Understanding Women's and Girls' Vulnerabilities to the COVID-19 Pandemic: A Gender Analysis and Data Dashboard of Low- and Lower-Middle Income Countries

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Executive Summary

In which low- and lower-middle income countries are women and girls most exposed to or at most risk to suffer the negative effects of the COVID-19 pandemic? How well are these countries able to address these effects? These two questions informed this policy paper and the creation of a pandemic-related gender vulnerability data dashboard for 75 low-income countries (LICs) and lower-middle income countries (LMCs). The dashboard includes country-level indicators of women's wellbeing, economic performance, COVID-19 rates and trends, and countries' capacity to respond to the pandemic with a gender lens.

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To identify the most vulnerable LICs and LMCs — or the countries where women are highly vulnerable[4] to suffering negative effects of the pandemic — the analysis:

- Assessed women's vulnerabilities to COVID-19 (based on a gender COVID-19 indicator framework) summarizing the available international statistics in three indexes of women's wellbeing: women's health, economic opportunities, and human capital, and added a composite women's vulnerability index that combines the three separate indexes. An index of gender data availability was also calculated to convey gender data vulnerability;
- Assessed the health and economic impacts of COVID-19 in all countries from current pandemic health data and 2020 economic forecasts;
- Ranked countries by their scores on each index of women's wellbeing and selected those that scored in the lowest quartile (25 percent) among all LICs and LMCs. Similarly, the analysis

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ranked countries on forecasted 2020 GDP growth scores and number of COVID-19 cases and selected the lowest quartile of LICs and LMCs with the most severe economic contraction and the highest number of health pandemic cases.

- Identified the most vulnerable LICs and LMCs where women are at the greatest risk of suffering from the primary health and secondary (economic and health) effects of the pandemic by combining the two assessments listed above, aided by the ranking of countries.

The resulting 26 most vulnerable LICs and LMCs were grouped into four clusters according to the type of vulnerability: countries with highly vulnerable women and severe economic crisis (4 countries); countries with highly vulnerable women and severe health crisis (Bangladesh); countries with severe health or economic crisis and gender data vulnerability (7 countries); and countries with highly vulnerable women but as of now no severe economic or health crisis (14 countries).

The majority of vulnerable countries (21 out of 26 countries) are found in Sub-Saharan Africa. Sub-Saharan African countries make up 55 percent of all LICs and LMCs and have among the lowest scores in the indicators used to measure women's wellbeing, which helps to explain their overrepresentation among vulnerable countries.

Depending on the evolution of the pandemic, updated information may cause countries to be added or subtracted from this list. It is worth emphasizing that this is a conservatively drawn list of LICs and LMCs who possess the severest vulnerability to the pandemic from a gender perspective based on current information. In many other countries outside the most vulnerable group, women are vulnerable in one or two domains, which is worrisome, especially if the pandemic worsens. Income, race, ethnicity, or other group-based inequalities in countries undergoing severe health or economic impacts from COVID-19 raise concerns about the wellbeing of women in excluded groups even if, on average, the country does not score as highly vulnerable in any domain of women's wellbeing.

To answer the question about the most vulnerable countries' capacity to address the negative effects of the pandemic with a gender lens, the analysis:

- Assessed the capacity of the state to channel government payments to women and children by the availability of sex disaggregated information on individuals' access to birth registration, ID, and a bank or mobile account;
- Assessed the capacity of the state to have enough fiscal space[5] to cover basic maternal and child sexual and reproductive health needs despite the pandemic fiscal constraints based on the nature and level of pandemic-related aid flows from major international donors;
- Examined the degree of congruence between identified country vulnerabilities and country capacities using the lens of the earlier identified four clusters of most vulnerable countries.

Notwithstanding changes in the list of countries with the evolution of the pandemic or changes in the definition of vulnerability, this analysis of the 26 countries conveys the following messages regarding the situation of vulnerable women and girls in LICs and LMCs:

- The economic contraction is affecting more LICs and LMCs with populations of highly vulnerable women than the health crisis, at least in the short term. This suggests the importance of mitigation measures that target cash transfers to women to compensate for the loss in income and help women with income generation, both in the short term and as part of longer-term recovery programs.

[5] The amount of budgetary room a government has to provide public services.

- There is a significant number of countries (slightly more than half of the countries in this group of vulnerable countries) where the pandemic has yet to have severe health or economic consequences but where the wellbeing of women is very low — they are highly vulnerable to any negative effects of the pandemic as well as other shocks beyond the current crisis.
- There is a smaller but still significant group of mostly LMCs (7 countries in the list of 26) that are undergoing severe health or economic crises but where the lack of available gender data impedes monitoring the situation and wellbeing of women and girls. This is particularly the case for data measuring women's human capital and economic opportunities, which is likely to reinforce a vicious cycle between lack of data and no remedial action.
- From the imprecise data that are available, vulnerable countries seem ill-prepared to address women's vulnerabilities to the pandemic. Effectively targeting women for cash transfers and other social safety nets will be difficult in countries where significant proportions of their populations have no birth registrations or IDs and where gender gaps exist in access to bank and mobile money accounts. An analysis of information from a UNDP-UN Women (2020) COVID-19 global response tracker raises particular concerns regarding policies that seek to increase women's labor market participation and calls for the need to have reliable monitoring data to assess if gender-sensitive programs on paper (which the UNDP-UN Women tracker compiles) will benefit vulnerable women and girls in practice.
- With few exceptions, these vulnerable countries also seem to have reduced fiscal space to address the needs of vulnerable populations and, in particular, women's health and income generation needs.
- The mismatch between women's needs in vulnerable countries and countries' capacities to respond to these needs highlights the important role of stakeholders in advocating for gender-sensitive resource allocations as well as the importance of closely tracking and monitoring the situation of women and girls in the most vulnerable countries. This analysis has specifically highlighted the need to monitor the effectiveness of gender-sensitive mitigation programs in actually reaching and benefiting vulnerable women and girls.

The gender vulnerability data dashboard is one tool to help monitor the situation of women and girls in vulnerable countries.[6] The dashboard also allows different users to explore different definitions of vulnerability and monitor the condition of women across all LICs and LMCs.

Introduction: Two Questions

In which low- and lower-middle income countries are women and girls most exposed to or most at risk to experience the negative effects of the COVID-19 pandemic? How well are these countries able to address these effects? These two questions informed this policy paper and our compilation and analysis of the available international statistics.

We created a pandemic-related gender vulnerability data dashboard for 75 low-income countries (LICs) and lower-middle-income countries (LMCs). A "dashboard" is a set of selected indicators organized to give an easily readable picture of countries' vulnerability to the COVID-19 pandemic from a gender perspective, showcasing both levels and trends and allowing comparisons across

[6] The UNDP-UN Women Covid-19 Global Gender Response Tracker (2020) and the UN Women COVID-19 and gender monitor (2020) are other useful tools.

LICs and LMCs. The dashboard includes country-level indicators of women's wellbeing, country economic performance, COVID-19 case rates and trends, and indicators of countries' capacity to respond to the pandemic with a gender lens. It was used for the analysis presented in this paper. An Excel file containing the dashboard and supporting information is available here.

The main objectives of this paper are to identify countries where women and girls are particularly vulnerable to the pandemic; alert policy makers, donors, and civil society to pay special attention to their condition; and provide these stakeholders with potentially useful information regarding countries' capacity needs so they can make and advocate for gender-informed resource allocations.

The paper first gives an overview of the analysis plan; it then lists the most vulnerable countries that the analysis identified and briefly describes the "other" LICs and LMCs in the data dashboard that did not fall into the lowest scores and thus were not analyzed in this paper. The next two sections present, first, the analysis of women's multiple vulnerabilities and, second, the economic and health triggers for the most vulnerable countries. The section that follows examines these countries' response capacities. A concluding section suggests implications for policy and advocacy and ways to use the gender vulnerability data dashboard.

Analysis Plan

To identify the most vulnerable LICs and LMCs — or countries where women are highly vulnerable[7] to the negative effects of the pandemic — we followed three steps in analyzing the internationally available statistics:

- Assessed women's vulnerabilities to COVID-19 (based on our gender COVID-19 indicator framework) in all countries where data are available and identified gender data gaps;
- Assessed the health and economic impacts of COVID-19 in all countries from current health data and 2020 economic forecasts;
- Identified the most vulnerable LICs and LMCs where women are at the greatest risk of suffering from the primary and secondary effects of the pandemic by combining the two assessments listed above.

The resulting selection of most vulnerable LICs and LMCs were grouped according to the type of vulnerability into four clusters: countries with highly vulnerable women and severe economic crisis ("economic crisis"); countries with highly vulnerable women and severe health crisis ("health crisis"); countries with severe health or economic crisis and lacking adequate gender data ("data gaps and health or economic crisis"); and countries with highly vulnerable women but as of now no severe economic or health crisis ("low women's wellbeing").

To answer the question about the most vulnerable countries' capacity to address the negative effects of the pandemic on women we compiled and examined two sets of indicators:

- Assessed the capacity of the state to reach women and children with government payments and social assistance based on the availability of sex-disaggregated information on individuals' access to birth registrations, national IDs, and a bank or mobile account;

[7] In this paper "highly vulnerable women" or "women's vulnerability" are shorthand terms for the vulnerability of both women and girls in a particular country.

- Assessed the capacity of the state to have enough "fiscal space" to cover basic maternal and child, sexual and reproductive health needs despite the pandemic fiscal constraints based on the nature and level of pandemic-related aid flows from major international donors.

The countries' capacity analysis was then juxtaposed with the four country vulnerability types to derive policy and advocacy suggestions on countries' priority resource needs from a gender perspective.

The Most Vulnerable Countries

To identify the most vulnerable countries from the list of 75 LICs and LMCs, we assessed women's vulnerability using a framework of 28 indicators for monitoring women's exposure to the impact of the pandemic (Buvinic, Noe, and Swanson 2020). This framework specifies primary and secondary effects of the pandemic on health (the former indicated by COVID-19 cases and deaths, the latter by maternal and child health as well as sexual and reproductive health indicators) as well as secondary effects on poverty and economic wellbeing triggered by the economic contraction and based on existing economic opportunities and human capital.

To assess women's vulnerabilities, we looked at the status and wellbeing of women as measured by the available data. We summarized these data in three indexes of women's wellbeing: women's health, economic opportunities, and human capital, and a composite women's vulnerability index that combines the three separate indexes to capture countries with wide-ranging vulnerabilities. Parallel to these indexes we calculated measures of gender data availability. We then ranked countries by their scores on each index and selected those that scored in the lowest quartile (25 percent) among all LICs and LMCs. Low scores indicate that women may be more vulnerable to the effects of the pandemic because of poor health, lack of economic opportunities, lack of education and skills, or a combination of the three. (It is possible for a country to score above the first quartile on all three separate indexes, but to fall below the first quartile on the composite measure.)

Women living in the countries that fall in the lowest quartile on all four indexes are most vulnerable to the potential negative effects of the pandemic; women living in the countries that fall in the lowest quartile in three of four indexes have the next highest vulnerability; and so on. Women are also at risk where the lack of data makes it difficult to assess their vulnerability or to develop policies to address their needs now and in the future. The lack of data, measured by the data availability index, is therefore treated as an additional vulnerability.

Second, we assessed the economic and health impacts of the pandemic. To gauge the projected economic impact of the pandemic, we used recent and forecasted GDP rates and selected countries that are likely to experience the most severe GDP contraction in 2020, that is, the 25 percent of countries with the most negative projected rates of change in GDP per capita. The direct health impacts are measured using the most recent 61-day average COVID-19 case rates (as of October 16, 2020) to rank order countries on cases and trends and selected the 25 percent of countries with the highest case rates.

Third, we juxtaposed the results of the two steps above to identify the countries where women are most likely to be most negatively affected by the pandemic; economic and health shocks in the context of existing gendered vulnerabilities can trigger rapid deterioration in well-being. That is, the negative GDP growth rates and high COVID-19 case rates were used as triggers to identify the most vulnerable countries that also exhibited the lowest women's wellbeing scores (signifying highest vulnerability) or scored lowest on the availability of gender data.

Using these criteria, we identified the 26 most vulnerable countries, grouped into four clusters according to the type of vulnerability they exhibit. Table 1 presents this list of LICs and LMCs grouped by cluster.

Table 1: The 26 most vulnerable LICs and LMCs grouped into clusters by vulnerability type

Economic Crisis (Cluster 1): Countries with 1 or more highest scoring vulnerabilities for women and severe economic crisis	• Afghanistan • Angola • Congo, Rep. • Zimbabwe
Health Crisis (Cluster 2): Countries with 1 or more highest scoring vulnerabilities for women and severe health crisis	• Bangladesh
Data Gaps and Health or Economic Crisis (Cluster 3): Countries with severe economic or health crises and low availability of gender data as measured by the composite data availability index	• Cabo Verde • Eswatini • Sao Tome and Principe • Solomon Islands • Sudan • Ukraine • Yemen
Low Women's Wellbeing (Cluster 4): Countries with the highest scoring (4) and the next highest scoring (3) number of vulnerabilities for women but as of yet no severe economic or health crisis	• Central Africa Republic • Chad • Congo, Dem. Rep. • Eritrea • Guinea • Guinea-Bissau • Mauritania • Malawi • Mali • Niger • Somalia • South Sudan • Tanzania • Uganda

The majority of vulnerable countries (21 out of 26 countries) are found in Sub-Saharan Africa. Sub-Saharan African countries make up 55 percent of all LICs and LMCs and have among the lowest scores in the indicators we used to measure women's wellbeing, which helps to explain their overrepresentation among vulnerable countries.

Depending on the evolution of the pandemic, updated information may add countries to or subtract countries from the list. We emphasize that this is a conservatively drawn list of LICs and LMCs with the most severe vulnerability to the pandemic from a gender perspective based on current information. Many other countries do not fall in the above categories but have existing gender vulnerabilities in one or two dimensions, which is worrisome, especially if the pandemic turns more severe. Income, race, ethnicity, or other group-based inequalities in other countries undergoing severe health or economic impacts from COVID-19 raise concern about the wellbeing of women in excluded groups even if, on average, the country does not exhibit vulnerabilities for women.

Other Countries in the Gender Vulnerability Data Dashboard

The remaining countries in the gender vulnerability data dashboard are found across the world in Central Asia, South Asia, Latin America and the Caribbean, North Africa, and South East Asia and the Pacific.

Countries hit the hardest by the economic contraction include **Kyrgyzstan** (-13.8 percent) and **India** (-11.2 percent). Both also have high COVID-19 case rates. Other countries with severe economic contractions in 2020 and high COVID-19 case rates are **Bolivia, El Salvador, Honduras**, and **the Philippines**. While these countries are clearly suffering from the immediate impact of the pandemic, we do not include them among the most vulnerable because they do not score lowest on domains of women's wellbeing. **Bolivia**, in particular, is a concern with the high overall number of cases (63 per million inhabitants) and a worrisome lack of sex-disaggregated data, so there is no way to track the primary effect of the pandemic on cases and deaths by sex. Bolivia, as other countries in Latin America, has significant income and ethnic inequalities that interact with gender inequalities increasing vulnerabilities among poor and indigenous women, even if women's wellbeing scores are above average for the country as a whole.

Moldova and **Kyrgyzstan** both have a high case rate and, unlike a majority of countries, a high proportion of women among cases. This should raise concerns about women's vulnerability to the pandemic, even in dimensions where women's wellbeing scores are high. Moldova has 175 cases per million, trends are increasing, and women represent 59 percent of the cases. Kyrgyzstan has 30 cases per million, trends are uncertain, and women represent 53 percent of the cases. Other countries with high and increasing COVID-19 case rates in the most recent 31-day period are: **Tunisia** (75 cases per million); **Nepal** (74 cases per million); and **Morocco** (66 cases per million).

There are 13 countries that have not yet experienced high rates of COVID-19 infections but have low scores on one or two of the indexes of women's wellbeing. Most of these will also experience some decline in GDP per capita in the current year. Of particular concern are four countries that fall in the bottom quartile on the index of women's health: **Benin, Mozambique, Nigeria, and Sierra Leone**. These countries should be monitored closely for possible secondary health effects of the pandemic on women.

Women's Multiple Vulnerabilities to the Pandemic

In this section we unpack and summarize the analysis of women's vulnerabilities to the pandemic, including the construction of the four indexes of women's wellbeing and the data availability index, indicating gender data vulnerability.

INDICATORS

Women's vulnerability to the pandemic is assessed in the domains of women's health (9 indicators); economic wellbeing (8 indicators); and human capital (6 indicators). The indicator selection is based on the framework paper but to increase coverage and representativeness of the data, several indicators were replaced with similar indicators. The largest replacement involved several indicators on school completion rates with the World Bank's Learning Adjusted Years of Schooling (LAYS) indicator.

The most recent observation from 2015 through 2019 for each country was selected from the SDG database or other databases maintained by international organizations. Where data were recorded for multiple age groups, a simple average was computed.

INDEXES

To summarize the information for each domain, a single index was calculated as the (unweighted) average of the rescaled indicators in that domain. Indicators were rescaled from a range of near zero to one, such that the best recorded outcome among all countries with data, including upper-middle-income and high-income countries, has a value of 1 and the worst has a value set to a number slightly larger than 0 (to distinguish those values from missing data).[8] A composite index was calculated as the (unweighted) average of the three domain indexes.

Only indicators with data were included in each country's indexes. Therefore, it is possible for a country to have little data but a high index score if it performs well only on the indicators available. Because of this, a separate gender data index was calculated from the proportion of indicators available for each domain. This index reflects gender data vulnerability.

IDENTIFYING COUNTRIES WITH VULNERABLE WOMEN

There are 79 countries classified by the World Bank in 2020 as low- or lower-middle income countries. Of these, four were excluded from our analysis because they lacked any data on cases or deaths from COVID-19.[9] As a starting point for analysis, the remaining 75 countries were ranked along the following dimensions:

- Women's vulnerabilities measured by the composite index of women's wellbeing outcomes and by the three separate domain indexes.
- Availability of gender data measured by the composite index of data availability.
- COVID-19 cases per 100,000 people, measured by the average number of new cases per million over a two-month period ending on October 16, 2020.
- Economic shock measured by the IMF's 2020 forecast for GDP per capita (PPP) growth.

WOMEN'S WELLBEING SCORES

Table 2 shows the scores for women's wellbeing measured by the separate health, economic, and education indexes and the composite index for the 26 most vulnerable countries in the four clusters listed in Table 1. Scores in the shaded cells are in the bottom 25 percent of LICs and LMCs for each index. Women in this group of countries are potentially the most vulnerable to the pandemic because of the large proportion who lack access to basic health and reproductive care; work for low wages in industries that may be adversely affected by the pandemic; and lack education and skills needed to cope with social and economic disruption.

[8] The rescaled scores are not a rank ordering. Each country's rescaled score is proportional to its indicator score over range of scores across all countries including upper-middle- and high-income countries.
[9] The excluded countries are Kiribati, Democratic People's Republic of Korea, Micronesia, and Vanuatu.

Table 2: Women's vulnerabilities for the 26 most vulnerable LIC and LMC countries by cluster (Scores in the lowest 25 percent of each index are shaded)

Country	Income group	Women's health index (%)	Economic opportunities index (%)	Human capital index (%)	Composite index (%)
Cluster 1: Economic crisis					
Afghanistan	LIC	46.4	14.7	28.2	32.5
Angola	LMC	56.1	36.1	20.5	40.3
Congo	LMC	59.9	36.0	29.3	43.8
Zimbabwe	LMC	69.3	37.6	6.7	45.7
Cluster 2: Health crisis					
Bangladesh	LMC	52.8	54.7	54.2	53.9
Cluster 3: Data gaps and health or economic crisis					
Cabo Verde	LMC	73.6	63.5	65.0	67.5
Eswatini	LMC	62.9	45.0	52.7	54.1
Sao Tome and Principe	LMC	67.9	90.1	64.4	75.0
Solomon Islands	LMC	59.9	59.8	56.4	58.7
Sudan	LIC	60.4	42.4	44.2	49.6
Ukraine	LMC	81.1	78.0	78.6	79.2
Yemen	LIC	57.1	43.7	50.4	50.7
Cluster 4: Low women's wellbeing					
Central African Republic	LIC	48.0	13.5	10.5	29.4
Chad	LIC	40.3	20.7	30.4	31.5
Cong, Dem. Rep.	LIC	56.8	24.3	24.5	38.4
Eritrea	LIC	54.3	30.3	32.0	40.4
Guinea	LIC	43.9	25.7	54.5	43.0
Guinea-Bissau	LIC	52.2	25.8	0.0	33.6
Malawi	LIC	60.4	30.2	27.7	42.1
Mali	LIC	47.2	44.7	30.5	41.5
Mauritania	LMC	51.6	34.4	41.0	42.9
Niger	LIC	42.6	13.8	12.5	26.8
Somalia	LIC	44.2	11.7	0.0	26.4
South Sudan	LIC	46.2	14.1	17.7	29.7
Uganda	LIC	58.0	34.0	0.0	38.8
Tanzania	LMC	53.0	33.5	44.1	44.3

Scores on each index measure the relative position of the country among all LICs and LMCs. For the 75 countries included in the study, the first quartile score was highest on women's health (55 percent); next highest on economic wellbeing (36 percent); and lowest on human capital (31 percent). The first quartile score on the composite index was 46 percent. Among the 26 most vulnerable countries, scores at or below these cutoffs are shaded in Table 2. Although the index scores are generally low, the

values of the underlying indicators are not consistently low. Scores for the indicator of the prevalence of anxiety disorders, for example, are better than for most high-income countries, which may explain why the median score on women's health for this group (55 percent) is near the median for all LICs and LMCs (60 percent). Tanzania has relatively high scores for primary school enrollments; and 8 of the 14 countries with data have above median scores on the indicator of weight for age (wasting), but only one (Zimbabwe) is above median on the indicator of height for age (stunting).

GENDER DATA AVAILABILITY

Table 3 shows the availability of data for the different domains of women's wellbeing for the 26 most vulnerable countries. Because the indexes can only be computed for indicators with data, country scores are not strictly comparable. Countries in cluster three generally have index scores above the median but, as we can see in the table below, lack adequate data to reliably monitor women's wellbeing. Cabo Verde, for example, has data for only 3 of the 9 indicators of women's health; for 4 of the 8 indicators of economic opportunity; and 4 of the 6 human capital indicators. Data availability for Sudan is even worse.

Table 3: Data availability in the 26 most vulnerable LICs and LMCs
(Scores in the lowest 25 percent of each index are shaded)

Country	Women's health data availability (%)	Economic wellbeing data availability (%)	Human capital data availability (%)	Composite data availability (%)
Cluster 1: Economic crisis				
Afghanistan	100	50	67	75
Angola	89	25	33	57
Congo	56	25	33	40
Zimbabwe	100	38	17	62
Cluster 2: Health crisis				
Bangladesh	89	88	67	82
Cluster 3: Data gaps and health or economic crisis				
Cabo Verde	33	50	67	52
Eswatini	33	63	50	50
Sao Tome and Principe	33	13	50	35
Solomon Islands	78	13	33	49
Sudan	33	13	33	28
Ukraine	44	75	17	51
Yemen	33	13	67	44
Cluster 4: Low women's wellbeing				
Central African Republic	56	25	17	36
Chad	89	25	83	72
Cong, Dem. Rep.	33	25	33	31
Eritrea	33	13	67	44
Guinea	89	38	33	59

Country	Women's health data availability (%)	Economic wellbeing data availability (%)	Human capital data availability (%)	Composite data availability (%)
Guinea-Bissau	33	13	0	21
Malawi	100	63	33	71
Mali	89	63	83	79
Mauritania	78	50	83	72
Niger	89	38	83	74
Somalia	33	13	0	21
South Sudan	33	25	50	38
Uganda	100	75	0	72
Tanzania	100	38	83	78

The women's health indicator domain is the best represented in the available data. The average availability of health indicators is 50 percent; indicators of human capital (32 percent) and economic wellbeing (31 percent) are less available, although some countries do much better. The relatively greater availability of health indicators may be attributable to the MICS and DHS surveys that focus on women's health and reproductive care, primarily in LICs and LMCs.

Across all countries (including high-income and upper-middle-income), the health-related indicators that are least likely to be found are SDG indicator 5.2.1 (women and girls subjected to physical or sexual violence) and 3.7.1 (women of reproductive age using modern methods of family planning). The gaps in economic data are greatest globally for SDG indicators 1.1.1 (employed population below the international poverty line) and 5.4.1 (time spent on unpaid domestic chores and care work) and the proportion of informal employment in total employment. The least available of the human capital indicators globally is SDG 4.4.1 (youth and adults with information and communications technology skills).

The Triggers: Negative GDP Growth Rates and COVID-19 Cases and Trends

Economic and health shocks in the context of existing gendered vulnerabilities can trigger rapid deterioration in women's well-being. In this section we examine the severity of economic and health shocks in the most vulnerable countries.

ECONOMIC SHOCK

We assess the potential economic shock of the pandemic by the expected shrinkage of the national economy in 2020 according to IMF projections, which take into account the effects of COVID-19. Economic shocks may be a direct consequence of the pandemic — closing businesses to limit the spread of the virus or a decrease in demand by consumers afraid to expose themselves to the virus — or an indirect effect on countries with little exposure to the virus but dependent on trade and tourism or financial flows from countries that have widespread infections. There is no sex-disaggregated measure of national income or output, but poor countries whose economies are shrinking or growing slowly have fewer resources with which to mitigate the effects of an epidemic disease. Table 4 includes a column showing the GDP per capita (PPP) growth rates for the 26 most vulnerable countries. Of the

75 countries in the dashboard, the 25 percent of countries observing the greatest negative growth rates are classified as experiencing severe economic shock.

Table 4: Forecasted economic growth rates for the 26 most vulnerable countries (Countries in bottom 25 percent of growth are highlighted)

Country	GNI per capita $	GDP per capita growth 2015-2019 (%)	GDP per capita growth 2020 (%)
Cluster 1: Economic crisis			
Afghanistan	2330	-0.39	-7.11
Angola	6390	-3.73	-6.81
Congo	3060	-7.45	-9.26
Zimbabwe	2730	-0.73	-12.05
Cluster 2: Health crisis			
Bangladesh	5190	6.55	-2.87
Cluster 3: Data gaps and health or economic crisis			
Cabo Verde	7310	3.01	-7.87
Eswatini	7940	1.00	-4.49
Sao Tome and Principe	4090	1.01	-8.64
Solomon Islands	2350	1.33	-7.04
Sudan	3990	-2.66	-10.70
Ukraine	13750	0.84	-6.76
Yemen	..	-10.49	-7.41
Cluster 4: Low women's wellbeing			
Central African Republic	1060	2.82	-2.70
Chad	1620	-3.22	-3.56
Cong, Dem. Rep.	1110	1.60	-5.00
Eritrea	..	-2.36	-2.00
Guinea	2520	4.74	-1.03
Guinea-Bissau	2220	2.56	-4.99
Malawi	1080	0.48	-2.22
Mali	2360	2.50	-4.83
Mauritania	5350	1.29	-5.30
Niger	1250	1.67	-3.22
Somalia	..	..	0.00
South Sudan	..	-6.91	1.08
Uganda	2210	2.46	-3.67
Tanzania	2700	3.61	-1.05

Source(s): World Bank and International Monetary Fund and authors' calculations

HEALTH SHOCK

Countries classified as undergoing a health shock are the 25 percent of countries in the dashboard with the highest rate of new COVID-19 cases per million inhabitants. The data are based on the average number of new cases and deaths over a 61-day period ending on October 16, 2020. Using a long period-average smooths out small variations in the case due to erratic reporting and corrections.

The direction of the epidemic in each country was calculated by comparing the 61-day average of cases per million with the recent 31-day average. Countries for which the 31-day average exceeds the 61-day average by 2 standard deviations[10] are classified as increasing; countries for which the 31-day average is less than 61-day average by two standard deviations are classified as decreasing; and those in between are classified as uncertain.

Table 5 shows case rates and trends for the 26 most vulnerable countries. The proportion of women among cases and deaths is shown where available.

Table 5: COVID-19 new cases and deaths for 26 most vulnerable countries - totals per million and proportion female
(The highest 25 percent of cases per million are shaded)

Country	New COVID-19 cases per million (61-day average)	Case rate Decreasing Increasing Uncertain	Females proportion of all cases %	COVID-19 daily deaths per million (61-day average)	Females proportion of deaths %
Cluster 1: Economic crisis					
Afghanistan	1.04	U	30.3	0.05	25.2
Angola	2.49	I	..	0.07	..
Congo	4.19	D	..	0.10	..
Zimbabwe	3.20	D	..	0.11	..
Cluster 2: Health crisis					
Bangladesh	10.95	D	29.0	0.20	23.0
Cluster 3: Data gaps and health or economic crisis					
Cabo Verde	126.23	I	52.0	1.33	37.3
Eswatini	28.09	D	53.2	0.65	45.1
Sao Tome and Principe	3.29	U	..	0.00	..
Solomon Islands	2.91	U	..	..	..
Sudan	0.51	D	..	0.01	..
Ukraine	71.79	I	59.0	1.22	46.2
Yemen	0.11	U	27.0	0.04	23.0
Cluster 4: Low women's wellbeing					
Central African Republic	0.69	U	26.5	0.00	..

[10] Standard deviations were measured around a least-squares linear trend line

Country	New COVID-19 cases per million (61-day average)	Case rate Decreasing Increasing Uncertain	Females proportion of all cases %	COVID-19 daily deaths per million (61-day average)	Females proportion of deaths %
Chad	0.40	I	25.0	0.02	..
Cong, Dem. Rep.	0.24	U	..	0.01	..
Eritrea	0.60	U	..	0.00	..
Guinea	3.64	D	31.0	0.02	..
Guinea-Bissau	2.23	U	..	0.06	..
Malawi	0.69	U	31.6	0.02	23.2
Mali	0.61	U	33.0	0.01	..
Mauritania	3.32	U	..	0.02	..
Niger	0.03	U	..	0.00	..
Somalia	0.63	I	26.0	0.01	..
South Sudan	0.47	U	24.2	0.01	..
Uganda	3.11	I	27.3	0.03	32.3
Tanzania	..	U	..	..	..

Source(s): Our World In Data and Global Health 50/50 and authors' calculations

The countries hit hardest by the COVID-19 pandemic have been high-income or upper-middle-income economies. Following its start in China, the epicenter moved to Western Europe and North America. Hotspots have now appeared among upper-middle-income countries in Central and South America, and the pandemic is now spreading to poorer countries on every continent, but only one low-income country, the Gambia, has a 61-day case rate in the highest quartile.

Figure 1: Trends in COVID-19 case rates, 16 March to 16 October 2020

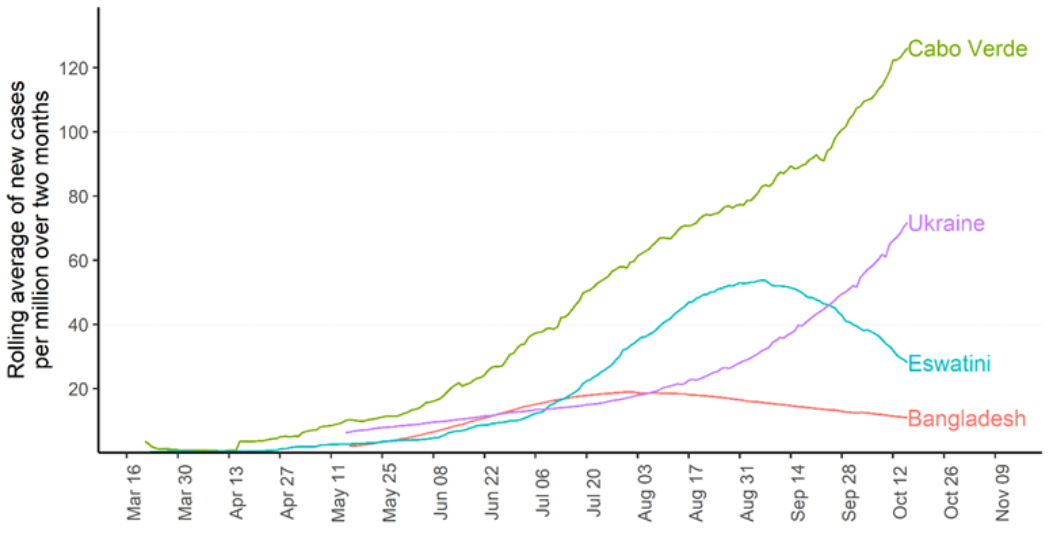

Figure 1 tracks the course of the 61-day moving average of new cases per million for the four countries in the highest quartile of cases, as highlighted in Table 5. Even using this heavily smoothed series, a momentary capture of a country's case load cannot by itself give a sense of whether cases are destined to stay high or low,

which is why we have paired the case load indicator with a trend indicator. Cabo Verde and Ukraine were profiled at the peak of their new cases and both countries have continued to see an increase in new cases since the October 16 cutoff, although Cabo Verde's slope has started decreasing as of this writing. Bangladesh and Eswatini show signs of bending the curve and have continued on a downward trajectory, though the experience of European and North American countries shows that new waves can follow even in countries with initially low case counts.

More data are becoming available on the sex breakdown of COVID-19 cases and deaths. Globally fewer women than men have been diagnosed with COVID-19 and women's death rates have also been lower. Among the most vulnerable countries, only in Cabo Verde, Eswatini, and Ukraine have women's case rates exceeded men's (with deaths lower than men's), but sex-disaggregated data on cases and especially on deaths are unavailable for more than half of the 26 countries.

Assessing Countries' Response Capacities

Countries' capacity to track the effects of the pandemic on vulnerable populations, including women, and assist these populations with mitigation and recovery measures depends largely on accurate reporting systems with universal coverage and sufficient granularity, including, importantly, sex-disaggregation. This information is required to effectively reach vulnerable populations with cash transfers and other social assistance programs. Since these programs have become major government instruments to mitigate the most severe effects of the pandemic, we assess countries' basic capacity to respond to the pandemic with a gender lens by tracking countries' sex-disaggregated coverage of birth registration, national ID, and bank or mobile money accounts, which governments use to channel government payments to people (Gelb, Mukherjee and Navis 2020).

Since LICs and LMCs depend more on external aid flows than more developed economies, the dashboard also includes aid flows reported by the International Aid Transparency Initiative (IATI) for 2019 and 2020, overall and for health separately, on the assumption that greater overall aid flows provide more fiscal space to address women's (and men's) vulnerabilities to the pandemic and that targeted spending in health should disproportionately benefit women and children compared to other spending. Lastly, the dashboard also records which countries have received COVID-19 responsive financing from the IMF and the World Bank to date and includes gross flows from (disbursements) and to (repayments) the World Bank in 2020 from a recent compilation and analysis by Duggan and colleagues (2020).

This last section of the analysis examines countries' response capacities both in terms of the basic information needed to channel government payments to women and having enough fiscal space from aid flows to protect social expenditures. Below we present these data for the 26 most vulnerable countries, explore the capacity of countries to target women with social safety nets, and examine the degree of congruence between identified country vulnerabilities and country capacities by country clusters. The intention is to provide stakeholders in the policy, donor, and civil society communities with a rough first approximation of countries' COVID-19 preparedness and needs from a gender perspective.

TARGETING VULNERABLE WOMEN WITH SOCIAL SAFETY NETS

A World Bank compilation of social protection and jobs responses by Gentilini and colleagues (September 2020 update) shows that cash-based transfers have been a preferred mitigation response to the pandemic in the 26 most vulnerable countries. Eighty-three percent of these countries have rolled out cash-based transfers as the main social protection response (versus 77 percent for other LICs and LMCs).

Even if policies are gender-sensitive and seek to give cash to recipients, women may not always be able to access these payments. Table 6 presents the available data on the information needed to target and track cash transfers and other social assistance payments by sex. Most countries have data disaggregated by sex for birth registration, although with varying reference years, and on bank or mobile money accounts, most with 2017 as the reference year. The exceptions are the cluster of countries with little available gender data. Information on possession of national ID is much less complete.

Table 6: Share of population without national ID, with bank accounts, and birth registration for 26 most vulnerable countries

Country	Share of pop without national ID %		Share of population 15+ with account at financial institution or mobile money %		Share of population under 5 with registered birth %	
	Total	Female	Total	Female	Total	Female
Cluster 1: Economic crisis						
Afghanistan	28.6	51.6	14.9	7.2	42.3	41.9
Angola	..	..	29.3	22.3	25.0	25.2
Congo	40.7	44.1	26.1	21.0	96.0	96.0
Zimbabwe	15.9	17.1	55.3	51.7	..	44.1
Cluster 2: Health crisis						
Bangladesh	17.1	18.7	50.1	35.8	20.2	20.0
Cluster 3: Data gaps and health or economic crisis						
Cabo Verde	..	..	..	..	91.0	..
Eswatini	..	..	28.6	27.4	54.0	50.0
Sao Tome and Principe	..	..	..	..	95.0	95.0
Solomon Islands	..	..	..	..	88.0	89.0
Sudan	..	..	15.3	10.0	67.0	66.0
Ukraine	2.7	1.6	62.9	61.3	100.0	100.0
Yemen	..	..	6.5	1.7	30.7	30.3
Cluster 4: Low women's wellbeing						
Central African Republic	..	..	13.8	9.7	61.0	62.0
Chad	62.7	79.4	21.8	14.9	12.0	12.0
Congo, Dem. Rep	..	..	25.8	24.2	24.6	24.8
Eritrea	..	..	..	..	..	..
Guinea	55.4	60.6	23.5	19.7	62.0	61.5
Guinea-Bissau	..	..	..	..	24.0	24.0
Malawi	84.3	84.4	33.7	29.9	67.2	67.2
Mali	29.3	36.9	35.4	25.7	86.7	85.6

Country	Share of pop without national ID %		Share of population 15+ with account at financial institution or mobile money %		Share of population under 5 with registered birth %	
	Total	Female	Total	Female	Total	Female
Mauritania	11.1	12.0	20.9	15.5	66.0	66.0
Niger	55.2	68.0	15.5	10.9	63.9	62.3
Somalia	..	..	38.7	33.7	3.0	3.0
South Sudan	78.6	88.6	8.6	4.7	35.0	36.0
Tanzania	..	..	46.8	42.2	26.4	25.0
Uganda	18.6	19.5	59.2	52.7	32.2	32.2

Source(s): ID4D-FINDEX, 2017; FINDEX, 2014-2017; and UNICEF

Table 6 suggests that, with few exceptions, countries are ill-prepared to track and address women's vulnerabilities to the pandemic through cash transfers and other targeted social assistance. On the positive side, there are few or no apparent gender differences in birth registration, suggesting that both girls and boys and women and men have equal access to services and social assistance that are tied to a birth certificate.[11] However, in 13 of the 24 countries for which there is information, less than half of the population has been registered at birth. Across the 24 countries with any data, the average share of the population registered at birth is 53 percent. Equally or more significantly, only half of these vulnerable countries have information on possession of national IDs and in 7 countries a majority of the female population does not possess this document.

National IDs are most often required to open bank or mobile money accounts. These accounts have been widely used to transfer government payments to people during the pandemic. In only 3 (Uganda, Ukraine, and Zimbabwe) of the 21 countries for which information is available do more than half of women (15 years and older) hold bank or mobile accounts. Further, across countries there are sizeable gender differences in bank or mobile account ownership, benefitting men over women and suggesting that the distribution of cash and other assistance through these vehicles could reinforce rather than reduce gender inequalities. Over the 26 countries, an average of 20.5 percent of men and 28.7 percent of women do not possess a national ID, and 46 percent of men compared to only 32 percent of women have a bank or mobile money account.

UN Women and UNDP recently launched a website tracking governments' gender-sensitive mitigation measures in response to COVID-19 (UNDP-UN Women COVID-19 Global Gender Response Tracker, 2020). These gender-sensitive measures include social protection but are broader and cover other topics such as violence against women. According to this tracking, 44 percent of the group of mitigation measures have been gender-sensitive in the vulnerable countries we have identified, versus 43 percent for the remaining LICs and LMCs. However, when disaggregating by type of measure, 15 percent of COVID-19 social protection policies in these 26 vulnerable countries are gender-sensitive, somewhat less than non-vulnerable countries, but broadly in line with a global average of 17 percent. The same analysis finds that only 9 percent of COVID-19 labor market policies in vulnerable countries are gender

[11] Birth registration and birth certificates are not synonymous and some people who have been registered at birth may not possess a birth certificate.

sensitive, compared to 38 percent for other LIC and LMCs and 21 percent at the global level. This last figure supports the importance of tracking and targeting the vulnerable countries in this analysis.

Data presented in Table 6 that signal who has access to government services question the extent to which gender-sensitive measures the UNDP-UN Women tracker picks up will actually reach vulnerable women. Therefore, it also highlights the need for stakeholders to monitor the basic indicators of women's wellbeing included in the UNDP-UN Women tracker and in this gender vulnerability data dashboard.

WOMEN'S INCOME GENERATION NEEDS IN COUNTRIES UNDERGOING SEVERE ECONOMIC CONTRACTION

Having a bank or mobile money account is especially important in the ten countries undergoing severe economic contraction and especially in the subset of four countries (**Afghanistan, Angola, Congo**, and **Zimbabwe**) where, additionally, women are highly vulnerable to the effects of the pandemic (Table 3). Having a bank or mobile money account is a signal that vulnerable women can both access government cash transfers and have access to basic financial services to help with income generation — a strategy for poor women to help households cope with economic shocks and food insecurity that is backed by evidence in the relevant literature.

These four countries all see women predominantly engaged in subsistence farming and off-farm work as well as experiencing high rates of food insecurity. This underscores the urgency of improving women's productivity and income generation on and off the farm to minimize the crisis' negative impacts on food consumption and family wellbeing. However, except for Zimbabwe, most women in these countries do not have accounts at a financial institution or mobile money service provider. In Zimbabwe, this figure is 52 percent; in the other three countries less than a quarter of women have accounts and in Afghanistan, that figure is only 7 percent. Equipping these women with basic financial tools to generate income through agriculture and self-employment off the farm should be a policy priority, both as a mitigation measure and as countries begin to recover from the pandemic.

To improve farm productivity and income generation off the farm, women also need access to productive technologies and practical information and knowledge. Unfortunately, women in these four countries score particularly poorly on the educational foundations that can help to maximize the impact of training and extension programs — they score in the lowest 25 percent on the human capital index and three of them score low on the availability of gender data on human capital (Tables 2 and 3). This highlights the need to invest significantly in women's and girls' human capital formation and in improvements in gender data on human capital to monitor trends and progress over time.

WOMEN'S HEALTH NEEDS IN COUNTRIES HARD HIT BY THE COVID-19 HEALTH CRISIS

Currently, only **Bangladesh**, a lower-middle-income country, has highly vulnerable women (scoring poorly on women's health) and high COVID-19 case rates, reflecting the fact that the pandemic has spread first among high- and upper-middle income countries, leaving low-income countries with comparatively low case rates until now.[12] In Bangladesh, the primary health effect of the pandemic on women is less of a concern than the pandemic's secondary health effects – the share of COVID-19 cases in women is comparatively low (29 percent) but Bangladesh has moderately high maternal mortality rates (173 deaths per 100,000 live births in 2017); relatively high rates of anemia among women of reproductive age (40 percent); and high rates of adolescent births (74 per thousand) and child stunting

[12] Three other countries hit hard by the COVID-19 pandemic (**Cabo Verde, Eswatini,** and **Ukraine**) do not record high vulnerabilities for women but lack available gender data. They are discussed in the next section.

(31 percent). The pandemic may worsen these already poor health indicators by shifting health spending away from maternal, child, and reproductive health services to combat COVID-19.

There are 12 other countries with very poor scores on women's health. With the exception of Mauritania and Tanzania, they are all low-income countries, and it can be assumed from the available data that, like Bangladesh, the secondary effects of the pandemic on maternal and child health, as well as on women's sexual and reproductive health, are of greater concern than the primary health effects, given the comparatively low proportion of COVID-19 cases affecting women in low-income countries (Table 5) and women's high health vulnerabilities (Table 2).

Foreseen negative secondary health effects on women could in principle be prevented with additional aid flows directed to expenditures in health. It is important to underscore, however, that providing vulnerable countries with fiscal space overall and for health spending is necessary but not sufficient to guarantee that health outcomes for women will be protected.

Table 7 shows aid flows from multilateral and OECD/DAC donors for all aid and for health reported to IATI. The table shows health disbursements per capita for 2019 and 2020 for the 26 most vulnerable countries. Reporting by donors may vary over time so these data should be interpreted with caution to reflect rough magnitudes rather than exact quantities. While the 2020 figures are year-to-date and additional disbursements may be coming in, the numbers suggest that health disbursements per capita will be lower in 2020 than in 2019 raising concerns about women's health, especially in the 13 vulnerable countries with poor women's health indicators. Stakeholders will want to monitor health indicators for these countries, pay attention to the apparent mismatch between women's health needs and health resources, and support targeted investments on women's health as part of pandemic-related aid financing.

Table 7: Donor (DAC and multilateral) Total and Health disbursements per capita for 26 most vulnerable countries (2019-2020)

Country	Total DAC & multilateral disbursements per capita (current $)		Health DAC & multilateral disbursements per capita (current $)	
	2019	2020 (Oct 1 YTD)	2019	2020 (Oct 1 YTD)
Cluster 1: Economic crisis				
Afghanistan	91.5	56.3	11.5	7.0
Angola	26.3	9.5	4.1	1.7
Congo	65.2	19.7	4.7	3.3
Zimbabwe	65.9	49.3	28.1	20.9
Cluster 2: Health crisis				
Bangladesh	27.6	19.8	2.5	2.0
Cluster 3: Data gaps and health or economic crisis				
Cabo Verde	260.1	186.2	16.2	11.7
Eswatini	92.8	58.8	49.6	31.6
Sao Tome and Principe	154.6	121.4	18.2	15.6
Solomon Islands	294.7	209.7	44.1	33.6

Country	Total DAC & multilateral disbursements per capita (current $)		Health DAC & multilateral disbursements per capita (current $)	
	2019	2020 (Oct 1 YTD)	2019	2020 (Oct 1 YTD)
Sudan	25.6	17.0	4.9	2.9
Ukraine	17.4	14.5	3.1	1.6
Yemen	153.1	76.9	10.7	7.7
Cluster 4: Low women's wellbeing				
Central African Republic	141.2	80.1	19.3	14.0
Chad	32.9	32.1	9.6	4.4
Congo, Dem. Rep.	34.4	21.8	11.5	5.7
Eritrea	18.2	8.1	9.2	3.5
Guinea	29.7	14.9	10.1	5.3
Guinea-Bissau	45.6	20.2	15.8	9.3
Malawi	49.6	34.8	22.3	16.2
Mali	59.6	39.4	11.7	6.9
Mauritania	46.0	54.0	5.0	4.9
Niger	45.0	28.9	6.9	4.1
Somalia	115.4	105.9	13.0	8.7
South Sudan	191.4	128.4	33.7	18.2
Tanzania	32.0	23.0	11.2	9.2
Uganda	41.0	33.5	13.4	8.7

Source(s): International Aid Transparency Initiative, October 1

Gender data needs in countries with severe economic or health crisis and gender data vulnerability. The group of countries experiencing severe crises and lacking available data to track the situation of women and girls are **Cabo Verde, Eswatini, Ukraine, Sao Tome and Principe**, and the **Solomon Islands** — all lower-middle-income countries, and **Sudan** and **Yemen**, which are low-income countries. All are projected to have negative economic growth in 2020 and all except Eswatini fall in the bottom quartile. These countries record varying rates of women's employment in the service sector (from 41 percent in Sudan to 88 percent in Sao Tome and Principe) as well as high rates of women's participation in informal employment (49 percent in Cabo Verde and 52.5 percent in Eswatini). Women are disproportionately losing formal and informal jobs in the services as result of the global pandemic. They require robust social safety nets to mitigate the worst effects of jobs and income losses and access to active labor market programs during the recovery period. A significant proportion of young women in Cabo Verde (33 percent), Eswatini (41 percent), and Ukraine (20 percent) are not in education, employment, or training. They should be a priority of active labor market programs. Unfortunately, gender data, especially on human capital, is very spotty in these countries. No country has a complete set of the data needed to design effective job training programs.

More generally, these countries have numerous gender data gaps. All countries lack data for health indicators except for the three indicators that are internationally modeled: maternal mortality rates, prevalence of anxiety disorders, and prevalence of anemia. This is especially a concern in Cabo Verde, Eswatini, and Ukraine, which are undergoing a severe health crisis and where women may suffer

primary and secondary health effects that will remain untracked. Women account for more than half the COVID-19 cases in these three countries suggesting that women are more exposed to the primary negative effects of the pandemic, unlike the situation we described earlier for Bangladesh and 12 other low-income countries. While recognizing that men suffer from higher death rates, women in these three countries may be saddled with long-term health effects and economic disruption due to their higher case burden.

This group of countries in particular should invest in gender data capacity. Few LICs and LMCs report on budget allocations for data and no country reports on budget allocations for gender data. Overall net financial flows provide much needed "fiscal space" to countries undergoing severe economic or health shocks and are used here to get a very rough estimate of countries' potential capacity to invest in gender data.

Table 8 reports data on financial flows (loan disbursements, repayments including fees and interest, and net disbursements) from an analysis by Duggan and colleagues (2020) of World Bank lending in 2020 as percentage of 2018 GDP. Cabo Verde, Sao Tome and Principe, and the Solomon Islands have so far received positive net flows in 2020, while Ukraine has received no new aid, becoming a net repayer to the World Bank; Eswatini has repaid the same amount as received; and Sudan and Yemen record no loans or repayments. This suggests that only Cabo Verde, Sao Tome and Principe, and Solomon Islands would have the fiscal space to allow for new gender data investments as part of World Bank operations. Unless new World Bank operations included specific allocations for gender data, zero or negative net loan inflows would constrain the ability of Eswatini, Ukraine, Sudan, and Yemen to invest in gender data through World Bank lending.

Table 8: IMF and World Bank disbursements for 26 most vulnerable countries, 2020

Country	IMF per capita from emergency funds (Current $)	World Bank YTD 2020 repayments % of 2018 GDP	World Bank YTD 2020 gross loan disbursements % of 2018 GDP	World Bank YTD 2020 net disbursements % of 2018 GDP
Cluster 1: Economic crisis				
Afghanistan	5.8	-0.04	1.91	1.87
Angola	23.3	-0.05	0.05	0.00
Congo	..	-0.04	0.31	0.27
Zimbabwe	..	0.00	0.06	0.06
Cluster 2: Health crisis				
Bangladesh	4.4	-0.16	0.34	0.18
Cluster 3: Data gaps and health or economic crisis				
Cabo Verde	57.6	-0.44	1.55	1.11
Sudan	..	..	..	..
Solomon Islands	41.7	-0.11	1.57	1.46
Sao Tome and Principe	67.4	-0.05	1.01	0.96
Eswatini	95.2	-0.05	0.09	0.04
Ukraine	114.3	-0.20	0.13	-0.07
Yemen	1.2	-0.23	0.08	-0.15

Country	IMF per capita from emergency funds (Current $)	World Bank YTD 2020 repayments % of 2018 GDP	World Bank YTD 2020 gross loan disbursements % of 2018 GDP	World Bank YTD 2020 net disbursements % of 2018 GDP
Cluster 4: Low women's wellbeing				
Central African Republic	9.6	-0.03	1.47	1.44
Congo, Dem. Rep.	4.4	-0.04	0.49	0.45
Eritrea	..	..	..	..
Guinea	14.7	-0.05	0.31	0.26
Guinea-Bissau	1.7	-0.08	0.44	0.36
Mali	10.4	-0.13	0.62	0.49
Mauritania	34.1	-0.08	0.16	0.08
Malawi	11.1	-0.17	1.41	1.24
Niger	5.4	-0.09	0.67	0.58
Somalia	24.9	..	..	..
South Sudan	..	..	..	..
Chad	11.3	-0.03	1.38	1.35
Tanzania	0.4	-0.18	0.59	0.41
Uganda	10.7	-0.16	1.71	1.55

Source(s): IMF COVID-19 Lending tracker, October 21; Duggan et al, - CGD WP # 554; and authors' calculations

Women's needs in countries with the most severe vulnerabilities. The COVID-19 pandemic has spread from high-income countries to middle-income countries and increasingly to low- and lower-middle-income countries. While trends are evolving and often unclear, partly because of the lack of gender data, countries where women are highly vulnerable because they score poorly on indicators of wellbeing are highlighted as the fourth cluster of countries of concern, even if the pandemic has yet to result in severe economic or health crisis. There are 14 countries in this group. All except for Mauritania and Tanzania are low-income countries. The situation of women is most precarious in six countries (**Central African Republic, Chad, Guinea-Bissau, Niger, South Sudan**, and **Somalia**) that exhibit the lowest scores across health, education, economic wellbeing, and the composite index. All countries have high or very high maternal mortality rates; a third of women of reproductive age suffer from anemia; and countries with data have rates of child stunting in excess of 25 percent, which indicates high levels of chronic child malnutrition. All countries (except for Eritrea, Guinea-Bissau, and Somalia that report no data) have very low rates of women owning an account with a financial institution or mobile money service, with an average of 29.7 percent, and only in Uganda do more than half of women own an account.

Three countries have no published data for any of the human capital indicators. Mali and Tanzania have relatively high rates of data availability measured by the composite indicator; yet six other countries in this group have among the lowest composite data availability among the 26 vulnerable countries, raising concerns about these countries' abilities to track the health and economic effects of the pandemic on vulnerable women, especially if these effects worsen over time.

In the remaining eight countries (**Congo Dem. Rep., Eritrea, Guinea, Malawi, Mali, Mauritania, Tanzania**, and **Uganda**,) women score highest vulnerability across three of the four indexes.

In the analysis by Duggan and colleagues (2020), Uganda, Central African Republic, Malawi, Chad, Niger, Mali, and Tanzania score above the median of countries receiving net loan disbursements from the World Bank as percentage of 2018 GDP (Table 8). This suggests that, in principle, they could spend some of these resources on social sector spending directed towards improving the situation of women and girls. Somalia and South Sudan are not on the World Bank list compiled by Duggan and colleagues.

These countries have also received IMF pandemic-related funding from emergency response mechanisms indicating that overall aid flows have responded at least somewhat to countries' fiscal needs related to the pandemic. In fact, all countries in the list of most vulnerable countries, with the exception of Congo, Rep., Eritrea, South Sudan, Sudan, and Zimbabwe, record having received emergency funds from the IMF, although one cannot tell whether these are net disbursements (Table 8). But per capita emergency funds from the IMF have been significantly greater for LMCs than for LICs, perhaps in response to the different size of LICs and LMCs economies, while World Bank emergency lending has been greater for LICs than for LMCs (Duggan et al. 2020).

Concluding Thoughts: Assessing Vulnerability with the Gender Vulnerability Data Dashboard

We have constructed a pandemic-related gender vulnerability data dashboard for 75 low- and lower-middle-income countries. We have used this dashboard to identify countries most vulnerable to the negative effects of the COVID-19 pandemic defined by the situation of women and the severity of the health and economic crises. The result is a list of 26 countries grouped into four clusters according to the crisis severity and whether they score most poorly in terms of women's health, education and economic wellbeing, a combination of these domains of wellbeing, or availability of gender data. The main objectives of the analysis are to alert policy makers, donors, and civil society to pay special attention to the condition of women and girls in these countries, provide these stakeholders with potentially useful information regarding countries' capacity needs so they can make and advocate for gender-informed resource allocations, and make available a gender vulnerability data dashboard or tool that can be used by different stakeholders to analyze, compare, and forecast country needs from a gender perspective.

The list of vulnerable countries we identified in this policy paper will most likely change with the evolution of the pandemic. Countries may be added to the list and countries may be subtracted because crisis conditions may improve. We have arbitrarily selected the 25 percent of countries scoring most poorly on the different indicators, but one could argue convincingly that selection should cover 33 percent or even half of the 75 countries scoring worst on the different indicators. Alternatively, the underlying data (which are continuous) could be analyzed to reflect a continuum of needs across all 75 countries with categories as complementary to help think about how countries cluster together in similarity of vulnerabilities.

Notwithstanding changes in the list of countries with the evolution of the pandemic or changes in the definition of vulnerability, our analysis of the 26 countries conveys the following messages regarding the situation of vulnerable women and girls in LICs and LMCs:

- The economic contraction is affecting more LICs and LMCs with populations of highly vulnerable women than the health crisis, at least in the short term. This suggests the importance of mitigation measures that target cash transfers to women to compensate for the loss in income and help women with income generation, both in the short term and as part of longer-term recovery programs.

- There is a significant number of countries (half of the countries in our group of vulnerable countries) where the pandemic has yet to have severe health or economic consequences but where the wellbeing of women is very low — they are highly vulnerable to any negative effects of the pandemic.
- There is a smaller but still significant group of mostly LMCs (7 countries in our list of 26) that are undergoing severe health or economic crises but where the lack of available gender data impedes monitoring the situation and wellbeing of women and girls. This is particularly the case for data measuring women's human capital and economic opportunities, which is likely to reinforce a vicious cycle between lack of data and no remedial action.
- From the rough data we could compile, vulnerable countries seem ill-prepared to address women's vulnerabilities to the pandemic. Targeting women for cash transfers and other social safety nets effectively will be difficult in countries with significant proportions of their populations having no birth registrations and IDs and gender gaps in access to bank and mobile money accounts. The UNDP-UN Women tracker raises particular concerns regarding policies that seek to increase women's labor market participation and calls for reliable monitoring data to assess whether gender-sensitive programs on paper will benefit vulnerable women and girls in practice.
- With few exceptions, these vulnerable countries have reduced fiscal space to address the needs of vulnerable populations and, in particular, women's health and income generation needs.
- The mismatch between women's needs in vulnerable countries and countries' capacities to respond to these needs highlights the important role of stakeholders in advocating for gender sensitive resource allocations as well as the importance of closely tracking and monitoring the situation of women and girls in the most vulnerable countries. Women's vulnerabilities will not disappear just because the pandemic abates or the economy recovers. Other crises – armed conflicts or natural disasters - may have different impacts but the vulnerability of women and children identified in these indexes will remain. This analysis has highlighted the need to monitor the effectiveness of gender-sensitive mitigation programs in actually reaching and benefiting vulnerable women and girls.

The gender vulnerability data dashboard is one tool to help monitor the situation of women and girls in vulnerable countries. Other tools are available to monitor the gender-sensitive policy responses. The dashboard also allows different users to explore different definitions of vulnerability and monitor the condition of women across all LICs and LMCs. More generally, different stakeholders should be able to exploit the dashboard in different ways:

- Policymakers can use the dashboard as a source of comprehensive information on the effects of the COVID-19 pandemic from a gender perspective, compare how countries are doing on the different domains of vulnerability, assess which countries or domains may be especially at risk or vulnerable and identify policy and action priorities.
- The dashboard can provide donors with useful information on how well their resource allocations respond to countries' and women's vulnerabilities to the pandemic, as well as how to structure aid flows so that they are able to benefit the most vulnerable countries with the most vulnerable populations of women and girls.
- Civil society organizations both in-country and internationally can use the dashboard to advocate for gender-informed investments from policymakers and donors.

- Lastly, as the gender vulnerability data dashboard is updated regularly, all stakeholders can use it to track the progress of mitigation and recovery measures that are directed to improve the situation and wellbeing of vulnerable women and girls in LICs and LMCs.

References

Buvinic, Mayra, Lorenz Noe, and Eric Swanson. 2020. Tracking the Gender Impact of COVID-19: An Indicator Framework. Washington, DC: Open Data Watch. https://opendatawatch.com/wp-content/uploads/2020/Blogs/BRIEF-Tracking-the-Gender-Impact-of-COVID-19.pdf.

Duggan, Julian, et. al. 2020. Is the World Bank's COVID Crisis Lending Big Enough, Fast Enough? New Evidence on Loan Disbursements. Center for Global Development, Washington, DC. https://www.cgdev.org/publication/world-banks-covid-crisis-lending-big-enough-fast-enough-new-evidence-loan-disbursements.

Gelb, Alan, Anit Mukherjee, and Kyle Navis. 2020. Citizens and State: How Can Digital ID and Payments Improve State Capacity and Effectiveness. Washington, DC: Center for Global Development. https://www.cgdev.org/publication/citizens-and-states-how-can-digital-id-and-payments-improve-state-capacity.

Gentilini, Ugo, et. al. 2020. Social Protection and Jobs Responses to COVID-19: A Real-Time Review of Country Measures. Version 13. The World Bank, Washington, D.C. http://documents1.worldbank.org/curated/en/295321600473897712/pdf/Social-Protection-and-Jobs-Responses-to-COVID-19-A-Real-Time-Review-of-Country-Measures-September-18-2020.pdf.

International Monetary Fund. 2020. World Economic Outlook. https://www.imf.org/en/Publications/WEO/weo-database/2020/October.

Ritchie et. al. 2020. Coronavirus Pandemic (COVID-19) database. Our World in Data. https://ourworldindata.org/coronavirus.

UNDP (United Nations Development Program). 2020. COVID-19 Global Gender Response Tracker. https://data.undp.org/gendertracker/.

Annex 1: Indicators included in the Gender Vulnerability Data Dashboard

Indicator Name	Source	Data Release / Access Date	URL
Women's Health			
Maternal mortality ratio	SDG Global Database	12 August 2020	https://unstats.un.org/sdgs/indicators/database/
Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods (% of women aged 15-49 years)	SDG Global Database	12 August 2020	https://unstats.un.org/sdgs/indicators/database/
Adolescent birth rate (per 1,000 women aged 15-19 years)	SDG Global Database	12 August 2020	https://unstats.un.org/sdgs/indicators/database/
Proportion of ever-partnered women and girls subjected to physical or sexual violence by a current or former intimate partner in the previous 12 months, by age (%)	SDG Global Database	12 August 2020	https://unstats.un.org/sdgs/indicators/database/
Prevalence of anxiety disorders (%)	IHME Global Burdens of Disease	2017	http://ghdx.healthdata.org/gbd-2017
Height-for-age <-2SD (Stunting)	UNICEF-WHO-World Bank Joint Malnutrition Estimates	July 2020	https://data.unicef.org/resources/dataset/malnutrition-data/
Weight-for-height <-2SD (Wasting)	UNICEF-WHO-World Bank Joint Malnutrition Estimates	July 2020	https://data.unicef.org/resources/dataset/malnutrition-data/
Prevalence of anemia among women of reproductive age (% of women ages 15-49)	WHO	30 August 2017	https://data.worldbank.org/indicator/SH.ANM.ALLW.ZS
Antenatal care coverage - at least four visits (%)	WHO MNCAH Data Portal	23 May 2020	https://www.who.int/data/maternal-newborn-child-adolescent-ageing/indicator-explorer-new/mca/antenatal-care-coverage---at-least-four-visits-(-)

Indicator Name	Source	Data Release / Access Date	URL
Economic Well-Being			
Employed population below international poverty line, by sex and age (%)	SDG Global Database	12 August 2020	https://unstats.un.org/sdgs/indicators/database/
Prevalence of moderate or severe food insecurity in the adult population (%)	SDG Global Database	12 August 2020	https://unstats.un.org/sdgs/indicators/database/
Proportion of time spent on unpaid domestic chores and care work, by sex, age, and location (%)	SDG Global Database	12 August 2020	https://unstats.un.org/sdgs/indicators/database/
Proportion of adults (15 years and older) with an account at a financial institution or mobile-money-service provider, by sex (% of adults aged 15 years and older)	SDG Global Database	12 August 2020	https://unstats.un.org/sdgs/indicators/database/
Unemployment rate, by sex and age (%)	SDG Global Database	12 August 2020	https://unstats.un.org/sdgs/indicators/database/
Proportion of youth not in education, employment, or training, by sex and age (%)	SDG Global Database	12 August 2020	https://unstats.un.org/sdgs/indicators/database/
Informal Employment by sex (as % of emp by sex)	ILOSTAT	18 July 2020	https://www.ilo.org/shinyapps/bulkexplorer20/?lang=en&segment=indicator&id=IFL_4IEM_SEX_ECO_IFL_NB_A
Employment in services (% of respective Sex employment) (modeled ILO estimate)	ILOSTAT	21 June 2020	https://data.worldbank.org/indicator/SL.SRV.EMPL.ZS
Human Capital			
Proportion of youth and adults with information and communica-tions technology (ICT) skills, by sex and type of skill (%)	SDG Global Database	12 August 2020	https://unstats.un.org/sdgs/indicators/database/
Adjusted net enrolment rate, primary, female (%)	UNESCO UIS	March 2020	http://data.uis.unesco.org/
Adjusted net enrolment rate, lower secondary, female (%)	UNESCO UIS	March 2020	http://data.uis.unesco.org/
Adjusted net enrolment rate, upper secondary, female (%)	UNESCO UIS	March 2020	http://data.uis.unesco.org/

Indicator Name	Source	Data Release / Access Date	URL
Learning-Adjusted Years of School	World Bank Group	October 2018	https://datacatalog.worldbank.org/dataset/human-capital-index
School enrollment, tertiary (% gross)	UNESCO UIS	August 2020	https://data.worldbank.org/indicator/SE.TER.ENRR
Trigger Indicators			
GDP per capita growth, 2020 (%)	International Monetary Fund (202). Author's calculations on gross domestic product per capi-ta, constant 2017 international (PPP) dollars	October 2020	https://www.imf.org/en/Publications/WEO/weo-database/2020/October
New COVID-19 cases per million (61- and 31-day averages)	Data from Ritchie et. al.(2020) Authors' calculations	16 October 2020	https://github.com/owid/covid-19-data/blob/master/public/data/owid-covid-data.csv
Response Capacity indicators			
Share of population without national ID, %	ID4D-Findex	25 June 2018	https://id4d.worldbank.org/global-dataset/visualization
Share of population +15 with account at financial institution or mo-bile money	FINDEX	15 October 2018	https://globalfindex.worldbank.org/
Share of population U5 with birth registration	UNICEF	June 2020	https://data.unicef.org/topic/child-protection/birth-registration/
IMF per capita COVID-19 Financial Assistance and Debt Service Relief	IMF COVID-19 Lending Tracker	21 October 2020	https://www.imf.org/en/Topics/imf-and-covid19/COVID-Lending-Tracker
World Bank YTD 2020 repayments, gross disbursements, and net disbursements	Duggan et. al. (2020) . Authors' calculations	12 October 2020	https://www.cgdev.org/publication/world-banks-covid-crisis-lending-big-enough-fast-enough-new-evidence-loan-disbursements
Total and Health Sector DAC and Multilateral disbursements per capita 2019 and YTD 2020	International Aid Transparency Initiative (IATI). Authors' calcula-tions	1 October 2020	https://d-portal.org/

Indicator Name	Source	Data Release / Access Date	URL
Share of Social Protection/Labor Market/Economic policies that are gender sensitive	UNDP/UN Women COVID-19 Global Gender Response Tracker. Authors' calculations	20 September 2020	https://data.undp.org/gendertracker/
Share of countries using cash-based transfers in response to the COVID-19 pandemic	Gentilini et. al. (2020)	18 September 2020	https://documents.worldbank.org/en/publication/documents-reports/documentdetail/295321600473897712/social-protection-and-jobs-responses-to-covid-19-a-real-time-review-of-country-measures-september-18-2020
Population, Total, by Sex and Age Groups	World Population Prospects 2019	17 June 2019	https://population.un.org/wpp/