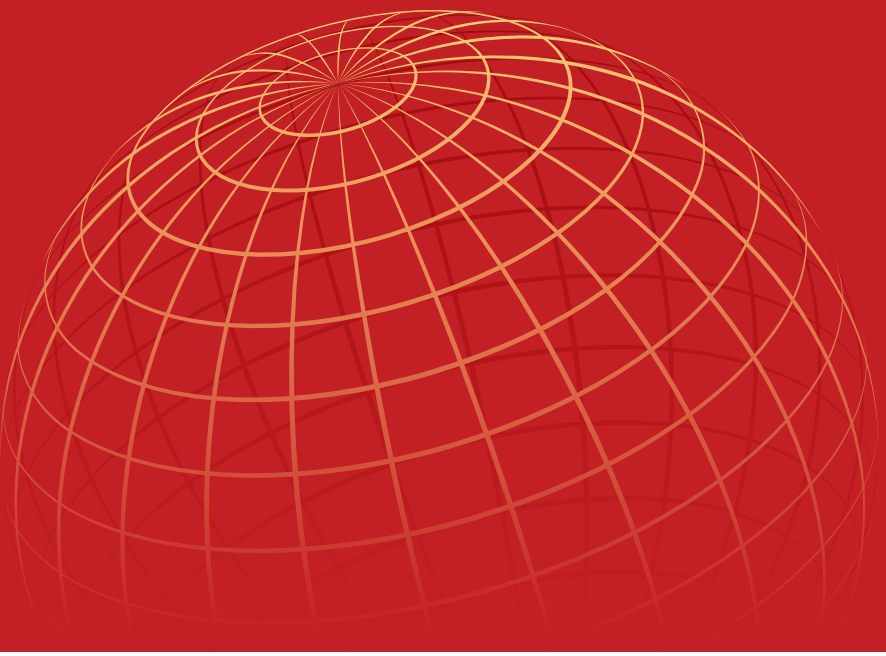


SPECIAL FOCUS 2.1

Growth in Low-Income Countries: Evolution, Prospects, and Policies

Growth in Low-Income Countries: Evolution, Prospects, and Policies

There are currently 34 countries classified as low-income, about half the number in 2001. Rapid growth in low-income countries from 2001-18 allowed many to progress to middle-income status, supported by a pre-crisis commodity price boom, the MDRI and HIPC debt relief initiatives, increased investment in human and physical capital, improved economic policy frameworks, and recoveries from the deep recessions in transition economies during the 1990s. However, the prospects for today's LICs appear much more challenging. Compared to the LICs in 2001 that became middle-income countries, today's LICs are further below the middle-income threshold and more often fragile than were LICs in 2001. Their heavy reliance on agriculture makes them vulnerable to climate change and extreme weather events, and their scope to boost external trade is limited by geography. Coordinated and multi-pronged policy efforts are required to address these challenges.

Introduction

Since 2001, the number of low-income countries (LICs) has almost halved, to 34 in 2019 from 64 in 2001 (Figure SF2.1.1.A).[1] During this period, their number rose to a peak of 66 in 2003 before falling to a trough of 31 in 2016. Since then, however, the decline has stalled, if not reversed, with four countries—Senegal, the Syrian Arab Republic, Tajikistan, and the Republic of Yemen—relapsing into LIC status amid armed conflict and terms of trade shocks, while only one country (Cambodia) reached middle-income status. The countries classified as LICs in 2001 that have converged to middle-income (MIC) status experienced average growth of 5.8 percent a year during 2001-2018—about one-half faster than non-LIC EMDEs over the same period and one-quarter faster than those 2001 LICs that have remained in the group (4.5 percent), although with wide heterogeneity (Figure SF2.1.1.B).

Several factors have contributed to the rapid economic growth of the 2001 LICs. Twelve 2001 LICs were transition economies, of which nine rebounded sharply during the 2000s from their deep recessions in the 1990s.[2] Among non-transition 2001 LICs, rapid investment growth boosted overall economic growth, on average contributing more than one-third to output growth during 2001-18. In six of these countries (Cameroon, the Democratic Republic of Congo, Guinea, Indonesia, Mauritania, Mozambique), investment booms followed new resource discoveries. Debt relief in the early 2000s, and the fiscal space created by it, supported government spending on non-interest expenditure.[3] In addition, business climates and policy frameworks improved in most of the 2001 LICs.

Rapid economic growth in LICs has contributed to poverty reduction. The share of extreme poor in the population of 2001 LICs has fallen by 16 percentage points, on average, and this has contributed 20 percentage points—about one third—to the decline in the global poverty headcount between 2001 and 2015. This contribution, however, mostly reflects sharp declines in the poverty headcount of the 2001 LICs that reached middle-income levels, while masking broadly unchanged poverty headcounts among the countries that have remained, or became, LICs (Figure SF2.1.1.C). Today's LICs

Note: This Special Focus was prepared by Rudi Steinbach. Research assistance was provided by Mengyi Li.

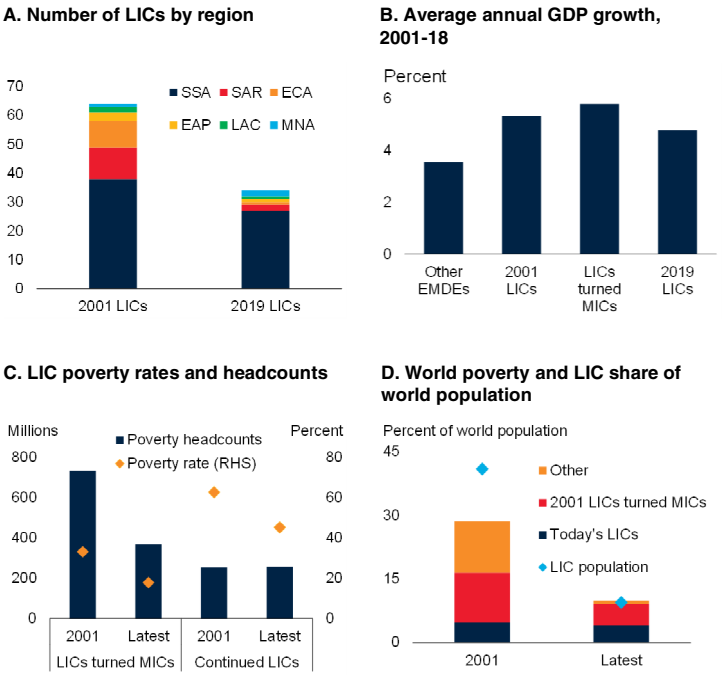
[1] LICs in 2019 reflect the country classification of the 2018/19 World Bank fiscal year and are defined as countries with GNI per capita (World Bank Atlas method) of $995 or less in 2017; 2001 LICs reflect the country classification of the 2000/01 fiscal year and had GNI per capita of $755 or less in 1999. New thresholds are determined at the start of each World Bank fiscal year. Of the 64 2001 LICs, 32 moved to middle-income country status while 32 remained classified as LICs in 2019.

[2] Transition economies are economies that changed from centrally-planned to market-oriented economic systems. Those that were LICs in 2001 include Armenia, Azerbaijan, Georgia, the Kyrgyz Republic, Cambodia, Lao People's Democratic Republic, Moldova, Tajikistan, Turkmenistan, Ukraine, Uzbekistan, and Vietnam. On average, their economies contracted by an estimated 30 percent during 1990-1996.

[3] Government non-interest expenditure rose by 2 percentage points of GDP, on average, between the year of debt relief and 2018.

FIGURE SF2.1.1 LIC growth since 2001

The number of LICs has declined from 64 in 2001 to 34 in 2019. Growth in LICs benefited from several factors and has allowed 32 countries to progress to middle-income status. Sharp declines in LIC poverty rates have contributed one-third to the decline in the global poverty headcount since 2001. However, these declines mask broadly unchanged headcounts among countries that have remained LICs. While the share of LICs in the global population has declined by three-quarters—from 41 percent in 2001 to 10 percent in 2015—they are home to more than 40 percent of the world's poor.



Source: United Nations, World Bank.
A. LICs = low-income countries. LICs in 2001 had per capita GNI (US$, current) at $755 or below, while LICs in 2019 have per capita GNI at $995 or below in 2017.
B. Other EMDEs exclude 2001 LICs.
C. Latest reflects 2015 data. Due to data limitations, poverty share for "LICs turned MICs" includes 26 of 32 countries and reflects 94.1 percent of the sample population in 2015; "Continued LICs" includes 25 of 32 countries and reflects 79.8 percent of the sample population.
D. Latest reflects 2015 data. Due to data limitations, poverty share for "LICs turned MICs" includes 26 of 32 countries and reflects 94.1 percent of the sample population in 2015; "Today's LICs" includes 34 of 34 countries.
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account for less than one-tenth of the global population (one-quarter their share in 2001). However, they are home to around 40 percent of the world's extreme poor (Figure SF2.1.1.D). This share is expected to remain elevated amid continued fragility in many of these economies, while the poverty headcount is expected to continue to decline elsewhere.

Today's LICs face severe challenges that threaten to hold back convergence of their per capita incomes with those in MICs. Today's LICs also face significantly larger spending needs than non-LIC EMDEs to meet the Sustainable Development Goals by the end of next decade, underscoring the need for sustained and robust growth (Gaspar et al. 2019).

Against this backdrop, this Special Focus examines the following questions.

- What has driven and supported growth in LICs since 2001?
- How have these factors affected LIC progression to MIC status?
- What are the prospects for future progression among today's LICs?

This Special Focus presents the following findings. First, growth in low-income countries—and, especially those that have progressed to middle-income status—has benefited from a confluence of favorable developments since 2001. Second, prospects for further progress by today's LICs toward middle-income status are challenging. Compared to the LICs of 2001 that became MICs, today's LICs have per capita incomes that are even further below the middle-income threshold, more likely to be fragile, more often landlocked and clustered with other LICs, heavily reliant on agriculture, and face weaker prospects for long-term commodity demand.[4] Third, since today's LICs account for 40 percent of the global extreme poor, challenging prospects for LIC growth will set back progress towards eliminating extreme poverty globally.

This Special Focus extends previous analysis of LIC growth (World Bank 2015a). First, a broader set of factors that have contributed to LIC growth since 2001 is considered—in particular, the roles of investment in human and physical capital, greater trade integration, and improved business climates and policy frameworks. Since three-quarters of LICs rely heavily on commodity exports and revenues, the impact of the 2014-16 commodity price plunges is examined. Second, and in contrast to the earlier work which examined the fates of the 64 LICs of 2001,

[4] Fragile LICs are those affected by fragility, conflict, and violence, according to the World Bank's Harmonized List of Fragile Situations.

the study here zooms in on the drivers of growth in the smaller group of 34 LICs of 2019, including the four countries that have become LICs in recent years amid weaker commodity prices and increased fragility. Third, this Special Focus highlights the implications for global poverty goals.

What has supported growth in LICs since 2001?

The 64 countries classified as LICs in 2001 experienced growth of 5.3 percent a year, on average, during 2001-18—considerably faster than the 3.6 percent growth in non-LIC EMDEs (Figure SF2.1.2.A). For those LICs, this was a sharp improvement from their tepid growth of 1.6 percent annually during the 1990s.

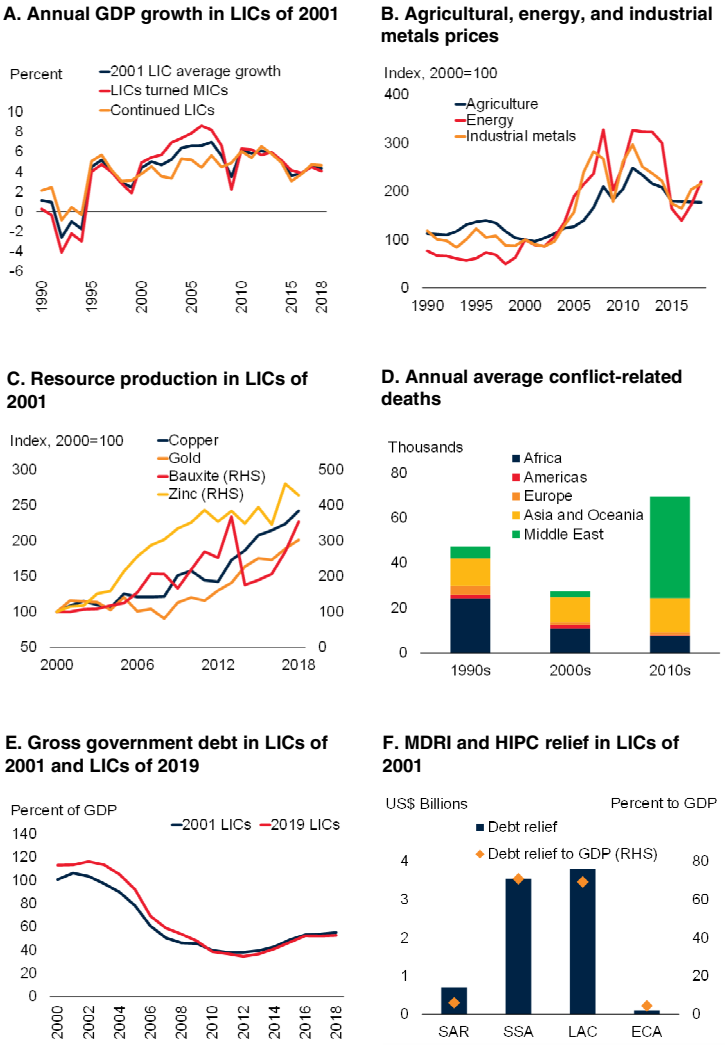
Growth in the 64 2001 LICs was supported by several cyclical and structural factors. The 2001-11 commodity price boom lifted growth in the one-third of LICs that were—or became—industrial commodity exporters. In the nine LICs transitioning into market-oriented economies, the deep recessions of the 1990s were followed by cyclical rebounds. In five countries, armed conflicts eased in the 2000s after inflicting heavy human and economic losses during the 1990s. Debt relief for about half of the 2001 LICs helped put these economies on a more sustainable financial footing. Business climates and governance, especially the rule of law, improved significantly in more than half of the 2001 LICs.

Cyclical factors

Commodity price boom. Around three-quarters of 2001 LICs benefited from the commodity price boom of 2001-11. During the commodity price boom, energy and industrial metals prices more than tripled and agricultural prices rose by around 150 percent (Figure SF2.1.2.B). The boom, along with a decline in easily accessible mineral and gas deposits in advanced economies and more cost-effective transport through advances in bulk shipping fueled unprecedented investment in commodity exploration and production in the 2001 LICs (Figure SF2.1.2.C; Lusty and Gunn 2015). In 2008, commodity prices—particularly metals and oil prices—declined sharply with the onset of the global financial crisis, but recovered to pre-crisis levels within about a year. However, by

FIGURE SF2.1.2 Cyclical and structural factors supporting LIC growth

Growth in the LICs of 2001 was supported over the next decade by booming commodity prices, increased resource production amid large investments in mineral exploration, debt relief under the MDRI and HIPC initiatives, and receding conflicts, particularly in Africa. Conflict-related casualties have, however, risen sharply in the Middle East where several countries have tipped into the low-income bracket.



Source: Haver Analytics; International Monetary Fund, *World Economic Outlook*; Peace Research Institute of Oslo (PRIO), Roser (2019); World Bank Pink Sheet; World Bank staff calculations; World Bureau of Metal Statistics.

B. Agriculture includes 23 commodities, industrial metals includes 7 metals, and Energy includes coal, crude oil, and natural gas. Index 100=2000.

D. Only conflicts in which at least one party was the government of a state and which generated more than 25 battle-related deaths are included. The data refer to direct violent deaths only and exclude outbreaks of disease or famine. Data up to 2016. Country-level data unavailable.

E. Unweighted averages. 2001 LICs includes 61 countries and the 2019 LICs includes 31 countries.

F. Committed debt relief under the assumption of full participation of creditors. Bars represent average debt relief per region in US$ billions for all HIPC and MDRI LICs. Diamonds reflect average debt relief per region relative to countries' GDP.

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2011, commodity prices began to slide again, and they fell by 30-60 percent to a low in 2016 before gradually and only partially recovering. By 2018, industrial metals and energy prices were at their 2005-06 levels in real terms while agricultural prices remained near their 2016 lows.

Two-thirds of the 2001 LICs were already heavily reliant on commodity exports and revenues in 2001—the majority of them on metals and energy exports, and the rest on agricultural commodity exports. Another one-tenth of the 2001 LICs subsequently became reliant on commodity exports, specifically metals and energy, after discoveries and exploitation of major commodity deposits. Several "giant" oil and gas fields—conventional fields with recoverable reserves of 500 million barrels or more—have been discovered offshore of East, West, and Central Africa, to the benefit of many 2001 LICs in these regions (Côte d'Ivoire, Cameroon, Ghana, Mozambique, Tanzania). During the 2000s, major new commodity deposits were also discovered in Indonesia (oil and gas), Lao PDR (copper, gold), Mauritania (copper, gold, and oil), Republic of Congo (oil), and Zambia (copper). From 2003-12, new commodity discoveries in Sub-Saharan Africa accounted for 22 percent of global discoveries and 15 percent of global exploration expenditures (Schodde 2013).

The commodity boom of 2001-11 supported above-average growth in those 2001 LICs that were, or became, commodity exporters. Exports of primary commodities in these countries rose by one-half of GDP between 2001 and 2011. Higher export earnings helped improve fiscal positions, with government revenues of commodity-exporting LICs rising by close to 4 percentage points of GDP, on average, and fiscal deficits narrowing by around 1 percentage point of GDP, between 2001 and 2011. This, as well as debt relief, allowed a doubling of social expenditures between the 2000s and 2010s. The commodity-driven growth surge was accompanied by a decline in inflation to single digits and an annual 3 percent real exchange rate appreciation between 2001 and 2011, on average, in commodity-exporting LICs (Trevino 2011; Guillaumont, Jeanneny, and Hua 2015).

Rebounds in transition economies. Nine of the 2001 LICs were, in the early 2000s, rebounding from the deep recessions into which their economies had plunged as they made the transition from centrally planned to market-based economies. By the time their economies had bottomed out in the mid- to late-1990s, their output had declined from its pre-recession levels by one fifth in Uzbekistan, by more than a third in Kazakhstan, and by at least one half in Armenia, Azerbaijan, Georgia, the Kyrgyz Republic, Moldova, Tajikistan, and Ukraine (Iradian 2007).[5] As a result, per capita incomes had fallen below the low-income threshold.

However, despite the drop in output these economies continued to have a foundation of solid human and physical capital, with near-universal literacy rates, triple the average secondary enrollment ratio of the average 2001 LIC, and power-generating capacity similar to those of advanced economies. Governments in many of these countries were implementing growth-enhancing structural reforms to accelerate the transition, including privatization of state-owned assets (for example, agricultural land reform in Azerbaijan); establishment of legal systems and property rights (the Kyrgyz Republic); the design of more efficient social safety nets (Armenia); strengthening of financial systems; greater openness to international trade, including through accession to the WTO (Georgia); and the improvement of business environments through substantive regulatory simplification (Moldova). These reforms helped boost productivity growth, including by promoting investment and exports (Loukoianova and Unigovskaya 2004). Growth since 2001 was further supported by the commodity boom, as seven of these nine transition economies were also heavily reliant on commodity exports.[6]

[5] It is likely that the real GDP declines in these transition economies were overstated in the official data of the early 1990s, as the private sectors that were emerging at that time were typically not fully included in the statistical base during the early days of the transition (Iradian 2007).

[6] The commodity-exporting transition-economy LICs of 2001 were Armenia, Azerbaijan, the Kyrgyz Republic, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan.

Structural factors

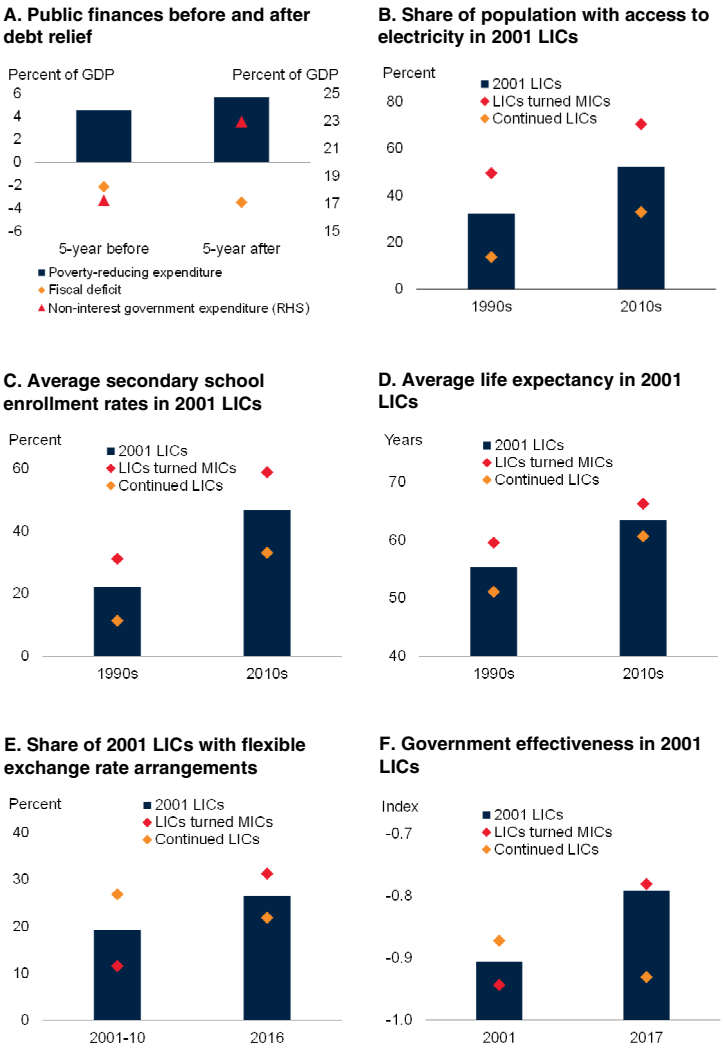
Receding conflicts. Five of the LICs of 2001—all of which remain LICs today—emerged from severe conflicts in the 1990s and early 2000s (Burundi, the Democratic Republic of Congo, Liberia, Rwanda, and Sierra Leone). The conflict in the Democratic Republic of Congo is estimated to have cost 2.5 million lives when deaths related to conflict-induced disease and famine are included—equivalent to 3 percent of today's population (Lacina and Gleditsch 2004; Roberts et al. 2001). Conflicts in Burundi, Liberia, Rwanda, and Sierra Leone inflicted losses of human life equivalent to between 1 and 10 percent of their populations. While most of these economies are still considered fragile, conflict-related casualties in Africa have been on a declining trend since the 1990s (Figure SF2.1.2.D). This has provided a more favorable setting for a growth rebound.

Debt relief. Thirty-five of the 2001 LICs (of which 26 remain LICs today) received debt relief during the early 2000s in the context of the Multilateral Debt Relief Initiative (MDRI) and Highly-Indebted Poor Country (HIPC) initiative. Between the year preceding debt relief and two years after it, government debt in these countries declined by 53 percentage points of GDP, on average, to 31 percent of GDP (Figures SF2.1.2.E and SF2.1.2.F). Rapid growth from 2001, more broadly, also supported the reduction of debt ratios. In the median 2001 LIC, government debt declined by 35 percentage points of GDP, from 84 percent of GDP in 2001 to 49 percent of GDP in 2018.

This reduction of debt burdens has helped put public finances on a sounder footing. While government deficits increased slightly (by about 1 percentage point of GDP), non-interest government expenditures rose by 5 percentage points of GDP, and combined health and education expenditures rose by one-fifth between the five years preceding debt relief and the five years following it (Figure SF2.1.3.A). More sustainable public finances supported macro-economic stability (Bayraktar and Fofack 2011; Marcelino and Hakobyan 2014).

FIGURE SF2.1.3 Domestic factors supporting LIC growth

The reduction of debt burdens has helped put public finances in the LICs of 2001 on a sounder footing. Policy frameworks have also improved, and governments have become more effective. Investments in human and physical capital have contributed to higher secondary school enrollment ratios and greater access to electricity. In addition, more effective health care interventions have raised average life expectancy in these countries.



Source: International Monetary Fund, *World Economic Outlook;* Reinhart and Rogoff (2004); Worldwide Governance Indicators; World Development Indicators.

Note. "LICs turned MICs" are those LICs in 2001 that have achieved MIC per capita incomes by 2019; "Continued LICs" are LICs that have remained LICs since 2001.

A. Poverty-reducing expenditure represents public spending on health and education. Unweighted average for 26 LICs that received MDRI or HIPC debt relief.

B.-F. Unweighted averages.

B. 2010s includes data up to 2016. 2001 LICs, "LICs turned MICs", and "Continued LICs", include 62, 32, and 30 countries, respectively.

C. 2010s includes data up to 2017. 2001 LICs, "LICs turned MICs", and "Continued LICs", include 55, 26, and 29 countries, respectively.

D. 2010s includes data up to 2017. 2001 LICs, "LICs turned MICs", and "Continued LICs", include 64, 32, and 32 countries, respectively.

E. Following the coarse exchange rate regime classification of Reinhart and Rogoff (2004), where categories 1-2 represents fixed, and 3-6 represent more flexible arrangements. 2010s includes data up to 2016. 2001 LICs, "LICs turned MICs", and "Continued LICs", include 63, 32, and 31 countries, respectively.

F. 2001 LICs, "LICs turned MICs", and "Continued LICs", include 64, 32, and 32 countries, respectively.

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Since 2013, the downward trend in 2001 LICs' debt has reversed, with government debt rising in the median 2001 LIC by 14 percentage points of GDP to 49 percent of GDP in 2018. That said, only two of the 2001 LICs—Benin and Chad—have returned to debt ratios near those before debt relief. The composition of this debt has become increasingly non-concessional as countries have accessed capital markets and borrowed from non-Paris Club creditors (World Bank 2019a). In 2018, 44 percent of the external debt of the median LIC of 2001 was on non-concessional terms, compared with 30 percent in 2001.

Trade integration. Many of the 2001 LICs have reaped benefits from greater trade integration by entering into free trade agreements. Moldova's trade agreement with the European Union has supported export growth and is encouraging reforms, in particular related to governance, the financial sector, and the business environment (European Commission 2018). In Sub-Saharan Africa, membership in free trade areas has boosted intra-regional trade (Burundi, Kenya, Rwanda, Tanzania, Uganda), and supported FDI inflows, industrialization, and integration into global value chains (e.g., Lesotho; Buigut 2016, Morris and Staritz 2017). Similarly, Nicaragua reaped growth dividends and attracted stronger FDI inflows between 2005 and 2011 as a result of the Central America-Dominican Republic Free Trade Agreement (Hornbeck 2012). The India-ASEAN agreement that went into effect in 2009-10 has benefited the 2001 LICs that became members (Bhutan, Bangladesh, India; Bhattacharyya and Mandal 2016).

Investment in human and physical capital. Most 2001 LICs boosted their investment in human and physical capital during the period of rapid growth from 2001. Between 2001 and 2017, the ratio of total investment to GDP in these countries increased by 5 percentage points, of which one-third represented increased public investment.

- *Infrastructure*. Infrastructure in sectors such as electricity and communications has improved significantly among LICs (Calderón and Servén 2010; Kumar and Rauniyar 2018). From 2001 to 2016, access to electricity in the median 2001 LIC increased from 30 to 53 percent of the population and, in one-quarter of LICs, from 52 to 84 percent (Figure SF2.1.3.B).[7] Communications infrastructure has improved rapidly, helped in part by the spread of mobile phone networks (Aker and Mbiti 2010; World Bank 2016b). The use of mobile phones has reduced information inefficiencies and transaction costs, benefitting particularly businesses and small-scale farmers in rural areas where distances from markets are large (Aker 2011). Transaction costs could be lowered even further if broad-band internet network infrastructure was increased from its current low coverage of 1 percent of the population in the median LIC in 2016 (World Bank 2019b).

- *Human capital*. In the median 2001 LIC, secondary education net enrollment ratios rose from 24 to 47 percent of the school-age population between 2001 and 2016, supported by a 25 percent increase in government spending on education (Figure SF2.1.3.C). This, combined with improvements in average life expectancy in LICs—in part due to the improved prevention and more effective treatment of widely-prevalent conditions such as malaria, HIV, and AIDS—is creating the preconditions for an increasingly productive future workforce (Figure SF2.1.3.D; Asiki et al. 2016; Barofski, Anekwe, and Chase 2015).

Improved business climates and policy frameworks. The business climate has improved in the majority of the 2001 LICs between the 1990s and the 2010s. More specifically, the ease of starting a business, obtaining credit, and trading across borders has, on average, increased by 20-30 index points since 2006 (World Bank 2019c). Similarly, the Worldwide Governance Indicator scores for the rule of law have strengthened by about 20 percent, and there have been more moderate improvements in regulatory quality and political stability.

[7] That said, access to electricity in some countries still remains below 10 percent of the population (Burundi, Chad, South Sudan).

A growing number of LICs have strengthened their fiscal management through medium-term debt management strategies (World Bank 2019a). Some have strengthened their monetary policy frameworks and their buffers against shocks by adopting flexible exchange rate arrangements and using their policy instruments to target low domestic inflation; more than one-quarter of 2001 LICs had flexible exchange rate regimes in 2016, compared to fewer than one-fifth during 2001-10, on average (Figure SF2.1.3.E).[8] Improved policy frameworks and increased resilience to external shocks among the 2001 LICs have also been supported by increases in foreign exchange reserves from 8 percent of GDP in 2001 to 14 percent of GDP, on average, in 2017.

How have these factors affected LIC progression to MIC income levels?

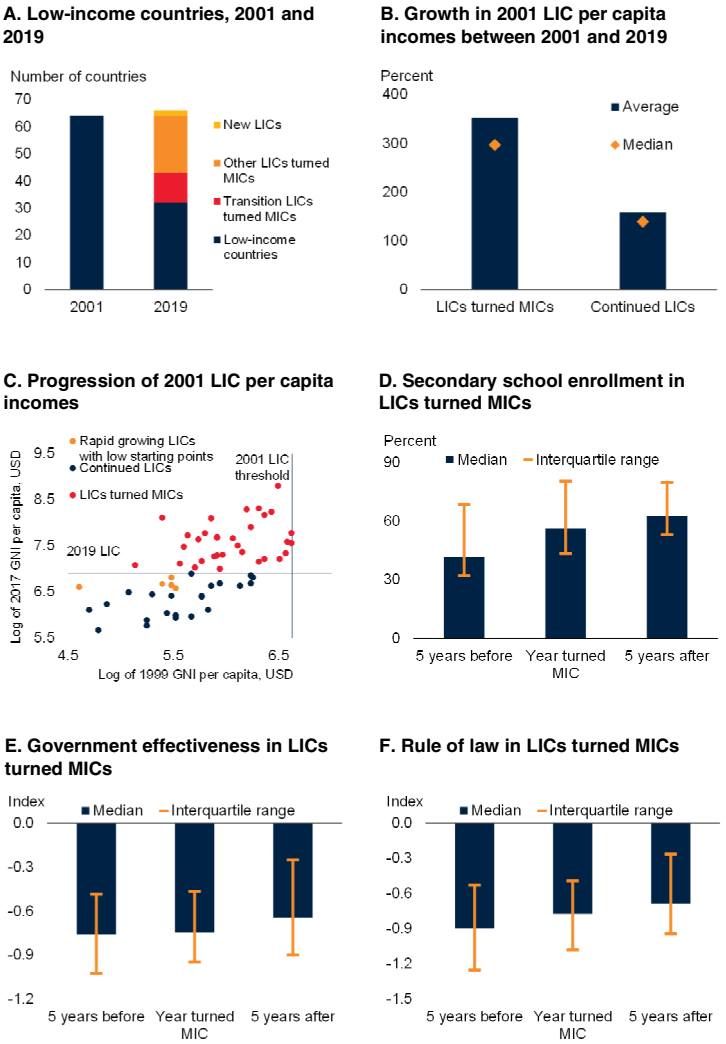
The 2001 LICs that became MICs benefited somewhat more from the factors discussed above than those that remained (Figures SF2.1.3.B-2.1.3.F). On average, the 2001 LICs that became MICs had stronger policy frameworks, better governance and business environments, better-developed infrastructure, larger improvements in human capital, and more fiscal resources due to revenue bases being significantly larger—by at least one fifth of GDP. The 2001 LICs that became MICs also had a geographical advantage, as less than one-third were landlocked compared to almost half of today's LICs. Furthermore, the 2001 LICs that were landlocked but became MICs had, on average, neighbors with per capita incomes that were 36 percent higher than current incomes among the neighbors of today's landlocked LICs.

LICs that achieved MIC per capita income levels. Between 2001 and 2019, 32 LICs achieved middle-income status (Figure SF2.1.4.A). The progress made by LICs that have become MICs

[8] Exchange rate regimes are grouped according to the classification in Ilzetski, Reinhart and Rogoff (2017), with the only exception that freely falling currencies are also regarded as flexible exchange rate arrangements.

FIGURE SF2.1.4 Factors supporting LIC progression to MIC income levels

A quarter of the 2001 LICs that have become MICs were transition economies that recovered from deep recessions after the end of socialism throughout much of the world. Improvements in per capita income were more pronounced in the LICs that have reached MIC status. A few rapid-growing LICs have not been able to reach MIC status, partly due to very low starting positions in 2001. In countries that have reached MIC status, school enrollment ratios, government effectiveness, and the rule of law improved as they neared the year of moving to MIC status, as well as in the years thereafter. At the point of becoming a MIC, these measures were consistently better than the LIC median.



Source: Worldwide Governance Indicators (WGI), World Bank staff calculations, World Development Indicators.

C. Sample includes 59 2001 LICs. GNI per capita according to the World Bank Atlas method. GNI per capita for 1999 was published in August 2000 and reflects the original data used for country income classification in the 2001 World Bank fiscal year, while GNI per capita for 2017 was published in October 2018 and reflects the data used for the 2019 World Bank fiscal year. Exceptions are Liberia and Myanmar, for which GNI per capita in 2002 is used as a proxy for 1999. Rapid-growing LICs with low starting points are defined as LICs that had per capita incomes below one-third of the $755 LIC threshold in 2001, and these incomes have increased to above two-thirds of the $995 LIC threshold in 2019.

D. Sample includes 13 LICs that became MICs, due to data limitations. Year turned MIC reflects the World Bank fiscal year.

E.-F. WGI index scores are standard normal units that range between -2.5 and 2.5, with zero mean. A negative score implies government effectiveness or rule-of-law below the global average. Sample includes all 32 LICs that became MICs. Year turned MIC reflects the World Bank fiscal year.

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has helped lift 20 percent of the global poor in 2001 out of poverty by 2016, more than offsetting the increasing poverty headcount among the countries that remained LICs.[9]

- *Favorable initial conditions*. The 2001 LICs that have become MICs were some of those countries closest to the middle-income threshold to begin with: their average per capita income in 2001 was about 80 percent higher than that of the LICs that have remained LICs (Table SF2.1.1). LICs that achieved MIC status also grew somewhat more rapidly during 2001-18 (Figure SF2.1.4.B; Johnson and Papageorgiou, forthcoming).[10] However, the growth differential between these two LIC groups masks substantial dispersion within each group. Despite exceptionally fast and sustained growth—more than tripling per capita incomes between 2001 and 2018—several 2001 LICs remain LICs today (Figure SF2.1.4.C; Ethiopia, Rwanda, Tanzania). This mostly reflects their low 2001 per capita incomes (70 percent below the 2001 threshold LIC income). In these countries, robust growth was supported by improving macroeconomic environments, institutional and business climate reforms, and strong public investment (Government of Rwanda and World Bank 2019; Möller and Wacker 2017).

- *Commodity discoveries and exploitation*. Of the 32 LICs that became MICs, about one half benefited from discoveries of commodity deposits or expanded exploitation of metals, oil, or gas resources. Today, many former 2001 LICs—such as Angola, the Republic of Congo, Equatorial Guinea, Ghana, Lesotho, Indonesia, Lao PDR, Mauritania, Nigeria, Sudan, Timor-Leste, Uzbekistan, and Zambia—have achieved middle-income status partly as a result of new commodity discoveries or the exploitation of commodity resources. Large investments in the resource sectors of Azerbaijan, Cameroon, and Mongolia facilitated their progression to middle-income status (World Bank 2015a). The countries that became MICs amid the commodity price boom often had stronger institutional quality and governance than those that remained LICs, and were therefore less likely to fall victim to the resource curse that erodes non-resource competitiveness (Dauvin and Guerreiro 2017).

- *Rebounding transition economies*. Another one-quarter of the LICs that have progressed to MIC status since 2001 were the remaining transition-economy LICs. All but one (Tajikistan) have returned to middle-income per capita income levels.

- *Trade integration, peace, and reforms*. Of the 27 LICs of 2001 that have subsequently signed trade agreements, 20 achieved MIC status as entry into large free trade areas catalyzed export spurts (Moldova, Nicaragua).[11] Others reached MIC status after emerging from conflict (Côte d'Ivoire, Solomon Islands), or undertaking substantial public infrastructure investment (Bhutan).[12] The 2001 LICs that reached MIC status have steadily strengthened human capital development, the effectiveness of their governments, business climates, and the quality of their institutions in the years before progression and thereafter. In fact, these countries have consistently outperformed the median LIC on measures of these factors (Figures SF2.1.4.D-2.1.4.F).

[9] Due to data limitations, poverty headcount data excludes the following 11 LICs of 2001: Afghanistan, Azerbaijan, Haiti, Cambodia, Myanmar, Democratic People's Republic of Korea, Somalia, Sudan, Turkmenistan, Uzbekistan, and Zimbabwe. In 2001, their combined population accounted for 8 percent of the total 2001 LICs population.

[10] In terms of per capita growth, the difference was more pronounced (Figure 2.1.4B).

[11] Excludes "region-region" agreements such as the Cotonou agreement between the European Union and the 78 economies in the African, Caribbean and Pacific Group of States.

[12] During the 2000s, the government of Bhutan transformed the economy's growth prospects by investing heavily in hydropower infrastructure, taking advantage of the country's mountainous terrain and high average annual rainfall. Electricity capacity in Bhutan tripled and the share of the population with access to it rose from 39 percent in 2001 to 100 percent by 2016. Surplus electricity is exported and accounts for a third of exports and almost half of government revenue, while overall power generation is estimated to contribute 1 percent of GDP annually (World Bank 2015b).

New LICs: 2016-19. Countries that have reached MIC status often face structural challenges that constrain their prospects for continued strong growth, while those MICs with incomes near the LIC threshold risk falling back into the LIC bracket (EBRD 2019). Four countries were classified as LICs between 2016 and 2019 from middle-income levels: Senegal, Syria, Tajikistan, and Yemen. While Syria was classified as a LIC for the first time, Senegal, Tajikistan, and Yemen relapsed into LIC status after some of the growth-enhancing factors discussed above had helped them move to middle-income status in earlier years.

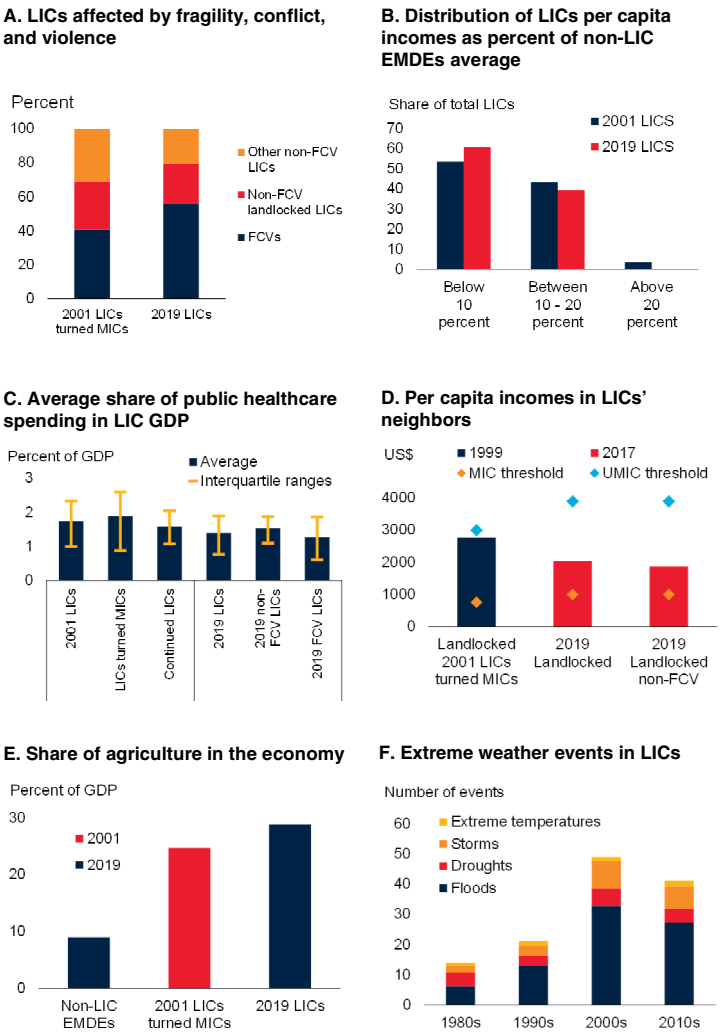
- *Senegal* suffered a series of adverse shocks in the years leading up to its relapse, which weighed heavily on per capita incomes. The decline in commodity prices from 2011 was aggravated by two consecutive droughts that severely disrupted agricultural production between 2011 and 2014 and also led to widespread famine, while a long-lasting domestic energy crisis repeatedly disrupted economic activity until the mid-2010s.
- In *Tajikistan*, robust growth was accompanied by a halving of its currency's value stemming from the 2014-16 commodity price slump and by rapid population growth; as a result, per capita incomes declined.
- Armed conflicts in *Syria* and *Yemen* caused sharp declines in per capita incomes in both countries by severely disrupting activity, destroying physical infrastructure, and forcibly displacing more than one-half of Syria's population and almost a tenth of the population in Yemen (World Bank 2017a, 2019d). In both countries, oil production has fallen by 90 percent from pre-war levels, sharply constraining fiscal positions.

Prospects for further LIC progression

Challenges for future progression towards MIC per capita income levels. Prospects for most of today's LICs to progress to MIC levels in the near future are dim, as the factors that may hold back

FIGURE SF2.1.5 Features of today's LICs

For today's LICs, prospects of becoming MICs are dim. More than half of them are affected by fragility, conflict, and violence, their governments are less effective than those of the 2001 LICs that became MICs, and public spending on health care is lower. Many countries are landlocked, and their neighbors are mostly low-income or lower-middle-income countries. LICs are heavily dependent on agriculture, which faces severe challenges as extreme weather events become more frequent.



Source: The Emergency Events Database—Universite Catholique de Louvain, World Bank, World Bank Doing Business, World Bank staff calculations, World Development Indicators.

Note: "LICs turned MICs" are those LICs in 2001 that have achieved MIC per capita incomes by 2019; "Continued LICs" are LICs that have remained LICs since 2001. FCV = fragility, conflict, and violence. UMIC = upper-middle-income country.

A. Bars for 2001 "LICs turned MICs" reflect shares in 2001, bars for 2019 LICs reflect latest shares. Due to data limitations, official FCV country classifications for 2001 are not available. This share is based on the World Bank FCV country classification of the 2005/06 fiscal year that has been amended to include countries that had the presence of UN peace-keeping missions between 1999 and 2001.

B. Blue bars represent share of 2001 LICs in 2001, red bars represent share of 2019 LICs in 2017. X-axis reflects ranges of LIC per capita incomes relative to that of the US, in percent. 2001 LICs includes 58 countries, 2019 LICs includes 28 countries.

C. Unweighted averages. 2001 LICs, "LICs turned MICs" and "Continued LICs" include 60, 32, and 28 countries, respectively. 2019 LICs, non-FCV and FCV LICs include 31, 14, and 17 countries, respectively.

D. Unweighted averages. Neighbors of LICs only include countries with shared land borders. Sample includes 16 landlocked 2001 "LICs turned MICs", 15 2019 landlocked LICs and 8 2019 landlocked non-FCV LICs.

E. Unweighted averages.

F. Data reflect annual averages of extreme weather events in the LICs of 2019.

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progression are more pervasive today than they were in the 2001 LICs (Figure SF2.1.5.A).

- *Weaker starting positions*. The gaps between per capita incomes in today's LICs and in middle-income countries are larger than the corresponding gaps faced by the LICs of 2001 that subsequently became MICs (Figure SF2.1.5.B). Comparing today's LICs with those that have become MICs, public spending on health care relative to GDP is lower by one-quarter, the share of their populations with access to electricity is lower by one-third, and measures of financial inclusion are lower by one-half to one- quarter (Figure SF2.1.5.C).[13]

- *Fragile or in conflict*. 56 percent of today's LICs are countries affected by fragility, conflict, and violence (FCV)—about one-third more than the share of countries in conflict among the 2001 LICs that became MICs.[14] In these FCVs, weak governments and poor institutions are endemic. Government revenues in these countries are often lower than in other LICs, leaving them heavily dependent on foreign aid to finance critical government spending (IMF 2014). Their economies are volatile and prone to collapses (World Bank 2017b). Since 1990, chronic FCVs—countries that have been FCVs for at least five years—have faced annual output contractions of 3 percent or more at least once every decade.

- *Clustered*. More than half of the LICs that are not FCVs are landlocked, and their neighbors are mostly other LICs or countries with per capita incomes just above middle-income thresholds (Figure SF2.1.5.D). This geographical disadvantage—often exacerbated by high trade costs and behind-the-border non-tariff barriers—limits LICs' ability to unleash a growth burst by encouraging trade with large trading partner economies (Arvis, Raballand, and Marteau 2010; Arvis et al. 2013; Paudel and Cooray 2018).

- *Heavily reliant on agriculture*. All but two (Yemen, Zimbabwe) of today's LICs are heavily dependent on the agricultural sectors which accounts for almost 30 percent of GDP on average compared with 9 percent of GDP in the average non-LIC EMDE (Figure SF2.1.5.E). In 70 percent of today's LICs (considerably more than the 40 percent of 2001 LICs that became MICs) agriculture accounts for more than one-quarter of the economy. Climate change is presenting many of these agricultural sectors with severe challenges as mean temperatures continue to rise and extreme weather events such as droughts, floods, and heatwaves occur more frequently and with greater intensity than in the 1980s and 1990s (Figure SF2.1.5.F; World Bank 2017b; IPCC 2014; Chaney et al. 2014; Hoeppe 2014). Recoveries from droughts appear to be taking longer, resulting in less time for livelihoods to be restored between droughts and thereby rendering countries even more vulnerable to the adverse impacts of climate change (Schwalm 2017). Climate-related destruction of crops and livelihoods could push many LIC populations further into poverty and this is aggravated by the limited capacity and resources of LICs to counter the adverse effects of climate change (Hallegatte et al. 2016).

- *Weaker prospects for commodity demand*. To transform recent resource discoveries in LICs into strong, sustained economic growth will require continued robust commodity demand growth, as well as strong governance and

[13] While mobile payment systems have improved financial inclusion in LICs, limited access to electricity, particularly in rural areas, severely constrains the charging of mobile phones (Max and Berman 2018; Riley and Kulathunga 2017, World Bank Group and China Development Bank 2017).

[14] Due to data limitations, official FCV country classifications for 2001 are not available. This share is based on the World Bank FCV country classification of the 2005/06 fiscal year that has been amended to include countries with UN peace-keeping missions between 1999 and 2001.

[15] Mozambique's deep-water gas fields are estimated to hold more oil-equivalent reserves than are held by Angola or Nigeria—Sub-Saharan Africa's two largest oil producers—and production is set to start by 2022/23 (World Bank 2015a). Oil reserves in Uganda are estimated to be the fourth-largest in Sub-Saharan Africa, and production could start within the next three years (Alkadiri and Tesfay 2014). Large off-shore gas fields were recently discovered in Tanzania.

institutions to manage the associated revenue windfalls (Addison and Roe 2018).[15] However, long-term prospects for commodity demand are weakening as growth in China—the largest source of commodity demand—slows and shifts towards less resource-intensive sectors (World Bank 2018a).

- *Debt vulnerabilities on the rise*. While government debt ratios in most of today's LICs are significantly lower than in 2001—helped largely by debt relief initiatives—their general rise since 2013 has contributed to increased vulnerabilities (World Bank 2019a). The interest burden brought about by greater indebtedness could constrain poverty-reducing expenditures, particularly on health and education.

Conclusion

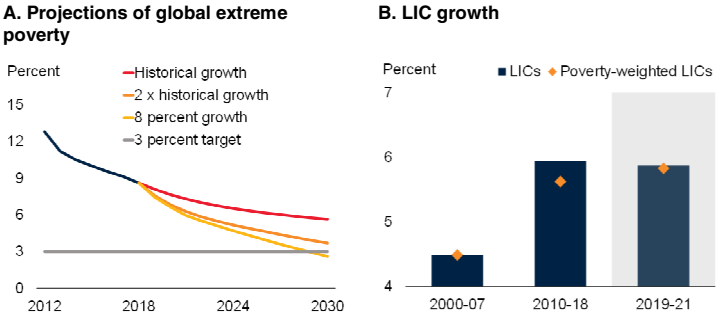
Growth in low-income countries has benefited from a confluence of favorable cyclical and structural developments since 2001 that have reduced the number of LICs by almost one-half. These factors have, at various points, included a commodity price boom, cyclical rebounds from the collapse of centrally-planned regimes in the early-1990s, debt relief, fewer armed conflicts (especially in Africa), trade integration, and improved business climates and policy frameworks. However, the cyclical factors that contributed to LICs reaching MIC status were either unique events (transition rebounds) or are unlikely to be repeated over the foreseeable future (commodity boom), while structural factors that could support growth present lasting policy challenges that will require various policy reform efforts. Prospects for progression of today's LICs to middle-income status are, therefore, more challenging. Compared to the LICs of 2001 that became MICs, today's LICs have per capita incomes that are further below the middle-income threshold, are more likely to be fragile, are more often landlocked and clustered with other LICs, are heavily reliant on agriculture, and face weaker prospects for long-term commodity demand.

Poverty implications. Today's LICs account for about 40 percent of the global poor and have average poverty rates in excess of 40 percent. Subdued prospects for lifting average per capita incomes in most of today's 34 LICs to middle-income levels pose a challenge for achieving the Sustainable Development Goals and reducing global extreme poverty to 3 percent by 2030. To reach this goal, per capita GDP would need to grow by 6 percent per year up to 2030 and per capita incomes of the bottom 40 percent of the income distribution would need to grow at 8 percent per year (Figure SF2.1.6.A; World Bank 2018b). Even during the global economic expansion that preceded the global financial crisis, per capita growth in LICs fell well below such rates (1.9 percent during 2001-07). Overall growth in LICs since the global financial crisis has been lower when growth is weighted according to the share of the world's extreme poor as opposed to output shares, implying that growth has been slower where it is needed most: in countries with the largest numbers of extreme poor (Figure SF2.1.6.B).

Policy implications. Coordinated and multi-pronged policy efforts are needed to boost both domestic and external drivers of LICs growth. Efforts to harness external drivers of growth include integrating LICs into global trade,

FIGURE SF2.1.6 Challenges LICs face in reducing poverty

For the world to reach the Sustainable Development Goal of reducing extreme poverty to 3 percent, per capita incomes will need to grow by 6 percent per year until 2030, but with the condition that incomes in the bottom 40 percent of the income distribution grow by 8 percent per year. Growth is expected to fall well short of this requirement.



Source: World Bank, World Bank (2018b).
A. Data based on global real per capita growth. 8 percent growth assumes average annual growth in per capita incomes of 6 percent for all countries, but that incomes of the bottom 40 percent of the distribution grow at 8 percent, while those in the top 60 percent grow at 4.7 percent.
B. Bars represented GDP-weighted aggregates. Diamonds represent GDP aggregates weighted according to each country's share in total poverty.
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diversifying exports, and encouraging foreign direct investment (Lee and Zhang 2019). Domestically, this can help embody upgrades to skills and technologies, but needs to be supported by continued investment in human and physical capital, while maintaining sustainable government debt profiles. Further efforts to foster domestic sources of growth include developing stronger and deeper financial systems, ensuring greater financial inclusiveness, and strengthening governance and business climates to help the private sector to thrive while overcoming some of the challenges of informality (EBRD 2019; World Bank 2017c; 2018c; 2019a). Enhanced competition policies, including the liberalization of unwarranted price controls, can encourage innovation, boost productivity and improve international competitiveness (World Bank 2016c; 2017d). Growth could further be supported by measures aimed at ending conflicts and reducing social tensions, mobilizing domestic resources more effectively for sustainable government finances, and managing and adapting to growing climate risks.

TABLE SF2.1.1 Low-income countries

	GNI per capita used for 2019 income classification (2017, USD)	Latest GNI per capita (2017, USD)	GNI per capita used for 2001 income classification (1999, USD)	Share of agriculture in GDP (percent)	Share of primary commodity exports in GDP (percent)
2001 LICs turned MICs					
Turkmenistan	6,650	6,380	660	…	…
Azerbaijan	4,080	4,080	550	5.6	30.2
Armenia	4,000	3,990	490	14.9	8.3
Georgia	3,790	3,780	620	6.9	6.2
Indonesia	3,540	3,540	580	13.1	5.9
Angola	3,330	3,570	220	10.0	28.4
Mongolia	3,290	3,270	350	10.3	46.7
Bhutan	2,720	2,660	510	17.4	…
Ukraine	2,390	2,390	750	10.2	13.8
Sudan*	2,380	2,380	330	30.5	11.2
Lao PDR	2,270	2,270	280	16.2	8.0
Moldova, Rep.	2,180	2,200	370	…	3.5
Vietnam	2,170	2,160	370	15.3	5.1
Nicaragua	2,130	2,130	430	15.5	1.5
Nigeria	2,080	2,100	310	20.8	11.4
Uzbekistan	1,980	2,000	720	…	…
Solomon Islands*	1,920	1,920	750	…	27.8
India	1,820	1,800	450	15.5	1.2
São Tomé and Príncipe	1,770	1,770	270	11.5	…
Pakistan	1,580	1,580	470	22.9	0.3
Côte d'Ivoire*	1,540	1,580	710	21.6	5.7
Ghana	1,490	1,880	390	19.7	7.1
Bangladesh	1,470	1,470	370	13.4	0.1
Kenya	1,440	1,460	360	34.6	1.4
Cameroon	1,360	1,370	580	14.4	12.7
Congo, Rep.*	1,360	1,430	670	6.4	44.0
Zambia	1,300	1,290	320	6.7	25.4
Lesotho	1,280	1,210	550	6.1	…
Cambodia	1,230	1,230	260	23.4	1.1

TABLE SF2.1.1 Low-income countries *(continued)*

	GNI per capita used for 2019 income classification (2017, USD)	Latest GNI per capita (2017, USD)	GNI per capita used for 2001 income classification (1999, USD)	Share of agriculture in GDP (percent)	Share of primary commodity exports in GDP (percent)
2001 LICs turned MICs					
Myanmar*	1,190	1,210	…	23.3	…
Kyrgyz Republic	1,130	1,130	300	12.3	4.1
Mauritania	1,100	1,100	380	23.1	16.3
2001 Continued LICs					
Tajikistan	990	990	290	…	…
Senegal	950	1,240	510	16.0	2.3
Tanzania	910	910	240	…	0.7
Zimbabwe*	910	1,170	520	8.3	3.8
Benin	800	800	380	23.0	4.3
Guinea	800	790	510	16.4	6.9
Nepal	790	800	220	26.2	0.3
Mali*	770	770	240	38.3	1.1
Comoros*	760	1,280	350	29.9	0.0
Haiti*	760	760	460	17.6	…
Ethiopia	740	740	100	34.0	0.0
Rwanda	720	720	250	31.0	1.3
Guinea-Bissau*	660	660	160	49.0	0.0
Chad*	630	640	200	49.1	…
Burkina Faso	610	590	240	28.7	5.4
Togo*	610	610	320	41.8	3.9
Uganda	600	600	320	24.6	0.8
Afghanistan*	570	560	…	20.5	…
Sierra Leone	510	510	130	60.3	0.7
Congo, Dem. Rep.*	450	460	110	19.9	…
Gambia, The*	450	680	340	23.0	0.5
Mozambique*	420	420	230	21.3	31.1
Madagascar	400	400	250	20.0	6.0
Central African Republic*	390	390	290	39.6	…
Liberia*	380	620	…	37.1	…
Niger	360	360	190	39.7	4.1
Malawi	320	320	190	26.1	0.9
Burundi*	290	280	120	…	0.3
Eritrea*	…	…	200	…	…
Korea, Dem. People's Rep.	…	…	…	…	…
Somalia*	…	…	…	…	…
Yemen*	…	…	350	6.0	…
New LICs					
Syria*	…	…	970	…	…

Source: World Bank World Development Indicators, World Integrated Trade Statistics.
Notes: Asterisks indicate economies affected by fragility, conflict, and violence (FCV). Ellipses indicate data unavailability. GNI per capita according to the World Bank Atlas method. GNI per capita for 1999 was published in August 2000 and reflects the original data used for country income classification in the 2001 World Bank fiscal year, while GNI per capita for 2017 was published in October 2018 and reflects the data used for the 2019 World Bank fiscal year. Latest GNI per capita incorporates data revisions that have occurred since the release of original GNI per capita data that was used for income classifications. South Sudan is also a new LIC, but not included in the table because it only gained independence in 2011; data not available.

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