INTRODUCTION
Women’s economic opportunities — including access to decent and equal work in the formal and informal sector and access to and control over resources — can increase their agency and decision-making power at the household and community level. It can also have spillover effects for their empowerment in other domains such as education, health, and public participation. Major efforts are underway to collect better sex-disaggregated data on different aspects of women’s economic opportunities so that progress in this domain can be monitored accurately.

In 2019, the most pressing gender data gaps for economic opportunities are:

- unpaid work;
- informal employment;
- conditions of migrant workers;
- earnings disparities and opportunity costs of paid work;
- employment mobility;
- entrepreneurship;
- asset ownership;
- productivity in agriculture;
- access to financial services;
- access to child care;
- access to ICT;
- decent work; and
- the subjective dimensions of women’s economic empowerment

WHERE WERE THE GENDER DATA GAPS IN 2014?
Under the MDGs, indicator 3.2 tracking the “share of women in wage employment in the non-agricultural sector” was the only MDG indicator to call for sex-disaggregated reporting in relation to economic opportunity. Data tracking other elements of gender inequality in economic opportunity, like women’s informal employment, access to child care, or migrant labor, for example, were not captured under the MDG monitoring framework.

In 2014, Data2X identified unpaid work, informal employment, earnings disparities and opportunity costs of paid work, conditions of migrant workers, employment mobility, entrepreneurship, asset ownership, productivity in agriculture, and access to financial services, to child care, and to ICT as the most pressing gender data gaps in this area.

GENDER DATA AND ECONOMIC OPPORTUNITIES IN THE SDG ERA
From 2015, under the SDGs, the focus on gender inequality and economic opportunity is much broader than the MDGs and includes information on income, paid and unpaid work, social protection, financial inclusion, and ICT access. In total, there are 23 gender-relevant economic opportunity indicators within the SDGs (full list available in appendix); but for most of these indicators sex-disaggregation is not required, only suggested in methodology.

To date, various gender-relevant SDG indicators have changed classification from Tier III to Tier II, which is an important accomplishment. However, much remains to be done to improve gender data gaps in economic opportunities. Through Data2X research, additional gaps have been identified since the initial mapping exercise in 2014, including gender data on decent work and on the subjective dimensions of women’s economic empowerment.
**Unpaid Work**

Compared to 2014, the amount, quality, comparability, and use of data on women’s unpaid work (e.g. domestic work or unpaid work for the family farm or business) is improving with the adoption of SDG 5.4 on unpaid care and domestic work and with the inclusion of unpaid work within the ILO’s classification of work (Buvinic and King 2018). Despite these improvements, measuring women’s unpaid activities can still be a challenge, even in time use surveys specifically designed for this purpose. Different types of unpaid work can be performed simultaneously and often overlap with leisure activities or even market-based work, and most time use surveys do not collect data on activities undertaken at the same time. The cross-country comparability of time use survey data are also limited by differences in population coverage, data collection instruments, sampling designs, activity classifications, and definitions of work and leisure.

Apart from measuring women’s time spent on unpaid work, we also need better data to understand its relationship to demographics, livelihoods and employment, and receipt of social protection transfers and services, for example.

**Informal Employment**

The nature of informal work is frequently unregulated, temporary, seasonal or short in duration, scattered, and mobile — all of which makes it difficult to collect reliable and comparable data. However, since 2014, major efforts have been underway to collect better data on the size, composition, and characteristics of the informal work force. Mostly notably, in 2015, the ILO adopted Recommendation 204, providing an international framework for policies and measures on the transition from the informal to the formal economy. Thanks to these developments, over 100 countries now collect the data required to produce statistics on informal employment and employment in the informal sector and have prepared public use files to disseminate the data (Bonnet et al. 2019). Yet demand for data on informal employment is outpacing its supply. Many countries still lack the resources and capacity to produce data on informal employment — particularly sex-disaggregated data — and not all who produce it provide this data to the ILO or use it to inform national policies and programs.

**Decent Work**

Closely related to informal employment, the concept of “decent work” is an internationally recognized labor standard endorsed by the ILO and by the UN under SDG 8. Yet, the multifaceted nature of decent work — which includes interrelated components such as job quality and security, the terms and conditions of employment, collective bargaining, labor rights, and more — makes measurement a complex task. The international comparability of data is also complicated by differences in national laws, regulations, social protection policies, and by the many possible sources of data for basic indicators such as earnings, each with their own coverage, scope, and methodology. Standardized data on decent work that is sex-disaggregated is especially scarce, particularly in low- and middle-income countries.

**Earnings Disparities and Opportunity Costs of Paid Work**

Under the SDGs, the ILO tracks the average hourly earnings of female and male employees by occupation, age, and disability (SDG 8.5.1) using a variety of sources — from administrative data (payroll records) to household surveys (especially labor force surveys). The variety of possible sources for statistics on earnings greatly hinders international comparability, as each type of source has its own coverage, scope, and characteristics (UNSD 2019). Country coverage is another issue; just 15% of countries worldwide have available data since 2010 (UN Women 2018). Data on the opportunity costs of paid work are not currently captured by the SDG framework nor are they listed within the Inter-Agency Expert Group on Gender Statistics (IAEG-GS) or UN Women lists of minimum gender indicators. In efforts promoting women’s labor force participation, their opportunity costs of paid work should be understood better.
Conditions of Migrant Workers
Better data are needed to document the labor conditions, characteristics, and trends of women migrant workers including: age and other demographic characteristics, legal status, reasons for migrating, remittances sent, working conditions, and family arrangements. Collecting these data are challenging since many migrants do not have a permanent residence or legal status and so are either unable or unwilling to be surveyed. While SDG indicators on occupational injuries (SDG 8.8.1) and on labor rights (SDG 8.8.2) specify data disaggregated by sex and migrant status, both are Tier II indicators — meaning data are not regularly produced by countries. Only a small number of household surveys (including some DHS and LSMS country surveys) ask about individuals who have migrated for work or other purposes. Beyond migration status, data on the proportion of women migrants — particularly those that migrate internationally — and on reasons for migration (e.g. economic, political, conflict) are much more limited.

Employment Mobility
We need more reliable data on women’s employment mobility — that is, their entry into the formal workforce and upward mobility in their jobs — including better data documenting occupational and gender segregation in different sectors and industries. This would ideally require longitudinal data. Employment mobility is not covered in the SDGs, apart from SDG 5.5.2 on the proportion of women in managerial positions.

Entrepreneurship
Details on women’s entrepreneurship and business outcomes are not well documented, even in enterprise surveys. In addition to ownership and management of a business, additional important details of women’s entrepreneurship include the factors motivating women to engage in self-employed work (necessity or opportunity), constraints they face (capital, skills, discrimination), and details of the enterprise including whether they run subsistence-level firms. Efforts are underway to develop better statistics in this area including the recently revised International Classification of Status in Employment (ICSE-18), which will better define, cover, and compare different modes of self-employment including women-owned businesses and women-managed businesses.

On constraints to women-owned and women-led enterprises, we need better data to capture the broader environments in which women entrepreneurs work. This includes burdensome and supportive government regulations and tax regimes, market access, connectivity, access to public transport, quality child care and health care, and ownership of government issued identification (ICRW 2019). Existing surveys like the World Bank Enterprise and Doing Business surveys and the Global Entrepreneurship Monitor provide some very rich data on entrepreneurship, but do not explore this full range of issues or what specifically is needed to create an enabling environment for women entrepreneurs (Joekes and Kaminski 2017; ICRW 2019).

Asset Ownership
Very little continues to be known about gender inequalities in asset ownership. In most nationally-representative surveys, ownership of different assets (i.e. landholdings, jewelry, and so on) is collected for the entire household as opposed to the individual level. Even within surveys that do collect individual-level data, like the Living Standards Measurement Survey – Integrated Surveys on Agriculture (LSMS-ISA), these data are not consistent across countries. Questions on asset ownership need to consider how assets are controlled or shared within the household, including whether an asset is individually or jointly owned and whether women actually have control over the management and use of assets they are legally entitled to.

Productivity in Agriculture
Compared to 2014, we now have better data on women’s role and productivity in agriculture, thanks to recent survey initiatives to refine statistics in this area, including the LSMS-ISA, the Women’s Empowerment in Agriculture Index (WEAI) (Alkire et al. 2013), and the FAO’s new guidelines for collecting and analyzing sex-disaggregated data in agriculture and sustainable resource management.
Yet data on women in agriculture continues to suffer from poor conceptualization. For example, most data collection still tends to be narrowly focused on land productivity (in terms of output per hectare, for example). Joint land ownership and management is also not well conceptualized or measured in the existing surveys, which tend to collect data on asset ownership at the household level (Doss and Quisumbing 2015). Even in agricultural surveys where data are collected at the individual level, like the LSMS-ISA, country coverage continues to be an issue.

**Financial Inclusion**

The growth in initiatives like the World Bank’s Global Findex, the IMF’s Financial Access Survey, and other surveys has increased the availability and use of sex-disaggregated data on access to financial services, including on savings, digital payment methods, and insurance. Beyond the question of access to financial services, however, data on women’s use of and benefit from financial inclusion remains limited and fragmented. This is due to gaps in sex-disaggregated data from both the demand-side (i.e. client) and supply-side (i.e. providers) of financial services and the platforms through which they operate. As a result, we cannot yet distinguish which design features and practices of financial inclusion are the most beneficial for women’s economic opportunities and gender equality (e.g. decision-making power, control over resources, and access to market opportunities) (Vossenberg et al 2018).

**Access to Child Care**

Access to affordable and quality child care is a key determinant of women’s labor force participation and right to decent work. Yet, very little is known about the child care needs and arrangements of working mothers, particularly in low- and middle-income countries. Time use data can provide important insights about women’s unpaid child care responsibilities, which is an important indicator of gender inequality though this is different from having data on the accessibility, affordability, and quality of child care.

An important and understudied aspect of child care is the working conditions of the individuals, mostly women, who provide it. Globally, much child care work is informal, characterized by low wages, long hours, a lack of contracts, and unsafe working conditions. Due to the informal and private nature of paid child care, there is very little data on the demographics, characteristics, and conditions of child care workers. This is especially true for child care work that takes places inside employers’ private households (as opposed to child care centers), where workers are more secluded. In high-income countries where women have migrated for child care work, it can be challenging for researchers and survey administrators to elicit information on their working conditions, since many do not have a permanent residence and are unwilling to be surveyed for fear of jeopardizing their employment status.

**Access to Information and Communications Technology (ICT)**

Since 2014, international standards have been developed for collecting data on ICT access including cell phone ownership, internet access, and the proportion of youth and adults with ICT skills. The GSMA Intelligence Consumer Survey and other initiatives have also increased the availability of gender data on cell phone ownership and mobile internet use. However, sex-disaggregated data on access to ICT remains scarce. Digital literacy, which includes ICT skills (e.g. social media, online research, or computer programming and coding), is an area where stakeholders are pushing for better sex-disaggregated data because of its importance in preparing individuals for the future of work. SDG indicator 4.4.1 tracks the percentage of youth and adults with ICT skills, but it is not sex-disaggregated and there is currently no global agreement on how to assess an individual’s proficiency or the effectiveness of these skills.

**Subjective Dimensions of Women’s Economic Empowerment**

More methodological work is needed to agree on robust and internationally standardized measures for the subjective dimensions of women’s economic empowerment — that is, measures
which are centered on a respondent’s own beliefs, experiences, and perspectives (Kabeer 1999, 2001; Quisumbing et al. 2016). This can include psychosocial and decision-making measures around things like agency, self-esteem, and self-efficacy or stress. Compared to objective measures of economic empowerment (e.g. labor market outcomes or loan use), data on women’s subjective experiences is limited due to lack of conceptual clarity, international standards, and country coverage.

**WHERE DOES GENDER DATA ON ECONOMIC OPPORTUNITIES COME FROM?**

Enterprise and agricultural censuses are key sources of data on labor force participation — the latter being focused on structural characteristics of household agricultural operations. Yet censuses occur infrequently, limiting their timeliness and utility for decision-makers. Another limitation is that not all census data are internationally comparable, and agricultural censuses are, by definition, sector-specific.

Population-based survey sources of information for women’s economic opportunities include Household Income and Expenditure Surveys such as the World Bank Living Standards and Measurement Study (LSMS) and Demographic and Health Surveys (DHS). However, these surveys are not typically designed to be representative beyond the first sub-national level (e.g. region). Introduced in 2009, the LSMS-ISA is a nationally representative household survey similar to the LSMS but with more detail on agricultural production, including: individual-level data on ownership, management and control of agricultural plots, livestock and other assets, and access to credit. Country coverage is limited to eight countries in Africa.

Managed by the ILO, Labour Force Surveys cover standard indicators of work for individuals aged 15 and older in a household including: occupation, earnings, hours of work, industry, absence from work, unemployment and underemployment, job permanency, full time/part time status, characteristics of the last job, job seeking, and unemployment benefits. Labour Force Survey data are available for 185 countries, disaggregated by age, sex, marital status, birth place, nationality, educational attainment, and relationship to household head.

Other nationally representative population-based surveys are focused on the social norms and institutions affecting women’s agency and economic opportunities. These include the World Values Survey, which monitors cultural values, attitudes and beliefs, and their relationship to economic development in nearly 100 countries, and the OECD’s Social Institutions and Gender Index (SIGI), which measures discrimination against women in social institutions across 180 countries and how they restrict access to productive and financial resources.

Increasingly, big data generated from social media, mobile money, and other cell phone-based applications is being combined with traditional data sources to provide more nuanced insights about women’s financial habits, behavior, and inclusion.

**WHAT EFFORTS ARE UNDERWAY TO IMPROVE GENDER DATA ON ECONOMIC OPPORTUNITIES?**

Key actors providing guidance on gender data on economic opportunities:

- The **International Labour Organization** (ILO) is the custodian agency for all employment-related indicators on economic opportunities, including, for example, indicator 1.3.1 on social protection, 8.8.1 on workplace injuries, and 8.5.2 on unemployment rate.
- The **World Bank** is the custodian agency for several indicators in this domain including 1.2.1 and 10.2.1 on poverty levels and 8.10.2 on financial inclusion.
- The **International Telecommunication Union** (ITU) is the custodian agency for indicators 4.4.1, 5.b.1, and 17.8.1 on different aspects of ICT access.
The Food and Agriculture Organization of the United Nations (FAO) is the custodian agency for indicators 2.3.2 on income of small-scale food producers, 5.a.1 on land ownership and security, and 5.a.2 on women’s equal rights to land ownership. UNSD and UN Women are co-custodians on SDG 5.4.1 on time-use related to unpaid domestic and care work.

Some significant large-scale efforts are underway to collect, analyze, and disseminate data on women’s economic opportunities, among them:

- The Global Financial Inclusion (Global Findex) Database is a data set focused on how adults spanning basic socioeconomic levels, sex, and urban/rural location save, borrow, make payments, and manage financial risk using 148 nationally representative country surveys. The database has been published every three years since 2011, and the next round of data will be available in 2020.

- World Bank Enterprise Surveys are firm-level surveys administered to business owners and top managers that provide a rich source of data on enterprises and the opportunities and challenges for growing a business and generating employment. The sex of the business owner is also recorded but other socioeconomic characteristics are not. Business data are available on approximately 130,000 firms across 135 countries from 2005 to the present.

- The World Bank is currently piloting an intrahousehold asset ownership measurement agenda in Malawi, Tanzania, Ethiopia, and Nepal to identify which household members own or control the use of assets (e.g. whether it is selling that asset or using it in productive activity) and to get this information self-reported by members. The idea behind the pilots is to show that it matters who in the household is asked questions about asset ownership and how.


- The Global Entrepreneurship Monitor is a study of entrepreneurship with over 20 years of data for more than 100 economies on entrepreneurial behavior and attitudes, as well as challenges faced by entrepreneurs globally.

- The Women’s Empowerment in Agriculture Index (WEAI) is the first comprehensive and standardized measure to directly measure women’s empowerment and inclusion in the agricultural sector. The newly launched Project WEAI (Pro-WEAI) allows users to apply the WEAI in project-specific contexts and includes optional measures tailored to livestock and/or nutrition and health programs. The Pro-WEAI also includes a time use module (using light diaries and asking for secondary activities), which seems to work quite well.

- The International Classification of Activities for Time Use Statistics (ICATUS), revised most recently in 2016, is an effort by national, regional, and international time use survey experts to develop a standard classification of daily activities that is internationally comparable and relevant for both social and economic policies. Further work to update TUS guidelines is now being undertaken by UNSD. The ILO will shortly begin testing a Light Time Use module for inclusion in the Labour Force Survey.

- The Women’s Work and Employment Partnership between the World Bank and the ILO, hosted by Data2X, is working towards harmonized measures of all types of women’s work — paid and unpaid — as well as un- and under employment.

- Since its inception in 2009, Women, Business, and the Law has collected unique data on the laws and regulations that constrain women’s entrepreneurship and employment in 187 economies.
The GSMA monitors gender gaps in cell phone ownership and mobile internet use through its Intelligence Consumer Survey, with over 20,000 respondents from 18 low- and middle-income countries.

Organizations calling for, supporting, or using gender data on women’s economic opportunities include:

- **Women in Informal Employment: Globalizing and Organizing (WIEGO)** is a global network focused on securing livelihoods for the working poor, especially women, in the informal economy. WIEGO has long been a key advocate for better statistics on women in informal employment and helped to lead the push for ILO Recommendation 204 concerning the Transition from the Informal to the Formal Economy.

- The **Evidence-based Measures of Empowerment for Research on Gender Equality (EMERGE)** initiative at University of California, San Diego is developing, testing, and promoting robust measures of gender equality and empowerment including subjective measures of women’s economic empowerment from psychological research.

- Through the **Evidence on Data and Gender Equality (EDGE)** project, the UN Statistical Division and UN Women have collaborated to develop innovative methodological guidelines to collect data on physical and financial assets and entrepreneurship disaggregated by sex.

- The **Women’s Financial Inclusion Data Partnership**, hosted by Data2X, is focused on working with multilaterals, central banks, and financial service providers to improve the provision of supply-side sex-disaggregation data on financial inclusion.

To obtain more nuanced and granular data on women’s unpaid work, there needs to be dedicated surveys that sample at the sub-national level, whereas closing data gaps on access to quality and affordable child care and on paid child care work are likely best served by integration into existing data collection instruments and labor force surveys.

On women’s entrepreneurship, we need better and more nuanced surveys that ask the right questions and expand the current scope of inquiry to capture the broader environments in which women entrepreneurs work.

Better gender data on financial inclusion will require coordinated efforts involving policy makers, financial service providers, mobile operators, and civil society. Digital data from mobile money and other cell phone-based applications can provide nuanced and granular information on this issue. For example, researchers from Dalberg Data Insights are using sex-disaggregated cell phone data to examine gender-related differences in cell phone access and mobile money usage in Uganda (Dalberg Data Insights 2019). Cell phone data can similarly be used to collect detailed information on women’s savings and assets, entrepreneurship, informal employment, access to ICT, and the conditions of migrant workers.

More robust and use-tested measures, particularly from psychology, are needed to develop standards for data collection on the subjective dimensions of women’s economic empowerment (Quisumbing et al. 2016).

*This brief is part of “Mapping Gender Data Gaps: An SDG Era Update.” The full report can be accessed here:* data2x.org/MappingGenderDataGaps

**RECOMMENDATIONS**

No single data source has complete information on all indicators for women’s economic opportunities; different components must be examined separately through dedicated data sources that ideally would be interlinked to produce comparable data.
REFERENCES


Appendix: Gender-Relevant SDG Economic Opportunity Indicators (23 total)

- 1.1.1 Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural) (Tier I, World Bank and partner ILO)
- 1.2.1 Proportion of population living below the national poverty line, by sex and age (Tier I, World Bank)
- 1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions (Tier I, national gov)
- 1.3.1 Proportion of population covered by social protection floors/systems, by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, newborns, work-injury victims and the poor and the vulnerable (Tier II, ILO)
- 1.4.2 Proportion of total adult population with secure tenure rights to land, (a) with legally recognized documentation, and (b) who perceive their rights to land as secure, by sex and type of tenure (Tier II, World Bank and UN-Habitat)
- 1.b.1 Proportion of government recurrent and capital spending to sectors that disproportionately benefit women, the poor and vulnerable groups (Tier III)
- 2.3.2 Average income of small-scale food producers, by sex and indigenous status (Tier II, FAO)
- 4.2.2 Participation rate in organized learning (one year before the official primary entry age), by sex (Tier I, UNESCO UIS)
- 4.4.1 Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill (Tier II, UNESCO UIS and ITU)
- 5.4.1 Proportion of time spent on unpaid domestic and care work, by sex, age and location (Tier II, UNSD and UN Women)
- 5.5.2 Proportion of women in managerial positions (Tier I, ILO)
- 5.a.1 (a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure (Tier II, FAO)
- 5.a.2 Proportion of countries where the legal framework (including customary law) guarantees women’s equal rights to land ownership and/or control (Tier II, FAO)
- 5.b.1 Proportion of individuals who own a mobile telephone, by sex (Tier II, ITU)
- 8.3.1 Proportion of informal employment in non agriculture employment, by sex (Tier II, ILO)
- 8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities (Tier II, ILO)
- 8.5.2 Unemployment rate, by sex, age and persons with disabilities (Tier I, ILO)
- 8.6.1 Proportion of youth (aged 15–24 years) not in education, employment or training (Tier I, ILO)
- 8.7.1 Proportion and number of children aged 5-17 years engaged in child labor, by sex and age
- 8.8.1 Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status (Tier II, ILO)
8.8.2 Level of national compliance with labor rights (freedom of association and collective bargaining) based on International Labour Organization (ILO) textual sources and national legislation, by sex and migrant status (Tier II, ILO)

8.10.2 Proportion of adults (15 years and older) with an account at a bank or other financial institution or with a mobile-money service provider (Tier I, World Bank)

10.2.1 Proportion of people living below 50 percent of median income, by sex, age and persons with disabilities (World Bank, Tier II)

17.8.1 Proportion of individuals using the Internet (ITU, Tier I)