IMF POLICY PAPER

December 2019

MACROECONOMIC DEVELOPMENTS AND PROSPECTS IN LOW-INCOME DEVELOPING COUNTRIES—2019

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- A **Press Release** summarizing the views of the Executive Board as expressed during its November 13, 2019 consideration of the staff report.
- The **Staff Report**, prepared by IMF staff and completed on October 10, 2019 for the Executive Board's consideration on November 13, 2019.

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International Monetary Fund
Washington, D.C.

INTERNATIONAL MONETARY FUND

COMMUNICATIONS DEPARTMENT

Press Release No. 19/452
FOR IMMEDIATE RELEASE
December 12, 2019

International Monetary Fund
700 19th Street, NW
Washington, D. C. 20431 USA

IMF Executive Board Discusses "Macroeconomic Developments and Prospects in Low-Income Developing Countries—2019"

On November 13, 2019, the Executive Board of the International Monetary Fund (IMF) discussed an IMF staff paper on recent economic developments and near-term prospects in low-income developing countries (LIDCs). The paper also examines the challenges faced by LIDCs in the implementation of a value-added tax system and how financial safety nets can be appropriately tailored to the specific circumstances of these countries.

Background

LIDCs are a group of 59 IMF member countries primarily defined by income per capita level below a certain threshold (set at $2,700 in 2016). This group of countries contain one fifth of the world's population—1.5 billion people—but account for only 4 percent of global output.

LIDCs are expected to record average annual growth of some 5 percent in 2018–19, a reasonably robust performance against the backdrop of loss of momentum in the global economy. Commodity-dependent economies continue to fare less well than countries reliant on other export sectors, a pattern in place since the drop of commodity prices from mid-2014; experiences vary markedly within these groups, with countries in fragile situations typically recording weaker-than-average performance. Looking ahead, growth is expected to pick up marginally in 2020 and beyond, although risks to the global economy threaten this outlook.

An analysis of the drivers of longer-term growth patterns in LIDCs highlights the importance of investment levels in contributing to growth, but also the drag on growth stemming from inefficient use of resources, weak business climates, and low levels of human capital.

Public debt accumulation in LIDCs has slowed significantly since 2017, having risen markedly in the preceding four years, but debt levels continue to drift upward in about half of the countries.

Progress in boosting domestic revenue mobilization over time has been mixed, with the median tax-GDP ratio in LIDCs, at about 13 percent of GDP, remaining broadly unchanged from the levels recorded in 2013. But one-quarter of the countries have succeeded in increasing this ratio by at least 2 percentage points over this period, showing that sustained progress can be achieved with well-designed reforms.

The value-added tax (VAT) can be a very effective instrument for boosting tax revenues, but many LIDCs have faced significant challenges in building the institutional capacity to execute the provision of VAT credits in a timely manner and to manage VAT registration in a cost-effective manner. As these challenges are addressed, the VAT can be expected to deliver higher revenues with in an efficient and cost-effective manner.

Recent experience with bank failures in some LIDCs has highlighted weaknesses in financial sector safety nets that contribute to financial sector instability. These include the absence of effective bank resolution regimes, of well-designed emergency liquidity assistance frameworks, and of a financially sound deposit insurance system. Upgrading safety nets, including by targeted adaptation of international standards to suit local conditions, can enhance the overall stability of the financial system while bolstering depositor confidence in the security of their savings.

Executive Board Assessment[1]

Executive Directors broadly endorsed the assessment of macroeconomic developments in low-income developing countries (LIDCs) and the policy priorities outlined in the staff report. They also welcomed the discussions of the experience with implementing VAT in LIDCs and how financial safety nets can be appropriately tailored to the specific circumstances of these countries.

Directors noted the solid growth of output in LIDCs in 2018-19, despite slowing global growth, while underscoring that there was large variation in experiences across countries. Commodity exporters are still recovering from the large drop in commodity prices from mid-2014, whereas many diversified exporters have been recording strong growth for several years. Within these broad groupings, several countries, often fragile or conflict-affected, have been falling behind, recording little if any sustained growth in GDP per capita. Directors noted the broadly favorable medium-term outlook, while recognizing the sizeable downside risks to this outlook, both external and domestic.

Directors welcomed the examination of longer-term drivers of growth across LIDCs, noting that the poor performance of total factor productivity growth had acted as a significant drag on economic performance in many countries. They underscored the importance of improving public investment management capacity to strengthen the quality, efficiency, and prioritization of public investments, enhancing governance frameworks, as well as strengthening the key role of the business climate in influencing both the scale of and returns to private sector investment.

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[1]An explanation of any qualifiers used in summings up can be found here: http://www.imf.org/external/np/sec/misc/qualifiers.htm.

They agreed on the importance of building human capital for longer-term growth and welcomed the improvement in access to education across LIDCs, while noting the need to strengthen its quality. To better understand the inclusive nature of growth in LIDCs, Directors encouraged more analysis of poverty dynamics and the evolution of per capita incomes.

Directors were encouraged by the improvement in fiscal balances in a majority of commodity exporters, helped by a pick-up in revenues. In the context of generally low fiscal revenues in most LIDCs, mobilizing domestic revenue, by broadening the tax base and strengthening tax administration, is essential. While welcoming the significant progress made in boosting revenues in some of the countries, Directors expressed concern that the median tax-GDP ratio across LIDCs had not changed significantly since 2013. They called for more analysis to identify the key factors contributing to success or failure in boosting tax revenues across LIDCs.

Directors agreed that the VAT is an efficient and productive instrument for building a strong tax base. However, they saw a need for renewed efforts to tackle the implementation challenges faced in many LIDCs, notably the handling of VAT credits and the management of VAT registration. Directors called on the Fund and other providers of technical assistance to help build the relevant institutional capacity in LIDCs.

Directors agreed that the distributional impact of the VAT needs to be viewed as part of the wider mix of fiscal policy, including both tax and expenditure policies. They noted that, while concerns about the regressivity of the VAT are relevant, governments have other instruments to address distributional objectives, with new possibilities for well-designed benefit programs being opened up by digitalization.

While growth of public debt levels in LIDCs has slowed markedly since 2017, Directors noted that public debt vulnerabilities remain a serious cause of concern in many LIDCs, with more than two-fifths of countries assessed to be at high risk of, or already in, debt distress. They emphasized the importance of strengthening debt management capacity and improving data quality and transparency, to be supported by implementation of the joint Bank-Fund multi-pronged approach to tackle debt vulnerabilities.

Directors expressed concern that financial sector stress remains significant in many LIDCs, with elevated levels of nonperforming loans, and that the loss of correspondent banking relationships (CBRs) continues to be a challenge in many countries. They called for proactive oversight by the regulatory authorities to contain financial stress, along with sustained efforts to substantially strengthen financial sector regulation and supervision frameworks, supported by the international community and the Fund. They also encouraged the Fund to continue to work with authorities and financial regulators to better understand the drivers, impact, and potential solutions with regard to the withdrawal of CBRs.

Directors concurred with the need to strengthen financial sector safety nets in many LIDCs, particularly in developing a robust bank resolution regime, a soundly-designed emergency liquidity assistance framework, and an appropriately funded deposit insurance scheme. They were encouraged by ongoing reform efforts in several countries and welcomed the Fund's broad engagement with LIDCs on these topics. Directors underscored that reform measures should be properly prioritized and tailored to country-specific circumstances and implementation capacity.

Directors looked forward to receiving regular reports on macroeconomic developments and policy issues in LIDCs. To enhance traction, they encouraged staff to explore ways to develop further the thematic focus of the report. Directors also noted that the timeline for Board discussions could be better aligned with the cycle of the Spring and Annual Meetings.

October 10, 2019

MACROECONOMIC DEVELOPMENTS AND PROSPECTS IN LOW-INCOME DEVELOPING COUNTRIES—2019

EXECUTIVE SUMMARY

This paper is the fifth in a series that examines macroeconomic developments and prospects in low-income developing countries (LIDCs). LIDCs are a group of 59 IMF member countries primarily defined by income per capita below a threshold level. LIDCs contain one fifth of the world's population—1.5 billion people—but account for only 4 percent of global output.

The first chapter of the paper discusses recent macroeconomic developments and trends across LIDCs and, using growth decompositions, explores the key drivers of growth performance in LIDCs. A second chapter examines the challenges faced by LIDCs in implementing a value-added tax system, generally seen as a key component of a strong national tax system. The third chapter discusses how financial safety nets can be appropriately tailored to the specific needs of LIDCs, recognizing that an effective safety net is important for ensuring financial stability and underpinning public confidence in the financial system, thereby promoting financial intermediation.

Macroeconomic Developments and Outlook

LIDCs are expected to record average annual growth of some 5 percent in 2018–19, a reasonably robust performance against the backdrop of loss of momentum in the global economy. Commodity-dependent economies continue to fare less well than countries reliant on other export sectors, a pattern in place since the drop of commodity prices from mid-2014; experiences vary markedly within these groups. Looking ahead, growth is expected to pick up marginally in 2020 and beyond, although risks to the global economy threaten this outlook.

Growth of public debt levels in LIDCs has slowed significantly since 2017 but continues to drift upward in about half of the countries; two-fifths of LIDCs are assessed to be at high risk of, or in, debt distress, up only marginally from 2017.

The median tax-GDP ratio in LIDCs, at some 13 percent, has changed little over the past six years. That said, one-quarter of countries have succeeded in increasing this ratio by at least 2 percentage points, indicating that sustained progress can be achieved with well-designed reforms.

Analysis of growth patterns in LIDCs highlights the importance of investment but also the drag on growth stemming from inefficiencies (as revealed in the troubling evolution of total factor productivity). Higher levels of public investment need to be directed to the right projects and executed efficiently. Tackling deficiencies in the business environment to boost private investment is also an imperative. Rising school enrollment rates are an encouraging sign, but the quality of education received is low compared with middle income economies, significantly constraining the accumulation of human capital.

The VAT Experience in LIDCs

Many LIDCs need to create fiscal space to finance developmental policies. For that purpose, the VAT can be a very efficient and productive instrument in revenue mobilization. However, while the performance of VAT in LIDCs has been improving, its implementation comes with challenges, including notably the handling of VAT credits and the managing of VAT registration. While VAT management requires essentially the same core competencies as administering other taxes, countries need to (i) implement a comprehensive risk-based strategy to address VAT compliance issues; and (ii) build the institutional capacity to properly manage VAT registration.

Concerns about the regressivity of the VAT are relevant, but redistribution should be assessed in the context of the overall tax and spending system. Reduced rates and exemptions might somewhat mitigate the distributional implications of the VAT, but at a very high cost, and carefully-designed benefit programs—with new possibilities being opened up by digitalization—can be much more efficient. The VAT is very efficient in raising revenues, and it would be difficult to identify alternative, less regressive revenue sources for LIDCs to finance much needed development spending.

The Financial Sector Safety Net in LIDCs

In the absence of strong financial sector safety nets, LIDCs are highly vulnerable to financial shocks. Recent experience with bank failures in LIDCs has revealed continuing weaknesses. International financial standards were strengthened following the global financial crisis and suitable tailoring to country-specific circumstances should underpin financial sector safety nets in LIDCs. While the IMF has a broad engagement with LIDCs on these topics and reforms are underway or already implemented in some countries, many still lack a special bank resolution regime (with effective resolution powers), well-designed Emergency Liquidity Assistance (ELA) frameworks, and a significant number of LIDCs have yet to introduce deposit insurance.

LIDCs should prioritize measures to address remaining shortcomings in their financial safety nets, in line with their implementation capacity and through proportional application of international standards.

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Acronyms and Abbreviations

AE	Advanced Economies
CEQ	Commitment to Equity
CBR	Correspondent Banking Relationships
ELA	Emergency Liquidity Assistance
EM	Emerging Markets
FDI	Foreign Direct Investment
FSAP	Financial Sector Assessment Program
FSSRs	Financial Sector Stability Reviews
FSB	Financial Stability Board
GFC	Global Financial Crisis
GNI	Gross National Income
HCI	Human Capital Index
IADI	International Association of Deposit Insurers
LIDCs	Low-income Developing Countries
NFC	Non-Fuel Commodity
OECD	Organisation for Economic Cooperation and Development
P&A	Purchase & Assumption
PIT	Personal Income Tax
REO	Regional Economic Outlook
RRPs	Recovery and Resolution Plans
SMaC	San Marino Card
SSA	Sub-Saharan Africa
TADAT	Tax Administration Diagnostic Assessment Tool
TFP	Total Factor Productivity
VAT	Value-added Tax
WEO	World Economic Outlook
WoRLD	World Revenue Longitudinal Database

MACROECONOMIC DEVELOPMENTS

A. Introduction

1. Economic activity in low-income developing countries (LIDCs) has been quite robust in 2018-19, against the backdrop of significant loss of momentum in global growth.[1] This apparent de-linking of growth in LIDCs from the state of the global economy is more coincidental than real: LIDCs heavily dependent on commodity exports are recovering from the large drop in commodity prices from mid-2014, while growth in other LIDCs has eased somewhat in line with the wider global trend.

2. There is a striking degree of heterogeneity across LIDCs that can undermine the value of broad-brush depictions. In interpreting developments, it has been useful to construct sub-groups of economies based on export structure (Annex I): *commodity exporters*, where primary products account for at least half of export earnings, and *diversified exporters*, where the majority of export revenues come from other sources.[2] Commodity exporters can also be usefully divided into *fuel* and *non-fuel commodity* (NFC) exporters, given the markedly different evolution of fuel and NFC prices in recent years.[3] Other analytical groupings that have proved to be useful include (i) *frontier market economies*, characterized by more developed financial systems and closer linkages to international financial markets (IMF, 2014b) and (ii) fragile states, with very weak institutional capacity or conflict situations or both (see Annex I). But there is also striking diversity of experiences within these analytical categories, with developments diverging sufficiently that movements in "averages" (of whatever type) may not be that informative. This issue reappears in several segments of the chapter.

3. The chapter discusses recent economic developments (2018–19) and the near-term outlook, focusing on the evolution of the traditional macroeconomic aggregates (growth, inflation, fiscal and external positions) and financial sector developments. One section looks at the factors that have contributed to trend growth over time in LIDCs; the level and evolution of total factor productivity (TFP) features heavily, underscoring the importance of domestic reforms that deliver efficiency gains.

B. The External Environment Facing LIDCs

4. The global economic environment facing LIDCs has weakened over the past two years, with the pace of expansion slowing sharply from a 2017 peak and projections marked down significantly relative to earlier projections. Global growth in 2019 is now projected at 3.0 percent in 2019, down from 3.8 percent in 2017 and some 0.7 points below the level forecast a year ago. Growth projections for the medium term have also been marked down, albeit by more modest

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[1] The grouping of LIDCs includes 59 countries primarily defined by a low level of per capita income (IMF, 2014a, 2018a). Discussion of developments in 2019 are usually based on IMF staff projections for the year.

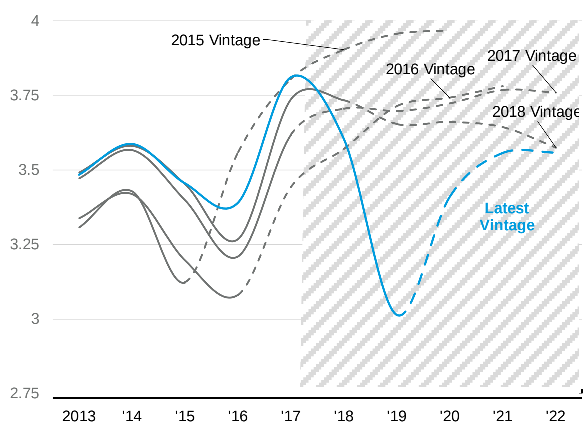
[2] "Diversified exporters" is something of a misnomer: these countries may still be dependent on a narrow range of manufactures or services (e.g., garments in Bangladesh and Haiti).

[3] The impact of export price fluctuations on fiscal positions also differs markedly between fuel and NFC exporters.

margins (Figure 1), reflecting increased trade tensions, policy and geopolitical uncertainty, and weak business confidence.

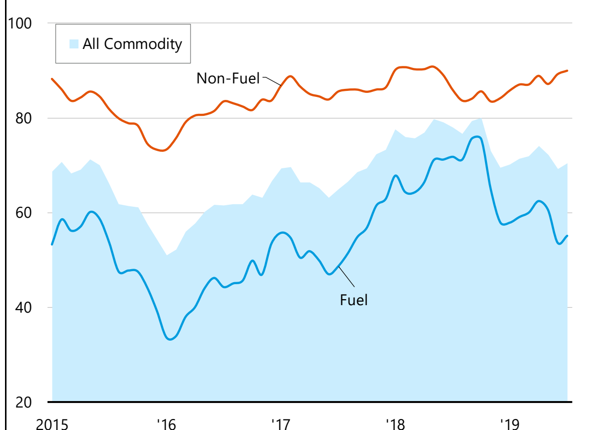
5. **Commodity prices have recovered significantly from the lows recorded in early-2016 but remain well down on 2014 levels (Figure 2).** A strong rebound in oil prices during 2018 has in good part been reversed over the past year, while non-fuel commodity prices have been broadly unchanged since 2017. Oil prices are expected to remain lower than in 2018, due to subdued global economic growth and supply developments, although geopolitical tensions are a risk factor (IMF, 2019a).[4]

Figure 1. Global Growth Projections
(Percent)



Source: IMF *World Economic Outlook*.

Figure 2. Global Commodity Prices
(Index, Jan 2014 = 100)

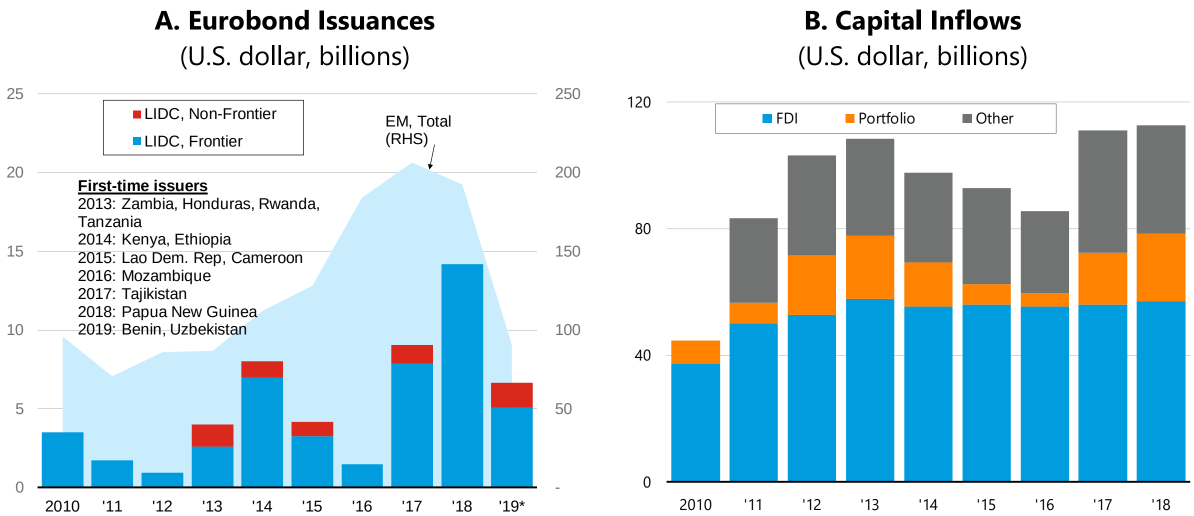


Source: IMF *World Economic Outlook*.

6. **Access to international capital markets has increased but not for all**. Several LIDCs have become repeat issuers of sovereign bonds in recent years (Côte d'Ivoire, Ghana, Kenya, Nigeria, and Senegal) and some have accessed markets for the first time (Tajikistan in 2017, Papua New Guinea in 2018, and Benin in 2019) (Figure 3.A). The surge in Eurobond issuances by LIDCs broadly mirrors capital flows to emerging market economies (EMs) and reflects in good part foreign investors' increased appetite for high yield assets during a low yield period in the debt markets of advanced economies (AEs). Notwithstanding higher portfolio flows to LIDCs as a group, more than half of LIDCs have not issued sovereign bonds in international markets over the past decade, reflecting mainly weaker economic fundamentals (particularly in lower income and fragile states). Foreign direct investment (FDI) continues to account for the bulk of private capital inflows to LIDCs, with portfolio flows fluctuating significantly from year to year (Figure 3.B), reflecting both shifts in global risk sentiment and in world commodity prices (most notable for fuel exporters).

[4] Global energy prices declined by nearly 20 percent as oil prices dropped from a four-year peak of $81 per barrel in October 2018 to about $60 at end-September 2019.

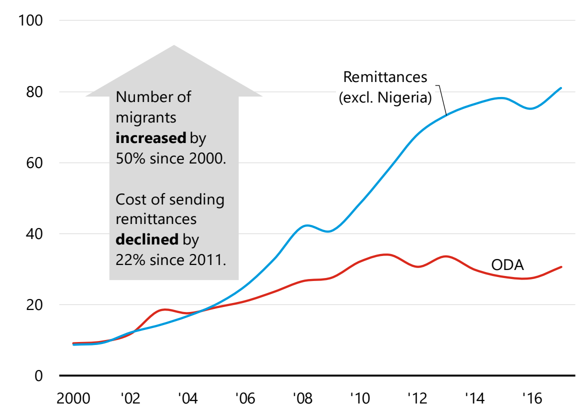
Figure 3. Capital Inflows to LIDCs



Sources: Bloomberg; IMF *World Economic Outlook*; and IMF staff calculations.
* Until May 31. Figures are based on gross inflows.

7. **Remittances to LIDCs continue to grow, while aid flows remain below pre-2014 levels.** Remittance flows have maintained their upward trend, driven by an increase in migrants and helped by falling transaction fees (Figure 4): the average cost of transferring money to LIDCs has fallen by 22 percent since 2011 (World Bank, 2019a) but remains high. The level of remittances dipped temporarily in 2015–16, reflecting weak economic conditions in major oil-exporting host countries. Official development assistance (ODA) to LIDCs picked up in 2017, with flows increasing by over 10 percent in nominal terms, but this rebound has merely reversed prior declines; aid as a share of LIDC GDP has steadily declined over time.

Figure 4. Remittances and Official Development Assistance Flows to LIDCs
(Billions of USD)



Sources: OECD database; and World Bank migration and remittances database.
Note: ODA = Official Development Assistance.

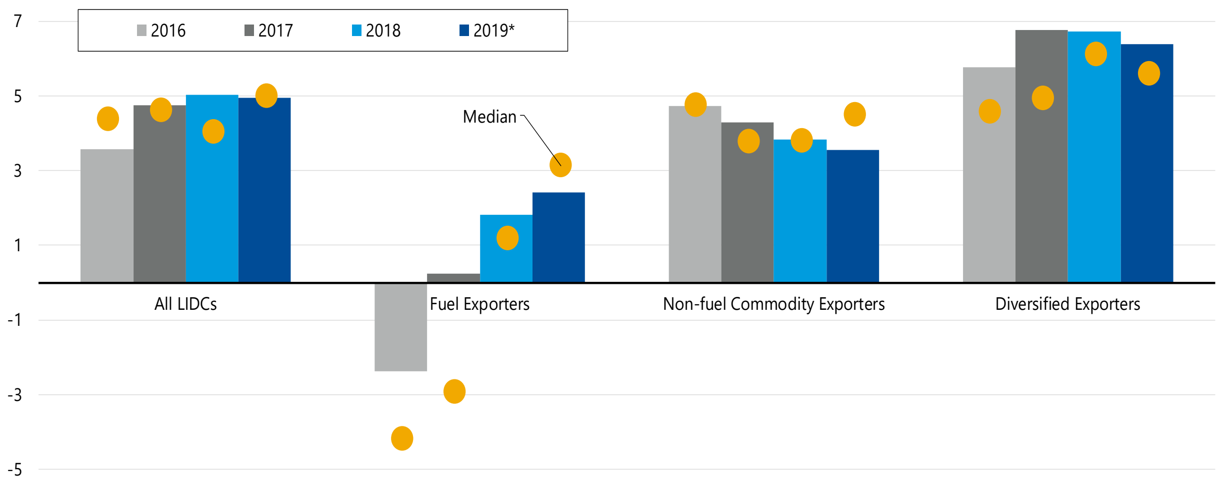
C. Recent Macroeconomic Developments in LIDCs

Continued Heterogeneity in Growth Paths

8. **The pace of growth in LIDCs has picked up modestly during 2018-2019, averaging 5.0 percent, up from 3.6 percent in 2016 and 4.7 percent in 2017 (Figure 5).** This growth pick-up runs counter to the slowing of the global economy since 2017, reflecting different dynamics at play between commodity exporters and those with more diversified export structures. *Fuel*

exporters have been slowly recovering from the recessions that followed the large drop in oil prices in 2014; the larger *NFC exporters* have experienced a steady easing of growth since 2016, albeit not mirrored in many smaller countries; *diversified exporters* have experienced strong growth for several years, with the modest year-to-year movements broadly tracking the evolution of the global economy.

Figure 5. Real GDP Growth, 2016–19
(Percent, PPP-weighted average)



Sources: IMF *World Economic Outlook*; and IMF staff calculations.
* Forecast.

9. Aside from commodity price movements, factors contributing to growth at the country level vary widely. Continued strong growth in diversified exporters has been helped by large-scale investment projects (Lao P.D.R., Rwanda, Senegal), the temporary positive impact of U.S. trade and investment reallocation (Vietnam), and post-disaster reconstruction (Nepal). Adverse factors included natural disasters (Comoros, Mozambique) and security-political challenges (Afghanistan, Nicaragua, the Sahel countries, Sudan). Unsurprisingly, the pace of growth in fragile states has typically been slower than in non-fragile countries.

Aggregate Fiscal Positions Show Only Modest Changes

10. Fiscal balances improved in most commodity exporters during 2018-19, supported by a pick-up in revenues (Figure 6).[5] Among *fuel exporters*, the median deficit fell from 5.4 percent in 2017 to a projected 2.3 percent in 2019 (below the 3.2 percent median in 2010–14), with tight financing constraints limiting expenditure growth (Table 1); Nigeria is an outlier in this context, with the fiscal position, though improving, still significantly weaker than in 2010–14 (the era of high oil

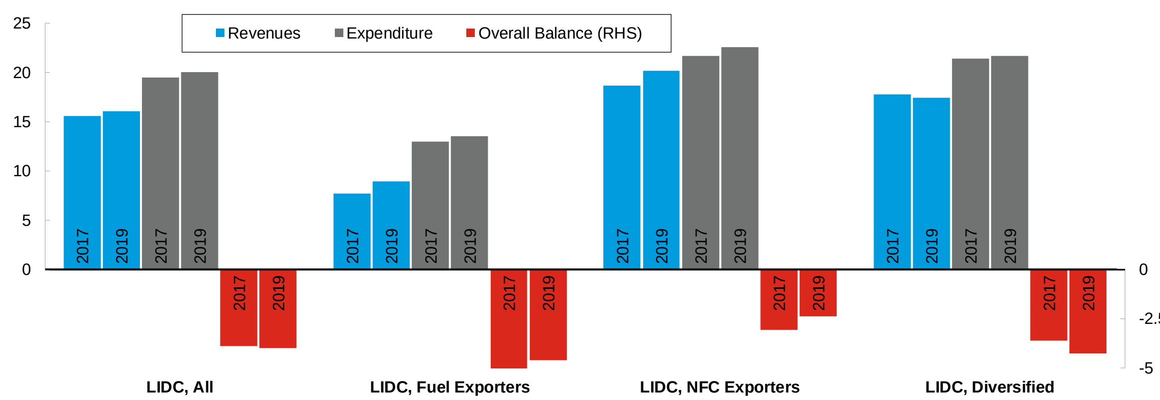
[5] Fiscal positions in some countries are likely weaker than reported, given the large build-up of government payment arrears during periods of fiscal stress (IMF, 2019b).

prices). Deficits are also projected to decline in most *NFC exporters* during 2018–19:[6] recovery in revenue levels (on the order of 1–1¼ percent of GDP), coupled with more modest expenditure increases, should yield a (weighted) average decline in deficit levels (by some 0.6 percent of GDP) to 2.5 percent of GDP, helping to contain debt accumulation. But movements in the aggregates can be deceptive:

- Revenue is projected to rise in 2018-19 by at least 1 percent of GDP in 13 countries (e.g., Burkina Faso, Sierra Leone, Uzbekistan), but fall relative to GDP in 13 countries (e.g., Malawi, Lao P.D.R., Tajikistan).
- While spending levels are projected to increase across commodity exporters as a group, the increases are concentrated in less than half of the 30 countries (e.g., Nigeria, Uzbekistan, Sudan), with spending levels falling in most of the other countries (Côte d'Ivoire, Republic of Congo, Mauritania).

Figure 6. Fiscal Trends across LIDCs

(Percent of FY GDP; PPP-Weighted Average)



Sources: IMF World Economic Outlook; and staff calculations.
Note: Data for 2019 are forecasts.

11. By contrast, fiscal deficits are projected to have widened marginally in diversified exporters during 2018–19 (on the order of 0.3 percent of GDP), reflecting a combination of revenue erosion and rising spending levels. There is significant variety around this aggregate picture, with the experience of larger countries driving the evolution of the (weighted) averages:

- Revenues declined in 2018-19 by at least 0.5 percent of GDP in 12 countries (e.g., Ethiopia, Tanzania, Vietnam) while increasing by at least this margin in 10 others (e.g., Cambodia, Niger, Nepal).
- Expenditure rose by more than 0.5 percent of GDP in 13 countries (with the increases being most marked in Cambodia, Nepal, and Togo) while falling by more than this margin in 10 countries (e.g., Bhutan, Ethiopia, Kyrgyz Republic).

[6] Divergent movements between medians and weighted-averages complicate the discussion of trends and underscore the diversity of experiences across countries.

Table 1. LIDCs: Selected Macroeconomic Indicators

	PPP-GDP Weighted Averages						
	2010-14	2016	2017	2018	2019 (Forecast)	2020 (Projections)	2021-23 (Projections)
Growth (percent)							
LIDCs (59)	**5.9**	**3.6**	**4.7**	**5.0**	**5.0**	**5.1**	**5.3**
Commodity exporters (26)	5.5	0.8	2.1	2.7	2.9	3.4	3.8
Fuel exporters (6)	5.7	-2.4	0.2	1.8	2.4	2.7	3.1
Non-fuel exporters (20)	5.3	4.7	4.3	3.8	3.5	4.1	4.5
Diversified exporters (33)	6.2	5.8	6.8	6.7	6.4	6.4	6.4
Inflation (percent)							
LIDCs	**9.3**	**10.0**	**10.2**	**9.6**	**9.4**	**9.2**	**7.9**
Commodity exporters	10.7	15.1	16.2	15.6	14.7	14.4	12.0
Fuel exporters	10.3	21.1	19.0	13.5	11.2	12.6	10.4
Non-fuel exporters	11.2	7.9	13.0	18.0	18.7	16.4	13.6
Diversified exporters	8.1	5.9	5.6	5.2	5.6	5.6	5.2
Fiscal balance (percent of GDP)							
LIDCs	**-2.7**	**-3.8**	**-3.9**	**-3.8**	**-4.0**	**-4.1**	**-3.7**
Commodity exporters	-1.5	-3.9	-4.2	-3.4	-3.6	-3.7	-3.5
Fuel exporters	-1.8	-5.0	-5.3	-4.2	-4.6	-4.3	-3.9
Non-fuel exporters	-1.0	-2.5	-3.0	-2.5	-2.4	-3.0	-3.0
Diversified exporters	-3.8	-3.8	-3.6	-4.0	-4.3	-4.3	-3.9
Public debt (percent of GDP)							
LIDCs	**38.7**	**44.4**	**46.5**	**46.9**	**47.0**	**46.8**	**46.7**
Commodity exporters	32.6	43.0	46.6	46.9	47.4	47.1	47.0
Fuel exporters	26.2	31.6	31.2	32.6	33.7	34.0	34.0
Non-fuel exporters	40.9	56.3	64.3	63.1	62.8	61.7	61.4
Diversified exporters	43.9	45.5	46.3	46.9	46.6	46.5	46.5
Current account balance (percent of GDP)							
LIDCs	**-1.7**	**-2.4**	**-1.9**	**-3.0**	**-3.4**	**-3.5**	**-3.2**
Commodity exporters	-0.1	-2.2	-0.3	-2.3	-2.7	-2.9	-2.6
Fuel exporters	2.5	-1.4	2.0	1.0	-0.4	-0.1	-0.3
Non-fuel exporters	-3.6	-3.2	-2.9	-6.1	-5.3	-5.9	-5.1
Diversified exporters	-3.2	-2.5	-3.2	-3.5	-3.9	-4.0	-3.6

	Medians						
	2010-14	2016	2017	2018	2019 (Forecast)	2020 (Projections)	2021-23 (Projections)
Growth (percent)							
LIDCs	**5.6**	**4.3**	**4.5**	**4.0**	**5.0**	**5.0**	**5.0**
Commodity exporters	5.6	3.5	3.3	3.5	4.4	4.2	4.7
Fuel exporters	5.4	-4.2	-2.9	1.2	3.1	3.9	4.8
Non-fuel exporters	5.7	4.4	3.7	3.7	4.5	4.2	4.5
Diversified exporters	5.7	4.6	4.9	6.1	5.6	6.0	5.6
Inflation (percent)							
LIDCs	**5.8**	**5.3**	**4.7**	**3.7**	**4.2**	**4.8**	**4.9**
Commodity exporters	5.9	4.4	4.9	3.8	3.9	4.5	5.0
Fuel exporters	6.9	9.4	8.5	8.1	7.1	7.4	4.4
Non-fuel exporters	5.9	4.4	4.9	3.1	3.9	4.5	5.0
Diversified exporters	5.7	5.5	4.6	3.5	4.4	5.0	4.9
Fiscal balance (percent of GDP)							
LIDCs	**-2.8**	**-4.0**	**-3.3**	**-3.0**	**-3.0**	**-3.0**	**-2.8**
Commodity exporters	-2.3	-4.0	-4.5	-4.0	-3.0	-3.0	-2.9
Fuel exporters	-3.2	-12.4	-5.4	-1.6	-2.3	-1.5	0.2
Non-fuel exporters	-2.2	-3.9	-4.4	-4.0	-3.0	-3.0	-3.0
Diversified exporters	-3.1	-3.9	-3.1	-2.9	-3.0	-3.0	-2.6

Sources: IMF *World Economic Outlook;* and IMF staff calculations.

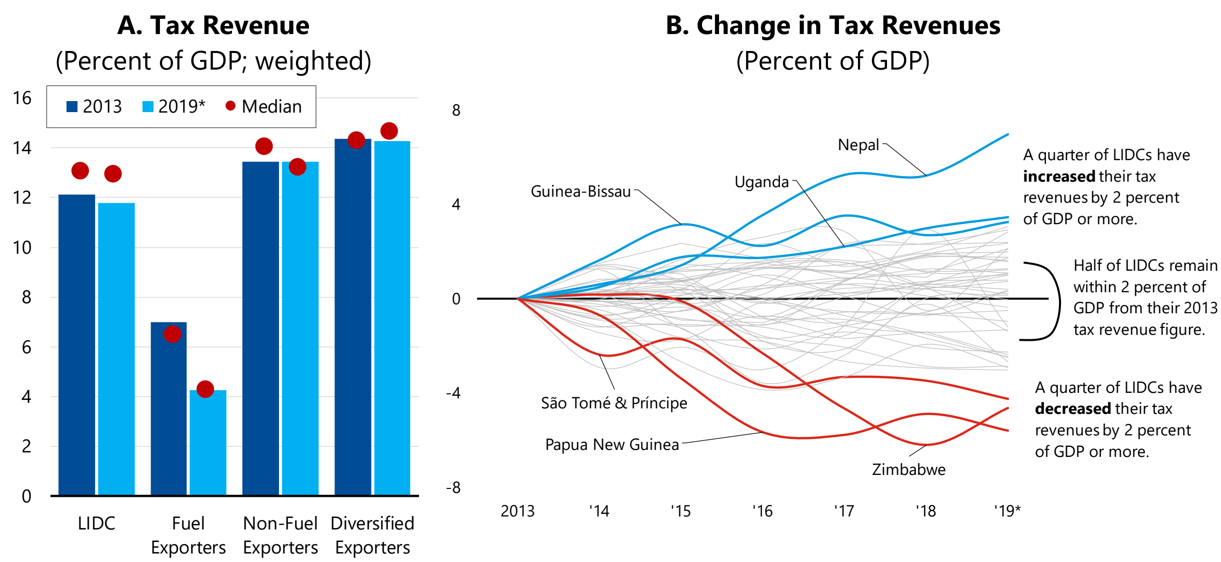
12. Progress in boosting tax collection, a key component of the Addis Ababa Action Agenda, has been encouraging in several countries, but it is not a broad-based pattern across LIDCs.[7] The median tax-GDP ratio across all 59 LIDCs has remained broadly unchanged at some 13 percent of GDP since 2013 (Figure 7). But there are strong and weak performers:

- Tax revenue as a share of GDP increased by at least 2 percentage points from 2013 to 2019 in 14 LIDCs (such as Guinea-Bissau, Nepal, Uganda), helped by both tax policy reforms and improvements in revenue administration.

- At the same time, the tax-GDP ratio declined by more than 2 percentage points in another 14 countries, influenced by domestic economic difficulties (e.g., Papua New Guinea, São Tomé and Príncipe, Zimbabwe).

- Effective implementation of a value-added tax (VAT) is usually seen as a key contributor to boosting tax revenues—but many countries have faced challenges in the design and administration of a VAT (see Chapter 2).

Figure 7. Tax Revenues



Sources: IMF *World Economic Outlook;* and IMF staff calculations.
Notes: In Panel B, selected observations have been removed to improve legibility.
* Forecast.

Public Debt Vulnerabilities Remain Elevated

13. The rapid growth in public debt recorded between 2013 and 2017 slowed significantly in 2018–19, although the general trend was still an upward drift in debt burdens (Figure 8.A).

[7] Some countries earn much of their budgetary revenues from non-tax sources (e.g., royalties in resources exporters).

- Debt levels in several countries (notably fuel exporters) fell sharply on fiscal tightening and recoveries of GDP and/or real exchange rates (which boosted dollar-equivalent denominators).[8]

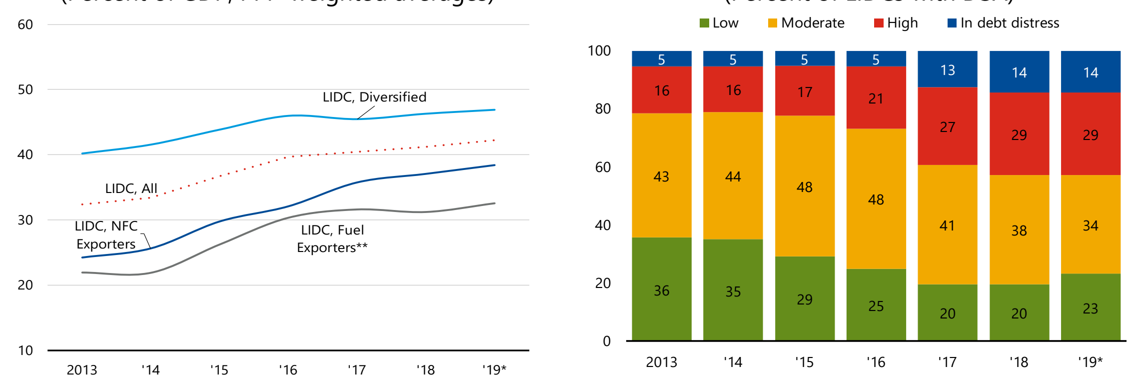
- Excluding fuel exporters, debt to GDP ratios are projected to have increased by at least 2 percentage points of GDP in 23 (of 52) countries, and by at least 5 percentage points of GDP in 11 cases (such as Liberia, Zambia). Rising primary deficits and off-budget operations have been the key drivers of debt build-ups, in part reflecting higher public investment levels.[9]

- On the positive side, debt to GDP ratios are expected to decline (excluding fuel exporters) by at least 2 percentage points of GDP in 11 countries (such as The Gambia, Vietnam) and by at least 5 percentage points of GDP in three countries (including São Tomé and Príncipe).

14. The number of countries facing serious debt challenges, as assessed by Bank-Fund debt sustainability assessments, has risen only marginally since 2017, after increasing sharply in the preceding four years (Figure 8B). 43 percent of countries for which DSAs are available are now assessed to be at high risk of, or in, debt distress, slightly higher than in 2017; the share of countries assessed to be at low risk of debt distress has also increased modestly.[10]

Figure 8. LIDCs Debt Position

A. Public Debt Levels (Percent of GDP; PPP-weighted averages) | **B. Evolution of Risk of Debt Distress** (Percent of LIDCs with DSA)



Sources: IMF *World Economic Outlook*; and IMF staff calculations.
* Forecast.
** Excludes outliers Eritrea and Sudan.

Source: LIC DSA database.
* As of July 31, 2019.

Some Softening in External Positions

15. Current account balances weakened in many countries during 2018–19 (Figure 9), albeit with different drivers. Among *fuel exporters*, current account deficits narrowed over the period,

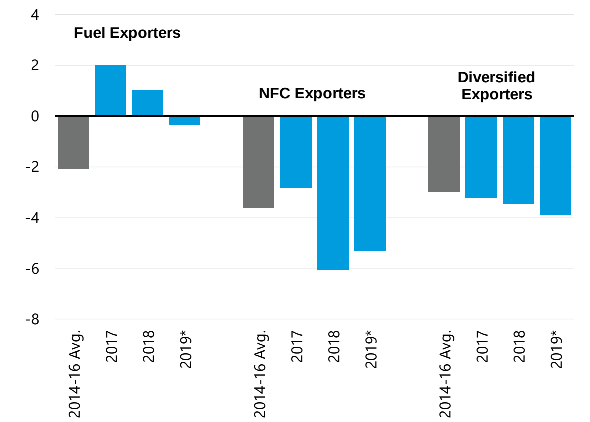
[8] An important exception is Nigeria, where debt to GDP ratio continued to increase.

[9] The respective roles of rising public investment and falling public savings (rising public consumption or falling revenue collections) in driving deficits is examined in IMF (2018a).

[10] A detailed discussion of the evolution of public debt vulnerabilities in lower income countries will be provided in a joint Bank-Fund paper, now under preparation (IMF and World Bank, forthcoming).

helped by recovery in export revenues—except in Nigeria, where recovery in import levels dominated a transitory increase in export revenues in 2018 on the back of higher oil prices.[11] Among NFC exporters, current account deficits widened markedly (exceeding 6 percent of GDP in 2018) on the basis of a surge in import levels, helped in several cases by FDI-driven imports (Lao P.D.R.) and demand for capital goods (Uzbekistan). Export growth remained strong for *diversified exporters*, particularly Asian LIDCs (Bangladesh, Cambodia, Vietnam) integrated into global manufacturing value chains; current account deficits widened modestly, more noticeably in smaller countries.

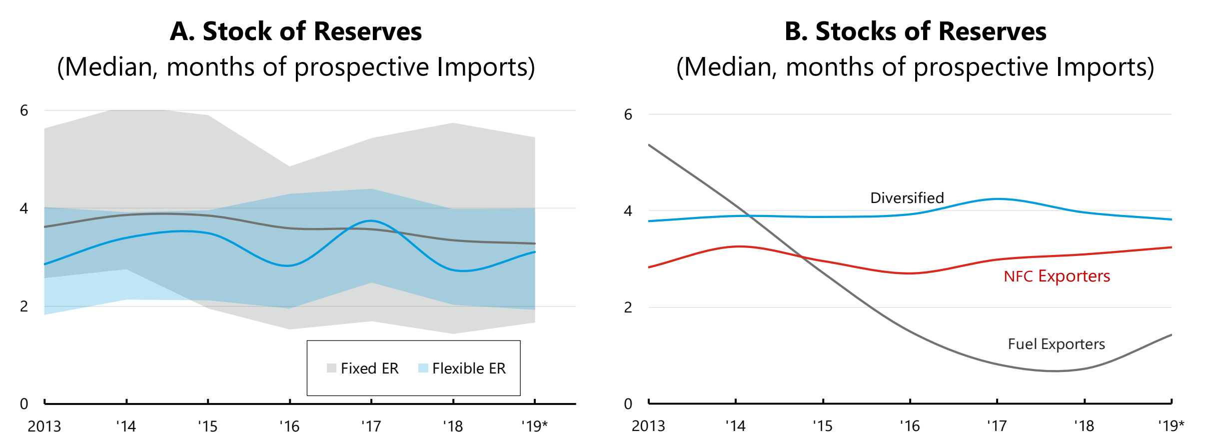
Figure 9. Current Account Balance
(Percent of GDP)



Sources: IMF *World Economic Outlook*; IMF staff calculations.
Note: Averages by LIDC subgroup are PPP-weighted.
* Forecast.

16. Foreign reserve levels showed little trend movement during 2018–19 (Figure 10) but remain low in a sizable number of countries. As of end-2018, 25 LIDCs had reserves below the conventional benchmark of three months of import coverage, while the bottom quartile of countries had reserve levels of less than two months coverage. Reserves levels at such low levels leaves countries particularly vulnerable to external shocks.

Figure 10. Reserves



Sources: IMF *World Economic Outlook*; and IMF staff calculations.
* Forecast.

Moderating Inflation

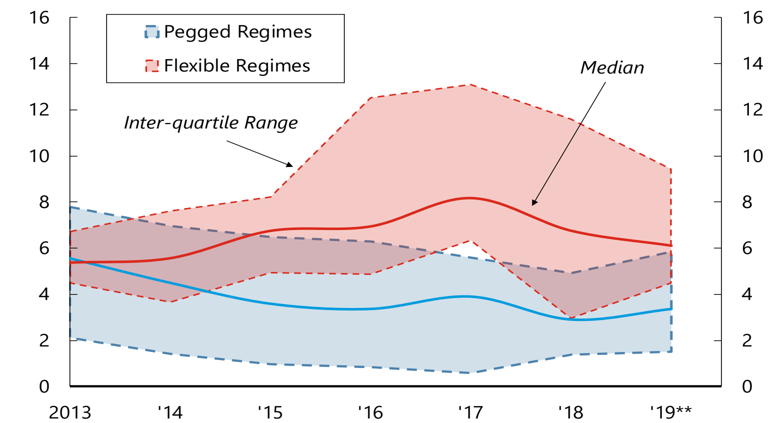
17. Inflation levels have eased since 2017, more noticeably in countries with flexible exchange rates (Figure 11). Among countries with pegged exchange rate regimes, the median inflation rate,

[11] Among fuel exporters, developments in Nigeria play a dominant role in driving changes in PPP-weighted averages.

already low, has fallen below 4 percent, helped by low growth in import prices. For countries with flexible exchange rates, the improvement in inflation has been more marked, as the pass-through effects from prior exchange rate depreciation faded. Outliers from these general trends include countries in conflict situations (South Sudan, Sudan, Yemen) or with shifting monetary/currency regimes (Zimbabwe).

Figure 11. Inflation by Exchange Rate Regime*

(Percent)

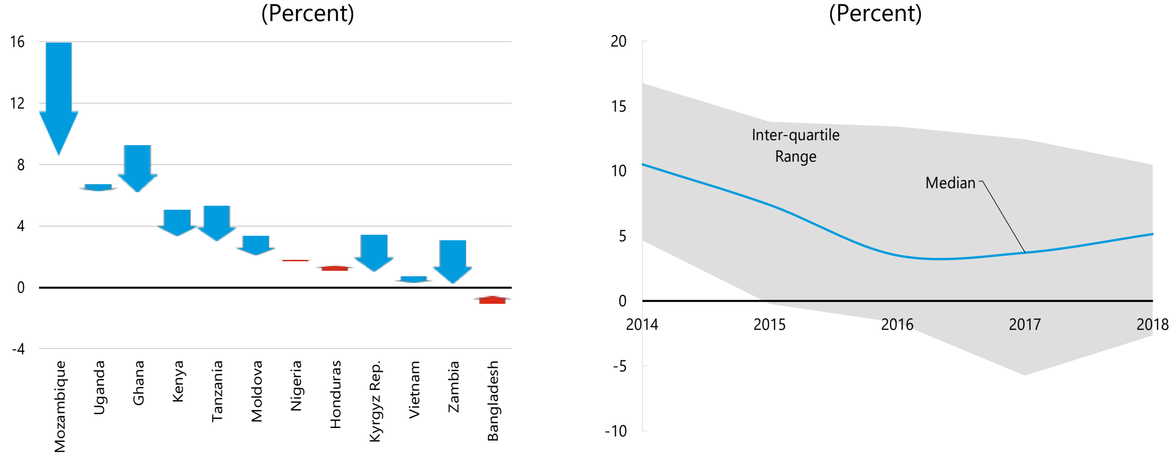


Sources: *IMF World Economic Outlook*; IMF staff calculations.
* Excluding conflict-affected cases (South Sudan, Sudan, Yemen) and a case of a currency regime shift (Zimbabwe).
** Forecast.

18. **Falling inflation provided space for monetary easing in countries with monetary autonomy,** with real interest rates declining in most inflation-targeting countries (Figure 12A). The pace of growth of private sector credit, which declined sharply during 2014–16, began to recover somewhat in 2018—but remained negative in about 30 percent of LIDCs (Figure 12B).

Figure 12. Interest Rate and Credit Growth

A. Real Interest Rates (Percent) | **B. Real Credit Growth** (Percent)



Sources: Haver Analytics; IMF *World Economic Outlook*; IMF staff calculations.
Note: Changes: end-2017 to September 2019.

Sources: Country authorities; IMF *World Economic Outlook*; and the survey of IMF country teams.

Financial Sector Developments

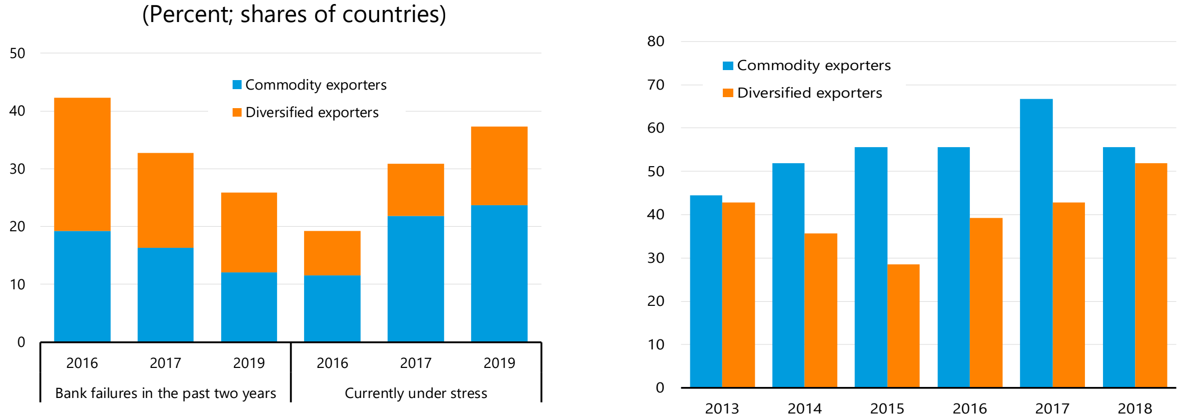
19. Financial sector stress remains a significant concern in many LIDCs.[12] Although the number of countries recording bank failures has fallen since 2016, the assessment of IMF country teams is that an increasing number of countries are currently under financial stress—close to 40 percent in 2019, up from around 32 percent in 2017 and less than 20 percent in 2016 (Figure 13A). While regulatory capital remains stable, the share of LIDCs with elevated levels of nonperforming loans (NPLs) has trended upward, albeit with some easing in commodity exporters in 2018 (Figure 13B). With the adverse impact from past commodity price shocks on the banking sectors easing somewhat, the key drivers are now country-specific developments, including rising public arrears (Comoros, Republic of Congo, Liberia, Zambia), falling remittances (Eritrea, South Sudan, Tajikistan), and prolonged conflict (Sudan, Afghanistan). The role of financial sector safety net policies in supporting financial stability is discussed in Chapter 3.

20. Loss of correspondent banking relationships (CBRs) remains a concern in a significant number of LIDCs. The IMF country team survey indicates that some loss of CBRs occurred in one-third of LIDCs over the past two years, with significant adverse effects on cross-border transactions in about half of these cases—typically small and/or fragile states (Djibouti, Solomon Islands, Somalia, Mauritania, Nicaragua).

Figure 13. LIDC Financial Sector

A. IMF Country Desk Survey on Financial Sector Stress in LIDCs*
(Percent; shares of countries)

B. LIDCs with more than 10 Percent of NPL Ratio**
(Percent; shares of countries)



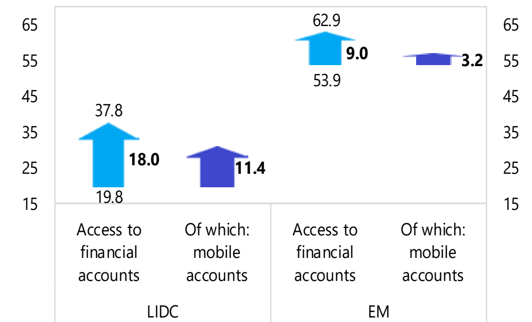
Sources: Country authorities; survey of IMF country teams; and IMF staff calculations.
* The years correspond to when the surveys were conducted. The left part shows the fraction of LIDCs where bank failures were observed during the past two years of the respective survey years. The right half of the chart shows the fraction of LIDCs that are assessed that their banking sectors are "currently under stress" by the IMF country teams as of the time of the surveys (see footnote 12).
** Missing values are replaced by nearest observations. Data are collected through part of the survey of IMF country teams on LIDCs, while the ultimate data sources are respective country authorities.

[12] The discussion of financial sector soundness draws on a survey of 59 IMF country teams, along with country data on financial soundness indicators. The assessment that a country's banking sector is currently under stress does not necessarily mean that the country is in a financial crisis. It rather indicates high levels of financial vulnerabilities that require intensified regulatory attention (with potential intervention if needed) to maintain financial stability.

21. Access to finance has improved significantly in recent years, albeit from low levels (Figure 14). Access to financial accounts almost doubled between 2014 and 2017, largely driven by increased access to mobile accounts, but remains much lower than in EMs. IMF analysis indicates that fintech is likely to have a strong impact in increasing financial inclusion in some countries (e.g., Bangladesh, Mali), while nonbank/ microfinance institutions are likely to play a more important role in other countries (e.g., Benin, Cambodia, Tajikistan). Impediments to financial intermediation are examined further in Box 1.

Figure 14. LIDC Financial Access: Improvements from 2014 to 2017

(Percent of the population, median)



Sources: World Bank Global Findex (Demirgüç-Kunt and others, 2018); and IMF staff calculations.

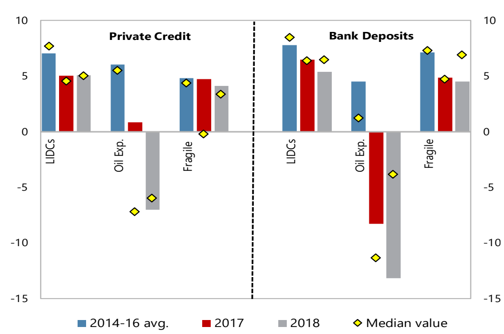
Box 1. The Challenge of Low Credit and Deposits in LIDCs[1]

Financial intermediation in LIDCs substantially lags the levels recorded in higher-income countries. Credit to the private sector in LIDCs remained steady at about 20 percent of GDP during 2013–18, as compared with 50 percent in EMs and 90 percent in AEs. Savings held in bank deposits in LIDCs amounted to less than 20 percent of GDP, against 57 percent and 95 percent in EMs and AEs, respectively.

The 2014–2015 commodity price shock has weighed on credit growth in commodity-exporting LIDCs. Fuel exporting LIDCs saw a sharp decline in real credit by 7 percent, reflecting the scale of the price shock (Box figure). Positive credit growth continued in most diversified exporters, underpinned by sustained growth. recorded continued credit growth, facilitated by ease of inflation pressures.

Real Credit and Deposit Growth

(Percent)



Source: IMF staff calculations.

Poor deposit mobilization is a key impediment to expanding credit, given that banks rely heavily on their own deposit bases as sources of funding. 9 percent of the adult population (15 years+) in LIDCs had a savings account at a financial institution in 2017, compared to 17 and 53 percent in EMs and AEs respectively.

Addressing impediments to deposit mobilization are key to supporting greater credit provision. The Global Findex (Demirgüç-Kunt and others, 2018) points to high banking service costs and geographical isolation as two key constraints. Greater adoption of Fintech could help address these key constraints and reduce intermediation costs (see IMF, 2017, 2019f). A well-regulated banking system, with appropriate depositor protections, is also needed to support depositor confidence (see IMF, 2016; and Chapter 3 below).

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[1] Prepared by Imen Benmohamed (MCD).

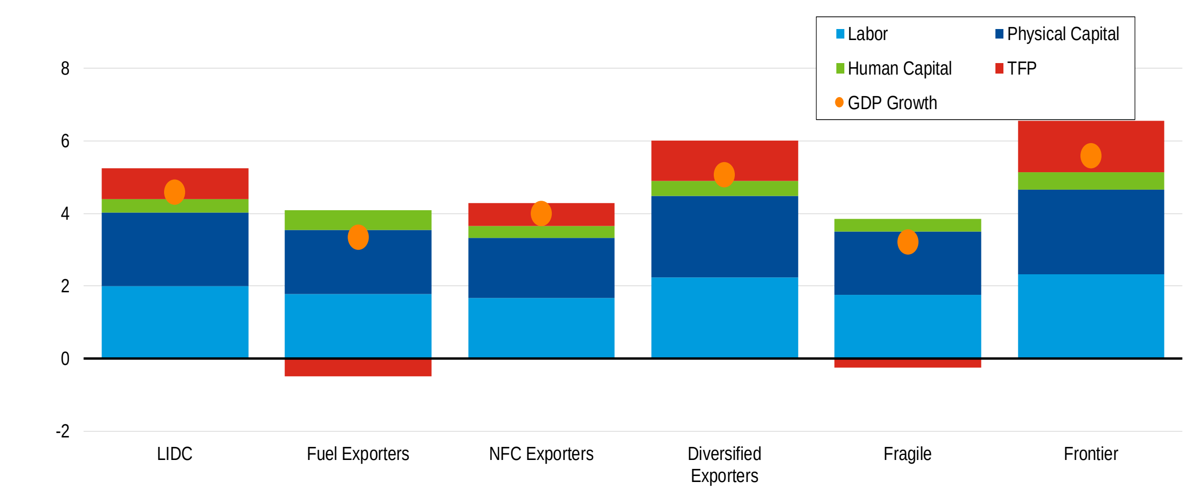
D. Longer-Term Growth Issues

22. Output levels increased at an annual average of 5 percent across LIDCs between 2000 and 2017, with output per worker increasing at some 2.4 percent over the same period. There are, unsurprisingly, significant differences in growth rates across country types, with growth being slower than average in fragile states, and higher in frontier markets (Figure 15). Comparisons of growth in diversified and commodity exporters point to modest differences, favoring the former. This section discusses some of the key drivers of growth, drawing on comparisons among LIDCs and between LIDCs and EMs and other analysis.

23. A decomposition of contributions to growth in LIDCs during 2000-17 points to some troubling features, notably the role of falling productivity as a drag on growth. Aside from labor force growth, investment in productive goods (capital accumulation) was the primary contributor to growth during the period, accounting, on average, for some three-quarters of the growth achieved. (See Box 2 for analysis of the payoffs from infrastructure investment). Improvements in the knowledge, skills, education, and health of the labor force—that is, human capital—played a surprisingly modest role, most likely reflecting measurement and specification challenges.[13] More striking is the negative contribution of total factor productivity (TFP: the residual unexplained by other factors) to growth among fuel exporters and fragile states, likely reflecting the severity of economic distortions in these economies, along with low levels of *private* sector investment (and outright destruction of productive assets) in fragile states.[14]

Figure 15. Growth Decomposition, 2000–17

(Percent GDP growth, average)



Sources: IMF *World Economic Outlook*; Penn World Tables (9.1); and IMF staff calculations.

[13] Other analyses—such as the World Development Report 2018 (World Bank, 2018)—point to a much larger contribution from improvements in the stock of human quality.

[14] See IMF (2019g, April 2019 sub-Saharan Africa *Regional Economic Outlook*) for analysis of the economic impact of conflict.

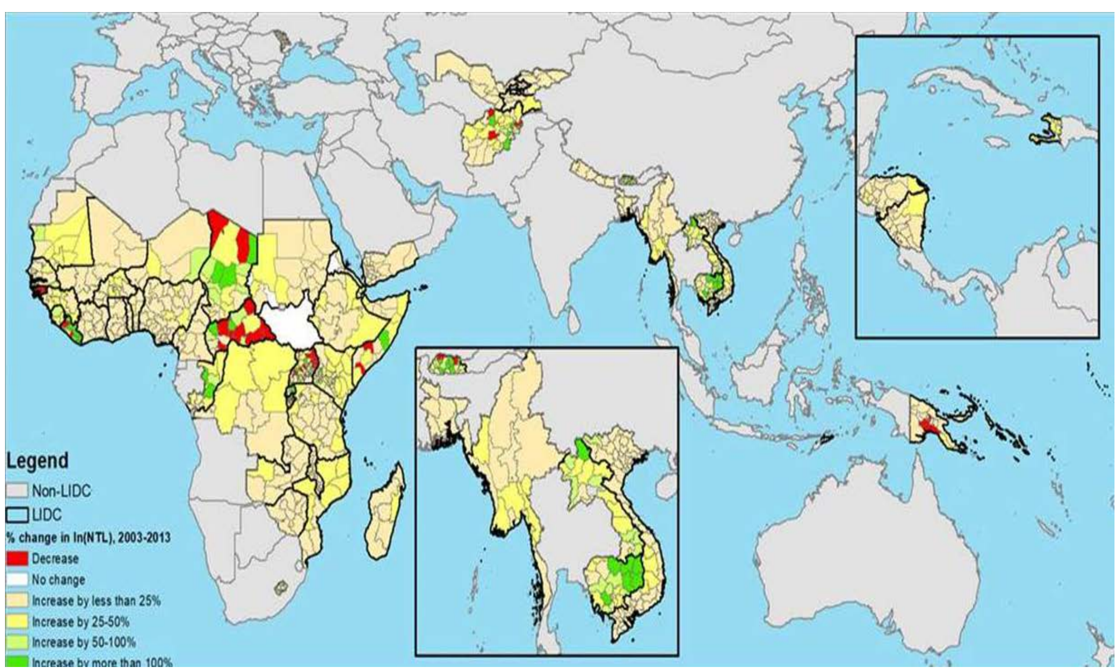
Box 2. Benefits of Infrastructure Upgrades Can Be Seen from Space[1]

Satellite images of the earth at night, showing "night lights" (NTLs), can provide a useful indicator of economic activity in countries where output data are of poor quality. This includes measuring activity levels across regions within a country, where output data by region are often not produced.

NTL data suggest that regional convergence of activity levels in LIDCs is ongoing. Data on the evolution of NTLs per capita between 2003 and 2010 indicate that regions with less nightlight intensity are catching up with more advanced regions.

Infrastructure investments in LIDCs are associated with increased economic activity as measured by NTLs. Looking at nightlights across LIDCs in areas where infrastructure investment in three sectors—transportation, energy, and water and sanitation—took place shows increased human activity. Investments in communication infrastructure, proxied by cell phone antennas have the strongest linkages; a 50 percent increase in the number of antennas in the region is associated with a 5.6 percent increase in NTLs after two years, compared with an increase of 1-2½ percent for a 50 percent increase in investment in transportation and energy infrastructure.

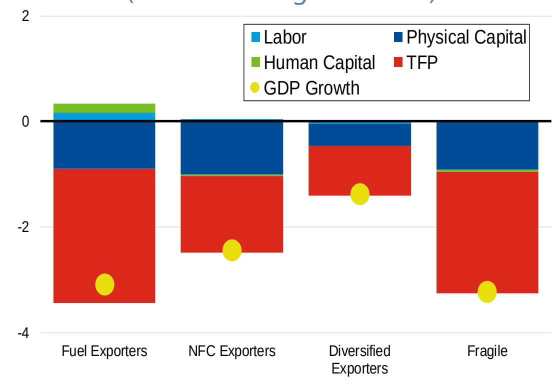
Changes in Nighttime Lights in LIDCs
(2003–2013)



[1] Prepared by Claudia Berg (RES), Mariya Brussevich (APD), Futoshi Narita (RES), and Jiaxiong Yao (AFR). Data sources: Bluhm and others (2018); Projects & Operations, The World Bank; Research and Evaluation Unit (2017); National Oceanic and Atmospheric Administration (NOAA)/National Geographic Data Center (NGDC); OpenCellid; World Bank Group Cartography Unit.

24. The key role of productivity for growth performance can also be illustrated by comparing the average LIDC and "fast-growing" peers—countries in the top quartile of growth performers during 2000–17. For most country groups, growth (and growth per worker) is lower than in these fast-growing peers because of a combination of less capital per worker and greater inefficiencies, as reflected in weaker (often negative) TFP growth (Figure 16). For fragile states and fuel exporters, the large growth differential (about three points per annum) is due primarily to poor productivity performance.

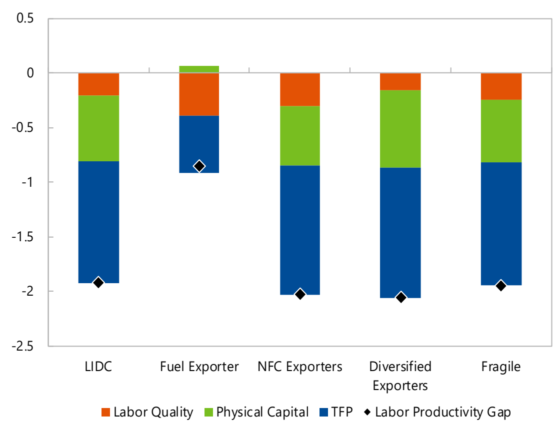
Figure 16. Growth Differentials vs. High-Growth LIDCs
(Percent average 2000–17)



Sources: IMF *World Economic Outlook;* Penn World Tables (9.1); and IMF staff calculations.

25. Insight can also be obtained from analyzing the factors accounting for income differentials between LIDCs and the "average" EM economy. Demographic factors, notably a higher dependency rate in LIDCs, account for only a modest component of the difference in GDP per capita (except among fuel exporters), with labor productivity differentials the dominant factor at play.[15] Labor productivity differentials between LIDCs and the average EM are explained primarily by differences in levels of TFP (accounting for about one-half of the divergence), in capital per worker (about one third), and in measures of labor quality (Figure 17). Differences in labor quality play a more significant role in explaining the differentials for fuel exporters; capital per worker in oil-dominated economies is predictably high.

Figure 17. Decomposition of Labor Productivity Differential vis-à-vis the EMs



Sources: Human Capital Index; World Development Indicators; ILOSTAT; Penn World Tables (9.1); IMF *World Economic Outlook*; and IMF staff calculations.
Note: Calculations based on Mourre (2009).

26. Differences in levels of human capital/labor quality between LIDCs and higher-income economies are conveniently summarized in the World Bank's Human Capital Index (HCI).[16] The scale of the differences in labor quality between AEs, EMs, and LIDCs is quite striking (Figure 18), as are the differences in labor quality among LIDCs, with fuel exporters and

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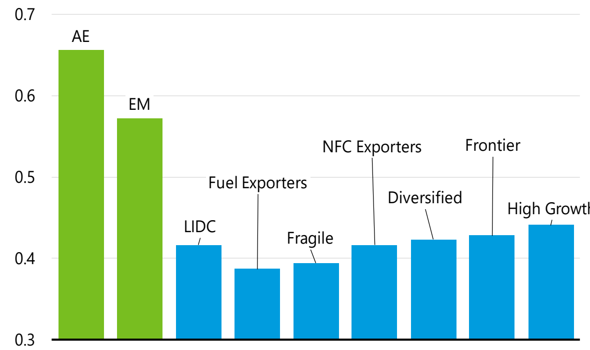
[15] LIDC fuel exporters are an exception, with a mix of a higher dependency ratio, lower labor force participation rates, and fewer hours worked accounting for two-fifths of the output per capita differential with EMs.

[16] The HCI consists of measures describing education and health outcomes over the life cycle: (i) expected years of quality-adjusted schooling; and (ii) survival rates of children to school age, adult survival rates, and health outcomes including stunting.

(less surprisingly) fragile states scoring relatively poorly to other countries and the high-growth economies scoring best.[17]

Figure 18. Human Capital Index
(Index; 0 to 1, least to most developed)



Sources: World Development Indicators; and IMF staff calculations.

27. The preceding discussion points to the importance of increasing investment levels to boost growth in LIDCs, but also underscores that if an economy becomes less efficient (the empirical significance of negative productivity growth) then "invest more" is, at best, a partial route to sustained growth. Clearly, where public investment is being channeled to and how projects are being executed matters greatly in determining the returns to new investment; as a corollary, tackling inefficiencies in public investment management is essential for accelerating growth. Similarly, identifying the reforms needed to unlock private sector investment—without introducing new distortions via, say, monopolies or trade protection—must be a key element of a growth promotion strategy (see Box 3 for discussion of business environment reforms). And, while the simplified methodologies used above give relatively little weight to human capital in "explaining" growth, there is a large body of compelling evidence (e.g., World Bank, 2018) that improving learning performance and the skill levels of the labor force are integral to achieving sustained and inclusive growth—as the correlations cited in the preceding paragraph support.

28. Against this background, it is encouraging that most LIDCs have been making strides in improving public infrastructure and access to education over time, often from a low base.

- Most LIDCs have made significant progress in improving access to electricity, although the largest gains are observed for countries that already have relatively high access (Lao P.D.R., Bhutan, Nepal), with countries with low initial access levels achieving more modest gains (Burundi, Chad, Malawi, Niger).

- Progress in improving the *quality* of infrastructure since 2007 has been significant (Niger, Rwanda), with several countries now at or close to the average score for EMs; that said, quality has been eroded in several fragile or conflict-affected states (Burundi, The Gambia).

- Primary school enrollment levels have increased in most LIDCs that were not already approaching full enrollment in 2007 (Côte d'Ivoire, Burkina Faso, Niger)—but the quality of education provided remains a serious impediment to growth, with only 44 (29) percent of pupils in early primary education grades (2 or 3) achieving at least a minimum proficiency level in mathematics (reading), as compared with an average of 58 (61) percent in EMs.[18]

[17] The large differences in labor quality levels between EMs and LIDCs raises questions about the relatively modest role attributed to labor quality in explaining the labor productivity gaps between the two groups: it is likely that some of the impact of labor quality is being captured in the estimated differences in TFP.

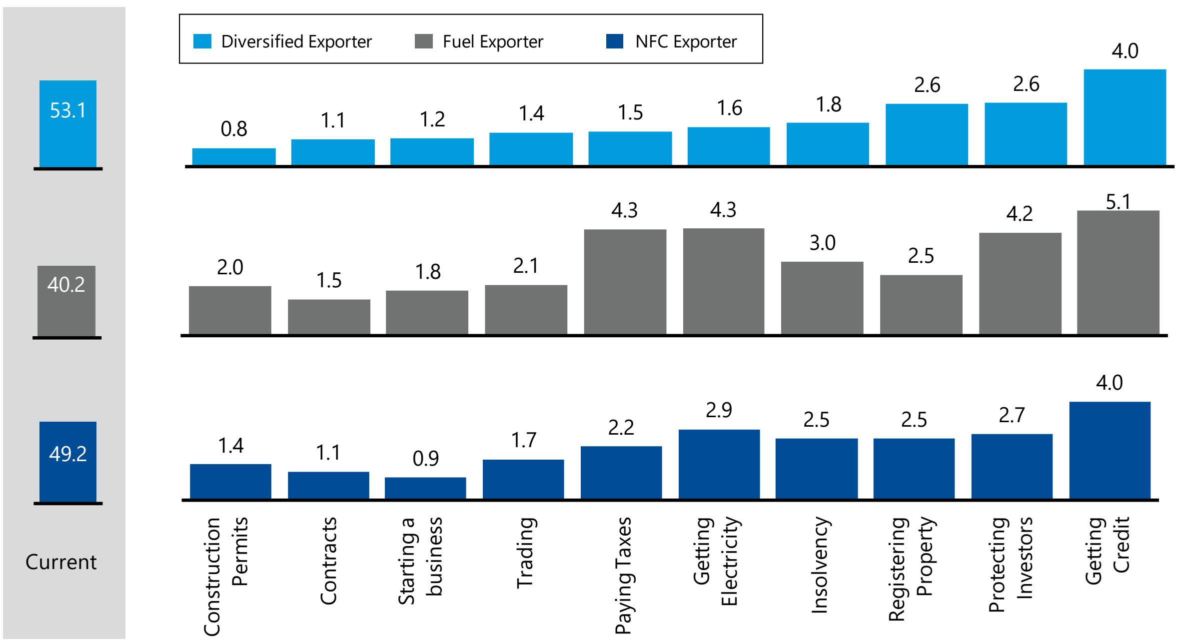
[18] https://sdg-tracker.org/quality-education#targets (based on 15 out of 59 LIDCs, covered by the survey).

Box 3. Key Structural Reforms to Improve Productivity

Weak productivity performance points to the importance of tackling the most salient constraints on the business environment, which has been shown to have an important influence on productivity growth.[1] There is striking variation in the quality of the business climate across LIDCs, with large differences between the average LIDC and the top performers (a benchmark group comprising Kenya, Kyrgyz Republic, Moldova, Rwanda, and Vietnam): for example, it takes about 80 days to register property in the average LIDC, compared to an average of 24 days in the benchmark group.

Potential Impact of Reforms

(Score to be gained if gap is closed with LIDC top performers)



Sources: World Bank Group, "Doing Business;" and IMF staff calculations.

Sizable improvements in the business climate could be achieved if the average LIDC were to introduce reforms sufficient to bring key elements of the business environment to the "frontier," defined here as the average level for each indicator in the benchmark group. The implications for the Doing Business (DB) indicator of falling short of the frontier on various indicators are illustrated in the above chart.[2]

Areas with potentially high returns in terms of boosting the DB indicator include access to credit, access to reliable electricity, facilitating property registration, making it easier to pay taxes, and protecting minority investors. Strategically targeted actions can produce quick payoffs: for example, Rwanda's DB score increased from 69.8 in 2017 to 78.9 in 2019 on the basis of enactment of an insolvency law and simplifying the regulatory environment for businesses.

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[1] See October 2019 WEO (IMF, 2019a, Chapter 3) for analysis of the impact of structural reforms in EMs and LIDCs; and World Bank (2019b, "*Doing Business: Training for Reform*") on returns to improving the environment for doing business.

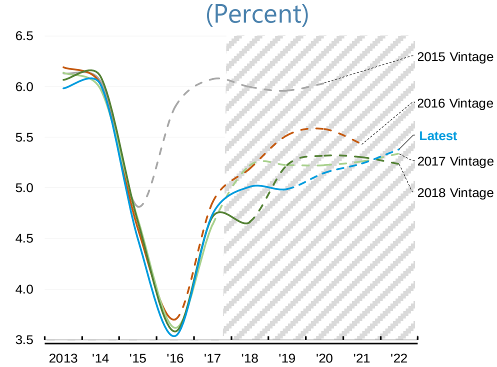
[2] To assess the impact of individual reforms, the score of each LIDC is replaced with the average of the top five LIDCs in the Doing Business Indicators (DBI) ranking.

E. Outlook and Risks

29. The outlook remains broadly favorable over the medium term (Table 1). Growth is forecast at some 5.1 percent in 2020, from 5 percent in 2019, and increasing marginally in the ensuing years (Figure 19). This is lower than the 6 percent average growth recorded in the decade prior to the 2014 commodity price shock, reflecting a less benign external environment.[19] Fiscal and external balances are projected to slightly weaken in the near term before strengthening along with favorable baseline growth prospects over the medium term.

Figure 19. LIDC Projected Real GDP Growth, 2013–22

(Percent)

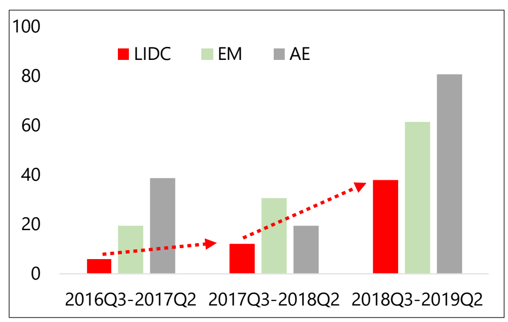


Sources: WEO databases, and IMF staff calculations.

30. Downside risks are significant. External risks include geopolitical and trade tensions, volatility in commodity prices, a sharp rise in risk premia, and a faster-than-anticipated slowdown in China or the euro area. Newly-developed measures indicate that trade uncertainty is increasingly becoming a source of concern for LIDCs (Figure 20). Trade exposure to China—measured as the share of exports to China—is high at more than 20 percent for several LIDCs integrated into global value chains (Myanmar, Vietnam), while demand from China plays a key role in supporting metals and other commodity prices.[20] Domestic risks include threats to fiscal management during the election cycle, intensifying security issues in some regions, climatic events, and sluggish implementation of key reforms.

Figure 20. World Trade Uncertainty Index

(Percent; share of countries with a spike in the index)



Source: World Trade Uncertainty Index (Ahir, Bloom, and Furceri, 2018).

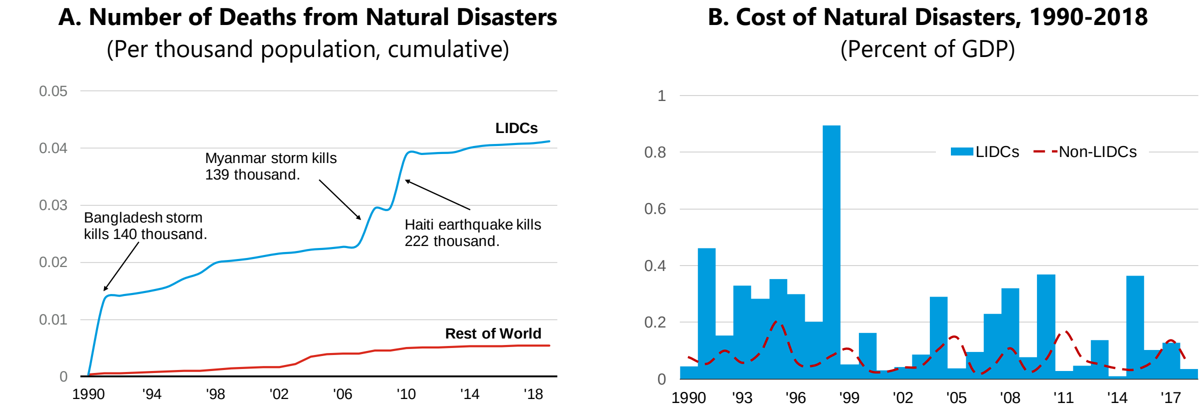
Note: The World Trade Uncertainty Index is based on text mining of the quarterly country reports by the Economic Intelligence Unit, counting the number of mentions of the word "uncertainty" and its variants within a proximity to keywords related to trade.

[19] Growth projections for LIDCs do not have a strong optimism bias relative to other IMF growth projections; see IMF (2019d) for an assessment of IMF projections.

[20] See Caceres, Cerdeiro, and Mano (2019) for more analysis on China-U.S. trade tension.

31. The majority of LIDCs are vulnerable to large-scale natural disasters and likely to suffer significantly as climate change proceeds (Figures 21A and 21B). Disaster events and climatic development can have large and long-lasting economic costs, particularly for those with weak economic buffers and less developed disaster response frameworks. There is substantial room for improvement for low-income countries due to inadequate investment in required infrastructure as well as limited use of ex-ante financing instruments such as insurance (IMF, 2019c).

Figure 21. Effects of Natural Disasters



Sources: EM-DAT Database 2019; and IMF staff calculations.
Note: LIDCs include the 59 countries in this report and non-LIDCs cover 134 countries.

32. Upside risks may support growth and income convergence. As described in Box 2, new technologies—such as mobile devices—have provided significant gains for LIDCs and could support further economic growth and economic inclusion, if accompanied by a commensurate accumulation of human capital. Regional economic integration has supported strong growth in several Asian LICs, underscoring the potential gains from a closely integrated African Continental Free Trade Area.

F. Conclusions and Policy Issues

33. Economic growth in LIDCs, at 5 percent per annum, has been reasonably robust in 2018–19, despite a significant loss of momentum in the global economy. Commodity-dependent economies continue to fare less well than countries reliant on other export sectors, with the latter group continuing to achieve trend growth rates on the order of 6 percent per annum. Looking ahead, the outlook for commodity exporters is expected to improve as countries exit the post-2014 export price-driven slowdowns, but global downside risks threaten this outlook.

34. Fiscal positions have changed only modestly at the aggregate level since 2017, but with country-specific factors delivering a diverse array of outcomes at the country level. Growth of public debt levels has slowed significantly from previous years, but more than two-fifths of LIDCs remain at high risk of (or already in) debt distress. In the crucial area of boosting tax collections, one-quarter of LIDCs have increased tax revenue/GDP ratios by at least two percentage points since 2013 (showing what can be done)—but as many experienced a decline of similar magnitude over the same period (showing what can go wrong).

35. There has been a marked increase in current account deficits in NFC exporters since 2017, financed by a mix of FDI and access to external capital markets. Foreign reserve positions show little trend movement: in the bottom quartile of countries, reserves cover less than two months of prospective imports—a continuing cause for concern.

36. On the monetary/financial side, inflation levels have been easing, helped by limited increases in import prices and the fading of pass-through effects of earlier exchange rate depreciations. Interest rates have been declining in countries with monetary autonomy, with the multi-year decline in the growth of credit to the private sector beginning to turn around. IMF staff assessments point to current financial stress in close to 40 percent of LIDCs (on an upward trend), highlighting the need for proactive regulatory actions (and clearance of government payment arrears, where relevant) in these countries.

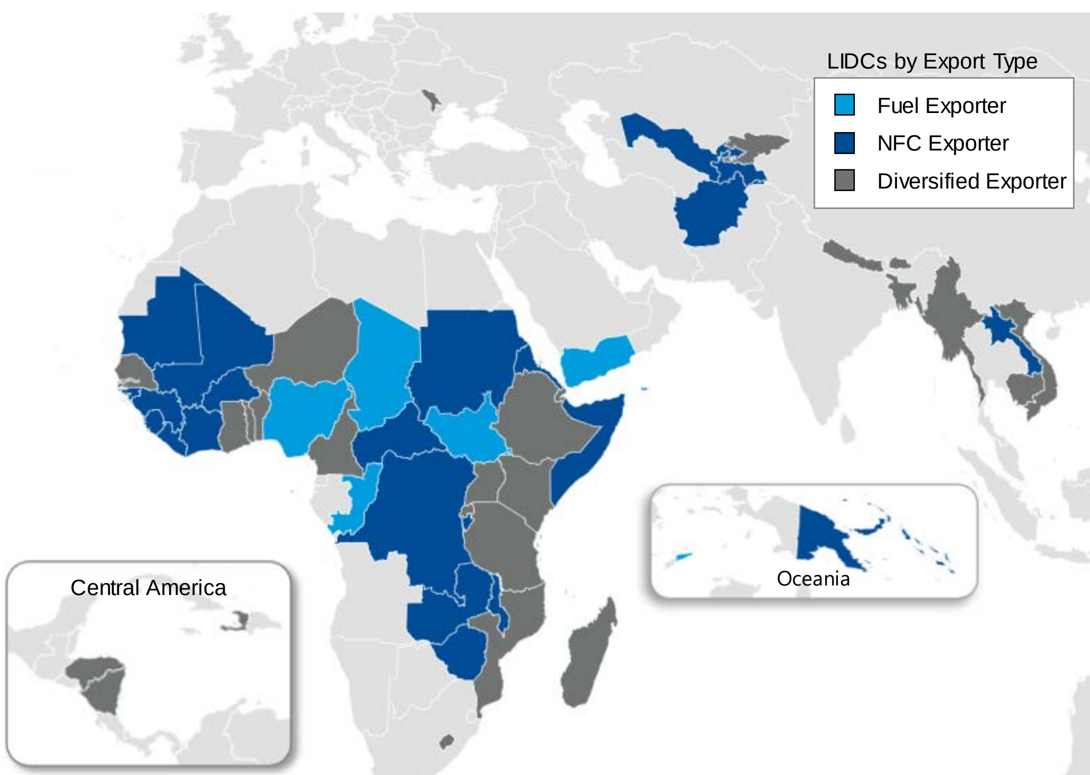
37. Analysis of growth patterns in LIDCs highlights the drag of low and falling TFP levels on productivity. Higher levels of public investment are warranted, but only if directed to the right projects and executed efficiently. Creating a business environment conducive to boosting private investment is essential: a handful of countries have made impressive strides in improving the business climate, showing the way forward for the many that have achieved much less. There is abundant evidence on the importance of improving human capital for growth prospects. In this context, it is encouraging to note that most LIDCs have been making progress in tackling infrastructure gaps and improving school enrollments, although strengthening the quality of education is an immediate and pressing concern.

Annex I. Country Group of Low-Income Developing Countries

The country grouping "low-income developing countries (LIDCs)" was introduced for analytical purposes in 2014 (IMF, 2014a) and updated in late 2017 (IMF, 2018a, Annex I). The group is defined by having per capita income levels below a set threshold and the economic structures that are insufficiently close to be widely seen as emerging market economies (EMs). The country group was updated in 2017 (effective as of October 2017 WEO), resulting in the current 59 countries. The LIDC group serves as a standardized definition of the "low-income country" universe in IMF's analytical work. There is no operational implication of being categorized in the LIDC group nor any connection to access to specific types of IMF financing. Growth experiences within the LIDC group has been very diverse (Annex Figure 2).

The subgroups of the LIDC group are defined in two dimensions: export types and financial development levels (Annex Figure 1; Annex Table 1). Export types are based on the WEO's analytical groups by source of export earnings. "Fuel exporters" are those that fuel consists of more than half of their export earnings. "Non-fuel commodity (NFC) exporters" are those that primary products consist of more than half of their export earnings. The rest of LIDCs are named "diversified" exporters. "Frontier markets" are defined as those with financial depth and institution settings comparable to EM (IMF, 2014b, Appendix II). "Fragile states" are those with less than 3.20 of the CPIA rating or where there is a peacekeeping operation in the preceding three years.

Annex Figure 1. Low-Income Developing Countries and Subgroups



Annex Table 1. Low-Income Developing Countries and Subgroups

Total (59)[1]		Frontier Markets (12)	Fragile States (32)	Developing Markets (17)
Commodity Exporters (30)	Fuel Exporters (6)	Nigeria (1)	Chad Congo, Rep. South Sudan Timor-Leste Yemen, Rep. (5)	
	Non-fuel Commodity Exporters (24)	Côte d'Ivoire[1] Papua New Guinea[1] Zambia (3)	Afghanistan Burundi Central African Rep. Congo, Dem. Rep. Côte d'Ivoire[1] Eritrea Guinea Guinea-Bissau Kiribati Liberia Malawi Mali Papua New Guinea[1] Sierra Leone Solomon Islands Somalia Sudan Tajikistan Zimbabwe (19)	Burkina Faso Lao P.D.R. Mauritania Uzbekistan (4)
Diversified Exporters (29)		Bangladesh Ghana Kenya Mozambique Senegal Tanzania Uganda Vietnam (8)	Comoros Djibouti Gambia, The Haiti Madagascar Myanmar São Tomé and Príncipe Togo (8)	Benin Bhutan Cambodia Cameroon Ethiopia Honduras Kyrgyz Republic Lesotho Moldova Nepal Nicaragua Niger Rwanda (13)

Note: see IMF (2014a, 2018a) for the details of the classification. The number of countries is shown in the parentheses.
[1] *Côte d'Ivoire* and *Papua New Guinea* are included in both the "frontier market" and "fragile state" groups.

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THE VAT EXPERIENCE IN LIDCS

38. The Value-Added Tax (VAT)[21] is at the heart of efforts to strengthen revenue mobilization in developing countries, including LIDCs, but remains in some respects contentious. There is scope and need to raise more from other taxes too, including the personal income tax and property tax; but progress on the former is difficult, and the revenue potential of the latter is limited. Moreover, in the areas of trade taxation and corporate income taxation the pressures, including from international tax competition and multinational avoidance, are likely to be on preserving rather than increasing revenue. This makes it hard to see how LIDCs can reach the Sustainable Development Goals (SDGs)—with median additional spending needs for them of around 17 percent of GDP[22]—without strengthening the VAT, both as a source of revenue and in catalyzing wider administration reform. In many countries, however, the VAT remains a source of controversy related to difficulties in properly managing VAT refunds, capacity constraints in administering large numbers of tax payers, and distributional concerns. While the last few years have seen much attention devoted to the problems of international taxation faced by developing and other countries, the less striking but potentially more important challenges of strengthening the VAT have received relatively little attention.

39. This chapter reviews core aspects of VAT policy and administration in LIDCs.[23] While it is important to consider all elements of tax (and spending) systems as a package, this chapter focuses on selected aspects of the VAT. It looks first at the performance of the VAT in LIDCs and then, in turn, at core challenges of implementation and lingering concerns about distributional effects. In all this, it is important to bear in mind that the 'VAT' label conceals quite wide variation in terms, for instance, of scope and nature of exemptions, degree of rate differentiation, level of registration threshold, and restriction on crediting and refunds.[24] In some cases, these features—of practice as well as design—can be such that there is room to question whether the tax is truly a VAT or not.

G. The Performance of the VAT

40. The VAT is a central element of the tax systems of most LIDCs, and its introduction is planned in more. Around three-quarters of LIDCs have adopted a VAT (Figure 22), which on average raises around 30 percent of their total tax revenue. Several more plan adoption (Bhutan, Bangladesh, and Liberia) while others are small islands or have particularly low administrative capacities, for example fragile states, for which a VAT may not be suitable. Countries have had a variety of objectives in introducing the VAT; some to replace earlier sales taxes or trade taxes in a revenue-neutral way, so reducing distortions and fostering growth;[25] some to mobilize additional

[21] Key features of the VAT are discussed in Box 4.

[22] Gaspar and others (2019).

[23] Book-length treatments of VAT issues in Africa are provided by Cnossen (2019) and Krever (2008).

[24] See for instance the detailed account VATs in Africa of Cnossen (2019).

[25] While there is evidence that VAT is in general a relatively growth friendly form of taxation for middle- and high-income countries, this is less clear cut for low income countries (Acosta-Ormaechea, Sola and Yoo, 2018).

Box 4. A Primer on the VAT[1]

The key features of the Value-Added Tax are that it is a broad-based tax levied at multiple stages of production, with taxes on inputs credited against taxes on output (and refunded or carried forward—ideally with interest—if this leads to excess credit). That is, while sellers are required to charge the tax on all their sales, they can also claim a credit for taxes that they have been charged on their inputs. Such a system thus secures revenue by collecting it throughout the process of production—unlike a retail sales tax—but without distorting production decisions, as, in particular, a turnover tax does.

Suppose, for example, that firm A sells its output (assumed, for simplicity, to be produced using no material inputs) for a price of $100 (excluding tax) to firm B, which in turn sells its output for $400 (again excluding tax) to final consumers. Assume now that there is a VAT at 10 percent. Firm A will then charge firm B $110, remitting tax of $10 to the government. Firm B will charge final consumers $440, remitting tax of $30: output tax of $40 less a credit for the $10 of tax charged on its inputs. The government thus collects a total of $40 in revenue. In its economic effects, the tax is thus equivalent to a 10 percent tax on final sales (there is no tax incentive, in particular, for B to change its production methods or for the two firms to merge), but the method of its collection secures the revenue more effectively.

"Zero-rating" refers to a situation in which the rate of tax applied to sales is zero, though credit is still given for taxes paid on inputs. In this case, the firm will be due a full refund of taxes paid on inputs. In a VAT designed to tax domestic consumption only, exports are zero-rated, so that exports leave the country free of any VAT. This is consistent with the "destination principle," which is the international norm: it requires that the total tax paid on a good be determined by the rate levied in the jurisdiction of its final sale with revenue accruing to that jurisdiction.

"Exemption" is quite different to zero-rating in that, while tax is again not charged on outputs, tax paid on inputs cannot be reclaimed. Thus, no refunds are payable. In this case, because tax on intermediate transactions remains unrecovered, production decisions may be affected by the VAT.

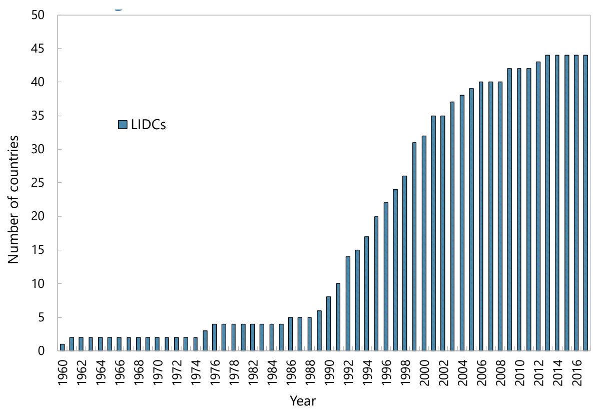
[1] Source: Adapted from Ebrill, Keen, and Perry, 2001, *The Modern VAT.*

revenues and strengthen their fiscal balance; some to promote growth through higher spending financed by the VAT.

41. LIDCs with a VAT raise significantly more total revenue than those without do (Figure 23), though that may also reflect differences in other characteristics that affect potential tax yield.[26]

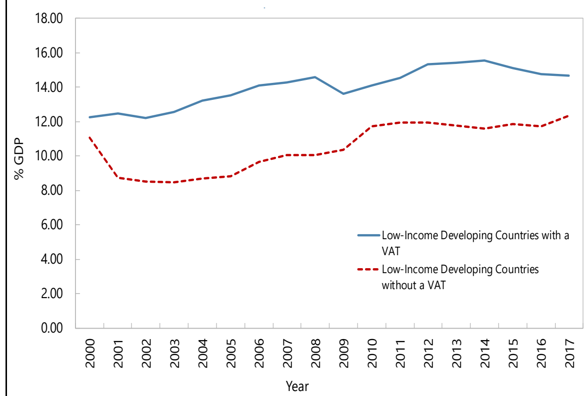
[26] The evidence on the impact of VAT adoption on overall revenue in low income countries when controlling for other factors is somewhat mixed. Keen and Lockwood (2010) find no strong evidence of a revenue gain in sub-Saharan Africa; Alavuotunki, Haapanen, and Pirttila (2019) reach a still more negative conclusion; Ebeke, Mansour and Rota Graziosi (2016) find a significant positive revenue impact. The absence of an impact on total revenue might reflect the use of VAT revenues to replace trade tax revenues, though evidence on incomplete replacement in Baunsgaard and Keen (2010) and Cage and Gadenne (2017) casts doubt on this explanation, at least for the earlier part of the sample periods.

Figure 22. Number of Countries with a VAT Rate



Source: IBFD

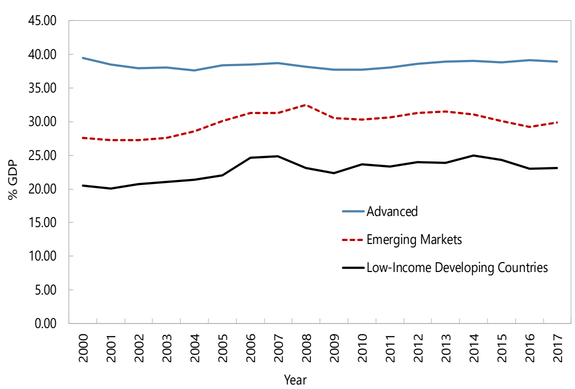
Figure 23. LIDCs with Vs. LIDCs without a VAT: Mean Total Tax Revenue, 2000–2017
(In percent of GDP)



Source: World Revenue Longitudinal Database (WoRLD).

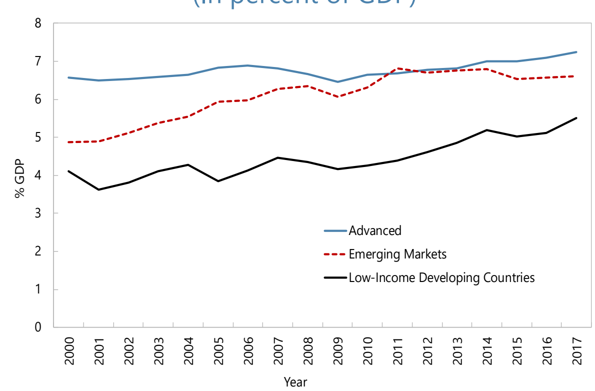
42. An increased average ratio of total revenue to GDP in LIDCs since 2000 (2.1 percent of GDP) largely reflects increased VAT revenue (1.5 percent) (Figures 24 and 25). There were also modest gains in personal income tax and corporate income tax, all serving to more than offset declining trade tax revenue.

Figure 24. WEO Income Groups: Mean Total Revenue, 2000–2017
(In percent of GDP)



Source: WoRLD.

Figure 25. WEO Income Groups: Mean VAT Revenue, 2000–2017
(In percent of GDP)



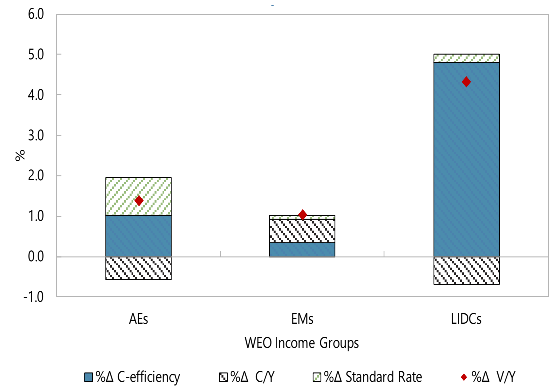
Source: WoRLD.

43. The increased revenue from the VAT in LIDCs mainly reflects improvements in C-efficiency[27] rather than changes in the standard tax rate or levels of consumption. Decomposing the average 4 percent annual increase in the ratio of VAT revenue to GDP suggests that this

[27] C-efficiency is the ratio of VAT revenue to the product of the standard VAT rate to total final consumption, and so would equal unity for a perfectly enforced VAT applied at a single rate to all final consumption. See Ebrill, Keen, and Perry (2001) for further discussion.

has been driven mainly by increases in C-efficiency, while the average standard rate has remained broadly constant (Figure 26).[28] What has driven this marked increase in C-efficiency, however, is unclear. One possibility, clearly welcome, is an improvement in compliance. Another is an increase in reduced rates of tax or the elimination of exemptions on final consumption goods, which many advising on VAT policy would welcome (for reasons discussed in section I below).[29] Another, unwelcome, is that this may reflect an increasing denial of VAT credits and refunds (an issue taken up below). More work is needed to understand the precise drivers of the underlying forces at work.[30]

Figure 26. Composition of Changes in VAT-to-GDP Ratio by WEO Income Group, 2012–2017



Sources: IMF staff estimates using WoRLD Revenue Longitudinal Database and WEO data.

44. There remain, nonetheless, large shortfalls in many LIDCs between actual VAT revenue and the revenue that would be expected with full compliance and the application of a single rate to all final consumption—closing which offers the prospect of significant additional revenue.[31] These gaps—which (confidential) IMF country work suggests, reflect in roughly equal parts noncompliance and deviations from uniform treatment of all consumption items—commonly amount to around 9 percent of GDP. Raising C-efficiency to 100 percent is not feasible (and perhaps not desirable) but illustrating the scale of the potential, if LIDCs in the lower quartile by C-efficiency were to raise it to the LIDC median, would raise additional revenue of around 3.5 percent of GDP.

45. In spite of the growing number of countries with a VAT, two countries have recently eliminated the VAT or seriously considered doing so—for different reasons. Zambia contemplated repealing the VAT because of the difficulty in managing VAT refunds, but the recently approved budget has explicitly retained it, and the authorities plan to address issues related to administrative challenges. Malaysia[32] eliminated VAT amidst with its impact on prices and thus the poor. Such discontent with the VAT is troubling. It is also not wholly new, and it is notable that all

[28] The decomposition is as in Keen (2013). There has also been a notable increase in the proportion of the VAT that is collected inland rather than at customs, suggestive of improved revenue administration performance. Consistent with Figure 26, such shifts are generally associated with increases in C-efficiency (Morrow, Smart, and Swistak, 2019).

[29] Results in Cnossen (2019), however, suggest that variations in the extent of exemptions with the scope of experience likely have little impact on measured C-efficiency.

[30] Encouragingly, Acosta and Morozumi (2019), building on IMF (2013), find that rebalancing tax composition towards the VAT is more conducive to growth if achieved by increasing C-efficiency rather than a higher standard rate—but their sample includes only OECD countries.

[31] VAT policy issues more generally are considered in a module of the Tax Policy Assessment Framework developed by the IMF and World Bank, at https://www.imf.org/external/np/fad/tpaf/pages/vat.htm. For a particular focus on lower income countries, see also Cnossen (2019).

[32]Malaysia is of course not an LIDC nor are other countries referenced in this paragraph, but their experience is also relevant to LIDCs.

countries that have previously removed a VAT, however, subsequently reintroduced it (for example Belize, Grenada, Malta, and Vietnam); for them, the wisest response to perceived difficulties with the VAT ultimately proved to be not its removal but its improvement. The next two sections take up two core elements for such improvement.

H. Implementation Challenges

46. Improving the implementation of the VAT—challenging in many LIDCs, as elsewhere—is a centerpiece of wider tax administration reform. More effective VAT management can help realize more fully the potential of the VAT as a productive and efficient revenue source in LIDCs. Moreover, the VAT—as a broad-based tax resting on self-assessment—has wider significance as a catalyst of wider administrative reform. Spillover effects on other taxes—not least those on small businesses and the self-employed—can be considerable.[33] Rios and Seetharam (2017), for instance, find that VAT stimulated the registration of small enterprises in India.[34] Building institutional capacity to properly manage VAT helps the tax administration upgrade its level of expertise and professionalism. Effective VAT management does, however, require the fundamentals to be in place.[35] The challenges that many LIDCs face in implementing the VAT are symptomatic of weak tax administration—not of inherent flaws in the VAT itself.[36]

47. Improving VAT implementation thus requires attention to the core competencies of tax administration—gathering and using information; identifying, measuring, and treating compliance risks; and managing core processes (IMF, 2015). While these broader and overarching aspects of administrative reform are critical, the rest of this section focuses on core VAT-specific issues—of managing VAT credits and taxpayer registration—that are particularly important for LIDCs.

Dealing with VAT Credits

48. The management of credits is one of the most challenging aspects of the VAT for all countries—including LIDCs. As Bird (1993) notes, a VAT invoice is comparable to a check written on the government. The challenges of dealing with this are most evident when excess credits arise—that is, when credit for taxes on inputs exceed tax due on sales—and the government really does pay money to taxpayers. But it also arises when credits simply reduce a positive liability.

[33] Bodin (2012) notes that the accounting-based nature of VAT produces a reconciliation of data that is also needed to calculate profit taxes.

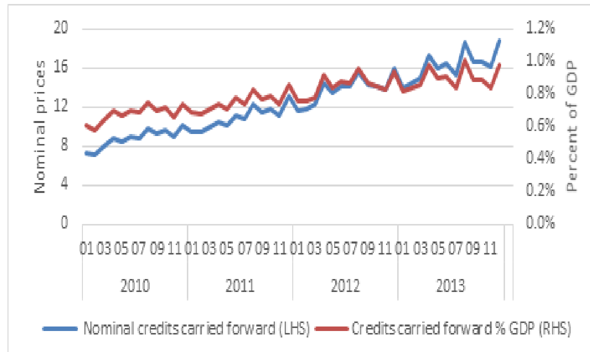
[34] This finds that in the state of Karnataka small businesses are willing to pay 1–4 percent more to register for VAT (except if they sell to final consumers, in which case they only register for VAT if it reduces their tax burden by at least 1 percent), because registered businesses are able to credit the input VAT, as opposed to non-registered ones.

[35] IMF (2017a) cautions that introducing VAT requires some institutional stability and capacity, which is why it is usually envisaged in the second stage of reforms in fragile states.

[36] Supporting countries implementing a VAT remains a major area of IMF capacity development in revenue administration.

49. The management of excess credits, notably for exporters—which can be substantial—is a particular focus of attention in LIDCs as elsewhere. Excess credits arise most pervasively for exporters (since exports are zero rated)[37] but can also arise for startups and others with heavy investment in excess of output, and in the presence of multiple VAT rates (with inputs potentially taxed more heavily than outputs). The amounts can be substantial, including in LIDCs: anywhere from 0.3 percent of GDP[38] to perhaps as high as 0.7 percent of GDP.[39] There is also evidence that in some countries the stock of excess credits continues to grow, which suggests VAT regimes severely limit refunds or other avenues of access to those credits (Figure 27). Managing refunds has been a persistent and widespread challenge for VAT administration and has created tensions between the business community and the government. Failure to pay proper refunds to exporters can have an especially pernicious effect on the economics of the VAT, turning it in part into a tax on exports—with some evidence that this has indeed caused real damage in lower-income countries.[40]

Figure 27. Stock of VAT Credits in an Asian LIDC



Source: IMF staff calculation using country data provided in the context of a RA-GAP Study.

50. Concerns with fraud are a key reason why many LIDCs (and others) limit VAT refunds. The risk is real. A credit fraud using missing electronic cash registers to issue false invoices and claim refunds is estimated to have cost one LIDC two percent of GDP.[41] In an attempt to guard against such frauds, while most LIDCs allow taxpayers who predominantly make zero-rated supplies to apply for refunds they require others to carry forward their VAT credit to the next tax period or beyond. Many countries subject all refund claims to audit, even for taxpayers who regularly apply for refunds (such as exporters), and without applying any risk profiling. As a result, the processing time for refunds can be months or even years. The result can be a tax that is a VAT in name only.

51. Some LIDCs have responded to the challenge of dealing with refunds by establishing special tax treatments for particular taxpayer segments—further complicating administration. Some have introduced mechanisms based on withholding by the buyer of part of the VAT that is payable by a supplier, or imposing a "reverse charge," in order to ensure that VAT due is paid to the government.[42] If broadly adopted (such as in Kenya, Zambia, and Zimbabwe), these mechanisms tend to

[37] Meaning that no VAT is chargeable on output, but input VAT is creditable.

[38] From nineteen (confidential) assessments of LIDCs by the Tax Administration Diagnostic Assessment Tool (TADAT).

[39] International Survey on Revenue Administration database, 2018.

[40] Sharma (2019).

[41] From a (confidential) IMF Revenue Administration—Gap Analysis Program (RA-GAP) study.

[42] The reverse charge mechanism moves the VAT liability (from the seller) to the buyer. The amount thus paid *(continued)*

make administration more complex, affect taxpayer cashflow and often result in more taxpayers being in a net credit position,[43] so amplifying the problem it was intended to address. Such special mechanisms, and others—such as the exemption of mining companies (primarily exporters) in the Democratic Republic of Congo from VAT on their imports—increase the complexity of administering the VAT and the likelihood of errors, risk further distortions (between imports and domestic suppliers, for example) and require innovative control mechanisms.

52. The failure to manage refunds adequately not only undermines the economic merits of the VAT but can result in a large and often unmonitored buildup of government liabilities. It is commonly assumed that since businesses cannot operate for very long if spending more on inputs than they receive from their sales, any excess credit accumulated should be quickly used up, but in many of the countries for which they have been assessed, stocks of excess VAT credits are large and may still be growing (Figure 27). They represent a large, unfunded, and unaccounted government liability.

53. The attention paid to the management of VAT refunds can detract from wider VAT compliance issues—which call for a comprehensive risk-based strategy. A false input VAT credit reduces revenue by the same amount whether it leads to a refund claim or a reduction in net VAT payable, and it is not helpful to separate out the refund risks from those in other stages of the VAT cycle. Experience shows that attempts to ease the tensions around VAT refunds in isolation (rather than as part of a comprehensive and targeted program to build compliance) have mixed results, and jeopardize the tax administration's understanding of taxpayer behavior, which increases revenue risks. Key elements of a strategy to address VAT compliance issues more widely are outlined in Box 5.

54. Ensuring that the Treasury has enough funding for the timely payment of refunds is one of the most challenging aspects of VAT administration in LIDCs.[44] Few LIDCs have ensured that the Treasury allocates enough funding to meet approved, risk-assessed VAT refund claims. As long as governments view VAT refund payments as a government expenditure, instead of a regular budget line item associated with VAT management,[45] LIDC tax administrations will lack an incentive to manage VAT refunds properly. There are ways to address this issue, for example by setting aside part of VAT revenue to cover expected refunds. One Southern African country, for example, used tax returns to estimate the amount needed for refunds, which was segregated from the collection account at the central bank and allocated to the payment of refunds. Unfortunately, this mechanism was dismantled in 2013/14: subsequently, less funding was allocated for VAT refunds and claims accumulated.

is creditable against the buyer's liability on subsequent sales (outputs).

[43] Because the credit due to the supplier for tax withheld by the buyer may exceed the amount by which its output VAT exceeds its input VAT.

[44] Okello and others (2019) provide a unified account of the tax administration and public financial management aspects of managing VAT refunds. See also Harrison and Krelove (2005).

[45] Which means VAT is recorded on a net basis.

Box 5. Elements of a Comprehensive VAT Compliance Strategy

These include:

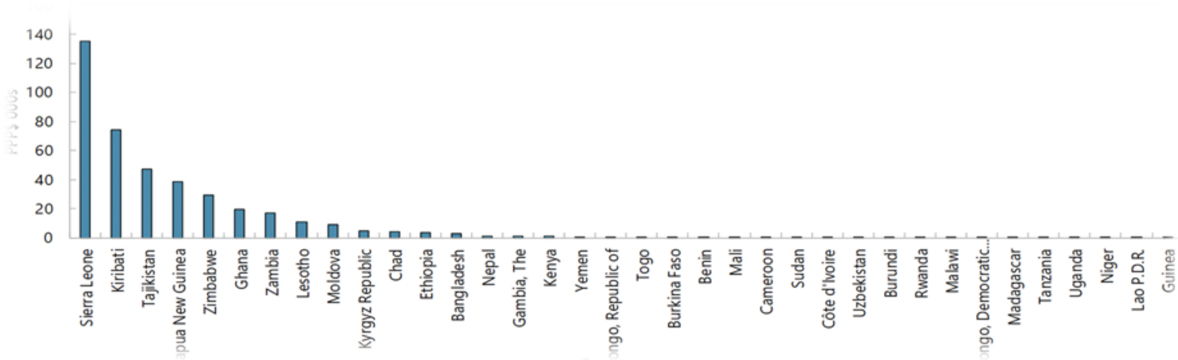
- ***Controlled and monitored registration***: See main text below on eligible taxpayers.
- ***On time-and full filing*:** In addition to supporting the tax assessment, a VAT return should provide needed information to control the VAT value chain. Non-filing compromises the verification of compliance not only for the non-filer, but also for its clients and suppliers.
- ***Prompt and full payment***: Non-payment risks creating credit claims not matched by government receipts.
- ***Verification using third party information***, such as: customs data, government acquisitions and large taxpayers' (especially manufacturers and distributors) transactions.
- ***Controlled issuance of invoices***: Many countries have developed mechanisms to do this: Paraguay implemented risk-based criteria to establish the number of VAT-invoices that would be authorized to be printed, while in Cabo Verde, printing companies are required to report (electronically) the sequencing of the invoices printed to each taxpayer, and taxpayers are required to report the invoices issued and received.
- ***Facilitation of compliance with reporting requirements.*** Several Francophone African countries (including Benin, Cameroon, and Chad) started in 2016–18 to publicize a list of active taxpayers authorized to issue VAT-credit-generating invoices, leading to improved compliance and making it easier for tax auditors to verify the legitimacy of VAT credits claimed. As a result, VAT collection in these countries improved by 5–15 percent in real terms.
- ***Effective use of technology*:** IT is an essential feature of effective tax administration, not least the data-intensive VAT, but is not a solution itself. Examples include the implementation of electronic invoicing and electronic fiscal devices, which can provide the tax administration with useful information. Only a few tax administrations actually use the data so obtained to cross-check tax return information, which in the long run may limit the benefits on compliance of the new technologies. Casey and Castro (2015) analyze the use of electronic fiscal devices (electronic cash registers and fiscal printers) by developing countries and argue they can only be effective if they are part of a comprehensive compliance strategy. Dabla-Norris and others (2019) find that in Peru, VAT e-invoicing increased firm sales, purchases and value-added by almost 10 percent, mostly among relatively smaller firms and in sectors with higher non-compliance. However, the aggregate effects on actual VAT collections are small.
- ***Treating taxpayers according to their risk-profile*:** Establishing a set of treatments according to the taxpayer risk-profile: for taxpayers that pose only a low risk, this may mean facilitating compliance (such as pre-filled returns, providing guidance, supporting compliance with their tax obligations);[46] for high risk-taxpayers, closely monitoring their activities (for example frequent verification programs; in-depth review/analysis of their claims and returns, repeated visits to their premises, closely monitoring the issuance of invoices, performing comprehensive audits, requiring guarantees under some circumstances); for compliant taxpayers, prioritizing their queries[47] and offering cooperative arrangements to reduce compliance costs.

55. Accumulated refund claims can jeopardize sound macro fiscal policies. The amounts at stake are so large that their macroeconomic impact can be significant, with risk of an inflated impression of the government's receipts, understatement of the fiscal deficit and the creation of a significant contingent liability. [48]

Managing Registration

56. The threshold level of sales at which registration to charge the VAT becomes compulsory is a critical anchor for any VAT. Practice in LIDCs (and elsewhere) varies widely (Figure 28), which may reflect insufficient attention to the key tradeoffs that the decision involves.[49]

Figure 28. LIDCs: VAT Thresholds, 2019
(In thousands of PPP dollars)



Source: IBFD

57. Common IMF advice is that a high registration threshold be set as a transitory measure until the tax administration strengthens its capacity to administer a larger number of taxpayers.[50] Ebrill and others (2001) highlight, for instance, that the concentration of potential VAT revenue in the largest taxpayers justifies the establishment of a high threshold, since it favors the deployment of scarce administrative resources towards activities that are expected to produce more revenue. VAT gap studies that have been conducted with IMF assistance corroborate the striking importance of large taxpayers for VAT collection: data for five countries show that, on average, the 20 percent of taxpayers who declared the largest volume of sales (including exempted, zero-rated or taxed transactions) account for 87 percent of total VAT collection. On one East African LIDC, the top 10 ten percent of taxpayers with the highest

[48] Okello and others (2019) elaborate on this.

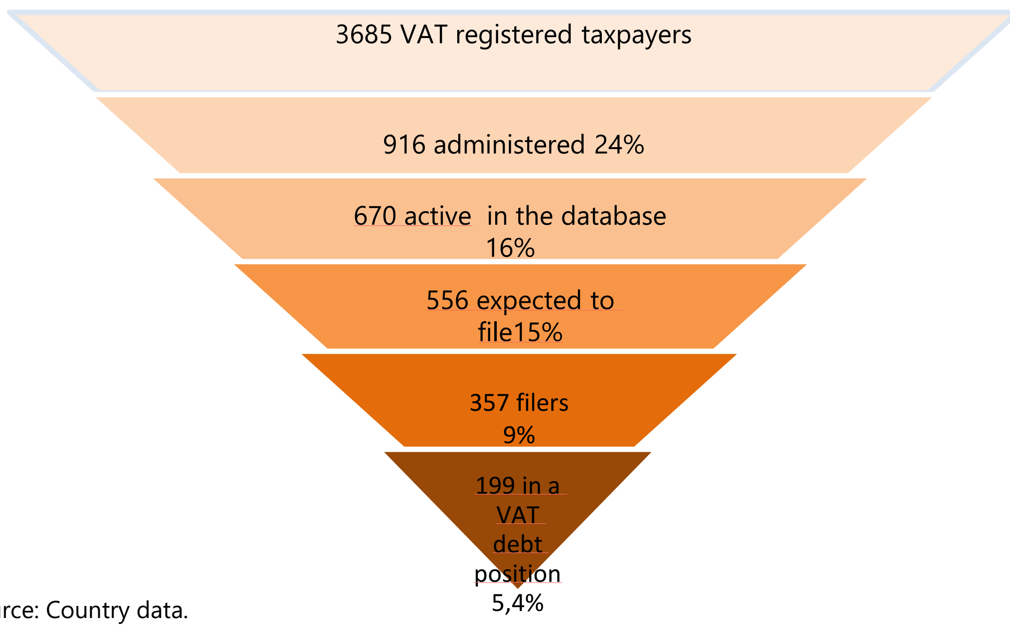
[49] Considerations shaping the proper choice of threshold include not only the impact on revenue but the capacity of the tax administration to properly administer VAT and taxpayers' capacity to comply with VAT requirements (such as periodic filing and paying, maintaining account records, and keeping books and documents), possible distortions to firm behavior (including the possibility of 'bunching' just below the threshold) and distributional considerations (touched on below). On principle, see Keen and Mintz (2004) and Kanbur and Keen (2014); on empirics, for the UK see Liu and others (2018).

[50] IMF (2017a) argues that establishing a high registration threshold is key to successfully implementing VAT in fragile states.

turnover account for 90 percent of total VAT revenues. Experience in LIDCs has shown that increasing the threshold can help improve VAT management. [51]

58. This strategy requires, however, close attention to voluntary registration—which in many LIDCs is very high. Allowing those below the threshold to register voluntarily eases the potential distortion that otherwise arises from unrecovered VAT on their purchases. But these taxpayers impose a burden on the tax administration's capacity: they require more attention—in services and education, and in verification and enforcement actions—which diverts the tax administration's resources away from the larger taxpayers that are responsible for the bulk of tax collection. Voluntary registration also provides opportunities for "bogus traders," whose sole purpose is producing invoices for themselves or for others and creates opportunities for fraudulent VAT recovery. More extensive voluntary registration faces the tax administration with diversified compliance risks.[52] For instance, it increases non-filing risks, which weakens VAT administration along the whole value-chain. Figure 29 illustrates the potential scale of the problem: in this LIDC in Francophone Africa only 916 of 3,685 registered taxpayers are considered by the administration as potential VAT taxpayers, and of those only 199 are net payers.

Figure 29. An African Francophone Country Example—VAT Taxpayer Population



Source: Country data.

[51] In 2015, the Ugandan authorities raised the VAT registration threshold by 200 percent. As a result, the number of registered taxpayers fell by 30 percent; the percent of VAT 'payment' returns increased; offset claims fell by more than 25 percent; the administration's efficiency and effectiveness in managing the register improved; and the VAT/GDP ratio increased from 4.1 percent in FY2014/15 to 4.5 percent in FY2017/18.

[52] Moreover, as many countries use the VAT threshold to differentiate small taxpayers (below the threshold) from medium and large (above the threshold), this situation impacts the segmentation strategy; it increases the number of taxpayers to be administered by the Medium Taxpayer Offices or leaves the management of this population of VAT taxpayers to a network of local offices, whose capacity to administer may not be robust.

59. A robust program to ensure integrity in registration reduces the space for fraud and tax evasion. Properly checking and identifying the *bona fides* of new registrants prevents fraudsters from accessing the VAT value-chain and reduces opportunities for tax evasion and fraud. Paraguay improved the registration process by incorporating biometric data and linking the taxpayer address to Global Positioning System coordinates. Deregistering taxpayers who are defunct helps address fraud through the issuance of false invoices in their name. While de-registering taxpayers has a critical role to play in VAT management, LIDCs often pay limited attention to maintaining a robust tax register.[53]

60. Registration issues are closely related to wider questions concerning the 'self-enforcing' nature of the VAT. To the extent that buyers are registered for the VAT, there is an incentive for their suppliers to register too, in order to ensure that no unrecovered input VAT passes to the final stage. On the other hand, if, for instance, buyers are not registered then their suppliers have an incentive not to register either. There is evidence that both 'good' and 'bad' chains of VAT compliance can emerge,[54] with implications for production efficiency. But results are mixed on whether compliance is best promoted—and 'informality', in that sense, reduced—by strengthening enforcement downstream (at or close to retail stage) or upstream.[55] The latter is more in line with the traditional appeal for tax administration of withholding mechanisms (though not necessarily of the add-on type mentioned above).

I. Distributional Aspects

61. Concerns have often been expressed regarding the regressivity of the VAT. This was one argument invoked for its removal in Malaysia, for example, while Bhutan faced some early challenges to VAT adoption as concerns arose around its impact on vulnerable groups. Some civil society organizations see a tension between heavy reliance on the VAT and efforts to reduce inequality, on occasion asserting that IMF's advice focuses on increasing tax collection and efficiency rather than progressivity (Oxfam, 2017).

62. In practice,[56] the VAT may not be as regressive as often supposed. Reduced rates and exemptions often reduce regressivity, but, as seen below, are a very poorly targeted way of helping vulnerable groups. Reflecting this, some studies find the VAT to be distributionally neutral (for example in Namibia, Ethiopia, Togo: see World Bank (2017), Hill and others (2017) and IMF (2017b), respectively). And there are further effects at work that are not always captured in analyses of VAT incidence:

[53] Which means keeping the register up-to-date, complete and ensuring the quality of its data.

[54] De Paula and Scheinkman (2010), Gadenne, Nandi and Rathelot (2019).

[55] Waseem (2019) suggest the former, for instance, while Pomeranz (2015) finds the latter.

[56] For reviews of the evidence, see also Cnossen (2019) and Bird and Gendron (2007).

- The VAT registration threshold implies, for instance, that sales by small retailers—where the poorest often buy—are VAT exempt. Where data enabling the identification of such purchases are available, the moderating impact of this has been found to be substantial.[57] To the extent that the benefits of non-registration are not passed on the consumer, they likely remain with the seller, who in turn is also likely to be of relatively low income.

- Food production for home consumption is also de facto exempt, with similar effect. More generally, studies which assume[58] the incidence of noncompliance to be equal across all consumption/income deciles overstate the regressivity of the VAT: for a sample of 15 countries Bachas (2019) finds that top decile has 27 percent less untaxed consumption than the bottom one.

- The effect is further amplified if regressivity is assessed not in terms of payments relative to income but relative to aggregate consumption—which is many would argue is likely a better indicator of economic wellbeing.[59] The VAT then becomes a close to neutral or—due to untaxed consumption—even a slightly progressive tax. Alavoutunki, Haapanen, and Pirttila (2019), for instance, find that the adoption of VAT has not led to increased inequality when measured based on consumption, whereas measuring based on disposable income suggests that VAT introduction raises inequality.

- While empirical work generally assume that the VAT is fully passed on to consumers, this may not be the case. For advanced economies at least—as in other areas, there is little if any evidence for LIDCs—there are signs that the benefits of reduced rates of VAT, often intended to help the poor, are less than fully passed on.[60]

63. But the more fundamental point is that the contributions of the VAT to poverty and inequality reduction need to be seen in the context of the overall tax and spending system. The VAT is well suited to raising revenue in a relatively efficient way, but—being based on anonymous transactions rather than finer indicators of ability to pay—is hard to tailor to serve equity concerns. Even in advanced economies, where the personal income tax and other instruments can be more effectively structured to ensure a degree of progressivity on the tax side, equity objectives are mainly served through a range of spending instruments. So too in LIDCs, equity aims are primarily pursued by public spending, both in-kind—health and education services—and, to a lesser but perhaps growing extent, cash transfers. Indeed, recent studies by Commitment to Equity

[57] See for instance the analysis of Jenkins, Jenkins and Kuo (2006) for the Dominican Republic.

[58] To the extent, in many studies, including those mentioned above (e.g., for Ethiopia, see p. 38), the incidence of informality, is assumed to be spread equally across consumption/income deciles, the progressivity of the VAT is underestimated.

[59] This is most evidently the case in context where individuals can smooth consumption relative to income. The poorest, of course, may not be able to do so; but for them, income and consumption are in any case likely to be very similar. Overall then consumption may then give a better indicator of wellbeing. For more on this issues, see Swistak, Wawrzak, and Alinska (2015).

[60] Benedek and others (2019).

(CEQ) Institute, IMF and World Bank on fiscal incidence and income distribution (Table 2) stress that the VAT is an important tool to finance the desired social spending programs geared toward poor households and the provision of other, broad-based, critical public goods. (IMF, 2017b).[61] Fabrizio and others (2017) present a model-based analysis on fiscal reforms and inequality for several LIDCs to comprehensively capture the economic impact of fiscal reform packages in a general equilibrium setup. In particular, they analyze the impact of reform package including VAT increase in Honduras and Uganda. The model has also been applied in other IMF studies, for example for Benin (IMF, 2018), Senegal (IMF, 2019), and Cambodia (Hansen and Gjonbalaj, 2019). These applications broadly indicate that VAT is a preferred reform option regarding the economic and distributional impact, if complemented by mitigating spending measures.

Table 2. Findings from Recent Fiscal Incidence Studies

Country	Year	Authors	Value Added Tax	Social Assistance
Cameroon	2018	CEQ, IMF	Small adverse impact on income distribution; Removal of VAT exemptions needed to boost inequality reducing transfers	Redistributive impact of cash and indirect transfers is weak; in-kind transfers having larger impact on poverty and inequality reduction.
Ghana[1/]	2018	CEQ	VAT reduced rates and exemptions costly and midly progressive (yet, not well targeted towards the poor)	Cash transfers are fairly well targeted and have positive redistributive effect
Eswatini	2017	CEQ, WB, IMF	…	Social transfers generally progressive. Step-up in cash transfers and means-testing needed to further reduce inequality
Ethiopia[1/]	2017	CEQ	VAT reduced rates and exemptions costly and regressive (not equalizing)	Cash transfers are poorly targeted and have limited redistributive effect
Namibia	2016	CEQ, WB, IMF	…	Large social assistance program(s) but poorly targeted
Nigeria	2018	CEQ, IMF	Increasing VAT revenue progressive (reduce income inequality) but increase poverty	Social programs of limited coverage. Widening and scaling up social safty nets would significantly reduce poverty and reduce inequality
Senegal[1/]	2018	CEQ	VAT reduced rates and exemptions costly and neutral (not equalizing)	Cash transfers are fairly well targeted and have positive redistributive effect
South Africa	2017	CEQ, WB	VAT mildly regressive.	Social spending progressive and significantly reducing inequality; targeting of social grants improved in recent years; quality of in-kind transfers needs improving.
Togo	2017	CEQ, IMF	VAT is progressive but increases poverty rate of poor and near-poor	Social spending low and poorly targeted; More VAT revenue needed to financed desired social programs.
Uganda	2017	CEQ	VAT marginally reducing inequality	Social spending, except for spending on tertiary education, reduces inequality but is very small.
Zambia[1/]	2017	CEQ, WB, IMF	VAT reduced rates and exemptions costly and regressive (not equalizing)	Cash transfers are fairly well targeted and have very positive redistributive effect

Note: CEQ's microsimulation methodology adopted in most of the studies, with certain modifications to account for data availability. Consumption-based deciles (derived from household budget surveys) and Gini calculations used in most cases; informality is usually assumed to be homogeneous across households' distribution; embedded VAT calculated using input-output tables where available.

[1] Focus on the analysis of the incidence of VAT reduced rates and exemptions, rather than the existing VAT.

64. No other more progressive and practicable instrument capable of raising comparable amounts of revenue has been identified as an alternative to the VAT. The most obvious instrument is the personal income tax (PIT), but its revenue performance remains weak in many developing

[61] The poorest may well pay more in taxes than they receive in cash benefits. The net impact of the fiscal system then depends on the valuation placed on public spending in kind. Standard incidence assumptions value these at the cost of provision, but, depending on the quality of that spending, this may greatly overstate or understate their cash-equivalent value to the poor.

countries—and as discussed in the previous section, the development of the VAT is intended to catalyze a further strengthening of the PIT. Some have argued for heavier reliance on tariffs, including as a more effective way to tax noncompliant businesses, but the underlying formal argument neglects the key point that the VAT is also levied on imports.[62] Moreover, while tariffs are often excluded from incidence analyses such as those of CEQ, the limited available evidence suggests that these may well be more regressive than the VAT (Bird and Zolt, 2005; Gemmell and Morrissey, 2005). Looking towards the top of the distribution, while there is no doubt that worthwhile additional revenue could be obtained by addressing evasion by the wealthy and avoidance by multinationals, and developing property taxation, the prospects for revenues from these sources to substantially replace VAT in the near future are remote.

65. Reduced rates and exemptions are widely used in LIDCs to mitigate the regressivity of the VAT but are poorly targeted as distributional devices.[63] Examples among LIDCs include Ethiopia, Malawi, and Mozambique, that have continued introducing VAT exemptions or reduced rates. The point is simply that the poor may spend a larger proportion of their budgets on basic items such as food for example, but the better off spend absolutely more, and so receive a larger share of the total benefits. A study by Warwick and others (forthcoming) for Ethiopia, Ghana, Senegal, Sri Lanka, Vietnam, and Zambia confirms that while preferential rates reduce poverty, they are expensive and much of their benefit accrues to better off individuals (see Figure 30). IMF analysis suggests much the same to be true of the prospective VAT, and reliefs, now under discussion in Bhutan (Box 6): with a uniform VAT, the poorest three deciles pay only 9 percent of the overall VAT, while 60 percent of all VAT would be collected from the three top deciles (the richest households)—enough to compensate the poor through targeted transfers. It may nonetheless be the case that if the weight attached to the well-being of the poorest is great enough, and instruments for compensating them weak enough, rate reliefs and exemptions are warranted on equity grounds. But a premium is clearly placed on finding more effective ways of supporting the poorest.

66. Advances in digitalization may come to provide better targeted ways to temper the regressivity of the VAT, while retaining the policy and administrative advantages of a broad-based VAT levied at a single rate—achieving something akin to the possibility in more advanced economies of reshaping income tax and income-related transfers. Ainsworth (2006), for instance, proposed a scheme of individualized VAT ('digital VAT' or 'D-VAT') where those eligible to purchase goods and service free of VAT would do so using a biometric ID card (a solution similar to a point of sale exemption sometimes available to diplomats). Barreix, Bes, and Roca (2012) proposed a similar version of a personalized VAT where the benefits are delivered through crediting an e-card in the amount equivalent to the monthly VAT liability calculated on a presumptive basis (consumption basket of the cut-off decile a person is in). These personalized VATs in LIDCs however, can amplify VAT refunds. A more direct approach is

[62] See Emran and Stiglitz (2005) and Keen (2008).

[63] Other than investment-related VAT reliefs (which would in any case be ineffective in a properly functioning VAT), most VAT exemptions and reduced rates in LIDCs have been introduced with a view to improve VAT equity. Unlike high-income countries (mostly in the European Union), not many LIDCs appear to have used the argument of improved competition (cross-border shopping), efficiency (promoting labor intensive services) or pursuing demand-side incentives (e.g., for energy-efficient appliances, etc.).

to use biometric identification to target cash compensation, a possibility that countries are beginning to experiment with. Possibilities (Box 7) range from targeted transfers to bank accounts (e.g., India) to VAT rebates using digital wallets (e.g., Thailand).[64] Simply using part of the VAT receipts to finance an equal poll subsidy to all adults could more than compensate the poorest while leaving significant additional revenue.

Figure 30. Incidence and Cost of VAT Exemptions and Reduced Rates
(In 2011 PPP USD and percent of consumption)

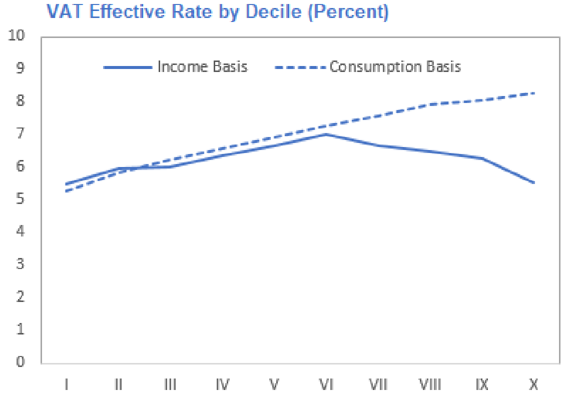
Source: Warwick and others (forthcoming).

[64] A similar approach is used in San Marino (through SMaC or San Marino Card) to pay digital credits to customers buying at SMaC registered establishments. While this scheme is not VAT related (as San Marino does not have VAT yet), it could potentially be used to deliver the benefits of VAT reduced rates.

Box 6. Bhutan—Distributional Impact of the VAT and Reliefs

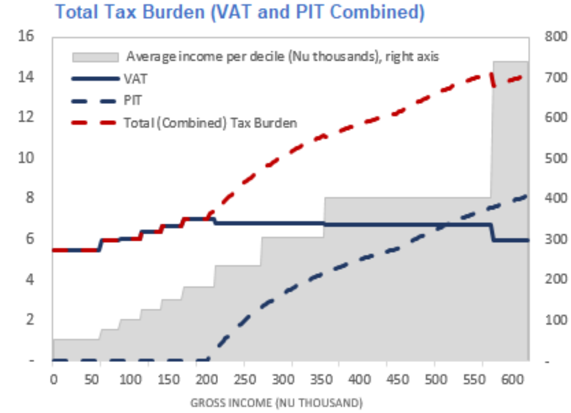
VAT imposes nearly equal tax burden for all income groups (slightly progressive for the bottom and slightly regressive for top deciles).

VAT Effective Rate by Decile (Percent)



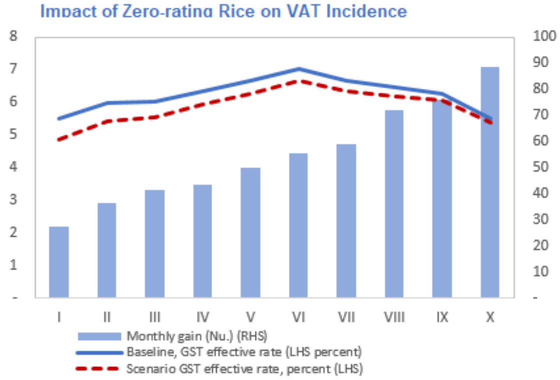
But when coupled with PIT it renders the overall level of taxation progressive—the richest give up a higher share of their incomes.

Total Tax Burden (VAT and PIT Combined)



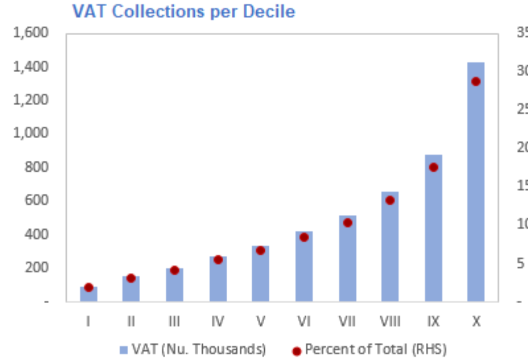
Providing VAT reliefs (e.g., zero-rating rice) does not substantially change VAT incidence; yet, the monetary gain accrues more to the rich…

Impact of Zero-rating Rice on VAT Incidence



…reducing resources available for social assistance programs, as the bulk of VAT is collected from top deciles of income distribution.

VAT Collections per Decile



J. Conclusion

67. The VAT is a central element of the tax system in many LIDCs raising a large share of their overall revenues—and its performance there has been improving. Nevertheless, the VAT remains contentious in some respects. Implementation is challenging for many LIDCs and concerns also arise around the regressivity of the VAT and its impact on vulnerable households.

68. Two key areas for improving implementation are the treatment of VAT credits and management of the VAT threshold. Instead of focusing the attention of the tax administration excessively on VAT refunds, a comprehensive risk-based strategy is needed to address VAT compliance issues more widely. Furthermore, sufficient funding should be ensured for the timely payment of refunds. The registration threshold should be set in line with the capacities of the

Box 7. Innovative Mechanisms for Mitigating the Impact of VAT Regressivity: Lessons from Emerging Market Economies

India established the Direct Benefit Transfer (DBT) system in 2013 as a way of paying subsidies to citizens living below poverty line directly through their bank accounts. The processing of payments is based on the Aadhaar (unique identity number), which covers 93 percent of the adult population. In the run up to the introduction of Goods and Services Tax (GST) in India, there was public discussion of mitigating its distributional impact by—instead of exempting necessities—using the DBT system (through Aadhaar-linked bank accounts) to supplement the incomes of the poorest. It was estimated that a DBT of Rs 2,000 per annum to every individual below the poverty line (BPL) would more than offset any incremental impact of GST, at a cost less than 20 percent of the exemptions. In the event, however, with the DBT at a preliminary stage, India opted for exemptions and reduced rates.

Thailand introduced in late 2018 a system to pay back consumption tax to the recipients of the government's welfare scheme. State Welfare Smartcard (SWS) holders—unemployed, and/or with low income—swipe their cards at shops with electronic data capture terminals, with 5 percentage points of the 7 percent VAT returned to their e-wallet, 1 percentage point going towards contribution to the National Savings Fund or the holder’s savings account and the rest to the Revenue Department; the rebate is capped at around US$16 equivalent per month. Five months after its launch there were 14.5 million smartcard holders and the Government had transferred around US$650 thousand to the e-wallets and an additional amount of around US$120 thousand to the holder’s savings account.

administration and increasing the threshold until the tax administration capacities have strengthened can help improve VAT management. Voluntary registration below the threshold also imposes a burden on tax administration and can divert resources from large taxpayers. Overall, VAT management requires the same core competencies as administering other taxes, so building institutional capacity to properly manage VAT helps the tax administration to upgrade its wider capacities.

69. Concerns with the regressivity of the VAT are sometimes over-stated, and risk leading to even less pro-poor policies. Reduced rates and exemptions can somewhat mitigate the adverse distributional impact, but they do so at a high cost and in a poorly targeted way. Equity concerns need to be assessed and addressed in the context of the overall tax and benefit system, integrating the effect of the VAT with the contribution of other taxes and the social safety net. Targeted benefit programs can be efficient tools to mitigate the distributional effects. Advances in digitalization may also provide innovative ways to offset some of the distributional impact. The VAT can be highly effective in raising revenues, and no alternative less regressive and practicable revenue sources for LIDCs have been identified that are capable of raising as much (much-needed) revenue.

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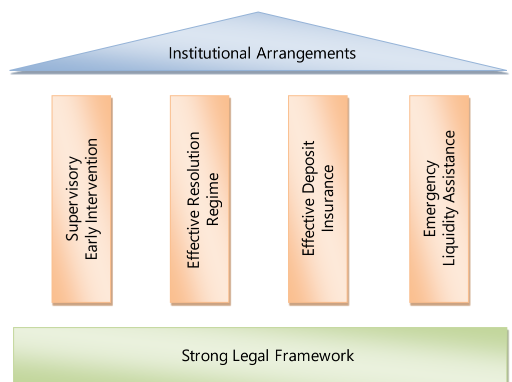
THE FINANCIAL SAFETY NET IN LIDCS

K. Introduction

70. **In the absence of strong financial safety nets, LIDCs are highly vulnerable to financial instability, which may result in high fiscal costs** (Box 7). Bank instability, resulting in significant economic and fiscal costs, has been experienced recently in several LIDCs; for example, in Ghana and Moldova. Going back further, Laeven and Valencia (2018) report that 38 of the 54 LIDCs included in their study have experienced full-blown banking crises since 1976. The same authors estimate the median net fiscal costs of banking crises in low- and middle-income countries at approximately 10 percent of GDP and 22 percent of financial sector assets; and the corresponding figures for high-income countries were 3.3 percent and 3 percent respectively.[65] The median increase in public debt over the three years following the banking crises in low- and middle-income countries was 16 percent of GDP, severely straining debt sustainability in many cases. Given the smaller size of the financial system in LIDCs as compared to advanced economies (as a percentage of GDP), costs in LIDCs would be lower if efficient financial safety nets were in place.

Box 8. Financial Safety Nets for Banks

An effective financial safety net supports the orderly recovery and resolution of weak and failing banks. The financial safety net comprises four pillars:



- **Powers for early intervention:** Bank supervisors need strong powers for intervention and enforcement, as delays in addressing bank problems typically lead to greater losses and risks (including of contagion).
- **Effective powers and tools for resolving failing banks:** A well-designed resolution regime allows authorities to resolve failing banks quickly and maintaining financial stability without exposing taxpayers to loss.
- **Deposit insurance:** Effective deposit insurance system (DIS), along with depositor preference, enhances depositor confidence and reduces the risk of deposit runs and contagion.
- **Emergency liquidity assistance (ELA):** An effective ELA framework enables central banks to provide liquidity, while protecting their balance sheets, to mitigate the risk that temporary bank illiquidity leads to insolvency or financial instability.

A well-designed financial safety net can minimize the risks of system-wide financial distress and the four pillars complement each other—for example, effective early intervention combined with ELA provision and depositor confidence induced by a DIS can reduce the risk that a temporary shock leads to bank runs. For a country's safety net to work, it must also have a formal mechanism for information sharing and coordination among safety net participants. Inter-agency contingency planning should address coordination, decision making and communication in a crisis scenario and be tested in crisis simulations.

[65] See Luc Laeven and Fabian Valencia: Systemic Banking Crises Revisited, IMF Working Paper No. WP/206/18.

71. International financial standards were strengthened following the global financial crisis (GFC) to reduce the likelihood that public funds need to be deployed to preserve financial stability and should underpin reform in LIDCs. To enhance bank resolution regimes and support cross-border resolution, the Financial Stability Board (FSB) developed a new international standard—the *Key Attributes of Effective Resolution Regimes for Financial Institutions* (Key Attributes). The International Association of Deposit Insurers (IADI) compiled the *Core Principles for Effective Deposit Insurance Systems* (IADI Core Principles) as a benchmark to assess the quality of deposit insurance frameworks and subsequently strengthened them.[66] International standards and good practices in bank resolution, deposit insurance, and emergency liquidity assistance (ELA) should guide the reform agenda but need to be adapted proportionally to country-specific circumstances, including the complexity of the financial system and the capacity of authorities.

72. Recent experience with bank failures in LIDCs revealed continuing weaknesses in the financial safety nets, including: (i) the absence of options to resolve banks without resorting to public bail-outs;[67] (ii) insufficient arrangements to protect small depositors without taxpayer funds; and (iii) inadequate arrangements on the provision of central bank liquidity to banks at times of stress. Combined, these shortcomings raise the cost of bank failures and the risk of financial instability and taxpayer bailouts. While reforms are underway in some countries, many LIDCs still need to make significant further progress in all three areas to move closer to international best practice.

73. This chapter examines current arrangements and best practices for LIDCs in three pillars of the financial safety net—the resolution regime, deposit insurance, and ELA. The discussion is based on staff experience from Fund programs and technical assistance, including the Financial Sector Assessment Program (FSAP) and Financial Sector Stability Reviews (FSSRs). Challenges in upgrading safety nets in LIDCs, including in adapting international standards to meet specific LIDC circumstances, as well as areas in need of further reform, are identified.

L. Bank Resolution Frameworks in LIDCs

74. An effective resolution regime allows the authorities to manage bank failures while preserving financial stability and protecting taxpayers. Experience has shown that a general corporate bankruptcy or insolvency framework is ineffective for dealing with failing banks. However, in many LIDCs, that may be all that is available. The resolution of banks must be quick to prevent contagion and preserve financial stability, whereas corporate insolvency procedures are often slow. In addition, retail deposit services and other critical functions provided by systemic banks need to be preserved (although, the bank itself need not be). A special legal regime for bank resolution is the

[66] The Basel Committee on Banking Supervision also revised the Core Principles for Effective Banking Supervision ("Basel Core Principles") in several areas, including strengthening early intervention powers. Supervisory recovery and early intervention powers were previously covered in the chapter of the 2016 LIDC report on bank regulation and supervision.

[67] More progress has been made in strengthening bank resolution regimes in countries which are home or host to global systemically important banks. This reflects in part the resolution standard being designed primarily to address the challenges posed by global systemically important banks.

best way to address these public policy objectives and deliver the overarching objective of maintaining financial stability. Once the supervisor deems a bank to be not viable (e.g., in serious breach of, or judged to have little prospect of restoring compliance with regulatory requirements), decisive and rapid actions are required to ensure that depositor confidence in the financial system is maintained and losses do not continue to accrue. Financial stability risks are minimized by ensuring that small depositors—typically, the bulk of bank liabilities in LIDCs—maintain access to their funds. Economic losses can be minimized by preserving critical functions of systemic failed banks, which ensures that performing assets are managed on a going-concern basis by acquiring or successor entities.

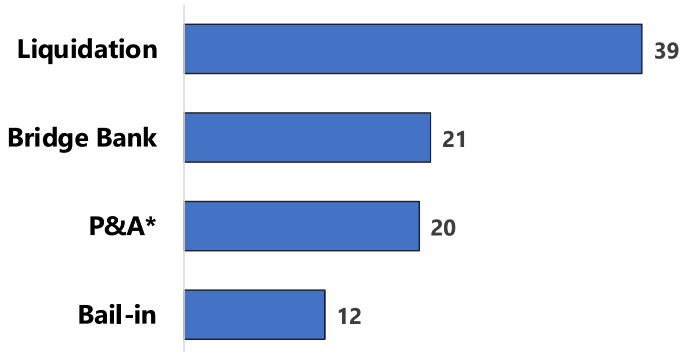
75. Best resolution practices were published by the FSB in 2011 as the *Key Attributes of Effective Resolution Regimes for Financial Institutions*.[68] The Key Attributes prescribe a range of powers and resolution tools that should be exercisable swiftly and permanently by the administrative resolution authority, without requiring shareholder or creditor consent and without courts being able to overturn or stay the resolution authority's decisions. The Key Attributes also prescribe creditor safeguards, including ex post judicial review and redress. Redress should be limited to monetary compensation if creditors are made worse off than they would have been if, instead, the entity had been liquidated. Amongst other resolution powers, the resolution toolkit should include the ability to transfer ownership of the troubled financial entity, or its assets and liabilities, either directly to a private purchaser (often called Purchase & Assumption or P&A) or via the intermediate step of a bridge bank,[69] and to recapitalize or 'bail-in' a failing systemic bank by reducing the nominal value of some liabilities and converting creditors to shareholders. The Key Attributes additionally include requirements for recovery and resolution planning, as well as formal arrangements for international cooperation to deal with cross-border institutions.

76. Many LIDCs lack a special bank resolution regime with effective resolution powers. Many authorities in LIDCs lack effective powers and are typically limited to (court-based) liquidation without the ability to apply other resolution powers that could deal with systemic failures (Figure 31) more effectively. In such circumstances, the authorities are left with the only option of nationalizing a failing system bank and bailing out its creditors to preserve financial stability. In such regimes, the closure of small, non-systemic banks can also be inefficient and cost-intensive, (e.g., leading to protracted court procedures, resulting in low recovery rates). Other shortcomings observed by staff in LIDC resolution regimes include the overall inadequacy of the legal framework, a lack of capacity impeding the relevant authorities from preparing for resolution in advance, and inadequate mechanisms to facilitate information exchange and cooperation for cross-border bank resolution in countries with significant foreign-owned banks.

[68] See FSB, Key Attributes of Effective Resolution Regimes for Financial Institutions, 2011 (updated 2014) https://www.fsb.org/wp-content/uploads/Key-Attributes-Assessment-Methodology-for-the-Banking-Sector.pdf/.The KA are part of the IMF and World Bank's Standards and Codes Initiative and FSAP.

[69] A bridge bank is created by the financial safety net authorities to operate parts of the failed bank's operations (for example, the deposit business) until a buyer can be found for them.

Figure 31. Types of Resolution Tools in LIDCs



Sources: IADI Annual Survey 2018 and IMF Staff Survey
Note: The sample consists of 39 countries out of a total of 59 LIDCs (Low-income Developing Countries).
***** P&A refers to purchase & assumption.

77. The Key Attributes need to be tailored to financial systems in LIDCs. The resolution regime should be proportionate to the size, structure, and complexity of the jurisdiction's banking system, and to the capacity (including expertise, governance, and independence) of its authorities. Staff considers[70] that all countries should adopt a special resolution regime with the following powers to: remove management; appoint an administrator; operate and resolve a bank; override shareholder rights; transfer assets and liabilities (P&A powers) including to a bridge bank; suspend creditor payments; and liquidate a bank. The resolution toolkit in LIDCs should, at a minimum, include the ability to use time-tested and cost-effective P&A and bridge bank tools. For a P&A transaction, resolution authorities need the power to transfer select assets and liabilities from the failed bank to a third-party institution or to a newly established bridge bank. Only in the absence of an acquirer should a bridge bank take over temporarily and continue operating certain critical functions and viable operations until a sale to a private-sector party can be completed. The P&A tool also offers an efficient and less disruptive way for a DIS to ensure that depositors retain access to their insured deposits through the transfer of those deposits to another bank, rather than relying on a lengthy and uncertain payout procedure. Other resolution tools foreseen in the Key Attributes may be less suitable for LIDCs. For example, statutory bail-in powers can be complex to execute and are relatively untested. It requires the resolution authority to undertake a valuation and determine haircuts in real time to execute a bail-in that may be challenging in an LIDC environment.

78. LIDCs should designate an administrative resolution authority that could build the necessary expertise and preparations to resolve banks. Fulfilling the public objectives of resolving banks and applying strong resolution powers requires a clearly identified administrative authority in each country. The resolution authority should have operational autonomy from both government officials, shareholders, and the industry, in general, as well as transparent processes, sound governance, and adequate resources. Because private (commercial) interests are impacted in resolution, which could lead to legal challenges, resolution authority staff should be legally protected. Giving the mandate of resolution authority to the central bank and the supervisor is often the most suitable option for LIDCs. Having the resolution authority under the same roof as the supervisory and ELA authority should allow

[70] IMF (2014).

for efficient cooperative arrangements and information exchange for resolution purposes, while leveraging the capacity and legal protection of the central bank. Adequate firewalls and governance arrangements should mitigate conflicts of interests that may arise when these responsibilities are housed within the same institution. Two LIDCs (Kenya and Nigeria) have given resolution powers to their independent deposit insurance agencies, but, in most LIDCs, administrative resolution powers (as they currently exist) reside with central banks.

79. In general, LIDCs should enhance crisis preparedness through bank-specific recovery and resolution planning. The Key Attributes require Recovery and Resolution Plans (RRPs) should be prepared in all jurisdictions, at a minimum for all banks that could be systemically significant or critical if they were to fail. Recovery plans serve to guide the recovery of a bank in distress. They should be developed and maintained by bank's management and reviewed and approved by the supervisor. They should include measures at pre-identified triggers to bolster capital and liquidity, such as the divestiture of business lines and restructuring of liabilities in periods of stress (prior to resolution). Resolution authorities should be tasked with developing and regularly updating resolution plans and ensuring that any impediments to effective resolution are removed. The plans should facilitate orderly resolution to protect critical functions without severe disruptions or losses for taxpayers. While Fund staff usually advise countries to require all banks to produce recovery plans, resolution plans should be in place, at least, for systemic or banks with significant cross-border operations. The requirement for RRPs should be subject to proportionality and reflect the complexity, interconnectedness, size, and extent of cross-border operations of banks subject to it.

80. The growing importance of foreign-owned banks in LIDCs, especially in Africa, makes cross-border cooperation arrangements crucial. These should include arrangements for sharing information and coordinating the preparation of RRPs to facilitate the management of a cross-border failure. An LIDC that is host to a bank with a regional (or global) footprint will be affected by the resolution decisions taken by the home authority, with potentially severe consequences for the host jurisdiction if, for example, they don't take into consideration the systemic importance of the foreign bank in the host country. While authorities should work together on a common resolution strategy that is in the best interest of all parties, diverging interests might make such an outcome difficult to achieve. Thus, host authorities should be prepared for a "Plan B" to safeguard financial stability in their jurisdiction and have their own resolution strategy prepared in case joint planning fails. Many LIDCs have made little progress in cross-border resolution planning and should, in the first instance, seek to leverage existing supervisory arrangements for cross-border coordination (if they exist), including supervisory colleges.

81. Resolution powers require adequate resolution funding. At the point at which a bank fails, its buffers of liquidity and capital will typically have been eroded. Resolution funding may be needed to effect an orderly resolution, for example, by backing a transfer of deposits to another bank; purchasing impaired assets; or injecting liquidity after a bail-in of creditors. Pre-established arrangements should allow the resolution authority to promptly mobilize the financial resources necessary, so that authorities are not constrained to rely on public funds as a means of resolving banks.[71] In LIDCs, particularly those

[71] The Key Attributes accept three types of funding arrangement; industry-financed deposit insurance fund; a *(continued)*

where a deposit insurance scheme (DIS) is ex post-funded or underfunded, the priority should be to make the DIS adequately funded and operationally available to fund bank resolution, instead of creating a separate fund that will need its own resources and may likely need to levy the same institutions as the DIS. Using public resources for resolution should be a last resort, used only when financial stability is severely threatened and subject to strict conditions, such as first recognizing losses to avoid bailing out shareholders.[72]

M. Deposit Insurance Systems (DIS) in LIDCs

82. A well-designed DIS enhances depositor confidence and reduces the risk of bank runs. By protecting small depositors, who, typically, do not have the skills to monitor bank risk-taking, deposit insurance helps preserve the financial wealth of average households and maintain bank deposits as a safe means of making payments, including during times of financial distress. A well-designed scheme must ensure sufficient coverage to protect the *maximum number of* retail depositors, and not *the maximum amount* of deposits, by excluding *high value* deposits of corporates and other sophisticated investors. The DIS should have a well-endowed deposit insurance fund that raises regular contributions by all deposit-taking institutions, with a credible line of back-up funding (commercial credit lines are likely to be unreliable at times of system wide stress).

83. DISs exist in over half of all LIDCs with different mandates (Figures 32 and 33).[73] Staff are aware of a further 12 LIDCs, which are taking steps toward establishing a DIS. DISs can be established, using various mandates ranging from narrow "pay box" systems that are limited to the reimbursement of insured deposits to systems with more extensive responsibilities for resolution or supervision.[74] DISs in LIDCs operate mainly under a narrow "paybox" or "paybox plus model" (which allows deposit insurance funds to be used in resolution) and two-thirds are set up as an independent body. Broader loss minimizer mandates where the deposit insurer is also the resolution authority exist only in Kenya and Nigeria. Most LIDCs have set up their DISs as independent agencies, meaning they are legally separated from already existing institutions, such as the central bank. Some of them may be working with seconded staff from, or use the office infrastructure of, the central bank.

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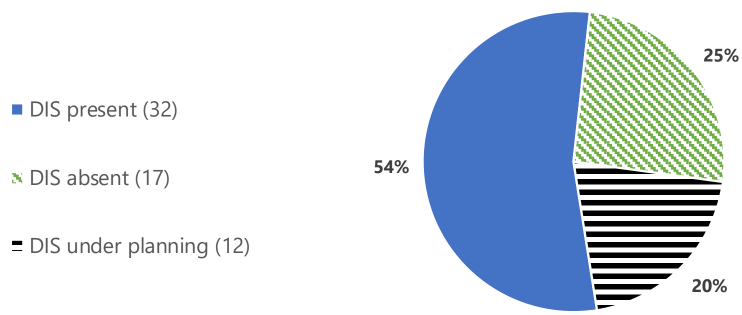
special resolution fund; and a funding mechanism for ex post recovery from the industry of the public costs of temporary resolution funding from the official sectors.

[72] See Box 5 of Dell'Ariccia (2018).

[73] There are two cross-border schemes in LIDCs: The Deposit Guarantee Fund of the Central African Economic and Monetary Community (CEMAC) with six countries (Cameroon, Central African Republic, Chad, Republic of the Congo, Equatorial Guinea, and Gabon) and the West African Monetary Union (WAMU) Deposit Insurance Fund covering eight members (Benin, Burkina Faso, Côte d'Ivoire, Guinea Bissau, Mali, Niger, Senegal, and Togo.).

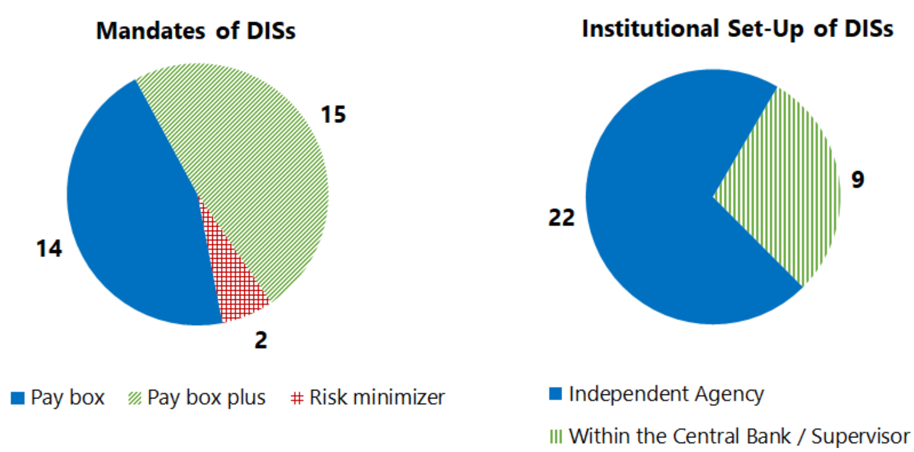
[74] IADI differentiates between the following four DIS mandates: (i) A pay box mandate, in which the deposit insurer is only responsible for the reimbursement of insured deposits once a bank is closed by the supervisory agency or central bank; (ii) a pay box plus mandate, in which the deposit insurer has additional responsibilities, such as to provide resolution funding; (iii) a loss minimizer mandate, in which the insurer actively engages in a selection from a range of least-cost resolution strategies when the deposit insurer is also the resolution authority; and (iv) a risk minimizer mandate, in which the insurer has comprehensive risk minimization functions that include risk assessment and management, a full suite of early intervention and resolution powers, and in some cases, prudential oversight responsibilities.

Figure 32. Deposit Insurance Scheme (DIS) in LIDCs



Sources: IADI Annual Survey 2018 and IMF Staff Survey
Note: The total number of LIDCs in the sample is 59, of which 32 have a DIS (Deposit Insurance System). Twenty-nine LIDCs do not have a DIS, of which 12 LIDCs are currently in the planning process.

Figure 33. Mandates and Institutional Setups of DIS in LIDCs



Sources: IADI Annual Survey 2018 and IMF Staff Survey.
Note: The sample consists of 31 LIDCs with a DIS.

84. A key challenge for LIDCs when introducing deposit insurance is first to ensure a conducive operating environment. As emphasized in the IADI Core Principles, a DIS can function effectively when it is embedded in a stable macroeconomic and healthy financial sector structure; with effective banking regulation, supervision, and resolution; and well-functioning legal, accounting, and disclosure systems.[75] While the design of the DIS can seek to address some weaknesses, for example, by prescribing a higher funding level, Fund staff does not recommend[76] establishing a DIS in countries with weak banking supervision, ineffective resolution regimes, and identifiably weak or undercapitalized banks. Doing so would expose a nascent scheme to significant

[75] See IADI Core Principles for Effective Deposit Insurance Systems: www.iadi.org/en/assets/File/Core%20Principles/cprevised2014nov.pdf; and IADI Assessment Handbook: http://www.iadi.org/en/assets/File/Core%20Principles/IADI_CP_Assessment_Handbook_FINAL_14May2016.pdf

[76] IMF (forthcoming).

risk of losses at a time when it has yet to build adequate funding and establish operational capacity. This would erode depositor confidence in the scheme on inception. Rather, the authorities should make significant progress in addressing deficiencies before introducing deposit insurance.

85. In the interim and also as a complement to deposit insurance, authorities should adopt depositor preference (Box 8). Depositor preference helps reduce the costs of protecting retail depositors, both in countries with deposit insurance (where the savings accrue to the DIS) and in countries without (where it can facilitate the preferential disbursement of asset recoveries, or advance payment, to retail depositors). Staff considers that either tiered or general depositor preference offers most advantages in jurisdictions with a DIS, as these forms prefer all eligible deposits over other senior and more sophisticated creditors. In line with the Key Attributes, the design of depositor preference rules should not give preference to depositors on the basis of their nationality, the location of the deposit claim, or the jurisdiction in which the claim is payable, as this would impede cross-border cooperation among resolution authorities.

86. Country-specific circumstances should inform a decision on the most appropriate mandate for a DIS. In the smaller and less complex financial systems, a "paybox plus" mandate that allows the scheme to reimburse insured depositors in a bank liquidation, but also fund certain bank resolution measures (such as P&A), may be best suited to the resources available in LIDCs. The financial support for a resolution should be on a least-cost basis (meaning less costly than a payout of insured deposits) to avoid overburdening the deposit insurance fund. This approach provides a better outcome to a lengthy payout of insured deposit in liquidation, by ensuring the following:

- Continuity of service for depositors who are transferred to another bank;
- Reduced deposit insurance outlays because only the gap between assets and liabilities transferred is covered by the DIS, not the full amount of insured deposits; and
- Maximized asset values as performing loans continue to be managed as a going concern by the acquiring bank.

Broader loss or risk minimizer mandates, which give resolution or supervisory powers to a deposit insurer, may be less suitable for LIDCs, as they may unnecessarily duplicate tasks already assigned to other agencies of the safety net (typically the central bank), which could raise issues of responsibilities, coordination, and competition for hiring qualified personnel and resources.

87. While many LIDCs have decided to set up their DISs as independent agencies, a case can be made for establishing a new DIS within an already existing authority. A stand-alone agency will create the need for its own infrastructure, including personnel, IT infrastructure, and housing, all of which will need to be borne out of the collected funds. Such an agency may be appropriate only in countries that have large banking sectors, which can adequately fund such an organization. In LIDCs, a DIS within the central bank (or banking supervisor) could be more appropriate as long as operational independence of the deposit insurance function is secured (including by giving the DIS its own separate decision-making process and separate budget and

Box 9. Depositor Preference

Introducing depositor preference in the hierarchy of claims in liquidation affords small depositors a degree of protection. Depositor preference means granting deposit liabilities a higher claim class than other general creditors against the proceeds of liquidation of an insolvent bank's assets. Depositors must be paid in full before remaining creditors can collect on their claims, resulting in a higher (often full) recovery rate for the preferred claims. It helps reduce the costs of protecting retail depositors, both in countries with deposit insurance (where the savings accrue to the DIS), and in countries without where it can facilitate the preferential disbursement of asset recoveries, or advance payment of retail depositors (cash flows from asset recoveries in liquidation can be used to quickly first repay insured depositors). Deposit preference has several benefits:

- *Reducing the cost of protecting depositors in liquidation or resolution.* Preferring deposits—and subrogating[1] the DIS in place of insured deposits—reduces the cost of deposit payouts or the DIS contribution to a resolution, bolstering credibility of the scheme.
- *Facilitating resolution.* By creating clear legal grounds for preferential treatment of deposits over other unsecured creditors, deposit preference may help reduce legal challenges in case of a transfer of deposits to another institution, or the bail-in of non-deposit creditors.
- *Protecting payments and economic activity.* Deposits are often used as a means of payment rather than a store of value. Deposits of nonfinancial firms and public entities may be used for paying wages and suppliers, and uninterrupted access ensured through a transfer of deposits will avoid payments disruptions.

Depositor preference can take several forms:

- *Insured depositor preference* gives preference to insured depositors (and the deposit insurer under subrogation);
- *Tiered depositor preference*, in which eligible, but uninsured deposits[2] have a higher ranking than claims of ordinary unsecured, nonpreferred creditors, and insured depositors have a higher ranking than eligible depositors; and
- *General depositor preference*, in which all deposits have a higher ranking than claims of ordinary unsecured, nonpreferred creditors, regardless of their status (insured/uninsured or eligible/not eligible).

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[1] Substituting the DIS to receive recoveries from liquidation in place of insured depositors reimbursed by the DIS.
[2] For example, the amount of deposits an insured depositor holds in excess of the coverage level of the DIS.

accounting). Having the DIS within the central bank allows it to gain access to the central bank's institutional and operational capacity, supervisory knowledge, and legal protection. Some LIDCs have chosen an evolutionary approach. For example, in Kenya, Tanzania, Uganda, and Zimbabwe, the DISs started within the central bank and have only recently become independent institutions, but sometimes still relying on seconded central bank staff.

88. **While almost all DISs in LIDCs are ex ante funded (as best practice dictates), funding arrangements still need to be strengthened.** To be able to reimburse depositors promptly, a DIS needs to build a sufficient fund through ex ante contributions from deposit-taking institutions. Many DISs in LIDCs still need to reach prudent funding levels that will cover their potential funding needs and continue to build up reserves. In addition, arrangements with the government to provide back-up financing should be in place for cases where the collected resources are insufficient. Staff

experience on LIDCs is that back-up funding arrangements are often nonexistent or insufficient, or they cannot be implemented quickly enough (e.g., because they require parliamentary approval). The resulting delays in reimbursing insured depositors could negatively impact confidence in the DIS and the financial safety net.

89. Payout timeframes for most DISs in LIDCs are much longer than international best practice. Prompt and accurate reimbursement is crucial to financial stability because it helps maintain public confidence, minimizes the likelihood of contagion, reduces disruption for depositors, and maintains the credibility of the DIS. The IADI Core Principles call for a seven-day payout period; however, in practice, most DISs in LIDCs still work with much longer payout timeframes ranging from 30 days to, in some cases, a few months. To ensure efficient payouts, DISs must build up payout procedures and capacity. Close cooperation with bank supervisors is needed to require banks to maintain and enhance the quality of depositor records, which allows the identification of insured depositors and deposits quickly.

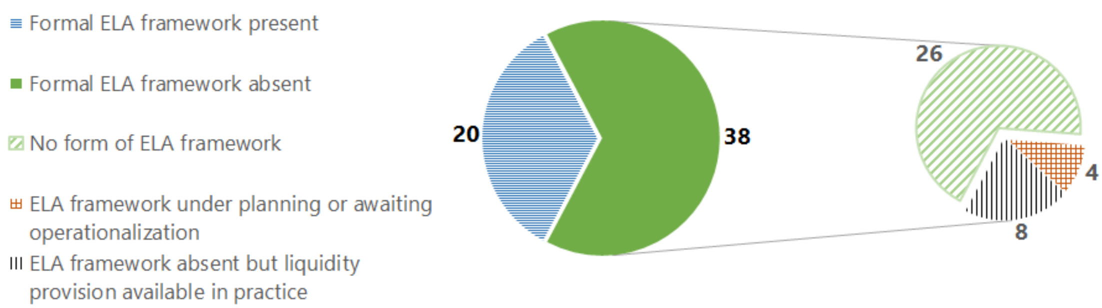
90. New emerging issues like Fintech also call for the attention of authorities in LIDCs. The use of mobile money which has, in some LIDCs, already attracted high numbers of users, raises questions of how the safety net should address issues of user protection and resolution. The deposit-like nature of some of the services creates financial stability and consumer-protection issues in the event of failure of a mobile money issuer. However, arrangements to deal with the failure of a mobile money issuer are only nascent and, in the absence of standard or international best practice, authorities have taken different approaches when deciding if and how users may be protected. Authorities in LIDCs should monitor developments to stay abreast of technical innovation and best practice in supervision, licensing, and user protection.

N. Emergency Liquidity Assistance (ELA) in LIDCs

91. ELA is used by central banks to provide liquidity in the event of institution-specific shocks affecting one or few individual financial institutions. ELA has two principal objectives; first, to provide liquidity to solvent financial institutions facing temporary illiquidity; and second, to avoid wider contagion. It may be required when one or more individual financial institutions are unable to maintain or roll over funding (whether retail or wholesale). Demand for central bank liquidity may also stem from a single institution encountering problems, such as deposit outflows triggered by a large loss, or possibly a group of institutions with similar business models or geographical focus. The underlying rationale behind such liquidity provision is to mitigate the risk of system-wide instability, recognizing the risk inherent in bank balance sheets arising from maturity mismatches in the banks' balance sheets—banks borrowing at shorter maturities than at which they lend.

92. A formal framework for ELA is in place in about one-third of the LIDCs (Figure 34). Of the 58 LIDCs in the sample, 20 countries have a formal ELA framework in place. While 38 countries have no formal ELA framework established, in four of them a framework is under planning.

Figure 34. Emergency Liquidity Assistance (ELA) Frameworks in LIDCs



Sources: IMF-MCM staff survey and IMF-MOID database.
Note: The sample includes 58 of the 59 LIDCs.

93. LIDCs face a variety of challenges in setting up ELA frameworks and operationalizing the mechanism. Many LIDCs have not incorporated ELA into central bank laws with specified powers. Additional weaknesses in ELA frameworks in LIDCs stem both from legal as well as operational capacity issues: (i) lack of transparency in establishing statutory preconditions for ELA; (ii) weak legal authority of the central bank in imposing terms and conditions on ELA; (iii) absence of detailed frameworks for viability assessment and collateral requirements; and (iv) inadequate capacity to effectively mobilize collateral and for collateral valuation. Many LIDC central banks lack ELA frameworks, but do still provide liquidity to banks in the event of idiosyncratic or system-wide shocks, often using extended standing facilities or ad hoc mechanisms, without a thorough solvency or viability assessment and without any safeguards, leading to central banks incurring significant risks and losses. Central banks should have formal frameworks in place for ELA provision with safeguards to protect them from losses that could compromise their independence or ability to undertake monetary policy.[77]

94. While the design of effective ELA frameworks is not covered by international standards, guidance on this topic was updated in recent years in light of the experience of the GFC.[78] Among other changes, ELA should still only be provided to viable entities, and this assessment should be made on a forward-looking basis, taking into account the recovery and/or resolution plan. Disclosure relating to the extension of any bilateral ELA should occur on an ex post basis and allow for being delayed temporarily, until financial stability would no longer be undermined when the decision to grant ELA becomes public. It is also understood now that central banks may need to extend ELA for periods longer than a few weeks in cases where there are systemwide problems. ELA should not be limited to banks designated as systemically important as, for example, at times of heightened contagion risk, the failure of a smaller bank could have

[77] ELA should be provided only at the central bank's discretion to viable banks at a penalty rate, with appropriate haircuts on collateral, and should trigger enhanced supervision, including a timebound repayment plan.

[78] See "The-Lender-of-Last-Resort Function after the Global Financial Crisis," M. Dobler, S. Gray, D. Murphy, and B. Radzewicz-Bak, IMF Working Paper, No. 16/10 (https://www.imf.org/~/media/Websites/IMF/imported-full-text-pdf/external/pubs/ft/wp/2016/_wp1610.ashx).

unintended consequences for the wider system. It may be appropriate for central banks to have statutory powers to provide ELA to nonbanks on an exceptional basis. This could be considered in LIDCs if nonbank financial entities are systemic (e.g., central clearing counterparties). Support for nonbank entities should not be pre-committed and should be restricted only to appropriately supervised nonbank financial institutions.

95. While attempts should be made to ensure that ELA is adequately collateralized, insufficient collateral or quality of collateral continue to be a concern in LIDCs. An entity requesting ELA likely has run out of sufficient high-quality collateral (which would allow access to standing liquidity facilities), so central banks should be able and prepared to accept a wide range of unencumbered assets where ownership can be transferred legally, and the risks can be managed by the central bank. Non-standard collateral (ineligible for standing facilities) should include nonmarketable assets, such as credit claims, for which specific legal and procedural requirements apply.[79] The acceptance of credit claims has the potential to substantively increase the amounts of ELA collateral. However, credit registers, which would support identification and verification of loan characteristics and debtor information at the individual loan level, are often absent in LIDCs, which complicates the eligibility assessment and valuation of these assets. The central bank should define an ELA collateral policy framework based upon predetermined and prudently defined risk tolerances and methodologies. Sufficient expertise (e.g., on collateral, due diligence, and pricing) and adequate training of central bank staff will need to be developed, along with regular simulation exercises and test transactions. Systems and information sources to determine credit quality of ELA collateral, and to value and manage such assets, should be put in place as part of contingency planning.

96. Other challenges for LIDCs include ELA provision in foreign currency. The need for central banks to have the legal capacity and sufficient funding to provide ELA in a currency different from their own is critical in countries where a large fraction of deposits is denominated in a foreign currency. For the majority of central banks in LIDCs, their ability to meet FX liquidity needs will be highly constrained by the availability of their international reserves. During the GFC, major advanced economies and some emerging markets resorted to central banks swap lines to meet large foreign currency needs. However, they are unlikely to be available to LIDCs. Supervisors in LIDCs should therefore have in place preventive measures that limit foreign exchange liquidity mismatches where possible, for example, by imposing foreign currency prudential liquidity requirements.

97. Another lesson derived from the GFC is that a bank in resolution will likely need liquidity. A central bank should be able to provide liquidity, subject to safeguards, to a bank whose current solvency may be in doubt, but which is considered systemic and viable in the context of a realistic timebound resolution plan. The assessment of a bank's viability in resolution depends largely on the resolution measures being implemented by the resolution authority: their feasibility, funding, and timeliness. The resolution authority or supervisor should make a positive determination of viability, and the ultimate decision to provide ELA should rest with the central bank. A close

[79] Legal obstacles for an effective and efficient transfer of the credit claim may, for example, include the requirement to inform or (even) receive consent on the transfer from the debtor ahead of the transfer of the credit claim as collateral.

dialogue between the central bank and the resolution and supervisory authorities will be crucial, as they must cooperate in deciding upon a resolution strategy that may require ELA. A government indemnity for ELA losses may be needed to protect the central bank's balance sheet, e.g., if provision is needed to preserve financial stability and there is significant uncertainty over solvency or collateral adequacy.

98. In case the domestic banking market contains or even is dominated by foreign banks, close coordination with foreign regulatory/supervisory authorities is crucial. The central bank should conduct the solvency and viability assessment, and the determination of institutional eligibility in close coordination and cooperation with the authorities of the parent institution. This should ensure that (a) liquidity is provided to viable institutions only, that (b) liquidity is not provided by the central bank as long as liquidity could be provided by the parent institution or its central bank, and (c) that liquidity is not led upstream (toward the parent company).

O. Conclusion

99. International standards and good practice in bank resolution, deposit insurance, and ELA can guide the reform agenda for LIDCs, but need to be adapted proportionally to LIDC circumstances and capacities. While the standards offer strong guidelines for any reform agenda in LIDCs, authorities will need to make informed policy decisions about the best approach for the country and the specific needs of its financial sector. For example, allowing the central bank to take on the mandate for bank resolution and the responsibility for the DIS might be the most feasible option in small countries with only a few banks. Not all resolution powers foreseen in the Key Attributes may be appropriate to implement. Coverage level and funding needs of a DIS should be assessed based on the local deposit structure rather than being copied from other jurisdictions. For ELA purposes, a central bank should have developed and implemented on a sound legal basis an ELA framework that specifies objectives, roles, and responsibilities of involved parties (central bank business areas and, possibly, other relevant domestic and foreign authorities). The decision on ELA-eligible collateral will differ from country to country. It will likely include credit claims for which dedicated procedures will have to be identified, developed, implemented, and tested; possibly also involving counterparties.

100. LIDCs need to prioritize measures to address remaining shortcomings in their financial safety nets in line with their implementation capacity. The Fund has a broad engagement with LIDCs regarding these topics and reforms are underway, or already implemented in some countries, often as part of Fund program conditionality. But, as discussed above, many LIDCs need to make significant further progress to move closer to international best practice. This will often mean tackling a wider reform agenda, including broad legal reforms, the implementation and operationalization of new powers and tools through guidelines, handbooks and manuals, and the need for extensive staff training. Depending on country-specific circumstances, these reforms may need to be combined with restructuring and recapitalizing the banking system and/or significant strengthening of banking supervision. Working in parallel on such wide-ranging reform items may severely challenge LIDCs, due to capacity constraints, push backs by stakeholders, and lengthy legislative processes. Broad political support will be needed to address entrenched political and financial interests of bank owners and other related parties in order to allow these reforms to succeed. But not tackling these issues would mean that public support to weak and failing financial institutions may need to be extensive (and, thus, costly) during the next financial crisis.

101. Measures to strengthen the financial safety net need to be buttressed by other reforms. Good corporate governance and sound supervision are critical to ensure robust and prudent risk management and decision making at banks.[80] Supervisors need adequate resources, strong legal authority and protection, a clear mandate, operational independence with strong governance structures, and accountability via a transparent framework. While the Basel Committee on Banking Supervision strengthened the Core Principles in these areas in 2012, there is little evidence that country practices have since improved materially. Weak corporate governance in banks, along with inadequate staffing and budgetary resources for supervisors, remain significant shortcomings in country compliance with the Core Principles.[81]

[80] BCBS (2015).

[81] Adrian and Narain (2019).

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