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DELIVERING THE POWER OF PARITY: TOWARD A MORE GENDER-EQUAL SOCIETY

MAY 2016

DISCUSSION PAPER



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MGI research combines the disciplines of economics and management, employing the analytical tools of economics with the insights of business leaders. Our "micro-to-macro" methodology examines microeconomic industry trends to better understand the broad macroeconomic forces affecting business strategy and public policy. MGI's in-depth reports have covered more than 20 countries and 30 industries. Current research focuses on six themes: productivity and growth, natural resources, labour markets, the evolution of global financial markets, the economic impact of technology and innovation, and urbanisation.

Recent reports have assessed the economic benefits of tackling gender inequality, a new era of global competition, Chinese innovation, and digital globalisation.

MGI is led by three McKinsey & Company directors: Jacques Bughin, James Manyika, and Jonathan Woetzel. Michael Chui, Susan Lund, Anu Madgavkar, and Jaana Remes serve as MGI partners. Project teams are led by the MGI partners and a group of senior fellows, and include consultants from McKinsey offices around the world. These teams draw on McKinsey's global network of partners and industry and management experts. Input is provided by the members of the MGI Council: McKinsey directors Eric Labaye (chairman of MGI), Andres Cadena, Richard Dobbs, Katy George, Rajat Gupta, Eric Hazan, Acha Leke, Scott Nyquist, Gary Pinkus, Shirish Sankhe, Oliver Tonby, and Eckart Windhagen. In addition, leading economists, including Nobel laureates, act as research advisers.

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McKinsey & Company: Gender and Diversity

Over the past decade, McKinsey has made a sustained commitment to researching and writing about gender and diversity. Since 2007, McKinsey's Women Matter research has explored the role women play in workplaces around the world. In the autumn of 2015, McKinsey released a research report with LeanIn.Org, *Women in the workplace*, as well as global research from MGI covering 95 countries on the economic benefits of advancing women's equality, *The power of parity: How advancing women's equality can add \$12 trillion to global growth*.

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PREFACE

In our 2015 report *The power of parity: How advancing women's equality can add \$12 trillion to global growth*, the McKinsey Global Institute (MGI) undertook what we believe may be the most comprehensive attempt to date to estimate the size of the economic potential from achieving gender parity and to map gender inequality. We are building on that work in several ways. First, we are deepening our analysis in order to understand country-level and subnational patterns in gender equality. In autumn 2015 and spring 2016, we published reports on France and Western Europe, India, and the United States. Second, we are attempting to chart the way forward by taking a look at practical interventions by global, regional, and national leaders that can help to bridge the global gender gap. This discussion paper offers some early analysis of gender equality in society, with particular emphasis on a set of essential services that are required for women to be able to participate more fully in the workforce and boost their productivity. We hope that it will inform the discussions and deliberations of global gender experts, government leaders, and practitioners at the Women Deliver 2016 Conference in Copenhagen.

This work was led by Anu Madgavkar, an MGI partner based in Mumbai, and Jonathan Woetzel, a director of MGI and of McKinsey based in Shanghai, along with James Manyika, a director of MGI and of McKinsey based in San Francisco, Kweilin Ellingrud, a partner in the Minneapolis office, and Vivian Hunt, the managing partner of McKinsey's United Kingdom and Ireland offices. Mekala Krishnan, a consultant based in Stamford, led the team, which comprised Rishi Arora, Kriti Bansal, and Vidya Mahadevan. Sabrin Chowdhury, a consultant in the Washington, DC office, provided valuable support. We thank other McKinsey colleagues for contributing their valuable insights: Kushe Bahl, Michael Conway, Pablo Illanes, Ayesha Jaggi, Bharath Kumaran, Tony Lee, Vania Pashova, and Tracy Nowski.

We thank our academic advisers who helped shape this research: Richard N. Cooper, Maurits C. Boas Professor of International Economics at Harvard University; Rakesh Mohan, senior fellow at the Jackson Institute for Global Affairs at Yale University and distinguished fellow at Brookings India; and Laura D'Andrea Tyson, professor of business administration and economics and director of the Institute for Business and Social Impact, Haas Business and Public Policy Group, University of California at Berkeley.

We are especially grateful for the insights and challenge provided by Caren Grown, senior director, gender, World Bank Group; and the extensive guidance provided by Kalpana Kochhar, deputy director, Asia and Pacific Department, International Monetary Fund.

We are also grateful to several other academic experts who provided valuable guidance and inputs: Ariane Hegewisch, study director, Institute for Women's Policy Research; Jeni Klugman, fellow, Harvard Kennedy School's Women and Public Policy Program, and research professor, George Washington University; Carmen Niethammer, employment lead for the International Finance Corporation's Gender Secretariat; Jessica Schwartzman, director, reference group and partner relations (FP2020), United Nations Foundation; and Ann Starrs, president and CEO, Guttmacher Institute. Finally, we owe special thanks to Katja Iversen, CEO of Women Deliver, and Susan Papp, the organisation's director of policy and advocacy, for their invaluable support and guidance.

MGI's operations team provided crucial support for this research. We would like to thank MGI senior editors Janet Bush and Lisa Renaud; Rebeca Robboy in external communications and media relations; Julie Philpot, editorial production manager; and

Deadra Henderson, manager of personnel and administration. Special thanks are owed to Fatema Nulwala of the India external relations team, Therese Khoury and Peter Roberts of New Media, and Vineet Thakur of the India graphic design team for their valuable support in design and production.

We are grateful for all of the input we have received, but the final report is ours and any errors are our own. This report contributes to MGI's mission to help business and policy leaders understand the forces transforming the global economy, identify strategic locations, and prepare for the next wave of long-term growth. As with all MGI research, this work is independent and has not been commissioned or sponsored in any way by any business, government, or other institution, although it has benefited from the input and collaborations that we have mentioned. We welcome your comments on the research at **MGI@mckinsey.com**.

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May 2016

DELIVERING THE POWER OF PARITY

MGI's research has established a large potential economic gain from narrowing the gender gap in the world of work: \$12 trillion in 2025 if all countries match the fastest historical rate of progress in their region. That represents an 11 percent boost to GDP above a business-as-usual scenario. In this research, we estimate the tangible progress in both work and society needed to capture this potential and the spending on essential services needed to spur that progress.

- MGI's Gender Parity Score (GPS) combines 15 indicators of gender equality across 95 countries to assess how far the world needs to travel on a range of dimensions that are key to achieving the economic potential of women and the UN's Sustainable Development Goals (SDGs). Capturing the \$12 trillion GDP opportunity would require regions around the world to raise their GPS by at least 8 to 21 percent by 2025.
- Globally, the biggest opportunities to close gender gaps are in leadership positions, unpaid care work, and political representation. Financial inclusion also represents a substantial global opportunity (and, by implication, the closely related aspect of digital inclusion), particularly in Latin America and South Asia. Narrowing gender gaps in maternal health and education will be critical for sub-Saharan Africa and South Asia.
- As an initial road map for action and investment, we focus on six indicators: education, unmet need for family planning, maternal mortality, financial inclusion, digital inclusion, and unpaid care work. Our research focuses on these because the first four are strongly correlated with gender equality in work, while the latter two are closely linked to broader societal aspects of gender equality, such as child marriage and violence against women.
- Within these six areas, we focus on securing millions of people—women and men, girls and boys alike—improved access to essential services by 2025 in order to capture the economic potential of women and make progress towards the SDGs. In secondary education, for example, 58 million more girls and 60 million more boys would need to be enrolled in schools over and above the business-as-usual scenario to raise enrolment rates in line with the SDGs. Some 224 million additional women would need access to formal financial services, while 29 million to 57 million working women, and an equivalent number of men, in the global labour force will need to be covered by paid family leave. Some 445 million more people would need improved access to safe water supplies, an important lever for reducing the unpaid care work performed by women in developing countries.
- It will take \$1.5 trillion to \$2.0 trillion in incremental public, private, or household annual spending in 2025, or 1.3 to 1.7 percent of global GDP in that year, to achieve these coverage levels in five of the six focus areas. (We do not estimate the resources required for financial inclusion due to data limitations.) This is 20 to 30 percent more than what would be spent in a business-as-usual case in 2025 as a result of rising population and GDP. Yet the economic benefits of narrowing gender gaps are six to eight times higher than the social spending required.
- Achieving this will require the public sector to step up gender-specific interventions and also ensure that overall resources are channelled in a gender-neutral way. Innovative financing mechanisms and broader coalitions can attract private investment and spur private action. Changing attitudes will be important for ensuring that households actually make use of services to help empower women and girls. Crucial measures beyond our six focus areas, such as addressing the absence of legal protections and investing to spur productive job creation, will also be needed.

Delivering the Power of Parity



If all countries match the historical progress towards gender parity achieved by their best-in-region country

\$12 TRILLION could be added to global GDP in 2025



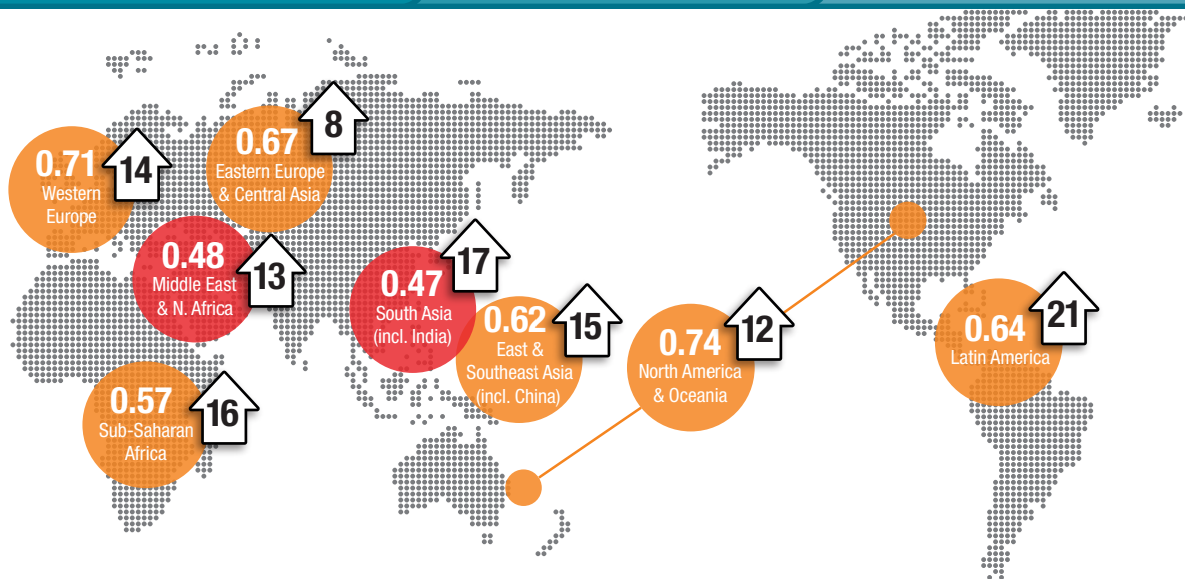
MGI's Gender Parity Score (GPS)

provides a **road map** for progress

Covers gender equality in **work** and in **society**

Achieving the **\$12T opportunity** requires progress on both aspects

Gender Parity Scores need to improve by **8–21%** across regions



2014 Gender Parity Score (1.0 = gender parity)

● High inequality ● Extremely high



Percentage increase required to achieve best-in-region GPS by 2025

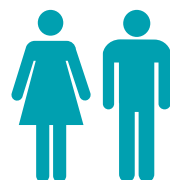
We focus on the costs and benefits associated with essential services for six indicators: education, family planning, maternal health, digital inclusion, financial inclusion, and assistance with unpaid care work.

Spending estimates do not include financial inclusion



20–30% required boost in projected spending in these areas

- Incremental annual spending of **\$1.5T to \$2.0T** needed in 2025
- **1.3 to 1.7%** of GDP in 2025



MILLIONS of women and men empowered by 2025

- **60M** more girls and **58M** more boys enrolled in secondary education
- **38M** more assisted births
- Paid family leave for up to **57M** more women
- Child care used by up to **180M** more families
- **880M** more people with access to energy



DELIVERING THE POWER OF PARITY: TOWARD A MORE GENDER-EQUAL SOCIETY

MGI's earlier research on gender inequality focused the world's attention on the economic potential inherent in narrowing the gender gap. It examined a scenario in which all countries match the historical rate of progress achieved by their fastest-improving regional peer in terms of gender equality in work—and found that by 2025, the world could add \$12 trillion to annual GDP. This represents an 11 percent lift over the business-as-usual scenario. But these gains in the world of work cannot be achieved without corresponding strides towards gender equality in society more broadly; the two go hand in hand.

But what level of societal progress is consistent with achieving the economic potential? Even more important, where do resources need to be focused? These questions are all the more relevant now that the Sustainable Development Goals (SDGs) adopted by the 193 UN member states in 2015 have raised the world's aspirations for gender equality.

This discussion paper examines the societal improvements in gender parity needed to secure the \$12 trillion opportunity and make significant progress towards reaching the SDGs. We quantify the progress needed on all 15 of MGI's gender inequality indicators and then highlight six of these in depth: education, family planning, maternal health, financial inclusion, digital inclusion, and unpaid care work. These were chosen because they either enable women to have better economic opportunities or are closely linked with broader aspects of gender equality. We estimate how many people need to be empowered through action on each of these fronts and how much expenditure that progress would require.¹ We find that \$1.5 trillion to \$2.0 trillion in incremental public, private, or household annual spending would be needed in 2025, above and beyond what would be spent anyway as a result of rising population numbers and GDP. This is equivalent to 1.3 to 1.7 percent of global GDP in that year.

Narrowing the gender gap and realising the economic potential of women is an ambitious agenda that will require concrete action and investment by governments working in concert with the private sector. Complementary interventions will also be needed to address other aspects of gender inequality, such as the absence of legal protection, limited political voice for women, and violence against women. This will also need to go hand in hand with measures and investments to expand job opportunities and facilitate the movement of women into more productive work.

¹ Note that estimates of required spending apply to only five of the six priority areas. We omit financial inclusion due to a lack of reliable cross-country data.

NARROWING THE GLOBAL GENDER GAP COULD SECURE \$12 TRILLION OF ADDITIONAL ANNUAL GDP IN 2025

MGI's 2015 report *The power of parity: How advancing equality for women can add \$12 trillion to global growth* made a strong economic case for narrowing gender inequality around the world.² MGI's "full-potential" scenario assumes that women participate in the world of work to an identical extent as men, erasing current gaps in labour-force participation rates, hours worked, and representation within each sector (which affects their productivity). In this scenario, as much as \$28 trillion could be added to GDP in 2025, raising global economic output by 26 percent over a business-as-usual scenario. This potential impact is roughly equivalent to the combined size of the economies of the United States and China today. The full-potential scenario assumes that the global average participation rate by women of prime working age rises from its current level of 64 percent to 95 percent.

However, full gender parity in work is unlikely to materialise within a decade. The barriers hindering women from participating in the labour market on a par with men are unlikely to be fully addressed within that time frame, and, in any case, participation is ultimately a matter of personal choice. So MGI considered another scenario in which each country bridges its gender gaps at the same rate as the fastest-improving country in its regional peer group. In this "best-in-region" scenario, global GDP could increase by as much as \$12 trillion annually in 2025, 11 percent higher than the business-as-usual scenario (Exhibit 1). This is equivalent to the current GDP of Japan, Germany, and the United Kingdom combined, or 1.0 percent incremental GDP growth per year relative to business-as-usual forecasts. Some 54 percent of the economic impact worldwide would come from narrowing gaps in labour-force participation rates between men and women. Closing the gender gap in part-time versus full-time work would generate 23 percent of the GDP opportunity, and shifting women into work in higher-productivity sectors on a par with the employment pattern of men would contribute another 23 percent of the total opportunity.

GENDER EQUALITY IN WORK AND GENDER EQUALITY IN SOCIETY GO HAND IN HAND

MGI has analysed gender equality in 95 countries that make up more than 90 percent of global GDP and the world's female population. To explore the link between achieving the economic potential of women and broader gender gaps, MGI's study examined 15 indicators of gender equality grouped in four categories.³ The first category is gender equality in work. The other three—essential services and enablers of economic opportunity; legal protection and political voice; and physical security and autonomy—all relate to gender equality in society. To measure how far each country is from gender equality on these dimensions, MGI calculates a Gender Parity Score (GPS) using the 15 indicators. Each indicator is weighted equally to calculate an aggregate measure of how close women are to gender parity in each of the 95 countries, where a GPS of 1.00 indicates full parity.

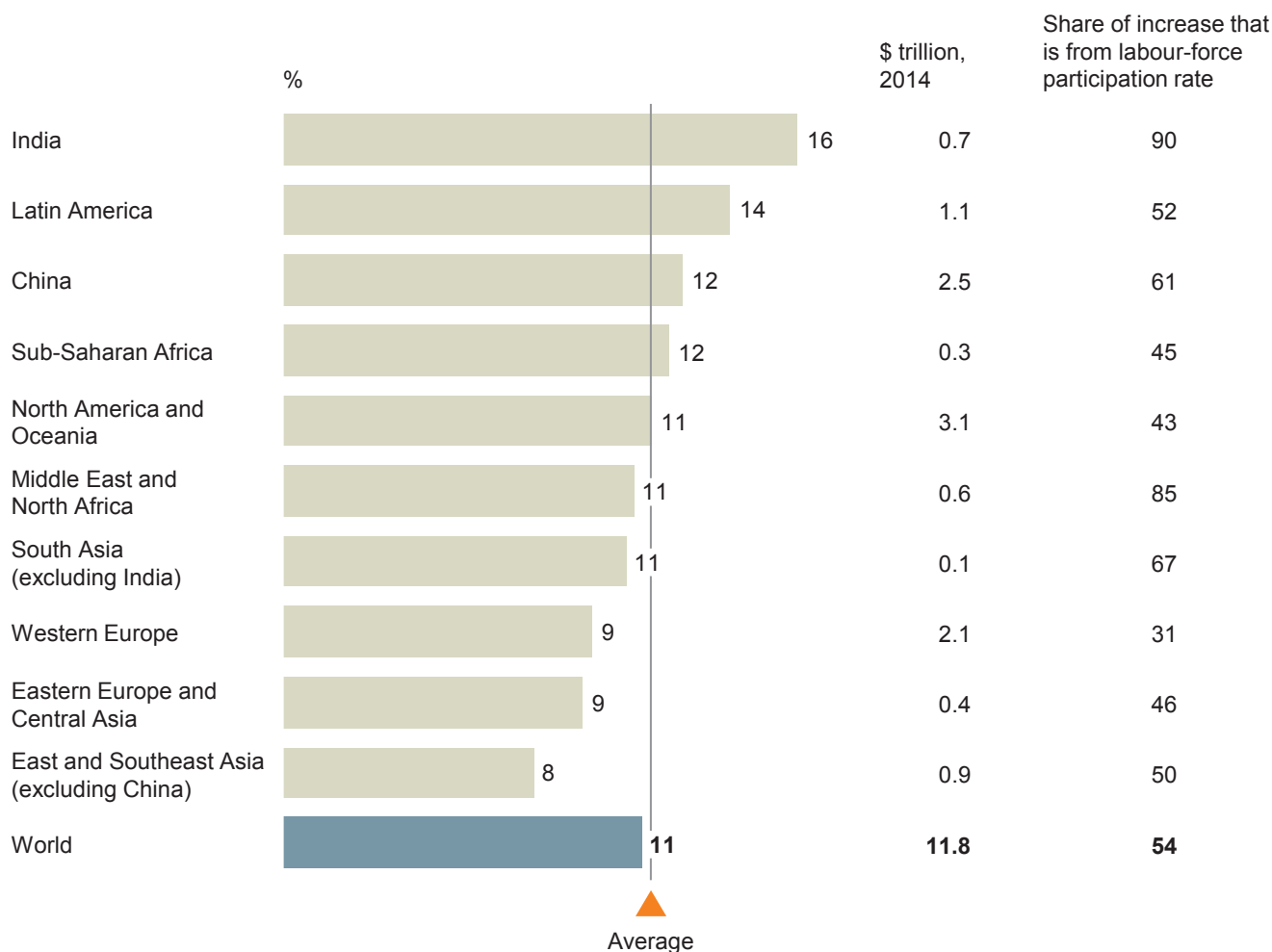
² Our approach models the potential for higher female labour supply and labour productivity to establish a GDP aspiration from increased participation of women; we do not take into account demand-side factors that could influence the ability to create jobs to absorb additional female workers. The estimates assume that there is no decline in male participation in response to the rising number of women in the workforce, in line with data from 1980 to 2010, across 60 countries, showing strong increases in female labour-force participation with marginal corresponding declines in male labour-force participation. We do not factor in the value of unpaid work in estimates. Given data limitations, it is difficult to quantify the mechanisms through which increased women's participation becomes possible and the impact it has on the gender gap in unpaid care work (that is, whether higher female participation and productivity are due to more productive ways of getting household work done, redistribution of unpaid care work between men and women and reduced leisure hours for men, or the marketisation of that work) and this warrants further study. For more details, see *The power of parity: How advancing women's equality can add \$12 trillion to global growth*, McKinsey Global Institute, September 2015.

³ The 15 indicators are: labour-force participation rate, representation in professional and technical jobs, the perceived wage gap for similar work, representation in leadership positions, unpaid care work, unmet need for family planning, maternal mortality, education level, digital inclusion, financial inclusion, legal protection, political representation, sex ratio at birth, child marriage, and violence against women.

Exhibit 1

Substantial economic value can be achieved by improving gender equality, and more than half of it is linked to higher labour-force participation rates

Global GDP opportunity in the best-in-region scenario, 2025
Incremental 2025 GDP to 2025 business-as-usual scenario



SOURCE: McKinsey Global Institute analysis. For more details, see *The power of parity: How advancing women's equality can add \$12 trillion to global growth*, McKinsey Global Institute, September 2015.

The GPS analysis establishes that gender equality in society and in work are closely linked (Exhibit 2). In most countries, absolute GPS values on equality in society tend to be higher than those on equality in work, but we found virtually no countries with high equality on social indicators but low equality in terms of employment and labour markets. This correlation suggests that the barriers that hold women back in society may be hindering them from participating more fully in the workplace.

MGI'S FRAMEWORK HELPS ASSESS PROGRESS NEEDED TO ACHIEVE THE GENDER-BASED SUSTAINABLE DEVELOPMENT GOALS AND REALISE THE ECONOMIC POTENTIAL OF WOMEN

Setting goals that can be measured and monitored with the help of gender-disaggregated data is a critical step towards narrowing gender gaps. MGI's 15 indicators and GPS analysis can be an effective starting point for assessing how far the world can—and needs to—travel on a range of dimensions that are key to achieving the economic potential of women and the Sustainable Development Goals (SDGs) adopted by all 193 UN member states in 2015.

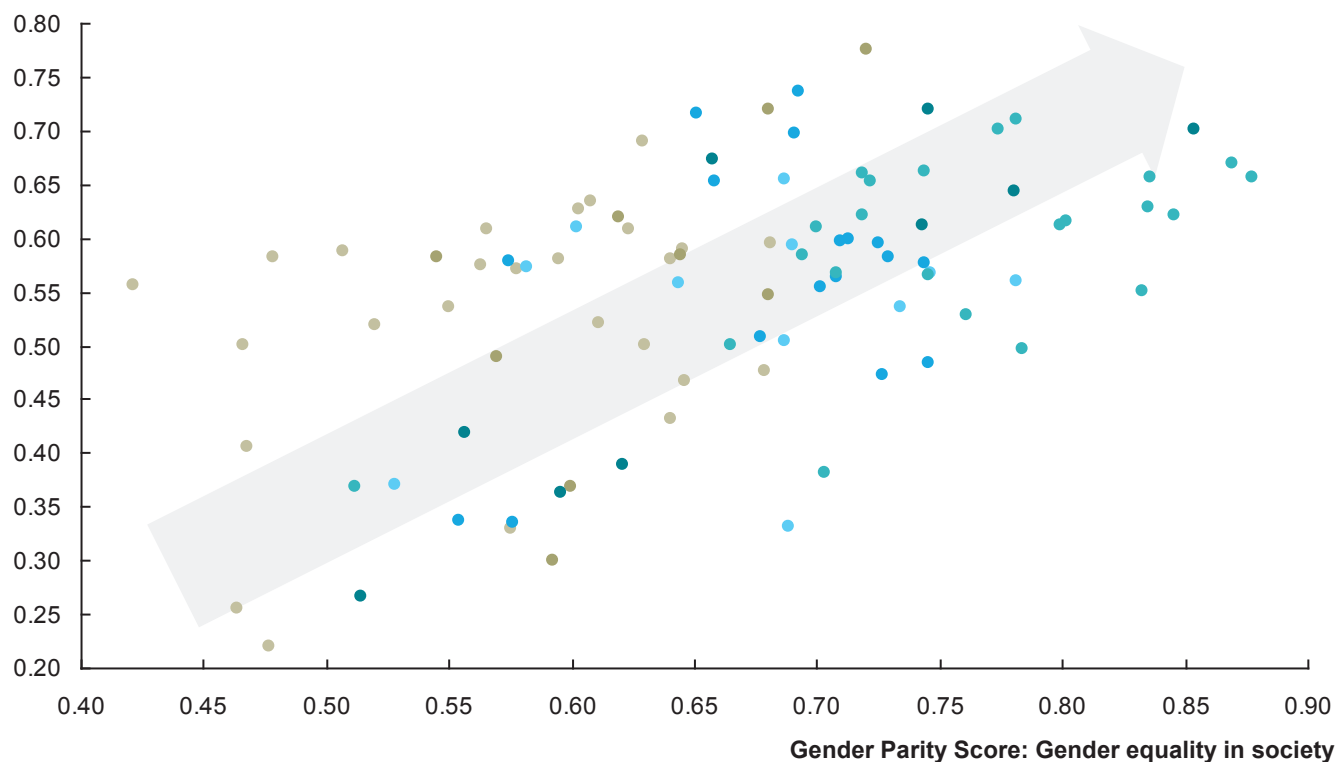
Exhibit 2

Gender equality in society is linked with gender equality in work

Per capita GDP levels, 2014 purchasing power parity international dollars

● <5,000 ● 5,000–10,000 ● 10,000–15,000 ● 15,000–25,000 ● 25,000–50,000 ● >50,000

Gender Parity Score: Gender equality in work



SOURCE: McKinsey Global Institute analysis. For more details, see *The power of parity: How advancing women's equality can add \$12 trillion to global growth*, McKinsey Global Institute, September 2015.

One of the SDGs, Goal 5, is a specific aspiration to “achieve gender equality and empower all women and girls”. In addition, gender equality is an important aspect of other SDGs. The indicators and data-gathering framework for the SDGs are being finalised, but currently 14 indicators are being considered for Goal 5 (MGI's GPS framework covers more than two-thirds of these) while 38 gender-related indicators are being considered under other SDG goals (MGI's GPS covers about 40 percent of these). A mapping of Sustainable Development Goals and subgoals to MGI's GPS indicators is provided in the appendix.

We use the 15 GPS indicators to answer the question: what would it take to achieve the \$12 trillion opportunity that MGI has identified and make progress towards the gender equality goals of the SDGs? Our analysis projects the necessary GPS improvement for each region that would be consistent with the best-in-region GDP scenario, using all 15 indicators (Exhibit 3). It then focuses on six of the 15 indicators as a starting point for action, estimating the number of people who would need to see improvement on these fronts by 2025. The six indicators are education, unmet need for family planning, maternal mortality (or its inverse, maternal health), financial inclusion, digital inclusion, and unpaid care work. Finally, we estimate the additional spending required in five of the six areas, leaving out financial inclusion for lack of reliable country-level data.

Exhibit 3

MGI's Gender Parity Score comprises 15 indicators of gender equality

- Included in sizing of additional people to be reached by 2025
- Included in sizing of additional spending required in 2025

Gender equality indicators			
Gender equality in work	Gender equality in work Women and men are equal players in the labour markets	Labour-force participation rate	Female-to-male ratio of labour-force participation rate
		Professional and technical jobs	Female-to-male ratio of representation in professional and technical jobs
		Perceived wage gap for similar work	Female-to-male ratio of wages for similar work
		Leadership positions	Female-to-male ratio of representation in leadership positions
Gender equality in society	Essential services and enablers of economic opportunity Women and men have equal opportunity to build human capital and progress	Unpaid care work	Male-to-female ratio of time spent on unpaid care work
		Unmet need for family planning	Percent of married or in-union women aged 15–49 who want to stop or delay childbearing but are not using contraception
		Maternal mortality	Maternal deaths per 100,000 live births
		Education	Female-to-male composite ratio of adult literacy rate, secondary education enrolment rate, and tertiary education enrolment rate ¹
		Digital inclusion	Female-to-male composite ratio of the rate of Internet and mobile users ²
		Financial inclusion	Female-to-male composite ratio of the rate of account holders at a financial institution, rate of borrowing, and mobile banking rates ¹
	Legal protection and political voice Women and men have equal right to self-determination	Legal protection	Composite index of the extent of protection to women by different legal provisions (e.g., right to inherit, access to jobs) ³
		Political representation	Female-to-male composite ratio of representation in parliamentary and ministerial positions ²
	Physical security and autonomy Women have a right to be safe from bodily harm	Sex ratio at birth	Male-to-female ratio of births
		Child marriage	Percent of girls and young women aged 15–19 who are married
Violence against women		Percent of women who have experienced physical and / or sexual violence from an intimate partner at some time in their lives	

- 1 Composite of three indicators.
- 2 Composite of two indicators.
- 3 Composite of 11 indicators.

SOURCE: McKinsey Global Institute analysis. For more details, see *The power of parity: How advancing women's equality can add \$12 trillion to global growth*, McKinsey Global Institute, September 2015.

We chose to focus on these six indicators because they are either closely linked with gender equality in work or correlated with wider aspects of gender equality in society, such as child marriage, sex ratio at birth, and violence against women. Progress on all six can be made through concerted actions and investments to expand essential services to millions of additional people—women and girls, men and boys alike. Our global research found correlations among indicators suggesting that gender gaps in education, financial and digital inclusion, and unpaid care work are closely linked to gaps in gender equality in work, and addressing them can also lay the groundwork for improvements in access to health care, physical security, and political participation (Exhibit 4). Our research also found that legal protection was strongly correlated with economic outcomes, but we do not focus on gaps in legal protection in this analysis because they warrant a more detailed study of the laws that need to be enacted and better enforced in each country and at a subnational level.⁴ For a detailed discussion of how improvements on these 15 gender equality indicators contribute to improved gender equality in work and the broader \$12 trillion economic opportunity, see the appendix.

⁴ For a comprehensive view of laws and gender equality, see *Women, business and the law 2016: Getting to equal*, World Bank, November 2015 and Christian Gonzales et al., *Fair play: More equal laws boost female labor force participation*, IMF staff discussion note number 15/02, February 2015.

Exhibit 4

Gender equality in society is correlated with economic development, and gender equality in work with key social enablers and unpaid care work

Economic development

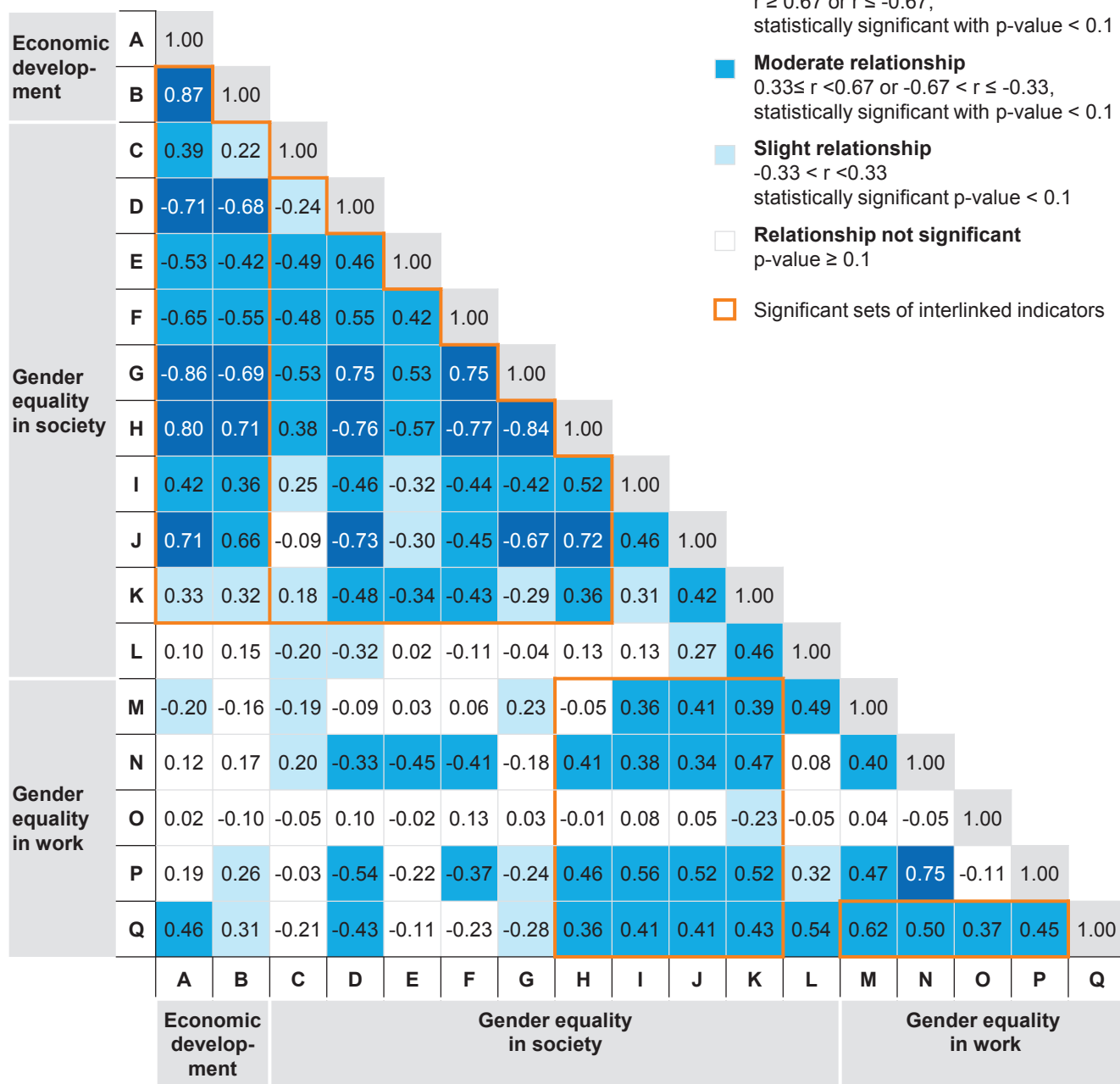
- A. Per capita GDP¹
- B. Urbanisation

Gender equality in society

- C. Sex ratio at birth
- D. Child marriage
- E. Violence against women
- F. Unmet need for family planning
- G. Maternal mortality
- H. Education level
- I. Financial inclusion
- J. Digital inclusion
- K. Legal protection
- L. Political representation

Gender equality in work

- M. Labour-force participation rate
- N. Professional and technical jobs
- O. Perceived wage gap for similar work
- P. Leadership positions
- Q. Unpaid care work



¹ Log of per capita GDP used for correlations.
 NOTE: Extreme variables beyond +/- 2 standard deviations of mean were trimmed before calculating correlation. Correlation coefficient labels rounded to two decimal places. Color coding based on actual, not rounded, values.

SOURCE: McKinsey Global Institute analysis. For more details, see *The power of parity: How advancing women's equality can add \$12 trillion to global growth*, McKinsey Global Institute, September 2015.

We also found that two additional aspects, family planning and maternal health, were strongly linked to gender gaps in education and the prevalence of child marriage. They were also moderately correlated with several other gender issues, including sex ratio at birth, violence against women, and the share of women in professional and technical jobs and leadership positions. Progress on family planning and maternal health is therefore also linked to improvements in economic opportunity for women as well as broader gender parity.

We acknowledge that correlation is not the same as causation. In many cases the relationship between the indicators may be more mutually reinforcing than cause and effect. Nevertheless, correlations help identify potential areas of focus in a vast landscape. Other studies similarly point to the role that education, financial and digital inclusion, and assistance with unpaid care work play in driving equality in work.⁵ The strong correlations also suggest that investments in different aspects of gender equality are not independent interventions but could have valuable synergistic effects. Investment in all six of these pivotal areas could lead to improved outcomes across a range of indicators.

IMPROVEMENT OF 8 TO 21 PERCENT IN GPS IS THE MINIMUM NECESSARY FOR ACHIEVING THE \$12 TRILLION GDP OPPORTUNITY IN 2025

To estimate the extent of the improvement needed in gender equality, we have developed a best-in-region GPS scenario. We find that by 2025, regional Gender Parity Scores need to rise by at least 8 to 21 percent above their levels in 2014 to achieve the \$12 trillion incremental GDP growth opportunity (Exhibit 5). These are meaningful increases: a 10 percent improvement in the global GPS for financial inclusion, for example, would mean 22 million more would have access to financial services accounts.

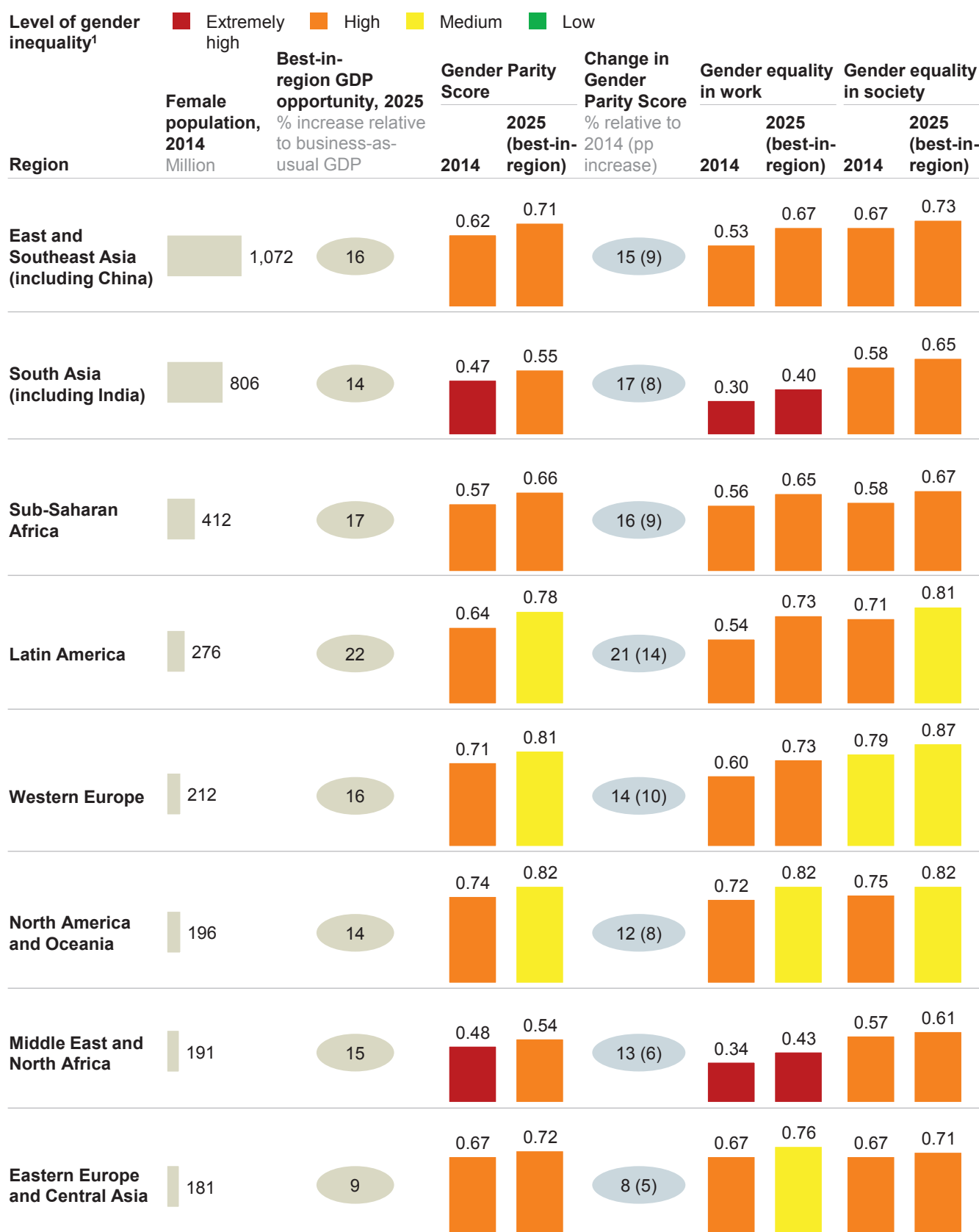
These estimates reflect both what is needed and what is possible. To reflect what is needed, we estimate the improvement in the overall GPS that is consistent with the higher economic participation of women in each country in the best-in-region scenario. To reflect what is possible, we estimate each country's improvement potential on individual indicators based on the gap between its current level and that of the best-performing country in the region.⁶ If some countries have achieved higher gender equality compared with others in the same region, it would suggest that the potential for improvement exists across the entire region.

⁵ See, for example, Rushidan I. Rahman and Rizwanul Islam, *Female labour force participation in Bangladesh: Trends, drivers and barriers*, ILO Asia-Pacific working paper series, October 2013, and *A labor market that works: Connecting talent with opportunity in the digital age*, McKinsey Global Institute, June 2015. In McKinsey's Women Matter global surveys of male and female managers in the Asia-Pacific region, China, India, Europe, and North America, respondents were asked to prioritise the biggest challenges women leaders face. Across countries, the double burden of balancing work and domestic life was the most frequently cited issue (ranging from 45 percent of respondents in Asia-Pacific to 31 percent in North America). See www.mckinsey.com/features/women_matter.

⁶ We group countries into four sets based on how their overall GPS (excluding the indicator of ratio of female-to-male labour-force participation rate) varies compared with their ratio of female-to-male labour-force participation rate. For each group, we conducted a regression analysis of the ratio of female-to-male labour-force participation rate (and per capita GDP, for countries where stage of economic development is a significant driver of gender parity) to establish a relationship with the GPS. Based on these relationships, we used the projected labour-force participation rate for each country from our best-in-region GDP scenario to estimate the overall GPS (excluding female-to-male ratio of labour-force participation rate) for that country in 2025. We then estimated the pattern of individual indicators within the overall projected GPS based on how far the best-performing country in each region has progressed towards gender parity on each indicator, adjusting in a few cases for outliers. We estimate the improvement required in the GPS and indicators at a regional (or global) level based on the female-population-weighted relative increases of each country (or region). For details on methodology, see the appendix.

Exhibit 5

Gender equality in work and society both need to rise to achieve the best-in-region GDP scenario



¹ For the Gender Parity Score, low inequality is usually defined as being within 5 percent of parity, medium inequality between 5 percent and 25 percent, high inequality between 25 percent and 50 percent, and extremely high inequality as greater than 50 percent from parity. For more details, see *The power of parity: How advancing women's equality can add \$12 trillion to global growth*, McKinsey Global Institute, September 2015.

SOURCE: McKinsey Global Institute analysis

Improvements are necessary on gender inequality in both society and work. Although some regions need to accelerate progress towards gender parity more than others, all will need to make a step change in their efforts. Achieving the \$12 trillion opportunity does not require any or all regions to achieve “low” levels of gender inequality, as we are not modelling an ideal or full-potential scenario.⁷ But Latin America, North America and Oceania, and Western Europe would need to shift from “high” inequality to “medium” inequality. The Middle East and North Africa region and South Asia (which includes India) would need to move from “extremely high” inequality to merely “high” inequality. In this scenario, sub-Saharan Africa, while maintaining a high level of inequality, would still require the second-highest relative increase in its GPS as a share of its 2014 score. The largest increase in GPS would be needed by Latin America, which is also the region with the second-highest economic opportunity from advancing gender parity (14 percent incremental GDP in 2025). India’s economic opportunity from advancing gender parity is highest (a 16 percent boost).

Our analysis suggests that some indicators have larger potential for improvement globally than others, but regional variations are also significant (Exhibit 6).

- **The biggest global opportunities:** By 2025, most regions of the world can—and will need to—narrow their 2014 gender gaps by more than 20 percent in five areas: leadership positions, the perceived wage gap, unpaid care work, legal protection, and political representation. The targets are high on this set of indicators for two reasons. First, these are the areas with the biggest gender gaps today. These indicators feature in four of the five “global impact zones” identified by MGI in our 2015 global research, reflecting both the seriousness of a type of gender inequality and its geographic concentration.⁸ Second, on each of these indicators, some countries within regions have demonstrated better performance than their peers, implying the potential for improvement.

By far the biggest opportunity for improving the GPS globally relative to its base in 2014 is in narrowing the gender gap in leadership positions, unpaid care work, and in political representation. In these cases, the best-in-region GPS suggests a 42 to 44 percent improvement opportunity over 2014 ratios of women to men in these positions globally. In unpaid work, for example, all regions except Eastern Europe and Central Asia have more than a 25 percent improvement opportunity. Legal protection has the next highest scope for improvement globally; all regions have at least a 20 percent improvement potential, with the biggest opportunity in the Middle East and North Africa.

⁷ For most indicators, low inequality is defined as being within 5 percent of parity, medium inequality is 5 to 25 percent from parity, high inequality is 25 to 50 percent from parity, and extremely high inequality is greater than 50 percent from parity. For maternal mortality, given the different range of values for this indicator in our global research, slightly different thresholds were used. For more details, see *The power of parity: How advancing women’s equality can add \$12 trillion to global growth*, McKinsey Global Institute, September 2015.

⁸ Based on the regional pattern of gender equality indicators in 2014, our research highlighted five global impact zones and five regional impact zones. The global impact zones are blocked economic potential, time spent in unpaid care work, fewer legal rights, political underrepresentation, and violence against women. The regional impact zones are low labour-force participation in quality jobs, low maternal and reproductive health, unequal education levels, financial and digital exclusion, and girl-child vulnerability. For more details, see *The power of parity: How advancing women’s equality can add \$12 trillion to global growth*, McKinsey Global Institute, September 2015.

Exhibit 6

All gender equality indicators have the potential to rise in the best-in-region scenario, but with significant regional variations

Change between 2025 best-in-region and 2014 % of 2014

0–10% 10–20% >20%

Gender equality levels in 2025 corresponding to \$12 trillion best-in-region opportunity

	East and South-east Asia (incl. China)	South Asia (incl. India)	Sub-Saharan Africa	Latin America	Western Europe	North America and Oceania	Middle East and North Africa	Eastern Europe and Central Asia
Female population (Million)	1,072	806	412	276	212	196	191	181
Gender equality in work								
Labour-force participation rate (F/M ratio)	0.87	0.48	0.92	0.87	0.93	0.96	0.47	0.83
Professional and technical jobs (F/M ratio)	0.99	0.65	0.82	0.98	0.98	1.00	0.62	1.00
Perceived wage gap for similar work (F/M ratio)	0.76	0.62	0.69	0.63	0.68	0.71	0.68	0.68
Leadership positions (F/M ratio)	0.46	0.23	0.43	0.82	0.61	0.80	0.19	0.75
Unpaid care work (M/F ratio)	0.54	0.19	0.68	0.52	0.68	0.80	0.25	0.54
Gender equality in society								
Essential services and enablers of economic opportunity								
Unmet need for family planning (% of women)	5	11	18	6	6	6	11	7
Maternal mortality (Index) ¹	0.99	0.89	0.67	0.99	1.00	1.00	0.96	0.99
Education (F/M ratio)	1.00	0.88	0.81	1.00	1.00	1.00	0.92	0.99
Digital inclusion (F/M ratio)	0.95	0.83	0.64	1.00	0.98	1.00	0.86	0.97
Financial inclusion (F/M ratio)	0.98	0.79	0.85	0.99	0.95	1.00	0.72	0.93
Legal protection and political voice								
Legal protection (Index)	0.68	0.49	0.53	0.85	0.94	0.99	0.34	0.65
Political representation (F/M ratio)	0.27	0.22	0.41	0.42	0.63	0.47	0.16	0.21
Physical security and autonomy								
Sex ratio at birth (male births to female births)	1.05	1.07	1.03	1.05	1.05	1.05	1.05	1.06
Child marriage (% of girls and young women)	1	18	11	0	0	0	8	1
Violence against women (% of women)	13	34	29	15	13	20	35	12

¹ Maternal mortality is normalised to a 0 to 1 scale based on minimum and maximum values in underlying data.

SOURCE: McKinsey Global Institute analysis

- **Large global opportunities:** Global improvements of about 10 to 20 percent over 2014 levels are possible and necessary on five indicators: financial inclusion, digital inclusion, labour-force participation rate, representation in professional and technical jobs, and violence against women. In this category, the largest global improvement (16 percent) needs to be in financial inclusion (and, by implication, the closely related area of digital inclusion). On this indicator, South Asia (including India) and Latin America could achieve an improvement higher than 20 percent—as high as 26 percent and 23 percent, respectively—representing about 60 million more women with access to financial services in these areas. The share of professional and technical work for women relative to men is another area where large improvement (11 percent) can be made, mainly in the Middle East and North Africa, South Asia, and sub-Saharan Africa. The world also needs to reduce violence against women; the issue requires concerted attention everywhere, but particularly in Latin America, North America and Oceania, sub-Saharan Africa, and Western Europe. The fact that some countries within these regions have made better progress than their peers indicates the opportunity for other countries in the region to improve.
- **Large regional opportunities:** Potential for improvement of less than 10 percent globally appears possible in five areas: unmet need for family planning, maternal mortality, education, child marriage, and sex ratio at birth. This reflects the fact that the global gender gap is relatively narrow overall on these five indicators. However, the picture is by no means uniform across the world, and there is much higher potential for improvement in some regions. For instance, sub-Saharan Africa has potential and need to improve on maternal mortality by 31 percent, and on the gender gap in education by 18 percent. The gender gap in education has been narrowing around the world. In 2014, gender gaps in secondary education (measured as the female-to-male ratio in net secondary enrolment rates) were higher than 25 percentage points in only eight of the 77 countries where data are available.⁹ However, education remains a high priority from a gender parity perspective for two reasons. First, overall enrolment rates remain low in many countries despite gender gaps having virtually closed. Second, the quality of education outcomes is often suboptimal, limiting the ability of women to raise their share of professional and technical jobs or leadership positions.

Our analysis suggests that the degree of improvement necessary to achieve the economic opportunity is tough but achievable. A reliable view of historical progress is not available for most gender equality indicators, but our estimates of future aspirations for each region are guided by the levels of gender parity achieved by the best-performing countries within that region in 2014. For example, countries in Sub-Saharan Africa with low levels on parity on education today, such as Chad, Guinea, and Niger would need to rise to about the level of the regional average in 2014. Similarly, India's level of parity on unpaid care work would need to rise to roughly that seen in Bangladesh.

Lastly, it is important to note that this level of improvement is the minimum needed to achieve the \$12 trillion GDP opportunity. But over and above the economic case, the human case—for example, as part of the Sustainable Development Goals—points to the imperative for making even faster progress on bridging gender gaps.

⁹ For more details, see McKinsey Global Institute, *The power of parity: How advancing women's equality can add \$12 trillion to global growth*, September 2015.



MILLIONS OF WOMEN NEED BETTER OPPORTUNITIES AND ACCESS TO SERVICES

We focus on six of the 15 indicators to quantify the magnitude of effort and impact required to address gender inequality. As mentioned earlier, these six are closely linked with gender equality in work and wider aspects of gender equality in society, and concerted actions and investments to boost essential services can help address them. Five indicators—education, family planning, maternal health, financial inclusion, and digital inclusion—directly reflect access to, or use of, various essential services such as primary or secondary schooling, services for improved family planning and assisted births, and payments and telecom services. The sixth indicator—unpaid care work—is measured in the GPS as the time women spend on household and care work as compared with men. Such time reflects access to family support services (including paid maternal, paternal, and parental leave, formal child care provision, and early childhood education services). It also reflects household access to basic services such as energy, sanitation, and water, since the absence of these services multiplies the daily tasks that often fall to women to perform. In the case of unpaid care work, we therefore focus on calculating the number of women who would need to access these types of services in 2025.

Boys and men are an important part of tackling gender inequality in society. Programs that are successful in addressing gender issues engage a variety of stakeholders, including husbands, boys, and other male members of the community. Hence we also include the required effort to improve coverage for men and boys in case of education, family support services, and basic services (see Box 1, “How we estimated the populations that need access to services”).

Across all six indicators, our analysis finds that a huge number of people need to benefit from steps to improve gender equality globally in the coming decade (Exhibit 7). We begin with a business-as-usual scenario that assumes populations grow with no narrowing of the gender gap and no improvement in access to services and then calculate the additional number of women, men, and children who need to secure better economic opportunities through improved access to essential services. This ranges from about 13.5 million in the case of getting more boys and girls into primary school (a relatively low figure because access is high in both developed and developing countries) to 445 million gaining access to safe water and 1.7 billion gaining access to sanitation (both huge figures since access is low in the developing world). In percentage terms, the additional progress required over the business-as-usual case ranges from just three percentage points in primary education to a maximum of 40 percentage points for formal child-care provisions.¹⁰ Sizable percentage increases in coverage will also be needed in related areas of paid family leave, early childhood education services, maternal health care, sanitation, and secondary education.

The number of people who would need improved access varies across regions and indicators. For example, the largest improvements in access to secondary schooling and basic services such as energy, sanitation, and water are needed in South Asia and Sub-Saharan Africa. In North America and Oceania, the additional number of women needing more access is high only in the case of family support services.

¹⁰ The business-as-usual case assumes current gender gaps and levels of access persist to 2025.

Box 1. How we estimated the populations that need access to services

For the six areas of education, family planning, maternal health, financial inclusion, digital inclusion, and assistance with unpaid care work, we have calculated the numbers of additional people who need access to these services in 2025 using three factors. In all cases, we begin by assuming that current levels of gender gap and access will prevail in 2025 in the business-as-usual scenario.

The first of these factors is the narrowing of gender gaps projected in our best-in-region GPS scenario (for example, the difference between male and female levels of educational attainment, digital inclusion, or financial inclusion).

Second, we consider an overall increase in access to services for women and girls beyond closing the gender gap—since any lack of access stands in the way of their empowerment. Services such as education, family planning, maternal health, sanitation, and water are widely accepted as being the right of every person. In many cases, global goals and commitments are in place to achieve a high level of access for women. Where such goals exist, we use them to size the number of additional women or girls to cover.¹ For financial and digital inclusion, the level of access in the business-as-usual scenario is dynamic due to technology-led disruptions, so we assume the gender gap needs to be closed by 2025 but make no assumption about efforts needed to help overall access levels rise.²

Third, in select areas, we also size the number of boys and men who need services, as they have an important role to play in changing social norms and attitudes about women. Overall school enrolment levels—not just gender gaps—seem particularly important: our analysis across 95 countries finds that there is a correlation of 0.5 to 0.6 between overall secondary and tertiary enrolment levels and the level of gender parity. In India, for example, girls' enrolment in secondary education matched that of boys in 2014, but in both cases the gross enrolment ratio was only 69 percent. In such a situation, it is hardly conceivable to think about a gender-equal society that enables girls to achieve full educational attainment without corresponding and complementary enablement of boys. So, in education, we also include the number of boys who need to be enrolled in 2025 to keep pace with higher girls' enrolment. Similarly, we include men in our estimates of additional people who will benefit from paid paternity and parental leave.³ We count all members of families that need access to water, sanitation, and energy. These services are delivered to entire households, but they determine the amount of domestic work the woman needs to do.

For a detailed discussion of the approach and data sources, see the appendix.


















¹ Where global goals and commitments are in place (as they are for primary and secondary education, family planning and maternal health, and water, sanitation, and energy), we have used them to estimate the number of people who would need access in 2025. In the case of tertiary education, we have assumed that all countries within a region achieve the access levels of at least the average of their region. In the case of family support services such as maternal leave and child care needed to narrow the gender gap in unpaid care work, we have assumed that all women in the labour force in MGI's best-in-region scenario need such services. We provide a range for the numbers based on whether the services cover workers in the informal sector or not. We use the share of wage and salaried workers as a proxy for workers in the formal sector for this purpose.

² See, for example, *Offline and falling behind: Barriers to Internet adoption*, McKinsey & Company, 2014.

³ While family-leave policies may help women balance care work with employment, they may also create disincentives for women to pursue full-time work and rise to leadership positions. Family leave policies that include men have the potential to provide better recognition for care work and to redistribute it between men and women, thus potentially helping women participate more actively in the world of work. For more on care work, see, for example, Francine D. Blau and Lawrence M. Kahn, *Female labor supply: Why is the US falling behind?* IZA discussion paper number 7140, January 2013; Andreas Kotsadam and Henning Finseraas, "The state intervenes in the battle of the sexes: Causal effects of paternity leave", *Social Science Research*, 2011; Linda Haas and Tina Rostgaard, "Fathers' rights to paid parental leave in the Nordic countries: Consequences for the gendered division of leave", *Community, Work & Family*, volume 14, issue 2, 2011; and Anne-Marie Slaughter, *Unfinished business: Women, men, work, family*, Random House, 2015.

Exhibit 7

Essential services need to reach a large number of additional women and girls (and men and boys) by 2025

Category	People affected		Coverage rate ¹		
		Incremental in 2025 over the business-as-usual Number of people affected	Total coverage rate % of relevant population	Incremental over current rate Percentage points	
Education 	Primary 	<ul style="list-style-type: none"> 9 million additional girls enrolled 4.5 million additional boys enrolled 	<ul style="list-style-type: none"> Gross enrolment rate: 108 	3	
	Secondary 	<ul style="list-style-type: none"> 60 million additional girls enrolled 58 million additional boys enrolled 	<ul style="list-style-type: none"> Gross enrolment rate: 94 	20	
	Tertiary 	<ul style="list-style-type: none"> 17 million additional girls enrolled 22 million additional boys enrolled 	<ul style="list-style-type: none"> Gross enrolment rate: 38 	7	
Unmet need for family planning 		<ul style="list-style-type: none"> 120 million–190 million additional women with family planning need met 	<ul style="list-style-type: none"> Contraception prevalence rate among those who demand it: 92–100 	14–22	
Maternal health coverage 		<ul style="list-style-type: none"> 38 million additional assisted births 	<ul style="list-style-type: none"> Assisted births: 100 	30	
Digital inclusion 		<ul style="list-style-type: none"> 120 million additional women with access to broadband mobile internet 	<ul style="list-style-type: none"> Gender gap: 0 	5	
Financial inclusion 		<ul style="list-style-type: none"> 224 million additional women with account at formal financial institution 	<ul style="list-style-type: none"> Gender gap: 0 	8	
Unpaid care work 	Family support services 	Paid family leave 	<ul style="list-style-type: none"> 29 million–57 million additional working women and an equivalent number of working men offered paid family leave 12² more days of paid maternity leave 10² more days of paid paternity leave 22² more days of paid parental leave 	<ul style="list-style-type: none"> Female wage and salaried workers or all female workers in the labour force covered (consistent with the \$12 trillion scenario) 	0–50 ³
		Formal child care 	<ul style="list-style-type: none"> 100 million–180 million additional working women using these facilities 	<ul style="list-style-type: none"> Participation rate: 31–57 	14–40
		Early childhood education 	<ul style="list-style-type: none"> 44 million–74 million additional working additional women using these facilities 	<ul style="list-style-type: none"> Gross enrolment rate: 73–85 	18–31
	Basic services 	Water 	<ul style="list-style-type: none"> 445 million additional people with access 	<ul style="list-style-type: none"> Coverage⁴: 97 	6
		Sanitation 	<ul style="list-style-type: none"> 1.7 billion additional people with access 	<ul style="list-style-type: none"> Coverage⁴: 89 	23
		Energy 	<ul style="list-style-type: none"> 880 million additional people with access 	<ul style="list-style-type: none"> Coverage⁴: 94 	12

1 Calculated as weighted average for 95 countries.

2 Global average.

3 Incremental over current rate; assumes that in 2014 all female wage and salaried workers opted for paid leave.

4 Scaled back to 2025 from SDG 2030 targets for coverage of basic services.

SOURCE: McKinsey Global Institute analysis



INCREMENTAL SPENDING OF \$1.5 TRILLION TO \$2.0 TRILLION (1.3 TO 1.7 PERCENT OF GLOBAL GDP) WOULD BE NEEDED TO DELIVER ESSENTIAL SERVICES TO THOSE WHO NEED THEM IN 2025

While the world needs to see improvement in all 15 of the indicators that go into the GPS, putting energy, effort, and resources into the six high-priority areas we have highlighted could have broad economic impact and accelerate social change. We have attempted to quantify in broad terms the additional public, private, or household spending that would be required. In our initial estimate of the incremental spending necessary, we have focused on five areas: education, family planning, maternal mortality, digital inclusion, and unpaid care work (see Box 2, “How we estimated spending levels required for essential services”). We have not attempted to calculate the additional investment or spending needed to improve women’s financial inclusion because of the lack of global and even country-level benchmarks on the unit cost of providing access.

Our analysis finds that incremental annual spending on the order of \$1.5 trillion to \$2.0 trillion in 2025 would be needed to narrow gender gaps and boost access in the five areas mentioned, above and beyond what would be spent anyway as a result of rising population numbers and GDP (Exhibit 8). This is between 1.3 percent and 1.7 percent of total potential global GDP in that year (including the additional \$12 trillion in our best-in-region scenario). It represents a 20 to 30 percent increase over what would be spent in the business-as-usual scenario.¹¹ Narrowing the gender gap in the world of work could generate some \$12 trillion in incremental GDP. This is six to eight times larger than the additional social spending requirement we estimate here to meet the world’s aspirations on essential services.

There are large differences in the mix of spending required across regions, partly because they are at different stages of their economic development (Exhibit 9). Very broadly, we find that a significant share of the required spending in South Asia and sub-Saharan Africa is needed to boost access to basic services such as energy, water, and sanitation. In other regions, a larger share goes to raising access and improving the terms of family support services such as paid leave and child care. Education takes up a significant share of spending required in all regions, though the dominant need in South Asia and Sub-Saharan Africa is for secondary education, while in other regions the focus needs to be on raising access to tertiary education. Overall, about 55 percent of the global education spending requirement is attributable to higher enrolment of boys, and the rest to girls.

¹¹ The estimates of social spending for 2014 do not include spending for digital inclusion.

Box 2. How we estimated spending levels required for essential services

For the five areas of education, family planning, maternal health, digital inclusion, and services to address unpaid care work, we have calculated the spending needed in two stages. First, we have considered a business-as-usual path that takes into account expected population and GDP growth but with gender gaps and access levels maintained at 2014 levels. Second, we have calculated the spending needed to meet the gender parity goals and improved levels of access we have described, including the cost of covering boys in the case of education and men in the case of paid paternity or parental leave. In some cases, such as paid leave, the gender parity goals are based on achieving at least the regional level of provision of these services (for example, in terms of number of days of maternity leave provided).

We do not distinguish between capital and revenue spending. Therefore, our figures are annual expenditures, including consumption of services, rather than investment outlays. For most services, we use data on current national spending on a per capita basis on the services we size, and we scale these for population, GDP growth, rising access, and narrowing gender gaps, rather than sizing specific gender interventions. We estimate per capita spending using either data available on total spending and coverage for each of the 95 countries in our analysis (for example, in the case of education) or directly available data on unit costs for each country (for example, the cost of mobile broadband use).¹

This approach entails some limitations, which are important to highlight. The analysis assumes that a business-as-usual path will maintain current levels of access and gender gaps. It assumes that all spending is independent, and therefore that total spending is a sum of individual spend for each gender equality indicator. In reality, we know that there are synergies between indicators; for example, higher education levels are linked with lower levels of maternal mortality.

We have assumed that every dollar spent is as effective in achieving access in 2025 as it is in 2014, and that the same outcomes are not achieved by lower per capita outlays over this time frame. For paid leave and child care, we assume that everyone who is offered the service actually uses it, though this may not happen in practice. Merely offering paternity leave, for example, may not mean all men take it.²

We also assume that the cost of achieving greater utilisation does not increase in light of expanding coverage. Offering assisted births to more women in rural areas where health facilities are scarce or implementing family leave policies in smaller-sized firms that may not be well equipped to encourage their employees to adopt these policies may appear to be more costly, but in reality, it is possible that as the scale of these services increases, the resulting benefits and synergies may deliver even more value.

For a detailed discussion of the approach and data sources, see the appendix.

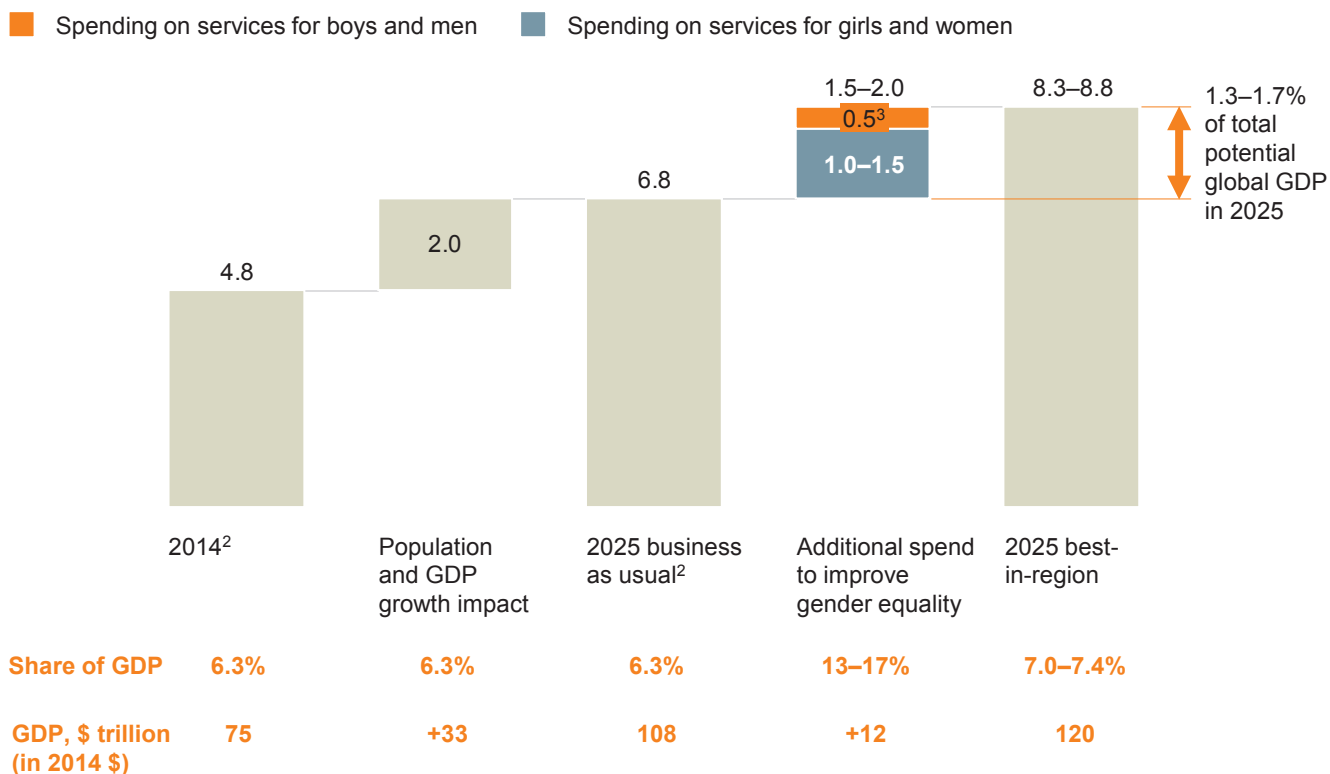
¹ We triangulate our estimates of coverage and unit costs across a variety of sources. See, for example, Susheela Singh, Jacqueline E. Darroch, and Lori S. Ashford, *Adding it up: The costs and benefits of investing in sexual and reproductive health 2014*, Guttmacher Institute and United Nations Population Fund (UNFPA), 2014; *Costs and benefits of investing in contraceptive services in Malawi*, Guttmacher Institute fact sheet, November 2014; George Psacharopoulos, *Benefits and costs of the education targets for the post-2015 development agenda*, Copenhagen Consensus Center working paper, July 2014; Win Brown et al., “Developing the ‘120 by 20’ goal for the global FP2020 initiative”, *Studies in Family Planning*, volume 45, number 1, March 2014; J. De Henau et al., *Investing in the care economy: A gender analysis of employment stimulus in seven OECD countries*, report by the UK Women’s Budget Group for the International Trade Union Confederation, March 2016; Guy Hutton and Jamie Bartram, *Regional and global costs of attaining the water supply and sanitation target (Target 10) of the Millennium Development Goals*, World Health Organization, 2008; Gaëlle Ferrant, Luca Maria Pesando, and Keiko Nowacka, *Unpaid care work: The missing link in the analysis of gender gaps in labour outcomes*, OECD Development Centre, December 2014; *Evaluation of the costs and benefits of water and sanitation improvements at the global level*, World Health Organization, 2004; Caren Grown et al., *The financial requirements of achieving gender equality and women’s empowerment*, World Bank working paper number 467, August 2006; McKinsey & Company, *Offline and falling behind: Barriers to Internet adoption*, 2014; and International Energy Agency, *World energy investment outlook 2014*, 2014. For paid leave, we estimate spending based on the demographic profile and share of wage and salaried workers in each country, as well as national policies on the days of leave offered and the percent of wages covered.

² For example, a recent study in the United States found that employee participation in family-oriented flexibility programs such as extended maternity or paternity leave and subsidised / in-house child care remains very low (below 5 percent) among both men and women. For more details, see *Women in the workplace*, LeanIn.org and McKinsey & Company, 2015.

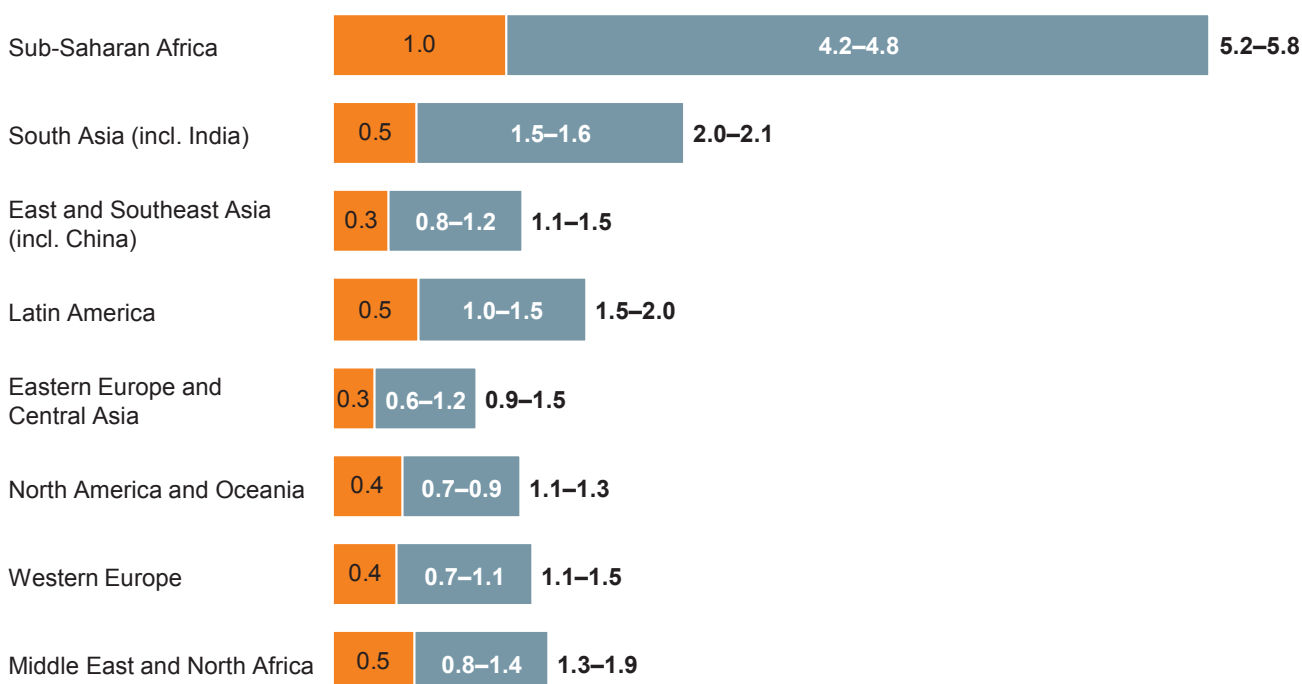
Exhibit 8

An additional \$1.5 trillion–2.0 trillion of annual spending on essential services is required in 2025 to achieve the economic potential of women

Breakdown of spending need, \$ trillion¹



Breakdown by region, Percent share of total GDP in the best-in-region scenario, 2025



1 Financial inclusion not included. Includes public, private or household spending; includes both revenue and capital expenditure; estimates primarily based on country-level data.

2 Baseline excludes spend on digital inclusion.

3 Includes spend on primary, secondary, and tertiary education as well as paternity leave.

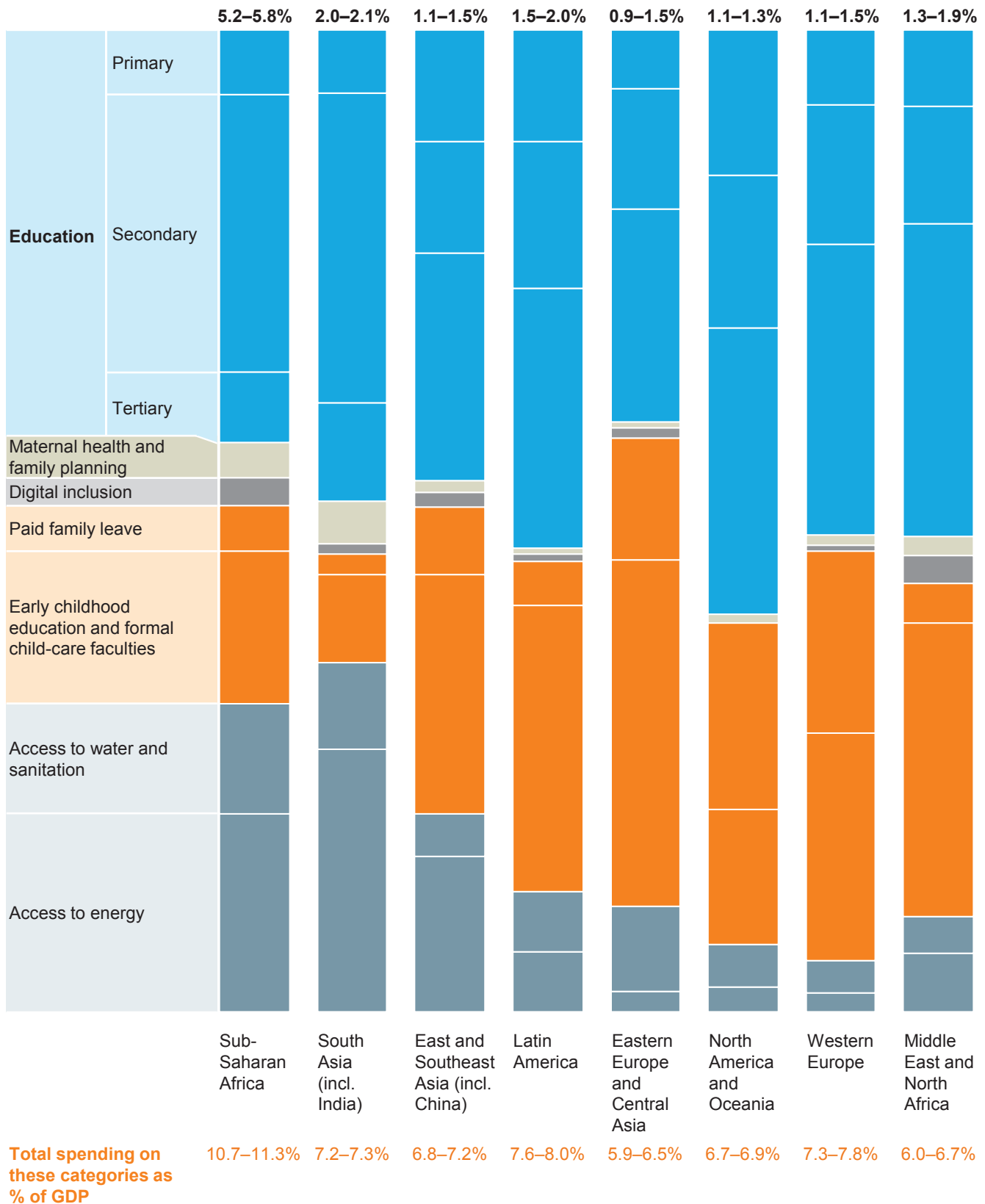
NOTE: Numbers are rounded.

SOURCE: McKinsey Global Institute analysis

Exhibit 9

The mix of spending required will vary by region

Incremental spending needed in 2025, over business-as-usual scenario
 % of total; total = % share of total GDP in the best-in-region scenario, 2025



NOTE: Financial inclusion not included. Spending on maternal health and family planning, paid family leave, early childhood education and formal child-care facilities represent average of low and high ranges.

SOURCE: McKinsey Global Institute analysis

The spending needed can come from public, private, and household or individual sources. Part of it will involve stepping up public-sector spending in gender-specific programs, but a country's spending on women-oriented programs will be a small share of its overall development and social budgets. It is therefore important that overall public budgets and resources are channelled in a gender-neutral way. This will require specific measures to include gender as part of all policy dialogues and build capacity for gender-responsive budgeting.

Our research finds that, at best, about 60 percent of the 95 countries analysed here could meet the additional spending need from the tax revenues secured with the additional best-in-region GDP gains. Tax resources can be augmented by considering earmarked taxes (such as airlines or alcohol), and taxes specifically to fund paid leave programs. For the rest, the public sector may also need to play a role in developing innovative financing mechanisms to attract private investment into areas that help bridge the gender gap but where the investment case is long term or less certain. This could take the form of social impact bonds, backed by reliable institutions, such as pooling investment from donors into a fund focused on improving education. The International Finance Corporation has set up a women's bond, for instance, that allows investors to fund women-owned businesses in developing countries.¹² More work is needed to understand how to structure and scale these bonds and to measure the impact from such investments. Many of these essential services can be structured as public-private partnerships, for instance in water, sanitation, energy, financial and digital inclusion and even child-care, where households may be willing to pay some portion of monthly charges, and vouchers or subsidies from the government may aid with the rest.

Finally, it is important to tackle attitudes to ensure that individual households make use of the services offered to correct gender imbalances. This could involve allocating resources to education and health care more equally among girls and boys, and sharing domestic work more equally between men and women. This may not happen automatically. Even in Sweden, studies suggest that only one-third of men take parental leave, significantly lower than the 75 to 80 percent of women who do so.¹³ Examples of programs to tackle attitudes include those that engage individuals and communities in dialogues or provide role models, support, and peer groups for both women and men. Gender parity in economic outcomes (such as participation in the workforce) is not necessarily a normative ideal as it involves human beings making personal choices about the lives they lead; however, tackling attitudinal barriers can help ensure equality of opportunity for both men and women.

¹² International Finance Corporation website.

¹³ Michael B. Wells and Anna Sarkadi, "Do father-friendly policies promote father-friendly child-rearing practices? A review of Swedish parental leave and child health centers", *Journal of Child and Family Studies*, volume 21, issue 1, February 2012.

PUBLIC- AND PRIVATE-SECTOR PLAYERS CAN WORK TO FURTHER GENDER EQUALITY IN SOCIETY AND REALISE ITS ECONOMIC GAINS

While charting a course to improve gender equality, countries would do well to focus on regional priorities, with specific solutions for each country, state, province, or city based on the prevailing issue and specific cultural and economic context. Our analysis of gender equality within countries indicates that subnational variations in opportunities to close the gender gap can be large. In India, for example, 52 percent of the girls not enrolled in secondary education are found in just five out of 29 states. Continuing efforts to raise girls' education levels in these large states could help India improve nationally—not just in education but on other gender gaps in society and in work.¹⁴

Within each focus area, many interventions have proved effective somewhere in the world that could narrow the gender gap and ensure that spending is well used. In our global research, we identified 75 interventions and more than 150 case examples that have been used to narrow gender gaps. Policy makers could evaluate and choose specific interventions through legislation, framing of policies, funding, and sharing of best practices. Most of these interventions require the involvement of both public- and private-sector organisations, as well as nongovernmental organisations. Within our six focus areas are some interventions to consider:

- **Education.** Actions may include building more secondary schools and ensuring girls have access to sanitation facilities in schools, and creating financial incentives and cash transfers to raise enrolment and keep girls in school. Other strategies include improving the quality and engagement of teachers, and reshaping secondary and tertiary education curricula to better equip students with employable skills (for example, through vocational training programs).
- **Family planning and maternal health.** Critical actions here include expanding the number of health workers and developing emergency services as well as services to cover remote rural areas for maternal care. Family planning and health awareness can be improved by focusing on supply chains for delivery and stocking of contraceptives, implementing school- and community-based programs for comprehensive sex education, and producing mass media campaigns and digital content for education on maternal and reproductive health.
- **Financial and digital inclusion.** Interventions may include implementing policies that support universal access to savings and credit accounts using digital and mobile platforms. Digital platforms can expand access to financial capital, but this depends on improving Internet access and affordability through greater investment in digital infrastructure. Programs can enhance digital and financial literacy among women, and incentives can be created for women to open digital or mobile financial accounts, by linking them to financial benefit programs, for instance.
- **Unpaid care work.** Each region will need to create an ecosystem for child-care services, whether it is government subsidised, employer assisted, self-funded, or a mix of these models. Developing charter school-like systems for early childhood education could enlist private entrepreneurs to deliver services based on agreed norms and outcomes. Government-, employer-, and employee-funded family leave policies will need to cover more families with better terms. Innovative methods such as paid family leave funds contributed by both employers and employees or allowance programs to offer income cover for maternity leave may help extend access to women employed in the informal sector in developing countries. A fund made by a combination of tax collection and social security contributions can be also be earmarked and allocated for providing

¹⁴ *The power of parity: Advancing women's equality in India*, McKinsey Global Institute, November 2015.

paid family leave to women employed in the informal sector. The expansion of sanitation, water, and energy infrastructure using government or public-private partnership models is a high priority for developing countries.

A more gender-equal society can promote a more gender-equal economy and benefit companies in myriad ways. The private sector can play an important role not just in investment and financing, but also in framing and executing strategies. The business case for expanding financial and digital services to women (and men) is becoming increasingly clear as technology cuts the cost of delivery and brings millions of low-income consumers into the market. While more has to be done to establish the company-level case for paid leave and child care, major names such as Google and IBM invest in such programs. Pharmaceutical companies including Merck are investing in producing and supplying low-cost contraceptives to developing countries in partnership with local governments. Financial services companies such as Turkey's Garanti Bank are investing in women entrepreneurs through innovative loan products, and training and networking programs. Companies can also play a role in funding gender-specific investment through their corporate social responsibility efforts. One example is Tata's initiatives in India to fund sanitation facilities for girls in school.

Collaborations by diverse partners—in funding, know-how, and execution capacity—can be effective in building a more gender-equal society. And, like any change program, action to tackle gender inequality needs to be tracked and measured to establish solid evidence for what works and what does not work. Closing the gender gap calls for substantial investment and sustained effort, but it would produce an enormous payoff in the form of economic growth and millions of lives transformed.



APPENDIX

This appendix summarises the methodology used for this paper in the following sections:

1. Mapping the SDGs to MGI's gender equality framework
2. Linking gender equality indicators to economic opportunity
3. Estimating the best-in-region GPS for each country in 2025
4. Estimating the number of people to reach with essential services by 2025
5. Estimating the spending required to narrow gender gaps by 2025

1. MAPPING THE SDGS TO MGI'S GENDER EQUALITY FRAMEWORK

We map MGI's 15 indicators to the UN's Sustainable Development Goals (SDGs). The high degree of overlap between the two frameworks suggests that many conclusions from MGI's research would hold true for the SDGs more broadly and that MGI's list of indicators may be a useful starting point to focus global efforts in measuring targets agreed to under the SDG framework (Exhibit A1).

2. LINKING GENDER EQUALITY INDICATORS TO ECONOMIC OPPORTUNITY

Our correlation analysis links aspects of gender equality in society and in work. Improvements in each indicator of gender equality in society can result in higher GDP growth by improving labour-force participation, labour productivity, or hours worked. They may also shift consumption patterns as women are empowered to exercise a greater degree of choice, though this is not currently included in the \$12 trillion opportunity from narrowing gender gaps (Exhibit A2). For example, improvements in indicators of gender equality in society such as unmet need for family planning drive up the supply of labour. Bridging gender gaps in education and financial inclusion can strengthen incentives for women to enter the workforce and provide them more opportunity to obtain higher-productivity jobs. Similarly, improving the provision of energy and sanitation to households helps to reduce the time women spend in unpaid work, increasing opportunities to undertake paid work.

Comparison of MGI indicators with SDGs to achieve gender equality and empower all women and girls

MGI's gender equality indicators

- 1 Labour-force participation rate
- 6 Unmet need for family planning
- 11 Legal protection
- 2 Professional and technical jobs
- 7 Maternal mortality
- 12 Political representation
- 3 Perceived wage gap for similar work
- 8 Education
- 13 Sex ratio at birth
- 4 Leadership positions
- 9 Digital inclusion
- 14 Child marriage
- 5 Unpaid care work
- 10 Financial inclusion
- 15 Violence against women

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Goal 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
End all forms of discrimination against women and girls everywhere											●				
Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation													●	●	●
Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation														●	
Recognise and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate					●										
Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision making in political, economic and public life			●									●			
Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences						●									
Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws										●	●				
Enhance the use of enabling technologies, in particular information and communications technology, to promote the empowerment of women									●						
Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels											●	●			
Other goals															
Goal 1: End poverty in all forms and everywhere	●				●						●				
Goal 3: Ensure healthy lives and promote well-being for all at all ages						●	●								
Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all								●							
Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	●	●	●												
Goal 10: Reduce inequality within and amongst countries	●		●												
Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable															●
Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels												●			●

SOURCE: Report of the IAEG-SDGs to the 47th session of the UN Statistical Commission, March 2016; McKinsey Global Institute analysis

Exhibit A2

How gender equality can lead to higher GDP growth

□ Gender equality in work

● Transmission mechanism to GDP

Gender equality indicator	How improvement in gender equality indicator can drive economic impact	GDP impact indicators ¹				
		Labour supply		Labour productivity		
		Increase in female population	Increase in female labour-force participation rate	Increase in hours worked by women	Increase in labour quality of women (skills and education)	Increase in employment of women in high-productivity sectors, more value-added roles
Labour-force participation rate	Larger labour force		●			
Professional and technical jobs	Lower skills mismatch				●	●
Perceived wage gap for similar work	Increase in opportunity cost of non-participation, more incentive to invest in education and work		●		●	●
Leadership positions	Better job quality and higher pay, incentive to engage in paid work rather than unpaid work or leisure		●		●	●
Unpaid care work	More ability to engage in paid work and take leadership roles requiring time and travel		●	●	●	●
Unmet need for family planning	Longer time spent in school for young girls, fewer working days lost due to pregnancy, longer periods between pregnancies		●	●	●	
Maternal mortality	Lives saved	●				
Education level	Higher labour-force participation rate, more access to skills and capital leading to productivity increase, lower skills mismatch		●		●	●
Financial inclusion	Higher labour-force participation rate, fewer low-productivity informal jobs, more access to capital and skills		●		●	●
Digital inclusion	Higher labour-force participation rate, fewer low-productivity informal jobs, more access to capital and skills		●		●	●
Legal protection	Broader access to jobs, more access to capital and skills		●	●	●	●
Political representation	Improved voice for women, potentially leading to fewer legal barriers, broader access to jobs, more access to capital and skills		●	●	●	●
Sex ratio at birth	Lives saved	●				
Child marriage	Greater likelihood of women completing education and participating in the labour force		●		●	
Violence against women	Fewer work days lost, greater willingness to do work currently considered less safe		●	●		

¹ Besides direct effects, increased participation among women has second-order impacts on GDP, including increased consumption and savings due to higher incomes, intergenerational impact from improved health and education among children, and potentially higher productivity due to greater female entrepreneurship.

SOURCE: McKinsey Global Institute analysis

3. ESTIMATING THE BEST-IN-REGION GPS FOR EACH COUNTRY IN 2025

We projected the GPS required to achieve MGI's best-in-region scenario in 2025 using historical relationships between the GPS (excluding the ratio of female-to-male labour-force participation) and the ratio of female-to-male labour-force participation in 2014. For countries where the stage of development is a significant driver of gender parity, we also used the log of per capita GDP as an explanatory variable. We tested for other variables such as the share of the agricultural sector and the services sector in employment, the urbanisation rate, and the ratio of female-to-male productivity, but we found that labour-force participation and per capita GDP for certain countries had the most explanatory power.

We grouped countries into four sets based on the nature and strength of these relationships. The groups reflect the overall profile of each country in terms of aggregate gender equality in work and gender equality in society. We find that these groupings overlap with regional classifications to a large extent, except where gender equality levels or stages of development are very different within a region (Exhibit A3). Similarly, the groups also contain countries from across regions. We estimated regression equations for each group separately and used these equations to project the GPS (excluding the ratio of female-to-male labour force participation) in 2025 consistent with the labour-force participation rate assumed in the best-in-region GDP scenario in 2025 (and per capita GDP in 2025 where this was a relevant factor).

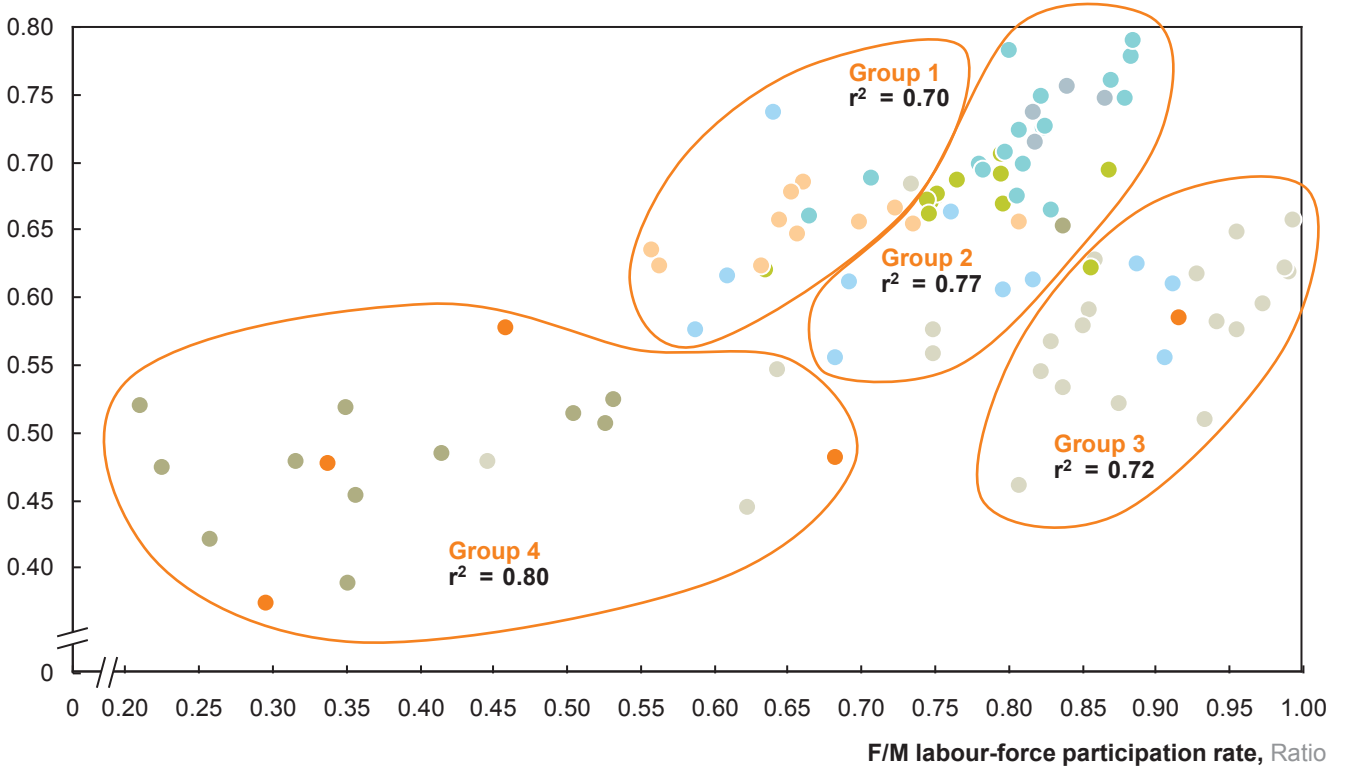
We then estimated how the improvement in overall GPS would translate into improvement on individual indicators of gender equality. For this, we modelled each country's potential level on each indicator in 2025 based on the level already achieved by the best-performing country in its region in 2014, correcting for a few outliers (for example, if the best-in-region country in a region had significantly higher gender parity levels than other countries in the region, we used a more representative benchmark). For indicators where countries were already at the best-in-region level of performance, we assume they will leapfrog to the closest higher best-in-region value. We then scaled this down based on the level of difference between the GPS calculated from the regression approach above and the GPS calculated using the best-in-region values for each indicator. Using this approach, we arrived at an overall GPS and its components for each country that is consistent with achieving \$12 trillion of incremental global GDP in 2025 and also reflective of the best-in-region performance on each gender indicator. The scores that we have calculated are a lower bound of what needs to be achieved by 2025—a higher GPS would, of course, be preferable from a normative or moral perspective.

Exhibit A3

There is a strong relationship between the labour-force participation rate and other variables in the GPS

- Western Europe
- Eastern Europe and Central Asia
- North America and Oceania
- Latin America
- Middle East and North Africa
- Sub-Saharan Africa
- East and Southeast Asia (including China)
- South Asia (including India)

GPS (excluding F/M labour-force participation rate), Index



Group 1	Group 2	Group 3	Group 4
Argentina Chile Dominican Republic Ecuador Guatemala Mexico Uruguay Venezuela	Brazil Colombia Peru	Angola Burkina Faso Cameroon Chad Congo, Dem. Rep. Ethiopia Ghana Guinea Kenya Madagascar Malawi Mozambique Rwanda Tanzania Uganda Zambia Zimbabwe	Algeria Egypt Iran Israel Kuwait Morocco Oman Qatar Saudi Arabia Turkey United Arab Emirates Yemen
Greece Italy	Austria Belgium Denmark Finland France Germany Ireland Luxembourg Netherlands Norway Portugal Spain Sweden Switzerland United Kingdom	Cambodia Myanmar Vietnam	Côte d'Ivoire Mali Niger Nigeria Senegal
Indonesia Malaysia	Belarus Croatia Czech Republic Hungary Poland Romania Russian Federation Slovak Republic Ukraine	Azerbaijan Kazakhstan	Bangladesh India Pakistan Sri Lanka
Uzbekistan	China Japan South Korea Philippines Singapore Thailand	Nepal	
South Africa	Australia Canada New Zealand United States		

NOTE: Kazakhstan, Philippines and Senegal countries are not shown in their corresponding groups in the plot.

SOURCE: McKinsey Global Institute analysis

4. ESTIMATING THE NUMBER OF PEOPLE TO REACH WITH ESSENTIAL SERVICES BY 2025

We use a combination of global goals and commitments and the projected labour-force participation rates of the best-in-region scenario to estimate the increased levels of coverage that need to be provided. In general, these are higher than those required by the best-in-region GPS, because they are estimated using three factors:

- The narrowing of gaps between female and male access projected in our best-in-region GPS scenario.
- An overall increase in access to services for women and girls, regardless of the relevant gender gap, based on global goals and commitments where present, or in some cases boosting each country to at least the average access level in its region.
- The number of boys and men who need services in line with the objective of attaining the economic potential of women, in areas such as education, paid paternity and parental leave, and access to water, sanitation, and energy.

For education, the SDGs include the goals of universal primary and secondary education by 2030; this was also consistent with the Millennium Development Goals. We therefore assume these goals are achieved in full by 2030, scaling back for 2025 levels. For tertiary education, we assume that each country reaches the enrolment level of at least the average of its region where this is higher than the country's current enrolment rate. In each of these areas, we factor in the additional boys and men who would need to be enrolled to meet the above goals and eliminate gender gaps by 2025.

For family planning, under the auspices of the United Nations Population Fund, there is a global commitment to providing 120 million more women with access to family planning by 2020. We assume that this goal is met by 2025 as a lower bound and assume access to those with unmet need as projected in the business-as-usual case as the upper bound.

For maternal health services, we assume all births in 2025 will be attended by a skilled health worker (trained to give the necessary supervision, care, and advice to women during pregnancy, labour, and the postpartum period). For financial inclusion and digital inclusion, we estimate the number of women affected to bridge all gender gaps by 2025, based on today's gender gaps in access to formal financial institutions and the Internet, respectively. We assume only that the gender gap in each country estimated in 2014 persists and is bridged by 2025. We do not factor in the need for increased access, since technology disruptions are rapidly raising current access levels, making the business-as-usual scenario for 2025 hard to estimate.

Within services to address gender imbalances in unpaid care work, we look at family support services and assume that all women in the labour force in 2025 (and their families) have access to paid maternity, paternity, and parental leave as the upper bound. As the lower bound, we assume that in each country only women engaged in formal wage and salaried work (and their families) would have access. Current data suggest that formal wage and salaried workers comprise 15 percent of the female labour force in India and 94 percent in the United States, for example, according to data from the International Labour Organisation.

Another aspect of addressing unpaid care work is household access to the basic services of energy, sanitation, and water. We assume that SDG targets are met proportionately by 2025 (that is, in line with a trajectory towards reaching these goals by 2030), and our estimates of people affected reflect the entire household.

UN population estimates (medium forecast) are used to project population growth to 2025. We use regional averages to fill in any missing data on coverage.

5. ESTIMATING THE SPENDING REQUIRED TO NARROW GENDER GAPS BY 2025

Our approach to calculating the spending requirements associated with bridging the gender gap and realising the economic opportunity consists of estimating per capita expenditure levels and identifying the incremental amount needed to provide improved access to the relevant services (Exhibit A4). We acknowledge that this is only an initial analysis; we intend to expand and refine it. Here, we have focused on estimating spending requirements in five areas (education, family planning, maternal health, digital inclusion, and unpaid care work) out of the six discussed in this discussion paper. We do not estimate the spending requirements associated with improving financial inclusion because of limited data on the unit costs involved. We have estimated total spending across public, private, and household categories except in the case of education, where public spending data are available. However, we believe that splitting spending into public, private, and household components is an important part of future analysis. We do not distinguish between capital and revenue spending. Therefore, our figures are annual expenditures, including consumption of services, rather than investment outlays.

We use national spending data available at a country level from globally harmonised data sets rather than undertaking a detailed bottom-up sizing of individual interventions, and we fill in any gaps caused by missing data using averages for the region. In each case, we estimated the unit cost of delivering the essential service (per woman, man, or child) and scaled it to levels of per capita GDP in 2025 to allow for natural improvements in the extent or quality of service. The exceptions to this approach are family planning and maternal mortality (where we explicitly assume an improved rate of service for all women on a par with that in developed countries and apply cost estimates for the same) as well as digital inclusion (where we assume constant costs in real terms since the costs of technologies are rapidly falling). Where possible, we have also triangulated unit costs across alternate data sources (for example, national data sources for countries like India or the United States).

Our detailed approach to estimating unit costs for each service is described below:

- For education, our unit costs are based on current national public spending on primary, secondary, and tertiary education per enrolled student.
- For family planning, we rely on estimates from other global studies of the costs per woman for modern contraceptive coverage and improved family planning services.¹⁵
- For maternal mortality, we considered the number of health-care workers needed to ensure that all births are assisted and estimated the cost per birth based on regional estimates from global studies.¹⁶
- For digital inclusion, we assumed that gaps in Internet access can be bridged through mobile broadband. We relied on data from the International Telecommunication Union for Internet access, and the International Data Corporation for annual spending on mobile broadband access and mobile handsets (amortised across three years). As mentioned, we did not scale up costs through 2025, since there is a long-term trend of falling costs. We therefore assumed that costs would stay constant in real terms on a per user

¹⁵ Susheela Singh, Jacqueline E. Darroch, and Lori S. Ashford, *Adding it up: The costs and benefits of investing in sexual and reproductive health 2014*, Guttmacher Institute and UNFPA, 2014, and James Trussell et al., "Cost effectiveness of contraceptives in the United States", *Contraception*, 2009.

¹⁶ Susheela Singh, Jacqueline E. Darroch, and Lori S. Ashford, *Adding it up: The costs and benefits of investing in sexual and reproductive health 2014*, Guttmacher Institute and UNFPA, 2014, and US Agency for Healthcare Research and Quality, HCUPnet, Healthcare Cost and Utilization Project.

basis at the level in 2014, though the value derived from the same amount of spending could increase.



- For basic services, we used estimates from the World Bank's SDG costing model for sanitation and water. For energy, our unit costs are based on national spending estimates from the International Energy Agency.¹⁷
- For family support services, we estimated the cost of paid family leave using payments linked to wages for the period of leave. For child care and early childhood education, we use country-level estimates of per child costs from the OECD and the Inter-American Development Bank for OECD and Latin American countries, respectively, and scale based on per capita GDP and the ratio of preprimary education spending per child where data were not available.

For education, we include the cost of higher enrolment for boys as well as girls since global goals suggest that girls' enrolment in primary and secondary school would need to rise beyond current enrolment of boys. We therefore assume that boys' enrolment also rises and keeps pace with that of girls in 2025. We similarly apply this thinking to paid family leave, where we estimate spending on paternity and parental leave as well as maternity leave.

¹⁷ For more details, see *The costs of meeting the 2030 SDG targets on drinking water, sanitation, and hygiene*, World Bank, and *World energy investment outlook 2014*, International Energy Agency.

Approach for estimating the unit costs of delivering essential services

Estimation approach Data sources

Category		2014 ¹		2025 best-in-region ²
		Coverage	Unit costs	Coverage assumed
Education	 <p>Primary, secondary, and tertiary education</p>	<ul style="list-style-type: none"> Country-level data on boys and girls in the relevant age group enrolled in school (based on gross enrolment ratios) 	<ul style="list-style-type: none"> Country-level total public expenditure on education by level (calculated based on expenditure as a percentage of GDP in 2014 x GDP) divided by coverage 	<ul style="list-style-type: none"> For primary and secondary education: 100 percent enrolment for children in the relevant age group in 2030, in line with MDG / SDG targets, scaling back for 2025 levels For tertiary education: Maximum of current enrolment rate and average enrolment rate of the region; gender gap based on difference between male and female gross enrolment ratios goes to 0
		<ul style="list-style-type: none"> UNESCO Institute for Statistics enrolment data: <ul style="list-style-type: none"> Primary (92/95 countries) Secondary (89/95 countries) Tertiary (91/95 countries) UN database for population in 2014 (95/95 countries) 	<ul style="list-style-type: none"> UNESCO Institute for Statistics expenditure data: <ul style="list-style-type: none"> Primary (78/95 countries) Secondary (80/95 countries) Tertiary (85/95 countries) 	<ul style="list-style-type: none"> UN projections for population in 2025 (95/95 countries)
Health	 <p>Family planning</p>	<ul style="list-style-type: none"> Country-level data on number of women aged 15-49 married or in a union who are currently either: <ul style="list-style-type: none"> Using any modern method of contraception Desiring to stop or delay childbearing but not using a modern method of contraception 	<ul style="list-style-type: none"> Per person direct cost of providing modern contraception services, aggregate data for developed and developing countries Indirect costs estimated as proportion of total costs from Guttmacher Institute and UNFPA's <i>Adding it up</i> report, 2014³ for developing countries 	<ul style="list-style-type: none"> Ranged from FP2020's goal of meeting demand for 120 million additional women to covering all women estimated by the UN as having unmet need in 2025⁵
		<ul style="list-style-type: none"> United Nations Department of Economic and Social Affairs data on users of modern contraceptives and unmet need (93/95 countries) FP2020 UN database for population in 2014 (95/95 countries) 	<ul style="list-style-type: none"> Guttmacher Institute and UNFPA's <i>Adding it up</i> report, 2014³; aggregate data for developing countries Estimates from <i>Cost effectiveness of contraceptives in the United States</i>⁴ on per person contraceptive costs for the United States, also used as proxy for developed countries 	<ul style="list-style-type: none"> United Nations Department of Economic and Social Affairs data on users of modern contraceptive and unmet need in 2025 (93/95 countries) UN projections for population in 2025 (95/95 countries) FP2020 (69/95 countries)




1 For missing data, we fill in gaps by scaling country-level data on the basis of regional averages for coverage, and on GDP per capita for unit costs.
 2 For 2025, unit costs were estimated by scaling the 2014 estimates based on GDP per capita for all indicators except family planning, maternal health (where unit costs were assumed to increase based on estimates of what it would take to provide improved care levels in 2014), and digital inclusion (where unit costs were held constant at 2014 levels in view of the long-term trend of falling technology costs).
 3 Susheela Singh, Jacqueline E. Darroch, and Lori S. Ashford, *Adding it up: The costs and benefits of investing in sexual and reproductive health 2014*, Guttmacher Institute and UNFPA, 2014.
 4 James Trussell et al., "Cost effectiveness of contraceptives in the United States", *Contraception*, 2009.
 5 The Family Planning 2020 partnership (FP2020) aims to expand access to family planning information, services, and supplies to an additional 120 million women and girls (or their partners) of reproductive age who want no more children or want to postpone having a child but are currently not using a modern contraceptive method, plus women who are currently using a traditional method of family planning in 69 of the world's poorest countries by 2020.

SOURCE: McKinsey Global Institute analysis

Exhibit A4 (continued)

Approach for estimating the unit costs of delivering essential services

Estimation approach
 Data sources

Category	2014 ¹		2025 best-in-region ²
	Coverage	Unit costs	Coverage assumed
Health Maternal mortality 	<ul style="list-style-type: none"> Country-level percent of total births in 2014 that were assisted by a skilled worker 	<ul style="list-style-type: none"> Regional data on direct cost per birth and overall indirect costs Indirect costs estimated as share of direct costs, as outlined in Guttmacher Institute and UNFPA's <i>Adding it up</i> report, 2014³ for developing countries 	<ul style="list-style-type: none"> 100 percent of births in 2025 assisted by a skilled worker
	<ul style="list-style-type: none"> World Bank data for percent of assisted births (85/95 countries) UN database for population in 2014 (95/95 countries) 	<ul style="list-style-type: none"> Guttmacher Institute and UNFPA's <i>Adding it up</i> report, 2014³; data by region for developing countries Estimates from US agency for healthcare and research⁴ on average per birth costs in the United States, also used as proxy for developed countries 	<ul style="list-style-type: none"> UN projections for population in 2025 (95/95 countries)
Financial inclusion 	<ul style="list-style-type: none"> Country-level data on access to formal financial institutions for men and women 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Gender gap based on difference between male and female access to accounts at formal financial institutions in 2014 goes to zero
	<ul style="list-style-type: none"> Global Financial Inclusion Database for access in 2014 (95/95 countries) UN database for population in 2014 (95/95 countries) 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> UN projections for population in 2025 (95/95 countries)
Digital inclusion 	<ul style="list-style-type: none"> Country-level data on Internet access for men and women 	<ul style="list-style-type: none"> Annual average cost for 500 MB broadband data plan and an average 3G handset (cost amortised over 3 years); spending in 2025 assumed to be the same in real terms as in 2014 	<ul style="list-style-type: none"> Gender gap based on difference between male and female Internet access in 2014 goes to zero
	<ul style="list-style-type: none"> International Telecommunication Union data for access in 2014 (51/95 countries) UN database for population in 2014 (95/95 countries) 	<ul style="list-style-type: none"> International Data Corporation (51/95 countries) 	<ul style="list-style-type: none"> UN projections for population in 2025 (95/95 countries)

1 For missing data, we fill in gaps by scaling country-level data on the basis of regional averages for coverage, and on GDP per capita for unit costs.

2 For 2025, unit costs were estimated by scaling the 2014 estimates based on GDP per capita for all indicators except family planning, maternal health (where unit costs were assumed to increase based on estimates of what it would take to provide improved care levels in 2014), and digital inclusion (where unit costs were held constant at 2014 levels in view of the long-term trend of falling technology costs).



3 Susheela Singh, Jacqueline E. Darroch, and Lori S. Ashford, *Adding it up: The costs and benefits of investing in sexual and reproductive health 2014*, Guttmacher Institute and UNFPA, 2014.

4 US Agency for Healthcare Research and Quality, HCUPnet, Healthcare Cost and Utilization Project.

SOURCE: McKinsey Global Institute analysis

Approach for estimating the unit costs of delivering essential services

 Estimation approach  Data sources

Category	Coverage	2014 ¹	2025 best-in-region ²	
		Unit costs	Coverage assumed	
Unpaid care work	Paid family leave 	<ul style="list-style-type: none"> Country-level data on all women in the formal labour force today (calculated based on share of wage- and salary-earning workers) eligible for paid maternity leave Country-level sizing for maternity, paternity, and parental leave based on current number of paid days 	<ul style="list-style-type: none"> Country-level average daily wages Country-level share of wages offered during leave 	<ul style="list-style-type: none"> Country-level estimates on the number of women eligible for maternity leave range from all women in the formal labour force aged 25–49 to all women in the formal and informal labour force Same number of men entitled to paid paternity leave as women to maternity leave Parental leave opted for by either parent 100 percent wage benefit for paternity / maternity leave; parental leave benchmarked to 15 percent Number of days of leave based on maximum of current country policy and regional average or benchmark: <ul style="list-style-type: none"> – Maternity leave: Average of the region – Paternity leave: 14 days – Parental leave: 30 days
		<ul style="list-style-type: none"> ILO for number of days of leave (95/95 countries) World Bank – Women, Business and Law database for number of days of leave (90/95 countries) ILO for percent of wage- and salary-earning workers (68/95 countries) UN database for population in 2014 (95/95 countries) 	<ul style="list-style-type: none"> World Economic Forum data for daily wages (90/95 countries) The Economist Intelligence Unit for daily wage data (49/95 countries) ILO for wage benefit data (95/95 countries) 	<ul style="list-style-type: none"> UN projections for population in 2025 (95/95 countries)
	Child-care facilities 	<ul style="list-style-type: none"> Country-level data on participation rates 	<ul style="list-style-type: none"> Country-level costs of early child care for OECD and Latin American countries Missing data scaled based on GDP per capita and ratio of preprimary education spending per child in every country to global average of pre-primary spending (used as proxy for child-care facilities spending) 	<ul style="list-style-type: none"> Ranged from 100 percent participation rate of children in the relevant age group with mothers in the formal labour force to all women in the formal and informal labour force
	<ul style="list-style-type: none"> OECD family database (27/95 countries) <i>IDB report for Latin America</i>³ (5/95 countries) Institute for Research on Labour and Employment for India Integrated Child Development Services data UN database for population in 2014 (95/95 countries) 	<ul style="list-style-type: none"> OECD family database for unit costs (27/95 countries) <i>IDB report for Latin America</i> (5/95 countries) Institute for Research on Labour and Employment for India Integrated Child Development Services data 	<ul style="list-style-type: none"> UN projections for population in 2025 (95/95 countries) 	

1 For missing data, we fill in gaps by scaling country-level data on the basis of regional averages for coverage, and on GDP per capita for unit costs.

2 For 2025, unit costs were estimated by scaling the 2014 estimates based on GDP per capita for all indicators except family planning, maternal health (where unit costs were assumed to increase based on estimates of what it would take to provide improved care levels in 2014), and digital inclusion (where unit costs were held constant at 2014 levels in view of the long-term trend of falling technology costs).


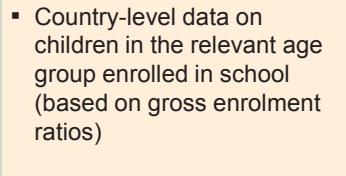
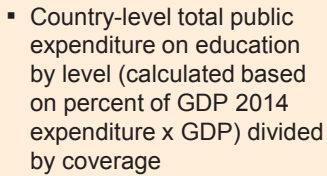
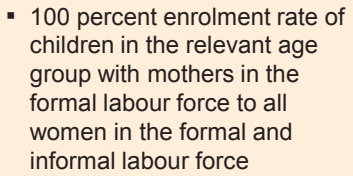
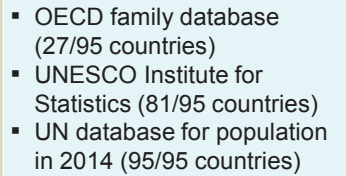
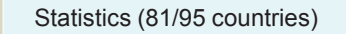
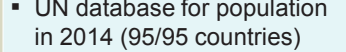
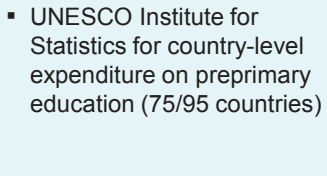
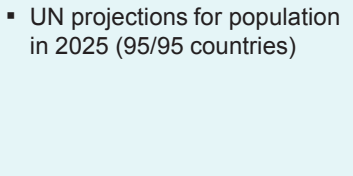

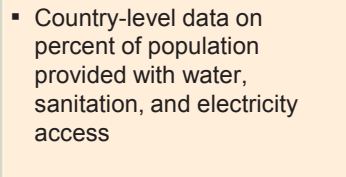
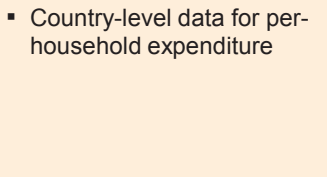
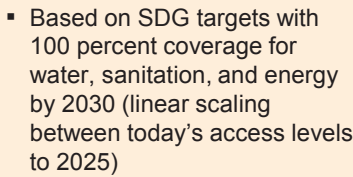
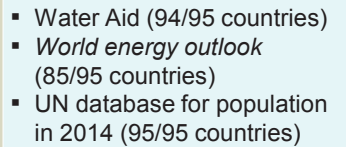
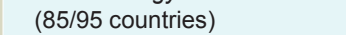
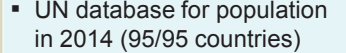
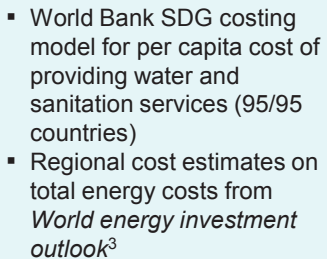
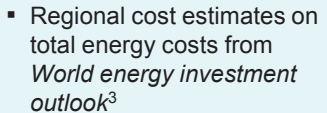
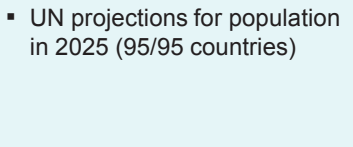
3 Samuel Berliński and Norbert Schady, *The early years: Child well-being and the role of public policy*, Inter-American Development Bank, 2015.

SOURCE: McKinsey Global Institute analysis

Exhibit A4 (continued)

Approach for estimating the unit costs of delivering essential services

 Estimation approach  Data sources

Category		2014 ¹		2025 best-in-region ²
		Coverage	Unit costs	Coverage assumed
Unpaid care work	Pre-primary education 	 Country-level data on children in the relevant age group enrolled in school (based on gross enrolment ratios)	 Country-level total public expenditure on education by level (calculated based on percent of GDP 2014 expenditure x GDP) divided by coverage	 100 percent enrolment rate of children in the relevant age group with mothers in the formal labour force to all women in the formal and informal labour force
		 OECD family database (27/95 countries)  UNESCO Institute for Statistics (81/95 countries)  UN database for population in 2014 (95/95 countries)	 UNESCO Institute for Statistics for country-level expenditure on preprimary education (75/95 countries)	 UN projections for population in 2025 (95/95 countries)
	Access to basic services 	 Country-level data on percent of population provided with water, sanitation, and electricity access	 Country-level data for per-household expenditure	 Based on SDG targets with 100 percent coverage for water, sanitation, and energy by 2030 (linear scaling between today's access levels to 2025)
		 Water Aid (94/95 countries)  <i>World energy outlook</i> (85/95 countries)  UN database for population in 2014 (95/95 countries)	 World Bank SDG costing model for per capita cost of providing water and sanitation services (95/95 countries)  Regional cost estimates on total energy costs from <i>World energy investment outlook</i> ³	 UN projections for population in 2025 (95/95 countries)

1 For missing data, we fill in gaps by scaling country-level data on the basis of regional averages for coverage, and on GDP per capita for unit costs.

2 For 2025, unit costs were estimated by scaling the 2014 estimates based on GDP per capita for all indicators except family planning, maternal health (where unit costs were assumed to increase based on estimates of what it would take to provide improved care levels in 2014), and digital inclusion (where unit costs were held constant at 2014 levels in view of rapid technology changes that are reducing costs over time).

3 International Energy Agency, *World energy investment outlook: Special report, 2014*.

SOURCE: McKinsey Global Institute analysis





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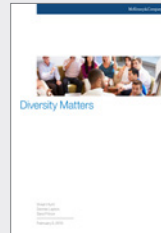
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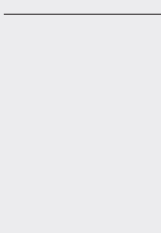
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