizeable loans in some countries (Chad, Republic of Congo).
- Domestic debt (defined on a currency basis) has increased significantly as a share of public debt. This debt is held mainly by the domestic financial system; by non-banks (including suppliers, where government arrears have been securitized) in some cases; and by foreign portfolio investors in some frontier market economies (Ghana, Nigeria, Vietnam).

**80. The shift in the composition of debt has been particularly marked in several post-HIPC countries now at high risk of/in debt distress** (Table 4, right panel). The rise in debt levels since 2013 has been financed by a mix of NPC bilateral creditors, commercial external creditors, and the domestic financial system. The modest contribution of traditional creditors (the multilateral development banks, Paris Club creditors) in part reflects creditor lending practices: traditional bilateral creditors limit their provision of loans to countries at high risk of/in debt distress, while MDBs, like the World Bank, are more likely to provide grant finance in such cases.

**Table 4. Total Public and Publicly Guaranteed Debt by Creditor, 2007–16**

(in percent of GDP)

<b>All LIDCs 1/</b> (in percent of GDP)				<b>Post-HIPC LIDCs in Debt Difficulties 1/</b> (in percent of GDP)			
	2007	2013	2016		2007	2013	2016
<b>Total</b>	<b>47.1</b>	<b>39.8</b>	<b>52.7</b>	<b>Total</b>	<b>44.7</b>	<b>41.2</b>	<b>72.1</b>
<b>External</b>	<b>36.5</b>	<b>28.7</b>	<b>37.3</b>	<b>External</b>	<b>32.8</b>	<b>30.3</b>	<b>53.4</b>
Multilateral, o/w	19.6	14.4	15.7	Multilateral, o/w	10.5	12.1	15.9
<i>WB, IDB, IMF, AfDB, AsDB</i>	16.8	9.4	9.9	<i>WB, IDB, IMF, AfDB, AsDB</i>	6.6	6.4	8.2
<i>Other</i>	2.8	5.1	5.8	<i>Other</i>	4.0	5.7	7.7
Bilateral, o/w	14.2	11.4	16.0	Bilateral, o/w	17.3	12.9	22.2
<i>Paris Club</i>	7.4	2.3	2.2	<i>Paris Club</i>	8.0	1.8	2.8
<i>Non-Paris Club, o/w</i>	6.8	9.1	13.8	<i>Non-Paris Club, o/w</i>	9.3	11.1	19.4
<i>China</i>	0.3	2.5	4.2	<i>China</i>	0.2	6.2	11.6
Commercial, o/w	2.7	2.9	5.6	Commercial, o/w	4.9	5.2	15.3
<i>Bonds</i>	0.5	0.6	1.4	<i>Bonds</i>	1.0	1.6	4.2
<i>Commercial banks</i>	1.1	0.8	1.1	<i>Commercial banks</i>	0.9	1.4	2.9
<i>Other</i>	1.1	1.5	3.2	<i>Other</i>	2.9	2.3	8.2
<b>Domestic, o/w</b>	<b>10.5</b>	<b>11.1</b>	<b>15.3</b>	<b>Domestic, o/w</b>	<b>12.0</b>	<b>11.0</b>	<b>18.7</b>
<i>Central bank claim (net)</i>	-0.8	0.3	2.8	<i>Central bank claim (net)</i>	-1.1	0.4	4.3
<i>Deposit money banks</i>	0.6	2.6	6.2	<i>Deposit money banks</i>	0.0	2.7	6.9
<i>Non-banks</i>	10.7	8.2	6.3	<i>Non-banks</i>	13.0	7.9	7.6
<i>Memorandum:</i>				<i>Memorandum:</i>			
Domestic, o/w by instrument				Domestic, o/w by instrument			
<i>Marketable</i>	3.1	5.9	7.0	<i>Marketable</i>	5.9	7.2	9.1
<i>Non-marketable</i>	7.4	5.2	8.3	<i>Non-marketable</i>	6.1	3.8	9.6

1/ Based on 37 LIDCs where continuous data is available from 2007 to 2016.

1/ Countries included are: Cameroon, Chad, Congo, Ethiopia, Ghana, Mauritania, Mozambique, and Zambia.

Note: Figures are in simple averages, and may be overly influenced by the experience of countries with very high levels of debt. External and domestic debt defined based on currency denomination. Other commercial creditors include oil traders.

Sources: 2017 Survey of IMF country desks; BIS-IMF-OECD-WB Joint External Debt Statistics; WB International Debt Statistics; IMF International Financial Statistics; and Various IMF Staff Reports.

### 81. The changes in the composition of creditors and debt instruments have increased the risks of encountering debt service difficulties:

- **Refinancing, interest rate, and capital flow reversal risks have risen.** Higher borrowing at shorter maturities from NPC creditors and external commercial creditors has led to higher refinancing risk (the risk of not being able to replace maturing debt) and interest rate risk (the risk that the average interest rate on outstanding debt may rise), while the share of variable interest rate debt has also risen. Growing non-resident participation in domestic debt markets in some countries has made them more vulnerable to sudden capital outflows, which could trigger exchange rate depreciations and funding shortfalls.
- **Challenges for debt resolution have risen.** Important official bilateral creditors are not part of a creditor coordination mechanism (such as the Paris Club), while Paris Club creditors typically hold only a very limited share of the debt. The diversity of private sector external creditors—bond-holders, bank loans, commodity traders—is likely to complicate debt workouts in some

cases. Finally, higher reliance on domestic borrowing creates its own challenges when much of this debt is held by domestic banks (which may face solvency threats from a restructuring).

- **There is also an emerging risk of a potential “race to seniority” that may make debt resolution more difficult in some cases.** First, collateralized debt has become significant in at least some LIDCs (Chad, Republic of Congo), creating an uneven hierarchy of creditors that can complicate debt resolution. Second, the status of new plurilateral lenders in the creditor hierarchy is unclear; many of these lenders may see their claims as senior to bilateral claims, although the acceptability of this position has not yet been fully tested.

## E. Public Sector Debt Data Gaps and Lack of Transparency

**82. The quality of debt sustainability analyses (DSAs), whether conducted by the IMF-World Bank or by national authorities, depends on the quality of the public debt data used in the analysis.** To ensure a thorough analysis, debt data should cover public and publicly guaranteed (PPG) debt, where the public sector includes central government, state and local governments, social security funds, and public corporations).<sup>37</sup> Sustainability analysis also requires having a thorough understanding of the terms and conditions of debt, as well as taking account of contingent liabilities that may convert into public debt at a future point in time.

**83. In practice, the quality of data available to Bank-Fund staff and Finance Ministry officials usually falls well short of these standards:** three-quarters of LIDCs report only debts of the central rather than the general government; one-third of countries do not report guaranteed debt; and fewer than one in ten countries report non-guaranteed debt of public corporations that lie outside the general government (Appendix 2).<sup>38</sup>

**84. These data deficiencies create ample room for unpleasant surprises, in the form of unexpected shocks to debt levels:**

- When debt data do not include guaranteed debt or non-guaranteed debt of SOEs that should be consolidated, instances of guarantees being called or SOEs needing support yield an adverse shock to the measured debt stock (as seen recently, for example, in Madagascar and Togo). With comprehensive debt data, materialization of these liabilities would not affect the debt stock—since these debts would already be part of measured debt.
- Unpleasant debt surprises may also arise in an environment where debt coverage is broad but data on, and attention to, extra-budgetary operations and SOE finances are weak. DSAs tend to focus on the evolution of narrow fiscal measures (such as central budget operations), missing the fiscal activities “below the line” in the fiscal accounts and in the SOE sector. With this, debt

<sup>37</sup> See IMF (2013), [Staff Guidance Note on The Application of The Joint Bank-Fund Debt Sustainability Framework for Low-Income Countries \(“LIC DSF Guidance Note”\)](#).

<sup>38</sup> Such debt should be included for all state-owned enterprises that are not considered commercial in nature, see Annex 3 of the LIC DSF Guidance Note.

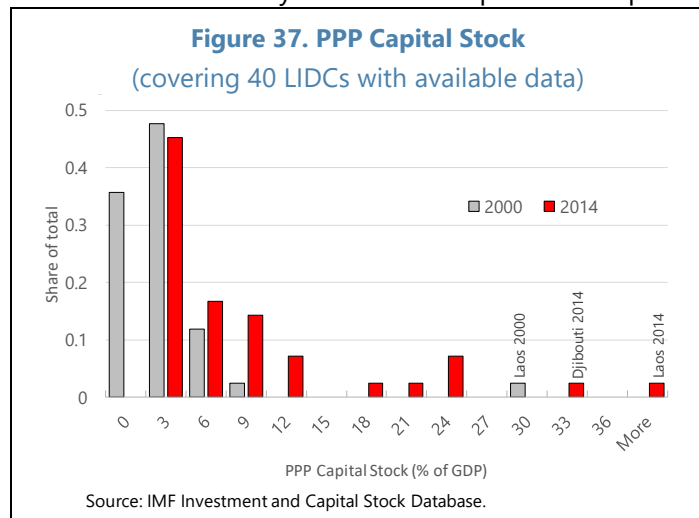
surprises can easily occur when i) the quality of governance and ii) central government oversight of SOEs and extra-budgetary institutions are weak.

**85. There are also important gaps in the information on the terms and conditions of loans available to IMF-World Bank staff and Finance Ministries.** This makes debt service projections more problematic, while also complicating the assessment of income-generating potential of key state assets (such as natural resources):

- **A survey of IMF country teams suggests that only two-thirds of the teams viewed the information on bilateral lending terms available to them to be reasonably clear.** For official bilateral creditors, terms and conditions of loans from Paris Club members were typically clearer than was the case for NPC members. For commercial credits (including syndicated loans), fewer than half of the country teams found the terms and conditions available to them to be clear/fairly clear. Limited clarity was attributed by desks both to debtor capacity limitations and to creditor practices, such as confidentiality requirements.
- **Country teams know little about collateral requirements on loans.** Collateral requirements have come to light in recent situations of debt distress (Chad, Republic of Congo); loan terms can involve complex calculations of debt payments and creditor rights to attach key assets, such as ownership shares in natural resource operations or SOEs. Little is known about such exposures outside of debt distress situations, although some analysts have suggested that up to one-third of lending by new creditors in LIDCs may involve some form of collateral (Brautigam and Hwang, 2016).

**86. There are also gaps in the information made available on loan commitments already made by the public sector, undermining the information basis for projecting future borrowing levels.** The scale of loans contracted can be very substantial, but information is provided only on disbursed amounts; for example, the amount of still-to-be-disbursed external debt contracted by Cameroon was estimated at 24 percent of GDP in 2017. Plausible disbursement schedules for this debt need to be built into DSAs if they are to accurately capture the debt outlook; absent adequate information, the steady accumulation of debt that materializes may come as an unpleasant surprise.

**87. Finally, there has been rapid growth in public-private partnerships (PPPs), which are rarely if ever captured in analysis of contingent liabilities, creating challenges for risk analysis** (Figure 37). A shock simulation, using the methodology developed for the revised IMF-World Bank Debt Sustainability Framework, points to sizeable debt risks from PPPs in some LIDCs. The simulation assumes that PPP projects fall into distress, requiring



government intervention and assumption of debt equivalent to 35 percent of the PPP capital stock. For a country with the median level of PPP capital stock relative to GDP, materialization of this shock would raise public debt by 1.2 percent of GDP; for a handful of countries with relatively large PPP capital stocks, the estimated fiscal impact of this shock would exceed 10 percent of GDP.

## F. Conclusions and Policy Recommendations

**88. Debt vulnerabilities remain contained in the majority of LIDCs, but a substantial minority of LIDCs now face significant debt-related challenges.** The number of countries facing serious challenges will undoubtedly increase if the fiscal adjustments embedded in current staff projections are not vigorously implemented.

- Public debt has risen significantly in recent years across a broad section of LIDCs due to a combination of shocks and expansive fiscal policies. Debt vulnerabilities have risen, with some 40 percent of countries at high risk of/already in debt distress—up from 21 percent in 2013.
- Debt burdens are projected to be contained in the coming years — but, for many countries, this is predicated on implementation of significant fiscal adjustment and a pick-up in growth. Sustained commitment to prudent fiscal management and to implementation of growth-supporting reforms will be needed if the debt objectives are to be achieved.
- The changing composition of debt, with an increasing share of commercial, domestic, and non-traditional sources, has intensified borrowers' exposure to market risk and created serious challenges for debt resolution in cases where countries face unmanageable burdens.
- Gaps in the reporting of public debt are significant in most LIDCs, understating current liabilities and creating room for more unpleasant debt surprises.

**89. Countries facing elevated risk of debt distress yet still needing substantial amounts of public investment will need to reassess their fiscal strategies:**

- Debt accumulation, particularly on commercial terms, needs to be contained, underscoring the importance of boosting budgetary revenues to create adequate space for growth-enhancing outlays. Improvements in public investment efficiency are an imperative to build the stock of public capital in a tightened budgetary environment.
- Close scrutiny of investment plans is essential to ensure that only projects with credibly high economic rates of return are taken on. Public-private partnerships offer a potential route to build infrastructure outside the budgetary envelope—but call for skilled negotiations and rigorous risk assessments if initial benefits eventually turn into fiscal liabilities.
- Collateralized borrowing promises improved debt servicing terms on specific loans, but weakens the position of current creditors and deters other would-be creditors by undermining their

prospects of repayment. It also creates important rigidities and serious risks for debtors, should they become unable to fully service their debt.

- Policy-makers should make use of the newly revised IMF-World Bank Debt Sustainability Framework for Low-Income Countries (IMF, 2017c), which contains an expanded set of tools to assess debt vulnerabilities and thereby inform budget and borrowing decisions.

**90. The increasing importance of new lenders, and their exposure in difficult debt cases, has made clear the need for them to exercise due diligence in lending and develop modalities for participating in debt restructuring operations:**

- Lenders need to monitor the evolution of debt vulnerabilities in borrowing countries, including assessing the impact of potential new lending on vulnerabilities. In this context, lenders should consider the potential benefits of subscribing to principles for sustainable lending and borrowing, such as those being championed by the G-20.
- Given the increasingly challenging debt environment among LIDCs, lenders should develop plans for participating in debt restructuring operations. When debt restructuring is required, timely resolution is of the essence, contributing to lower costs for both the debtor and creditors. Timely resolution generally requires efficient creditor coordination; assurances on progress toward such a resolution are also critical for Fund financing.
- Prior agreement among official creditors on the general “rules of the game,” including principles for sharing information and approaches to burden-sharing, can greatly facilitate work-outs in individual country cases. Lenders should consider the potential benefits of joining or working with existing international fora for creditor information sharing and coordination.

**91. Given the data gaps cited above, it will be important for national authorities, working with IMF and World Bank staff, to improve the monitoring and reporting of public sector debt and guarantees.** Actions needed include:

- Expanding the coverage of debt data to cover all public and publicly guaranteed debt.
- Improving reporting of both the amounts and the terms and conditions of loans. Lenders could develop mechanisms for sharing information on terms and conditions with international financial institutions while preserving confidentiality; borrowers could find ways to share such information while preserving confidentiality, for example by aggregating across several loans.
- Systematically tracking lending commitments as well as disbursements.
- Making greater efforts to project and report contingent liabilities, including those arising from state-owned enterprises and PPPs. The Fund’s Fiscal Transparency Code provides guidance on risks disclosure and analysis (IMF, 2014c).

## Appendix I. Methodological Notes on Realism Tools Used to Examine WEO Forecasts

### Cyclically adjusted primary balances

Primary structural balances are estimated by staff under a common assumption that the elasticity of revenues to output is 1 and the expenditure elasticities are zero. Thus, primary structural balances in percent of potential GDP ( $psb$ ) can be estimated as:

$$psb_t = pb_t - gap_t \cdot ex_t$$

Where  $pb$  is the primary balance in percent of GDP,  $gap$  is the output gap, and  $ex$  is primary expenditures in percent of GDP. Output gaps are estimated by applying the HP filter to annual real GDP series in the WEO database, using a smoothing parameter of 100, and extending the endpoints of the series 5 years using average growth rates to avoid endpoint bias.

### Multiplier calculations

For the multiplier analysis, staff assumed an impact multiplier of 0.4 and a persistence term that also equaled 0.6. Thus, in any year ( $t$ ), the impact of fiscal policy can be obtained by summing up the estimated current and lagged effects of fiscal policy (measured as the change in the primary structural balance,  $psb$ ) as follows:

$$m_t = \sum_{i=0}^{10} 0.4 \cdot \Delta psb_{t-i} \cdot 0.6^i$$

### Estimates of public sector capital stocks and their contribution to growth

Public capital stocks are derived using the FAD dataset, which extends through 2015. Capital-to-GDP ratios are extended until 2017. From that point, capital to output ( $K^G$ ) is forecasted using the perpetual inventory equation:

$$K_t^G = (1 - \delta)K_{t-1}^G + qI$$

Where  $I$  is public investment to GDP,  $\delta$  is the depreciation rate (5 percent) and  $q$  is the efficiency of government investment (set to 1).

The growth contribution of public capital is estimated using a pseudo-production function approach in which output is iso-elastic in public capital:

$$Y_t = (K_t^G)^\beta \cdot f(z, K^P, L)$$

Where  $Y$  stands for output,  $z$  stands for total factor productivity,  $K^P$  stands for private capital, and  $L$  for labor. In this analysis, the elasticity of output to public capital ( $\beta$ ) is set at 0.15.

## Appendix II. Coverage of Public Sector Debt in LIDCs

### Coverage of Public Sector Debt in LIDCs

Country	General government			Nonfinancial public corporations
	Central government	Sub-national government	Guaranteed debt	
Afghanistan	•			
Bangladesh	•		•	
Benin	•		•	
Bhutan	•		•	
Burkina Faso	•		•	
Burundi	•		•	
Cambodia	•		•	
Cameroon	•		•	•
Central African Republic	•			
Chad	•	•	•	
Comoros	•	•	•	
Congo, Democratic Republic of the	•		•	
Congo, Republic of	•		•	
Côte d'Ivoire	•			
Djibouti	•	•	•	
Eritrea	•			
Ethiopia	•	•	•	•
Gambia, The	•		•	
Ghana	•	•		
Guinea	•			
Guinea-Bissau	•		•	
Haiti	•	•	•	
Honduras	•	•		•
Kenya	•		•	
Kiribati	•			
Kyrgyz Republic	•			
Lao P.D.R.	•	•	•	
Lesotho	•		•	
Liberia	•		•	
Madagascar	•			
Malawi	•		•	
Mali	•		•	
Mauritania	•	•	•	
Moldova	•	•	•	
Mozambique	•		•	
Myanmar	•		•	•
Nepal	•	•	•	
Nicaragua	•			
Niger	•		•	
Nigeria	•	•		•
Papua New Guinea	•			
Rwanda	•		•	
São Tomé and Príncipe	•		•	
Senegal	•			
Sierra Leone	•	•	•	
Solomon Islands	•		•	
Somalia	•		•	
South Sudan	•			
Sudan	•	•	•	
Tajikistan	•			
Tanzania	•		•	
Timor-Leste	•			
Togo	•	•		
Uganda	•		•	
Uzbekistan	•			
Vietnam	•	•	•	
Yemen	•		•	
Zambia	•		•	
Zimbabwe	•			

Sources: 2017 LIDC desk survey, and IMF Fiscal Monitor.

## Appendix III. Multilateral and Plurilateral Lending Institutions

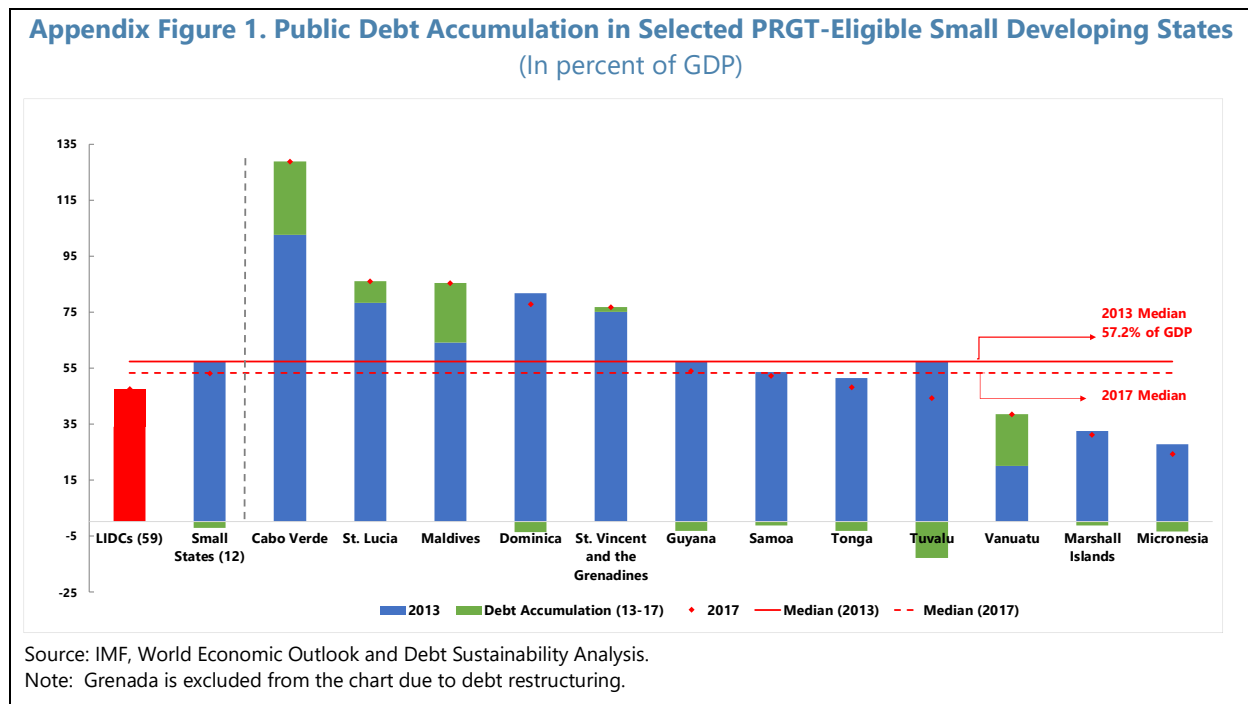
Institution	Global/Regional Remit	Member Countries (inc. indirectly represented)	Non-regional Members (inc. indirectly represented)
International Monetary Fund	Global	189	n/a
World Bank Group	Global	189	n/a
International Fund for Agricultural Development	Global	179	n/a
African Development Bank	Regional	80	26
European Bank for Reconstruction and Development	Intermediate (mostly regional)	65	n/a
Asian Development Bank	Regional	67	19
Inter-American Development Bank	Regional	48	20
European Investment Bank	Intermediate (mostly regional)	28	0
EU BoP assistance facility	Regional	28	0
EU EFSM	Regional	28	0
Council of Europe Development Bank	Regional	41	0
Caribbean Development Bank	Regional	28	5
Asian Infrastructure Investment Bank	Regional	57	20
European Stability Mechanism	Regional	19	0
North American Framework Agreement	Regional	3	0
West African Development Bank	Regional	14 (94)	6 (87)
Chiang Mai Initiative Multilateralisation	Regional	13	0
New Development Bank	Global	5	n/a
BRICS Contingent Reserve Arrangement	Intermediate	5	n/a
Islamic Development Bank	Intermediate	57	n/a
African Export-Import Bank	Regional	32 (82)	2 (28)
CAF - Development Bank of Latin America	Regional	19	2
PTA Bank	Regional	23	4
OPEC Fund for International Development	Global	13	n/a
Arab Monetary Fund	Regional	22	0
Central American Bank for Economic Integration	Regional	13	6
Shelter Afrique	Regional	44 (82)	0 (28)
Bank of the South	Regional	7	0
South Asian Association for Regional Cooperation	Regional	8	0
Nordic Investment Bank	Regional	8	0
Eurasian Development Bank	Regional	6	0
Eurasian Fund for Stabilisation and Development	Regional	6	0
Nordic Development Fund	Global	5	0
Latin American Reserve Fund	Regional	8	0
Alba Bank	Regional	8	0
East African Development Bank	Regional	5 (80)	1 (75)

Source: Various web sites.

## Appendix IV. Debt Developments in PRGT-Eligible Small States

This annex assesses debt developments in 13 middle income small states that are eligible for concessional PRGT financing (due to vulnerabilities) but have income levels well above the LIDC cut-off level.<sup>1</sup> The median level of public debt in this grouping has fallen slightly since 2013, albeit with marked variation across countries. Debt levels and vulnerabilities are generally higher in small states than in LIDCs.

**The median level of public debt in this grouping of small states<sup>2</sup> has edged downwards since 2013, but remains higher than for LIDCs.** Median public debt in small states increased from 42 percent of GDP in 2006 to a peak at 57 percent in 2013. Since 2013, it has declined by 4 percentage points to 53 percent of GDP in 2017 (Figure 1).



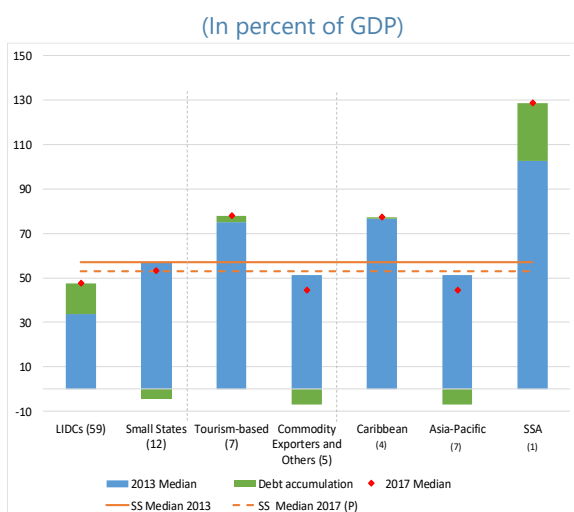
<sup>1</sup> This annex is included to provide comparable coverage to IMF-WB (2015) paper (*Public Debt Vulnerabilities in Low-Income Countries: The Evolving Landscape*), which covered all PRGT-eligible countries, including small states.

<sup>2</sup> In this annex, “small states” refers to the subgroup of 13 small states that are eligible for PRGT financing, unless noted otherwise.

### Appendix Box 1. Definition of PRGT-Eligible Small States

The IMF membership includes 34 small developing states with a population of less than 1.5 million, of which 20 are deemed to be sufficiently poor or economically vulnerable to make them eligible for access to the Fund’s concessional lending facilities (henceforth, “PRGT-eligible”). Seven small states are classified as LIDCs, while 13 are middle income countries whose income level exceeds the LIDC per capita threshold. These 13 countries had a combined population of 2.9 million in 2016; the four largest members are Maldives, Guyana, Cabo Verde and St. Lucia, which account for 74 percent of the PPP-weighted GDP of the group. All 13 small states are island states, except Guyana, and 8 are tourism-based economies, where tourism contributes at least 15 percent of GDP and 25 percent of total exports.

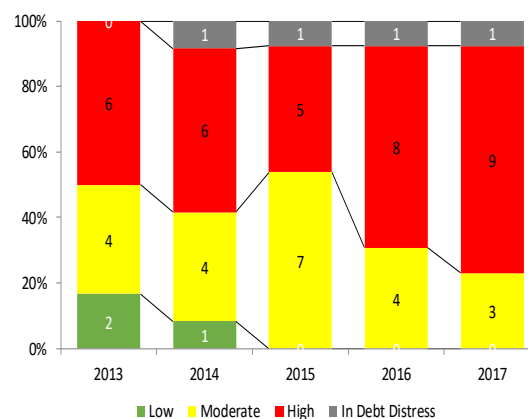
**Appendix Figure 2. Median public debt accumulation in selected small developing states, 2013-2017**  
(In percent of GDP)



Source: IMF, World Economic Outlook database and Debt Sustainability Analysis.

Note: Grenada is excluded from the chart due to debt restructuring.

**Appendix Figure 3. External Debt Sustainability Ratings for selected PRGT-eligible Small States**  
(In percent of GDP)



Source: IMF, Debt Sustainability Analysis (DSA).

Note: The DSA rating for Micronesia is only available for 2015-2017.

**Tourism-based small states have higher public debt.** Tourism-based small state median public debt to GDP increased modestly from 2013 to reach 78 percent of GDP in 2017, compared to 44 percent in other small states. Cabo Verde has the highest debt levels and also experienced the largest buildup in public debt since 2013 (Figure 2).

**External debt vulnerabilities in PRGT-eligible small states have risen considerably since 2016, with three-quarters rated as being at high risk of debt distress or in debt distress.** Ten out of 13 small states were at high risk of external debt distress or in distress in 2017, up from six in 2013 – compared to some two-fifths of LIDCs (Figure 3).

**Appendix Table 1. List of PRGT-Eligible Small Developing States 1/**

<b>Caribbean</b> (Population: 1.2 Million; GDP: 7.5 Billion USD) <sup>2</sup>				
<b>Country</b>	<b>Micro States</b> <sup>1</sup>	<b>Fragile Situation</b> <sup>3</sup>	<b>Tourism-based State</b>	<b>Commodity Exporter State</b>
Dominica	Y		Y	
Grenada	Y		Y	
Guyana				Y
St. Lucia	Y		Y	
St. Vincent and the Grenadines	Y		Y	
<b>Asia-Pacific</b> (Population: 1.2 Million; GDP: 6.8 Billion USD)				
Maldives		Y	Y	
Marshall Islands, Rep.	Y	Y		
Tuvalu	Y	Y		
Micronesia	Y	Y		
Samoa	Y		Y	
Tonga	Y	Y		
Vanuatu			Y	
<b>Sub-Saharan Africa</b> (Population: 0.5 Million; GDP: 1.6 Billion USD)				
Cabo Verde			Y	

Note:

1/ Small States are defined as developing countries that are Fund members with populations below 1.5 million while micro states are a sub-group and populations below 200,000 as of 2011. The list excludes seven small states which are classified as LIDCs (Bhutan, Comoros, Djibouti, Kiribati, Sao Tome and Principe, Solomon Islands, and Timor-Leste).

2/ Data sources: World Bank-World Development Indicators (2016) and IMF-World Economic Outlook database (2016).

3/ Based on the IMF definition of a) a harmonized average CPIA country rating of 3.2 or less, or b) the presence of a UN and/or regional peace-keeping or peace-building mission within the country during the past three years.

## Annex I. Update of the Low-Income Developing Countries Grouping<sup>1</sup>

The country grouping “Low-Income Developing Countries” (LIDCs) was introduced in 2014 to facilitate coverage of low-income economies in multilateral surveillance and other analytical work; this annex revisits the 2014 classification. The primary determinant for inclusion in the grouping remains a level of gross national income (GNI) per capita that falls below a threshold level, but the threshold has been adjusted to reflect the average growth in per capita income in LIDCs since the 2014 exercise was undertaken. A set of socioeconomic indicators are used to assess the case for reclassification in the few cases where the new income data suggest that a country should be reclassified. The updating exercise results in an LIDC grouping that contains 59 countries—with Bolivia and Mongolia exiting the group and Timor-Leste being added.

### A. Introduction

#### 1. The country grouping “Low-Income Developing Countries (LIDCs)” was introduced in 2014

to “(a) facilitate enhanced coverage of low income country issues in the Fund’s flagship products and (b) serve as a standardized definition of the “low income country” universe in staff analytical work” (IMF, 2014a). LIDCs are countries that have per capita income levels below a set threshold, structural features consistent with limited development and structural transformation, and external financial linkages insufficiently close to be widely seen as emerging market economies (EMEs). It is an analytical category, without any bearing on access to specific types of IMF financing or any other operational implications.

**2. The country grouping has proven to be useful for analytical purposes.** The grouping provides the vehicle for discussing developments in lower-income countries in the Fund’s flagship reports and is also used in other Fund analytical work (e.g., IMF, 2015a; Fabrizio and others, 2017). Three reports on *Macroeconomic Developments and Prospects in Low-Income Developing Countries* have provided in-depth analysis of issues pertaining to LIDCs (IMF, 2014b, 2015b, 2017a).

#### 3. As specified in 2014, the LIDC grouping included all countries that satisfied two criteria:

(a) PRGT eligibility, as determined in the 2013 PRGT eligibility exercise (IMF, 2013);<sup>2</sup> and (b) a level of Gross National Income (GNI) per capita (Atlas method) in 2011 less than twice the IDA operational income threshold (\$2,390 at the time).<sup>3</sup> The grouping included all IMF member states meeting the income

<sup>1</sup> Prepared by Vladimir Klyuev (lead), Sibabrata Das, Futoshi Narita, and Rujun Yin (all SPR).

<sup>2</sup> “PRGT eligibility” refers to access to the IMF’s concessional lending financed through the Poverty Reduction and Growth Trust (PRGT).

<sup>3</sup> The income level for PRGT graduation level for non-small states is set at twice the IDA operational threshold.

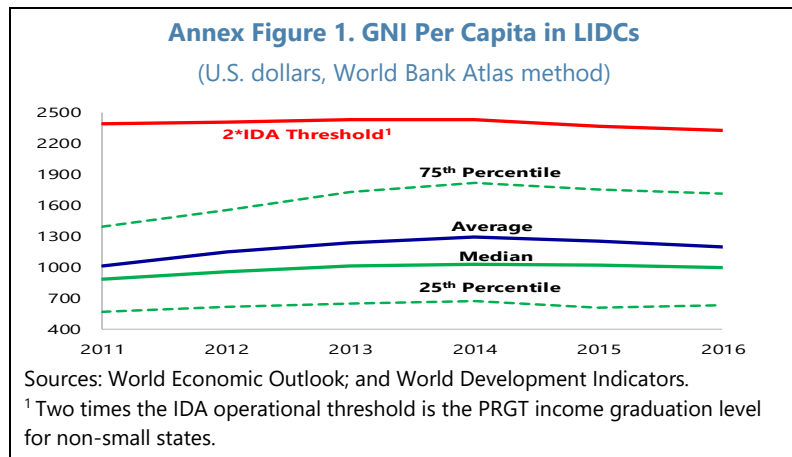
criterion *except* India, Pakistan, and the Philippines—which were widely viewed as emerging market economies (EMEs) rather than LIDCs by market analysts.<sup>4</sup>

**4. This note introduces adjustments to the specification and composition of the LIDC grouping to accommodate economic developments since it was introduced.**

## B. Evolution of Income Levels

**5. There has been a broad, if differentiated, increase in income levels in LIDCs since 2011** (Annex I. Figure 1), with median GNI per capita for the group increasing by 12 percent between 2011 and 2016.<sup>5</sup>

Meanwhile, the IDA operational threshold has declined marginally over the period, consistent with its stated objective of measuring (in U.S. dollar terms) an unchanged real level of income per capita over time.



**6. Four countries in the 2014 LIDC group are no longer eligible for concessional financing from the PRGT:** Bolivia, Mongolia, Nigeria, and Vietnam all graduated in 2015 (IMF, 2015c). The first three countries graduated on the basis that income per capita exceeded the applicable threshold; Vietnam graduated on the basis that it met the market access criterion.<sup>6</sup>

## C. Methodology

**7. To maintain a coherent and stable grouping of low income countries for analytical purposes, the LIDC grouping will be adjusted in an incremental manner.**

- Countries would be removed from the group when a) income levels have grown rapidly, moving above a threshold level and b) key structural features of the economy resemble more those of an EME than a typical LIDC.

<sup>4</sup> The group included Zimbabwe, which was not PRGT-eligible at that time because it was in arrears to the PRGT.

<sup>5</sup> The mean increased by 19 percent.

<sup>6</sup> The income threshold for these countries at the 2015 PRGT edibility review was \$2,430. The market access criterion refers to the ability of the sovereign to access international financial markets on a durable and substantial basis.

- Countries would be added to the group where a) per capita income levels have fallen to LIDC-like levels and b) key structural features of the economy resemble more to those of a typical LIDC than an EME.

**8. The per capita income threshold selected for classification purposes is the income level used when the LIDC category was constructed, adjusted by the median growth in income among current LIDCs since then.** The original LIDC grouping was based on a 2011 GNI per capita of \$2,390; the median growth in GNI per capita during 2011–16 was some 12 percent; the new income threshold level would thus be set at \$2,700.<sup>7</sup>

**9. Delinking the income threshold from the (constant real) IDA operational threshold ensures that countries may graduate from PRGT eligibility but remain below the LIDC income threshold income**—as is the case for Nigeria and Vietnam. Both countries have key features in common with typical LIDCs—for example, low life expectancy in Nigeria, a still-large share of employment in agriculture in Vietnam—and are retained within the group.

**10. There were 60 countries in the 2014 LIDC grouping.** Two of these countries—Bolivia and Mongolia—had 2016 GNI per capita income levels that exceed the proposed threshold level (by 14 percent and 31 percent, respectively). Looking at key structural features—absolute poverty levels, share of employment in agriculture, education levels, and life expectancy, both countries look much more like a typical, if somewhat poorer EME, than a typical LIDC (Annex I. Figure 2, Panel A). *Therefore, Bolivia and Mongolia are dropped from the LIDC grouping.*

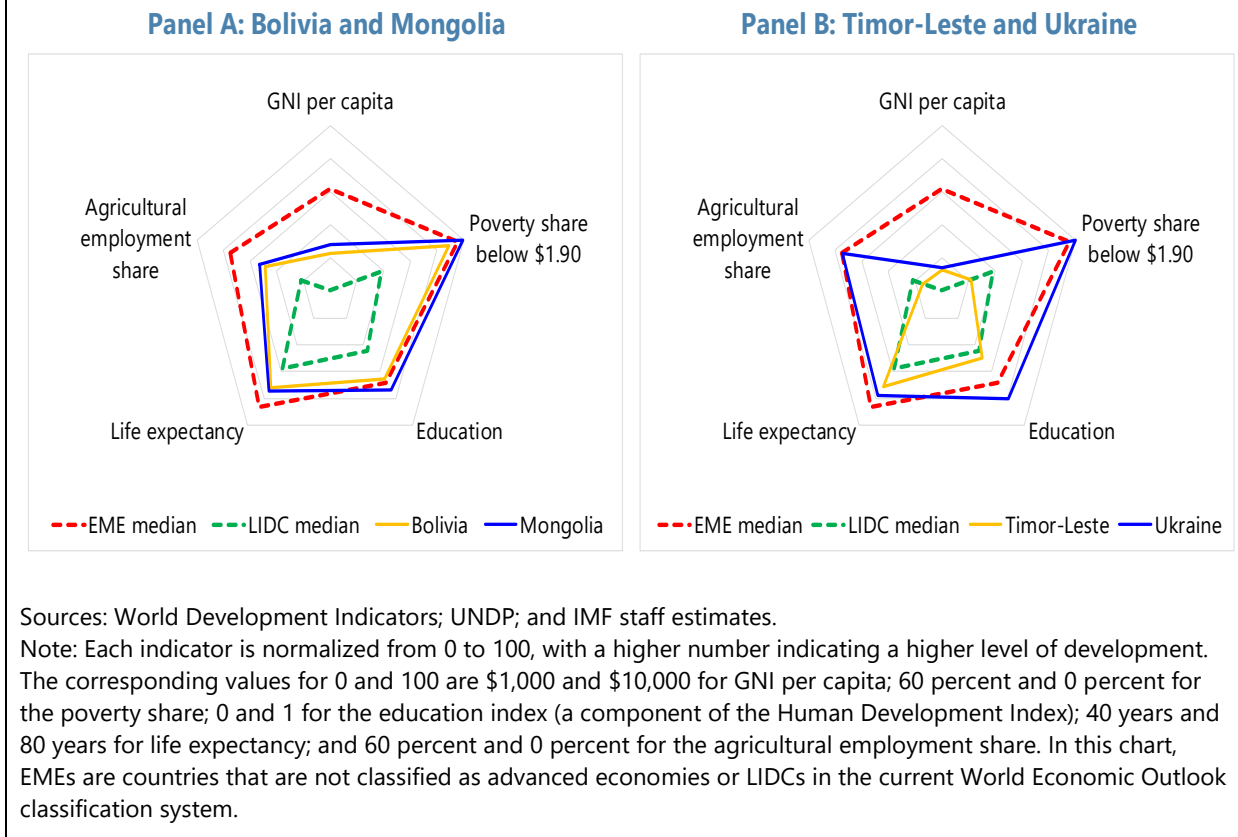
**11. There are two countries—Timor-Leste and Ukraine—not included in the 2014 LIDC grouping where per capita income levels fall below the proposed threshold level,** by 19 percent and 14 percent, respectively.<sup>8</sup> The fall of income in Timor-Leste reflects the large fall in output of oil, with current oilfields nearing depletion; the fall of income levels in Ukraine mainly reflects the impact of armed conflict.<sup>9</sup> Examining the set of structural factors listed above for both countries yields divergent conclusions (Annex I. Figure 2, Panel B). Timor-Leste’s poverty levels, role of agriculture, and education levels are similar to those of a typical LIDC; Ukraine’s poverty levels, employment structure, life expectancy, and educational levels are similar to those of a typical EME. *Therefore, Timor-Leste is included in the revised LIDC grouping, but not Ukraine.*

<sup>7</sup> Rounding from \$2,687.

<sup>8</sup> In both countries, income levels have fallen below the former cut-off point of twice the IDA operational threshold (\$2,330 or two times \$1,165).

<sup>9</sup> Income is not expected to rebound quickly in Timor-Leste, given the depleting production in current oilfields and the outlook for oil prices; the income decline in Ukraine reflects exceptional circumstances and is likely more transitory.

**Annex Figure 2. Selected Socio-Economic Indicators**



**12. In conclusion, the updated LIDC grouping contains 59 countries, all with a GNI per capita of less than \$2,700.** Two countries were dropped from the group (Bolivia and Mongolia), while one was added (Timor-Leste). The absolute size of the grouping (in terms of GDP and population) is not significantly affected by these changes.

**Annex Table 1. Low-Income Developing Countries and Subgroups**

		<b>Frontier Markets (12)</b>	<b>Fragile States /1 (33)</b>	<b>Developing Markets (16)</b>
<b>Commodity Exporters (26)</b>	<b>Fuel Exporters (6)</b>	Nigeria ✓(1)	Chad Congo, Rep. South Sudan Timor-Leste Yemen, Rep. ✓(5)	
	<b>Non-fuel Commodity Exporters (20)</b>	Mozambique <b>Papua New Guinea*</b> Zambia (3)	Afghanistan Burundi Central African Rep. Congo, Dem. Rep. Eritrea Guinea Guinea-Bissau Malawi Mali <b>Papua New Guinea*</b> Sierra Leone Solomon Islands Sudan Zimbabwe ✓(14)	Burkina Faso Mauritania Niger Uzbekistan ✓(4)
<b>Diversified Exporters (33)</b>		Bangladesh <b>Cote d'Ivoire*</b> Ghana Kenya Senegal Tanzania Uganda Vietnam ✓(8)	Cameroon Comoros <b>Cote d'Ivoire*</b> Djibouti Gambia, The Haiti Kiribati Liberia Madagascar Myanmar Sao Tome and Principe Somalia Tajikistan Togo ✓(14)	Benin Bhutan Cambodia Ethiopia Honduras Kyrgyz Republic Lao PDR Lesotho Moldova Nepal Nicaragua Rwanda ✓(12)

Note: See IMF, 2014a, for the details of the classification. The number of countries is shown in the parentheses.

\*Cote d'Ivoire and Papa New Guinea are included in both the "frontier market" and "fragile state" groups.

1/ The IMF defines "fragility" on the basis of weak institutional capacity and/or experience of conflict. Weak institutional capacity is defined by reference to a country's World Bank CPIA score (three-year average score of 3.20 or lower), while conflict is proxied by the presence of a UN and/or regional peace-keeping or peace-building operation over the preceding three years.

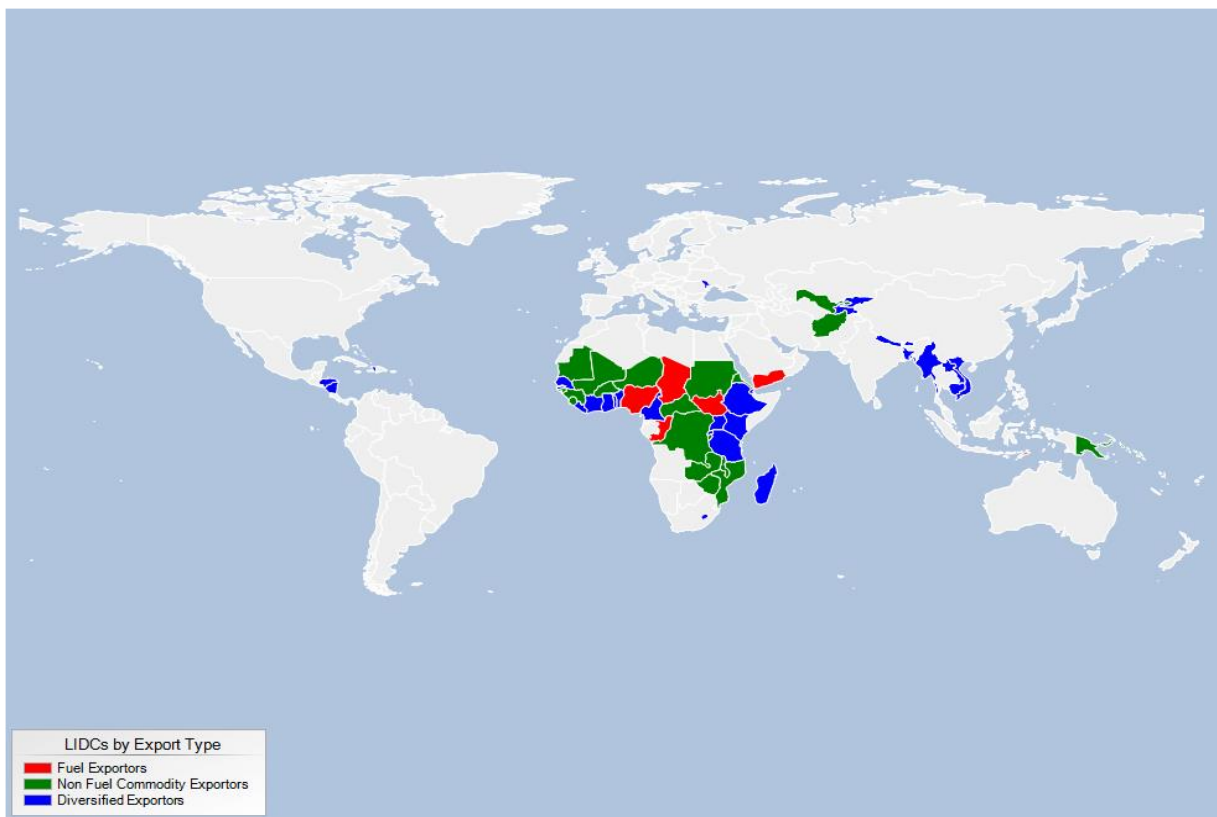
**Annex Table 2. Low-Income Developing Countries: 2017 Classification 1/**  
(Ranked from highest to lowest per capita income level)

1	\$2,510	Bhutan	31	\$940	Zimbabwe
2	\$2,450	Nigeria	32	\$900	Tanzania
3	\$2,380	Kiribati	33	\$820	Benin
4	\$2,220	Uzbekistan	34	\$820	South Sudan
5	\$2,180	Timor-Leste	35	\$780	Haiti
6	\$2,160	Papua New Guinea	36	\$760	Comoros
7	\$2,150	Honduras	37	\$750	Mali
8	\$2,150	Lao P.D.R.	38	\$730	Nepal
9	\$2,140	Sudan	39	\$720	Chad
10	\$2,120	Moldova	40	\$700	Rwanda
11	\$2,050	Vietnam	41	\$660	Uganda
12	\$2,050	Nicaragua	42	\$660	Ethiopia
13	\$1,880	Solomon Islands	43	\$640	Burkina Faso
14	\$1,730	São Tomé and Príncipe	44	\$620	Guinea-Bissau
15	\$1,710	Congo, Republic of	45	\$580	Afghanistan, I.R. of
16	\$1,520	Côte d'Ivoire	46	\$540	Togo
17	\$1,380	Ghana	47	\$520	Eritrea
18	\$1,300	Zambia	48	\$490	Sierra Leone
19	\$1,380	Kenya	49	\$490	Guinea
20	\$1,330	Bangladesh	50	\$480	Mozambique
21	\$1,210	Lesotho	51	\$440	Gambia, The
22	\$1,200	Cameroon	52	\$420	Congo, Dem. Rep. of
23	\$1,190	Myanmar	53	\$400	Madagascar
24	\$1,140	Cambodia	54	\$370	Niger
25	\$1,120	Mauritania	55	\$370	Liberia
26	\$1,110	Tajikistan	56	\$370	Central African Republic
27	\$1,100	Kyrgyz Republic	57	\$320	Malawi
28	\$1,040	Yemen	58	\$280	Burundi
29	\$1,030	Djibouti	59	...	Somalia
30	\$950	Senegal			

Sources: World Development Indicators; and IMF staff estimates.

1/ GNI per capita series (Atlas method; 2016 data or the latest available) are in columns preceding the columns for country names.

**Annex Figure 3. LIDC by Export Type**



Source: WEO.

Note: Country names shown in the map are the top 10 LIDCs in average GDP level (in purchasing power parity terms) during 2013–2015.

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