Women's Index: Developing a Tool for Aligning Financial Investments with Gender Equity

FINDINGS & IMPLICATIONS FOR THE FIELD

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Executive Summary

Improving the lives of women and girls is one of the most powerful ways to create social impact. It's not just a matter of social justice — financial investment in women and girls has been linked to improvements in outcomes for families, communities, and global economies.[1] Gender lens investing — the practice of considering benefits to women, alongside financial return — has the potential to unlock capital in support of businesses and governments aligned with the interests of women and girls.

In October 2019, Women of the World Endowment (WoWE), a global endowment working to mainstream investing in and through women, co-hosted a Sustainable Development Goals Public Markets Financial Engineering Workshop with UN Women. The purpose was to address the limited availability of fixed-income investing products informed by data on gender. The workshop brought together data aggregators, index and product developers, asset managers, and asset owners, representing leading financial organizations. Together, the group identified the need for a scoring methodology that used a gender lens to rate government debt.

To take this work forward, WoWE and the Tara Health Foundation partnered with the Center for High Impact Philanthropy (CHIP) to lay the groundwork for the development of a Women's Index. By enabling comparisons of the status of women in different countries, this

index would help those who want to make financial investments to advance gender equity, The indicators that comprise the index would reflect those factors known to influence the well-being of women and girls, no matter what country they live in.[2] As with all of CHIP's projects, our goal was to ensure our work was both informed by the best available information[3] and practical for intended users. We identified the two sets of criteria that data used in a Women's Index would need to meet:

1 SOCIAL IMPACT CRITERIA

The data must be consistent with the social impact evidence associated with improvements in the lives of women and girls. Therefore, we anchored this work to the five dimensions of women's lives — health, education, economic empowerment, personal safety, and legal rights — that CHIP identified in **The XX Factor: A Comprehensive Framework and Guidebook for Improving the Lives of Women & Girls**.

2 PRACTICAL USE CRITERIA

The data must meet minimum requirements for feasibility for an array of users, including policymakers, philanthropic decision-makers, and those interested in financial returns. Throughout this project, CHIP partnered with **WoWE**, who provided insights and expertise on the data requirements of indices used for financial investments, particularly debt products.

After conducting a comprehensive review of 12 data sources and consulting with colleagues responsible for both **The XX Factor: A Comprehensive Framework for Improving the Lives of Women and Girls** and **The XX Factor Guidebook: How to Align Financial Investments to Improve the Lives of Women and Girls**, CHIP found no data source that met both sets of criteria along all five XX Factor dimensions. However, all of these publicly accessible data sources could be used as the basis for a beta version of a Women's Index. In fact, some of these data sources are already in use for related efforts.

What follows is a brief discussion of those existing data sources and their strengths and limitations for use in building a Women's Index. You will find the consolidated results of applying both social impact and practical use criteria to potential indicators linked to each of the five dimensions. Associated tables provide a more detailed analysis with key takeaways about the strength of each indicator, the associated data source, as well as other indicators or outcome measures to consider. We conclude with key considerations for the future development of a Women's Index.

Our hope is that this report will help all those committed to improving the status of women and girls develop the tools the field needs to advance progress towards greater gender equity.

2

Project Background

In Spring 2020, the Center for High Impact Philanthropy (CHIP), in partnership with WoWE, received a planning grant from the Tara Health Foundation to develop a workplan for a gender-specific index/scoring methodology against which financial products could be rated. In April 2020, CHIP began to identify and assess publicly available sources of data for use in developing a Women's Index.

For socially minded investors committed to improving the status of women, such an index could be used to rate financial investment products, such as public/government debt. Provided that a Women's Index reflects the key dimensions that have been identified as critical to the overall well-being of women and girls, financial investment products informed by a Women's Index have the potential to unlock significant capital aligned with real improvements in the lives of women and girls.

BUILDING UPON FIVE DIMENSIONS OF THE XX FACTOR

Our team already had an existing framework for this analysis. In 2017, CHIP published **The XX Factor: A Comprehensive Framework for Improving the Lives of Women & Girls**, which identified five key dimensions of women's lives that research shows are critical to flourishing: **health**, **education**, **economic empowerment**, **personal safety**, and **legal rights**. The XX Factor was the first comprehensive, evidence-based framework for understanding social sector opportunities to make meaningful improvements in the lives of women and girls around the world.

The Five Dimensions of Women's Lives

ECONOMIC EMPOWERMENT

Women are enabled to achieve economic success and have agency over financial decision-making

EDUCATION

Women have access to knowledge and educational opportunities in order to cultivate learning and expand their possibilities in life

PERSONAL SAFETY

Women are free from violence and other harmful practices that undermine bodily autonomy and well-being

HEALTH

Women are free from disease and pain and able to live full, flourishing lives

LEGAL RIGHTS

Women have rights under the law that enable them to thrive (including in the other four dimensions)

Source: Center for High Impact Philanthropy. (2017). The XX Factor: A Comprehensive Framework and Guidebook for Improving the Lives of Women & Girls. Philadelphia, PA. www.impact.upenn.edu/toolkits/the-xx-factor.
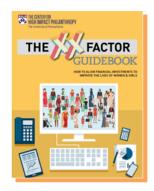
These five dimensions are inextricably linked and provide stakeholders with a holistic view of how to create the greatest impact for women and girls. In the following graphic, we provide a summary of the top consensus outcome measures that are linked to progress in each of the five dimensions.

Table 1: Outcome Measures Linked to the Five Dimensions of Women's Lives

Dimension	Top Consensus Outcome Measures
HEALTH	• **Years of life lost** (premature death measure) • **Years lived with disability** (disease & disability measure) • **Maternal mortality ratio** (female-specific health measure)
EDUCATION	• **Enrollment rates** (educational access measure) • **Completion rates** (educational attainment measure) • **Literacy rates** (educational achievement measure)
ECONOMIC EMPOWERMENT	• **Household wealth** (economic status measure) • **Control over household spending** (economic agency measure)
PERSONAL SAFETY	• **Proportion of women subjected to physical and/or sexual violence by a current or former intimate partner, in the last 12 months** (intimate partner violence measure) • **Proportion of women subjected to sexual violence by persons other than an intimate partner, since age 15** (non-partner sexual violence measure)
LEGAL RIGHTS	• **Percentage of women in national parliament** (governance rights measure)

CHIP subsequently published **The XX Factor Guidebook: How to Align Financial Investments to Improve the Lives of Women & Girls**, which illustrates how The XX Factor Framework could be adapted for use in screening investments in public equity.

This project builds upon those two previous efforts to identify and assess available data to inform an index that measures country-level progress against the measures we established in The XX Factor as critical to improving the lives of women and girls.

PARTNERSHIP WITH WoWE

Throughout this project, CHIP partnered with WoWE who provided insights and expertise on the data requirements of indices used for financial investments, particularly public debt products. The 2019 Public Markets Financial Engineering Workshop hosted by WoWE and UN Women offered evidence of demand for such a scoring methodology. At that workshop, 90% of asset managers and owners indicated they would be interested in investing in fixed income gender-lens (GL) products, if available. The same group indicated that the most relevant benchmark would be a broad, global universe of fixed income products, evaluated through gender-lens criteria. However, current gender-lens rating methodologies can be applied only to corporate debt, leaving two thirds of debt products in the Global Aggregate Bond universe unrated (namely government and securitized bonds).

A FOCUS ON COUNTRY-LEVEL DATA

In our project analysis, we focused only on country-level data for a few reasons. First, we found multiple sources of data at that level that aligned with The XX Factor dimensions. Second, we found that data at the state or sub-national level was limited and varied widely from source to source, by indicator, and by country and sub-national entity. While there isn't comprehensive sub-national data across all countries, our team notes that sub-national data may be available for specific markets, such as in the United States or Australia where there is an active sub-national debt and bond market. Any effort to evaluate sub-national debt products can apply our approach and analysis to the country or countries of focus.

3

High-Level Findings

1. To be useful in aligning investment capital with the best available evidence regarding determinants of women's well-being, the data used in developing a Women's Index must meet two sets of criteria: social impact criteria and practical use criteria.

SOCIAL IMPACT CRITERIA

The data must be consistent with social impact evidence associated with improvements in the lives of women and girls. This was the central focus of The XX Factor Framework, which identified the evidence-based strategies and outcome measures linked to improvement in the lives of women and girls, no matter their geography, socioeconomic status, or race. Social impact criteria is the basis of CHIP's expertise.

PRACTICAL USE CRITERIA

The data must meet minimum requirements for feasibility for both the development and assessment of relevant financial investment products and users, including policymakers, philanthropic decision-makers, and those interested in financial returns. Sharing their financial investment expertise, our colleagues at WoWE helped our team generate this practical use criteria.

The tables below outline both sets of criteria, along with the rationale for considering each characteristic.

Table 2: Social Impact Criteria for a Women's Index

Social Impact Criteria	Why This Matters
Alignment with all five XX Factor dimensions *(health, education, economic empowerment, personal safety, and legal rights)*	The XX Factor is the first framework to comprehensively examine the evidence-based strategies and outcome measures associated with improvements in the lives of women and girls, no matter their location, race, or socioeconomic status.
Internal validity	Internal validity assesses whether an indicator or data source measures what it is intended to measure (e.g., maternal mortality rate as an indicator of maternal health). Internal validity is determined by an assessment of the data collection methods.
External validity	External validity measures whether there is consensus on the use of this indicator and how broadly the indicator is used in different contexts (i.e., generalizability). For example, we found indicators for literacy did not have good external validity, as literacy can encompass different definitions and values in different cultures, making it difficult to generalize between countries. On the other hand, the proportion of physical and/or sexual violence by a current or former intimate partner indicator has a clear definition as reported for 195 countries.
Temporal association of indicator	Temporal association refers to whether an indicator is leading (e.g., percentage of births delivered by a skilled attendant is predictive of maternal mortality rates), real-time (e.g., the monthly maternal mortality rates for the current month), or lagging (e.g., maternal mortality rates for last year).

Table 3. Practical Use Criteria for a Women's Index

Practical Use Criteria	Why This Matters
Historical continuity	Without a historical view, users can't measure trends in progress, including any improvement, decline, or cause and effect. While historical trends are not predictive, they provide a necessary baseline to inform expectations. Need for historical continuity varies by indicator (e.g., access to internet and mobile phones will not go as far back as school enrollment rates).
Periodicity	The frequency of when data is updated (e.g., monthly, annually, every 2 years). That frequency can then be matched against project or investment timeframes.
Redundancy/comparability	When multiple sources collect and report data for the same indicators using the same methods, it is easier to fill any gaps in the number of countries or years reported. For example, multiple data sources collect data for maternal mortality rates (e.g., IHME, DHS, WHO) for different countries and time periods.
Level of disaggregation	The level at which data is available, such as national or subnational (e.g., in the U.S., state level). For example, if you're looking at a particular debt market, index data needs to span the same geography as that market appropriate to that level of analysis – i.e., data at the national level for national debt or sub-national level, such as city, for municipal bonds.
Public accessibility of data	In order to be aggregated into an index, data must either be publicly available for free or licensable for specific purposes.

2. No data source or existing framework met both the social impact criteria and practical use criteria, detailed in Tables 1 and 2 above, along all five XX Factor dimensions.

To determine whether any data source — or frameworks — already exist that could meet both sets of criteria outlined above, the CHIP team reviewed 12 sources of data, including related efforts such as existing indices that incorporate indicators relevant to women and girls. We also consulted colleagues responsible for both The XX Factor: A Comprehensive Framework

for Improving the Lives of Women and Girls and **The XX Factor Guidebook: How to Align Financial Investments to Improve the Lives of Women and Girls**. During this planning grant, we found no one data source, existing index, or framework that met both sets of criteria across all five dimensions or that were inclusive of all 11 consensus outcome measures identified in The XX Factor Framework. In our analysis, we only reviewed publicly available data.

3. **However, data sources did exist that could be used as a basis to develop a useful, beta version of a Women's Index. In fact, some of these are already in use for related efforts.**
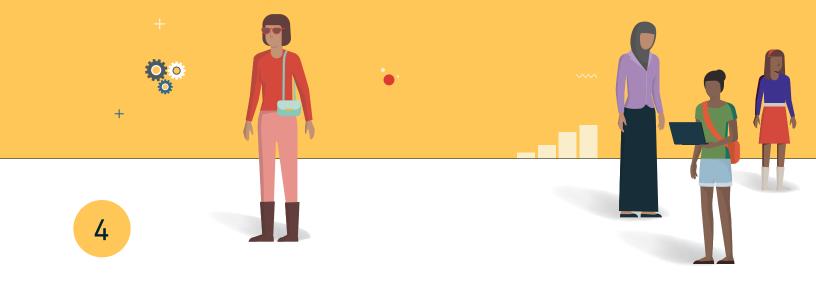
For three of the five XX Factor dimensions — health, education, and personal safety — sources of data for consensus outcome measures exist that meet criteria for both social impact and practical use. However, for two dimensions — economic empowerment and legal rights — we did not find data sources for outcome measures that meet the defined criteria.

For example, a consensus outcome measure for women's economic empowerment is women's control over household spending. Unfortunately, our review found only nine countries that report this measure, making that measure of limited practical use for a global Women's Index.

To identify data that could be used for economic empowerment and legal rights, we expanded our review to include data sources for key determinant measures which were also defined in The XX Factor Framework. A key determinant is a measure that evidence links to an outcome. For example, key determinants of women's control over household spending are female labor force participation and women's access to mobile phone/internet. The more women participate in the labor force and the more access they have to mobile and internet technology, the more control they tend to have over household spending. When available, such key determinant measures can therefore serve as proxies for outcome measures.

For economic empowerment and legal rights, the two dimensions where we did not find good data sources for outcome measures, we identified sources of data for key determinants.

Data from many of these sources are already being aggregated and used by policymakers, businesses, and countries' citizens. The following section outlines all of these data sources, along with our team's analysis of their utility in developing a Women's Index.

Landscape of Available Data Sources
Descriptions and Characteristics of Sources Reviewed

In this section, we provide descriptions and characteristics of the data sources we reviewed. We list 10 of these data sources in order of the number of XX Factor dimensions and indicators that each data source covers. At the end of this section, we describe two additional data sources with which members of our team were already very familiar. These two data sources focus largely on dimensions of public health, an area of expertise of several members of our team. All sources reviewed could be accessed publicly.

World Bank Gender Data Portal

This source included data on all five of The XX Factor dimensions and potential indicators for nine of 11 consensus outcome measures. World Bank is both a primary and secondary source.

The portal reports data on 79 indicators for 195 countries since 1960; so it provides a level of global comprehensiveness and historical continuity that would make it more widely useful than other sources we looked at. In addition, most of the data was publicly accessible for free. However, the historical continuity and reporting consistency varied across indicator and country. An example of a key health indicator is maternal mortality rate, which was covered for 190 countries. However, a helpful economic empowerment indicator like control over household spending, disaggregated by gender, was reported for only nine countries.

The portal compiles data on key gender topics from both World Bank-conducted or funded surveys and other primary sources, including national statistics agencies, United Nations databases, and some modeled data (i.e., leading indicators).

DIMENSIONS: 5/5*

INDICATORS: 9/11

SOURCE TYPE: Primary and secondary data source (collector and aggregator)

SOURCE START DATE/HISTORICAL CONTINUITY: 1960

NUMBER OF COUNTRIES INCLUDED: 195

* Economic empowerment counted but data is limited and not reflective of our definition of household wealth and control over household spending.

United Nations Sustainable Development Goals (SDG) Tracker

This source included data on all five of The XX Factor dimensions and potential indicators for seven of 11 consensus outcome measures.

The SDG Tracker is a data aggregator and directs users to primary data sources reporting on 231 unique indicators that aid in measuring progress on the UN's 17 Sustainable Development Goals (SDGs). SDG Tracker does not produce its own data or indicators (i.e., secondary source). Primary data sources include UNICEF, WHO, UNESCO, FAO, OECD, UNAIDS.

Data is accessible by indicator or by specific goals or targets but acknowledges the many gaps that remain in data availability (i.e., redundancy). The number of countries, historical continuity, and frequency of updates varies significantly depending on the indicator and data source. However, SDG Tracker applies a tiered rating to assess indicator validity that could be applied to The XX Factor outcome measures in developing a Women's Index.

DIMENSIONS: 5/5*

INDICATORS: 7/11

SOURCE TYPE: Secondary data source (aggregator)

SOURCE START DATE/HISTORICAL CONTINUITY: Varies by indicator

NUMBER OF COUNTRIES INCLUDED: Varies by indicator

* Economic empowerment was counted but data is limited and not reflective of our definition of household wealth and control over household spending.

WomanStats Project

This source included data on all five XX Factor dimensions. The WomanStats Project collects data on all countries with a population greater than 200,000 — a total of 176 countries, with

over 350 variables on data that include laws, statistics, and practices within countries. The information available ranges from data on domestic violence to female landownership to political participation.

Its nine dimensions are: women's physical security, women's economic security, women's legal security, women's security in the community, women's security in the family, security for maternity, women's security through voice, security through community investment in women, and women's security in the state.

All data is available to the public for free, and the information on the site is continually updated as newer information becomes available. While the information in the WomanStats database is extensive, not every data point is complete. Sometimes there are coding gaps in the database where information isn't available or where the information is incomplete (i.e., inconsistent reporting for all indicators for all countries in all years).

DIMENSIONS: 5/5

INDICATORS: 5/11

SOURCE TYPE: Secondary data source (aggregator)

SOURCE START DATE/HISTORICAL CONTINUITY: Varies by indicator

NUMBER OF COUNTRIES INCLUDED: 176

Demographics and Health Surveys (DHS) Program

This source included data on four of the five XX Factor dimensions, not including legal rights, and potential indicators for seven of 11 consensus outcome measures. DHS is a primary source.

The DHS Program surveys collect data on a wide variety of topics for 92 low- and middle-income countries since 1984 on overlapping five-year periods (i.e., 1984–1990, 1989–1993, 1992–1997, and so on; historical continuity and periodicity).

Surveys are country specific and executed by a national implementing agency and therefore, may vary widely on what data is reported by each country (i.e. internal validity). However, access to raw data is limited (i.e., gated and subject to approval upon review of use purposes).

DIMENSIONS: 4/5, not including legal rights

INDICATORS: 7/11

SOURCE TYPE: Primary data source

SOURCE START DATE/HISTORICAL CONTINUITY: 1984

NUMBER OF COUNTRIES INCLUDED: 92

Georgetown Institute for Women, Peace, and Security (WPS) Index

This source included data on four of five XX Factor dimensions and potential indicators for three of 11 consensus outcome measures.

The Women, Peace, and Security (WPS) Index systematically measures and ranks women's well-being worldwide based on three dimensions in line with the UN's SDGs. The index's three dimensions are: inclusion (economic, social, and political), justice (formal laws and informal discrimination), and security (at the individual, community, and societal levels).

WPS aggregates data from multiple sources and defines each sub-dimension, which serves as an indicator. The 167 countries ranked in 2019 have scores ranging from 0.904 (Norway) to 0.351 (Yemen), where 1 is the best possible score and 0 is the worst. The WPS Index was also recently expanded to measure women's rights and opportunities at the state level in America.

DIMENSIONS: 4/5, not including health

INDICATORS: 3/11

SOURCE TYPE: Secondary data source (aggregator)

SOURCE START DATE/HISTORICAL CONTINUITY: Varies by indicator

NUMBER OF COUNTRIES INCLUDED: 167

International Monetary Fund Gender Data

This source included data on four of the five XX Factor dimensions, not including legal rights. Data reported annually is split between three indexes: gender budgeting, gender inequality, and gender development.

Data availability by country and historical continuity varies by index. For example, the Gender Development Index reports data for 145 countries and the Gender Inequality Index reports data for 139 countries, both as far back as 1990. The Gender Budgeting Index only includes data since 2016 for 47 countries.

DIMENSIONS: 4/5, not including legal rights

INDICATORS: 5/11

SOURCE TYPE: Secondary data source (aggregator)

SOURCE START DATE/HISTORICAL CONTINUITY: Varies by indicator

NUMBER OF COUNTRIES INCLUDED: Ranging from 47 to 145 depending on index

Equal Measures 2030 SDG Gender Index

This source included data on three of the five XX Factor dimensions, not including personal safety or legal rights, and potential indicators for five of 11 consensus outcome measures.

The SDG Gender Index aggregates data that are compiled, quality-assured, and disseminated by UN agencies, multilaterals, research institutes, and others. Many of the indicators are produced by national statistical offices or line ministries in the countries themselves and reported according to internationally comparable standards to custodian agencies that have a formal role in globally monitoring the SDG targets. Some indicators are regularly collected or calculated by non-governmental organizations.

DIMENSIONS: 3/5, not including personal safety or legal rights

INDICATORS: 5/11

SOURCE TYPE: Secondary data source (aggregator)

SOURCE START DATE/HISTORICAL CONTINUITY: Varies by indicator

NUMBER OF COUNTRIES INCLUDED: 129 in total; varies by indicator

World Bank Sovereign ESG Data Indicators – Beta

This source included data on three of five XX Factor dimensions, not including health or personal safety, and potential indicators for three of 11 consensus outcome measures. However, this source is included in these findings because it is one of limited sources that reports on literacy rates (education) and proportion of seats in parliament held by women (legal rights).

The World Bank Beta framework includes 17 indicators in three categories — environment, social, and governance (ESG). The indicators are based on: survey of World Bank data currently used by investors; indicators relevant to World Bank's own policy analysis; other key indicators identified through analysis of World Bank expert teams; and availability, coverage, and timeliness of data. Currently in this framework, countries are not ranked or given a score, but this might be incorporated in a later version. Much of the data is disaggregated by region of the world, not country. Importantly, the current framework is built for the financial sector and government, and lets users perform their own analysis.

This Sovereign ESG Data Framework is not specifically intended to evaluate gender, although that is a component in its social pillar, and therefore, there are some gaps in the indicators necessary to reflect The XX Factor dimensions. However, it provides a good starting point for developing an index using indicators and available data already evaluated from a financial use perspective.

DIMENSIONS: 3/5, not including health or personal safety

INDICATORS: 3/11

SOURCE TYPE: Secondary data source (collector and aggregator)

SOURCE START DATE/HISTORICAL CONTINUITY: Data collection started in 1960; varies by indicator

NUMBER OF COUNTRIES INCLUDED: 193

🔗 Social Progress Index (SPI)

This source included data on two of the five XX Factor dimensions (health and education), and potential indicators for four of 11 consensus outcome measures.

The Social Progress Index (SPI), first established in 2013, ranks 163 countries on social progress. It combines 50 social and environmental outcome indicators to calculate an overall score for these countries, based on tiered levels of scoring that include measures in health, safety, education, technology, rights, and more. There are 12 components, with three to five indicators per component. These 12 components fall under three categories: basic human needs, foundations of well-being, and opportunity.

Primary data sources aggregated here vary by component and indicator, but the most widely used are Institute for Health Metrics and Evaluation (IHME), World Bank, Varieties of Democracy Project, the UN, and WHO. Country reporting, periodicity, and historical continuity vary by indicator and data source.

DIMENSIONS: 2/5, not including personal safety, economic empowerment, or legal rights

INDICATORS: 4/11

SOURCE TYPE: Secondary data source (aggregator)

SOURCE START DATE/HISTORICAL CONTINUITY: Established 2013; varies by indicator

NUMBER OF COUNTRIES INCLUDED: 163

🔗 Women, Business, and the Law 2020

Women, Business, and the Law 2020 is the sixth in a series of studies that analyze laws and regulations affecting women's economic opportunity in 190 economies.

Eight indicators — structured around women's interactions with the law as they begin, progress through, and end their careers — align with the economic decisions women make at various stages of their lives and corresponding legal rights. The indicators are mobility, workplace, pay, marriage, parenthood, entrepreneurship, assets, and pension.

The indicators were selected through research and consultation with experts. They are also inspired by the international legal frameworks set out in the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW); the Committee on the Elimination of Discrimination against Women General Recommendations (CEDAW GR); the UN Declaration on the Elimination of Violence against Women (DEVAW); the International Labour Organization (ILO) Equal Remuneration Convention; 1951 (No. 100); the Maternity Protection Convention, 2000 (No. 183); and the Violence and Harassment Convention, 2019 (No. 190). Its data covers 190 countries, dates back to 1971, and is binary (yes/no) to questions under each indicator.

DIMENSIONS: 2/5, not including health, education, or personal safety

INDICATORS: 0/11

SOURCE TYPE: Primary and secondary data source (collector and aggregator)

SOURCE START DATE/HISTORICAL CONTINUITY: 1971

NUMBER OF COUNTRIES INCLUDED: 190

SOURCES FOR DATA ON HEALTH

The team also reviewed the World Health Organization (WHO) **Global Health Observatory**, a data repository for over 1,000 health-related indicators for its 194 member states, and the Institute for Health Metrics and Evaluation (IHME)'s **Global Burden of Disease Study**.

5

Indicator Review
Applying Social Impact and Practical Use Criteria for a Women's Index

In this section, you will find the consolidated results of applying both social impact and practical use criteria to indicators that align with consensus outcome measures for each of the five XX Factor dimensions.

Results are summarized in a table for each dimension, followed by other consensus outcome measures to consider. The first column includes The XX Factor outcome measures, those measures identified in the The XX Factor Framework as linked by evidence to meaningful improvements in the lives of women and girls, no matter what country they live in. The second column includes recommended indicators used to measure these outcomes. The third and fourth columns provide the results of applying the social impact and practical use criteria, respectively. The fifth column includes our key takeaways and recommendations for inclusion in a Women's Index.

For the dimension of economic empowerment, our analysis found there was insufficient data for the consensus outcome measures identified in The XX Factor Framework— household wealth and control over household spending. For example, we did not find sources of data that reported across many countries and over a sufficiently long time horizon to be useful. To fill this gap, we identified data sources for key determinants of these outcome measures. For example, labor force participation is a key determinant of household wealth, a consensus outcome measure for economic empowerment. Labor force participation can therefore serve as a suitable proxy indicator for economic empowerment, given the lack of good data sources for household wealth. We identified suitable proxy indicators and corresponding data sources that could fill the gap in this dimension based on key determinants of outcome measures defined in The XX Factor Framework (e.g., labor force participation).

We took a similar approach to address gaps in the dimension of legal rights. We expanded our analysis beyond the single consensus outcome measure defined in The XX Factor to include additional legal and human rights-related indicators. As a result, we identified three additional indicators that serve as measures of equitable work-related policies and practices.

Dimension 1: Health

Consensus Outcome Measure	Suggested Indicator (Source)	Social Impact Assessment (Validity and use)	Practical Utility (History, periodicity, redundancy)	Key Takeaways
Years of life lost (YLL) (**Premature death**)	Population-level measurement of years of life lost prematurely due to a disease or injury (IHME)	YLL is useful for reflecting impact when measuring mortality. Other reasonable proxies are available.	Limitation: This indicator has only been collected since 1990 and is only reported by IHME. They report data on 195 countries annually.	Good alternatives exist with more longevity and broader uptake (e.g., age-adjusted mortality). We recommend an index include YLL since it is the optimal social impact indicator of mortality. Other useful indicators include age-adjusted mortality rate or life expectancy, by gender.
Years lived with disability (YLD) (**Disease and disability**)	Population-level measurement of years living with disability due to a disease or injury (IHME)	YLD is useful for reflecting impact when measuring morbidity. Other reasonable proxies are available.	Limitation: This indicator has only been collected since 1990 and is only reported by IHME. They report data on 187 countries every five or more years.	Similar to YLL, YLD is an optimal indicator from the social impact perspective. However, limited history, periodicity, and redundancy suggest that supplementary indicators of morbidity/ disability should also be considered.
Maternal mortality ratio (MMR) (**Female-specific health measure**)	The number of maternal deaths during a given time period per 100,000 live births during the same time period (United Nations Population Division via World Bank Gender Data Portal; other sources available)	MMR is the standard and common measure reflecting female-specific health.	Multiple secondary sources report data, likely using the same primary data collection (census data and household surveys). World Bank reports data going back to 2000, covering almost all 195 countries.	The World Bank data is aggregated from multiple primary sources, and thus is comprehensive and provides MMR for almost all countries.

Dimension 2: Education

Consensus Outcome Measure	Suggested Indicator (Source)	Social Impact Assessment (Validity and use)	Practical Utility (History, periodicity, redundancy)	Key Takeaways
Enrollment Rates (Access)	Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex (UNESCO-UIS*)	There are several data sources on enrollment rates, varied by level of schooling. Multiple levels can be included in an index.	World Bank indicators are comprehensive and specific but are only reported by a few dozen countries. In contrast, UNESCO reports data for 99 countries since 1994.	UNESCO-UIS is the best data source — it captures the participation rate of youth and adults in formal/non-formal education programs in the previous 12 months, no matter the education level.
Completion Rates (Attainment)	Expected years of schooling, by gender (UNESCO-UIS)	Several measures exist for completion rates: completion rates between primary, secondary, bachelor's degree, etc. levels; but the data does not address educational quality or level.	UNESCO-UIS goes back to 1970 and covers 150 countries, which is still relatively high for this dimension.	There is no perfect indicator, but this UNESCO indicator ("expected years of schooling, by gender") provides an overall view of attainment.
Literacy Rates (Achievement)	Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex (UNESCO-UIS)	Literacy rates are a tricky indicator to compare across settings, because literacy can mean different things in different cultures and contexts.	The identified data source only has literacy data on ~70 countries (though it varies by year) since 2006.	In its current state, literacy rates could be included but with limited data across countries. A decision to include should also consider the questionable validity of the indicator across countries.

* All UNESCO-UIS data was identified and analyzed via the UN SDG Tracker.

Education is hard to measure overall because of the varied purposes and definitions of education. For example, it is difficult to measure education quality across countries, because the educational goals vary so widely. School enrollment rates are an indicator of access, a necessary condition before education attainment and quality can be measured. Expected years of schooling reflects attainment. Literacy, a measure of educational quality, is a key (and most commonly measured) component of educational achievement. WHO defines literacy rate as "the percentage of population aged 15 years and over who can both read and write with understanding a short simple statement on his/her everyday life." Literacy data is normally collected from national population census or household/labor force surveys. However, literacy is a challenging measure because there are different national standards and definitions for functional literacy, making it difficult to compare across cultures and countries.

Given the reasonable strength of educational access and attainment measures, a Women's Index does not need to measure quality through literacy, especially given the limitations of associated measures. Educational measures, including access and attainment, are intrinsically connected to other important dimensions, like economic empowerment. There are other intermediate measures that reflect educational quality, such as access to books, classroom size, and teacher experience. A Women's Index may also include three-part indicators where the assessment is weighted depending on what data is available for each part. Where data is not available, the objective would be to catalyze the collection of data, but an index cannot be built upon data that doesn't exist. Having two good indicators out of three for education is sufficient for the first iteration of an index.

Dimension 3: Economic Empowerment

Consensus Outcome Measure	Suggested Indicator (Source)	Social Impact Assessment (Validity and use)	Practical Utility (History, periodicity, redundancy)	Key Takeaways
Household wealth (Economic status)	Growth rates of household expenditure or income per capita among the bottom 40% of the population and the total population (World Bank Group's PovcalNet database)	So far, the data is only focused on tiers of household wealth, especially those below the poverty line without sex disaggregation.	While this indicator covers 94 countries dating back to 2000, the data is not disaggregated by sex and thus doesn't provide a clear picture of household wealth for women in particular.	There is no clear concept of household wealth; the intended meaning must be better defined to determine the best indicator. Stakeholder or subject-matter experts should be consulted and alternatives/proxies identified. Indicators that disaggregate by sex are also needed.
Control over household spending (Economic agency)	Percentage of women who say that they alone or jointly have the final say in all of the three main decisions (own health care, making large purchases, visits to family, relatives, friends) (DHS Accessed via World Bank Gender Data Portal)	This indicator not only reported on economic decisions but also female agency and authority in the household.	Only 9 countries report this measure.	There is no clear leading indicator for this measure. Stakeholders or subject-matter experts should be consulted and alternatives/proxies identified.

ADDITIONAL CONSIDERATIONS FOR THIS DIMENSION

Women's economic empowerment is broadly defined as having both the ability to succeed and advance economically (economic status) and the power to make and act on economic decisions (economic agency). Economic agency reflects control over resources, measured by women's ability to earn and control income and to own, use, and dispose of material assets. Yet, there are significant and well-documented gaps in gender data available in this dimension.

In our review of the available data sources, there is currently insufficient data for inclusion of indicators of household wealth or control over household spending in a country-level

Women's Index. However, there are a number of other measurable, positive impacts that result from women's economic empowerment at both a macro and micro level. At the macro level, economic empowerment is measured by GDP and other measures related to women's economic participation that contribute to GDP — such as female labor force participation, female entrepreneurship, gender wage gap, and discriminatory laws. At a micro level, benefits to women's families, their communities, and women themselves are measured by household income and economic agency.

In this expanded section, we explore additional measures of economic empowerment for inclusion in an index based on key determinants of outcome measures defined in The XX Factor. These indicators are important because they are enablers of indicators in other dimensions and may serve as proxies for other dimensions.

Economic Empowerment: Other Indicators to Consider

Key Determinant Measure	Suggested Indicator (Source)	Social Impact Assessment (Validity and use)	Practical Utility (History, periodicity, redundancy)	Key Takeaways
Female labor force participation (LFP)	LFP rate, female (percentage of female population ages 15 and older who are working or actively seeking work) (Modeled ILO estimate from World Bank)	LFP reflects macro-level economic growth of a country.	Almost all countries are included, going back to 1960 or 1990 for most (date depends on the country).	While LFP is both a driver of and outcome of economic development, simply measuring whether a woman works or not does not give an adequate picture of her economic status and agency. Unpaid and informal work, fair wages, and worker protections should also be considered.
Access to mobile phone/internet	Percentage of women ages 15 and older who report having a mobile phone that they use to make and receive personal calls (Gallup World Poll)	Access to a mobile phone can serve as a proxy for internet access, digital banking and payment systems, and networks.	169 countries are included, dating back to 2008.	In this information-driven age, internet access (often through mobile phones) is important for driving economic development.

Key Determinant Measure	Suggested Indicator (Source)	Social Impact Assessment (Validity and use)	Practical Utility (History, periodicity, redundancy)	Key Takeaways
Property rights (ability to own land and other assets, such as livestock or small farm equipment)	1) Do men and women have equal ownership rights to immovable property? 2) Do female and male surviving spouses have equal rights to inherit assets? (Women, Business, and Law 2020)	Evidence demonstrates that women are better poised to improve their lives when they own land and other assets, such as livestock or small farm equipment.	190 countries are included and data goes back to 1971; however, data is binary (yes/no).	Legal rights for women are the first step to property ownership for women. This indicator covers most countries and the historical continuity is comprehensive. However, it does not tell us if women are actually gaining access to ownership in practice. A non-binary analysis would tell a more complete story (e.g., number, proportion, or percentage of women who own property).
Access to finance	1) Can a woman open a bank account in the same way as a man? (Women, Business, and Law 2020) 2) Percentage of women ages 15 and older who report having an individual or joint account at a bank or other financial institution or who report using a mobile money service (WPS)	Access to secure, private, individual savings accounts, such as through mobile technology, is particularly important for helping women control their money, grow their incomes, and re-invest in their families and businesses. This is a proven economic empowerment intervention for women.	1) 190 countries are included, dating back to 1971. The data is binary (yes/no). 2) 170 countries are included, only dating back to 2011.	There are limitations to this data: 1) Binary data only tells us part of the story and 2) There is a lack of historical depth. However, inclusion in an index is supported due to the significance in economically empowering women and recent progress in data collection.

Dimension 4: Personal Safety

Consensus Outcome Measure	Suggested Indicator (Source)	Social Impact Assessment (Validity and use)	Practical Utility (History, periodicity, redundancy)	Key Takeaways
Intimate partner violence measure	Proportion of physical and/or sexual violence by a current or former intimate partner in the last 12 months (IHME)	While IMHE's methodology is unclear, its definition aligns with that in The XX Factor: violence directed against a woman because she is a woman, or violence that disproportionately affects women.	Data is analyzed from 195 countries and goes back to 1990.	This IHME measure should be included upon closer confirmation of methodology.
Proportion of sexual violence by persons other than an intimate partner, since age 15 (non-partner sexual violence measure)	Lifetime prevalence of sexual violence by non-partners (WHO)	Data for non-partner violence seems to be limited (as stated in SDG's website).	We were unable to access and analyze raw data, but WHO reports data for 56 countries. Compared to other data sources for this indicator, this is still fairly comprehensive.	WHO should be engaged to review methods and available data for inclusion in index.

Dimension 5: Legal Rights

Consensus Outcome Measure	Suggested Indicator (Source)	Social Impact Assessment (Validity and use)	Practical Utility (History, periodicity, redundancy)	Key Takeaways
Percentage of women in national parliaments (governance rights measure)	Proportion of seats held by women in national parliaments (percentage) (World Bank Gender Statistics/Inter-Parliamentary Union)	Women in parliaments are the percentage of parliamentary seats in a single or lower chamber held by women.	Most countries (238) are covered. The data goes back to 1997 and is collected annually.	The Inter-Parliamentary Union seems to be the best (and only) source on this indicator. Other indicators should be identified and defined to reflect women's legal rights.
Equitable work-related policies and practices	1) Does the law mandate equal remuneration for work of equal value? (Women, Business, and Law 2020) 2) Does the law prohibit discrimination in employment based on gender? (Women, Business, and Law 2020) 3) Is paid parental leave of at least 14 weeks available to mothers? (Women, Business, and Law 2020)	Many discriminatory laws restrict women's participation in the economy. Such laws are often a reflection of social and cultural norms of a certain country or region. Paid maternity leave leads to positive health and economic benefits, including increased female labor force participation.	Data is provided for 190 countries and goes back to 1971; though data is binary (yes/no).	We suggest inclusion of the available measures even if data is binary, while continuing to pursue data with greater depth. However, this is a known gap where little improvement has been made.

6

Next Steps

A Women's Index could align the efforts of socially minded investors, developers of gender-lens investment products, government ministries, philanthropic players, and others interested in advancing gender equity and improving the lives of women and girls. A "base" index used by all, but expanded or adapted for particular use cases, could also strengthen existing indices by providing a way to integrate considerations of gender and social impact.

However, the feasibility or practical use requirements can differ among practitioners. Developers and raters of government bond products may require data that differ from what philanthropists or private impact investors might seek. In addition, university-based centers like ours, while helpful from a social impact and credibility standpoint, do not offer the kind of marketing platform required for the fast adaptation and use of an index by practitioners in the more mainstream, commercial investment ecosystem.

For that reason, the development of a Women's Index for use by multiple providers of capital will require a broad, collaborative effort that can incorporate considerations of varied end users and the resources of various stakeholders. Those stakeholders include subject-matter experts, data gatekeepers, and advocates for the use of data on gender and social impact. Importantly, the development of an index will require investment by those with the financial resources and expertise to ensure the index meets criteria for both social impact and practical use — and evolves as the data landscape continues to expand.

Since financial investments have historically been viewed as separate from philanthropic goals and social impact, it can be challenging for socially minded investors to achieve mission alignment with their investment capital. A base Women's Index with a gender-specific index/

scoring methodology will allow practitioners to rate and build financial products aligned with factors linked to improvements in the lives of women and girls. The number of relevant, existing indices built in the last three years alone signals a growing interest and urgency for aligning financial Investments with gender equity. The more quickly a base Women's Index can be developed, the sooner individuals and organizations can align investments with factors linked by evidence to gender equity.

A Women's Index that consolidates the indicators described in this report could be a powerful tool for advancing gender equity. The breadth of stakeholders needed to successfully develop the index and ensure the index's use presents a challenge. However, that same breadth offers a unique opportunity: Once developed and put into practice, a base Women's Index has the potential to link efforts across the full continuum of capital — commercial, government and, philanthropic — in service of improving the lives of women and girls around the world.

Appendix: Methodology

CHIP developed our original five dimensions in The XX Factor Framework by looking for the key areas of overlap in existing frameworks and by examining the evidence on which dimensions of women's lives matter and why. This framework synthesized the research, existing frameworks, and key outcome measures reviewed. It is both compatible with other frameworks (including the UN's Sustainable Development Goals) while more holistically addressing all five key dimensions that funders can influence to improve the lives of women and girls around the world. Read the full methodology for the original framework, including the indices reviewed in **The XX Factor Toolkit**. As we examined sources of data in this current project, we considered the following:

XX Factor Framework. The XX Factor Framework served as the basis of this planning grant to build a scoring methodology based on the five dimensions of women's lives that research shows are critical to them flourishing. The CHIP team reviewed The XX Factor Guidebook, associated research, and data sources to guide us in identifying key sources of country-level and sub-national data that could inform a Women's Index. We also consulted colleagues involved in both past projects to get a deeper understanding of their learnings and how data was engaged as a part of that analysis.

Ideal Data Characteristics. CHIP iteratively developed a checklist of ideal data characteristics to inform an index linked to all five XX Factor dimensions. We initially developed this checklist primarily based on existing team expertise in social impact analysis and global development data sources, but continually refined ideal data characteristics based on learnings throughout the planning grant and input from the WoWE team on practical considerations for a Women's Index.

Data Analysis. The CHIP team used the 11 consensus outcome measures identified in The XX Factor as a starting point for analysis, by identifying data available and applying CHIP's set of ideal social impact characteristics. Data sources included those used to inform The XX Factor Framework. The team then identified an additional set of data sources widely used in the global development sector or other similar efforts (e.g., global development indices that include gender considerations).

For each consensus outcome measure, CHIP assessed currently available country-level data sources, and where available, state-level and municipal U.S. data. Where data was not available for consensus outcome measures, we reviewed data availability for select key determinants of outcome measures in each dimension, also defined in the original XX Factor Framework.

Given the intensive and well-documented social impact analysis undertaken in The XX Factor Framework's determination of consensus outcome measures and their key determinants, in this process, we emphasized practical considerations for inclusion in an index that rated sovereign or sub-sovereign debt products.

Preliminary Stakeholder Analysis. The CHIP and WoWE teams identified stakeholder types that would be important to inform the development of an index for scoring government debt products based on the dimensions critical to women. The CHIP team defined those stakeholder types and tracked potential stakeholders to engage in a broader project. We prioritized the following stakeholder types and potential contacts:

- Potential index users and validators
- Potential project funders/investors
- Subject-matter experts (by dimension, data use and access, and index development)
- Data gatekeepers/aggregators/collectors
- Advocates/ambassadors (technical and thematic)
- Leaders of similar efforts (funders, implementers, users, etc.)

Endnotes

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Authors and Acknowledgements

About CHIP

The Center for High Impact Philanthropy is a trusted source of knowledge and education to help donors around the world do more good. Founded as a collaboration between the School of Social Policy & Practice and alumni of the Wharton School, it is the premier university-based center focused on philanthropy for social impact.

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