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Transitioning from foreign aid: is the next cohort of graduating countries ready?



AUTHORS

Gavin Yamey, Diana Gonzalez, Ipchita Bharali, Kelly Flanagan, Robert Hecht

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AUTHORS

Gavin Yamey is Director of the Center for Policy Impact in the Duke Global Health Institute (DGHI), Professor of Global Health and Public Policy, and Associate Director of Policy at DGHI, Duke University

Diana Gonzalez is an Associate Program Officer at Pharos Global Health Advisors

Ipchita Bharali is a Policy Associate at the Center for Policy Impact in Global Health

Kelly Flanagan is an Associate Program Officer at Pharos Global Health Advisors

Robert Hecht is the President of Pharos Global Health Advisors and Professor at the Yale School of Public Health and the Jackson Institute of Global Affairs, Yale University

EXECUTIVE SUMMARY

In the coming years, over a dozen middle income countries (MICs) are likely to transition from multilateral concessional assistance, including from International Development Association (IDA) and Gavi, the Vaccine Alliance (Gavi) support. A glance at the list of upcoming graduates, which includes Nigeria and Pakistan, suggests that this cohort may find the transition more challenging when compared with the experiences of previous countries that have already graduated. Many upcoming graduates, for example, still have high rates of child and maternal mortality and large proportions of the population living in poverty. Is the upcoming cohort more vulnerable and less “ready” to transition than those countries that previously graduated? If it is, do multilateral agencies need to adjust their transition policies?

To help answer these questions, we compared two cohorts of countries: a “previous cohort” that graduated from IDA between 2010 and 2015, and an “upcoming cohort” that is anticipated to graduate from IDA, Gavi, or both in coming years. We compared the two cohorts across five categories of indicators: macroeconomic conditions, health financing, health performance, governance, and overall levels of poverty and inequality.

We assumed 2020 as the graduation year for the upcoming cohort; for this cohort, the most recent available data are usually from 2016, i.e., four years or more prior to the anticipated year of graduation. For each indicator, we collected data from the three most recent years (typically 2014-2016) and calculated an annual average. To make an “apples to apples” comparison, for the previous cohort we also took an average of three years of data for the period 4-7 years prior to graduation.

Overall, our findings suggest that, on average, the countries that graduated from IDA in the previous 2010-15 period had stronger capacity to manage the donor transition than that of upcoming graduates. The upcoming cohort seems to have, on average, lower per capita income, greater indebtedness, weaker capacity to efficiently use public resources, more limited and less effective health systems, weaker governance and public institutions, and greater inequality.

Our initial analysis points to potentially significant differences in the two cohorts that could have a bearing on (i) the ability to transition smoothly from donor aid, (ii) the timing and nature of transition, and (iii) the policies of donor partners and the MICs slated to graduate.

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Abbreviations

ANC	Antenatal care	IHME	Institute for Health Metrics and Evaluation
CPIA	Country Policy and Institutional Assessment	IRAI	IDA Resource Allocation Index
DAH	Development assistance for health	LMIC	Lower middle income country
DTP3	Diphtheria-tetanus-pertussis, 3 doses	MIC	Middle income country
GDP	Gross domestic product	MMR	Maternal mortality ratio
GGHE	General government health expenditure	NGOs	Non-governmental organizations
GHE	Government health expenditure	ODA	Official development assistance
HAQ	Healthcare access and quality	OOP	Out of pocket
HDI	Human Development Index	PHC	Primary health care
IDA	International Development Association	U5MR	Under-five mortality rate
		UMIC	Upper middle income country
		WGI	Worldwide Governance Indicators

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BACKGROUND

In the coming years, a number of countries are anticipated to be transitioning from multilateral concessional assistance, including transitioning from International Development Association (IDA) and Gavi, the Vaccine Alliance (Gavi) support. There is concern among some global health and development experts that some of the upcoming cohort of graduating countries, such as Nigeria and Pakistan, are less well prepared and will find the transition challenging—especially when compared with the experiences of previous countries that have already graduated. Some of the challenges facing the upcoming cohort, for example, include large proportions of the population living in poverty and high ongoing rates of avertable child and maternal mortality.

Is the upcoming cohort more vulnerable and thus less “ready” to transition than those countries that previously graduated from IDA and Gavi assistance? In this rapid analysis, we compare two cohorts of countries using a range of indicators of their macroeconomic conditions, domestic and external health financing, health performance, governance, and overall levels of development and inequality.

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COHORTS AND TIME FRAME FOR COMPARISON

We examined data on two groups of IDA countries, which we call the “upcoming cohort” and the “previous cohort.”¹ For this analysis, we assume 2020 as the graduation year for the upcoming cohort (except for Angola, which graduated from IDA in 2014 and is now in the process of graduating from Gavi).

For almost all indicators for the upcoming cohort, the most recent available data are from 2016 or slightly earlier, i.e. 4+ years prior to the anticipated year of graduation. For this cohort, we examined annual data for the three most recent years and estimated an average annual value over this three-year period. For example, Pakistan’s GDP was the three-year moving average for 2013-15, amounting to US\$1,339. In order to make a fair “apples to apples” comparison, for the previous cohort, we also took an average of three years of data for the period 4+ years prior to graduation. For example, if a country’s IDA graduation was in 2014, we examined data for the years 2007-2009 and estimated an average annual value over this three-year period. For Indonesia, for example, the three-year average for this earlier period came to US\$2,225.

For some indicators, especially health outcome indicators (e.g. the coverage index), data were not available for three consecutive years, so the data point from a single year was used in the year closest to the 4-7 year range prior to graduation. The exact years used for each country for each indicator are shown in the [attached Excel spreadsheet](#). The first tab (**Catalog**) lists the indicators (with definitions and data sources) and the second tab (**Graduation Information**) summarizes the graduation status of the countries included in the analysis.

¹ **Upcoming cohort:** Angola, Cameroon, Congo-B, Moldova, Mongolia, Nigeria, Pakistan, Papua New Guinea (PNG), Sudan, Timor-Leste, Uzbekistan. **Previous cohort:** Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Bolivia, Georgia, Indonesia, Sri Lanka and Vietnam.

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CHOICE OF INDICATORS AND PRESENTATION OF THE DATA

In our analysis, we compared the two cohorts across five categories of indicators: macroeconomic conditions, health financing, health performance, governance, and overall levels of poverty and inequality.

These categories were selected to express a range of country characteristics related to the countries' ability and willingness to take on, pay for, and manage effectively the policy and program challenges of economic and social development under transition, i.e., without external donor technical and financial support. In other words, the underlying hypothesis behind the analysis was that countries with more robust economies, a greater commitment to health and other social goals, more effective programs to improve health outcomes, better national governance and institutions, and more egalitarian and poverty-oriented policies will be in a stronger position to exit from donor support while sustaining economic and social gains.

For each category, we chose several indicators that we believe provide a good signal of the countries' readiness to transition from donor aid. Within each category, we selected indicators that are non-overlapping, in order to capture a wide spectrum of country characteristics. Among the macroeconomic indicators, for example, we looked at per capita GDP (Atlas method), tax revenues as a share of GDP, net debt as a share of GDP, and risk of debt distress – all conceptually quite distinct variables describing national economic performance. Since data were missing for some indicators that we had hoped to use, we dropped or de-emphasized these indicators, focusing on the ones for which more complete data were available.

For each category, one tab in the spreadsheet gives the data for each country in table form, the other tab gives a visualization that compares the two cohorts (including an average of the data across the whole group of upcoming graduates versus an average of the data across the group of previous graduates). For example, **Figure 1** below shows the average maternal mortality ratio (MMR) across the upcoming cohort of countries versus the average MMR across the previous cohort; the upcoming cohort has a much higher average MMR in the run up to graduation.

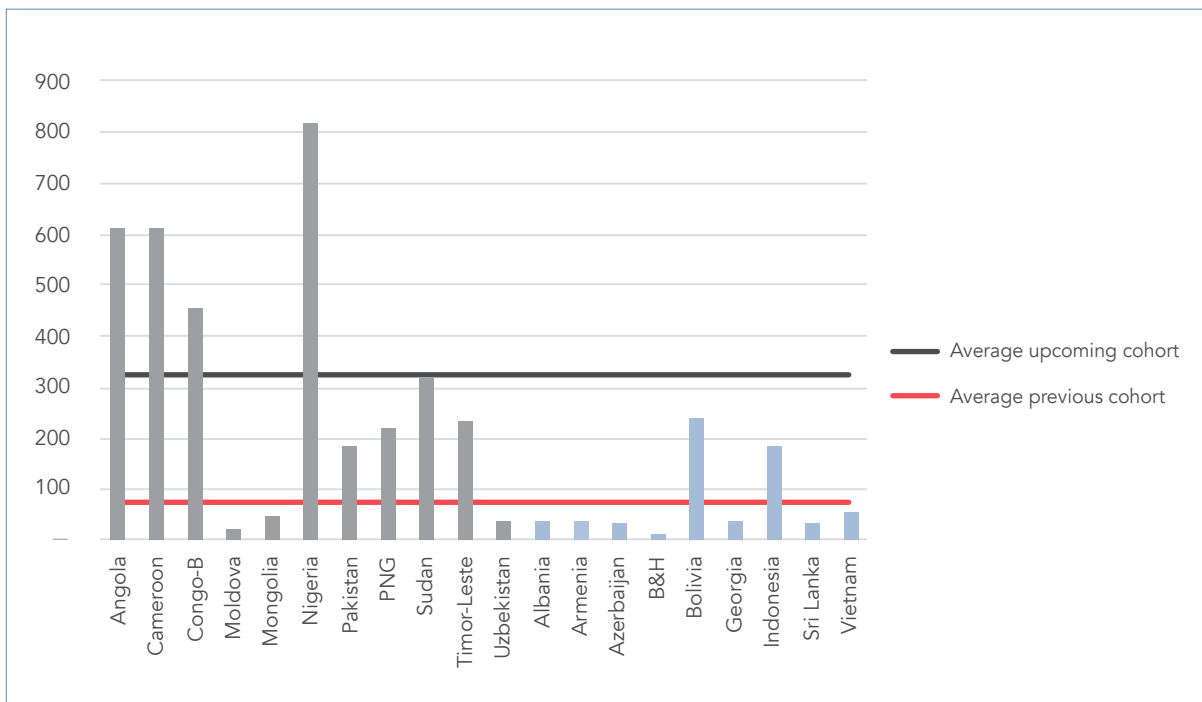


FIGURE 1: Comparison of the MMR (deaths per 100,000 live births) in the two cohorts of countries in the period 5-8 years prior to graduation. For each country, an average annual MMR was estimated for this three-year period. The black line shows the average of this value across the cohort of upcoming graduates; the red line is the average across the previous cohort. The average MMR for the upcoming graduates is 323 per 100,000 live births vs. 73.41 per 100,000 live births for the previous cohort.

In the rest of this technical note, we summarize the results of our comparison of these two cohorts, across the five categories of each indicator. With each category, we begin by defining the indicators that we included in the analysis.

4 RESULTS OF COMPARING THE TWO COHORTS

4.1 Macroeconomic indicators

INDICATOR	DEFINITION
GDP per capita (current prices USD)	GDP divided by mid-year population. Atlas method (adjustment to reduce the impact of exchange rates).
Tax revenue (% of GDP)	General government tax revenue as a percentage of GDP.
Net debt (% of GDP)	Gross debt minus financial assets corresponding to debt instruments. These financial assets are: monetary gold and special drawing rights, currency and deposits, debt securities, loans, insurance, pension, and standardized guarantee schemes, and other accounts receivable.
Risk of debt distress (after 2014)	<ul style="list-style-type: none"> • Low risk: all debt burden indicators are below the thresholds. • Moderate risk: debt burden indicators are below the thresholds in the baseline scenario, but stress tests indicate that thresholds could be breached if there are external shocks or abrupt changes in macroeconomic policies. • High risk: <ul style="list-style-type: none"> • one or more thresholds are breached under the baseline scenario, but the country does not currently face any repayment difficulties; or • in debt distress, when the country is already experiencing difficulties in servicing its debt, as evidenced, for example, by the existence of arrears, or • debt and debt service indicators are in significant or sustained breach of thresholds.

Key findings from comparison of cohorts:

- **GDP per capita:** The average GDP per capita for the previous cohort of graduates is slightly higher at US\$2,601 USD compared to US\$2,404 for the upcoming graduates.
- **Tax revenue:** The tax revenue to GDP is a good measure of a country's tax effort and revenue mobilization policies.² Various studies have compared the tax revenue performance of countries with similar income levels and economic structures. Rao and Kumar recently estimated the predicted tax revenue to GDP ratios for the income categories defined by the World Bank (**Table 1**).³ The selected list of countries included in our analysis mostly fall in the lower middle income country (LMIC) or upper middle income country (UMIC) category. According to Rao and Kumar's study, the predicted ratio is between 21.46%-23.03% for LMICs and UMICs. Both the cohorts in our analysis are underperforming against this benchmark, and there is not much

² Le, Tuan Minh; Moreno-Dodson, Blanca; Bayraktar, Nihal. 2012. Tax Capacity and Tax Effort : Extended Cross-Country Analysis from 1994 to 2009. Policy Research Working Paper; No. 6252. World Bank, Washington, DC.

³ Rao, M. G., & Kumar, S. (2017). *Envisioning Tax Policy for Accelerated Development in India* (No. 17/190).

difference in the tax revenue to GDP performance of the two cohorts (an average of 17.67% for upcoming graduates vs. 18.07% for previous graduates). However, the value for Angola (42.03%) seems like an outlier among the upcoming cohorts,⁴ and Angola is also different from the rest of the cohort in that it graduated in 2014. Removing Angola, the average tax revenue to GDP for the upcoming graduates would be 14.96% (vs. 18.07% for the previous graduates).

	No. countries in sample	Tax GDP ratio	Predicted Tax GDP ratio
High income	36	29.03	26.26
Upper middle	24	23.84	23.03
Lower middle	24	17.83	21.46
Lower income	14	12.11	16.22

TABLE 1: Predicted tax revenue to GDP ratios by World Bank income category (table from reference 3).

- **Net debt as share of GDP:** Although complete information on net debt/GDP was not available, the ratio is very high for one upcoming graduate, Pakistan (58.80%). On average, the net debt as a percentage of GDP for the upcoming cohort is twice that of the previous cohort (31% vs. 14%).
- **Debt distress:**⁵ We looked at the debt sustainability analysis⁶ undertaken by the IMF and included the risk of debt distress levels of the two cohorts during the years leading to graduation. While data on all countries were not available, among the upcoming graduates, Mongolia has high risk of debt distress while Sudan is currently in debt distress. Angola, Cameroon, Congo-B, and Timor-Leste have moderate risk of debt distress and Moldova, Nigeria and PNG have low risk of debt distress.
- The lower tax revenue performance and higher debt servicing obligations of the upcoming graduates could make transition more challenging unless there is greater domestic resource mobilization.

⁴ According to the Angola IMF 2012 article IV consultation, "oil revenue accounts for some three-quarters of budgetary revenue and is the main driver of reserves accumulation."

⁵ Since the debt distress levels of all countries are not available, it is hard to make a comparison in the performance of the two cohorts. We also examined net debt/GDP data but again these data are not available for all selected countries.

⁶ Retrieved from IMF "Debt Sustainability Analysis Low-Income Countries": <https://www.imf.org/external/pubs/ft/dsa/>

4.2 Health financing indicators

INDICATOR	DEFINITION
Govt. health expenditure, GHE (% total govt. expenditure)	Recurrent and capital spending from government (central and local) budgets, external borrowing and grants (including donations from international agencies and NGOs), and social (or compulsory) health insurance funds.
General government health expenditure (GGHE) as % of GDP	Govt. health expenditure expressed as percentage of GDP.
Out-of-pocket (OOP) health expenditure (% of total expenditure on health)	Any direct outlay by households, including gratuities and in-kind payments, to health practitioners and suppliers of pharmaceuticals, therapeutic appliances, and other goods and services whose primary intent is to contribute to the restoration or enhancement of the health status of individuals or population groups. It is part of private health expenditure.
Development assistance for health (DAH) as % of general government health expenditure	In this analysis, DAH was considered as ODA for health as reported by DAC donors and the Bill & Melinda Gates Foundation to the Creditor Reporting System using sector codes "120: I.2. Health, Total," "130: I.3. Population Policies/Programmes & Reproductive Health, Total" and "16064: Social mitigation of HIV/AIDS."
% of routine vaccines funded by the government	Indicates extent of government financing of routine vaccination programs, and thus reflects national commitment to key primary health care programs.

Key findings from comparison of cohorts:

- **GHE:** On average, health expenditure as a percentage of government expenditure is similar for both cohorts of countries (7.80% vs 7.98%).
- **GGHE:** The average general government health expenditure as a percentage of GDP is slightly lower at 2.45% for the upcoming graduates versus 2.48% for the previous graduates. Cameroon, Nigeria and Pakistan have GHE/GDP ratios below 1% while Congo and Moldova spend a larger share of their GDP on health. Although both cohorts of countries have similar levels of public spending on health, the differences in health sector performance illustrated below could suggest inefficiencies in use of government funding and other implementation and capacity challenges in the health sector.
- **DAH:** The average DAH as a percentage of general GHE in the upcoming graduates is almost twice as high as that of the previous graduates (13.89% vs 9.21%). Among the upcoming graduates, Cameroon (38.84%), Nigeria (25.76%), Pakistan (19.33%), and PNG (15.72%) have the highest DAH as a proportion of GHE. Among the previous graduates, Albania and Georgia have ratios approaching 20%, but six of the nine countries obtained less than 10% of their public sector health spending from donors in the years leading up to graduation.

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- **OOP expenditures:** OOP health expenditure as a percentage of total health expenditure is an important indicator of financial protection for consumers of health services and facilities. This ratio is higher in the previous cohort compared to the upcoming group—an average of 50.87% versus 41.9% in the previous group.⁷ However, the OOP percentages reported for Timor-Leste (9.2%) and PNG (10.57%) do not seem credible based on our knowledge of these countries' health systems and on the general experience of lower middle income nations, and are almost certainly distorting the average picture.⁸ The very high rates of OOP health expenditure in several of the large upcoming graduates—Cameroon (65.60%), Nigeria (70.07%), and Sudan (74.77%)—also point to a major barrier to health access and a large risk for poor households of incurring catastrophic health expenses in these countries.
 - **Government financing of vaccines:** On average, government financing covered 70% of routine vaccination programs in the previous graduate countries, while the proportion is less than 40% for the upcoming graduates. This suggests that for the upcoming cohort, the “leap” from donor funding of vaccination to self-sufficiency will be more challenging as compared to the earlier graduates.

⁷ Among the former soviet countries (Albania, Armenia, Azerbaijan, and Georgia), the ratio improved from 65.12% to 58.87% after graduation.

⁸ If Timor-Leste and PNG are removed, the average ratio for the upcoming cohort is 49.01% which is almost on a par with the previous graduates (50.87%).

4.3 Health performance indicators

INDICATOR	DEFINITION
Coverage index	Indicates a country's performance on primary health care (PHC) service coverage, based on: (i) antenatal care (ANC) coverage (4+ visits), (ii) % of children with diarrhea receiving appropriate treatment, and (iii) DTP3 coverage. Ranges from 0 to 1; 1 indicates better PHC service coverage. Data are only available for the year 2015.
Equity: under-five mortality wealth differential	Measures the difference in the under-five mortality rate (U5MR) between the highest and lowest wealth quintiles. The smaller the difference in U5MR between these quintiles, the more equitable.
Maternal mortality ratio, MMR (deaths per 100,000 live births)	Annual number of maternal deaths from any cause related to or aggravated by pregnancy or its management, per 100,000 live births. MMR is regarded as a good proxy indicator for health system strength.
Healthcare access and quality (HAQ) index	This new indicator, developed by IHME, provides a summary measure of personal healthcare access and quality on a scale from 0 (lowest) to 100 (highest). ⁹ The HAQ index is based on risk-standardized mortality rates from 32 causes of the global burden of disease that, in the presence of high-quality healthcare, should not be fatal. Data are only available for the years 2010 and 2015.

Key findings from comparison of cohorts:

- **Coverage index:** Looking at 2015 data alone (admittedly not a true “apples to apples” comparison), the average coverage index is 0.6 for upcoming graduates and 0.8 for recent graduates. This is at least suggestive that the previous cohort of graduates was performing better on primary health care service coverage in the run up to transition.
- **Equity, under-five mortality rate (U5MR) wealth differential:** In the cohort of upcoming graduates, there is a very large average difference in the U5MR between the richest and poorest quintiles—a difference of 63 deaths per 1,000 live births—while this average difference is much lower among the previous graduates (36.7 deaths per 1,000 live births).
- **MMR:** The average annual MMR for upcoming graduates in the period 5-8 years prior to graduation is over four times as high as the previous graduates (323 per 100,000 live births vs. 73.41 per 100,000 live births) (see figure 1, p7).
- **HAQ index:** Previous graduates perform better on healthcare access and quality. The average HAQ index among upcoming graduates is 51, while for previous graduates the average is 62 (a higher score means better access and quality).

⁹ GBD 2015 Healthcare Access and Quality Collaborators. Healthcare Access and Quality Index based on mortality from causes amenable to personal health care in 195 countries and territories, 1990–2015: a novel analysis from the Global Burden of Disease Study 2015. *Lancet* 2017; 390: 231–66

4.4 Governance indicators

INDICATOR	DEFINITION
Country Policy and Institutional Assessment (CPIA) – overall score (also referred to as the IDA Resource Allocation Index, IRAI)	Score has 16 criteria grouped in 4 equally weighted clusters (economic management, structural policies, policies for social inclusion and equity, public sector management and institutions). For each of these criteria, countries are rated on a scale of 1 (low) to 6 (high).
CPIA property rights and rule-based cluster average	Extent to which private economic activity is facilitated by an effective legal system and rule-based governance structure in which property/contract rights are respected and enforced. Countries are rated on a scale of 1 (low) to 6 (high).
Worldwide Governance Indicators (WGI), Regulatory Quality	Estimates of governance are reported using a range from -2.5 (weak) to 2.5 (strong) governance performance. Regulatory quality reflects perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.
WGI, Rule of Law	Estimates of governance are reported using a range from -2.5 (weak) to 2.5 (strong) governance performance. Rule of law reflects perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.

Key findings from comparison of cohorts:

- **CPIA overall score:** On average, the overall score is 0.7 points lower for the upcoming cohort compared to the graduated countries, an important difference. Three countries from the previous cohort do not report data for this indicator: Albania, Azerbaijan and Indonesia. Sudan has the lowest score while Armenia and Georgia have the highest. The three best performers among the upcoming cohort are Moldova, Nigeria and Uzbekistan.
- **CPIA property rights and rule-based governance:** The previous cohort performs better, on average, on this indicator.
- **WGI indicators:** These indicators measure perceptions about governance performance where -2.5 represents the weakest governance to 2.5 strongest. The previous cohort performs better, on average, on both regulatory quality and rule of law, as shown by the larger negative values for the upcoming country cohort.

4.5 Inequality indicators

INDICATOR	DEFINITION
Gini index	Measures extent to which distribution of income among individuals/ households within an economy deviates from a perfectly equal distribution. A Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality. Long-standing and widely cited indicator of inequality.
Human Development Index (HDI)	Composite index based on life expectancy, years of education, and per capita income. Seen by some as capturing more dimensions of a country's inequality than the Gini, which focuses exclusively on income.
Inequality in life expectancy	Inequality in distribution of expected length of life based on data from life tables (estimated using the Atkinson inequality index and cohort simulation). The level of inequality is represented as a percentage loss of years due to inequality. The higher the %, the greater the inequality.

Key findings from comparison of cohorts:

- **Gini index:** For upcoming graduates, the average Gini index is about 3 points higher than for the cohort of previous graduates, suggesting slightly higher inequality in the upcoming cohort of graduates. Most of the countries in both cohorts have Gini scores in the 30-40 range, with several outliers in the 40s (Cameroon, Congo-B and Nigeria among the upcoming cohort, Bolivia and Georgia in the earlier graduates), pointing to higher inequality.
- **HDI:** The average index is significantly lower among the upcoming cohort of graduates, with scores one-third less than among the earlier cohort. This again highlights the lower overall development levels of the countries preparing to transition from donor aid.
- **Inequality in life expectancy:** the average for upcoming graduates is double the average for the previous cohort of graduates (30.26% vs. 16.08%). This difference shows that among the previous cohort of graduates, life expectancy was more equitable between the poorest and the wealthiest in the country than in the upcoming graduate countries.

We conducted a rapid collection and analysis of data that we believe can help to assess country readiness to transition from higher to lower levels of external donor aid. Based on this analysis, it appears that the countries that graduated from IDA in the 2010-15 period had, on average stronger capacity to manage this “donor transition” and thus sustain economic and social progress achieved partly with an infusion of donor support, as compared with the dozen or so countries that are predicted to graduate in the next few years. On average, the upcoming cohort seem to have, among other characteristics, lower per capita income, greater indebtedness, weaker commitment to public spending on health, more limited and less effective health systems, weaker governance and public institutions, and greater inequality.

The data and analysis presented here have several limitations that should be kept in mind, and that may merit further investigation. The country samples may be imperfectly chosen. Data are missing for a number of countries. Some outliers appear odd and need to be checked to ensure that these are not errors in the reported country values. We were not always able to obtain data for exactly matched years, i.e., 3-5 years prior to graduation. We did not weight averages by country population level or size of the economy.

Nevertheless, our initial analysis points to potentially significant differences in the two cohorts that could have a bearing on (i) the ability to transition smoothly from donor aid, (ii) the timing and nature of transition, and (iii) the policies of donor partners and the MICs slated to graduate. The findings raise several questions:

- Should certain upcoming graduations be delayed or occur over a longer time period?
- Should weaker countries prepare earlier for transition, e.g. by investing more heavily in their health systems and strengthening their public institutions for budgeting, procurement, and other functions?
- Should donors allocate more resources to this next wave of countries to bolster health delivery and financing and intensify their policy dialogue with country governments to encourage greater national commitment to domestic health spending and sound governance?

While there are no straightforward answers to these questions, it will clearly be important for multilateral agencies and transitioning MICs to pursue policies that can promote and sustain social and economic gains for the tens of millions of poor families living in these countries.