INDICATOR ANALYSIS

FEMALE EMPLOYMENT

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| Overview | The employment-to-population ratio is defined as the proportion of a country's working-age population that is employed – in this case, specifically females: "A high ratio means that a large proportion of a country's population is employed, while a low ratio means that a large share of the population is not involved directly in market-related activities, because they are either unemployed or (more likely) out of the labour force altogether" (1).

Employment comprises all persons of working age who during a specified brief period, such as one week or one day, were in the following categories: a) paid employment (whether at work or with a job but not at work); or b) self-employment (whether at work or with an enterprise but not at work) (1).

The indicator is calculated in the following way:
Female EPR(%) = Females employed x 100 / (Female working-age population). |
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GLOBAL TRENDS	
What are the global patterns for this indicator?	*Geographic trends:*
• In the period 1980-2016, the majority of countries saw an increase in the share of women who are employed. However, not all countries have seen an increase notably, India, China and the United States have all seen a decline in the female employment to population ratio (2).
• At the global level, "employment-to-population ratios are higher for men than for women and the gender gap remains stable. Thus, in 2015, the female employment-to-population ratio was 46 per cent, while the corresponding male ratio was almost 72 per cent. In 2015 nearly 1.3 billion women were employed compared to close to 2 billion men" (3).
• These trends are much more marked in Northern Africa, in the Arab States and in Southern Asia, "where the male employment-to-population ratio is more than three times higher than that for women. Large employment gaps are also observed in Latin America and the Caribbean and Central and Western Asia, although of much smaller size. While, however, at the global level employment-to-population rates have remained quite stable, in these two regions female employment has been on the rise since early 2000s" (3).
• "Gender employment gaps are narrower both in Northern America and in Northern, Southern and Western Europe. While in Northern America the crisis has reduced both female and male employment, the Northern, Southern and Western Europe region has witnessed a slight increase in female employment and a drop in male unemployment, which has ultimately narrowed gender employment gaps" (3).

Correlation with Higher Public Spending?
Higher public spending is associated with higher female employment-to-population ratios: "While some countries, such as Canada and the United States, have traditionally displayed a combination of lower public expenditure in work- |

family benefits and higher female employment rates, over the last ten years, in the United States, women's labour force participation has declined. The lack of investment in work-family policies in the United States explains nearly 30 per cent of the decline of female labour force participation from 1990 to 2010 relative to other OECD countries which expanded family-friendly policies over the same period" (3).

RELEVANCE TO UNDERSTANDING RELATIONSHIPS AMONG GENDER, HEALTH, FRAGILITY/PEACE	
How could this indicator contribute to our understanding of how gender, health and fragility and peace influence one another?	This indicator provides one measure of women aged 15 years and older's subjection to sexual violence by persons other than an intimate partner. Thus, it indicates the level of non-intimate-partner sexual violence against women in a given area. Because high levels of sexual violence against women are associated with perverse outcomes such as (but not limited to) higher rates of depression, unwanted pregnancy, and HIV prevalence, this indicator is closely related to women's overall mental and physical health (2). Because women and girls are especially vulnerable in the face of sexual violence, analysis of this indicator can be of value to reach those who experience the greatest fragility. According to the United Nations, having data on this indicator can aid in understanding the extent and nature of this form of violence, and could potentially help develop appropriate policies and programs to reduce gender-based sexual violence and promote stable, peaceful societies (1).

UTILITY	
What does this indicator measure?	The employment-to-population ratio provides information on the ability of an economy to create employment; for many countries the indicator is often more insightful than the unemployment rate (1).
What does it NOT measure – what does it miss?	• Although a high overall ratio is typically considered as positive, the indicator alone is not sufficient for assessing the level of decent work or decent work deficits: "Additional indicators are required to assess such issues as earnings, hours of work, informal sector employment, underemployment and working conditions. In fact, the ratio could be high for reasons that are not necessarily positive – for example, where education options are limited, young people tend to take up any work available rather than staying in school to build their human capital. For these reasons, it is strongly advised that indicators should be reviewed collectively in any evaluation of country-specific labour market policies" (1).

	• There is a tendency to under-count women who do not consider their work as "employment" or are not perceived by others as "working" (e.g. women who are engaging in childcare) (1). This is one problem with accounting for informal work since many categorisations may or may not count this as part of the "informal" category. There exists household work adjusted numbers but these are only available for very specific countries and methodologies vary greatly. • Employment-to-population ratios do not provide any information on labor market problems such as low earnings, underemployment, poor working conditions, or the existence of a large informal sector (4). There exist estimates by the ILO for both informal employment and underemployment – but these are not available across all years and geographies. • It does not distinguish between part-time and full-time employment (5). These estimates are available from the ILO. However, the dataset presents many missing years. Self-employment figures are also made available through ILO estimates. Moreover, they are also available by broad sector: agriculture, services, and industry.
If/how this indicator relates to the interface/relationship among health, gender and fragility/stability?	• Female employment rates are low in fragile and conflict-affected (FCA) countries, and paid work is predominantly in agriculture: "Only 44% of women are likely to be in paid work, compared to 66% of men in the same set of countries" (6). • "Women fare worse in countries with protracted conflict than in post-conflict countries. Fewer than one in five are employed for pay or profit, compared to three in five in post-conflict countries" (6). • "Women are more likely than men to be working either for themselves or with their families, which means that they have fewer legal protections and are often low paid and low skilled" (6). • Precarious employment and lack of employment can be linked to health outcomes. For instance, low employment numbers for women can be tied with higher fertility rates and other health outcomes. Precarious employment and lack of employment can be linked to health outcomes. For instance, low employment numbers for women can be tied with higher fertility rates and other health outcomes.

AVAILABILITY

Sources for indicator (CRVS, DHS, etc. – include links)	Information for this indicator is typically derived from household surveys, mainly labour force surveys. Some countries, however, use "official estimates" or population censuses as the source of their employment figures (1). ILOSTAT contains statistics from national sources on employment-to-population ratios by sex and age, and rural/urban areas. ILOSTAT also includes ILO modelled estimates of employment-to-population ratios by sex and age, which contain both nationally reported and imputed data (1). 1. The datasets (modelled and not modelled) are available on the ILOSTAT website: https://ilostat.ilo.org/
Most recent date available?	National estimate dataset: Data is available for most countries in 2019 and for some in 2020. Modelled dataset: Data is available for most countries in 2020
Availability across geographic areas?	National estimate dataset (1960-2020): Data available in most regions following 1970 but presents large number of gaps and no data for some countries. Modelled Dataset (1991-2019): Modelled data covers most countries with no gaps.
Availability in conflict affected settings?	National estimate dataset: Data availability in conflict affected settings varies by country and year: Yemen (10 years of data between 1994-2014); South Sudan (2008); Libya (2012); Somalia (No Data), DRC (2005 and 2012), Afghanistan (2008, 2012, 2014 and 2017) and Syria (25 years of data between 1970-2010) Modelled Dataset: Modelled data covers Yemen, South Sudan, Libya, Somalia, DRC, Afghanistan and Syria from 1991-2019 with no gaps.

GRANULARITY
Disaggregation at national level

Data disaggregated by sex;	Yes.
Data disaggregated by identity group (race, ethnicity);	Yes.
Data disaggregated by income	No.
Data disaggregated by citizenship;	No.

Data disaggregated by migration background;	No.
Disaggregation at sub-national level	
Data disaggregated by geographic region;	No.
Data disaggregated by identity group (race, ethnicity);	No.
Data disaggregated by income.	No.

SOURCES OF BIAS	
What bias can exist with these data?	Labour force surveys are the preferred source of information for determining this indicator. When those are not available, other types of household surveys and population censuses can also be used as sources of data to derive employment-to-population ratios. However, the information obtained from such sources may be less reliable since they do not typically allow for detailed probing on the labour market activities of the respondents (1).
	It should also be emphasized that this indicator has a gender bias because as mentioned earlier, there is a tendency to under-count women who do not consider their work as "employment" or are not perceived by others as "working": "Women are often the primary child caretakers and responsible for various tasks at home, which can prohibit them from seeking paid employment, particularly if they are not supported by socio-cultural attitudes and/or family-friendly policies and programmes that allow them to balance work and family responsibilities" (1). Additionally, other forms of informal activities – whether they be legal or illegal – are largely unaccounted for.
	Finally, comparisons can also be problematic when the frequency of data collection varies: "The range of information collection can run from one month to 12 months in a year. Given the fact that seasonality of various kinds is undoubtedly present in all countries, employment-to-population ratios can vary for this reason alone. Countries with employment-to-population ratios based on less than full-year survey periods can be expected to have ratios that are not directly comparable with those from full-year, month-by-month collections" (1).

VALIDITY

Clear and accepted international standards for indicator	Yes, this indicator is measured the same way across all countries, by all organizations, and is very well accepted.
Validity of measurement of indicator generally accepted	While this indicator might measure the number of employed women, it does not measure *how* they are employed and the *specifics* of their employment, which leaves a significant gap. They also do not count women who are engaging in childcare as the primary caretaker, which is problematic. While this approach does measure the actual number of women who are employed, it does not measure their *level* of employment. However, there are some available breakdowns in terms of self-employment, sector, informal employment, and others, provided by the ILO for this purpose. As mentioned throughout, this indicator offers a limited measure of women's work, as it gives no details pertaining to their employment. For example, it does not consider hours of work (part-time vs full-time), earnings, informal sector employment, working conditions, or underemployment. Estimates from the ILO for these exist.

RELIABILITY	
Reliability of indicator generally accepted;	Yes, the reliability of this indicator is generally accepted.

COMPLEXITY	
Enables analysis across time and location.	Yes, there are no limits on location or time within this indicator.

OTHER REFLECTIONS

Are indicator values imputed/modelled?	*For the national estimate dataset:* Values are not imputed or modelled. *For the modelled dataset:* Values make use of real observations based on availability. Separate models are used to produce age and sex stratified estimates of the working-age population and the unemployment rate [6]. Population estimates are taken from the United Nations World Population Prospects which model some of their values and offer a description of country specific methods and data sources used to derive estimates in their metadata documentation (7). Unemployment rate values are modeled based on real data when available and regression models when data is limited (8). *The ILO does not offer uncertainty bounds with its modelled data and notes that imputed observations are not based on national data, are subject to high uncertainty and should not be used for country comparisons or rankings.*

References

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