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**THE POWER OF PARITY:
ADVANCING WOMEN'S
EQUALITY IN ASIA PACIFIC**

MAY 2018

FOCUS: INDIA



MCKINSEY GLOBAL INSTITUTE

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An extract from the original report, published April 2018

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PREFACE

Advancing women's equality in work and society represents one of the most sizable economic opportunities for the world. McKinsey & Company has been researching, publishing, and helping shape action on gender diversity for more than a decade, and the McKinsey Global Institute (MGI) has contributed to this important issue with its research series on the "power of parity".

In September 2015, MGI published a global report, *The power of parity: How advancing women's equality can add \$12 trillion to global growth*. Since then, we have issued reports on the power of parity in Canada, India, the United Kingdom, the United States, and Western Europe, as well as research on what it will take to deliver gender parity globally. In this report, MGI explores the challenge of gender inequality in Asia Pacific, one of the most economically dynamic regions in the world, and an engine of global growth.

This research was led by Jonathan Woetzel, a director of MGI and senior partner of McKinsey, based in Shanghai; Anu Madgavkar, an MGI partner based in Mumbai; Kweilin Ellingrud, a partner based in Minneapolis; and Mekala Krishnan, an MGI senior fellow based in Boston, along with Kevin Sneader, chairman of McKinsey's offices in the Asia Pacific region, and McKinsey senior partners John Lydon in Sydney, Sha Sha in Hong Kong, Oliver Tonby in Singapore, and Diaan-Yi Lin in Singapore. Michael Gubieski, a consultant in Melbourne, led the working team, which comprised Alice Hudson, Nigel Lee, James Oliver, Catherine Peralta, and Phillippa Radford. We are grateful to a number of McKinsey colleagues who were closely involved in this research and provided invaluable insight into the seven countries highlighted in the report. They are Rishi Arora, Anders Bärlund, Jules Carrigan, Jenny Cermak, Kaushik Das, Namrata Dubashi, Emma Dudley, Ellen Feehan, Vidhya Ganesan, Guillaume de Gantès, Rajat Gupta, Shishir Gupta, Rachel Howard, Corinne Johnson, Peter Kenevan, Nick Leung, Guang Li, Suraj Moraje, Joe Ngai, Tracy Nowski, Vivek Pandit, Kristine Romano, Yukiko Sakai, Miki Sarumaru, Himanshu Satija, Jeongmin Seong, Tanya Sharma, Ben Vatterott, Jin Wang, Kenji Watatani, Phillia Wibowo, Naomi Yamakawa, and Fadhilah Zamawi.

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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 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. We welcome your comments on the research at MGI@mckinsey.com.

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IN BRIEF

ADVANCING WOMEN'S EQUALITY IN ASIA PACIFIC

Advancing women's equality in the countries of Asia Pacific could add \$4.5 trillion to their collective annual GDP by 2025, a 12 percent increase over the business-as-usual trajectory. Already a powerful engine of global growth, pursuing the goal of gender parity can lift many more women out of poverty, unleash the economic potential of many others, and reinforce the region's dynamic growth story.

- All countries would benefit from advancing women's equality. In a best-in-region scenario in which each country matches the rate of progress of the fastest-improving country in its region, the largest absolute GDP opportunity is in China at \$2.6 trillion, a 13 percent increase over business-as-usual GDP. The largest relative GDP opportunity is in India, which could achieve an 18 percent increase over business-as-usual GDP, or \$770 billion. Across Asia Pacific, we estimate that 58 percent of the opportunity would come from raising the female labour-force participation ratio, 17 percent from increasing the number of hours women work, and the remaining 25 percent from more women working in higher-productivity sectors.
- MGI has established a strong link between gender equality in work and in society—the former is not achievable without the latter. MGI's Gender Parity Score, or GPS, using 15 indicators of gender equality in work and society, measures the distance each country has travelled towards parity, which is set at 1.00. Overall, Asia Pacific has a GPS of 0.56, slightly lower than the global average of 0.61—both “high” levels of gender inequality. But countries in the region vary in their positions on specific indicators. There is no single Asia Pacific story.
- On gender equality in work, the Philippines stands out for its progress, followed by New Zealand and Singapore. The six countries furthest from gender parity in work are Bangladesh, India, Japan, Nepal, Pakistan, and South Korea. China does well on female labour-force participation but can improve its share of women in leadership—as can most countries in Asia. Globally, there are fewer than four women in leadership roles to every ten men, but, in Asia Pacific, only around one woman for every four men. Gender inequality also remains high across the region in the sharing of unpaid care work.
- On gender equality in society, Australia, New Zealand, the Philippines, and Singapore are ahead of most in the region on essential services such as education, maternal and reproductive health, financial and digital inclusion, and legal protection and political voice; countries like Bangladesh, India, Nepal, and Pakistan still have a considerable distance to travel. Achieving gender parity in digital and financial inclusion is a large opportunity in many South Asian and Southeast Asian countries. Physical security and autonomy remains a concern in many parts of the region—and globally.
- Asia Pacific nations have made progress in the past decade, driven by a combination of economic development, government measures, technological change, market forces, and activism. Maternal mortality and gender gaps in education have declined in countries including Bangladesh, Cambodia, India, and Nepal. Many countries have increased women's labour-force participation, but participation has fallen in Bangladesh, India, and Sri Lanka, a trend that may be linked to rising household income.
- Mapping the road ahead, policy makers, companies, and non-governmental organisations could consider prioritising action in five areas that are urgent issues (to differing degrees) across the region: (1) focus on higher female labour-force participation, with steps to address unpaid care work as a priority to boost economic growth; (2) address the pressing regional and global issue of women's underrepresentation in business leadership positions; (3) capture the economic and social benefits of improving access to digital technology; (4) shift social attitudes about women's role in society and work in order to underpin progress on all aspects of gender inequality; and (5) collaborate on regional solutions as powerful catalysts for gender equality.

The economic case for gender parity in Asia Pacific

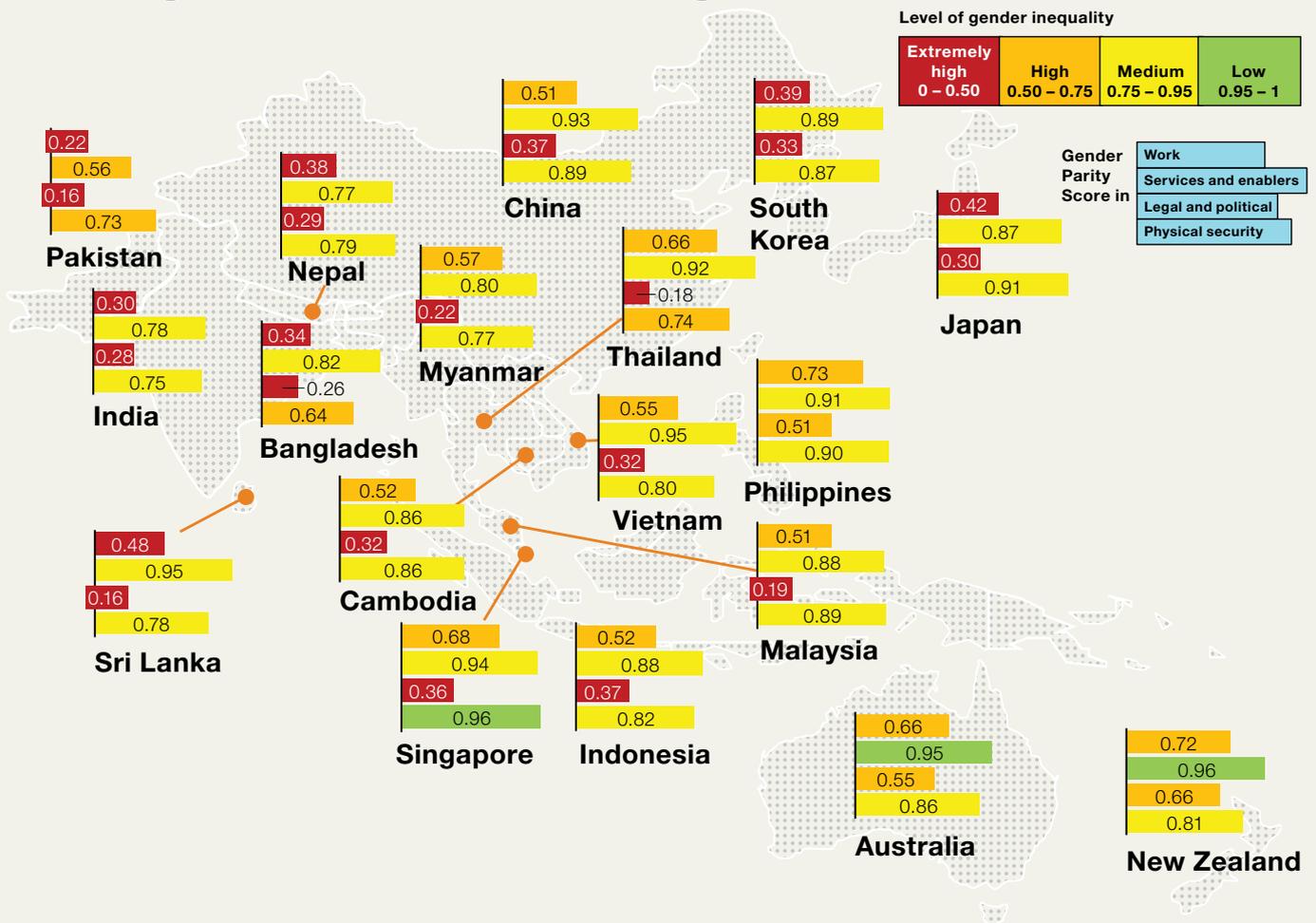


\$4.5 trillion

of **additional annual GDP** in 2025 could be added to the economies of Asia Pacific by advancing women's equality

or **12%** above business-as-usual GDP in 2025¹

Gender inequality is high overall in Asia Pacific, with significant variations among countries²



Five areas for change in Asia Pacific

- Focus on higher female labour-force participation in quality jobs as a priority to boost economic growth
- Address the pressing regional and global issue of women's underrepresentation in business leadership positions
- Capture the economic and social benefits of improving women's access to digital technology
- Shift attitudes about women's role in society and work, in order to underpin progress on all aspects of gender equality
- Collaborate on regional solutions, such as financing and knowledge-sharing, as powerful catalysts for gender equality

¹ GDP opportunity in scenario where all countries match their best-in-region country in progress towards gender parity.

² GPS scores are made up of 15 indicators of gender equality in work and society, weighted equally. GPS runs from 0 (no gender equality) to 1.0 (parity); for instance, a 0.95 ratio represents 5% distance from gender parity.

SOURCE: McKinsey Global Institute analysis



EXECUTIVE SUMMARY

Asia Pacific is today arguably the most dynamic region in the world, a global engine of growth driven by productivity, investment, technology, and innovation. Women can help—and are helping—to power this engine, making vital contributions to sustaining and enhancing Asia's growth and lifting more people out of poverty. Yet gaps remain large in many countries in the region on gender equality both in work and in society. From an economic perspective, trying to grow without enabling the full potential of women is like fighting with one hand tied behind one's back.

By advancing women's equality, the economies of Asia Pacific could boost their collective GDP by \$4.5 trillion a year by 2025, a 12 percent increase over business-as-usual GDP. This additional GDP would be equivalent to adding an economy the combined size of Germany and Austria each year. China and India would benefit most in absolute and relative terms, respectively. Advancing women's equality not only is important from a moral and social perspective, but also delivers a considerable growth dividend.

This research builds on MGI's landmark 2015 report on global gender inequality, *The power of parity: How advancing women's equality can add \$12 trillion to global growth*, which found that advancing women's equality could add \$12 trillion to annual global GDP by 2025. Every region studied has the potential to increase its GDP by 8 to 16 percent over the next ten years. MGI used 15 economic and social indicators to compile a Gender Parity Score, or GPS, for each country.¹

Asia Pacific countries are grappling with many of the same challenges and opportunities that we see around the world. But there is no one Asia Pacific story. Rather, there is huge variation throughout the region in both gender outcomes and the drivers of those outcomes, whether economic, cultural, political, or environmental. Yet we believe that using a regional lens to look at these complex, interrelated issues of gender inequality can aid understanding of common challenges, potential solutions, and key differences.

First, the sheer size of the region in population and GDP terms means that regional solutions could be possible and, if initiated, could be rolled out on a significant scale. Second, many multinational businesses operate across national borders within the region, including companies whose global supply chains are heavily dependent on Asia Pacific. They represent a potentially catalytic opportunity, as multinational corporations bring a wider range of organisational practices to individual labour markets within Asia Pacific. Third, there is merit in bringing countries grappling with various gender equality issues into one conversation, so that they can share best practices and learn lessons from one another's experience.

In Chapter 1, we investigate the cross-cutting issue of women in leadership positions in business, an aspect of gender inequality that is highly relevant in the region and globally. We suggest some key measures that would help to raise the number—and share—of women in companies from the entry level to middle management to the boardroom. In Chapter 2, we focus in greater detail on India, one of seven countries highlighted in our Asia Pacific research (the other six are Australia, China, Indonesia, Japan, the Philippines, and Singapore)

¹ *The power of parity: How advancing women's equality can add \$12 trillion to global growth*, McKinsey Global Institute, September 2015.

(see Box 1, “Approach to country discussions,” and Box 3, “Gender inequality in seven Asia Pacific countries”).

AN ADDITIONAL \$4.5 TRILLION A YEAR COULD BE ADDED TO ASIA PACIFIC GDP BY 2025 BY ACCELERATING PROGRESS TOWARDS GENDER PARITY

Today, women account for half of the combined population of Asia Pacific but contribute 36 percent of the \$26 trillion of GDP currently generated (Exhibit 1). This is in line with the global figure of 36 percent. We note that current traditional measures of GDP do not capture the very significant economic value that women create through unpaid care work in the home such as looking after children and the elderly, shopping, cooking, and cleaning. Using conservative assumptions, we estimate that the unpaid care work undertaken by women in Asia Pacific, if included in measurement of GDP, would add \$3.8 trillion to the regional total, equivalent to roughly 15 percent of the region’s GDP.²

² This figure is estimated from minimum wage multiplied by time spent on unpaid work.

Box 1. Approach to country discussions

The seven countries we focus on in this research are home to more than 80 percent of the region’s female population and account for 90 percent of the total \$4.5 trillion GDP opportunity in the 18 Asia Pacific countries included in our estimate. They vary widely in their stage of economic development, cultural norms, and performance on different aspects of gender inequality.

For each country, we have highlighted the economic opportunity from advancing women’s equality and dimensionalised gender gaps. We have also homed in on key topics in each country chapter, chosen because they are of national interest and importance in those countries and have gender-disaggregated data available. Some of these topics build on current strengths, while others are pockets of continuing gender inequality that need to be addressed. We note that these topics are not exclusively relevant to a particular country. In many cases, they are aspects of gender inequality that will resonate in many countries. The topics we have chosen for each of the seven countries are illustrative, not exhaustive. We have focused more closely on gender equality in work and the direct enablers of economic opportunity, while fully acknowledging the importance of areas such as gender equality in political leadership, and physical safety and security, to help countries move to gender parity.

Measures needed to accelerate progress towards parity differ. For each country, we have identified some of the significant gaps and opportunities

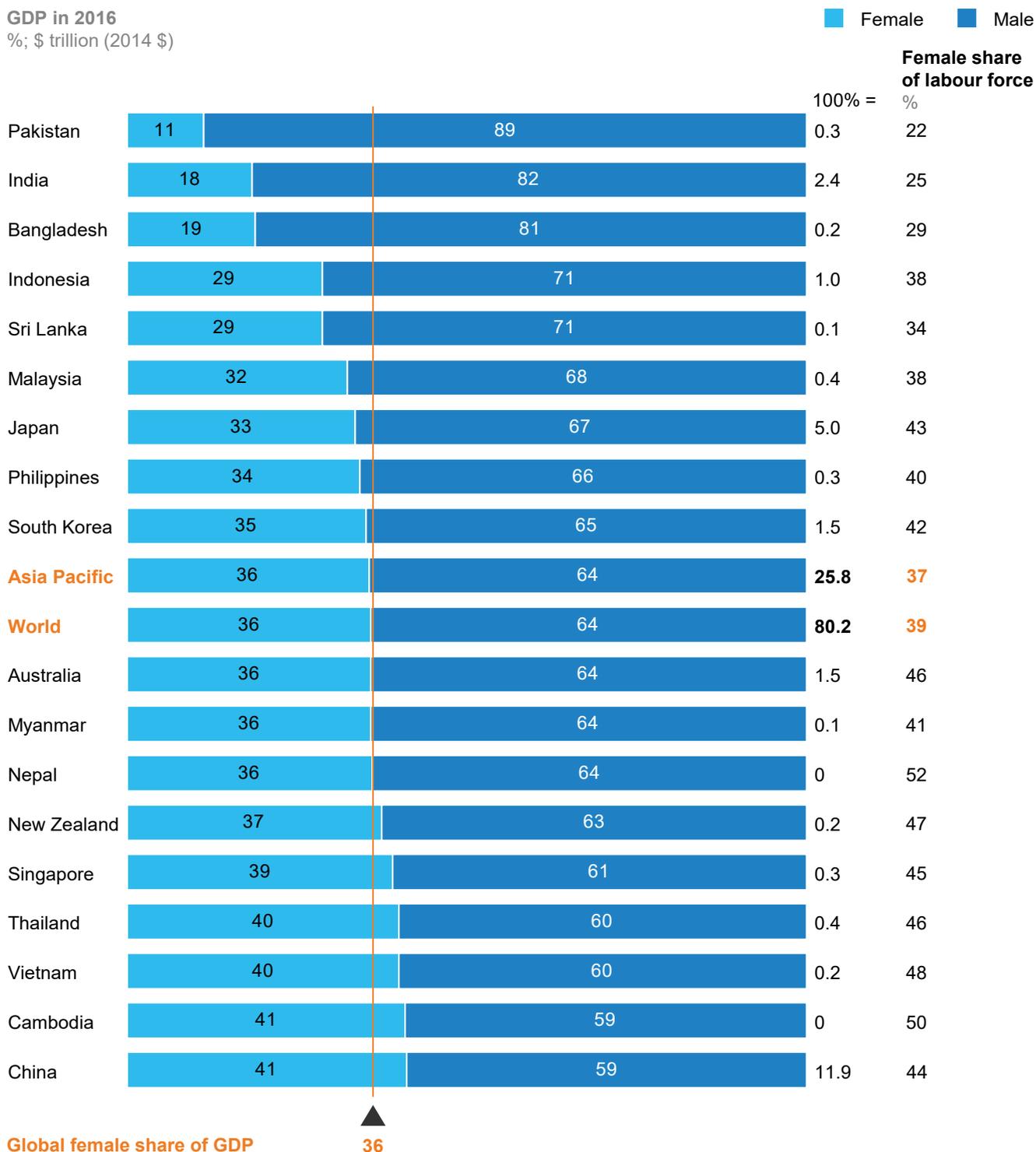
in gender inequality and have examined measures to address them through actions by governments, corporations, non-governmental organisations, and individuals. The measures that we discuss are, by definition, not exhaustive—a broader suite of measures will be needed to fully address gender imbalances. We note, too, that approaches relevant to the formal sector may not be effective in the informal or agricultural sectors.¹ For instance, tax measures and workplace policies such as parental leave may be suitable for the formal sector but not for others, and action to open up access to digital technologies and financial services may be most necessary for those at lower income levels who often live in rural areas and work informally.

In Exhibit 9 at the end of this chapter, we summarise recommended measures that are discussed in each subsequent chapter of this report. We identify five areas that countries might prioritise: (1) focus on higher female labour-force participation, with steps to address unpaid care work as a priority to boost economic growth; (2) address the pressing regional and global issue of women’s underrepresentation in business leadership positions; (3) capture the economic and social benefits of improving access to digital technology; (4) shift social attitudes about women’s role in society and work in order to underpin progress on all aspects of gender inequality; and (5) collaborate on regional solutions as powerful catalysts for gender equality.

¹ Hundreds of millions of women worldwide work informally without social and labour protections in law or in practice. Bringing these women under the protection of regulatory regimes—specifically through measures covering recognition as workers, regulated access to public spaces, freedom of association and collective bargaining, and access to social protection—will be important to addressing gender inequality in countries with large informal sectors, such as India. See *Leave no one behind: A call to action for gender equality and women’s economic empowerment*, Report of the UN Secretary-General’s High-Level Panel on Women’s Economic Empowerment, 2016.

Exhibit 1

Women’s contribution to GDP ranges from 11 to 41 percent across Asia Pacific; the Asia Pacific average is in line with the global average



SOURCE: ILO; World Input-Output Database; IHS; national statistical agencies; Oxford Economics; McKinsey Global Growth Model; McKinsey Global Institute analysis

On the paid work that is measured in GDP statistics, there is significant variation in the share that women contribute among Asian economies. For instance, in China, which generates almost half the region’s GDP and accounts for 35 percent of the region’s female population, women contribute an above-average 41 percent to GDP. However, in India, which generates almost 10 percent of regional GDP and is home to 33 percent of the region’s combined female population, the share is well below average at 18 percent.

MGI's 2015 global report on the power of parity assessed the size of the growth opportunity that could be seized if each country were to narrow its labour-market gender gaps at the same rate as the fastest-improving country in its region.³ In Asia Pacific, most countries would increase female labour-force participation rates relative to male labour-force participation rates for 25- to 54-year-olds at a rate of 1.1 percentage points a year, in line with the experience of Singapore between 2003 and 2013.⁴ At these rates of progress, the region's average labour-force participation rate for prime working-age women would reach 54 percent by 2025, an increase of seven percentage points from 2016. On the second source of additional GDP related to gender equality in work—closing the gap between the paid hours women work compared with men—all countries in the region would bridge the gap by 0.6 percentage point per year, in line with Norway, the country that closed the gap the fastest in the period from 1995 to 2013.⁵ Finally, on the migration of workers to higher-productivity sectors, most countries would increase the share of women moving into such sectors at a rate 0.5 percentage point faster than men, matching the performance of Indonesia.⁶

In a best-in-region scenario for Asia Pacific, we estimate that the region overall could add \$4.5 trillion of GDP a year by 2025 (Exhibit 2). This represents 12 percent more than would be generated according to current forecasts of GDP for 2025. The largest absolute opportunity is in China at \$2.6 trillion, a 13 percent increase over business-as-usual GDP. The largest relative opportunity is in India, which could achieve an 18 percent increase over business-as-usual GDP, or \$770 billion.

MGI's calculation is a supply-side estimate of the size of the additional GDP available from closing the gender gap in employment. It takes into account labour-force participation rates by gender and age cohorts, the prevalence of part-time vs. full-time work among men and women, and employment patterns for men and women across sectors of the economy (see the appendix for more detail). We acknowledge that the supply-side approach needs to be accompanied by demand-side policies that could influence the ability to create jobs to absorb additional female workers. In addition, education and vocational training systems will need to keep pace with rapid technological changes that are altering the nature of work and creating new types of jobs.

To achieve this significant boost to growth will require the region to tackle three economic levers: increase women's labour-force participation rate, increase the number of paid hours women work (part-time vs. full-time mix of jobs), and raise women's productivity relative to men's by adding more women to higher-productivity sectors. Of the total \$4.5 trillion GDP opportunity, 58 percent would come from raising the female-to-male labour-force participation ratio, in line with the global average contribution. A further 17 percent of the GDP opportunity would come from increasing the number of paid hours women work, and the remaining 25 percent from more women working in higher-productivity sectors.

³ In our calculation of the GDP opportunity, we assumed the same labour productivity for men and women within sectors. We excluded any second-order impact from the increased participation by women, including increased consumption by women, any negative impact on male labour-force participation due to increased female participation, and any drag on productivity due to increased labour supply (see the appendix for more detail).

⁴ This benchmark improvement rate was applied to 11 countries, while different rates were applied to other countries (see the appendix for more detail).

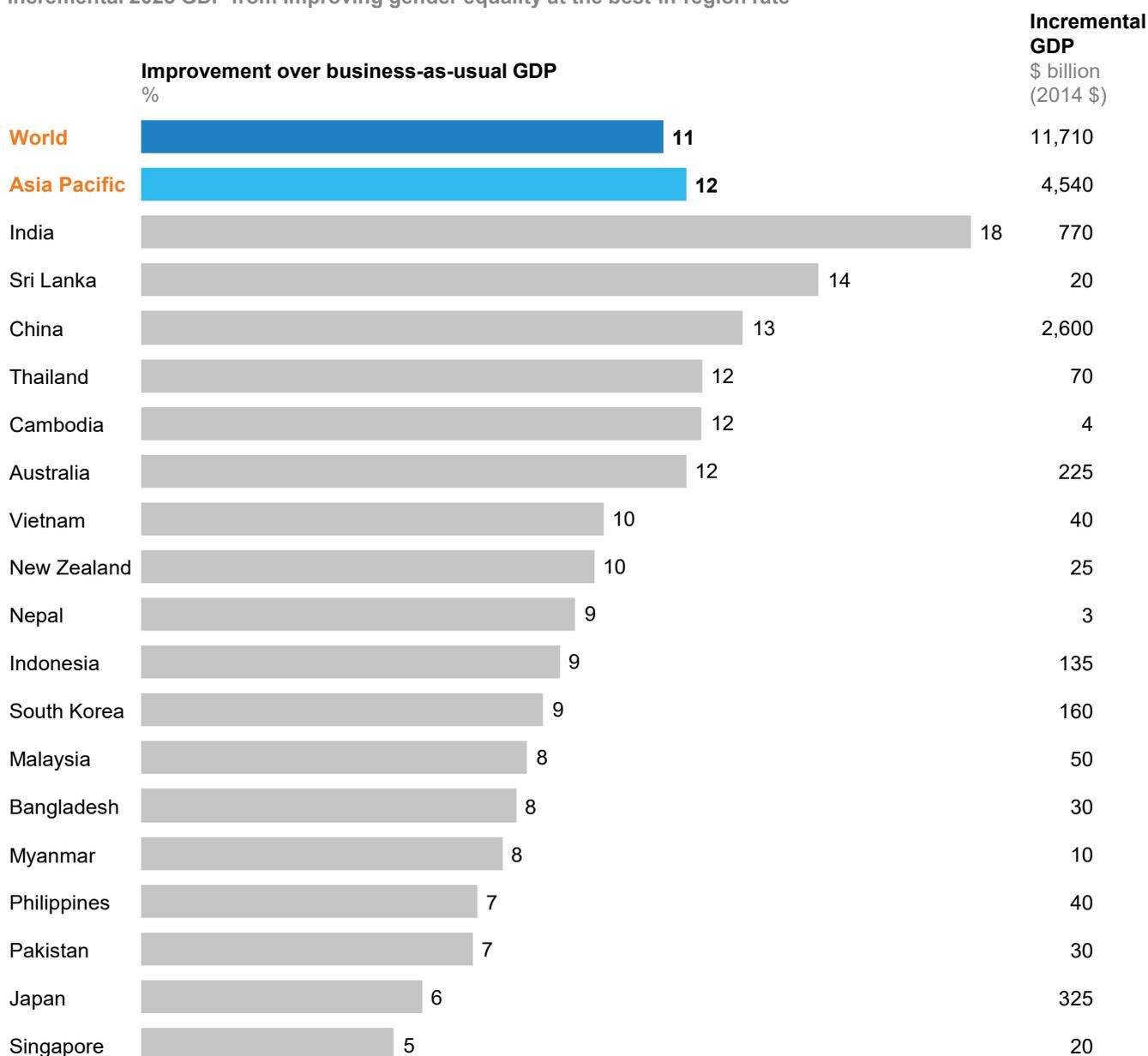
⁵ We benchmarked to Norway because there were not sufficient regional benchmarks, and therefore we chose a global one. Norway was identified as the best performer in a sample of 30 countries, most of which are developed economies. See the appendix of *The power of parity: How advancing women's equality can add \$12 trillion to global growth*, McKinsey Global Institute, September 2015.

⁶ For women's labour-force participation rate and high-productivity sector mix, different rates of improvement were applied to Australia, Bangladesh, India, Nepal, New Zealand, Pakistan, and Sri Lanka to adjust for local circumstances (see the appendix for further detail).

Exhibit 2

In a best-in-region scenario, Asia Pacific could add \$4.5 trillion to annual GDP by 2025, or 12 percent above business as usual

Incremental 2025 GDP from improving gender equality at the best-in-region rate



SOURCE: ILO; World Input Output Database; Oxford Economics; IHS; national statistical agencies; McKinsey Global Growth Model; McKinsey Global Institute analysis

It is difficult to quantify the mechanisms through which increased women’s participation becomes possible (that is, whether it is due to reduced leisure, reduced hours in unpaid work, redistribution of unpaid care work, or the marketisation of that work). However, it is clear that women who are freed from spending some time in unpaid care work would have more opportunity to use and improve their skills and pursue higher-paid professions, boosting GDP. We therefore estimate the economic impact only in GDP terms, while acknowledging that this lens does not measure total welfare and total economic activity. The impact of unpaid work on economic activity and wellbeing warrants further study.

Delivering the power of parity will require investment. Previous MGI research estimated that achieving the \$4.5 trillion GDP opportunity in Asia Pacific will require around \$1.5 trillion of

incremental investment to 2025 to support additional workers, roughly 12 percent higher than the business-as-usual scenario for the region.⁷ Beyond capital to support additional jobs, investment will be needed to close gender gaps in health, education, and other services to enable women to participate more fully in the formal economy. In a 2016 paper, MGI estimated that 20 to 30 percent more spending would be required worldwide to tackle these key aspects of gender inequality in society. However, the return on that investment could be six to eight times higher than the additional social spending required.⁸

THE REGION'S ECONOMIES EXHIBIT MAJOR DIFFERENCES IN THE PATTERNS AND EXTENT OF GENDER INEQUALITY

Gender inequality does not exist purely in the workplace—it affects women's life in society, too. Indeed, one influences the other. Progress on gender equality in work is unlikely to be achievable without progress on gender equality in society. Realising the power of parity will require addressing societal drivers of gender inequality in the workplace including education, health, attitudes towards women working outside the home, access to finance, and more access for women to the internet and the benefits of the digital revolution. That is why MGI uses the broadest possible lens to examine gender inequality.

In its 2015 global analysis of gender inequality, MGI mapped 15 gender equality indicators to arrive at a Gender Parity Score or GPS that runs from 1 (gender parity) to zero (full gender inequality). We colour code four categories: “low inequality” (green), “medium inequality” (yellow), “high inequality” (orange), and “extremely high inequality” (red).⁹ MGI's GPS analysis looks at gender equality in work and in society in the following four dimensions:¹⁰

- **Gender equality in work:** This includes the ability of women to find employment and be compensated fairly for it, share unpaid care work equitably, have the skills and opportunity to perform higher-productivity jobs, and occupy leadership positions. Five indicators are included in this category: labour-force participation rate, professional and technical jobs, perceived wage gap for similar work, leadership positions, and unpaid care work.
- **Essential services and enablers of economic opportunity:** These include healthcare, education, and financial and digital services that are also vital enablers of social progress. We include five indicators in this dimension: unmet need for family planning, maternal mortality per 100,000 births, education level, financial inclusion, and digital inclusion.

⁷ The best-in-region scenario assumes that many women shift out of agriculture into industry and service sectors, narrowing gender productivity gaps, but achieving this shift will require investment: productivity-boosting investment in agriculture (that is, losing workers), and investment to create jobs in the sectors to which women are migrating. Several MGI country studies have discussed measures that can stimulate investment and job creation for inclusive growth. See MGI's reports on Africa, Brazil, Europe, India, and Nigeria, all downloadable free at www.mckinsey.com/mgi. Also see *Global growth: Can productivity save the day in an aging world?* McKinsey Global Institute, January 2015.

⁸ *Delivering the power of parity: Toward a more gender-equal society*, McKinsey Global Institute discussion paper, May 2016.

⁹ For most indicators, low inequality is defined as being within 5 percent of parity, medium between 5 and 25 percent, high between 25 and 50 percent, and extremely high as greater than 50 percent from parity. For physical security and autonomy indicators, we defined extremely high inequality as greater than 33 percent distance from no prevalence (of child marriage or violence against women). For sex ratio at birth and maternal mortality, given the different range of values for these two indicators, slightly different thresholds were used. See the appendix to this report and, for full details of the methodology used in MGI power of parity reports since 2015, the appendix of *The power of parity: How advancing women's equality can add \$12 trillion a year to global growth*, McKinsey Global Institute, September 2015.

¹⁰ MGI has aimed to map gender equality as comprehensively as possible. The indicators we chose typically measure the difference between the position of men and women; these are expressed as a ratio of female-to-male data. Exceptions are sex ratio at birth and unpaid care work, which are expressed as male-to-female ratios. For indicators that apply only to females—child marriage, violence against women, family planning, and maternal mortality—we used the absolute level expressed as a prevalence rate in percentage terms.

- **Legal protection and political voice:** This includes the right to work, access institutions, inherit assets, be protected from violence, and have the opportunity to participate actively in political life.¹¹
- **Physical security and autonomy:** This is the right of women to be safe from bodily harm. We include three indicators: sex ratio at birth, child marriage, and violence against women.

Asia Pacific as a whole has a GPS of 0.56—high gender inequality, according to MGI’s GPS analysis—slightly lower than the global average GPS of 0.61. It places Asia Pacific in the middle of the pack globally, comparing favourably with the Middle East and North Africa (0.50) and in line with sub-Saharan Africa (0.57), but lagging behind Latin America (0.63), Eastern Europe (0.67), and Western Europe (0.71). Globally, some aspects of gender equality are persistent problems in most parts of the world, while in others, some regions have made rapid strides relative to others (see Box 2, “Ten impact zones: Five global and five regional”).

Within Asia Pacific, all countries have some way to go before attaining gender parity, although the patterns of progress towards that ultimate goal vary (Exhibit 3). Differences in gender equality among countries are greater in work-related indicators than in societal indicators, although the two are closely linked. The Philippines stands out for the extent of its progress towards gender equality in work, followed by New Zealand and Singapore. The six countries that are furthest away from gender parity in work, performing well below the regional average, are Bangladesh, India, Japan, Nepal, Pakistan, and South Korea. The countries that are the closest to gender parity in society are Australia and New Zealand—with the most progress towards parity in essential services and enablers of economic opportunity, and legal protection and political voice—and Singapore, which is most advanced towards parity on physical security and autonomy. Pakistan has room to improve on most aspects of gender equality in society, and its South Asian neighbours Bangladesh, India, and Nepal also have a considerable distance to travel. Legal protection and political voice stands out as an area in which many countries of Asia Pacific have much progress to make.

¹¹ We use a composite index of 11 indicators spanning laws to protect individuals against violence, ensure parity in inheriting property and accessing institutions, and safeguard the right to find work and be fairly compensated.

Box 2. Ten impact zones: Five global and five regional

MGI’s global research in 2015 identified ten “impact zones”—concentrations of gender inequality that cover more than three-quarters of the women in the world affected by the gender gap. Five of these impact zones are global: blocked economic potential, time spent on unpaid care work, fewer legal rights, political underrepresentation, and violence against women. As global impact zones, these are present in Asia Pacific in varying degrees—for instance, violence against women is lower in East Asia than in other subregions. Five other impact zones are regional, and appear in parts of Asia Pacific.

Low labour-force participation in quality jobs is particularly problematic in South Asia (except Sri Lanka). Low maternal and reproductive health is an issue in the region’s lower-income countries such as Nepal. Unequal education levels are a particular issue in Pakistan. Financial and digital exclusion appears mainly in South Asia (except Sri Lanka) and Myanmar. Finally, girl-child vulnerability, which we measure using the indicators of sex ratio at birth and child marriage, is a pressing issue in China, India, and Vietnam.¹ The recommendations in this report are not exhaustive and therefore do not address all ten impact zones.

¹ *The power of parity: How advancing women’s equality can add \$12 trillion to global GDP*, McKinsey Global Institute, September 2015.

Exhibit 3

Countries across Asia Pacific have a significant way to go to bridge the gender gap

Gender Parity Score (GPS) Level of gender inequality ■ Extremely high ■ High ■ Medium ■ Low

Region	Country	Female population, 2016 Million	Gender equality in society			
			Gender equality in work ¹	Essential services and enablers of economic opportunity ²	Legal protection and political voice ³	Physical security and autonomy ⁴
Oceania	Australia	11.9	0.66	0.95	0.55	0.86
	New Zealand	2.3	0.72	0.96	0.66	0.81
East Asia	China	671.2	0.51	0.93	0.37	0.89
	Japan	65.2	0.42	0.87	0.30	0.91
	South Korea	24.9	0.39	0.89	0.33	0.87
Southeast Asia	Indonesia	125.6	0.52	0.88	0.37	0.82
	Philippines	50.0	0.73	0.91	0.51	0.90
	Vietnam	46.8	0.55	0.95	0.32	0.80
	Thailand	34.3	0.66	0.92	0.18	0.74
	Myanmar	27.6	0.57	0.80	0.22	0.77
	Malaysia	15.5	0.51	0.88	0.19	0.89
	Cambodia	7.9	0.52	0.86	0.32	0.86
	Singapore	2.8	0.68	0.94	0.36	0.96
	South Asia	India	612.2	0.30	0.78	0.28
Pakistan	90.0	0.22	0.56	0.16	0.73	
Bangladesh	78.4	0.34	0.82	0.26	0.64	
Nepal	14.5	0.38	0.77	0.29	0.79	
Sri Lanka	11.0	0.48	0.95	0.16	0.78	
Asia Pacific best			0.73	0.96	0.66	0.96
Asia Pacific average⁵			0.44	0.85	0.32	0.82
Global best			0.73	0.97	0.84	0.97

1 Comprising labour-force participation, professional and technical jobs, perceived wage gap for similar work, leadership positions, and unpaid care work.

2 Comprising unmet need for family planning, maternal mortality, education, financial inclusion, and digital inclusion.

3 Comprising political representation and a legal protection index (including, for example, legislation protecting against domestic violence, providing equal inheritance rights and paternity or parental leave, and mandating non-discrimination in hiring).

4 Comprising sex ratio at birth, child marriage, and violence against women.

5 Weighted by 2016 female population.

NOTE: GPS calculations use a sum of squares method with equal weighting of indicators. Numbers are rounded to two decimal places. Colour coding is based on actual, not rounded, values. For further details on this, and the underlying GPS indicators, see the appendix.

SOURCE: McKinsey Global Institute analysis

At the level of individual indicators, the differences between countries—and the opportunities for improvement—are even clearer (Exhibit 4). Within gender equality in work, the female-to-male ratio in labour-force participation ranges from 0.92 in Nepal to 0.30 in Pakistan, but getting more women into the labour force is a major opportunity in many countries, including Bangladesh, India, Indonesia, Japan, Malaysia, and South Korea. The ratio of women vs. men in professional and technical jobs is above 1.00 in seven countries, including Australia, China, New Zealand, the Philippines, and Thailand, but less than 0.5 in Bangladesh, Nepal, and Pakistan. The low level of women in leadership positions is apparent throughout the region, with only the Philippines achieving a female-to-male ratio of close to 1.00 on this indicator. Unpaid care work is unequally distributed between men and women, not only in countries with low female labour-force participation rates, but also in Australia, China, and New Zealand, where many more women are part of the paid workforce.

Within gender equality in society, gender gaps in education are relatively narrow in most countries, although maternal mortality and financial and digital inclusion are significant improvement opportunities in most parts of South Asia and Southeast Asia. Sex ratio at birth is a stubborn issue in China, India, and Vietnam where the male-to-female ratio exceeds 1.10. Child marriage is a particularly common issue for girls and women in Bangladesh, and violence against women continues to be prevalent in many countries. Most countries of Asia Pacific can also improve substantially on legal protection and political voice.

While gender outcomes vary significantly among Asia Pacific countries, our analysis shows equally large variations within certain countries (Exhibit 5). Countries such as India and Indonesia with significant geographic and economic diversity tend to have the highest internal variations. For example, the female-to-male labour-force participation ratio is approximately 0.8 in the Indian state of Nagaland (higher than in Brazil) but below 0.2 in Chandigarh and Delhi (lower than in Saudi Arabia). In the Indonesian provinces of Sumatera Barat and Lampung, the female-to-male tertiary education ratios are 1.36 and 1.38, respectively—similar to the United States—but 0.69, close to the national average in Kenya, in Nusa Tenggara Barat. Interestingly, subnational variations seem less dramatic in China and the Philippines despite their internal diversity.

Variations in gender outcomes between and within countries appear to be broadly correlated with differences in per capita GDP, but there are clearly non-economic factors at play. Consider China and India, which have marked variations in per capita GDP at the subnational level but very different patterns of gender inequality. Essentially, variations in gender outcomes are much larger in India than they are in China, which may reflect the presence of non-economic factors such as local cultural norms.

The fact that there is large variation in gender outcomes among the region's constituent economies underscores the need for national governments to tailor measures designed to further women's equality to the particular economic and social context of their individual nations. At the same time, the many aspects of gender inequality that countries experience in common indicate that there are opportunities for governments, companies, and non-governmental organisations (NGOs) to collaborate, learning from one another's experiences and spreading best practices (for more, see the final section of this summary on the agenda for change).

Exhibit 4

Asia Pacific's performance varies on gender equality indicators (1 of 2)

Level of gender inequality ■ Extremely high ■ High ■ Medium ■ Low

Region	Country	Female population, 2016 Million	Per capita GDP, 2016 \$, current purchasing power parity	Gender equality in work				
				Labour-force participation rate F/M ratio	Professional and technical jobs F/M ratio	Perceived wage gap for similar work F/M ratio	Leadership positions F/M ratio	Unpaid care work M/F ratio
Oceania	Australia	11.9	46,790	0.83	1.19	0.60	0.58	0.55
	New Zealand	2.3	39,059	0.85	1.25	0.71	0.67	0.58
East Asia	China	671.2	15,535	0.81	1.07	0.59	0.20	0.39
	Japan	65.2	41,470	0.70	0.66	0.61	0.15	0.21
	South Korea	24.9	35,751	0.70	0.93	0.45	0.12	0.19
Southeast Asia	Indonesia	125.6	11,612	0.61	0.94	0.63	0.30	No data
	Philippines	50.0	7,806	0.64	1.42	0.76	0.96	No data
	Vietnam	46.8	6,424	0.89	1.19	0.58	0.35	No data
	Thailand	34.3	16,917	0.79	1.31	0.73	0.48	0.56
	Myanmar	27.6	5,773	0.93	1.12	No data	0.40	No data
	Malaysia	15.5	27,681	0.64	0.80	0.76	0.26	No data
	Cambodia	7.9	3,736	0.87	0.57	0.72	0.45	0.25
	Singapore	2.8	87,856	0.76	0.91	0.78	0.52	No data
South Asia	India	612.2	6,572	0.34	No data	0.50	No data	0.10
	Pakistan	90.0	5,249	0.30	0.28	0.48	0.03	0.10
	Bangladesh	78.4	3,581	0.53	0.39	0.46	0.13	0.27
	Nepal	14.5	2,468	0.92	0.43	0.52	0.22	No data
	Sri Lanka	11.0	12,316	0.40	0.97	0.63	0.33	No data
Asia Pacific best				0.93	1.42	0.78	0.96	0.58
Asia Pacific average¹				0.60	0.95	0.56	0.25	0.25
Global best				1.00	2.66	0.86	1.13	0.85

¹ Weighted by 2016 female population.

NOTE: For further details on the indicators used here, see the appendix.

SOURCE: McKinsey Global Institute analysis

Exhibit 4 (continued)

Asia Pacific's performance varies on gender equality indicators (2 of 2)

Level of gender inequality ■ Extremely high ■ High ■ Medium ■ Low

		Gender equality in society									
		Essential services and enablers of economic opportunity					Legal protection and political voice		Physical security and autonomy		
Region	Country	Unmet need for family planning	Maternal mortality	Education level	Financial inclusion	Digital inclusion	Legal protection Index	Political representation F/M ratio	Sex ratio at birth	Child marriage	Violence against women
		% of women	Per 100,000 births	F/M ratio	F/M ratio	F/M ratio			M/F ratio	% of girls and young women	% of women
Oceania	Australia	11	6	1.00	1.00	1.00	1.00	0.36	1.06	1	25
	New Zealand	9	11	1.00	1.00	1.00	0.83	0.55	1.06	1	33
East Asia	China	4	27	0.97	0.87	No data	0.58	0.20	1.16	3	15
	Japan	20	5	0.95	0.80	0.97	0.51	0.14	1.06	1	15
	South Korea	6	11	0.86	0.81	0.93	0.58	0.15	1.07	0	23
Southeast Asia	Indonesia	12	126	0.98	0.81	0.86	0.45	0.29	1.05	26	No data
	Philippines	18	114	1.00	1.00	No data	0.70	0.37	1.06	2	18
	Vietnam	6	54	0.97	1.00	No data	0.47	0.19	1.10	8	34
	Thailand	6	20	0.98	0.84	0.98	0.29	0.09	1.06	11	44
	Myanmar	16	178	0.98	0.60	No data	0.39	0.08	1.03	12	38
	Malaysia	18	40	0.98	0.82	0.96	0.28	0.10	1.06	6	No data
	Cambodia	13	161	0.86	0.80	0.97	0.50	0.17	1.06	20	14
	Singapore	11	10	0.96	1.00	0.96	0.64	0.17	1.07	0	No data
South Asia	India	13	174	0.87	0.66	0.72	0.40	0.18	1.11	21	37
	Pakistan	20	178	0.74	0.17	0.59	0.20	0.12	1.09	27	39
	Bangladesh	12	176	0.84	0.83	0.73	0.39	0.16	1.05	34	53
	Nepal	23	258	0.84	0.74	No data	0.38	0.21	1.05	24	28
	Sri Lanka	7	30	0.99	0.96	No data	0.29	0.05	1.04	9	38
Asia Pacific best		4	5	1.00	1.00	1.00	1.00	0.55	1.03	0	14
Asia Pacific average¹		10	102	0.92	0.76	0.77	0.47	0.19	1.11	14	28
Global best		4	3	1.00	1.00	1.00	1.00	0.93	1.02	0	6

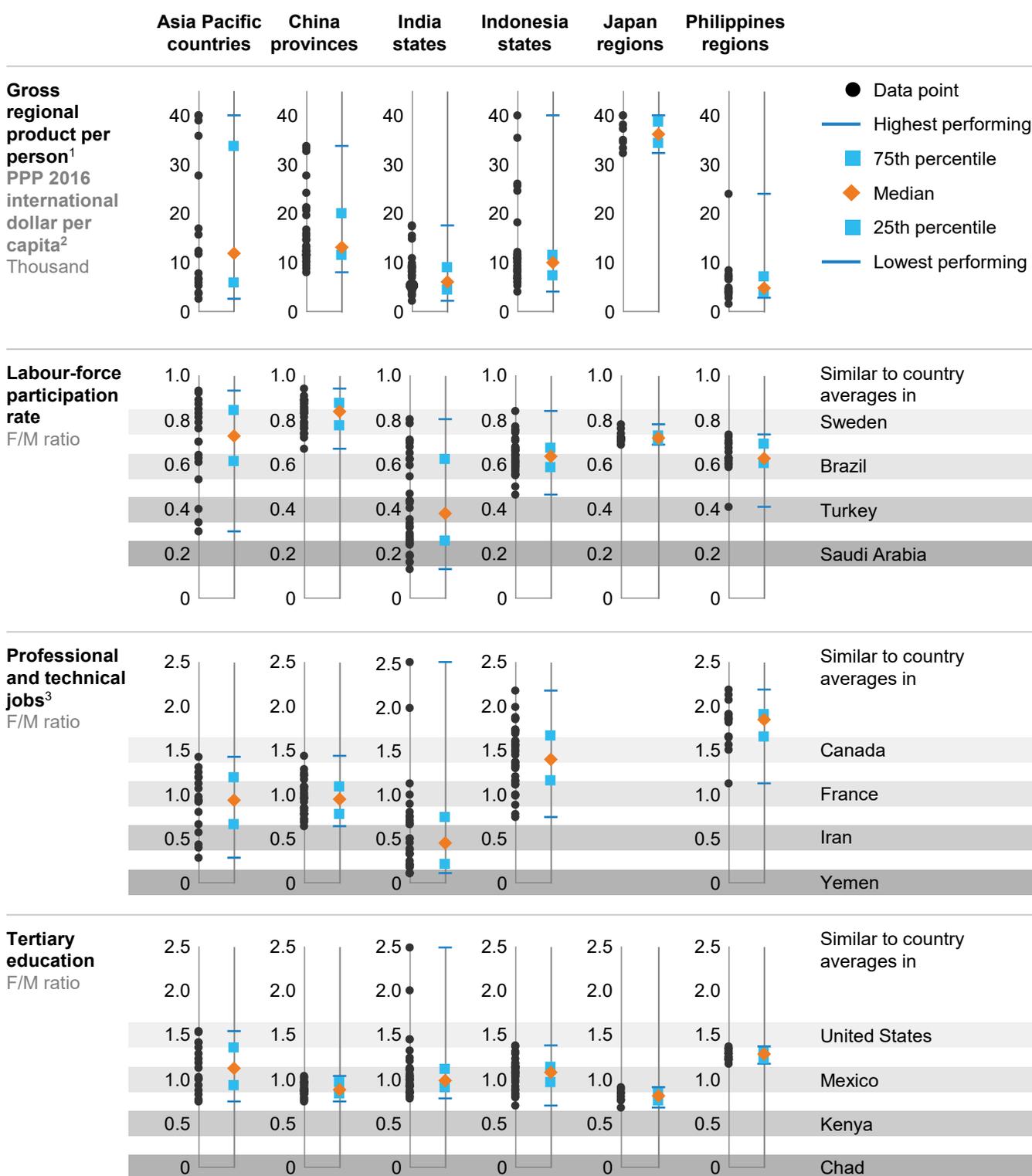
¹ Weighted by 2016 female population.

NOTE: For further details on the indicators used here, see the appendix.

SOURCE: McKinsey Global Institute analysis

Exhibit 5

There is significant variation in gender equality between and within Asia Pacific countries



1 For display purposes, values above \$40,000 have been set to \$40,000. In Asia-Pacific, this includes Australia (\$46,790), Japan (\$41,470) and Singapore (\$87,856). Within Indonesia, this includes DKI Jakarta (\$51,769). Within Japan, this includes Chubu (\$40,985) and Kanto (\$44,104).

2 Except Japan's regions, which are in PPP 2014 International dollar per capita.

3 For display purposes, outlier removed for professional/technical jobs in India: Lakshadweep (18.8 F/M), and Chandigarh set to 2.50 (2.52 F/M).

NOTE: Not to scale. Similar countries are representative only. Their values typically fall within or close to the bands depicted here.

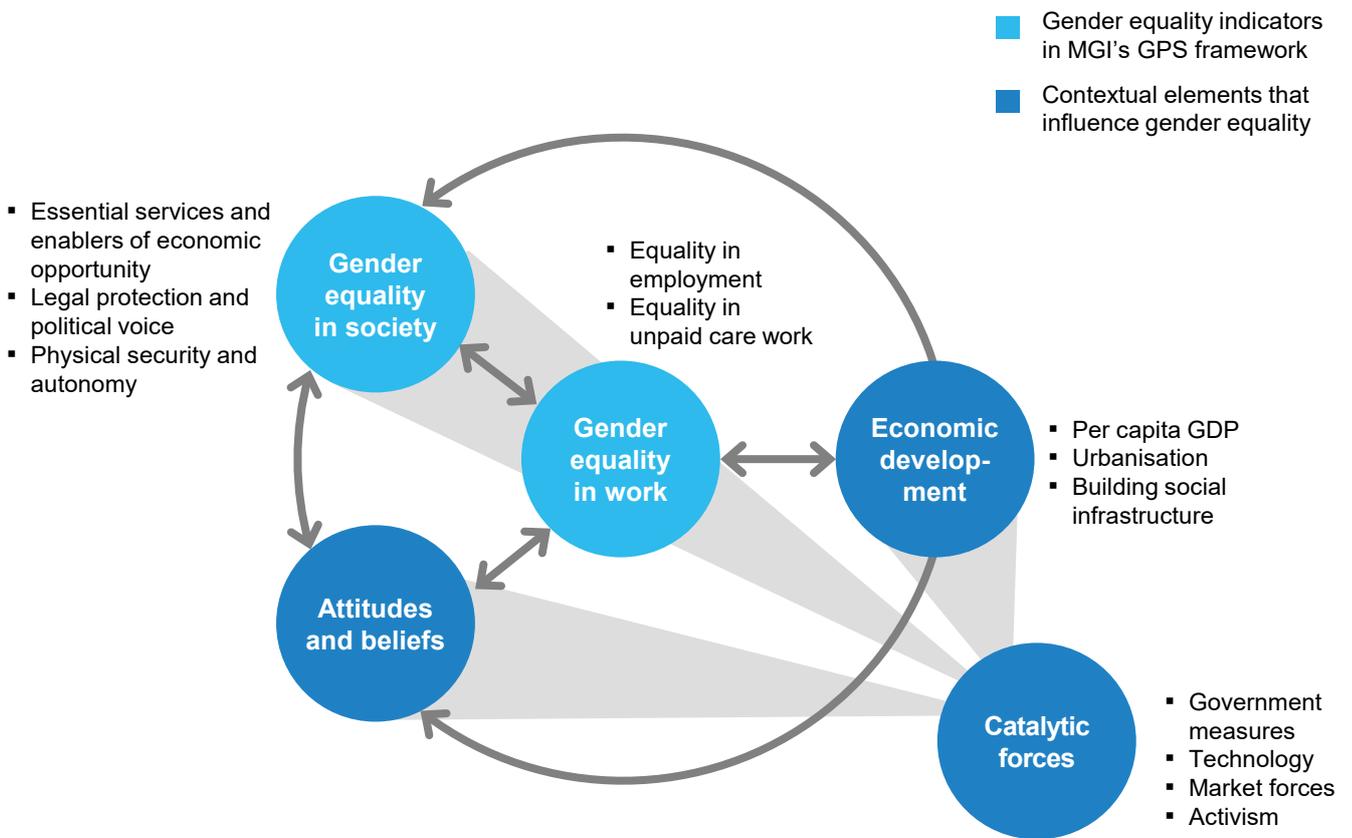
SOURCE: ILOSTAT, 2016; UNESCO STAT, 2016; World Bank, 2016; China National Bureau of Statistics, 2012, 2016; China Ministry of Human Resources and Social Security, 2011; India Ministry of Statistics and Programme Implementation, 2016; India Ministry of Labour and Employment, 2016; India Ministry of Human Resource Development, 2016; Statistics Indonesia, 2013, 2016; Japan Cabinet Office, Government of Japan, 2014; Japan Ministry of Internal Affairs and Communications, 2014, 2016; Obunsha Educational Information Center, 2017; Philippines Statistics Authority, 2015, 2016; IMF World Economic Outlook Database, 2017; McKinsey Global Institute analysis

ECONOMIC DEVELOPMENT HEAVILY INFLUENCES GENDER OUTCOMES IN ASIA PACIFIC, BUT OTHER NON-ECONOMIC FACTORS ARE ALSO SIGNIFICANT

Economic development has a significant influence on gender equality outcomes but does not fully account for differences between and within countries in Asia Pacific. Other factors at work include cultural attitudes and beliefs, and catalysts such as government action, technological development, market forces, and activism. These factors help to explain the significant variations in gender outcomes between—and within—Asia Pacific countries, and are often complex and mutually reinforcing: improvement on any of them is likely to have some positive impact on the others, creating a virtuous cycle (Exhibit 6).

Exhibit 6

Gender equality is shaped by contextual elements such as economic development, attitudes about women, and catalytic forces that provide impetus for change



SOURCE: McKinsey Global Institute analysis

- **Economic development:** Gender outcomes in Asia Pacific appear to be closely tied to the stage of economic development. In its 2015 global report on the power of parity, MGI conducted a correlation analysis suggesting that per capita GDP is strongly linked to almost all aspects of gender equality in society.¹² Economic development in itself can create momentum towards a further narrowing of gender gaps, provided countries use the dividend of higher GDP growth to boost investment in social infrastructure, for example education and healthcare. However, relying on economic development alone is a slow process. The fact that some aspects of gender inequality are present in both developing and advanced economies is testament to the fact that economic development alone cannot solve these complex issues. Moreover, there is a nuanced correlation between economic development and indicators of gender equality in work. Women’s labour-participation rates dip in middle-income countries and rise again in more advanced economies, reflecting not only cultural barriers and personal choices, but also changes in the opportunity cost of women working as opposed to caring for children and the elderly.¹³ The relationship between urbanisation and progress on gender inequality is also nuanced. While urbanisation generally correlates with growth in per capita GDP and improved gender outcomes, in the short term urbanisation may make it more difficult for some women to work for pay because employment in cities is more regulated and less flexible, and childcare is more expensive.

In Asia Pacific, economic development has a significant influence on gender equality outcomes but does not fully account for differences between countries (Exhibit 7). The correlation between economic development and progress towards gender parity is much clearer in the case of gender equality in society than in gender equality in work. In the case of gender equality in society, countries tend to cluster quite clearly into subregions broadly aligned with per capita GDP—South Asia, Southeast Asia, East Asia, and, finally, Australia and New Zealand in their own cluster. Yet the scores on gender equality in society in Japan, Singapore, and South Korea are more similar to those in China, Indonesia, and Vietnam than to those in other advanced economies in the region such as Australia and New Zealand. This highlights the influence of non-economic factors on gender outcomes.

On gender equality in work, countries in South Asia have the furthest to go before achieving parity, but Southeast Asian countries have generally advanced further than higher-GDP East Asian countries. The Philippines stands out for its achievements on narrowing gender gaps in work.

¹² While gender equality in society outcomes do improve with economic development, this does not mean that countries with high per capita GDP have “solved” gender equality in society issues. The evidence for this includes global impact zones of violence against women, underrepresentation of women in politics, and weak legal protection for women.

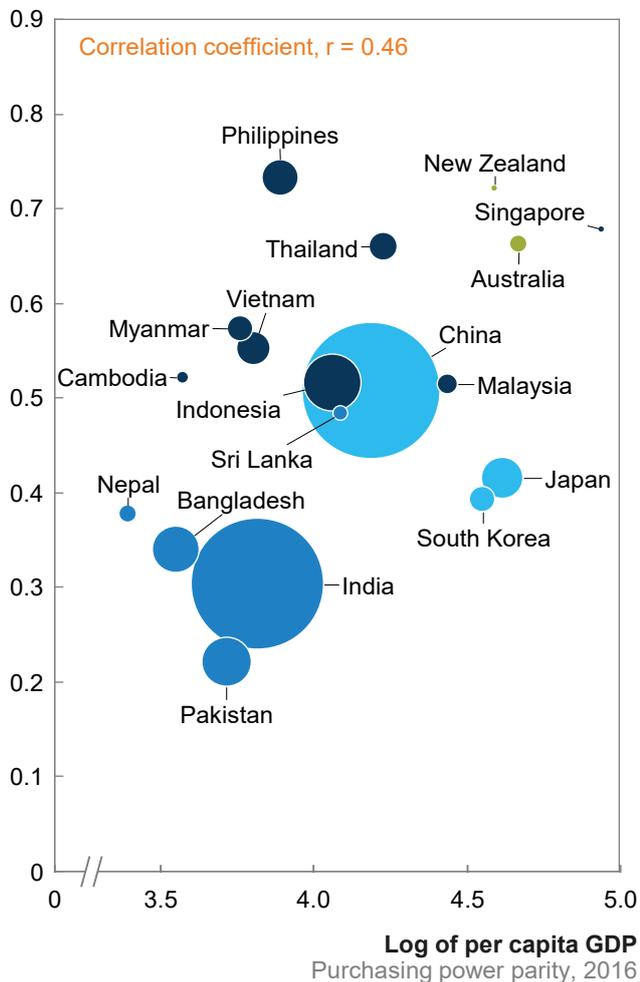
¹³ There is a U-shaped curve relationship between the participation of women of prime working age and per capita GDP. See Exhibit 8 in *The power of parity: How advancing women’s equality can add \$12 trillion to global growth*, McKinsey Global Institute, September 2015.

Exhibit 7

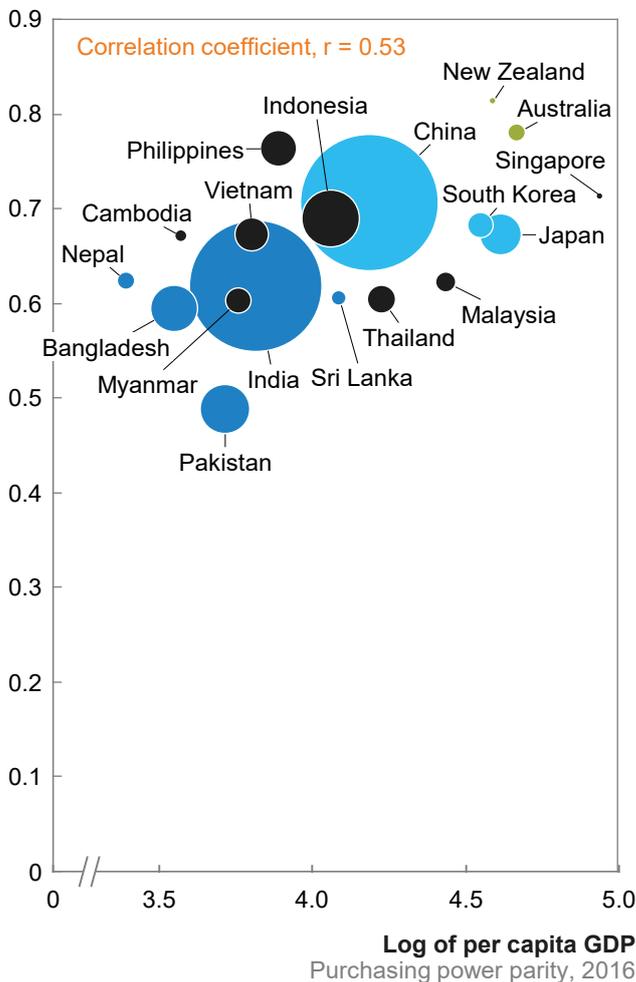
Equality in work and society tends to increase with per capita GDP, but with some variations

Bubble size = Female population, 2016 (million) 100 ● Oceania ● East Asia ● South Asia ● Southeast Asia

Gender Parity Score: Gender equality in work¹



Gender Parity Score: Gender equality in society²



1 Includes labour-force participation rate, professional and technical jobs, perceived wage gap for similar work, leadership positions and unpaid care work.
 2 Includes essential services and enablers of economic opportunity, legal protection and political voice, and physical security and autonomy.

SOURCE: McKinsey Global Institute analysis

- Cultural attitudes and beliefs:** Attitudes can affect gender outcomes in work and in society. We have analysed the World Values Survey and Organisation for Economic Co-operation and Development (OECD) data and found a strong link between societal attitudes that limit women’s potential and gender-equality outcomes in a given region.¹⁴ On average in Asia (excluding Australia and New Zealand), cultural attitudes reflected in the World Values Survey are similar to global averages. On women’s role in the workplace, for instance, 45 percent of respondents in Asia agree that men should have more right to a job than women when jobs are scarce, compared with 39 percent of respondents globally. Nearly half of respondents both in Asia and globally agree that children suffer when a mother works for pay. Cultural attitudes can reinforce expectations about the roles women are best equipped to play. In Indonesia, for example, the concept of *kodrat* embodies society’s expectation that women are

¹⁴ Throughout this report, we refer to the 2010–14 World Values Survey. See *WVS Wave 6 (2010–2014)*, (<http://www.worldvaluessurvey.org/WVSDocumentationWV6.jsp>).

nurturing and should take care of domestic commitments before engaging in any other activities.¹⁵ Beyond affecting the role of women in work, cultural attitudes can impact more fundamental notions of the value of women and girls in society. One example is the phenomenon of “son bias” or the preference for the male child. It results in a skewed male-to-female sex ratio at birth in countries such as China (1.16) and India (1.11), driven by sex-selective abortions and sometimes by younger girls being neglected in favour of their male siblings.¹⁶ Changing societal attitudes can play an important role in changing gender outcomes, but the link may not be obvious or sufficient. For example, the Philippines’ proportion of female political leaders is more than double that of Japan, despite the fact that twice as many Filipinos as Japanese agree with the statement that men make better political leaders than women. This may be driven by factors including legislated gender quotas at the subnational level in the Philippines since 1991—which have in turn influenced political parties to adopt their own voluntary quotas—underscoring the potential impact of catalytic forces such as government action on gender outcomes.¹⁷

- **Government measures:** Government measures—whether in the form of legislation, fiscal measures, programmatic change, or public-private partnerships—have the potential to influence gender outcomes directly, or indirectly by targeting society’s economic development or attitudes and beliefs. Asia Pacific offers many examples of government initiatives, often in conjunction with the private sector, and legislation leading to significant progress on certain gender equality indicators. For instance, the government of Singapore has clearly contributed to the city-state’s progress on inequality in labour-force participation through a range of policies that help women to balance family responsibilities and work. Measures in place include paid maternity leave, paid and unpaid childcare leave, increased tax relief, tax rebates, and childcare subsidies. As far back as 1978, the government put in place a Foreign Domestic Servant Scheme, enabling employment of women from other countries. This raised the rate of labour-force participation among married women by 145 percent between 1970 and 2016.¹⁸ In the Philippines, the government set up the Philippines Commission of Women to ensure the inclusion of gender policies at all levels of government. The commission also implemented gender and development budgeting, or GAD, which requires a minimum of 5 percent of the national government budget be allocated for gender and development initiatives such as microfinance pilot programmes to help informal-sector workers open bank accounts, and providing legal support to improve workplace safety and access to jobs. Australia’s federal Workplace Gender Equality Agency (WGEA) reviews compliance of employers with the Workplace Gender Equality Act 2012, including reporting on workforce representation and pay by gender, and offers support in designing gender initiatives. Similarly, legislation enacted in Japan in 2015 requires large companies (with more than 300 employees) to report on gender diversity and improvement plans. Action can also be taken by governments working together. For example, Asia-Pacific Economic Cooperation (APEC) has a number of gender initiatives, including collecting and reporting on regionwide gender-disaggregated data and helping member economies to develop Individual Action Plans for the Enhancement of the Ratio of Women’s Representation in Leadership, including voluntary targets.

¹⁵ Sari Andajani, Olivia Hadiwirawan, and Yasinta Astin Sokang, “Women’s leadership in Indonesia: Current discussion, barriers, and existing stigma”, *Indonesian Feminist Journal*, volume 4, number 1, March 2016.

¹⁶ A review of literature on sex ratio at birth found that the natural male-to-female ratio at birth is typically in the neighbourhood of 1.06. See Stephan Klasen and Claudia Wink, “Missing women: Revisiting the debate”, *Feminist Economics*, volume 9, issue 2–3, 2003.

¹⁷ *Enacting a women’s political participation and representation law*, policy brief number 4, Philippine Commission on Women (<http://www.pcw.gov.ph/wpla/enacting-women%E2%80%99s-political-participation-and-representation-law>).

¹⁸ While foreign workers in Singapore are offered protections under local laws, the International Labour Organization (ILO) notes that Singapore is the only country in the Association of Southeast Asian Nations that has yet to ratify its Convention on Domestic Workers.

- **Technology:** In the digital age, technological developments are likely to be a major factor in accelerating progress towards parity if their full power is harnessed. On digital inclusion of women, Asia Pacific has a GPS of 0.77, somewhat behind the global average of 0.85. GSMA has estimated that there are 1.1 billion unconnected women in low- and middle-income countries in the region.¹⁹ Yet use of digital technologies is truly transformative—it unlocks doors to finance and even healthcare, saves cost and time, and helps drive access to information and marketplaces, for instance.²⁰ Just as mobile banking enables women to avoid long journeys to the ATM or bank, technology-enabled healthcare delivered via phone or tablet can reach women even in the remotest areas and save them time travelling to see a doctor. In both cases, there is an impact on the time women spend on unpaid household or family tasks, and, for some women, access to services that were previously out of reach.²¹ Digital technologies offer channels to new customers and business models. Women-owned micro, small, and medium-sized enterprises (MSME) generate 35 percent of e-commerce revenue, compared with only 15 percent of offline MSME revenue.²² Digital technologies enable individual microentrepreneurs and even one-woman micromultinationals to sell to global markets at a low cost and with a high degree of flexibility—attractive characteristics for women balancing home and work responsibilities.²³ And digital technologies give women a low-cost and easy way to network and to have their voices heard as never before. In India, the rapid adoption of cable television—150 million individuals gained access between 2001 and 2006—has been identified as a potential driver of positive changes in attitudes towards women’s role in the household and reductions in domestic violence.²⁴
- **Market forces:** Competitive market forces can also be a positive catalyst for change. In technology, for example, market forces can make the internet more accessible to women. In 2015, 72 percent of women in India did not own a phone, compared with 57 percent of men, and in one survey half of Indian women said that the cost of a handset was the major reason.²⁵ But prices are heading downwards—the average cost of a smartphone in India has already fallen 45 percent in the past five years, opening up the possibility of owning one for many more women and giving them a gateway to a range of services, from finance to healthcare and education. A key reason for prices dropping has been competition. In India, for instance, Reliance Jio was able to reduce prices of data and voice packages by investing heavily in 4G, and other companies cut their prices in order to compete. Market forces in the skills market can also play a role in driving towards gender parity. In Australia, the shift from resource-intensive to service-based industries has been highlighted as a potential driver of faster growth in women’s labour-force participation relative to men.²⁶ Throughout the region, the emergence

¹⁹ *Bridging the gender gap: Mobile access and usage in low- and middle-income countries*, GSMA, 2015.

²⁰ MGI research in 2016 found that two billion people and 200 million businesses in emerging economies lack access to savings and credit, and that digital technologies can help to close this gap. The research found that financial services delivered via mobile phones and the internet could provide access to finance for 1.6 billion people in emerging economies, more than half of them women. Overall, widespread use of digital finance could boost the annual GDP of all emerging economies by \$3.7 trillion by 2025, a 6 percent increase vs. a business-as-usual scenario. We should note that although digital technologies help connect people to financial institutions, they do not guarantee improved credit—and that it is important that any increased access to credit does not result in unsustainable indebtedness. See *Digital finance for all: Powering inclusive growth in emerging economies*, McKinsey Global Institute, September 2016.

²¹ *Digital China: Powering the economy to global competitiveness*, McKinsey Global Institute, December 2017.

²² McKinsey survey of Indonesian e-commerce merchants, 2017. N = 700.

²³ *Global flows in a digital age: How trade, finance, people, and data connect the world economy*, McKinsey Global Institute, April 2014.

²⁴ Robert Jensen and Emily Oster, “The power of TV: Cable television and women’s status in India”, *Quarterly Journal of Economics*, volume 124, issue 3, August 2009.

²⁵ *Accelerating affordable smartphone ownership in emerging markets*, GSMA, July 2017. Unconnected women are those who do not own a mobile phone but may borrow one. See *Bridging the gender gap: Mobile access and usage in low- and middle-income countries*, GSMA, 2015.

²⁶ *More jobs. Great workplaces: Annual report 2015–16*, Australian Government Department of Employment, 2016.

of ride-hailing services may significantly improve women's mobility, thus enabling greater economic, social, and civic participation and reducing the time they spend doing household chores. Almost one-quarter of women in one survey said ride-hailing increases their sense of independence; 9 percent of Indonesian women said that ride-hailing enables them to go out at night when they otherwise could not.²⁷

- **Activism:** Social movements and organisations mobilising the grassroots have historically been a powerful catalyst for change, from the suffragettes in the United Kingdom over a century ago to the current #MeToo movement. Indeed, social media and mobile internet devices have only amplified the reach and pace of social activism. Beyond global movements such as #MeToo, local activist campaigns have achieved significant change in Asia Pacific in recent years. Popular outrage over the brutal rape and murder of an Indian girl in 2012 spurred legal reforms regarding sexual offences, for instance.²⁸ In Bangladesh, the mobilisation of self-help groups has helped to improve the economic situation of many poor people, including women.²⁹

To ensure Asia Pacific's continued progress towards gender parity, the virtuous cycle needs to be working well, powered by continued economic development. In addition, we see positive catalytic forces through government measures, market forces, new technologies, and activism playing a significant role in shaping gender outcomes. Government action, in particular, will be necessary both to accelerate progress and to achieve measurable change in globally consistent areas of inequality such as female leadership representation, which have proven persistent irrespective of economic development.

ASIA PACIFIC COUNTRIES HAVE MADE PROGRESS ON GENDER EQUALITY IN RECENT YEARS, BUT THERE IS STILL A LONG WAY TO GO

The past decade has seen many advances in addressing gender inequality in society in Asia Pacific. South Asia and Southeast Asia in particular have achieved significant improvements in health and education outcomes, which are generally correlated with economic development. However, the picture on indicators of gender equality in work is more mixed, particularly on women's participation in the labour force, on which some countries have advanced but others have regressed (Exhibit 8).³⁰

In the sphere of women's health, maternal mortality, measured as maternal deaths per 100,000 live births, has dropped across the board. In 2016, Nepal was the lowest-performing country in the region on this indicator, and over the past ten years it achieved the largest fall in maternal mortality—a drop of 186 deaths per 100,000 live births, or 42 percent. Other countries registering large improvements were Cambodia (minus 154), Bangladesh (minus 143), and India (minus 106). All countries in Asia have some way to go on tackling unmet need for family planning. China, the best-performing country in the region, stands out for its progress on this front. The proportion of women with unmet family planning needs has dropped consistently over the past decade—by 12 percentage points in Cambodia, five percentage points in Pakistan, and four percentage points in Bangladesh and the Philippines. Cambodia and Vietnam have regressed on sex ratio at birth, which may reflect increased availability of early diagnosis of foetal sex and abortion services.³¹

²⁷ *Driving toward equality: Women, ride-hailing, and the sharing economy*, International Finance Corporation, Accenture, and Uber, 2018.

²⁸ The Criminal Law (Amendment) Act, 2013, Government of India.

²⁹ M. Mahmudul Hasan and Mizan Rahman, "Self-help groups in Bangladesh", *Review of Enterprise and Management Studies*, volume 2, number 1, 2015.

³⁰ Trend figures are for ten-year changes, but the exact period measured may vary slightly by country and indicator, depending on data availability.

³¹ *Gender equality and women's empowerment in Asia and the Pacific: Perspectives of governments on 20 years of implementation of the Beijing Declaration and platform for action*, UNESCAP, 2015.

Exhibit 8

There has been significant progress towards gender equality in Asia Pacific over the past although not on labour-force participation

Progress on gender equality ■ Negative ■ Positive

	Country	Per capita GDP Annualised absolute change ¹ , %	Labour- force parti- cipation rate Change in F/M ratio ²	Maternal mortality Change per 100,000 births ²	Adult literacy rate Change in F/M ratio ²	Net secondary enrolment Change in F/M ratio ²	Gross tertiary enrolment Change in F/M ratio ²
Oceania	Australia	3.6	0.03	-1			0.15
	New Zealand	4.1	0.05	-3		-0.13	
East Asia	China	16.4	-0.02	-21			0.24
	Japan	2.5	0.04	-2			0.04
	South Korea	3.8	0.01	-3			0.10
Southeast Asia	Indonesia	7.8	0.02	-86	0.03		0.22
	Philippines	7.2	0.03	-13		-0.01	0.05
	Vietnam	9.0	0	-7			0.04
	Thailand	5.3	-0.01	-6	0.01		0.33
	Myanmar	14.6	-0.01	-70		0.05	
	Malaysia	5.7	0.06	-12			0.25
	Cambodia	8.9	0	-154		0.38	0.36
	Singapore	4.6	0.05	-6			
South Asia	India	10.9	-0.08	-106	0.10		0.27
	Pakistan	3.7	0.05	-71	0.03	0.02	0.03
	Bangladesh	9.2	-0.03	-143		0.06	0.22
	Nepal	5.6	0.01	-186		0.21	0.51
	Sri Lanka	9.2	-0.07	-13	0.02		

1 Total GDP percentage change divided by ten years.

2 Change in indicator is defined as the value in the latest year subtracted by the value ten years ago. Note that measures are not comparable across indicators, since units and timeframes vary.

NOTE: Within each subregion, countries have been ordered according to their 2016 female population. No data are available for the countries where no values are shown.

SOURCE: McKinsey Global Institute analysis

Indicators related to women's education have improved significantly over the past decade. The female-to-male adult literacy ratio has risen markedly in South Asia—by 0.10 in India, 0.03 in Indonesia and Pakistan, and 0.02 in Sri Lanka, according to UNESCO. The female-to-male ratio in net secondary enrolment rates has risen significantly in several countries, including Cambodia (0.38) and Nepal (0.21). Finally, the female-to-male ratio of gross tertiary enrolment has increased in almost every country in Asia Pacific. The largest rise was in Nepal at 0.51, followed by Cambodia (0.36), India (0.27), Malaysia (0.25), and China (0.24). Gender equality in educational attainment has a moderate or strong correlation with three out of five work equality indicators and several indicators of gender equality in society. For instance, women who enjoy parity in education are more likely to share unpaid work with men more equitably, to work in professional and technical occupations, to assume leadership roles, and to have higher status in the family, reducing the prevalence of child marriage and violence against women. Higher education and skills training can help raise women's labour participation.³²

While these improvements in health and education outcomes are closely correlated with economic development, progress can also be attributed to positive measures by governments and NGOs. For example, the Cambodia Health Equity Fund launched a voucher programme in 2007 to provide poor pregnant women with access to free pre- and postnatal care and delivery, while the government implemented a nationwide scheme to incentivise healthcare workers for live births in hospitals and healthcare centres.³³

The female-to-male labour-force participation ratio has increased in some developed economies, climbing 0.05 in New Zealand and Singapore, 0.04 in Japan, 0.03 in Australia, and 0.01 in South Korea. Government measures have facilitated some of these improvements. For instance, Singapore extended its parental leave scheme in 2013 to allow sharing of leave by working fathers, and Australia mandated 18 weeks of paid parental leave in 2011. In contrast, several South Asia countries have registered declines on this indicator, with the ratio falling by 0.08 in India, 0.07 in Sri Lanka, and 0.03 in Bangladesh. These changes in developing economies may be associated with an improvement in per capita GDP, as lower-income women are no longer forced into the workforce, and younger women are staying in school longer and joining the workforce later.

Many countries in the region have experienced increases in women's political representation. This may reflect the introduction of gender quotas in government and public service, which have boosted women's political participation. In India, which has a 33 percent quota for female representation in local government, many states have attained 50 percent representation.

³² *The power of parity: How advancing women's equality can add \$12 trillion a year to global growth*, McKinsey Global Institute, September 2015.

³³ Andrew D. Mason et al., *Toward gender equality in East Asia and the Pacific: A companion to the World Development Report*, World Bank, 2012.

Box 3. Gender inequality in seven Asia Pacific countries

Australia. Australia's best-in-region annual GDP opportunity by 2025 is \$225 billion, or 12 percent above business-as-usual GDP. Australia has advanced further than the Asia Pacific average towards gender equality in work and on all three elements of gender equality in society. It scores higher than the regional average on almost all of the 15 gender inequality indicators. It is near best in region on female-to-male ratio in professional and technical jobs, maternal mortality, and child marriage, and is best in region on educational level and financial and digital inclusion. Nevertheless, as in the rest of the region, inequality on political representation is still a major issue. Progress has stagnated in recent years on key indicators such as female labour-force participation, gender wage gaps, and women's political representation. Increasing female labour-force participation is crucial to delivering the GDP opportunity. Achieving this—especially for Australian mothers—will require action on three fronts: improving marginal financial incentives to work, spreading best practices in workplace policies, and shifting attitudes about gender roles.

China. In a best-in-region scenario, China could add \$2.6 trillion—or 13 percent above business as usual—to annual GDP by 2025. China's position on gender equality in work is above the average of Asia Pacific, with a relatively high female-to-male labour-force participation ratio and share of women in professional and technical jobs. China is best in region on unmet need for family planning and is near best in region on female-to-male ratio of educational attainment and on child marriage. However, China has some way to travel towards parity in leadership positions, unpaid care work, political representation, and sex ratio at birth, which is heavily skewed towards male children, a legacy of China's one-child policy. Overall, there has been no substantial advance in women's equality in recent years. China can build on its emerging strength in women's entrepreneurship in the e-commerce and technology sectors to continue to encourage more women into professional and technical fields and into leadership positions. It should also consider looking carefully at the high share of unpaid care work undertaken by women, a share that is likely to increase as the number of children rises—the fertility rate is expected to stop declining over the longer term—and the elderly population swells.

India. In a best-in-region scenario, India could add \$770 billion to annual GDP by 2025, or 18 percent above business as usual. India has a considerable way to travel to reach the Asia Pacific average on female-to-male labour-force participation rate, maternal mortality, financial and digital inclusion, sex ratio at birth, and violence against women. In education, by contrast, gender gaps are narrowing fast. India also has some significant opportunities, such as access to digital technologies—and, largely through their use, access to financial services and credit. In unpaid care work in the home—women do roughly ten times as much as men—India has made advances in rolling out household infrastructure that helps women. Building on this momentum and sharpening focus on how women can achieve greater economic empowerment are high potential priorities for India to consider.

Indonesia. Our analysis finds that Indonesia could add \$135 billion to annual GDP by 2025, or 9 percent above business as usual. Indonesia exceeds the Asia Pacific average on gender equality in work but lags significantly behind best in region in areas including labour-force participation and leadership positions. Indonesia's position on the three dimensions of gender equality in society is in line with the Asia Pacific average but, again, some distance from best in region. There are some bright spots. For instance, Indonesia is near best in region on education. Potential priorities for Indonesia to consider are unleashing the full potential of its existing strength in female entrepreneurship and boosting female labour-force participation by investing in household and transport infrastructure in order to reduce women's share of unpaid work.

Box 3. Gender inequality in seven Asia Pacific countries (continued)

Japan. Japan could add \$325 billion to annual GDP by 2025, or 6 percent above business as usual, in a best-in-region scenario. Japan's progress towards gender parity in work is below the Asia Pacific average and considerably lower than best in region. There is considerable scope to boost the female-to-male ratio of labour-force participation and other indicators of gender equality in work. As the economy ages and the workforce shrinks, tapping the economic potential of women by increasing women's representation in higher education, and subsequently in professional and technical jobs and company leadership positions, is vital. Transforming the work culture in Japanese organisations and shifting attitudes about gender roles will be essential. A particular area to address is the lack of women in leadership, which partly reflects underrepresentation of women in Japan's top universities. The government is leading from the front on addressing gender issues, introducing many potentially effective policies, but there is now an imperative to ensure that legislation and policies are implemented effectively to achieve more rapid change.

The Philippines. In a best-in-region scenario, the Philippines could add 7 percent to GDP above business as usual, or \$40 billion a year, by 2025. The Philippines is a traditionally matriarchal and egalitarian society whose government has proactively legislated to close gender gaps. Consequently, it is Asia Pacific's best performer on indicators of gender equality in work, such as participation in professional and technical jobs and women in leadership positions, and near best in region on perceived wage gap for similar work. On gender equality in society, the Philippines is in line with the regional average on essential services and enablers of economic opportunity and on physical security and autonomy, but is above average on legal protection and political voice. Looking at individual indicators, the Philippines is in line with best in region on education and financial inclusion, and near best in region on sex ratio at birth and child marriage. But there is scope for improvement. The experience of women in the Philippines still depends largely on their socioeconomic status. Lower-income women still confront considerable gender gaps and less opportunity. For educated women, there is scope for higher representation and equal pay in professional and technical fields—already a strength. Another priority is to increase women's access to finance.

Singapore. In a best-in-region scenario, Singapore could boost its GDP by \$20 billion a year, or 5 percent. It has achieved an above-average level of gender equality in work. The women's labour-force participation rate doubled from 28 percent in 1970 to 58 percent in 2016, reflecting a range of policies helping women to achieve work-life balance, including paid maternity leave, paid and unpaid childcare leave, increased tax relief, tax rebates, and childcare subsidies. Singapore's level of gender equality in essential services and enablers of economic opportunity and in legal protection and political voice is in line with the Asia Pacific average. It is best in region on physical security and autonomy. Singapore is at or near best in region on financial and digital inclusion and on education. The number of women with at least secondary education rose from 57 percent in 2011 to 71 percent in 2015. Singapore still has a significant gap to best in region on leadership positions and legal protection, and much to do to erase gender inequality in political representation. Two potential priorities are supporting women in balancing work and family life by shifting societal attitudes and providing family-friendly workplace programmes, and boosting the number of women working in higher-growth sectors and higher-paying roles by encouraging participation in STEM fields and addressing skills shortages.

FIVE PRIORITY AREAS COULD BE THE BACKBONE OF AN EFFECTIVE AGENDA FOR CHANGE IN ASIA PACIFIC

What should the road ahead look like as Asia Pacific countries move to capture the considerable economic and social opportunity from greater gender equality? Here we briefly summarise key areas that we believe could usefully form the backbone of an Asia Pacific agenda for change. Each of them applies across the region to differing degrees, and therefore merits being prioritised by policy makers, companies, and NGOs. Some aspects, namely female labour-market participation, are crucial for securing the potential economic benefits we have identified in most countries. Others, including the role that digital technologies can play, offer an opportunity to raise economic participation and earning while potentially improving gender equality in society. The imperative to shift societal attitudes towards women's role in society and work appears in virtually all countries and can enable—or hold back—progress on all other aspects of gender inequality. Measures described here are broadly relevant throughout the region, but they may not be equally applicable to all countries, and indeed to regions within countries. Some approaches are more suitable for the formal economy, others for the informal economy. Broadly, measures need to be tailored to the cultural and economic context of each country, based on decision makers' judgment—and experience—of what will be most effective. As examples of this tailoring, we have developed a menu of potential actions in seven countries (Exhibit 9).

Exhibit 9

Overview of potential measures to improve gender equality across Asia Pacific (1 of 6)

Measures are primarily:

- Government-driven
- Company-driven

Overarching priorities for action

- P Raise female participation in quality jobs
- L Lift female leadership representation
- DF Improve digital and financial inclusion
- A Shift attitudes on gender roles

● P ● L ● DF ● A

Women in business leadership (all countries)				
Government				
Invest in skills training programmes for women in industries where they are underrepresented	●	●		●
Improve transport infrastructure to make commuting less burdensome and safer for women	●	●		
Use public spending to enable better and more affordable childcare, and rationalise taxes to remove disincentives for second earners	●	●		●
Implement workplace legal protections (e.g., antidiscrimination laws, protection from sexual harassment)		●		●
Set a publicly declared national agenda and target for women’s representation in leadership	●	●		●
Work with companies in broad coalitions to share experience and foster a collective effort towards parity	●	●		●
Corporations				
Show top management commitment and accountability by, for instance, setting metrics and targets for gender equality supported by gender-based talent pipeline planning		●		●
Offer and encourage uptake of flexible working arrangements such as part-time positions and homeworking, supported by technology such as videoconferencing	●	●		●
Introduce inclusion programmes that, for instance, challenge conscious and unconscious bias in the talent management process, from recruitment to performance evaluation		●		●
Introduce formal and explicit sponsorship and mentorship programmes		●		●
Run leadership skills workshops and networking events to help women bolster aspirations and push for higher positions		●		●
Individuals (men and women)				
Actively pursue methods to reduce personal negative perceptions and unconscious biases		●		●
Participate in well-designed diversity and inclusion measures		●		●
Partnerships				
Create partnerships between governments to set goals, share best practices, and make gender parity a priority		●		●
Create partnerships between organisations and institutions (public, private, local, or foreign) to share gender data transparently and commit to initiating inclusion programmes		●		●
Australia				
Articulate case for change: macroeconomic, company, and individual				
Develop a clear macroeconomic and social case for policies promoting female participation	●	●		●
Communicate the individual and family benefits of workforce parity through awareness campaigns	●	●		●
Make a strong case for gender balance in the organisation, linked to purpose and business goals	●	●		●

SOURCE: McKinsey Global Institute analysis

Exhibit 9 (continued)

Overview of potential measures to improve gender equality across Asia Pacific (2 of 6)

Measures are primarily:

■ Government-driven

■ Company-driven

Overarching priorities for action

P Raise female participation in quality jobs

L Lift female leadership representation

DF Improve digital and financial inclusion

A Shift attitudes on gender roles

P L DF A

Australia (continued)	
Ensure economic incentives exist for all mothers to work	
Ensure long-term budgetary support for more universal childcare	P L
Adjust means testing for childcare-related benefits to retain incentives for middle-class women to work	P L
Increase equal provision, and uptake and acceptance of, flexible policies and life-transition support for women	
Encourage equal uptake of leave by making it more financially attractive, flexible, and understood	P L DF
Increase support for women through life transitions, including services and networks	P L DF
Foster acceptance of flexibility (for both genders) through role models and positive communication	P L
Invest in shifting attitudes about the role of women in society and work	
Launch public-awareness campaigns on the economic and societal benefits of women being free to pursue careers and of parents sharing childcare	P L DF
Normalise male child-rearing through role modelling by key influencers	P L DF
Further strengthen existing institutions and policy action focused on gender	
Expand participation in coalitions (e.g., Male Champions of Change) across sectors and geographies	P L
Increase policy impact through gender budgeting and gender-impact analysis	P L
Consider strengthening national mandates for employers and encourage greater gathering and use of data to shape practices	P L
China	
Increase opportunities for women to reduce time spent on unpaid work	
Provide subsidised childcare from birth to age five (pre-school)	P L
Improve auditing and enforcement of childcare regulatory standards to ensure quality care	P L
Mandate minimum nationwide paternity leave and encourage uptake by male workers	P L DF
Increase focus on and accelerate provision of elderly care to respond to aging population	P L
Mandate minimum nationwide elderly-care leave for male and female employees	P L
Encourage and implement family-friendly work practices such as remote and flexible working, and permanent part-time roles that enable parents to accommodate their care requirements	P L DF
Invest in shifting attitudes about the role of women in society and work	
Launch public-awareness campaigns on the economic and societal benefits of women being free to pursue careers and of parents sharing unpaid care work	P L DF
Encourage male and female leaders (“champions”) to role model and advocate for change	P L DF
Mandate public reporting of data on women in employment and leadership in state-owned and other companies	L DF
Raise minimum female representation in legislatures and be transparent about progress in provinces	L DF

SOURCE: McKinsey Global Institute analysis

Exhibit 9 (continued)

Overview of potential measures to improve gender equality across Asia Pacific (3 of 6)

Measures are primarily:

■ Government-driven

■ Company-driven

Overarching priorities for action

P Raise female participation in quality jobs

L Lift female leadership representation

DF Improve digital and financial inclusion

A Shift attitudes on gender roles

P L DF A

China (continued)

Encourage and enforce equal treatment of women in the workplace

Remove barriers to women continuing to work past the age of 50 and 55 (in blue-collar and white-collar work, respectively), and align with male retirement age of 60

● ●

Encourage equal treatment at work and strengthen enforcement of regulation by, for instance, reducing male-only advertised roles, addressing unequal pay between men and women, and prohibiting questions on intention to become a parent in interviews

● ● ●

Develop women's entrepreneurial and digital skills and networks, particularly in rural areas

Create partnerships with the private sector to provide training and networking events for women, particularly in the e-commerce and technology sectors

● ●

India

Make a concerted effort to expand job opportunities for women

Stimulate job creation and skills training in sectors where women are established, including textiles, garments, healthcare, beauty, IT-enabled services, tourism, electronics assembly, and manufacturing

● ●

Enhance commitment to, and policies for, gender balance in the corporate sector among employees and in supply chains

● ● ●

Accelerate digital and financial inclusion of women and link with economic empowerment

Accelerate roll-out of digital literacy initiatives and innovative financial products for female entrepreneurs

● ●

Expand business training and connectivity to markets for individual women, collectives, and producer companies through digital platforms targeting female entrepreneurs

● ●

Continue to expand access to infrastructure to reduce unpaid care work

Sustain the roll-out of household infrastructure and services (e.g., water, sanitation, and clean cooking fuel)

●

Increase utilisation through supply and demand levers (e.g., quality, cost, education, and awareness)

● ●

Increase accessibility and uptake of childcare

Increase investment in and scale up existing initiatives (e.g., national flagship scheme, mobile crèches)

● ●

Strengthen and enforce national standards on childcare quality, including more training for carers

● ●

Invest in high-quality employer-provided childcare and share best practices

● ●

Invest in shifting attitudes about the role of women in society and work

Intensify public-awareness campaigns to communicate the value of girls and women in society

●

Put the spotlight on gender data, with a new focus on women in the workforce, across states, sectors, and organisations

●

Engage community leaders and individuals on women's digital and financial empowerment

● ●

Educate individuals on the value of childcare (e.g., children's cognitive, emotional, and health outcomes)

● ● ●

SOURCE: McKinsey Global Institute analysis

Exhibit 9 (continued)

Overview of potential measures to improve gender equality across Asia Pacific (4 of 6)

Measures are primarily:

■ Government-driven

■ Company-driven

Overarching priorities for action

P Raise female participation in quality jobs

L Lift female leadership representation

DF Improve digital and financial inclusion

A Shift attitudes on gender roles

P L DF A

Indonesia				
Continue to expand access to infrastructure to reduce unpaid care work				
Build a robust economic case for increased investment in infrastructure, with a gender-budgeting lens	●			
Work with NGOs and foundations to develop infrastructure and services in remote areas	●			
Introduce innovative products and services to help women reduce time spent on household chores	●			
Drive digital access, skills development, and business training for female entrepreneurs				
Increase instruction in digital skills in the early years of secondary school	●		●	
Scale up digital skills-building programmes for female entrepreneurs	●		●	
Improve tailoring of digital platforms, products, services, and marketing to women's needs	●		●	
Invest in shifting attitudes about the role of women in society and work				
Encourage community learning on how to manage a career in addition to family	●	●		●
Educate and activate networks of male champions	●	●		●
Run public-awareness campaigns to encourage recognition and redistribution of unpaid care work	●	●		●
Legislate and enforce greater protection for women				
Pass workforce laws to enforce part-time options, grant more paternity leave, and tackle sexual harassment	●	●		●
Strengthen enforcement of gender protections (e.g., training, measurement, and accessibility of courts)	●	●		●
Promote diversity policies in business organisations				
Make a strong case for gender balance in the organisation, linked to purpose and business goals	●	●		●
Offer and encourage uptake of flexible working arrangements (e.g., part-time and home-based assignments)	●	●		●
Set diversity targets and boost acceptance by men and women of diversity goals and programmes	●	●		●
Train and equip women as entrepreneurs in supply chains and distribution channels	●	●	●	
Japan				
Accelerate implementation of specific existing recommendations and policies				
Accelerate policy change and public services to match market needs (e.g., expanding public provision of childcare, more flexible labour contracts, and tax and social disincentives for second-income earners)	●	●		
Use organisational change best practices to accelerate implementation (e.g., top management commitment and linking diversity to business objectives)	●	●		
Increase cross-institutional collaboration to foster gender equality				
Create national and local coalitions of public and private institutions to facilitate sharing of best practices, broaden advocacy, and collaborate on societal issues	●	●		●

SOURCE: McKinsey Global Institute analysis

Exhibit 9 (continued)

Overview of potential measures to improve gender equality across Asia Pacific (5 of 6)

Measures are primarily:

■ Government-driven

■ Company-driven

Overarching priorities for action

P Raise female participation in quality jobs

L Lift female leadership representation

DF Improve digital and financial inclusion

A Shift attitudes on gender roles

P L DF A

Japan (continued)				
Invest in shifting attitudes about the role of women in society and work				
Run campaigns to celebrate top-performing women professionals and those at top universities	●	●		●
Facilitate networks, mentorship, and sponsorship of women from high school through the talent pipeline	●	●		●
Increase corporate and public-sector efforts to cultivate female talent from the start of the talent pipeline				
Provide scholarships for women to attend Japan's top universities	●	●		
Expand search for female talent beyond the top ten universities and ensure that women are included in management development programmes	●	●		
Increase the number of women attending top universities				
Legislate to promote women's representation in top universities (e.g., requiring targets and action plans)	●	●		
Provide safe and affordable housing for female students in top universities outside their home prefecture	●	●		
Review plans to change National Center Test and entrance conditions for applicants to non-STEM majors, to remove gender bias	●	●		
Create a coalition of top universities to develop understanding of gender issues and address them by, for instance, surveying, analysing, and sharing data	●	●		
Increase focus on improving female performance in STEM at high school				
Review STEM outcomes at the high school level and create action plan to improve female participation, scores, and motivation in mathematics and science	●	●		
Philippines				
Increase access and equal provision of family-friendly policies in the workplace				
Mandate gender-equal provision of parental leave	●	●		●
Increase flexible work options and part-time options for all workers	●	●		●
Increase access to employer-assisted or employer-provided childcare options	●	●		
Introduce policies and programmes to improve gender balance in male-dominated industries				
Revise elementary school curricula to remove gender biases	●			●
Develop mentorship programmes to encourage women to pursue careers in male-dominated industries	●	●		
Strengthen economic incentives for women to remain in the workplace				
Improve on equal remuneration clause for men and women	●			
Audit employee pay to identify gender wage gaps in similar roles	●			
Reduce barriers to labour-force participation for young mothers and single parents				
Improve childcare support for single parents and young mothers	●			
Provide employment and education support programmes for young mothers	●			

SOURCE: McKinsey Global Institute analysis

Exhibit 9 (continued)

Overview of potential measures to improve gender equality across Asia Pacific (6 of 6)

Measures are primarily:

■ Government-driven

■ Company-driven

Overarching priorities for action

P Raise female participation in quality jobs

L Lift female leadership representation

DF Improve digital and financial inclusion

A Shift attitudes on gender roles

P L DF A

Philippines (continued)	
Use financial products and services to increase economic empowerment for less-educated women	
Scale up existing measures targeting unbanked areas to expand women's financial inclusion	P DF
Provide adjacent services to improve financial access for women farmers and microentrepreneurs	P DF
Accelerate implementation of programmes to improve maternal health in rural and isolated areas	
Improve access to maternal healthcare and information for women in rural areas	P
Engage local government units in tracking health outcomes of expectant mothers	P
Singapore	
Invest in shifting attitudes about the role of women in society and work	
Run public-awareness campaigns to foster recognition and redistribution of unpaid care work	P L DF
Create forums of corporate leaders to share best practices on moving closer to gender equality	P L DF
Increase access and equal provision of family-friendly policies in the workplace	
Increase availability of flexitime and teleworking options for full-time workers	P L DF
Develop programmes to ease the transition for mothers returning to the workplace	P L
Expand leave options to include family sick leave and elderly-care leave	P
Make parental leave policies more gender-balanced	P L DF
Increase economic incentives for women to remain in the workforce	
Audit employee pay to identify gender wage gaps between similar roles	P
Create an equal remuneration clause for men and women	P
Encourage higher representation in STEM fields	
Develop programmes to inspire girls and young women to pursue STEM careers	P
Review university policies to encourage women to participate in STEM fields	P
Adjust policies to reduce barriers to women interested in applying for jobs in STEM	P
Promote skills development for women working in lower-growth sectors and/or lower-paying roles	
Create incentives to participate in SkillsFuture for women in need of reskilling or skills development	P
Help provide digital access to women who do not use mobile phones or the internet	P DF

SOURCE: McKinsey Global Institute analysis

1. Focus on higher female labour-force participation in quality jobs with steps to address unpaid care work as a priority to boost economic growth

Improving female labour-force participation represents 58 percent of the total GDP opportunity in Asia Pacific that we estimate is available. Enabling women to juggle their home and work responsibilities—an issue in advanced and developing economies alike—would help women who choose to work for pay outside the home to do so. The emphasis of such efforts should be to open the way for women not only to work, but to work in quality jobs. Today, women are underrepresented in many Asia Pacific countries in higher-paying professional and technical jobs, particularly in high-growth science, technology, engineering, and mathematics (STEM) jobs.

Women undertake four times the unpaid care work as men on average—and this hinders their freedom to choose to work for pay outside the home. In some countries, shifting demographics risk exacerbating this issue. In China, for instance, the time spent by women looking after their children and elderly relatives may even rise in the years ahead as fertility rates bounce back because of the shift from a one-child to a two-child policy, and as the population ages rapidly. Many women get deep satisfaction from caring for their children and aging relatives, and the time they choose to spend may reflect personal choice. But true equality of opportunity and freedom of choice still eludes many women who would be able to earn more money outside the home if household responsibilities were recognised, reduced, or redistributed.³⁴

A lack of childcare clearly deters many women from participating more fully in the labour market. The scarcity of quality, affordable childcare in major Indian cities has been cited as a barrier to women participating in the workforce. Even in Australia, an advanced economy, many women struggle to balance childcare with paid work because of a lack of affordable childcare. Net childcare costs were 20 percent of average family income in 2015, compared with the 12 percent average in OECD economies. Even if provision of childcare is sufficient and affordable, uptake will be limited unless women's incentive to work in terms of salary and tax rate is set at the right level. Many countries have recognised the importance of addressing this issue and have responded with a combination of public subsidies and mandates on employer provision.³⁵

There are other ways to reduce the time that women spend on unpaid work. Improved transport infrastructure and services such as ride-hailing can reduce the time it takes to shop or visit a doctor. There is every prospect that digital technologies will enable widespread use of remote healthcare via mobile phone and internet, saving women a great deal of time.³⁶ Other types of “household infrastructure” can also reduce time pressure on those working in the home. Today, many households lack water supply, necessitating considerable time collecting water. Unpaid care work can also be shared more equally between men and women in the household, facilitated by policies to promote paternity leave and flexible work models for male as well as female workers. Family leave policies that include men have the potential to provide better recognition for care work and to redistribute it among men and women, thereby potentially helping women to participate more actively in the world of work: however, steps are needed to encourage men to take up these offers.

³⁴ 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.

³⁵ For example, Australia provides government subsidies to help cover childcare costs, while India's Maternity Benefit Act requires companies with 50 or more employees to provide crèche facilities.

³⁶ In China, a combination of healthcare big data, treatment powered by artificial intelligence, and Internet of Things-enabled services can create a more efficient, higher-quality system that puts the patient at its centre. See the discussion in *Digital China: Powering the economy to global competitiveness*, McKinsey Global Institute, December 2017. For more on the use of digital technologies in healthcare, see, for instance, *India's technology opportunity: Transforming work, empowering people*, McKinsey Global Institute, December 2014, and *What's now and next in analytics, AI, and automation*, McKinsey Global Institute briefing note, May 2017.

Unpaid care work can also be “marketised” to external providers, creating jobs in the care services industry.

A number of initiatives are being pursued in the region to give women a more solid platform for higher-quality careers. In response to reluctance among girls in Singapore to pursue STEM careers, non-profit 21C has started to provide free coding classes for girls.³⁷ In Japan, where women are markedly underrepresented at the top universities that are the source of a large share of the country’s business and political leaders, the institutions are taking some new approaches. For instance, Nagoya University has established a centre for gender equality and instituted female-only positions to open up opportunities to women academics.

2. Address the pressing regional and global issue of women’s underrepresentation in business leadership positions

A lack of women in top management positions—an issue in advanced and developing economies around the world—not only stunts the ability of women to have fulfilling careers and earn higher incomes, but negatively affects companies’ bottom lines. McKinsey’s latest research on the impact of diversity in business shows that companies in the top quartile for gender diversity on their executive teams are 21 percent more likely than other firms to report above-average profitability; the figure three years earlier was 15 percent.³⁸ We note that correlation does not prove causation, but we would argue that the correlation at least indicates that companies with gender-diverse leadership are more successful.

The global GPS on this metric, which includes women in leadership positions in both business and politics, is 0.37, indicating extreme gender inequality—there are fewer than four women for every ten men in leadership positions. The average GPS on women in leadership in Asia Pacific is only 0.25: women hold only one in four positions at the manager level and above. Asia Pacific has made some progress in recent years. Across the region, the share of women sitting on company boards doubled between 2011 and 2016 from 6 to 13 percent, but that is still a very low share.

Most countries have similar barriers to women rising to leadership roles in business. They include cultural expectations that women should prioritise childcare over their careers, a lack of suitable or affordable childcare, unconscious bias in the workplace, a lack of role models and sponsors, and, perhaps critically, a failure by many companies to offer flexible working options. The fact that the barriers are similar suggests that measures that have proved successful in raising the share of women in leadership in individual companies could be the template for businesses in the region.

Governments, companies, and NGOs all have a role to play in tackling this issue. Policy makers have the power to influence the talent pipeline through education and training systems, legislation, fiscal measures, and political leadership. They can also improve diversity in public services in their capacity as employers and can encourage gender diversity in companies in their supply chains through their procurement practices. Companies need to embed gender diversity into their operations from top to bottom, with clear managerial commitment to equality in the workplace, processes to back up that standard, the provision of flexible working to ensure that employees can achieve work-life balance, and programmes that explicitly provide mentorship, skills building, and networking for women. NGOs can provide similar programmes. It is vital that men play a central role in efforts to promote gender equality. In the home, if they undertake a greater share of family responsibilities, women will be freer to work for pay if they so choose. In work, men are still

³⁷ Lakshmi Ramachandran, *Small steps to big changes towards gender equality in science*, National University of Singapore, May 2017.

³⁸ *Delivering through diversity*, McKinsey & Company, January 2018; *Women Matter: An Asian perspective: Harnessing female talent to raise corporate performance*, McKinsey & Company, 2012; and *Women Matter: Time to accelerate: Ten years of insights into gender diversity*, McKinsey & Company, October 2017.

often in positions of authority and therefore have control over decisions to promote women, offer them flexible work practices, and provide them with mentoring and sponsorship.

3. Capture the economic and social benefits of improving women's access to digital technology

Globally, a digital divide separates rich and poor but also men and women. Most countries have some distance to travel to open up access to digital technologies for women. Yet access to and use of digital technologies is a powerful enabler of economic advancement for both individuals and entire economies, and it can have a positive impact on a number of aspects of gender inequality. On digital inclusion of women, Asia Pacific has a GPS of 0.77, somewhat behind the global average of 0.85. GSMA has estimated that there are 1.1 billion unconnected women in low- and middle-income countries in the region.

Access to technology can open many economic doors to women. For instance, digital businesses can enable female entrepreneurs by reducing many of the barriers they face offline. The rise of e-commerce and the online “gig economy” offer many women flexibility in terms of their working hours and where they work, helping them to balance work with their family commitments.³⁹ There is widespread evidence that digital technologies connect women with larger markets far more effectively than if they are offline. In Indonesia, for instance, women-owned MSMEs generate 35 percent of e-commerce revenue, compared with only 15 percent of offline MSME revenue.⁴⁰ Digital technology-based startups also tend to require less capital than more traditional startups, reducing entry barriers for women who, on average, have less access to capital than men.⁴¹ In a 2015 report, Alibaba stated that starting a Tmall store typically costs 210,000 renminbi, 96 percent less than setting up an offline business.⁴²

Digital banking levels the playing field between men and women in terms of access to financial services, and it enables financial institutions to serve more customers profitably. MGI research has found that mobile payments can lower the cost of providing financial services by 80 to 90 percent, enabling providers to serve people with lower incomes in rural areas. Overall, digital finance has the potential to provide access to financial services for 1.6 billion people in emerging economies, more than half of them women. Today, an estimated 57 percent of women are financially excluded in South Asia, 54 percent in China, and 49 percent in Southeast Asia.⁴³

Digital technologies can also encourage higher labour-force participation by women. They can, for instance, reduce the hours women spend on unpaid work. For example, if women have access to digital payments, they can save an enormous amount of time spent travelling to a physical bank or ATM and waiting in queues. MGI has estimated that Indians (men and women) lose more than \$2 billion a year in income because of travel time to and from a bank.⁴⁴ The adoption by many businesses of telecommuting also makes it easier for women to remain in the workforce if they so choose.

Finally, the internet offers the potential for women to make their voices heard. The #MeToo movement against sexual harassment that erupted on social media in late 2017 and early 2018 is just one example. One study found that half of the women surveyed in developing countries said that the internet had made it safer for them to express their views.⁴⁵ Yet

³⁹ *Independent work: Choice, necessity, and the gig economy*, McKinsey Global Institute, October 2016.

⁴⁰ McKinsey survey of Indonesian e-commerce merchants, 2017. N = 700.

⁴¹ David Halabisky, *5 ways policy could close the gender gap in entrepreneurship*, World Economic Forum, October 19, 2017.

⁴² *Women in the era of Internet Plus*, AliResearch, 2015.

⁴³ *Digital finance for all: Powering inclusive growth in emerging economies*, McKinsey Global Institute, September 2016.

⁴⁴ *Ibid.*

⁴⁵ *Women's rights online: Translating access into empowerment*, World Wide Web Foundation, October 2015.

powerful attitudes and beliefs inhibit women and girls from accessing the internet. In India, for instance, male relatives reportedly prohibit girls from using the internet.⁴⁶ Many digitally excluded people may need help to overcome digital literacy and numeracy issues. In an initiative from Tata Trust and Google India, for instance, women ride a bicycle carrying two smartphones and two tablets around villages to teach women how to use them.⁴⁷ It may not always be possible for the digitally excluded to take advantage of these technologies without assistance given that many will continue to have literacy and numeracy issues. Therefore, there is a case for providing digital access through intermediaries. Again in India, in late 2016, the government set up Common Service Centres in a public-private partnership with local entrepreneurs. Entrepreneurs run these kiosks, where people can go online, and the government allows them to be used for e-government services and applying for jobs.⁴⁸

We acknowledge that digital technologies are a double-edged sword. If the gender gap in digital inclusion and capabilities is not closed, there is a risk that women will be left out of the wave of change rolling through societies and economies driven by the rapid penetration of these technologies. Digital technologies can accelerate progress towards parity for women who are digitally included but leave those who are not even further behind.

4. Shift attitudes about women's role in society and work, in order to underpin progress on all aspects of gender inequality

In essence, progress towards gender parity in Asia Pacific and around the world relies on women and men having equality of opportunity and the freedom to choose how they balance the different parts of their lives: home and work, children and career. But even today in many countries, societal attitudes hold women back. Shifting those attitudes—a complex and long-term effort—can unlock progress on many aspects of gender inequality.

Defeating gender biases is critical to achieving equality in the workplace, where Asia Pacific countries generally exhibit an extremely high level of inequality. Attitudes regarding women's role as family caregivers are key reasons that women undertake a disproportionate amount of unpaid care work, choose to step out of the workforce, and face conscious and unconscious discrimination in the workplace. This holds true even in relatively advanced economies—in Australia, for instance, one in two women reported experiencing discrimination related to pregnancy or parental leave.⁴⁹ Selecting and equipping male champions to lead cultural change within organisations can be an effective way to address the attitudes underlying this bias. For example, the Australian Male Champions of Change group of CEOs and public-sector leaders recently committed to eliminating “everyday sexism” in workplaces through role modelling, tone setting, and training.⁵⁰

Shifting attitudes is also an important part of improving women's political representation, which is currently an area of extremely high inequality in most countries in Asia Pacific. The average female-to-male ratio of elected leaders is only 0.19. In countries in the region, an average of 44 percent (not weighted for population) of World Values Survey respondents agreed that men make better political leaders than women. Even when countries attempt to increase female representation, women are judged more harshly than men. For example, in India, a study of women-led villages showed that levels of dissatisfaction among

⁴⁶ Feminist Approach to Technology (<http://www.fat-net.org/>). Restrictions are even more common in terms of limiting (rather than prohibiting) use. More than half of men in one survey in New Delhi agreed that men have the responsibility to restrict what women access on the internet, and 65 percent agreed that women should be restricted from using the internet in public places on their own. See *Women's rights online*, World Wide Web Foundation (<https://webfoundation.org/our-work/projects/womens-rights-online/>).

⁴⁷ “Google, Tata Trusts to expand Internet Saathi programme”, *The Hindu Business Line*, December 5, 2017.

⁴⁸ Anandita Jumde, *How Common Service Centres are revolutionising e-governance in rural India*, The Better India, May 31, 2016.

⁴⁹ *Supporting working parents: Pregnancy and return to work national review—report*, Australian Human Rights Commission, 2014.

⁵⁰ *We set the tone: Eliminating everyday sexism*, Male Champions of Change, October 2017.

constituents were higher where council representatives were women, despite the fact that outcomes on some key services were, on average, better.⁵¹ Part of tackling this problem is increasing the visibility of female candidates, their track records, and the importance of women's representation in government. One example of this approach is the global #makeithappen campaign, which involved female parliamentarians raising awareness of these issues.

A change in attitudes is also crucial to solving the pervasive global issue of violence against women, a widespread problem that does not diminish even as countries develop economically. Campaigns can be effective. The Indian government's Beti Bachao Beti Padhao social campaign has raised public awareness of girl-child welfare in an effort to combat "son bias" and a skewed sex ratio at birth. Hollaback, an international initiative, targets women's attitudes. It asks women to share their stories of harassment so that other women don't feel alone and may be more empowered to report the problem to authorities. In countries including China and India, changing attitudes is an important part of addressing sex-selective abortion and child marriage. Humanising the issue to prompt discussions can be effective. For example, the Meena cartoon series, a television programme supported by UNICEF and shown in South Asian languages, presents a South Asian girl character, tailored to resonate with the audience's background, who faces a range of discriminatory obstacles.

Governments, companies, the media, and individuals in every community can help to change attitudes towards women by using cutting-edge and innovative approaches. Leading from the front, the Victoria state government in Australia has invited international behavioural insights experts to design strategies to address the societal attitudes and biases that drive gender inequality.

5. Collaborate on regional solutions as powerful catalysts for gender equality

Programmes and policies will largely be developed in each country with an eye to its particular context, pockets of high inequality, areas of strength, and cultural norms. But pan-Asia Pacific policies could give national efforts a powerful following wind, enabling change. Two forms of pan-Asian intervention could prove particularly effective, and regional and global bodies might consider exploring their feasibility:

- **Improve financing mechanisms to address gender outcomes:** Improving the financing of initiatives designed to tackle gender equality could improve outcomes. One approach is gender-lens investing—encouraging retail and institutional investors to direct funding to gender-diverse or women-owned businesses or to companies that advance gender equality through their product and service offerings.⁵² There is renewed momentum behind corporate social responsibility and ethical investing. For instance, BlackRock recently urged CEOs to ensure that their companies make a positive contribution to society.⁵³ Changes in investor behaviour can be facilitated by regional or global rating or accreditation systems for companies that improve gender outcomes, such as Bloomberg's Gender-Equality Index. Further work can be done to continue improving the sophistication and the uptake of such indices. Another approach to explore is social financing through, for instance, development impact bonds that attract private funding to support organisations or initiatives pursuing gender outcomes. Since the Banking on Women bond issued by the International Finance Corporation in 2013, many similar bonds have been developed. One example is the Women's Livelihood bond, which is estimated to have impacted 385,000 women in Cambodia, the

⁵¹ Ray Fisman, "It takes a village ... to fail to thank its female leader, no matter how good she is", Slate, November 27, 2007.

⁵² BNY Mellon and the UN Foundation explored this issue in a joint report: *Return on equality: Investment opportunities to help close the global gender gap*, January 2017.

⁵³ Larry Fink, *Larry Fink's annual letter to CEOs: A sense of purpose*, BlackRock, January 2018.

Philippines, and Vietnam. In this case, the bond was partially guaranteed by USAID and Australia's Department of Foreign Affairs and Trade.⁵⁴

- **Explore greater regional collaboration on knowledge-sharing:** Given the wide variation in gender equality outcomes in Asia Pacific, it is vital that best practices already in place, as well as cutting-edge ideas, be widely shared. Asia Pacific institutions could consider creating a unified regional learning or knowledge agenda on gender issues, backed by regular, practitioner-level forums in a “network of networks”. Such collaboration may work most effectively within the framework of existing regional institutions such as APEC, whose Women and the Economy Dashboard seeks to measure and share progress in the region and its constituent countries. Regional and international organisations could also collaborate more with one another and with governments to build a comprehensive and up-to-date fact base of gender data to enable more effective design and implementation of gender initiatives. There may also be potential for strategic cooperation, including in procurement, to reduce operating costs and free up funds for investment in gender initiatives.⁵⁵



Asia Pacific is home to some of the fastest-growing and increasingly innovative economies in the world. The region is forging an exciting new future and an ever-greater role on the world stage. Yet women are not yet playing an equal part—a gap in the narrative that many leaders now recognise. The economic dividend from advancing women's equality is significant in every country of the region. We know that diverse workforces are good for the bottom line, and that educated, healthy, fulfilled women with the freedom to choose both a family life and a career are good for growth. Now is the time to step up efforts to accelerate progress towards gender parity—and harness its power for growth and the wellbeing of society.

⁵⁴ *USAID supporting Women's Livelihood Bond to benefit 385,000 women in Southeast Asia*, USAID press release, August 7, 2017.

⁵⁵ An analogous example is the Joint Procurement Agreement between 24 EU countries to ensure more equitable access to vaccines, antivirals, and other medical countermeasures.



1. OPPORTUNITIES FOR WOMEN IN BUSINESS LEADERSHIP

The relative lack of women leaders—both in business and in politics—is a marked source of gender inequality around the world. In Asia Pacific, the number of women in top jobs in both spheres is even lower than the global average. Large gender gaps on women’s leadership are evident in all countries despite some progress in recent years. This is a waste of talent that the region can ill afford, especially when many economies are aging, labour pools are eroding, and skills shortages are on the rise.⁵⁶

In this chapter, we look at the issue of leadership positions throughout Asia Pacific with a specific focus on the business talent pipeline from education to board-level positions. We examine the root causes of bottlenecks that prevent women from becoming leaders, and offer thoughts on measures that could be taken and adapted to each country’s context. We base our findings on attitudes revealed in proprietary surveys and more than 20 interviews with female leaders across the region.

DESPITE RECENT PROGRESS, WOMEN STILL LAG SIGNIFICANTLY BEHIND MEN IN LEADERSHIP POSITIONS IN BUSINESS AND POLITICS

Women’s relatively low representation in leadership positions—measured using the female-to-male ratio—is a global issue. Worldwide, slightly fewer than four women hold leadership positions to every ten men in business and politics.⁵⁷ In Asia Pacific, there is only one women in leadership positions for every four men. In some countries in East Asia, there are only 12 to 20 women leaders for every 100 men (Exhibit 10).

Most countries in the region have female-to-male ratios of less than 0.5. Even in Australia, New Zealand, and Singapore, three of the region’s more advanced economies, the gender imbalance is notable. The Philippines, a traditionally matriarchal society whose government has been proactive in narrowing gender gaps, is the country in the world nearest to gender parity. However, even there, only 15 percent of board members are women, signalling that there is some way to go before parity.⁵⁸ The standing of women in the Philippines still depends heavily on their income level. Many women in upper income brackets are almost equal to men in terms of education, and this opens up similar opportunities to companies. However, for many women with lower incomes, such opportunities are not nearly as widely available.

⁵⁶ Globally, there will be an estimated shortage of about 40 million graduates. See *The world at work: Jobs, pay, and skills for 3.5 billion people*, McKinsey Global Institute, June 2012.

⁵⁷ We use International Standard Classification of Occupations (ISCO-08) of ILO system definitions under major group 1 (managers) and submajor group 11 (chief executives, senior officials, and legislators).

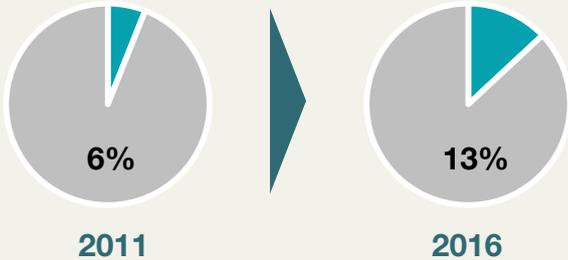
⁵⁸ J. Benjamin C. Alvarez and Patricia M. Alvarez, “The Filipino family-owned business: A matriarchal model”, *Philippine Studies*, volume 20, number 4, fourth quarter 1972.

Female business leaders

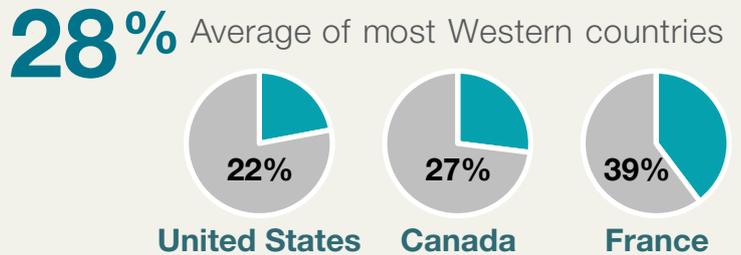


Women's representation in leadership has improved, but there is still a gender gap

Women's representation in boards has improved in Asia Pacific . . .



. . . but is still lower than Western counterparts (2016 estimates)



There are bottlenecks throughout the talent pipeline in each country

Percentage of women¹

	Tertiary educated graduates	Entry-level professionals ²	Senior management ³	Board members
Australia	56	44	21	18
China	53	51	11	10
India	43	25	4	11 ⁴
Indonesia	52	45	13	5
Japan	46	49	1	3
Philippines	53	43	33	15
Singapore	53	49	25	8



Progress with require comprehensive measures by both public and private stakeholders

Government

- Investment in training
- Improved transport infrastructure
- Legal protections in workplace
- Fiscal policies to balance work and home
- National target for women leaders
- Work with companies towards parity

Corporations

- Management commitment and accountability
- Flexible working arrangements
- Inclusion programmes across talent management process
- Sponsorship and mentorship
- Skills workshops and networking events

Individuals

- Participation in diversity interventions
- Self-help activities to reduce negative self-perceptions and unconscious bias

Partnerships

- Government partnerships to make gender parity a priority
- Partnerships between local institutions: public, private, local, and foreign

¹ Women as a percentage of the total men and women at the respective stage of the talent pipeline.

² Entry positions in jobs occupied by graduates.

³ Company management/executive committee (CEO and direct reports to CEO).

⁴ Increase in proportion due to legal mandate for one woman board member for all listed companies.

SOURCE: McKinsey Global Institute analysis

Exhibit 10

The share of women in leadership positions is low across Asia Pacific

	Country	Female population, 2016 Million	Leadership positions Female/male ratio ²	Level of gender inequality
Oceania	Australia	11.9	0.58	<div style="display: flex; flex-direction: column; gap: 5px;"> <div style="display: flex; align-items: center;"> Extremely high</div> <div style="display: flex; align-items: center;"> High</div> <div style="display: flex; align-items: center;"> Medium</div> <div style="display: flex; align-items: center;"> Low</div> </div>
	New Zealand	2.3	0.67	
East Asia	China	671.2	0.20	
	Japan	65.2	0.15	
	South Korea	24.9	0.12	
Southeast Asia	Indonesia	125.6	0.30	
	Philippines	50.0	0.96	
	Vietnam	46.8	0.35	
	Thailand	34.3	0.48	
	Myanmar	27.6	0.40	
	Malaysia	15.5	0.26	
	Cambodia	7.9	0.45	
	Singapore	2.8	0.52	
South Asia	India	612.2	No data	
	Pakistan	90.0	0.03	
	Bangladesh	78.4	0.13	
	Nepal	14.5	0.22	
	Sri Lanka	11.0	0.33	
Overall score	Asia Pacific average ¹		0.25	
	Global average ¹		0.37	

1 Weighted by 2016 female population.

2 Leadership positions defined as manager level and above in private- and public-sector organisations (e.g., includes legislators, chief executives, and middle managers).

SOURCE: McKinsey Global Institute analysis

WOMEN'S REPRESENTATION HAS IMPROVED—PARTICULARLY IN BUSINESS LEADERSHIP—BUT INEQUALITY REMAINS HIGH

The business case for companies in the region to increase the share of women in leadership roles is a strong one. Increasing women's representation throughout a company and in the top team is strongly correlated with value creation (see Box 4, "Gender diversity is linked to company performance").

Box 4. Gender diversity is linked to company performance

There is compelling evidence of a correlation between gender diversity in companies and their performance. McKinsey's latest research on the impact of diversity in business shows that companies in the top quartile for gender diversity on their executive teams are 21 percent more likely than other firms to report above-average profitability; the figure three years earlier was 15 percent.¹ McKinsey has also found that companies with three or more women on their executive committees scored higher on organisational health, on average, than companies with no women at this level.² We acknowledge that correlation does not prove causation: diversity does not automatically equal more profit, but companies that commit to diverse leadership have been more successful. Several factors could explain this:

- **Better decision making and innovation:** Gender-diverse top teams can offer more problem-solving tools and more effective solutions by bringing different perspectives.³ Inherent (gender and ethnicity) and acquired (from experience) diversity can help companies innovate and perform better than others.⁴
- **Stronger customer orientation:** Women are heavily represented among companies' customers. For instance, they tend to control household finances—in Indonesia, Japan, the Philippines, and Vietnam, in more than half of all households.⁵ By increasing gender diversity in their top teams, companies can better understand large numbers of customers.
- **Broader leadership styles:** Women and men tend to have different leadership styles, and incorporating both can help performance. Specifically, there is evidence that women apply five out of nine types of positive behaviour in business—people development, expectations and rewards, role models, inspiration, and participatory decision making—more often than men.⁶

We also acknowledge that the correlation may not be sufficient evidence to convince companies of the positive business effects of gender diversity. It is therefore important for companies to build their own business case based on their own situations. For example, Minerals Australia uses BHP data to show that more inclusive and diverse groups have higher performance in both safety and operations.⁷ Aurizon in Australia found that diversity and inclusion programmes can help reduce potential long-term costs associated with retention issues. The company reported that between March 2012 and 2013, turnover rates for female employees fell from 13 percent to 7.2 percent.⁸

¹ *Delivering through diversity*, McKinsey & Company, January 2018; *Women Matter: An Asian perspective: Harnessing female talent to raise corporate performance*, McKinsey & Company, 2012; and *Women Matter: Time to accelerate: Ten years of insights into gender diversity*, McKinsey & Company, October 2017.

² McKinsey's Organizational Health Index measures the performance and health of a company using nine criteria including quality of leadership team, ability to communicate a vision and clear direction, and the work environment.

³ Vivian Hunt, Dennis Layton, and Sara Prince, *Diversity matters*, McKinsey & Company, February 2015.

⁴ Sylvia Ann Hewlett, Melinda Marshall, and Laura Sherbin, "How diversity can drive innovation", *Harvard Business Review*, December 2013.

⁵ *Women in Asia's emerging markets take reins of household finances: MasterCard survey*, MasterCard press release, March 27, 2013.

⁶ *Women Matter: Time to accelerate: Ten years of insights into gender diversity*, McKinsey & Company, October 2017.

⁷ *Women in leadership: Lessons from Australian companies leading the way*, McKinsey & Company, Workplace Gender Equality Agency, and Business Council of Australia, November 2017.

⁸ *Case study: Gender diversity at Aurizon*, Aurizon (<https://www.aurizon.com.au/~/-/media/aurizon/files/sustainability/diversity/aurizon%20diversity%20case%20study.ashx>).

There has been progress in recent years. On average in the region, women's representation on boards increased from 6 percent in 2011 to 13 percent in 2016.⁵⁹ This appears partly to reflect regulations and corporate policies instituted during this period. For instance, India has made it mandatory for companies to have at least one female director, and the Australian Securities Exchange Corporate Governance Council tracks gender diversity in its constituent companies. On the specific issue of women's representation on boards, an upwards trend is apparent in every country of the region. In Australia and Indonesia, women's representation more than doubled, from 13 to 27 percent and from 6 to 14 percent, respectively. In Japan, the share tripled from 2 to 6 percent, but remains very low. All of these numbers are low compared with the average share in advanced economies of 28 percent.⁶⁰ Twenty-two percent of board members in the United States are female, 27 percent in Canada, and 39 percent in France.⁶¹

Women CEOs are even rarer than board members. In 2016, only 5 percent of CEOs in Singapore and 6 percent of CEOs in Australia were women.⁶² These are the countries that are closest to parity in the region.⁶³ In Indonesia and China, the share was only 2 percent, and in Japan zero. Even in the Philippines, just 3 percent of CEOs are female. Shares of women reporting directly to CEOs are somewhat higher, at 30 percent in the Philippines, 27 percent in Australia, and 21 percent in Singapore, but only 6 percent in India and 4 percent in Japan.

BOTTLENECKS FACING WOMEN IN THE TALENT PIPELINE FROM EDUCATION TO THE BOARDROOM VARY AMONG COUNTRIES AND SECTORS

The lower share of women in company leadership isn't all about the glass ceiling—the famous point at which women's careers appear to come to a halt. The relative lack of women in the top positions in business has its roots far earlier in the talent pipeline that runs from enrolment in tertiary education to entry-level positions, middle management, and the boardroom. In the seven countries we highlight in this research, the share of women erodes the further they are along this pipeline, with different patterns and bottlenecks among countries (Exhibit 11).

India and Japan have a relatively lower proportion of women enrolled in tertiary education at 44 percent and 47 percent of the total of men and women enrolled, respectively, which creates a smaller pool of female talent early in the pipeline. In some countries, there is a significant drop from the share of women who graduate from college to the share taking entry-level positions. The decline in share at this stage is greatest in three countries: India, where the share falls from 43 percent of tertiary-level graduates to only 25 percent of entry-level professionals; the Philippines, 53 to 43 percent; and Australia, 56 to 44 percent.⁶⁴

⁵⁹ This is the average of the seven countries featured in this report.

⁶⁰ This is the 2016 average of the estimated board representation of women based on G20 country samples (only Western countries). See *Women Matter: Time to accelerate: Ten years of insights into gender diversity*, McKinsey & Company, October 2017.

⁶¹ *Women Matter: Time to accelerate: Ten years of insights into gender diversity*, McKinsey & Company, October 2017.

⁶² These data are based on the top 100 public companies by market capitalisation. Australia's Workplace Gender Equality Agency reports that the share of female CEOs was 16.5 percent in 2017 based on 4,000-plus organisations. See *All industries summary for 2017*, WGEA Data Explorer (http://data.wgea.gov.au/industries/1#gender_comp_content).

⁶³ Data from annual report of top 100 public companies for each country by market capitalisation.

⁶⁴ The talent pipeline results from an analysis that combines information from multiple data sources. However, we acknowledge the difficulties of combining different data sets.

Exhibit 11

Bottlenecks in the talent pipeline vary among countries

ESTIMATES

Women drop out at all stages of the employment “funnel”¹
% women²

■ Potential major bottleneck in pipeline (~50% drop from previous stage of pipeline except in the first enrolment stage)



	Tertiary education, enrolled	Tertiary education, graduates	Entry-level professionals ³	Middle management ⁴	Senior management ⁵	Board members
Australia	57	56	44	36	21	18
China	52	53	51	22	11	10
India	44	43	25	16	4	11 ⁶
Indonesia	51	52	45	n/a	13	5
Japan	47	46	49	9	1	3
Philippines	55	53	43	n/a	33	15
Singapore	51	53	49	n/a	25	8

1 Does not include data on women entrepreneurs.

2 Women as a percentage of total men and women.

3 Entry positions in jobs occupied by graduates.

4 Managerial (midlevel) positions. Comparable middle-management data are not available for Southeast Asia.

5 Company management/executive committee (CEO and direct reports to CEO).

6 Increase in proportion due to legal mandate for one woman board member for all listed companies.

SOURCE: McKinsey proprietary database 2015; Women in Leadership Australia 2017; World Bank; published reports; McKinsey Global Institute analysis

The largest drops in share of women between the entry level and middle management are in Australia, China, and, most significantly, Japan, where a 49 percent share becomes only 9 percent. In all seven countries that we examined, the share of women then declines further between middle and senior management. The share dwindles further between senior management and board positions, with one exception. In India, the share of female senior managers is only 4 percent, but 11 percent of board members are women; however, we note that women’s board-level representation in India is relatively low compared with other countries in the region. The largest drops between senior management and the boardroom are in Indonesia, the Philippines, and Singapore.

The question is what causes the bottlenecks where women drop out of the business talent pipeline? We have drawn on the Asia results of a McKinsey survey carried out in 2015 across the world that revealed a number of barriers to women’s advancement into leadership roles; these barriers appear throughout Asia Pacific (Exhibit 12).

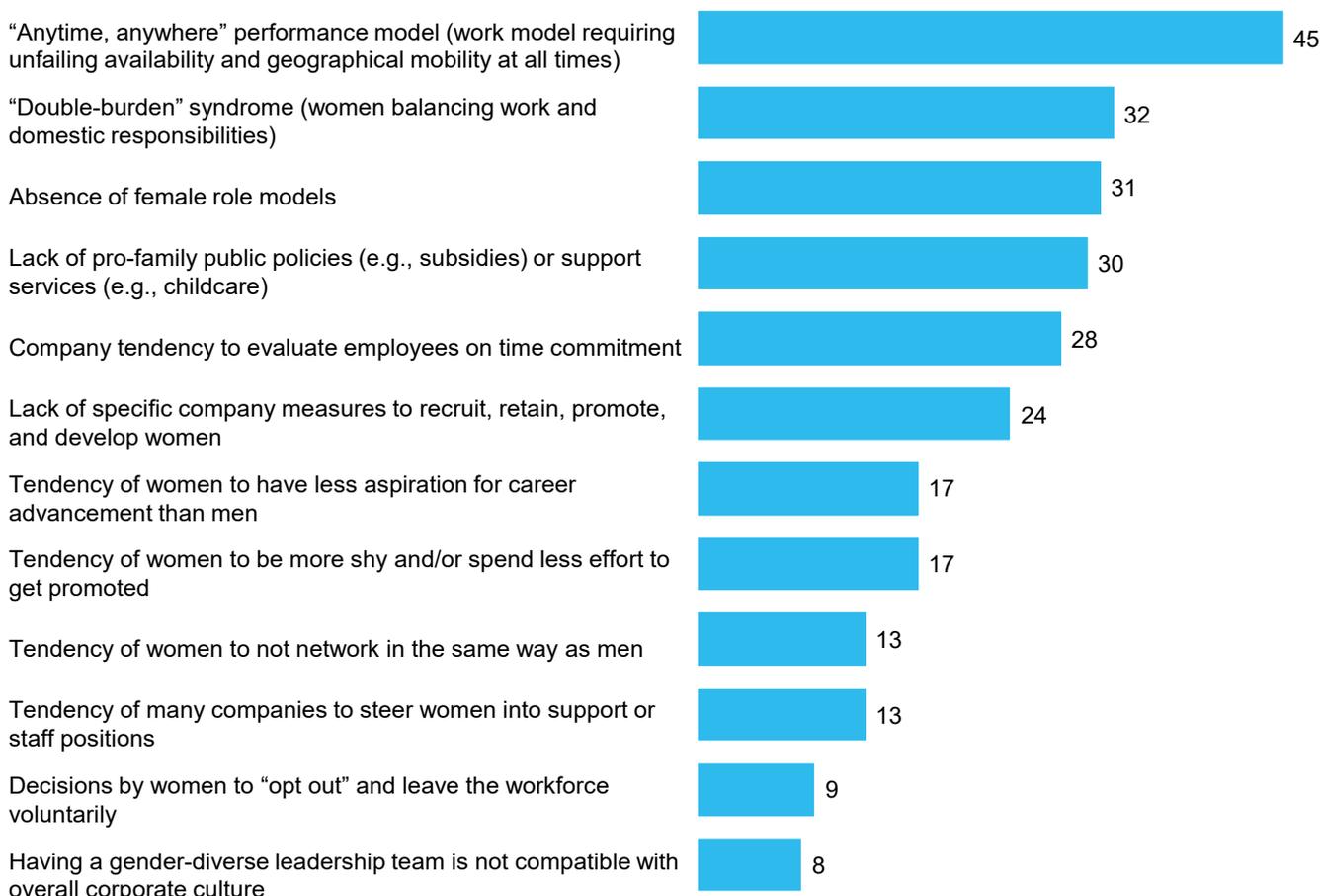
Exhibit 12

Top barriers perceived by women across Asia Pacific include insufficient flexibility in work, work-life balance, female role models, and childcare

Women’s views of barriers to improving gender diversity vary across Asia Pacific

% of respondents who selected the barrier (Asia Pacific average)

“In your opinion, which are the top three high-level barriers, if any, to increasing gender diversity within the top management of your organisation?”



SOURCE: McKinsey proprietary database—Women Matter survey 2015; McKinsey Global Institute analysis

The survey found that by far the largest barrier to women moving into senior roles cited by executives—45 percent—was the “anytime, anywhere” performance model. The second biggest—cited by 32 percent of respondents—was the “double burden” of women holding down a job while looking after their families, particularly in societies where women are still expected to take sole responsibility for family and household duties. Third was an absence of female role models, followed by a lack of pro-family public policies and support, including childcare; 30 percent of respondents cited the latter factor. Other barriers—all selected by more than 20 percent of respondents—were companies’ tendency to evaluate employees on the basis of time commitment (rather than performance and outcomes), and a lack of specific measures to recruit, retain, promote, and develop women. For some women, further barriers included their own tendency to have lower aspirations for their careers than men, being shyer than men, and spending less effort on winning promotion.⁶⁵

⁶⁵ This McKinsey survey covered some 700 senior managers in ten markets (the seven countries that we focus on in this report plus Malaysia, South Korea, and Thailand).

These barriers are present in most countries in Asia Pacific, with some variations. For example, respondents in India say the lack of specific company measures to recruit, retain, promote, and develop women is the most important barrier to increasing gender diversity in their organisations' top management. Among Japanese respondents, the anytime, anywhere performance model is cited as the top barrier, followed by companies' tendency to evaluate employees on their time commitment.

The double burden on women is perpetuated by a lack of workplace flexibility and the anytime, anywhere workplace culture

Evidence suggests that failure to normalise flexible work options has the strongest correlation with women dropping out of the talent pipeline, because this perpetuates and entrenches women's double burden. Across Asia Pacific, many interviews and the McKinsey Women Matter survey in 2015 reveal that it remains the norm for women to be the primary caregiver in the household, and that this is very often the main reason women opt out of the talent pipeline. In some parts of Indonesia, women who become mothers and stay at home to take care of children are prized more highly than those who have successful careers outside the home. The concept of *kodrat*, which is unique to Indonesia, encompasses the expectation that women will take care of domestic commitments before engaging in any other activities.⁶⁶

One Australian study highlighted ten key elements that companies need to address in order to increase women's representation.⁶⁷ They include making a case for change and role modelling a commitment to diversity. An important factor is flexible working. In Australia, financial services company Suncorp redesigned the operating model of its contact centre to enable flexible scheduling through "work at home hubs" that combine home workstations and working spaces in regional shopping centres, and the firm offers a range of positions that are based in the home. Also in Australia, mining company Rio Tinto has a flexible work policy offering the option to work part time and job share, and giving mothers the choice to work four-hour shifts supported by contractors to fill gaps.⁶⁸ In Indonesia, a huge, dispersed archipelago, women tend to stay close to home because of family responsibilities, and many women will turn down work if it means that they are relocated far from home.⁶⁹ In China, many women are thriving in the e-commerce and technology sectors because, by their nature, these fields allow flexible and remote work.

The Australian study found that the element most correlated with higher ratios of women in top roles was action to normalise flexible working. Providing ways to work flexibly is not, in itself, sufficient—uptake of these options should be encouraged so that they become normal practice. Women may be reluctant to take advantage of flexible working because of a perception that doing so may hurt their chances of promotion.⁷⁰ Companies taking steps to remedy this include Unilever, which has striven to make working flexibly acceptable. Among the practical steps that the company has taken are explicitly encouraging employees to work from home and urging managers to counter negative views of employees without children taking advantage of flexible options.

⁶⁶ Sari Andajani, Olivia Hadiwirawan, and Yasinta Astin Sokang, "Women's leadership in Indonesia: Current discussion, barriers, and existing stigma", *Indonesian Feminist Journal*, volume 4, number 1, March 2016.

⁶⁷ *Women in leadership: Lessons from Australian companies leading the way*, McKinsey & Company, Workplace Gender Equality Agency, and Business Council of Australia, November 2017.

⁶⁸ Jane Nelson et al., *A path to empowerment: The role of corporations in supporting women's economic progress*, Harvard Kennedy School and U.S. Chamber of Commerce, April 2015.

⁶⁹ Ilhaamie Abdul Ghani Azmia, Sharifah Hayaati Syed Ismailb, and Siti Arni Basir, "Women career advancement in public service: A study in Indonesia", *Procedia—Social and Behavioral Sciences*, volume 58, October 12, 2012.

⁷⁰ *The CPA Australia workplace flexibility survey 2016*, CPA Australia, 2016; and George Nott, *Is flexible working bad for your career?* CIO, May 30, 2017.

Motherhood—with its associated societal attitudes—is a major point at which women drop out of the talent pipeline

Throughout Asia Pacific, it is clear that many women leave the workforce when they become mothers, and many never return. Many women choose to care for their families full time. Others leave the workforce while their children are young but then find it hard to return. Others would like to go back to work but have difficulty securing affordable childcare. The attrition of women from the talent pipeline can start even before employees become mothers, as societal attitudes militate against women pursuing a career and instead prioritise looking after their families and households. We fully acknowledge that such attitudes are not always “imposed” on women—many women take the view that their primary role is as mothers and caregivers who run households.

In China, 53 percent of tertiary education graduates are women, and many of them move into entry-level positions—there is only a slight decline, to 51 percent, at this stage. But the share of women is less than half that at the middle-management level. One factor appears to relate to difficulties that accompany managing motherhood with a career. One 2017 survey found that 40 percent of women were reluctant to have children and 63 percent of women did not want a second child, citing concerns that becoming mothers (especially a second time) would compromise their ability to rise through the ranks in their company.⁷¹ Indeed, 63 percent of women said that having a child would have a significant impact on their career. In the same survey, 53 percent of women said that they were concerned about difficulties returning to work, and 49 percent said that they were worried that they would be replaced in their job by someone else. There appears to be a monetary disincentive, too. In the survey, 33 percent of respondents said that they had experienced a salary decline when they returned from having a child, and 36 percent returned to a lower position than the one they had left. Both figures were somewhat higher than in the same survey in 2016. Another survey also showed economic pressure as a top concern for women when having a second child.⁷² The UN Human Rights Council has highlighted discrimination against women in China when they become mothers.⁷³

India and Japan have a relatively lower proportion of women at the start of the pipeline (enrolled in tertiary education), with 44 and 47 percent, respectively. In India, 43 percent of graduates are women, but they hold only 25 percent of entry-level positions. In the World Values Survey, the proportion of respondents in India agreeing that “a university education is more important for a boy than for a girl” was 63 percent; the country with the next-highest share of respondents holding this view had 51 percent.⁷⁴ In the World Values Survey, 70 percent of Indian respondents agreed with the statement “When a mother works for pay, the children suffer”. The next-highest share in the region was 44 percent. We conducted a number of interviews to find out what factors are persuading so many women to stay at home. They include a lack of accessible childcare in the workplace, long commuting times resulting in too little time with their children, and finally a desire to help their children’s education by giving them hands-on tutoring.

In Japan, the pipeline starts with women making up 47 percent of students enrolled in tertiary education. However, the average share of female students in Japan’s top ten universities, including the University of Tokyo and Waseda University, was only 28 percent in 2017. This may limit the number of Japanese women rising to higher echelons in companies,

⁷¹ *Zhaopin report found China’s working women less keen on childbearing*, Zhaopin Limited, May 11, 2017.

⁷² *Lean In China: 2016 women, work and happiness white paper*, Lean In, November 2016 (<http://www.leaninchina.com.cn/col.jsp?id=141>).

⁷³ In 2014, the UN noted a “prevalence of discrimination on the grounds of maternity, with employers avoiding their obligation to pay maternity leave benefits by employing only women who already have children, not paying the statutory 98-day maternity leave, or dismissing women during pregnancy or when they are breastfeeding”. See *Report of the working group on the issue of discrimination against women in law and in practice on its mission to China (12–19 December 2013)*, UN General Assembly, June 2014.

⁷⁴ Data up to 2014 depending on the country.

given the correlation between attending top universities and holding leadership positions. Although 49 percent of entry-level positions are taken by women in Japan, there is a very sharp drop to only 9 percent in middle management, narrowing even further to only 1 percent in senior management. This erosion appears partly to reflect the fact that women do not want to become managers. A 2015 Intelligence HITO Research Institute survey found that 75 percent of female respondents said that they were not interested in managerial positions for two reasons: a lack of confidence in being leaders or a lack of role models, and the longer hours and more burdensome work that would come with promotion.⁷⁵ Japanese working hours are relatively long, perhaps explaining this reluctance. Men in Japan work 46 percent more hours than their US counterparts, OECD data show.

In the Philippines, the 33 percent share of female senior managers is more than twice the 15 percent share at the board level. This appears partly to reflect women's attitudes. In the many interviews we conducted, we heard Filipinas express the view that they had already done well to achieve a certain position and were satisfied not to advance further. This suggests that, even if attractive job opportunities are available, many women may choose to put their effort into the family instead. A far higher share of Filipinas view being a housewife as just as fulfilling as working for pay—80 percent in the World Values Survey, compared with 60 percent of their counterparts in most other countries in the region.

Childcare arrangements vary, but they represent a significant challenge for women's careers in virtually all countries in the region. In East Asia, Japanese women have difficulties finding childcare despite support from the government.⁷⁶ Even in Australia, childcare is a major issue because it is so expensive. Net childcare costs (the amount paid by two-earner families) were 20 percent of an average family's income in 2015, compared with the 13 percent average in OECD economies.⁷⁷ In such cases, in the short term it can make economic sense for the parent earning the lower wage—likely to be the woman—to leave the labour force to save money on formal childcare.

Other factors that vary by country contribute to lower representation of women along the pipeline

A number of factors act as barriers that keep women from climbing to leading positions in particular countries. For instance, China's statutory retirement age of 55 for women but 60 for men leaves less time for women to climb through the ranks. Severe mobility issues in Indonesia due to traffic congestion and a lack of efficient public transport pose a considerable challenge to women working while also looking after their families.⁷⁸

In Singapore, it is typical for companies to appoint candidates for promotion from within the social circles of board members—more of them men than women—rather than through formal processes.⁷⁹ If women do rise to senior positions, they are less likely to see fostering gender equality as their responsibility than women in other Asian countries: only 54 percent of women in Singapore believe this to be the case, compared with around 70 percent in Indonesia and Malaysia.⁸⁰ One survey of female executives also revealed that although 75 percent of respondents said it is important to give advice and training to other women, only 16 percent had actually done so. At the same time, 65 percent of respondents in the World Values Survey agreed that it causes problems if a woman earns more than her

⁷⁵ Ken Moriyasu, "75% of Japanese women not interested in management," *Nikkei Asian Review*, May 14, 2015.

⁷⁶ Tomohiro Osaki, "Day care crisis stuck in vicious cycle", *The Japan Times*, April 17, 2016.

⁷⁷ For two children aged two and three, and assuming a two-parent household both earning average Australian wages. See *Starting strong IV: Monitoring quality in early childhood education and care*, OECD, October 28, 2015.

⁷⁸ Kang Hang Leung, *Indonesia's summary transport assessment*, ADB Papers on Indonesia, number 15, Asian Development Bank, 2016.

⁷⁹ Chor Kheing Yuit, *Why aren't more women on Singapore company boards?* Channel New Asia, October 24, 2015.

⁸⁰ *Mind the gaps: Perceptions of gender equality in corporate Southeast Asia*, Economist Intelligence Unit, 2016.

husband, which may contribute to women’s leaving employment in the later stages of the pipeline. Finally, even if women make it to the board level, they are paid an average of 43 percent less than their male counterparts, which acts as a disincentive to push for the highest positions in companies.

WOMEN’S REPRESENTATION IN LEADERSHIP POSITIONS VARIES BY SECTOR

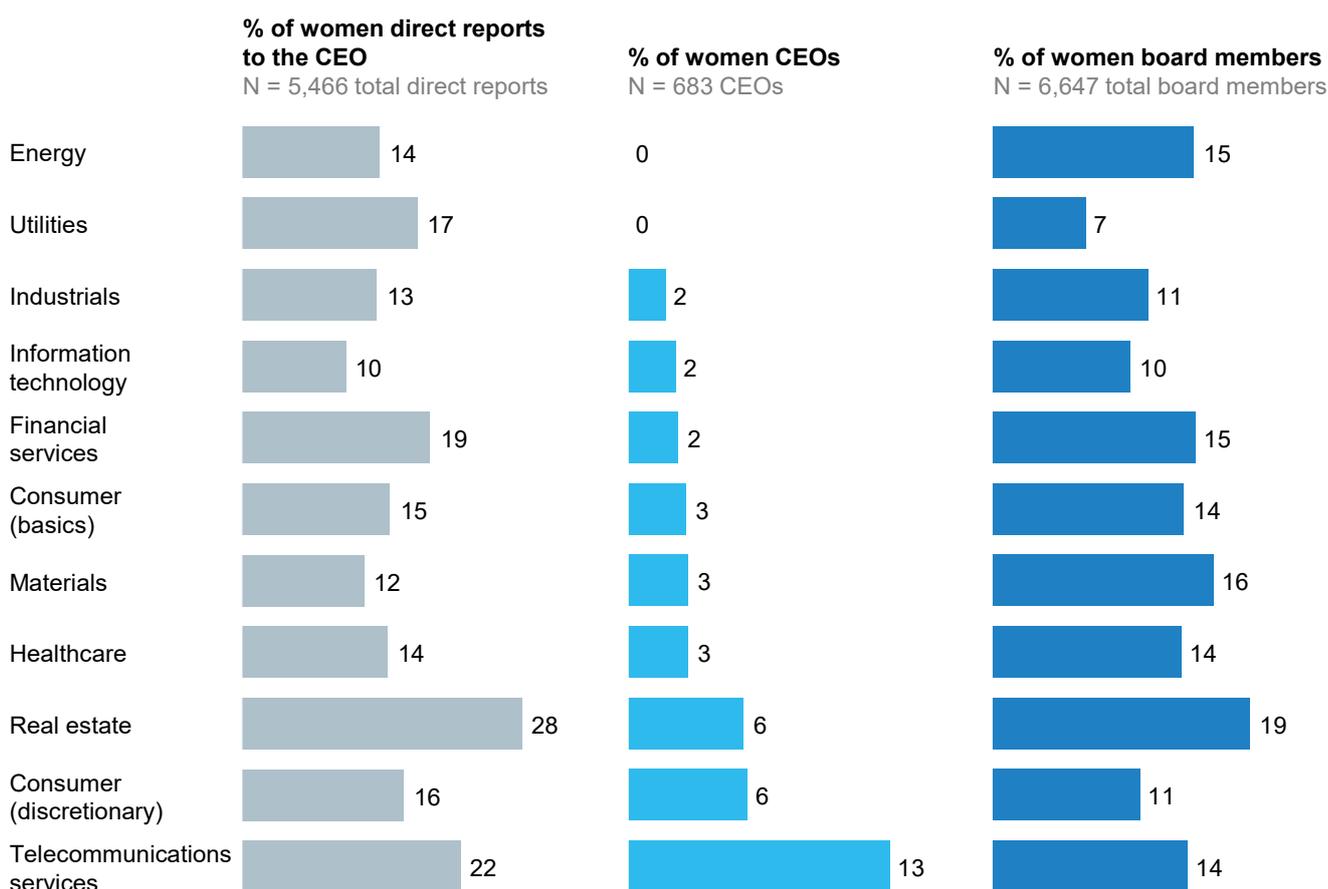
Looking at women in leadership at the sector level, we also find variation (Exhibit 13). The data show that women’s representation in leadership positions is markedly low in energy, finance, industrial sectors, information technology, and utilities. Telecommunications has a higher share of women CEOs, senior executives, and board members—across Asia Pacific, 13 percent of CEOs, 22 percent of executives reporting directly to CEOs, and 14 percent of board members are female. Real estate has the highest share of women direct reports, at 28 percent, and board members, at 19 percent. In energy and utilities, there are so few women CEOs that the share rounds to zero for the top 100 public companies in 2016 by market capitalisation in our seven focus countries.

Exhibit 13

Women’s representation in business in Asia Pacific varies by sector

Women’s representation by sector in Asia Pacific¹

Top 100 companies per country



¹ Data for focus countries only (Australia, China, India, Indonesia, Japan, Philippines, and Singapore). Figures here are based on the top 100 companies in each focus country and may differ from pipeline data in Exhibit 11 where sample sizes and time frames are different.

SOURCE: Annual reports; investor presentations; McKinsey Global Institute analysis

Global McKinsey research identifies three archetypes of industries where the attrition of women from the talent pipeline is similar. Patterns in Asia Pacific align with these archetypes. They are:

- “Low entry” industries where there is a small proportion of women even in entry-level positions; these industries include technology, information technology, automotive, energy, and basic materials.
- “Middle barrier” industries where there is a significant drop-off in the share of women in middle management compared with the entry level; these industries include healthcare, infrastructure, logistics, and travel and transport.
- “Glass ceiling” industries where the share of women in top leadership roles is low; these industries include financial services (asset management, banking, and insurance) and other professional services.

Different factors appear to be in play depending on the sector. In male-dominated industries such as construction and mining, women may be underrepresented because working conditions are not attractive to them.⁸¹ Some large companies in these sectors have acted to mitigate this situation. In mining, for instance, BHP announced that it aims for women to account for half of its workforce by 2025. This is against a 15 percent share in the Australian mining industry as a whole as of August 2017. A year after its announcement, BHP said that the share of women had increased by 2.9 percent, just shy of the company’s target of 3.0 percent, and that its female turnover rate had fallen from 8.4 percent higher than that of male employees in 2016 to 4.7 percent higher in 2017. The company put these advances down to a combination of recruiting based on skills as well as experience in the mining industry, flexible work options for employees based in offices and on-site, and encouraging suppliers to offer the same flexibility.⁸² In construction, Australia company Mirvac has made advances in normalising flexible work after introducing a programme called “My Simple Thing” in 2016. The company asks all employees to publicly declare a simple change that can improve their work lives, and they are then supported by their teams to make it happen. Examples of these simple changes are finishing work early one day a week to attend sports training, and starting the day late to drop off children at school. The uptake of flexible working arrangements increased to 76 percent of employees in 2017 from 44 percent in 2015.⁸³

Another industry where women’s representation is low, especially in managerial positions, is healthcare and pharmaceuticals. In Japan, pharmaceutical company Takeda launched a range of initiatives in 2016 to improve women’s inclusion, including an internal women’s network, a flexible programme that gives employees the choice of work times and location, and a drive to encourage faster promotion for employees who perform well early in their careers. As a result of these efforts, the company has hit its target of 30 percent of new managers being women, from only 6.2 percent in 2015.⁸⁴

⁸¹ Phiona Martin and Antoni Barnard, “The experience of women in male-dominated occupations: A constructivist grounded theory inquiry”, *SA Journal of Industrial Psychology*, volume 39, number 2, 2013.

⁸² *No silver bullet but great progress on gender balance*, BHP press release, September 18, 2017.

⁸³ Mirvac 2017 annual report.

⁸⁴ Chalya Freeman et al., *Footprints: Taking strides toward gender parity and sustainable diversity and inclusion*, Takeda Pharmaceuticals International (https://www.hbanet.org/sites/hba.cms.memberfuse.com/hba/files/docs/Corporate/Annual_Conference/Posters/P07-Freeman_et_al_Takeda.pdf).

In the technology sector, a shortage of women in STEM-related jobs may be due not only to lower enrolment in these subjects by girls, but also to early-career barriers. In academic research, for instance, short-term contracts lead to career instability. A 2014 report by the Science and Technology Committee in the House of Commons in the United Kingdom found that a lack of a permanent job when starting a family deters more women than men.⁸⁵ One survey of women in STEM fields found that more than nine out of ten respondents experienced in-group bias, and seven out of ten strongly agreed that unconscious bias had affected their opportunities to network.⁸⁶

Leading companies in the United States, including Airbnb, Asana, and Google, have all taken steps to increase women's representation (especially in engineering roles) and have started publicly publishing data in order to reinforce change. Pinterest reports that it boosted the share of women in technical roles from 21 to 26 percent in 2016; this was somewhat short of the company's 30 percent target for that year but considerably higher than the 16 percent average in the industry.⁸⁷

Perhaps one way to improve women's representation in leadership in technology industries is to involve women at the startup stage. In China, for example, women are relatively well represented at e-commerce giant Alibaba, where six out of 16 senior managers are female, a relatively high share of about 38 percent. Alibaba's founder Jack Ma has led from the front on this issue and has consistently been vocal about the importance of having women in leading positions; it is notable that one-third of the team that founded the company was female. The company makes a number of provisions for women at work, including express lanes and relaxation room for pregnant employees.⁸⁸ Ctrip, an online service provider in China, has a female CEO, chief operating officer, and chief financial officer, and has a nursery and breastfeeding rooms at its Shanghai headquarters. At Didi Chuxing, China's top ride-hailing company, women hold 37 percent of tech-related jobs, more than double the 15 percent at Uber worldwide. In 2017, Didi launched a women's network that aims to cultivate managers through tutoring from senior executives, rotation in different departments, and mentorship from business leaders in China and overseas.⁸⁹

With the importance of technology as a sector rising the world over, countries in Asia Pacific have a significant opportunity to boost women's entry into tech and achieve sustained growth in the share of women in leadership positions in business (see Box 5, "India should now consider how to build on advances in women's representation in STEM fields").

⁸⁵ *Women in scientific careers: Sixth report of session 2013–14*, House of Commons Science and Technology Committee, February 6, 2014.

⁸⁶ *Unconscious gender bias in the STEM professions*, Professionals Australia, 2015.

⁸⁷ *Oh, how Pinteresting! A 2016 update on diversity at Pinterest*, Pinterest, December 16, 2016; Sohan Marthy, *Women in software engineering: The sobering stats*, LinkedIn Talent blog, March 20, 2014; and Candice Morgan, "What we learned from improving diversity rates at Pinterest", *Harvard Business Review*, July 11, 2017.

⁸⁸ Kia Kokalitcheva, "Female executives are Alibaba's 'secret sauce,' founder Jack Ma says", *Fortune*, May 20, 2015; and Charles Clover, "Women of 2014: The women of Alibaba", *Financial Times*, December 12, 2014.

⁸⁹ *In China, Didi speeds far ahead of Uber in gender diversity*, Tech in Asia, March 31, 2017; *Didi launches Women's Network, introducing leadership programs for its 40 percent women workforce*, Didi Chuxing press release, March 29, 2017.

Box 5. India should now consider how to build on advances in women's representation in STEM fields

The iconic image of a group of smiling Indian women scientists celebrating the success of their project to launch Mangalyaan, the Mars space probe, is symbolic of a larger phenomenon: India has made impressive strides in raising the share of female graduates in STEM subjects and women in STEM careers. It can now build on this progress by ensuring that more women STEM graduates advance through the talent pipeline to the most senior positions in Indian companies. Many women in India have already reached the top at companies such as Intel, Capgemini, HP, Facebook, and IBM.

In 2012, India's share of women graduates from STEM courses was 42 percent, far higher than in many advanced economies, including the United States (35 percent), the United Kingdom (32 percent), and Norway (30 percent).¹ Shares vary by subject. For instance, about 50 percent of Indian graduates in sciences are women, but the figure is only about 30 percent in engineering and technology courses.² For purposes of comparison, in the United States the share of women science graduates was also about 50 percent, but the share of engineering and technology graduates only 20 percent in 2012.³

In Indian tech, women continue to be underrepresented, especially in engineering roles up to the C-suite. Only an estimated 26 percent of engineers in the tech industry are women. Of these, half move onto different roles, and only 7 percent reach top positions, after approximately 12 years. Men take six years plus to reach the managerial level; women take eight or more.⁴

In science fields, women account for only 25 to 30 percent of PhDs, and the share of female faculty members is only 15 to 20 percent.⁵ In high-profile institutions such as the Tata Institute of Fundamental Research and the Council of Scientific and Industrial Research, women account for between 14 and 30 percent of scientists, while at top educational institutions such as IISc Bangalore and Delhi University, women account for between 8 and 20 percent of professors.

Women in India appear to face barriers that are particular to STEM roles. In tech, for instance, a 2015 report found that 59 percent of women in STEM report a "testosterone-laced" culture, compared with 25 percent in the United States, and 57 percent a "late-night geek/hacking culture", compared with 31 percent in the United States. Sixty-six percent of women responded that "a female at my company would never get a top position no matter how able or high-performing".⁶

A report from NASSCOM, India's industry association for the information technology and business process management sector, published survey data showing that employee referrals and on-campus recruitment are more gender-balanced modes of recruitment than, for instance, online job portals.⁷ Policies relating to parenthood also play an important role in promoting gender diversity. The survey found that the cost of maternity leave was not the key issue, but rather the low rate of return to work and managing changing work patterns after returning. This suggests that targeted support for women when they become mothers is important to raise retention and enhance their career progression.

¹ UNESCO science report: *Towards 2030*, UNESCO, 2015; *All India survey on higher education (2012–2013)*, Government of India, Ministry of Human Resource Development, Department of Higher Education, 2015; and 2012 OECD data.

² *All India survey on higher education (2012–2013)*, Government of India, Ministry of Human Resource Development, Department of Higher Education, 2015.

³ *Dataset: Graduates by field of education*, OECD, 2012.

⁴ Mohita Nagpal, *Women in tech: There are 3 times more male engineers to females*, Belong Technologies India, August 31, 2017.

⁵ Rohini M. Godbole and Ramakrishna Ramaswamy, "Women scientists in India", in *Women in science and technology in Asia*, The Association of Academies and Societies of Sciences in Asia, 2015.

⁶ *Women in STEM: How and why an inclusive strategy is critical to closing the science, technology, engineering, and maths talent gap in Europe*, Kelly Services, 2015.

⁷ Parvati Raghuram et al., *Women and IT scorecard—India: A survey of 55 firms*, NASSCOM and The Open University UK, spring 2017.

ALL STAKEHOLDERS NEED TO WORK TOGETHER TO DRIVE CHANGE

A comprehensive approach to the issue of women's leadership in business is needed, with all stakeholders—governments, companies, and NGOs—playing their parts to achieve change. Partnerships among stakeholders can be highly effective.

The approach of individuals counts, too. In order for the many initiatives that are possible to be effective, individuals must work on their own attitudes. In 2016, one study found that a simple writing exercise to affirm personal values and reduce negative self-perceptions narrowed the performance gap between men and women.⁹⁰ Another study in 2016 found that participating in well-designed measures such as diversity workshops has the potential to increase awareness, reduce subtle gender bias, and increase the propensity to take action to address diversity challenges.⁹¹

Men need to play their full part in changing the status quo to increase women's representation in work and their share of leadership positions. In the home, unless men take on a greater share of domestic responsibilities, many women will drop out of the labour force.⁹² At work, men continue to dominate leadership positions, and they therefore have the means to support women in their careers through promotions, mentoring, and sponsoring. A number of equality-promoting initiatives explicitly involve both men and women. One is the HeForShe movement, which provides a systematic approach and targeted platform where men and boys can engage and become change agents in favour of gender equality. Senior executives can lead by example. A well-known example is the announcement by Facebook CEO Mark Zuckerberg that he was taking two months of paternity leave. More male managers can serve as mentors to women, the focus of Lean In's #MentorHer movement.

Narrowing the leadership gender gap will take time and concerted effort, but we are already seeing examples of initiatives in the region that are steps in a positive direction. We now highlight some of these, focusing on governments and companies.

Government can use policy and legislation to influence women's representation at all stages of the talent pipeline

A number of government initiatives could set the stage for genuine advances in women's representation in leadership positions, and we mention several here (our list is by no means exhaustive):

- **Investment in skills training programmes for women in industries where they are underrepresented:** Governments can put in place initiatives targeted at women, including programmes that equip them with the skills they need to have successful careers in industries where they are underrepresented. In the Philippines, the Technical Education and Skills Development Authority's Women's Center offers vocational training to women to equip them for work in industrial sectors traditionally dominated by men. Courses include electrical installation and maintenance, motorcycle and small engine servicing, and plumbing. In its 2015 annual report, the authority said that it had achieved a 60.3 percent employment rate six months after completion of its training courses.

⁹⁰ Zoe Kinias and Jessica Sim, "Facilitating women's success in business: Interrupting the process of stereotype threat through affirmation of personal values", *Journal of Applied Psychology*, volume 101, number 11, November 2016.

⁹¹ The study took the form of a "scientific diversity" workshop that took deliberate design choices to systematically increase its effectiveness, such as trained facilitators, using empirical evidence rather than intuition, and a rigorous evaluation to assess the efficacy of the intervention. See Corinne A. Moss-Racusin et al., "A 'scientific diversity' intervention to reduce gender bias in a sample of life scientists", *CBE—Life Sciences Education*, volume 15, number 3, September 2016.

⁹² *The role of men and boys in promoting gender equality*, Women 2000 and beyond, United Nations, December 2008.

- **Improve transport infrastructure to make commuting less burdensome and safer for women:** Governments can improve public infrastructure to make work less burdensome for women. Finding ways to shorten commuting times and making travel safer for women can reduce one particular type of challenge they face. In India and Indonesia, whose cities suffer from traffic congestion, bus rapid transit projects have had some success.⁹³ Expanded and higher-quality household infrastructure can reduce the amount of time women spend on chores in the home.
- **Use public spending to enable better and more affordable childcare, and rationalise taxes to remove disincentives to second earners:** Government can use public spending and the tax system to incentivise measures to help women better balance their home and work responsibilities. In Japan, for instance, the government approved a ¥2 trillion (\$17 billion) package in 2017 to finance free education and childcare services, with the aim of increasing capacity to 320,000 children and eliminating waiting lists for daycare centres. Faced with a shortage of workers, Japanese companies are also taking action to provide more daycare facilities, taking advantage of government subsidies that can cover as much as 75 percent of the cost of starting a nursery and up to 80 percent of its operational expenses. By early 2017, 500 companies had received subsidies to open 600 childcare centres providing places for 14,000 children.⁹⁴ The Japanese government is also seeking to revisit a spousal tax deduction that encourages limited earnings by the spouse of the main breadwinner.⁹⁵ In Australia, the government has provided funding so that four-year-olds can have 15 hours per week of kindergarten.⁹⁶
- **Implement workplace legal protections (for example, antidiscrimination laws, protection from sexual harassment:** Antidiscrimination laws are vital to ensure that companies take a gender-neutral approach to recruitment and working practices.⁹⁷ China has a range of laws that theoretically offer women comprehensive legal protection, but in practice gender discrimination is still widespread in Chinese companies.⁹⁸ In the Philippines, the government requires mass media to abide by gender equality principles and encourages the media to disseminate positive messages about women leaders, raising the profile of female role models.⁹⁹ The Philippine Commission on Women implements such regulations.¹⁰⁰ Legislation can also prohibit gender pay gaps by, for instance, protecting the identity of those who share compensation information. The law can also protect women who report sexual harassment in the workplace.

⁹³ Nadja Kogdenko, *Successfulness of bus rapid transit systems in Asia: Ex-post evaluation*, Energy Research Center of the Netherlands, February 2011.

⁹⁴ Yoshiaki Nohara, *Worker shortage drives Japanese companies into child care*, Bloomberg, February 27, 2017; and Yoshiaki Nohara, *Firms tap state subsidies to start day care facilities to woo working moms*, Bloomberg, March 2, 2017.

⁹⁵ If the spouse earns less than ¥1.03 million a year, the family is eligible to claim a tax deduction. Japan's ruling Liberal Democratic Party is seeking to increase the cap to ¥1.50 million to encourage more women to work.

⁹⁶ Miranda Stewart, ed., *Tax, social policy and gender: Rethinking equality and efficiency*, Australian National University Press, 2017.

⁹⁷ In Iceland, a mandatory pay equality certification system took effect in January 2018 that makes it illegal to pay men more than women.

⁹⁸ Sadie Yang and Ao Li, "Legal protection against gender discrimination in the workplace in China", *Gender and Development*, volume 17, number 2, July 2009.

⁹⁹ Andrew D. Mason et al., *Toward gender equality in East Asia and the Pacific: A companion to the World Development Report*, World Bank, 2012.

¹⁰⁰ *Towards a gender fair media*, Philippine Commission on Women, 2013.

- **Set a publicly declared national agenda and target for women’s representation in leadership:** Governments can establish a national agenda for pursuing the goal of gender equality and set targets for organisations to support more women in leadership positions. In Japan, Prime Minister Shinzō Abe set a target for of filling 30 percent (later revised to 15 percent) of leadership positions with women by 2020. In Singapore, the Diversity Action Committee has targets of 20 percent female representation on boards by 2020, 25 percent by 2525, and 30 percent by 2030. The committee’s six-step plan includes educating companies on the benefits of diversity, implementing diversity disclosure requirements, and encouraging investors to promote diversity on company boards.
- **Work with companies in broad coalitions to share experience and foster a collective effort towards parity:** Governments can work with companies to advocate for women’s equality in work. In Germany, for instance, Chancellor Angela Merkel backed the *Chefsache* initiative in which leaders from industry, science, the public sector, and the media explore ways of promoting gender balance in top management. In the United Kingdom, the WISE campaign manages a portfolio of initiatives aimed at increasing female representation in STEM. This campaign has helped to increase the UK female STEM workforce, which grew by 15 percent from 2014 to 2015.¹⁰¹ The Philippine Commission on Women supports a local initiative called local learning hubs. The government of Davao City established community child-minding centres in 1998, and by 2012, these centres had been rolled out to *barangays*—smaller local units in the city—to enable parents to work.¹⁰²

Companies in Asia Pacific can implement a range of initiatives that have been effective in other regions in advancing women’s careers

Companies can promote gender diversity and equality in the workplace in many ways, a topic that McKinsey & Company has explored for a decade through its Women Matter initiative.¹⁰³ Here we focus on just a few concepts that companies in Asia Pacific could consider that have proved effective around the world:

- **Show top management commitment and accountability by, for instance, setting metrics and targets for gender equality supported by gender-based talent pipeline planning:** From the very top, companies need to make a clear business case for gender equality that is tailored for their organisation, and be visible in their support for initiatives that promote pro-gender-equality practices. Companies should then consider planning for a gender-based talent pipeline supported by setting transparent diversity targets, putting in place tracking of these targets, and holding executives accountable for meeting them. Some companies tie compensation to meeting targets through a scorecard system, while others opt for peer-to-peer accountability (voluntary commitments coupled with regular review). As we have noted, the Australia Securities Exchange’s Corporate Governance Council has tracked diversity targets since 2010; while there has been some progress, constituent companies of the ASX200 need to continue the effort to reach 30 percent female representation in board positions by 2018.¹⁰⁴ Also in Australia, BHP made a strong case for change by using its own company

¹⁰¹ *Annual report April 2015–March 2016*, The Wise Campaign, 2016.

¹⁰² *Gender and development local learning hubs: Davao City*, Philippines Commission on Women (<http://www.pcw.gov.ph/sites/default/files/documents/studies/Davao%20GAD%20LLH%20Write%20up.pdf>).

¹⁰³ McKinsey research on gender equality can be found at <https://www.mckinsey.com/global-themes/gender-equality>.

¹⁰⁴ The ASX corporate governance council gives a recommendation for listed entities to set measurable objectives for achieving gender diversity, disclose policies and objectives, and monitor progress.

data to show that “more diverse and inclusive groups have higher performance both on safety and operational performance”.¹⁰⁵

- **Offer and encourage uptake of flexible working arrangements such as part-time schedules and homeworking, supported by technology such as videoconferencing:** Flexible working arrangements such as part-time or homeworking options supported by technology such as videoconferencing have proved effective in retaining women in companies even after they become mothers. In India, pharmaceutical company Dr. Reddy’s has a range of initiatives, including Comeback Careers for Women, which offers full-time roles for women returning after a career break; six to seven months of paid maternity leave; and an hour off every day to care for a baby for up to a year. In 2017, Japanese cosmetics company Shiseido announced a new collaboration with childcare-services company JP-Holdings to set up and operate in-house nurseries.
- **Introduce inclusion programmes that, for instance, challenge conscious and unconscious bias in the talent management process, from recruitment to performance evaluation:** Companies can have programmes for inclusion that challenge conscious and unconscious bias and long-established ways of working. In Australia, Kmart’s Diversity Walk initiative uses role-play to help leaders understand how their decisions affect women, and Microsoft rolled out a programme called “dialogue across the differences” in which actors present different scenarios to illuminate unconscious bias. Some companies have put in place formal criteria and processes for recruiting and performance evaluations to help take gender bias out of them. Overall, it would be useful for companies to recognise the need to build a truly inclusive organisational culture and then create a portfolio of initiatives that will deliver on it.¹⁰⁶
- **Introduce formal and explicit sponsorship and mentoring programmes:** Sponsors actively use their influence to help women advance in their careers, while mentors typically provide advice and coaching.¹⁰⁷ Evidence suggests that sponsorship programmes have a significant impact on women’s success in the workplace. Citibank, which has a presence across Asia Pacific, launched Women Leading Citi in 2009. It pairs senior women with executive sponsors to act as their advocates and increase their visibility. As of 2015, 173 women around the world had participated.¹⁰⁸ The Dell Women in IT Executive Mentoring programme has been running in Australia since 2005. The government of Australia has partnered with Dell on this initiative since its inception and had become a channel for 120 government protégés as of 2015.¹⁰⁹ However, the fear of sexual harassment can sometimes deter women from taking part in mentorship programmes (see Box 6, “Sexual harassment can be a barrier to women’s advancement”).¹¹⁰

¹⁰⁵ *Women in leadership: Lessons from Australian companies leading the way*, McKinsey & Company, Workplace Gender Equality Agency, and Business Council of Australia, November 2017.

¹⁰⁶ *Delivering through diversity*, McKinsey & Company, January 2018.

¹⁰⁷ *Sponsorship/mentoring*, Catalyst (<http://www.catalyst.org/knowledge/topics/sponsorshipmentoring>).

¹⁰⁸ “Diversity”, in 2015 *Citi global citizenship report*, Citigroup, 2016 (<http://www.citigroup.com/citi/about/citizenship/download/2015/global/2015-citi-global-citizenship-factsheet-diversity-en.pdf>).

¹⁰⁹ Andrew Woolf, *WITEM 19 & 20 launch 8 April 2016, Women in IT Executive Mentoring (WITEM) Program*, Australian Government Department of Finance, April 8, 2016.

¹¹⁰ *Sponsoring women to success*, Catalyst Knowledge Center, August 17, 2001; and Sylvia Ann Hewlett et al., “The sponsor effect: Breaking through the last glass ceiling”, *Harvard Business Review*, January 12, 2011.

Box 6. Sexual harassment can be a barrier to women's advancement

Sexual harassment in the workplace is a major issue and a highly sensitive topic around the world, with the groundbreaking social-media-driven #MeToo campaign making headlines in late 2017 and early 2018. One study found that as many as 40 percent of women workers in Asia Pacific had responded to surveys by saying they had experienced some type of harassment—verbal, physical, or sexual.¹ Globally, an estimated 35 percent of women have experienced some form of sexual harassment, although some studies suggest that the figure could be as high as 70 percent over women's lifetimes.²

Sexual harassment can have a negative impact on efforts to increase the number of women leaders in business by, for instance, making men and women reluctant to be included on mentorship programmes. Data from a partnership between Lean In and SurveyMonkey shows that male managers are now more hesitant to engage in mentoring activities with female colleagues: 30 percent of male managers say they are uncomfortable working alone with a women, double the previous share, and senior men are 3.5 times more likely to hesitate about having a working dinner with a junior woman, and five times more likely to hesitate about travelling for work with a junior woman.³ One way to overcome this issue is to establish formal programmes with standard procedures to ensure transparency. Lean In has launched a campaign called #MentorHer that encourages more people, especially men, to provide mentorship for women despite their concerns about performing this role.

More broadly, sexual harassment can disrupt women's careers. One 2017 study gave examples of women leaving a company to escape sexual harassment or because of frustration about their employer's inadequate response.⁴ The same study found that women who opt to stay can be ostracised by co-workers.

Companies can take practical steps to guard against sexual harassment. There is a robust case for them to institute clear policies on sexual harassment and respond to instances of sexual harassment by, for example, establishing an internal complaints procedure.⁵ At the same time, national governments can establish their own initiatives. In Australia, the Human Rights Commission conducts national sexual harassment prevalence surveys every five years with the aim of documenting harassment in the workplace.⁶

¹ *Stopping sexual harassment at work*, International Trade Union Confederation, April 2008.

² *Facts and figures: Ending violence against women*, UN Women, August 2017.

³ *Sexual harassment in the workplace: Key findings*, Lean In and SurveyMonkey, 2018 (<https://leanin.org/sexual-harassment-backlash-survey-results/>).

⁴ Heather McLaughlin, Christopher Uggen, and Amy Blackstone, "The economic and career effects of sexual harassment on working women", *Gender & Society*, volume 31, issue 3, June 2017.

⁵ The Australian Human Rights Commission has published a detailed report containing practical measures to tackle sexual harassment in the workplace. See *Ending workplace sexual harassment: A resource for small, medium, and large employers*, Australian Human Rights Commission, 2014.

⁶ *Sexual harassment. Know where the line is*, Australian Human Rights Commission, May 21, 2014.

- Run leadership skills workshops and networking events to help women bolster their aspirations and push for higher positions:** Skills workshops and networking events can help women to push for higher positions, and companies and NGOs can each make a contribution. In India, Tata Group, which aims to have more than 1,000 women leaders by 2020, has in place programmes including iExcel, a cross-company initiative that provides mentoring with 18 senior executives and 35 CEOs from 45 firms in the group; Network to Win, which assigns mentors to small groups of junior female employees; and the Diversity and Women's Network, a support group for women and minorities that provides access to senior leadership, mentoring, workshops, and wellness sessions. These initiatives have already had an impact. In 2016, 50 percent of direct recruits to Tata Administrative Services were women, up from about 30 percent in 2013. The share of women leaders in Tata Communications increased by 10 percent between 2015 to 2016, compared with the 4 percent average at all Indian companies. The Tanmatra programme launched by Catalyst, IBM, and the Indian Institute of Management Bangalore offers women leaders with at least 15 years of work experience a nine-month cross-industry leadership-development programme. Lean In (with which McKinsey & Company has collaborated on Women in the Workplace, a research initiative) is active in more than 150 countries, offering networking opportunities as well as producing a library of expert videos and publishing discussion guides for women. In the Philippines, the Filipina CEO Circle organises forums aimed at building a bridge between one generation of woman CEOs and the next.

Partnerships between different actors are effective at driving gender initiatives

Cooperation and partnership among different players can be a highly effective way to push advances towards gender parity in work.¹¹¹

- Partnerships between governments to make gender parity a priority:** APEC coordinates activities through the Policy Partnership on Women and the Economy.¹¹² The partnership works towards five key pillars, including women's leadership. Its activities include encouraging and monitoring the action plans of individual members to promote women's leadership. In 2017, the partnership released the second edition of its Women and the Economy Dashboard, which helps APEC member countries track and communicate progress on reducing barriers to women's advancement using 75 indicators.
- Partnerships between organisations and institutions (public, private, local, or foreign) to initiate inclusion programmes:** NASSCOM aims to develop an inclusive work environment for women through a range of diversity initiatives on which it cooperates with the government and others. In 2017, NASSCOM partnered with the United Kingdom's Open University on a Women and IT Scorecard in India to demonstrate the differences in participation between men and women in the sector. Local companies can also foster industry partnerships that actively advocate for gender parity.¹¹³

¹¹¹ Kweilin Ellingrud, Mekala Krishnan, Anu Madgavkar, and Tracy Nowski, *Opinion: How cross-sector collaborations can accelerate progress toward gender equality*, Devex, November 2017.

¹¹² *Policy partnership on women and the economy working group*, Asia-Pacific Economic Cooperation (<https://www.apec.org/Groups/SOM-Steering-Committee-on-Economic-and-Technical-Cooperation/Working-Groups/Policy-Partnership-on-Women-and-the-Economy>).

¹¹³ *Delivering through diversity*, McKinsey & Company, January 2018.



Across Asia, there has been progress on increasing the representation of women in leadership positions in companies, but there are still significant gaps to fill and opportunities to explore. Many effective measures in the region can be more widely emulated and developed further by governments and companies, often working in partnership. The benefits of enhancing the career prospects of women are considerable, not only for women but for companies and the economies in which they work.



2. INDIA

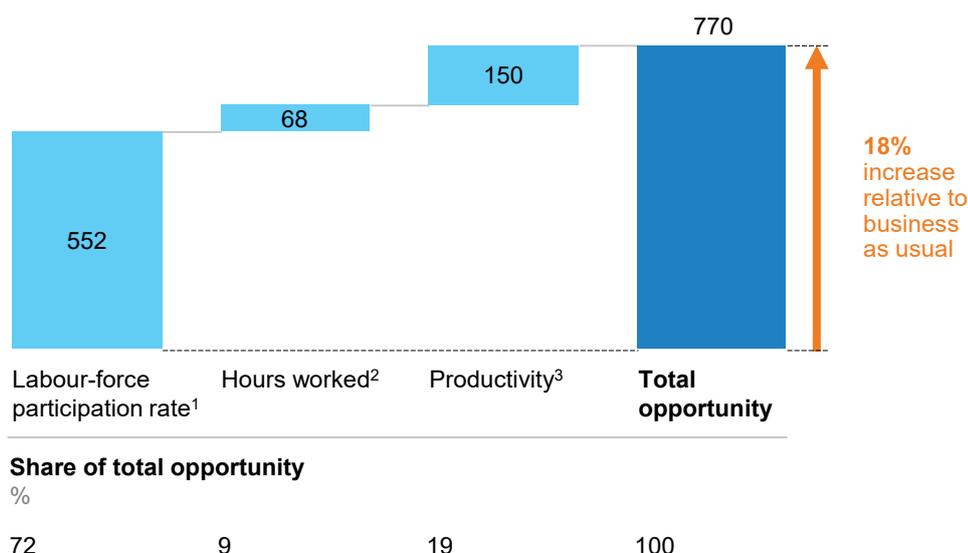
India has one of the largest opportunities in the world to boost GDP by advancing women’s equality. In a best-in-region scenario, it could add \$770 billion to annual GDP by 2025, 18 percent higher than business-as-usual GDP, compared with the global average opportunity of an 11 percent boost to business-as-usual GDP (Exhibit 24). The contribution of women to India’s GDP is 18 percent, one of the lowest proportions in the world, reflecting the fact that only 25 percent of India’s labour force is female.²⁵⁸ More than 70 percent of the potential GDP opportunity in our analysis comes from increasing women’s participation in the labour force by 10 percentage points.²⁵⁹

Exhibit 24

India could add \$770 billion to annual GDP by 2025—18 percent above business as usual

Incremental 2025 GDP from improving gender equality in the best-in-region scenario, relative to the business-as-usual scenario

\$ billion, in 2014 dollars



1 Implies female labour-force participation rate increasing from 27% in 2014 to 37% in the 2025 best-in-region scenario.

2 Implies full-time equivalent rate for females increasing 89% in 2014 to 95% in the 2025 best-in-region scenario.

3 Implies weighted productivity for females increasing from \$4,000 in 2014 to \$9,000 in the 2025 best-in-region scenario.

NOTE: Numbers may not sum due to rounding.

SOURCE: McKinsey Global Institute analysis

²⁵⁸ Based on data from the ILO for the sake of comparability with other countries.

²⁵⁹ Note that this assumes that sufficient jobs can be created to accommodate increased participation—the “supply” side of the equation.



India



GDP opportunity from advancing women's equality¹

\$770 billion added to annual GDP by 2025 **or 18%** over business-as-usual GDP by 2025



Gender inequality today²

Level of gender inequality

Extremely high
0 – 0.50

High
0.50 – 0.75

Medium
0.75 – 0.95

Low
0.95 – 1.00

India

Asia Pacific best

Asia Pacific average

Global best

Gender equality in work

0.30

0.73

0.44

0.73

Gender equality in society



Essential services and enablers of economic opportunity

0.78

0.96

0.85

0.97



Legal protection and political voice

0.28

0.66

0.32

0.84



Physical security and autonomy

0.75

0.96

0.82

0.97



Potential measures to capture the GDP opportunity

Government



Make a concerted effort to expand job opportunities for women



Expand women's business training and connectivity to markets through digital platforms to activate female entrepreneurs



Continue to expand access to and utilisation of childcare and infrastructure to reduce unpaid care work



Invest in shifting attitudes about the role of women in society and work (e.g., spotlight data, engage community leaders, and run education campaigns)

Companies



Enhance commitment to, and policies for, gender balance in the corporate sector among employees and in supply chains



Invest in high-quality employer-provided childcare and share best practice



Accelerate rollout of digital literacy initiatives and innovative financial products for female entrepreneurs

1 GDP opportunity in scenario where all countries match their best-in-region country in progress towards gender parity.

2 GPS scores are made up of 15 indicators of gender equality in work and society, weighted equally. GPS runs from

0 (no gender equality) to 1.0 (parity); for instance, a 0.95 ratio represents 5% distance from gender parity.

SOURCE: McKinsey Global Institute analysis

India is somewhat ahead of close neighbours Bangladesh and Pakistan on the path to gender parity, but behind the Asia Pacific average on gender equality in both work and society. As our previous research has noted, India should be further ahead given its stage of economic development. However, the positive news is that it has already progressed faster than any other Asia Pacific country over the past ten years, largely due to advances in education and a reduction in maternal mortality (although from a lower base than many other countries in the region).²⁶⁰ India can now build on this achievement.

INDIA FACES MULTIPLE CHALLENGES IN ADVANCING WOMEN'S EQUALITY, WITH SIGNIFICANT VARIATION WITHIN THE COUNTRY

India's position on gender equality in work and on the three elements of gender equality in society is lower than the regional average, and the country lags well behind best in region. It has a considerable way to travel to match the best performance in the region on female-to-male labour-force participation rate, maternal mortality, financial and digital inclusion, sex ratio at birth, and violence against women (Exhibit 25).

²⁶⁰ *The power of parity: Advancing women's inequality in India*, McKinsey Global Institute, November 2015.

Exhibit 25

India has extremely high levels of gender inequality on six indicators

Level of gender inequality ■ Extremely high ■ High ■ Medium ■ Low

	India	Asia Pacific best	Asia Pacific average ¹	Global best
Gender equality in work	0.30	0.73	0.44	0.73
Labour-force participation rate F/M ratio	0.34	0.93	0.60	1.00
Professional and technical jobs F/M ratio	No data	1.42	0.95	2.66
Perceived wage gap for similar work F/M ratio	0.50	0.78	0.56	0.86
Leadership positions F/M ratio	No data	0.96	0.25	1.13
Unpaid care work M/F ratio	0.10	0.58	0.25	0.85
Gender equality in society				
Essential services and enablers of economic opportunity	0.78	0.96	0.85	0.97
Unmet need for family planning % of women	13	4	10	4
Maternal mortality Per 100,000 births	174	5	102	3
Education level F/M ratio	0.87	1.00	0.92	1.00
Financial inclusion F/M ratio	0.66	1.00	0.76	1.00
Digital inclusion F/M ratio	0.72	1.00	0.77	1.00
Legal protection and political voice	0.28	0.66	0.32	0.84
Legal protection index	0.40	1.00	0.47	1.00
Political representation F/M ratio	0.18	0.55	0.19	0.93
Physical security and autonomy	0.75	0.96	0.82	0.97
Sex ratio at birth M/F ratio	1.11	1.03	1.11	1.02
Child marriage % of girls and young women	21	0	14	0
Violence against women % of women	37	14	28	6

¹ Weighted average based on 2016 female population.

SOURCE: McKinsey Global Institute analysis

- **Female-to-male labour-force participation ratio:** Labour-force participation is a key indicator, because it is where the lion's share of the GDP opportunity comes from in our analysis. Women account for only 25 percent of the labour force, on a par with many countries in the Middle East and North Africa where, unlike in India, legal provisions restrict many forms of female employment.²⁶¹

According to ILO estimates, India's female-to-male participation ratio fell from 0.44 to 0.34, between 2005 and 2012 and has held steady since.²⁶² This was a much steeper decline than observed in other developing economies, indicating that taking action on labour-force participation is even more critical for India than for other countries. Although this decrease implies significant lost economic potential, much of the fall was driven by other areas of progress—namely demographic shifts due to urbanisation and growth in the relative share of women with higher educational attainment—that will eventually translate into larger economic gains.²⁶³ These demographic shifts lead to a lower labour-force participation ratio, all other things being equal. This is because urban women in India have lower average participation than those in rural areas (with a female-to-male ratio in 2012 of 0.26 in urban areas, compared with 0.44 in rural areas), and women educated to the secondary level have lower participation rates than those with no secondary education.²⁶⁴

An important consideration beyond the level of labour-force participation is the quality of that participation. In India, 120 million women, or 97 percent of all female workers, are active in the informal sector, many of them in low-paying activities such as picking up waste and domestic work that are beyond the reach of regulation.²⁶⁵ Improving the quality of work and its remuneration and enhancing the wellbeing of such women are an urgent priority.

In the longer term, India should aim to create many more jobs in the formal, organised sector. Women's labour-force participation tends to follow a U-shaped curve in which women in very low-income households work by necessity and often in low-paid agriculture or low-productivity informal jobs, but then, as families become more prosperous and economic necessity diminishes, their participation tends to fall; when there is less economic need to work for pay, societal norms favouring women's role as caregivers in the home come to the fore. This effect reverses only when women have more attractive work options facilitated by high levels of education, and the creation of better-paid jobs in the formal sector will be an increasing priority in order to reinforce women's participation. In parallel, India's corporations will need to step up their hiring of women and ensure that they retain them and enable them to progress into leading roles (see Chapter 1).

²⁶¹ *The power of parity: Advancing women's equality in India*, McKinsey Global Institute, November 2015.

²⁶² Note that the latest available data are for 2015, and this dynamic may have shifted in recent years.

²⁶³ The only groups experiencing a significant like-for-like decline from 2005 to 2012 were rural women with low levels of education (that is, without a secondary education). The decline was steepest among non-literate rural women. Similar trends for this group have been observed in other developing countries as they have moved away from agriculture towards industry.

²⁶⁴ For instance, the ratio of non-literate women to men in the labour force in rural areas was 0.44 in 2012, compared with 0.33 for those educated at the secondary level.

²⁶⁵ *Leave no one behind: A call to action for gender equality and women's economic empowerment*, Report of the UN Secretary-General's High-Level Panel on Women's Economic Empowerment, 2016.

- **Unpaid care work:** The flip side of low participation in paid work is undertaking a higher share of unpaid work, and India has a large gender imbalance here. In its 2015 report on gender inequality in India, MGI found that women perform nearly ten times the unpaid care work as men, a far greater disparity than the global average of three times. If the unpaid work of Indian women were to be measured as GDP, even at minimum wage rates, it would contribute \$300 billion to India’s economic output.²⁶⁶ Three-quarters of unpaid work is in the form of routine household chores, with the amount of time spent on these activities lengthened by poor access to basic services such as sanitation, clean water, and clean sources of cooking fuel.
- **Legal protection:** India gives its women a range of legal protections. It has laws that address domestic violence and sexual harassment, and women have the right to inherit property and give evidence in court. Recent advances include an increase in paid maternity leave from 12 to 26 weeks at the beginning of 2017. However, legal protection to ensure gender parity remains weak. Key legislation such as legal mandates of equal pay for equal work and entitlements to parental (rather than maternity) leave are still not in place. Even when legislation exists, customary laws, prevailing social norms, and poor enforcement may place severe hurdles on the ability of women to access legal protection. Moreover, as we have noted, 120 million women in India work without the protection of regulations such as antidiscrimination and occupational health and safety laws.²⁶⁷
- **Political representation:** Only 11 percent of MPs in the 16th Lok Sabha (India’s lower house of parliament) and 9 percent of members of state legislative assemblies were women in 2014, according to the Inter-Parliamentary Union. However, quotas for women at the *panchayat* (rural local government) level helped boost the share of women among elected representatives to 46 percent in that year. This suggests that there is an opportunity for India to capitalise on the many women with local government experience by better equipping them to enter higher levels of politics.
- **Sex ratio at birth:** Although sex-selective abortion is illegal in India, United Nations data suggest that some 300,000 to 600,000 Indian girls are not born every year due to sex-selective abortion, causing India’s highly disparate sex ratio at birth. The sex ratio of the last birth has not changed significantly in the past ten years (reflecting the fact that families tend to stop having children once they have a boy), although there has been an increase of four percentage points in the number of women who prefer more, or an equal number of, daughters vs. sons.²⁶⁸ Innovative public-awareness campaigns have attempted to shift preferences about children’s gender. For example, the Beti Bachao Beti Padhao campaign—“save the daughter, educate the daughter”—has used radio and text messages to raise awareness. Television drama series *Atmajaa* and *Astitva* have also brought attention to this topic. While the effectiveness of such initiatives needs to be explored further, they appear to be promising approaches to improving sex ratio at birth.²⁶⁹

²⁶⁶ For data in other regions, see *The power of parity: Advancing women’s equality in India*, McKinsey Global Institute, November 2015.

²⁶⁷ Diptirekha Mohapatra, *Female workers in the unorganised sector in India*, International Conference on Studies in Humanities and Social Sciences, July 29–30, Phuket, Thailand, 2015.

²⁶⁸ “Gender and son meta-preference: Is development itself an antidote?”, in *Economic Survey 2017–18*, volume 1, Government of India, January 2018.

²⁶⁹ India’s sex ratio at birth rose from 899 females per 1,000 males in 2015 to 928 in 2016, according to the National Family Health Survey. However, this may simply be a reversion to a long-term average: the figure was higher in 2012 and 2013 (931 and 942, respectively). See *National Family Health Survey (NFHS-4), 2015–16*, Government of India, Ministry of Health and Family Welfare, December 2017.

- **Violence against women:** Various forms of violence against women have been brought to the forefront of public discourse over the past five years, with intense debate and media attention provoked by several high-profile attacks on women in public spaces. Domestic violence is also a significant issue. In 2016, 22 percent of women reported suffering spousal physical or sexual violence in the previous 12 months.²⁷⁰ Attitudes are a serious contributing problem. In one survey, 52 percent of women and 42 percent of men agreed that a husband is justified in beating his wife for one of seven reasons.²⁷¹

India should be further ahead on tackling gender inequality, given the correlation between economic development and progress on gender inequality globally. In 2016, 26 countries in our data set had a lower per capita GDP and Human Development Index than India, but 21 had achieved more progress towards gender parity than India—indeed, 13 had lower inequality on seven out of the 15 indicators for which we had comparative data. The fact that India isn't more advanced towards parity is evidence that other factors are exerting influence. Some cultural norms still militate against equality. In the World Values Survey, for instance, Indian respondents show the second-highest level of support—71 percent—of any country in Asia Pacific for the statement “When a mother works for pay, the children suffer”. Societal preference for male children contributes to sex-selective abortion in India as well as the higher propensity for families to stop having children only after a male child is born.

Gender inequality varies within the country, largely due to differences in levels of urbanisation and educational attainment as well as economic development. This disparity suggests that there is an opportunity for states to learn from one another how to tackle issues on which there is significant variation (Exhibit 26).

²⁷⁰ *National Family Health Survey (NFHS-4), 2015–16*, Government of India, Ministry of Health and Family Welfare, December 2017.

²⁷¹ Reasons were going out without telling him, neglecting the house or children, arguing with him, refusing to have sexual intercourse with him, not cooking properly, showing disrespect for in-laws, or if he suspects she is unfaithful.

Exhibit 26

India has high variation in performance across regions (1 of 2)

Level of inequality ¹	Gender equality in work						Gender equality in society				
	Unpaid care work: access to Index of households ²						Essential services and enablers of opportunity			Education Index of women ²	
	La- bour- force partici- pation rate F/M ratio	Partici- pation in profess- ional and tech- nical jobs F/M ratio	Wage gap F/M ratio	Clean cook- ing fuel	Clean drink- ing water	Sani- tary toilets	Health Unmet need for family planning Index of women 15–49 ²	Maternal mortal- ity Per 100,000 live births	Access to mens- trual hygiene % of women	Adult liter- acy	Ele- mentary school com- pletion rate ³
Andaman & Nicobar Isl.	0.42	2.35	0.98	0.64	0.93	0.94	0.16	*	0.90	0.83	0.97
Andhra Pradesh	0.62	0.66	0.75	0.62	0.69	0.87	0.05	92	0.68	0.58	0.79
Arunachal Pradesh	0.70	0.55	0.75	0.45	0.57	0.96	0.22	*	0.73	0.73	1.00
Assam	0.35	0.99	0.61	0.25	0.62	0.80	0.14	300	0.45	0.82	0.87
Bihar	0.24	0.73	0.47	0.18	0.60	0.45	0.21	208	0.31	0.56	0.99
Chandigarh	0.13	1.91	1.14	0.94	1.00	0.90	0.06	*	0.92	0.93	1.00
Chhattisgarh	0.68	0.39	0.64	0.23	0.95	0.96	0.11	221	0.47	0.63	1.00
Dadra & Nagar Haveli	0.25	1.78	1.01	0.56	*	0.91	0.20	*	0.57	0.70	1.00
Daman & Diu	0.19	0.61	0.89	0.74	*	0.89	0.20	*	0.73	0.90	0.97
Delhi	0.19	1.17	1.19	0.98	0.89	0.86	0.16	*	0.90	0.86	1.00
Goa	0.33	1.65	0.86	0.84	1.00	0.79	0.18	*	0.89	0.87	1.00
Gujarat	0.26	0.70	0.73	0.53	1.00	0.98	0.17	112	0.60	0.71	0.94
Haryana	0.28	1.66	0.84	0.52	0.95	0.94	0.09	127	0.78	0.67	1.00
Himachal Pradesh	0.25	1.32	0.59	0.37	0.83	0.99	0.16	*	0.84	0.77	1.00
Jammu & Kashmir	0.16	2.54	0.63	0.58	0.70	0.56	0.12	*	0.67	0.64	0.78
Jharkhand	0.60	0.94	0.59	0.19	0.96	0.73	0.18	208	0.50	0.60	0.99
Karnataka	0.44	0.73	0.70	0.55	0.62	0.83	0.10	133	0.70	0.69	0.90
Kerala	0.44	1.47	0.73	0.57	0.45	0.89	0.14	61	0.90	0.93	1.00
Lakshadweep	0.29	1.78	0.75	0.35	*	0.97	0.18	*	0.97	0.89	0.96
Madhya Pradesh	0.26	0.78	0.52	0.30	1.00	0.88	0.12	221	0.38	0.61	1.00
Maharashtra	0.47	0.46	0.77	0.60	0.89	0.88	0.10	68	0.66	0.77	0.98
Manipur	0.62	1.45	0.91	0.42	0.77	0.79	0.30	*	0.76	0.84	1.00
Meghalaya	0.70	1.67	0.81	0.22	0.38	0.96	0.21	*	0.64	0.93	0.99
Mizoram	0.78	0.97	0.80	0.67	0.84	0.90	0.20	*	0.93	0.95	0.92
Nagaland	0.80	0.67	0.84	0.33	0.64	0.87	0.22	*	0.66	0.94	0.77
Odisha	0.32	0.99	0.83	0.19	0.81	0.51	0.14	222	0.47	0.68	0.89
Puducherry	0.40	1.47	0.51	0.85	0.90	0.83	0.08	*	0.97	0.82	1.00
Punjab	0.16	2.01	0.77	0.66	0.80	0.93	0.06	141	0.84	0.73	1.00
Rajasthan	0.44	0.58	0.67	0.32	0.58	0.96	0.12	244	0.55	0.54	0.85
Sikkim	0.71	1.31	0.91	0.59	0.49	0.99	0.22	*	0.85	0.89	1.00
Tamil Nadu	0.55	0.63	0.70	0.73	0.96	0.83	0.10	79	0.91	0.74	1.00
Telangana	0.62	0.38	*	0.67	*	0.82	0.07	*	0.76	0.58	0.90
Tripura	0.65	1.61	0.70	0.32	0.66	0.68	0.11	*	0.44	0.84	0.96
Uttar Pradesh	0.19	1.10	0.63	0.33	0.93	0.63	0.18	285	0.47	0.60	0.90
Uttarakhand	0.32	0.60	0.90	0.51	0.66	0.96	0.16	285	0.70	0.77	0.99
West Bengal	0.27	0.96	0.53	0.28	0.52	0.86	0.08	113	0.55	0.73	1.00

1 Given the nature of gender equality issues and data availability in India, we have expanded beyond the typical set of GPS indicators. As many of these were not F/M ratios, we chose to colour based on even-sized bands between 0 and 1 rather than our standard GDP colouring. Colouring inverted for unmet need for family planning, child marriage, and spousal violence to reflect that they are undesirable outcomes. For maternal mortality, colouring based on score normalised to 0–1 scale (though number shown is original per 100 live births). Sex ratio at birth follows binary colouring based on whether ratio is above or below 1.10.

2 Indexed so that 1 = 100%.

3 Class VIII.

SOURCE: Ministry of Labour Employment-Unemployment Survey; National Family Health Survey; Ministry of Drinking Water and Ministry of Urban Development Statistics; U-DISE Flash Statistics; All India Survey on Higher Education; NSS Survey on Education; Reserve Bank of India; MOSPI Statistical Yearbook; Census; Sample Registration Survey; McKinsey Global Institute analysis

Exhibit 26 (continued)

India has high variation in performance across regions (2 of 2)

Level of inequality ¹	Gender equality in society										
	Essential services and enablers of opportunity (continued)					Political representation			Physical security and autonomy		
	Education		Digital inclusion		Financial inclusion	Members of Parliament F/M ratio	Members of Legislative Assembly F/M ratio	Representation in Panchayati Raj institutions F/M ratio	Sex ratio at birth M/F ratio	Child marriage Index of women 18–29 ²	Spousal violence Index of women ²
	Secondary completion rate ³	Gross tertiary enrolment	Mobile phone ownership Index of women ²	Computer/smartphone skill F/M ratio	Bank account ownership F/M ratio						
■ <0.2 Highest inequality											
■ 0.2–0.4											
■ 0.4–0.6											
■ 0.6–0.8											
■ >0.8 Lowest inequality											
* No data											
Andaman & Nicobar Isl.	0.79	0.24	0.67	1.00	0.44	0.00	*	0.49	1.03	0.18	0.18
Andhra Pradesh	0.54	0.28	0.36	0.49	0.55	0.09	0.10	1.00	1.10	0.36	0.43
Arunachal Pradesh	0.46	0.29	0.60	0.54	0.48	0.00	0.03	0.71	1.03	0.30	0.31
Assam	0.28	0.17	0.46	0.56	0.48	0.17	0.07	0.58	1.12	0.33	0.25
Bihar	0.26	0.13	0.41	0.39	0.48	0.08	0.16	1.00	1.10	0.42	0.43
Chandigarh	1.00	0.69	0.74	0.67	0.47	0.00	*	0.62	1.14	0.13	0.23
Chhattisgarh	0.48	0.16	0.31	0.49	0.31	0.10	0.13	1.00	1.04	0.24	0.37
Dadra & Nagar Haveli	0.33	0.12	0.37	0.65	0.32	0.00	*	0.60	1.08	0.32	0.33
Daman & Diu	0.32	0.09	0.61	0.88	0.39	0.00	*	0.59	1.11	0.22	0.27
Delhi	0.80	0.48	0.67	0.73	0.49	0.17	0.09	*	1.17	0.17	0.27
Goa	0.79	0.32	0.81	0.71	0.63	0.00	0.05	0.48	1.06	0.14	0.13
Gujarat	0.37	0.17	0.48	0.53	0.45	0.18	0.08	0.50	1.18	0.25	0.20
Haryana	0.57	0.30	0.51	0.61	0.48	0.00	0.17	0.57	1.20	0.22	0.32
Himachal Pradesh	0.87	0.41	0.74	0.63	0.51	0.00	0.06	1.00	1.09	0.10	0.06
Jammu & Kashmir	0.44	0.28	0.54	0.59	0.49	0.20	0.02	0.41	1.10	0.09	0.09
Jharkhand	0.36	0.17	0.35	0.40	0.39	0.00	0.12	1.00	1.09	0.39	0.34
Karnataka	0.35	0.27	0.47	0.62	0.56	0.04	0.03	0.77	1.07	0.25	0.21
Kerala	0.72	0.40	0.81	0.80	0.65	0.05	0.06	1.00	1.04	0.09	0.14
Lakshadweep	0.86	0.11	0.68	0.51	0.62	0.00	*	0.59	1.10	0.05	0.06
Madhya Pradesh	0.36	0.19	0.29	0.46	0.32	0.21	0.15	1.00	1.08	0.33	0.33
Maharashtra	0.60	0.28	0.46	0.64	0.47	0.12	0.07	1.00	1.14	0.26	0.21
Manipur	0.52	0.35	0.63	0.51	0.56	0.00	0.03	0.94	1.07	0.12	0.53
Meghalaya	0.38	0.24	0.64	0.72	0.71	0.00	0.05	*	1.03	0.19	0.29
Mizoram	0.51	0.24	0.77	0.81	0.63	0.00	0.00	*	1.03	0.11	0.17
Nagaland	0.29	0.17	0.71	0.61	0.46	0.00	0.00	*	1.06	0.14	0.13
Odisha	0.28	0.19	0.39	0.45	0.41	0.11	0.08	1.00	1.05	0.23	0.35
Puducherry	0.83	0.45	0.67	0.64	0.41	0.00	0.15	0.57	1.03	0.15	0.35
Punjab	0.65	0.31	0.57	0.66	0.50	0.08	0.05	0.53	1.12	0.10	0.21
Rajasthan	0.40	0.19	0.41	0.38	0.62	0.04	0.16	1.00	1.17	0.33	0.25
Sikkim	0.65	0.41	0.80	0.79	0.60	0.00	0.10	1.00	1.04	0.16	0.03
Tamil Nadu	0.74	0.46	0.62	0.69	0.48	0.11	0.10	0.51	1.09	0.18	0.41
Telangana	0.52	0.34	0.48	0.46	0.50	0.06	0.08	*	1.11	0.31	0.43
Tripura	0.35	0.17	0.44	0.39	0.64	0.00	0.05	0.56	1.04	0.33	0.28
Uttar Pradesh	0.58	0.25	0.37	0.48	0.43	0.19	0.11	0.67	1.13	0.23	0.37
Uttarakhand	0.68	0.33	0.55	0.43	0.46	0.25	0.08	1.00	1.18	0.16	0.13
West Bengal	0.44	0.17	0.42	0.52	0.47	0.40	0.16	0.51	1.07	0.44	0.33

1 Given the nature of gender equality issues and data availability in India, we have expanded beyond the typical set of GPS indicators. As many of these were not F/M ratios, we chose to colour based on even-sized bands between 0 and 1 rather than our standard GDP colouring. Colouring inverted for unmet need for family planning, child marriage, and spousal violence to reflect that they are undesirable outcomes. For maternal mortality, colouring based on score normalised to 0–1 scale (though number shown is original per 100 live births). Sex ratio at birth follows binary colouring based on whether ratio is above or below 1.10.

2 Indexed so that 1 = 100%.

3 Class VIII.

SOURCE: Ministry of Labour Employment-Unemployment Survey; National Family Health Survey; Ministry of Drinking Water and Ministry of Urban Development Statistics; U-DISE Flash Statistics; All India Survey on Higher Education; NSS Survey on Education; Reserve Bank of India; MOSPI Statistical Yearbook; Census; Sample Registration Survey; McKinsey Global Institute analysis

INDIA CAN BUILD ON ITS RECENT PROGRESS ON SOME ASPECTS OF GENDER INEQUALITY

Over the past ten years, India has made some of the largest advances towards gender parity in Asia Pacific on certain metrics, although from a lower base than many other countries.²⁷² India has made considerable strides in opening access to education to girls, a vital enabler of macroeconomic productivity benefits as well as benefits to the individual. India has achieved the largest improvement in gender inequality in education—equal to the improvement achieved by Nepal—over the past two years.²⁷³ Maternal mortality has been declining for some years, falling from 280 per 100,000 live births to 174 over the past decade, although in Asia Pacific, maternal mortality rates in Bangladesh, Cambodia, and Nepal have fallen by more over this period. The rate of child marriage has declined significantly, from 47 percent of women aged 20 to 24 having been married before the age of 18 in 2005 to 27 percent in 2015, according to the National Family Health Survey. The rate is significantly lower than in neighbouring Bangladesh (59 percent) but still higher than in Pakistan (21 percent). Women’s financial inclusion has also increased in recent years (see Box 9, “India has made notable progress on financial inclusion”).

To build on our previous work, in this report we choose to focus on two specific opportunities to address women’s lack of access to the fundamental enablers of economic opportunity. In both, India has already made progress, creating a solid platform for further advances. The first is increasing women’s access to digital technologies and financial products; we discuss these enablers together as they are strongly linked because of the pivotal role that access to mobile phones and the internet plays in opening doors to banking, payments, credit, access to markets, and entrepreneurship. Second, we look at how India could reduce the time women spend on unpaid care work by filling gaps in essential infrastructure, including childcare, and promoting labour-saving technologies such as clean cooking stoves. India has already made progress on rolling out household infrastructure like access to clean water. Such advances are particularly valuable because women do roughly ten times more household and care work than men. Building this momentum and sharpening focus on how women can achieve greater economic empowerment are arguably high potential priorities for India.

²⁷² Note that there is still a way to go on many areas and progress is slowing on some areas such as political representation and certain aspects of work quality. See *The global gender gap report 2017*, World Economic Forum, 2017.

²⁷³ The education gap between boys and girls has been virtually eliminated at the primary and secondary levels in India and has been narrowing at other educational levels. Girls’ gross enrolment in secondary education increased from 53 percent in 2007 to 74 percent in 2015, and that of boys from 62 percent to 74 percent over the same period, indicating no gender gap but signalling a need to raise enrolment levels for both girls and boys. In tertiary education, female enrolment rose from 11 percent in 2007 to 27 percent in 2015, while that for men rose from 15 percent to 27 percent. These statistics come from the UNESCO database.

Box 9. India has made notable progress on financial inclusion

India has achieved significant progress on the financial inclusion of both women and men over the past five years. The number of bank accounts has more than doubled, and the number of bank accounts held by women has almost tripled.¹ Several initiatives have succeeded by addressing pull and push factors simultaneously, as well as opportunities for income generation. India might now consider how to build on this progress. We highlight three initiatives that have been effective:

- **National drive for universal financial inclusion:** The Pradhan Mantri Jan Dhan Yojana (“wealth to all”) initiative aims to ensure access to banking, savings and deposit accounts, remittances, credit, insurance, and pensions—all in an affordable manner. The scheme drives citizen “pull” for, and utilisation of, bank accounts by directing payments of wages and government benefits directly to beneficiary bank accounts. It also “pushes” citizens by mandating the opening of accounts. This coupling of pull and push factors has helped drive rapid progress. According to the Department of Financial Services, 300 million people (160 million of them women) have gained access to bank accounts through the scheme.² Although this initiative did not target women specifically, the fact that it focuses on individual rather than household accounts has helped to narrow the gender gap on financial inclusion.
- **Thrust towards microentrepreneurship loans:** Lack of credit is an important barrier to entrepreneurship for both men and women in India. Previous MGI research found that India has 23 million enterprises that collectively have a \$140 billion gap between the credit they can obtain and the credit they need.³ The Pradhan Mantri Mudra Yojana programme, initiated in 2015, provides loans of up to one million rupees (around \$15,000) to non-corporate, non-farm micro and small enterprises, with a specific focus on women. Thus far, it has made loans to 13 million new entrepreneurs, and 47.5 percent of the funds have been dispersed to female entrepreneurs.⁴
- **Women’s collectives:** India has broadened access to finance for women through self-help groups (collectives with ten to 12 members). According to National Bank for Agriculture and Rural Development data, loans to self-help groups rose by 35 percent in 2015–16. Loans were made to some two million groups, reaching between 20 million and 24 million members.

For such efforts to have even more impact, persistent perceptions that women should not have control over household resources need to be addressed. For example, the Bhamashah scheme in Rajasthan attempts to increase financial inclusion by creating a digital ID for households linked with government services and a bank account. To drive female empowerment, it has designated females as the head of the household on the Bhamashah card and bank account. However, one study found that only 18 percent of these women reported going to the bank without a male family member present, and 86 percent of households said that male family members make the major decisions in the family.⁵

¹ Reserve Bank of India.

² *Progress report*, Pradhan Mantri Jan Dhan Yojana (<https://www.pmjdy.gov.in/account>).

³ IFC Enterprise Finance Gap database 2011, SME Finance Forum, 2013. See *Digital finance for all: Powering inclusive growth in emerging economies*, McKinsey Global Institute, September 2016.

⁴ Data are as of March 31, 2016. See *Loan disbursement to women entrepreneurs under Pradhan Mantri Mudra Yojana as on 31.03.2016*, community.data.gov.in, October 19, 2016; and *India’s labour market: A new emphasis on gainful employment*, McKinsey Global Institute, June 2017.

⁵ *Household perception: Impact of Bhamashah on digital governance reforms in Rajasthan*, version 1.0, MicroSave and Center for Global Development, December 2017.

ACCESS TO DIGITAL TECHNOLOGIES HAS EXPANDED IN INDIA: THE NEXT FOCUS IS WOMEN'S DIGITAL INCLUSION THROUGH INCREASING LITERACY AND TACKLING SOCIETAL ATTITUDES

Gender parity on access to the internet and mobile phones—the key gateway to financial services and opportunities for income generation in developing economies—is moderately correlated with a number of indicators of gender equality in work (see Box 10, “Digital inclusion of women has a unique role in enabling a broad acceleration of gender equality”).²⁷⁴

Yet far fewer Indian women access the internet than Indian men. In 2016, only 25 percent of internet users in rural areas, and only 40 percent in urban areas, were women.²⁷⁵ Only 46 percent of women own a mobile phone.²⁷⁶ Making further progress by focusing on barriers to access that face women is a vital part of India's efforts to empower its women.

²⁷⁴ The power of parity: How advancing women's equality can add \$12 trillion to global growth, McKinsey Global Institute, September 2015.

²⁷⁵ Internet in India—2016: An IAMAI & KANTAR IMRB report, Internet and Mobile Association of India, and Kantar IMRB Technology Practice, 2016.

²⁷⁶ Key findings from NFHS-4, National Family Health Survey, Government of India, Ministry of Health and Family Welfare, http://rchiips.org/NFHS/factsheet_NFHS-4.shtml.

Box 10. Digital inclusion of women has a unique role in enabling a broad acceleration of gender equality

Women's digital inclusion enables progress on other aspects of gender inequality:

Labour-force participation: The informal sector accounts for around 92 percent of employment in India, and matching people with jobs largely happens by word of mouth.¹ Digital job-matching platforms can aggregate a great deal of information about job seekers and available jobs, and could create a far more efficient labour market in India. This would have particular benefits for people living in remote areas and those looking for part-time work. McKinsey has estimated that the internet cuts the time it takes to search for a job by as much as 22 percent.

In one survey, 60 percent of women said that they already use the internet to search and apply for jobs.² McKinsey analysis suggested that accelerated roll-out of online talent platforms could create more effective job matching for 20 million to 28 million job seekers in India, a significant proportion of whom are likely to find part-time employment. Technology is also empowering women by helping them to move into jobs that were previously considered unconventional for them. In 2015–16, the

BabaJob job portal experienced a sevenfold increase in demand from employers for female cab drivers and an increase of more than 150 percent in applications for driving jobs from women.³ Use of such platforms would help to increase female labour-market participation, with benefits to growth.⁴

Financial inclusion: Digital inclusion is a prime access point for financial services, particularly in emerging economies where many men and women are unbanked and underserved with finance. Digital financial services could bring an additional 344 million Indians into the financial system, closing the financial inclusion gender gap by 16 percentage points.⁵

Healthcare: India has begun using digital technologies in healthcare, and in ways that close gender gaps. For instance, the government has launched a nationwide mobile health programme that aims to train one million community health workers who will reach ten million pregnant women and new mothers. By the end of 2016, 150,000 healthcare providers in four states had received training.⁶

¹ *India labour market update*, ILO Country Office for India, July 2016.

² *Women and the Web: Bridging the Internet gap and creating new global opportunities in low and middle-income countries*, Intel Corporation and Dalberg Global Development Advisors, January 2013.

³ “More women taking up odd jobs; opt to be cab drivers, guards”, Press Trust of India, June 6, 2016.

⁴ McKinsey research has found that improved job matching could add economic value of between \$63 billion and \$71 billion in 2025. Online talent platforms will also help to reduce attrition rates and provide the information needed to target investment in developing skills. See *A labor market that works: Connecting talent with opportunity in the digital age*, McKinsey Global Institute, June 2015.

⁵ *Digital finance for all: Powering inclusive growth in emerging economies*, McKinsey Global Institute, September 2016; and *India's tech opportunity: Transforming work, empowering people*, McKinsey Global Institute, December 2014.

⁶ *The state of broadband: Broadband catalyzing sustainable development*, Broadband Commission for Sustainable Development, September 2017.

If women in India were online to the same extent as men, some 135 million more women would have access to the internet.²⁷⁷

India is one of the largest connected markets in the world, with 429 million internet subscriptions.²⁷⁸ Access is growing rapidly. The share of the population using the internet jumped from 4 percent in 2007 to 33 percent in 2017—a compound annual growth rate of 27 percent.²⁷⁹ Previous MGI research found that the number of mobile internet users in India has the potential to reach 700 million to 900 million people by 2025.²⁸⁰

However, the benefits of digital connectivity for financial inclusion, income generation, and information sharing mean that rapidly expanding digital access for men risks exacerbating gender gaps. The gender divide on digital inclusion in India is the second-largest in Asia

²⁷⁷ Based on estimates of online usage by gender in October 2016 from Internet in India—2016: An IAMAI & KANTAR IMRB report, Internet and Mobile Association of India, and Kantar IMRB Technology Practice, 2016.

²⁷⁸ The Indian telecom services performance indicators July–September 2017, Telecom Regulatory Authority of India, December 28, 2017.

²⁷⁹ International Telecommunication Union (ITU).

²⁸⁰ India's technology opportunity: Transforming work, empowering people, McKinsey Global Institute, December 2014.

Box 10. Digital inclusion of women has a unique role in enabling a broad acceleration of gender equality (continued)

Education: Some blended learning projects—curricula combining digital and traditional components overseen by a teacher—show promise. In one randomised controlled trial in 2007 involving 111 schools in India, Year 4 students who participated in a computer-aided mathematics-focused learning programme increased their scores compared with the control group.⁷ A 2017 evaluation of a blended after-school learning programme for middle-school students revealed increased test scores in mathematics and Hindi after approximately five months. The programme provided individually customised educational content to match each student's level and rate of progress.⁸

Self-esteem and political voice: In a multicountry survey, more than 58 percent of female internet users said that they felt more autonomous and independent while using a mobile phone.⁹ In Uganda and Nigeria, studies have found that use of digital technology increased

women's self-esteem, wellbeing, and opportunities to achieve personal goals.¹⁰

Feelings of safety: In one survey, more than 68 percent of respondents said that they felt safer with a mobile phone. In addition to enabling women to call for help from the police or from a women's helpline in several states, mobile phones can be used as "personal guardians". They can, for instance, use the Fightback and Safetipin apps to track their movements, send SMS alerts if they run into danger, and check the safety of areas.¹¹

Access to markets and revenue opportunities: Digital platforms can eat up distance, connecting women in remote areas with limited mobility to markets. In India, Amazon's Saheli initiative and the government's Mahila E-haat online marketplaces provide women entrepreneurs with a platform to sell produce and goods. The Mahila E-haat digital marketplace registered 125,000 women when it launched in March 2016.

⁷ *The state of the world's children 2017: Children in a digital world*, UNICEF, 2017.

⁸ Ibid.

⁹ Estimates based on a survey of 11,000 respondents in 11 emerging economies. See *Bridging the gender gap: Mobile access and usage in low- and middle-income countries*, GSMA, 2015.

¹⁰ Florence Nameere Kivunike, Love Ekenberg, and Mats Danielson, "Perceptions of the role of ICT on quality of life of people in rural communities in Uganda", *Information Technology for Development*, volume 17, issue 1, 2011; and Wole Michael Olatokun, "Analysing socio-demographic differences in access and use of ICTs in Nigeria using the capability approach", *Issues in Informing Science and Information Technology*, volume 5, 2009.

¹¹ *Bridging the gender gap: Mobile access and usage in low- and middle-income countries*, Connected Women, GSMA, 2015; and *Women and the Web: Bridging the Internet gap and creating new global opportunities in low and middle-income countries*, Intel Corporation and Dalberg Global Development Advisors, January 2013.

Pacific (after Pakistan's), and there are some signs that inequality among men and women is widening. For instance, the gender gap in mobile phone ownership in India slightly increased from 31 percent in 2009 to 36 percent in 2015.²⁸¹ India could now usefully focus on what is required to capture the full value of digital technologies for women in terms of both access and adoption. There is a long way to go.

A major factor behind growing digital access has been greater affordability and infrastructure

The cost of mobile phones—for many Indians the only access point to the internet—has been the biggest obstacle to women's digital inclusion in India. Half of women in a 2015 survey said that the cost of a handset was a major barrier to owning a phone.²⁸² However, mobiles have become a great deal more affordable over the past ten years: the average sale price of smartphones fell by 45 percent to \$115 between 2012 and 2017. Between the first quarter of 2016 and the first quarter of 2017, the annualised cost of a one-gigabyte-per-month data plan fell from \$44 to \$23.²⁸³

Innovation in the telecommunications sector has driven down the prices of handsets, data, and voice significantly. For example, Reliance Jio's significant investment in its 4G network together with its shift to a voice-over-LTE model enabled the company to slash the prices of its data and voice packages. Other players also reduced prices.

Initiatives from the government are also making a difference. In 2006, the government set up Common Service Centres—assisted online access kiosks run by public-private partnerships. Local entrepreneurs set up the kiosks with basic computing infrastructure, run them, and are paid for every transaction, and the government allows them to be used for e-government services such as paying electric bills, obtaining information and application forms for government schemes, and applying for jobs.²⁸⁴ In 2015, the programme explicitly set the aim of encouraging women to become village entrepreneurs.²⁸⁵ As of September 2017, close to 270,000 kiosks have been set up in more than 162,000 rural villages, and 34,000 women entrepreneurs enabled.²⁸⁶

Low levels of digital literacy among women and social attitudes towards women's use of mobile and internet remain significant barriers

In order to make full use of digital technologies, people need to know how to use them. Digital literacy is increasingly a required skill for many jobs, and it opens new avenues for flexible and remote working that could help to boost women's labour-force participation.²⁸⁷ However, 35 percent of Indian women surveyed by GSMA (compared with 26 percent of male users) said that lack of knowledge about how to use the internet was a barrier. Further, Google finds that 49 percent of women said that they didn't see the value of the internet for them.²⁸⁸

²⁸¹ The gender gap is the difference between the male and female share of the population connected, divided by the proportion of male population connected. See *Women & mobile: A global opportunity*, GSMA Development Fund and Cherie Blair Foundation for Women, 2010; and *Bridging the gender gap: Mobile access and usage in low- and middle-income countries*, GSMA, 2015.

²⁸² *Accelerating affordable smartphone ownership in emerging markets*, GSMA, July 2017.

²⁸³ Mary Meeker, *Internet trends 2017*, Kleiner Perkins, May 31, 2017.

²⁸⁴ Anandita Jumde, *How Common Service Centres are revolutionising e-governance in rural India*, The Better India, May 31, 2016.

²⁸⁵ Rohit Prasad and Rupamanjari Sinha Ray, "Critique of the Common Service Centre scheme", *Economic & Political Weekly*, volume 47, issue 06, February 11, 2012; and CSC (Common Service Centres) Scheme 2.0, Government of India, Ministry of Electronics and Information Technology (<https://csc.gov.in/cscscheme>).

²⁸⁶ Anandita Jumde, *How Common Service Centres are revolutionising e-governance in rural India*, The Better India, May 31, 2016; and National Monthly Progress Report on CSC Scheme, November 2017.

²⁸⁷ *A labor market that works: Connecting talent with opportunity in the digital age*, McKinsey Global Institute, June 2015.

²⁸⁸ *Insights: India*, Womenwill, Google (<https://www.womenwill.com/intl/es/insights/india.html>).

Some initiatives have started to change this situation. In the Internet Saathi programme, a partnership between Tata Trust and Google India that started in July 2015, female entrepreneurs ride a bicycle carrying two smartphones and two tablets around villages to teach women how to use them. By the end of 2017, 33,000 female entrepreneurs had reached 125,000 villages and trained 13 million women.²⁸⁹

In households where budgets are highly constrained, men tend to get priority access to technology, and they may control whether a high-value item such as smartphone is purchased at all.²⁹⁰ For example, in one survey in New Delhi, 60 percent of men agreed that they have priority over women when it comes to accessing the internet.²⁹¹ Beyond budgetary constraints, there is still entrenched cultural opposition to girls and women using technology such as mobile phones and the internet. One village's governing body in rural Rajasthan stated that girls were not to use mobile phones or social media, and another in Uttar Pradesh implemented a 2,100-rupee fine for any girl using a mobile phone outside the home.²⁹² Even where there is no outright ban, women may be worried about the reaction if they use these technologies. There are reports of girls being prohibited from accessing the internet by their fathers or brothers.²⁹³ In one Google study, 79 percent of women agreed that society would judge them for using the internet; this was 30 percent higher than the average response in Asia Pacific.²⁹⁴ In another Google study, women reported a fear that they would anger their in-laws by spending time online; 19 percent suggested that they would do more online if they were "able to use the internet in private without fear of surveillance or criticism".²⁹⁵

INDIA HAS BOOSTED HOUSEHOLD INFRASTRUCTURE TO ADDRESS UNPAID CARE WORK: ACTUAL USE AND AFFORDABLE CHILDCARE ARE CRITICAL NEXT STEPS

High levels of unpaid care work correlate with reduced labour-force participation and lower-quality jobs for those who do participate. The World Bank estimates that a decrease in women's unpaid care work by an average of two hours per week is related to a ten-percentage-point increase in women's participation in the workforce.²⁹⁶

The amount of time women spend working in the home has other effects, too. For instance, women's family responsibilities mean that many work in the informal sector, and household obligations may compromise girls' education. One longitudinal study suggested that time spent on unpaid care work is the biggest contributor to the gender gap in secondary school completion. Girls who do two hours of housework per day have a 63 percent probability of finishing secondary school, compared with 84 percent for boys with the same amount of housework.²⁹⁷ Family responsibilities may also affect women's digital access. One Google

²⁸⁹ *Doorway to a new world*, Tata Trusts, January 2018.

²⁹⁰ This behaviour reflects a fundamental attitude prevalent in India that men should earn and be in control of finances. In the World Values Survey, 33 percent of Indians agreed that "when a woman earns more money than her husband, it is almost certain to cause problems". This is the second-highest percentage in Asia, after Pakistan at 35 percent. See *Accelerating affordable smartphone ownership in emerging markets*, GSMA, July 2017.

²⁹¹ *Women's rights online*, World Wide Web Foundation (<https://webfoundation.org/our-work/projects/womens-rights-online/>).

²⁹² *The state of the world's children 2017: Children in a digital world*, UNICEF, 2017.

²⁹³ Feminist Approach to Technology. These restrictions are even more common in terms of limiting (rather than prohibiting) use. More than half of men in one survey in New Delhi agreed that men have the responsibility to restrict what women access on the internet, and 65 percent agreed that women should be restricted from using the internet in public places on their own. See *Women's rights online*, World Wide Web Foundation (<https://webfoundation.org/our-work/projects/womens-rights-online/>).

²⁹⁴ *Insights: India*, Womenwill, Google (<https://www.womenwill.com/insights/india/>).

²⁹⁵ *Ibid.*

²⁹⁶ 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.

²⁹⁷ Renu Singh and Protap Mukherjee, "Whatever she may study, she can't escape from washing dishes': Gender inequity in secondary education—evidence from a longitudinal study in India", *Compare: A Journal of Comparative and International Education*, volume 48, issue 2, 2018.

survey found that “not having time available” due to housework was the second-largest barrier for women getting online.²⁹⁸

We now look at two aspects of unpaid care work—routine housework and childcare—to explore ways in which these responsibilities can be discharged to free up time for women.

India has made strides on improving household infrastructure, but there is still a long way to go

The availability of household infrastructure such as clean running water, more effective fuels for cooking, and sanitation has a significant impact on the time women devote to routine housework such as cleaning, laundry, cooking, gathering firewood for fuel, and accompanying children to the toilet. Housework accounts for 85 percent of the time women in India spend on unpaid care work. One study in three states of India, as well as Nepal and Bangladesh, found an average saving of 30 to 70 minutes per day through the use of improved cooking stoves alone.

Provision of household infrastructure in India lags behind that of other economies at similar stages of economic development. In 2014, 79 percent of the Indian population had access to electricity, well below the median for low- to upper-middle-income nations of 91 percent. In 2015, 40 percent of the population had access to proper sanitation, compared with the median of 73 percent. The picture is slightly more positive on the supply of clean water: 94 percent of the Indian population had access in 2015, slightly above the median for low- to upper-middle-income nations of 91 percent, but still below the top quartile of these countries at above 97 percent.²⁹⁹

In the recent past, India has prioritised the development of household infrastructure and has achieved significant improvements (Exhibit 27). Access to clean drinking water and sanitary toilets has doubled, and access to clean cooking fuel has increased by 51 percent. Yet there is still a long way to go. In 2017, 22 percent of households still lacked clean water, 32 percent did not have quality sanitation, and 56 percent were without access to clean fuel. The lack of clean fuel is particularly extreme in rural areas, where only 24 percent of households have access, compared with 81 percent of urban households. Infrastructure needs are more acute in some provinces than in others. For instance, Goa, Gujarat, and Madhya Pradesh have 100 percent access to clean water, but that figure is only 38 percent in Meghalaya.³⁰⁰ Similarly, 99 percent of households have access to sanitation in Himachal Pradesh and Sikkim, but only 34 percent in Bihar.

The quality as well as the quantity of India’s household infrastructure remains a concern. Since the majority of the drinking water supply comes from groundwater, which has significant contamination problems, the quality of water is substandard with significant risks to health—which, in turn, can compromise women’s ability to participate in the labour force.³⁰¹ Women may become ill and unable to work, or their children can become sick, which means women need to care for them at home.

²⁹⁸ *Insights: India*, Womenwill, Google (<https://www.womenwill.com/intl/es/insights/india.html>).

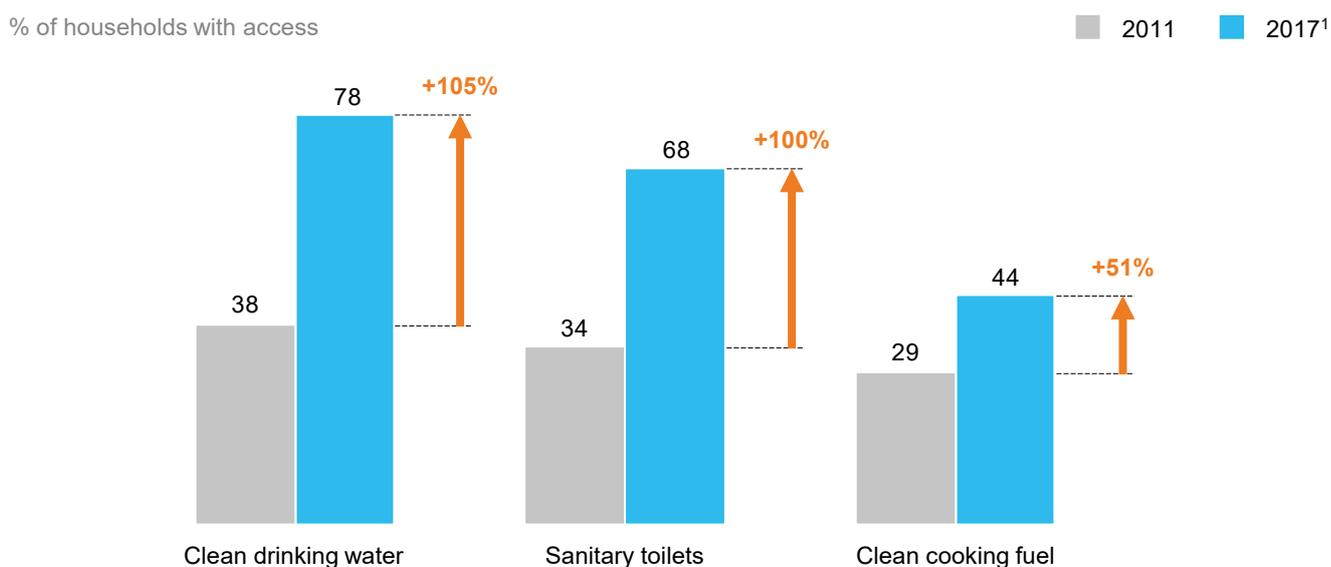
²⁹⁹ All statistics are for the latest available year in India compared with the latest available data for other countries (excluding high-income nations).

³⁰⁰ The current definition of clean water may overstate household access. Using the Sustainable Development Goal definition, clean water access in rural areas drops to 49 percent. See *End of mission statement by the special rapporteur on the human rights to safe drinking water and sanitation Mr. Léo Heller*, UN Office of the High Commissioner for Human Rights, November 10, 2017.

³⁰¹ *Ibid.*

Exhibit 27

India has achieved significant improvements in access to household infrastructure since 2011



1 Clean drinking water as of April 2017; sanitary toilets as of May 2017; clean cooking fuel as of December 2016.

SOURCE: National Rural Drinking Water Programme; Atal Mission for Rejuvenation and Urban Transformation; Swachh Bharat Mission; National Family Health Survey 4; National Census, 2011; McKinsey Global Institute analysis

A number of government programmes have facilitated India's rapid progress. These experiments in transformation highlight what is achievable even with limited time and resources, but also the challenge of increasing use of what is on offer. We highlight three examples:

- **Clean cooking fuel:** Pradhan Mantri Ujjwala Yojana, a government scheme launched in 2015, aims to provide free liquefied petroleum gas connections to around 50 million families currently below the poverty line by 2019; only women are allowed to apply. In 2016–17, 20 million connections were issued, outstripping the target of 15 million. The results of the scheme suggest that continuing to revise and roll out the plan is worthwhile. One assessment revealed that cooking on gas stoves helped save one to two hours a day (time spent both cooking and collecting firewood), which women used for leisure activities or other household pursuits.³⁰² However, the fact that families then have to pay for a refill (even at a subsidised rate) of the gas cylinder means that many families only use the first one; India's Economic Survey found that 79 percent of households issued the cylinders between May 2016 and April 2017 came back and refilled them, on average four times.³⁰³ But in the future, an active demand-creation strategy (centred on the health benefits to women, for example) will be needed if India is to continue to increase the number of households with clean fuel.³⁰⁴
- **Electricity connections:** Deen Dayal Upadhyaya Gram Jyoti Yojana, a government scheme set up in 2015, aims to universalise electricity connections, which is expected to benefit women more than men. Much of the time spent in rural households finding biomass to meet energy needs falls upon women, and women are also more likely to

³⁰² Surabhi Twesh Mishra, "Modi govt's Ujjwala scheme leaves women healthier, happier", *The Hindu Business Line*, May 7, 2017.

³⁰³ "State of the economy: An analytical overview and outlook for policy", in *Economic survey 2017–18, volume 1*, Government of India, January 2018.

³⁰⁴ *Digital financial inclusion India—a growth trajectory*, MicroSave, October 2013–March 2017 (http://www.microsave.net/files/pdf/GSI_Feasibility_Statement.pdf).

feel unsafe or be less mobile in poorly lit villages. So far, 99.8 percent of 597,000 census villages have been electrified.³⁰⁵ Even now, however, only 8 percent of villages have 100 percent of households electrified.³⁰⁶ Expansion of the scheme, more reliable supply, and making connections more affordable are arguably the next priorities.³⁰⁷

- **Improved sanitation:** Swachh Bharat Abhiyan (Clean India Mission), started in late 2014 and championed by the prime minister, aims to end open defecation by building individual and community toilets. This practice typically affects women more than men: they take more time because they travel longer distances to find more private locations, they make more trips because they accompany their children, and the journey can present a significant threat to women's safety.³⁰⁸ Women were made an explicit priority of this initiative in 2015. In May 2015, for instance, companies pledged to build 3,195 toilets in schools for girls by 2019. To date, more than 60 million toilets have been constructed, and over 300,000 villages have been certified as being free of open defecation.³⁰⁹ However, there are concerns about whether toilets are being used in light of reluctance in communities and insufficient maintenance.³¹⁰

There is still a long way to go to capture the full benefits of household infrastructure on women's time. India can leverage its strengths by rolling out transformational programmes, increasing utilisation, and learning from what has already worked when deploying new initiatives. More work could also usefully be put into education and awareness-building efforts, and to improve the quality and lower the cost of household infrastructure services.

Encouraging uptake of childcare will provide women with more realistic options to participate in the labour force—and accelerate childhood development

The availability of affordable, high-quality childcare provides women with the option of reducing the hours they spend on unpaid care work and increasing their labour-force participation. Women's work-life balance is not the only issue—quality childcare also offers valuable benefits for children, such as mental stimulation and acting as a channel through which to provide nutrition at a critical stage of development. There is also evidence from India that providing early-childhood education increases the likelihood that children will stay in school.³¹¹ Enrolment in childcare and early-childhood education in India is growing fast but remains very low.³¹²

Childcare is expensive for families without financial support from either the government or employers, and the Indian government has taken a number of steps to tackle this issue. For women working in the formal sector, the government requires companies with more than 50 employees to provide sponsored childcare at a crèche at or near the work site, and gives tax benefits to companies to incentivise compliance. Many companies have responded

³⁰⁵ The scheme's website has a live tally of households that have been connected to the electricity supply (<http://www.ddugjy.gov.in/mis/portal/index.jsp>).

³⁰⁶ Pradhan Mantri Ujjwala Yojana Saubhagya dashboard (<http://saubhagya.gov.in/dashboard>).

³⁰⁷ CP Chandrasekhar and Jayati Ghosh, "Are Modi government's power promises being fulfilled?" *The Hindu Business Line*, January 30, 2017.

³⁰⁸ Women who practice open defecation are twice as likely to experience non-partner sexual violence. See Apoorva Jadhav, Abigail Weitzman, Emily Smith-Greenawam, "Household sanitation facilities and women's risk of non-partner sexual violence in India", *BMC Public Health*, 2016.

³⁰⁹ *Household toilet coverage across India*, Swachh Bharat Mission (<http://sbm.gov.in/sbmdashboard/IHHL.aspx>).

³¹⁰ Such a concern was raised by the United Nations. See *End of mission statement by the special rapporteur on the human rights to safe drinking water and sanitation Mr. Léo Heller*, UN Office of the High Commissioner for Human Rights, November 10, 2017. However, surveys conducted by the National Sample Survey Office and the Quality Council of India report that more than 90 percent of individuals with access to toilets were using them in 2017.

³¹¹ Edward Melhuish and Konstantinos Petrogiannis, eds., *Early childhood care and education: International perspectives*, Routledge, 2006.

³¹² Between 2001 and 2015, rates of enrolment in pre-primary education increased 3.5 times, but this still left India with a 12 percent gross enrolment rate, the lowest in Asia, according to the World Bank.

positively to this initiative, seeing it as a way to attract talent and invest in quality. For example, global IT consulting firm Mindtree performs quality benchmarking on its childcare providers every three years (when the contract is up for renewal) to ensure that they meet the highest standards. It also provides referrals for employees to help them find additional out-of-hours care.

The government runs a number of crèche and childcare programmes targeted at low-income women for whom employer-sponsored childcare is not an option. The Rajiv Gandhi scheme is a pan-India initiative that provides daycare and sleeping facilities as well as supplementary nutrition for children from six months to six years old whose mothers work, with priority given to poor children and those with special nutritional needs. As of January 2015, there were 23,293 functional crèches, and 71 million children and 15 million mothers had benefited from supplementary nutrition. The Integrated Child Development Service is the world's largest childhood programme, with centres nationwide focusing on disadvantaged communities. It covers a range of services including family planning, maternal health, nutrition, childcare, and pre-school. A survey in 2016 found that 54 percent of children receive at least one service from these centres, and 38 percent of children aged three to six received early-childhood care.³¹³

Despite these steps, the quality of childcare in general tends to be low, increasing the pressure on mothers to leave paid employment.³¹⁴ Childcare workers lack adequate training, and a lack of remuneration means that this sector does not attract the talent it needs.³¹⁵ Moreover, social attitudes discourage women from using formal childcare. Indians continue to regard the family (parents and grandparents) as having the primary responsibility for childcare.³¹⁶ As noted, 71 percent of respondents in India agreed or strongly agreed with the World Values Survey statement “When a mother works for pay, the children suffer”. Shifting these attitudes is critical before formal childcare and childhood education are realistic options for more Indian women.

INDIA CAN CONSIDER SEVERAL STEPS TO ACCELERATE PROGRESS

MGI's 2015 report on the power of parity in India highlighted eight areas on which policy makers, business leaders, and the social sector could focus. They were (1) closing gender gaps in secondary and tertiary education in India's large states; (2) lowering barriers to job creation; (3) expanding skills training for women in key sectors; (4) expanding the reach of financial and digital services to enable women entrepreneurs; (5) stepping up gender diversity policies and practices in private-sector organisations; (6) further strengthening legal provisions for women and the enforcement of laws; (7) improving infrastructure and services to address the large amount of time spent on routine domestic work, childcare, and care for the elderly; and (8) reshaping deep-rooted attitudes about the role of women in work and in society. Here we emphasise some of the themes from our earlier research and in addition focus on two key areas: digital and financial inclusion, and household infrastructure and childcare services.

1. Make a concerted effort to expand job opportunities for women in the workforce

India should consider redoubling reforms to increase investment and job creation with an additional focus on improving women's representation in the economy. Both the government and the private sector have critical roles to play:

³¹³ *National Family Health Survey (NFHS-4), 2015–16*, Government of India, Ministry of Health and Family Welfare, December 2017.

³¹⁴ *Tackling childcare: The business case for employer-supported childcare*, International Finance Corporation, 2017.

³¹⁵ Amrita Jain, *Early childhood—key issues, challenges and approaches in the Indian context* (http://portal.oas.org/LinkClick.aspx?fileticket=HCQt_dMDkY0%3D&tabid=1282&mid=3694).

³¹⁶ Edward Melhuish and Konstantinos Petrogiannis, eds., *Early childhood care and education: International perspectives*, Routledge, 2006.

- **Stimulate creation of high-quality jobs and skills training, starting in sectors where women are established:** Efforts to empower India's women economically will require lowering or dismantling barriers to job creation in tandem with programmes to boost the supply of skilled women. In the short term, such efforts could focus on sectors where women have already shown interest. For example, our previous research has found that textiles and garments, healthcare services, beauty services, and IT-enabled services already draw a relatively large proportion of women, while growth sectors such as leisure and hospitality (tourism services) and electronics assembly and manufacturing also hold promise. MGI's previous research revealed that almost three-quarters of the vocational courses chosen by women in India relate to textiles and garments, computers, healthcare, and beauty services. Tourism services and manufacturing (other than of garments) do not yet figure among the top five areas in which women acquire vocational training, indicating the need for more women-oriented skills programmes in these sectors.³¹⁷
- **Enhance commitment to, and policies for, gender balance in the corporate sector among employees and in supply chains:** As discussed in Chapter 1, the corporate sector offers a mixed picture in terms of gender diversity. More organisations can make a clear case for gender balance linked to business goals, with supportive workplace policies that promote flexible working and enable women to advance their careers. While this is a priority throughout Asia Pacific, it is striking that in India "the lack of specific company measures to recruit, retain, promote, and develop women" is the most important barrier to increasing gender diversity in leadership positions, and the double burden for women of balancing work and domestic responsibilities is the next-highest hindrance (see Chapter 1). Beyond hiring and retaining more women as employees in their own organisations, corporations can also train and equip women as entrepreneurs in their supply chains and distribution channels.

2. Accelerate progress on digital and financial inclusion of women and link it with economic empowerment

India can step up efforts to improve women's digital literacy and design measures to improve acceptance of women using digital technologies and accessing finance:

- **Accelerate roll-out of digital literacy initiatives for women and innovative financial products for female entrepreneurs:** The Internet Saathi movement is one approach that shows promise in being able to accelerate digital literacy in rural areas. Other innovative initiatives come at the problem in different ways. For example, #PositionOfStrength engages young women on Twitter to brainstorm ideas for empowering women online. Continuing to scale up these initiatives will help give women the skills and confidence to access the internet. For female entrepreneurs, Mudra has begun to reduce the financing gap by allocating funds equally to men and women. However, there is still scope to further prioritise financing of female entrepreneurs to bridge the gender capital gap.
- **Expand business training and connectivity to markets for individual women, collectives, and producer companies through digital platforms targeting women entrepreneurs:** An important part of the promise of digital inclusion is its potential to enable women to generate more income. Digital technology can enable women in remote areas to find jobs, and to increase their income when they have jobs, by becoming connected to larger markets, sending and receiving payments, and performing other business activities. A key part of this effort will be increasing the use of online talent platforms, particularly platforms that target women such as JobsForHer, Heroines, AVTAR I-WIN, and GharSeNaukri. Moreover, mere access to a phone or

³¹⁷ *The power of parity: Advancing women's equality in India*, McKinsey Global Institute, November 2015.

internet connection is not sufficient. Women need to be equipped with the knowledge, skills, and resources to convert digital access into income generation. Several government, NGO, and business initiatives that focus on skills development could be made more effective and expanded. India's government can continue to develop and expand its Mahila E-Haat online marketplace. The Government eMarketplace, India's national public procurement portal, could pursue similar efforts to enrol more women entrepreneurs. NGO Swayam Shikshan Prayog's Arogya Sakhi programme uses a mobile application that assists women in becoming health entrepreneurs delivering antenatal and infancy care. The Mann Deshi Foundation in rural Maharashtra promotes digital banking and financial services tailored for rural women, along with business training programmes. The Self-Employed Women's Association has set up an ICT School for Empowerment of Women in the states of Bihar and Gujarat, which provides women with training in employable skills in software, internet, and business process outsourcing. The association, along with the Cherie Blair Foundation and Vodafone, has developed a mobile-based app management solution called RUDI Sandesh Vyavahar to enable women in its rural distribution network to order and manage stock, sales, and supply-chain flows in distant villages in a secure electronic format.

3. Continue to expand access to household infrastructure to reduce unpaid care work

- **Sustain the roll-out of household infrastructure and services (for example, water, sanitation, and clean cooking fuel):** India is clearly making progress on access to household infrastructure, and these efforts should continue.
- **Increase utilisation through supply and demand levers (for example, quality, cost, education, and awareness):** In addition to increasing supply, initiatives to increase use of the infrastructure are critical. In large part, use can be addressed by increasing the quality of infrastructure, reducing perceived costs, and educating people on the benefits of use. In the case of public toilets, tracking and incentivising more regular maintenance may help ensure ongoing usage. Similarly, ensuring that electricity networks are more reliable should become a focus. On cost, there are two key opportunities: reduce prices through increased efficiency or greater subsidies, and educate people about the hidden financial trade-offs (for instance, the value of time savings vs. upfront and ongoing costs). Education on the broader health benefits of household infrastructure through public-awareness campaigns can also drive its use.

4. Increase accessibility and uptake of childcare

The affordability of childcare is a significant issue, especially for the 120 million women who work in India's informal sector and do not have access to employer-provided childcare.³¹⁸ India might consider measures that encourage women in both the informal and formal sectors to use childcare options when available, that improve quality, and that help shift social attitudes. Four potential priorities that India could consider are:

- **Increase investment in childcare and scale up existing initiatives:** Only a small proportion of India's central budget is allocated to young children.³¹⁹ Further investment in expanding programmes such as the National Creche Scheme and Integrated Child Development Service will increase options for women in the informal sector. In addition, scaling up NGO initiatives such as mobile crèches and Mumbai-based Annapurna Mahila Mandal, which educates women on a range of topics including health and nutrition and childcare, can help fill the care gap where government services are unavailable or too far away from the work site.

³¹⁸ Diptirekha Mohapatra, *Female workers in the unorganised sector in India*, International Conference on Studies in Humanities and Social Sciences, July 29–30, Phuket, Thailand, 2015.

³¹⁹ This figure was 1 percent in 2008. Amrita Jain, *Early childhood—key issues, challenges and approaches in the Indian context*, 2008.

- **Strengthen and enforce national standards on childcare quality, including more training for carers:** India doesn't have extensive national standards or certifications for the care of children, such as mandatory pupil-to-teacher ratios, teacher-training standards, or a regulatory body to enforce quality.³²⁰ This reduces incentives for childcare providers to raise quality and makes it more difficult for parents to find and evaluate good childcare options. Expanding and improving training for childcare workers is needed to raise quality. The provision of simplified but detailed teaching materials for childcare workers is one option that could be considered.³²¹
- **Invest in high-quality employer-provided childcare and learn from best practices:** High-quality on-site crèches benefit businesses by helping them to attract and retain talented people—an important consideration given skills shortages in many areas. Mindtree has prioritised childcare and enjoys a 90 percent retention rate of female employees after maternity leave, much higher than the Indian average.³²² Better collaboration on employer-provided care is another opportunity. NASSCOM, the industry association of India's IT and business-processing sector, offers resources to employers providing childcare in the industry. More such collaborations to share best practices could be valuable.

5. Invest in shifting attitudes about the role of women in society and work

- **Intensify public-awareness campaigns to communicate the value of girls and women in society:** Government efforts through schemes such as Beti Bachao Beti Padhao and Sukanya Samridhi Yojana to address biases towards the girl child must be sustained and examples of impact celebrated. The government, in cooperation with the private sector and NGOs, can intensify public-awareness campaigns to communicate the value of girls and women in society and within the family. Procter & Gamble's #SharetheLoad campaign, aimed at encouraging men to participate more in housework, is one example. Another is Main Kuch Bhi Kar Sakti Hoon, a "transmedia" (multiple-platform) education campaign coupled with evaluation of its impact on knowledge, attitudes, and practices on a range of gender issues.³²³ Evaluating impact is vital in order to prove the value of such campaigns and to enable experimentation to increase their effectiveness. In addition to implementing campaigns, the private sector could also come together to recognise companies that support attitudinal change. For instance, industry awards (like the Clio Awards in advertising) could reward gender-equitable work
- **Put the spotlight on gender data, with a new focus on women in the workforce in states, sectors, and organisations:** Working with other stakeholders, the government could publish data on gender equality in states. While the data currently emphasise women's education and maternal and child health, the focus can be expanded to include workforce dimensions such as labour-force participation, job quality, the gender pay gap, and the share of women in leadership positions. Data comparing states, sectors, and types of organisations could spur higher public awareness and competition in the government and private sector that would lead to more progress on advancing women's equality.

³²⁰ *Tackling childcare: The business case for employer-supported childcare*, International Finance Corporation, 2017.

³²¹ Margaret Khalakdina, *Early child care in India*, Routledge, March 2017.

³²² *Tackling childcare: The business case for employer-supported childcare*, International Finance Corporation, 2017.

³²³ The evaluation undertaken after the first season of the campaign found a measurable increase in viewers' knowledge and perceptions of the value of women. See *Annual report 2015–16*, Population Foundation of India, 2016 (<http://www.populationfoundation.in/Publications/view/21/10>).

- **Engage community leaders and individuals on the value of women’s digital and financial empowerment:** Societal attitudes need to take into account the value—to families and to women themselves—of empowering women to make household financial decisions and of enabling them to access technology more broadly. Several initiatives in India show promise on this front and can be emulated. Some groups in India, such as Feminist Approach to Technology, have begun to tackle attitudes, but they are still operating on a small scale. Shifting the perceptions of community leaders (in addition to key decision makers in families) is important, particularly in areas where there are formal bans against women’s use of technology.
- **Educate individuals on the value of childcare:** Mothers (and fathers) won’t take up childcare if they don’t view it as valuable and appropriate. While the recent government step to make 26 weeks of maternity leave mandatory is welcome, measures are also needed to change attitudes towards early-childhood care beyond the initial period. Many Indians regard early-childhood education negatively despite evidence that it improves children’s cognitive, social, and emotional competence.³²⁴ Some companies have engaged with employees at key moments, making the case for using their childcare facilities. Mindtree explicitly reached out to the families of women considering putting their children into the company’s workplace crèche, knowing that the whole family must be convinced of the quality of care.³²⁵ Role modelling is another useful approach. The Bank of Tokyo-Mitsubishi UFJ highlights male and female role models in its organisation to show that it is possible to be both an active parent and a successful employee. Another option is community learning forums that connect women to others making use of childcare options and facilitate discussions about their experiences; communication like this may ease parents’ fears and make them feel more confident about the benefits of formal childcare.



India is moving in the right direction on empowering women, with the fastest progress on some dimensions of any country in Asia Pacific over the past ten years. Now India has an opportunity to build on this foundation by focusing not only on enabling more women to rise to leadership positions in the organised sector, but also on enabling women in the informal sector—many of them in rural and urban microenterprises and in unpaid work—to fulfil more of their economic potential. Each area of progress has opened up new scope for action. Access to the internet and digital technologies has soared. A potential next step for India is helping women develop their digital literacy and shifting societal attitudes that still militate against them making full use of these technologies, especially for income generation. India has made great strides in expanding the household infrastructure that can save so much of women’s time spent on household chores. The next stage is to ensure that women have access to affordable childcare so they can work for pay if they so choose. Tackling gender inequality is a complex, long-term challenge, and an ongoing search for new ways to unleash the potential of its women will be critical.

³²⁴ Amer Hasan, Marilou Hyson, and Mae Chu Chang, eds., *Early childhood education and development in poor villages in Indonesia: Strong foundations, later success*, World Bank, 2013.

³²⁵ Ibid.



APPENDIX

This appendix has the following sections:

1. Building a supply-side GDP model
2. Methodology for assessing global gender inequality
3. Methodology for calculating Gender Parity Score (GPS)

1. BUILDING A SUPPLY-SIDE GDP MODEL

For its original 2015 global report on the power of parity, MGI built a supply-side GDP model. We briefly describe that methodology below. For this report on Asia Pacific, we have relied on that model to calculate the economic opportunity that is available from advancing further towards parity in the region. We have tested the assumptions in the original model to confirm that there have been no major deviations over the two years since the publication of that report in the forecast trajectory of our business-as-usual scenario. We have also updated the model using the latest available data from the same sources used in the original report.

MGI's supply-side model estimates the economic impact of closing the gender gap in labour markets in 95 countries. The countries cover 93 percent of the world's female population and 97 percent of its GDP. In all countries, the model estimates the GDP contribution of women and men in the period to 2025. The model calculates GDP using five inputs, each of which is estimated by gender:

$$\text{GDP} = \text{Working-age population} \times \text{Labour-force participation rate} \\ \times \text{Employment rate} \times \text{Full-time equivalent rate} \\ \times \text{Labour productivity per full-time equivalent employed}$$

The employment rate is the percentage of the labour force that is employed. The full-time equivalent rate is the ratio of full-time equivalent employees relative to total employees. Labour productivity per full-time equivalent employed is the economic output of each full-time equivalent employee.

Overall approach

- **Drivers of the difference in male and female GDP:** The model captures differences in male and female contributions to GDP due to three main factors: participation rates, hours worked, and distribution of employment among 14 sectors of the economy. We assumed that the labour productivity of men and women is the same within each of the 14 sectors studied—that is, there is no impact on productivity due to the different roles men and women play in companies, the size of firms that employ men and women, variation in agricultural productivity due to the size of male vs. female farm holdings, and so on. Any difference in the productivity of men and women is therefore driven by different representation in the 14 sectors, each of which has different productivity levels. The 14 sectors are agriculture and fishing; mining and quarrying; manufacturing; construction; utilities; wholesale and retail trade; hotels and restaurants; transport, storage, and communications; financial intermediation; real estate, renting, and business

activities; public administration and defence; education; health and social work; and other services.

- **Second-order impact on GDP:** We do not include any second-order impact from increased participation by women, including increased consumption by women, or any drag on productivity due to changes in the supply of labour relative to capital. Our analysis also does not take into account other economic benefits from bridging gender gaps (for example, the intergenerational benefits that may arise from better-educated and healthier women raising families).
- **Supply-side analysis:** Our approach models the labour supply to help establish a GDP aspiration from increased participation by women. We do not take into account demand-side factors that could influence the ability to create jobs to absorb additional female workers. We fully acknowledge that achieving this potential will require investment in job creation as well as skills development, addressing barriers from unpaid work, and so on.

Summary of approach and data sources

- **Labour force:** To estimate the total labour force for each country, we calculate its working-age population and labour-force participation rate separately for six cohorts comprising the two genders and three age cohorts: 15 to 24 years, 25 to 54 years, and 55 and over. The working-age population for all scenarios is sourced from the UN's World Population Prospects for all 95 countries. The historical labour-force participation rate is sourced from the ILO.
- **Full-time equivalent employment:** We first apply an overall employment rate to each country's aggregate labour supply. The employment rate for historical periods is sourced from the ILO, available for all 95 countries. The ILO provides historical data split by gender. To convert employment by gender into full-time equivalents, we use ILO data on average hours worked by gender. In countries where data are not available, we extrapolate from the most similar countries available. We determine similarity by using regional groupings and level of per capita GDP at purchasing power parity. We were able to gather actual data or estimate hours worked for 53 countries in our 95-country sample, and we extrapolated this to the remaining countries. We assume the hours worked by men and women per week do not vary by sector.
- **Labour productivity:** For each country, we estimate labour productivity per full-time equivalent employee for men and women as average sector productivity, weighted by the sector share of full-time equivalent employment for each gender. We assume that the productivity of men and women in the same subsector (for example, education, health, and agriculture) is the same, and that any variations in average productivity among men and women are due to the sector mix of their employment. We use a three-step calculation:
 - First, we estimate the productivity of men and women in 14 subsectors. For example, in most countries, services productivity for women is lower than that of men because women are disproportionately concentrated in low-productivity sectors (as measured by GDP per worker) such as education and health services. Due to data limitations, we calculated relative productivity at the 14-sector level for 25 countries, and then extrapolated to the full sample. We then extrapolated these data to other countries based on our regional groupings and level of per capita GDP at purchasing power parity. For these 25 countries, we sourced data on employment by gender from the ILO and national statistics bureaus at the 14-sector level. We took productivity data for the 14 sectors from the World Input-Output Database, the McKinsey Global Growth Model, and national statistics offices. We aggregate the 14 subsectors to

arrive at relative productivity between men and women for three sectors: agriculture, industry, and services.

- Second, we use relative productivity for these three subsectors to arrive at a productivity level in each for men and women. We calculate average productivity for both men and women together using GDP from IHS's World Industry Service, employment data from the ILO in each of agriculture, industry, and services, and the hours worked estimates described above to convert employment numbers to full-time equivalent employee numbers. We then applied the relative productivity of men compared with women calculated in the first step to this average productivity to estimate a male and a female productivity level for each of agriculture, industry, and services.
- Finally, we estimate overall productivity by gender by weighting gender-specific productivity for agriculture, industry, and services by the respective shares of employment of men and of women in these sectors.

For a more detailed description of the inputs to our model and data sources, see MGI's 2015 global report.

Forecast assumptions

In its original 2015 global research, MGI modelled three scenarios to project the economic opportunity that is available from bridging the gender gap in 2025. The first scenario is a business-as-usual projection of GDP based on consensus forecasts, supplemented with historical trends to obtain gender-disaggregated forecasts. The second is a best-in-region scenario that describes the GDP opportunity for each country if it were to bridge the gender gap at the best historical rate of countries in its region. The third is a full-potential scenario that sizes the total opportunity of closing gender gaps in the labour-force participation rate, employment rate, hours worked, and sector mix. In this report on Asia Pacific, we have focused on the GDP opportunity from the best-in-region scenario. While gender parity is a worthy aspiration, the complex and multifaceted issues that affect women's participation in work mean that this is likely a challenging goal to achieve by 2025. Equally, participating in the workforce is a matter of personal choice. We therefore focused on the best-in-region scenario, which considers the degree of progress that countries have actually achieved in the past decade to establish an aspiration for progress towards parity.

For all projections, we use the following data sources: for population, we use the UN's World Population Prospects; for total labour-force participation, GDP growth, labour-force participation rate, and employment rate, we use Oxford Economics and IHS, both of which provide aggregate country forecasts (not gender-disaggregated) for these variables.

Business-as-usual scenario

We formulated the business-as-usual scenario in three steps. First, we projected detailed data on labour supply broken down by gender according to growth rates over the past ten years, scaling them so that they were in line with consensus forecasts and ensuring that they followed a few overall constraints. In detail:

- We first forecast the labour-force participation rate by age group and gender based on its compound annual growth rate between 2003 and 2013. We then scaled the forecast so that the participation rate was consistent with predictions from Oxford Economics. Finally, we applied three constraints: the participation rate does not exceed 100 percent for any cohort; for each age cohort, the rate of female participation does not exceed the male rate; and the participation rate of those aged 55 and over for each country remains equal to or less than that of those aged 25 to 54 for that country.

- For the employment rate, we used the overall employment rate forecast from Oxford Economics, but scaled to separate male and female employment rates, based on the observed historical ratio of female-to-male employment rates in 2013.
- The ratio of hours worked and the relative productivity of full-time equivalent males and females in industry and services remained constant over the business-as-usual forecast. This assumption is based on an analysis of historical data, which show little or no change for most countries in our sample over the past ten years.
- Forecasts for the distribution of employment by sector and gender were based on historical trends and reasonable assumptions for productivity growth. First, we forecast the share of employment by sector based on historical trends from the most recent ten-year period with data. We then modified the projection to bring GDP growth for agriculture, industry, and services in accordance with forecasts from IHS and bring average sector productivity in line with three overall constraints we apply: forecast productivity growth from 2014 to 2025 is greater than or equal to zero; the productivity ranking of agriculture (which typically has the most volatile productivity-growth rates) does not change relative to other sectors; and the difference between sector productivity growth and overall productivity growth should not be more than 2 percent from any historical gap for agriculture, industry, and services. We chose the 2 percent differential based on typical historical trends for these two measures.

Best-in-region scenario

The best-in-region scenario sizes the GDP opportunity for each country if it were to bridge the gender gap at the best historical rate of countries in its region on three dimensions of gender equality in work: labour-force participation rate, hours worked, and sector productivity. This is calculated for each input as the difference between the female and male growth rate over the past ten years. The scenario assumes that, for each country and each input, the male growth rate is constant at the business-as-usual levels, but the female growth rate is equal to the male growth rate plus the best-in-region rate of convergence. The only exception to this rule is the employment rate. Because the difference in the employment rate by gender is small for most countries, we assume that this gap is fully bridged in the best-in-region scenario.

The convergence rate is capped for each country so that female GDP input does not overtake male GDP input in 2025. Specifically:

- In the case of the labour-force participation rate, data coverage was sufficient to identify the best rate of convergence in most of the ten regions described in MGI's 2015 global report. India was merged with South Asia, China was merged with East and Southeast Asia, and North America and Oceania were merged with Western Europe in order to identify the best-performing country in each region. Other regions included the Middle East and North Africa, sub-Saharan Africa, Eastern Europe and Central Asia, and Latin America. This was calculated for each of the three age cohorts.
- Due to limited data availability, we assume that the rate of convergence for hours worked was the same in all countries. Norway was identified as the best performer in a sample of 30 countries, most of which are developed economies.
- For sector productivity, we follow two steps:
 - First, we assume progress towards parity on the share of agricultural employment between men and women. For the share of employment in agriculture, data coverage was good enough to identify the best rate of convergence in each region. The regional groupings used were similar to those described above.

- Second, we assume convergence in productivity in each of industry and services. We calculate the rate of convergence for industry and services productivity for OECD and non-OECD countries separately, due to limited data availability. This is calculated based purely on the change in distribution of employment of men and women in the 14 sectors examined, and not due to the change of underlying productivity of each of these sectors (that is independently factored into productivity forecasts). For example, for industry, the United Kingdom is the best-in-region country chosen for OECD economies.

2. METHODOLOGY FOR ASSESSING GLOBAL GENDER INEQUALITY

For its original 2015 global report on the power of parity, MGI established 15 indicators by which to measure gender equality; we rely on the same approach for this report and briefly describe it below.⁵⁷⁶

Our aim was to map gender equality as comprehensively as possible but also to ensure that the indicators we used were not so numerous as to be unwieldy for analytical purposes. In order to select a manageable set of indicators, we reviewed a range of global charters and statements of principle. We also explored indicators used by other well-established indices to measure gender equality, including the World Economic Forum’s Global Gender Gap Index, the OECD’s Social Institutions and Gender Index, the European Union’s Gender Equality Index, and the UN’s Gender Inequality Index. Lastly, we conducted principal component and factor analyses to identify natural groupings of variables. This revealed four critical dimensions of gender equality: gender equality in work, essential services and enablers of economic opportunity, legal protection and political voice, and physical security and autonomy. We call the last three aspects “gender equality in society” (see Exhibit A1 for a list of the indicators we selected, data sources, country coverage, and other information).

The indicators used are measures of outcomes. This enables us to make an objective assessment of a country’s performance on gender equality.⁵⁷⁷ We would have liked to include other indicators but were unable to do so because insufficient data were available from a large set of countries for measures such as property ownership by women vs. men, political representation at local government levels, and enforcement of legal provisions.

The indicators we chose typically measure the difference between the position of men and women, and these are expressed as a ratio of female-to-male data. The exceptions are sex ratio at birth and unpaid care work, which are expressed as male-to-female ratios.

⁵⁷⁶ For more detail on our original methodology, see the appendix of *The power of parity: How advancing women’s equality can add \$12 trillion to global growth*, McKinsey Global Institute, September 2015.

⁵⁷⁷ Researchers have debated whether gender equality should be measured as equality of opportunity or equality of outcomes. Those arguing for the former believe that assessing gender on the basis of equality of opportunity allows the distinguishing of factors outside an individual’s control as opposed to those dictated by personal preferences or choice. The latter group, arguing for assessing gender equality based on equality of outcomes, contends that differences in preferences and attitudes are not inherent but reflect the internalisation of social norms that unequally distribute power and resources—although arguably true equality of opportunity would imply lack of discrimination in social norms, and therefore differences in outcomes would in fact be shaped purely by freedom of personal choice. See, for example, *World Development Report 2012: Gender equality and development*, World Bank, September 2011; and Allison J. Booth and Patrick J. Nolen, *Choosing to compete: How different are girls and boys?* IZA discussion paper number 4027, February 2009. In our analysis of gender equality, we have tried to consider both aspects, using several objective measures of gender equality outcomes to identify gaps and priority areas of focus, but also, in parallel, seeking to understand underlying attitudes and behaviour related to gender that could impede the ability of women to exercise choice and take advantage of their opportunities. Unfortunately, globally comparable data on attitudes are scarcer than those on gender equality outcomes. For this reason, we did not incorporate these aspects into our assessment of the current state of gender inequality, but instead used available data to draw inferences about potential root causes and solutions.

Exhibit A1

Summary of gender equality indicators and data

Indicator	Definition	Source
Labour-force participation rate	Female-to-male ratio; age 15+ labour-force participation rate	ILOSTAT, ILO modelled estimates (July 2015), 15+
Professional and technical jobs	Female-to-male ratio; representation (number) in professional and technical jobs (professionals, technicians, and associate professionals)	ILOSTAT, Employment by Occupation and Sex, November 2017
Perceived wage gap	Female-to-male ratio; wages for similar work, based on survey responses on equal pay for equal work ranked on a 7-point scale	World Economic Forum, Global Gender Parity Reports, 2011, 2014, and 2016
Leadership positions	Female-to-male ratio; representation (number) in leadership position (legislation, senior officials, and managers)	ILOSTAT, Employment by Occupation and Sex, November 2017
Unpaid care work	Male-to-female ratio; time spent in unpaid care work	OECD Database (only latest year available), November 2017
Family planning	Female only; percent of married or in-union women aged 15–49 who want to stop or delay childbearing but are not using contraception	UN Department of Economic and Social Affairs, Population Division, Estimates and Projections of Family Planning Indicators 2017
Maternal mortality	Female only; maternal deaths per 100,000 live births in a specified year ¹	WHO, Global Health Observatory Data, November 2017
Education level	Female-to-male ratio; composite indicator of adult literacy rate, net secondary enrolment rate, and gross tertiary enrolment rate	UNESCO Institute for Statistics, November 2017
Financial inclusion	Female-to-male ratio; composite indicator of rate of account holders at a financial institution, borrowing from a financial institution in the previous 12 months, and use of mobile phones to send money	World Bank's Global Findex database, 2014
Digital inclusion summary	Female-to-male ratio; composite indicator of rate of internet and mobile users ²	ITU 2017 Database
Legal protection	Female only; composite index of the extent of protection to women by 11 different legal provisions (e.g., right to inherit, access to jobs)	World Bank, Women, Business and the Law Database (2010–16), November 2017
Political representation	Female-to-male ratio; composite indicator of representation (number) in parliamentary and ministerial positions ³	Inter-Parliamentary Union, Women in Politics Database, February 2018
Sex ratio at birth	Male-to-female ratio; number of male births to number of female births	UNDP Department of Economic and Social Affairs World Population Prospects, 2012 Revision
Child marriage	Female only; percent of girls and young women aged 15–19 who are married	United Nations World Marriage Data 2015
Violence against women	Female only; percent of women who have experienced physical and/or sexual violence from an intimate partner at some time in their lives ⁴	OECD Gender, Institutions and Development database 2014, WHO

1 Includes female deaths from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, per 100,000 live births, for a specified year.

2 Indicator of mobile phone employed to send money was used in the composite calculation only when rates for males were more than 5%.

3 Parliamentary seats refer to those in a single or lower chamber.

4 Based on data from Demographic and Health Surveys, WHO, International Violence Against Women Survey, and European Union Agency for Fundamental Rights.

SOURCE: McKinsey Global Institute analysis

For indicators that apply only to females—child marriage, violence against women, family planning, and maternal mortality—we used the absolute level expressed as a prevalence rate in percentage terms. We collated data for these indicators for our set of 95 countries from global sources such as the ILO and the OECD.

For many of the indicators, we remained consistent with standard definitions used in the literature. For instance, we chose the ILO’s major groupings of occupational classifications for our definitions of professional and technical jobs and leadership positions; this aligned with the World Economic Forum’s approach for these two indicators as well. Some features of the indicators are worth highlighting:

- Five of the 15 indicators are composites constructed using subgroup indicators. They are education, financial inclusion, digital inclusion, political representation, and legal protection. The rationale for constructing these composite indicators was to include multiple aspects of inequality in each case. In the case of digital inclusion, for instance, we included female-to-male ratios for both mobile and internet use. The methodology we used to construct composite indicators was the same methodology we used to construct countries’ Gender Parity Scores (see next section of this appendix).
- Our wage gap indicator is based on data from the World Economic Forum’s Executive Opinion Survey. Although it is based on opinion, we still took the view that this survey was the best available measure of equal pay for equal work. Some researchers have attempted to calculate differences in equal pay for equal work using real wage data (for example, as a residual after accounting for differences in occupational or industrial concentrations of men and women). However, such analysis is available for only a handful of countries.⁵⁷⁸
- The indicator we chose for leadership is based on the ILO’s major occupational group classifications, as mentioned. The indicator includes legislators, senior officials, and managers. Despite the fact that there is some overlap in the case of legislators with our measure of political representation, we opted for our approach because it used the ILO’s standard classification and is in line with the indicator used by the World Economic Forum in its Global Gender Gap report. In any case, it is difficult to obtain more detailed occupational splits of this ILO major group. We used the major group of professional and technical jobs for similar reasons.
- The legal indicator comprises 11 underlying indicators constructed from the answers to the following questions in the World Bank’s Women, Business and the Law database:
 - Is there legislation that specifically addresses domestic violence?
 - Is there legislation that specifically addresses sexual harassment?
 - Can a married woman apply for a national ID card in the same way as a man?
 - Does a woman’s testimony carry the same evidentiary weight in court as a man’s?
 - If there is a non-discrimination clause in the constitution, does it explicitly mention gender?
 - Do sons and daughters have equal inheritance rights to property?
 - Are there laws mandating non-discrimination based on gender in hiring?

⁵⁷⁸ See, for example, Francine D. Blau and Lawrence M. Kahn, “The gender pay gap”, *The Economists’ Voice*, volume 4, issue 4, June 2007.

- Does the law mandate equal remuneration for men and women for work of equal value?
- Can non-pregnant and non-nursing women do the same jobs as men?
- Does the law mandate paid or unpaid parental leave?
- Does the law mandate paid or unpaid paternity leave?

We first grouped the 11 indicators into four logical categories (for example, the first two questions, regarding violence against women, into a single category) by taking a simple average. We then used a sum of squares approach described in the next section. In the case of Australia, reflecting an issue with the legal protection index score, we made a manual adjustment to the World Bank’s scoring to reflect an oversight that is due to be revised in the Women, Business and the Law data release in 2018.

- The indicator we used for child marriage is the share of girls between 15 and 19 who are married. An alternative, and perhaps more commonly used, indicator of child marriage is the percentage of women aged 20 to 24 years who were first married before the age of 15 or the age of 18. However, we found that the latter data did not exist for our full sample of 95 countries; in particular, there were large gaps in data in developed countries. The measure we used has also been proposed as one of the core measures of child marriage by UNICEF.

To establish “low”, “medium”, “high”, and “extremely high” levels of inequality, we chose to use an absolute measure of equality levels across indicators, rather than relative thresholds for each indicator, to ensure an objective assessment of equality. These thresholds were chosen by examining the education indicator, which we believe is a core gender equality indicator and one where significant progress has been made. We found that there were virtually no countries with gender gaps greater than 50 percent for this indicator, about 15 percent of countries had gaps greater than 25 percent, and about 50 percent of countries had gaps less than 5 percent.

For a few indicators, the thresholds used differed from these, given the different distribution of data for this indicator. For physical security and autonomy indicators, where we felt the severity of the indicators warranted different thresholds, we defined extremely high inequality as greater than or equal to 33 percent distance from no prevalence (of child marriage or violence against women), or one in three women affected. For maternal mortality, the thresholds were informed by the relative distribution of maternal mortality ratios across countries. For example, we used a cut-off of ten deaths per 100,000 live births for “low” equality, based on maternal mortality ratios typically seen in highly developed nations such as the Scandinavian countries. Similarly, we used a threshold of 200 deaths per 100,000 live births for “extremely high” inequality, as it represented a natural break in the relative performance of countries. For sex ratio at birth, a review of literature on this topic found that the natural male-to-female ratio at birth is typically in the neighbourhood of 1.06.⁵⁷⁹ However, data for 2005 to 2010 from the UN typically had values significantly above this number. We therefore set our threshold between “extremely high” and “low” equality at 1.09, which was slightly above the world average of 1.084 and above which we saw significantly higher values for a few countries (including India and China).

⁵⁷⁹ Stephan Klasen and Claudia Wink, “Missing women: Revisiting the debate”, *Feminist Economics*, volume 9, issue 2–3, 2003.

Regional numbers for gender equality indicators typically represent weighted averages, based on 2016 female population data available from the UN. Per capita GDP is based on data from the IMF and represents values in 2014 international dollars adjusted for purchasing power parity.

3. METHODOLOGY FOR CALCULATING GENDER PARITY SCORE (GPS)

In MGI's global 2015 report, we calculated how close women are to gender parity on each of four aspects of gender inequality made up of 15 indicators of gender equality in work and in society for 95 countries. We then combined average gender parity levels into aggregated Gender Parity Scores on gender equality in work, gender equality in essential services and enablers of economic opportunity, gender equality in legal protection and political voice, and gender equality in physical security and autonomy. To aggregate country scores into regional scores, we weighted our results based on the size of the female population in each country in the region. We weighted the relevant indicators for each category equally, and we aggregated all gaps rather than compensating underperformance on some by outperformance on others.

In this report, we refreshed the 15 gender equality indicators based on the most recently available data, and therefore scores may differ slightly from those in the 2015 research.

To calculate overall GPS, we combined the country's position on our 15 gender indicators using the sum of squares method and assuming equal weight to each indicator as:

$$\text{GPS} = 1 - \sqrt{\frac{(1 - a_1)^2 + (1 - a_2)^2 + \dots + (1 - a_n)^2}{n}}$$

where a_1 = F/M ratio in gender equality indicator 1, a_2 = F/M ratio in gender equality indicator 2, etc.

For family planning, violence against women, and child marriage, where indicators are expressed as prevalence rates in percentage terms, the inverse—that is, one minus the prevalence rate—is used instead of female-to-male ratios. For the maternal mortality ratio, we normalised country ratios using minimum and maximum values. All indicators were capped at a maximum value of 1. The GPS for individual category scores (for example, for physical security and autonomy) is constructed using the same approach, but including only the indicators relevant to the category.

In some instances, where there were extensive gaps in available data for a country, we used subregional averages to extrapolate missing values and calculate the GPS for the country.⁵⁸⁰ We did this only selectively to ensure that scores were not skewed significantly due to missing data. We undertook such extrapolations only for the purpose of GPS calculations and not for any other analysis such as identification of impact zones. When identifying a “world best” and “Asia Pacific best” GPS score, we chose countries where data are available for all indicators in each category.

⁵⁸⁰ The exceptions are the Philippines and Singapore on unpaid care work, where we used the best in Asia Pacific given their leading performance in the region on other metrics related to gender parity in work.



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