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Why gender equality matters for insurance

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Executive summary

Increasingly, gender equality is being recognised as a key component of sustainable growth and resilience.

The issue of gender equality is attracting growing attention from policymakers worldwide. They increasingly recognise the benefits of gender equality to society in terms of poverty alleviation, inclusive growth, sustainable development and economic resilience. There has been a positive trend towards greater gender equality over time, but progress has been slow and uneven, and the gap remains substantial. For example even today, women have equal employment rights with men in only six out of 187 countries.¹ Globally, women still earn about 20% less than men.² The accumulated effects of shorter careers and lower earnings result in higher retirement saving gaps for women. Coupled with their higher life expectancy, women are also more vulnerable to old-aged poverty.

Gender parity in the labour market would boost global GDP and...

There is strong evidence that gender equality boosts economic potential. For instance, an OECD study estimates that gender parity in labour force participation would add about 12% to GDP growth across the member states between 2015 and 2030.³ And McKinsey Global Institute estimates show that closing the gender gap can add as much as USD 28 trillion to global GDP by 2025.⁴

...could bring an additional USD 2.1 trillion in global insurance premiums by 2029.

Gender equality is an important theme for insurers. More gender equality in the work place and in remuneration would lead to higher household income levels, and likely an increase in insurance penetration. Swiss Re Institute estimates that a 26% increase in global GDP in a scenario of labour market gender parity could translate into an additional USD 2.1 trillion in global insurance premiums by 2029. To further demonstrate the benefits of male-female equality, we also model how gender parity in the labour market would narrow the overall healthcare protection gap of 12 nations in Asia by 11%.

Insurers need to prepare for regulatory changes and recognise gender differences in needs, biases, and preferences.

There are challenges and opportunities for insurers on the road to gender equality. They need to prepare for reforms and regulations that are increasingly being put in place to advance gender equality. More importantly, insurers need to recognise the gender difference in preferences, biases, and understand what solutions to offer and how and where to offer them. Financial literacy and inclusion are also important. Studies shows that financial inclusion drive higher insurance demand, and to this end insurers can help more female consumers improve their understanding of the benefit of insurance and the specifics of risk protection products.⁵

¹ *Women, Business and the Law 2019: A decade of reform*, The World Bank, 2019.

² *Global Wage Report 2018/19: What lies behind gender pay gaps*, International Labour Organization, January 2019.

³ M. Kiviniemi, *Why a push for gender equality makes sound economic sense*, OECD, 2015

⁴ *The power of parity: how advancing women's equality can add \$12 trillion to global growth*, McKinsey Global Institute, September 2015.

⁵ E. Luciano and M. Rossi, *Life Insurance Demand and Financial Inclusion: evidence from Italian households*, Carlo Alberto Notebooks, 2014

Introduction

Gender inequality comes in many different guises.

Like any inequality, gender inequality is intrinsically unfair. Women face different types of inequality across the world, from legal rights to limitations driven by cultural norms. There is growing recognition that gender equality benefits society and the economy, supported by a body of research investigating links between income inequality and growth, and between female labour force participation and the economy.

Gender equality is also a United Nations Sustainable Development Goal.

The United Nations' Sustainable Development Goals (SDGs) recognise the importance of gender equality for global policy efforts to strengthen societal resilience. The 2030 Agenda for Sustainable Development makes explicit references to gender equality and women's economic empowerment, and their contribution to poverty reduction, sustainable economic growth, and resulting benefits to societies and humanity at large.⁶

The trend of a narrowing gender gap has important implications for household dynamics and insurance buying behaviours.

Encouragingly, gender inequality has narrowed over time, but there is still much further to go. Equal employment opportunities for men and women means changes in household lifestyles, household financial assets and workplace dynamics. What are the implications for employers and insurers? How will insurance buying behaviours change in terms of product and distribution channels choices, if women are the key or equal decision-makers in a household or business environment?

The regulatory pursuit of gender equality will also affect how insurers sell cover.

Combatting gender inequality is becoming a priority for policymakers across the globe, prompting a declaration by G7 ministers in May 2019 committing "to strong outcomes for the empowerment of women and girls".⁷ In many parts of the world, there is growing social awareness and regulatory action to support this trend. For instance, the European Court of Justice banned the use of gender as a factor in setting insurance premium rates in 2012. And although insurers have since relied on proxy factors, and differences in premiums still persist for men and women, regulatory trends favour equal treatment. In this paper we explore the potential business opportunities that may come with gender equality and discuss how insurers can prepare for them.

⁶ *Transforming Our World: The 2030 Agenda for Sustainable Development*, United Nations, 2015

⁷ *Declaration on gender equality*, G7 Ministers, 10 May 2019

Gender inequality: an overview

There are some commonly-used measures of gender equality.

Measures of gender inequality

The following are some commonly-used measures of gender equality.

- The United Nations' (UN) Gender Inequality Index (GII) provides a composite measure reflecting inequality between women and men in 159 economies. The index covers five indicators along three dimensions: the cost of reproductive health, empowerment (as measured by educational attainment and parliamentary representation) and the labour market.⁸
- The UN Gender Development Index (GDI) examines gender differences in development outcomes in health, education and equitable command over economic resources. Covering 160 economies, the indicators measure the gender gap by showing women's human development index as a percentage of men's.⁹
- The World Bank's Women, Business and Law Index investigates gender inequality in the law, employing eight indicators to measure women's interactions with the law through various stages in their careers.¹⁰
- The World Economic Forum's (WEF) Global Gender Gap Index (GGI) quantifies the magnitude of gender disparities and tracks progress over time across 144 economies and four thematic areas: economic participation and opportunity, educational attainment, health and survival, and political empowerment.¹¹
- The Organisation for Economic Cooperation and Development's (OECD) Social Institutions and Gender Index scores 160 economies on discrimination in social institutions, including family codes, restricted physical integrity, bias to sons over daughters, restricted resources/assets and restricted civil liberties.¹²

Gender equality has advanced over time, but progress has slowed in recent years.

Gender inequality has declined over time

Gender inequality has lessened over time. For instance, gender gaps have narrowed in education, health and economic and political opportunities, according to indicators such as the UN's GDI and GI, and the WEF's GGI. But this progress varies greatly by region and appears to have slowed of late.¹³ According to the GGI, the average score rose from 64% in 2006 to 68% in 2018. However, it stagnated in the last two years of that period (2016-2018), and there are no signs of further improvement.¹⁴

Table 1

UN's Gender Inequality Index, by region

	2008	2017	Change
North America	19.8	14.1	-5.7
Latin America and Caribbean	45.7	39.8	-5.9
Western Europe	15.6	9.0	-6.6
Eastern Europe	24.3	18.0	-6.3
Advanced Asia	14.0	7.8	-6.2
Middle East and Central Asia	46.5	34.1	-12.5
South & East Asia	47.4	40.1	-5.5
Africa	59.2	53.7	-5.5
Oceania	37.5	34.1	-3.4
Global average	56.0	44.1	-11.9
Highest	85.3	83.5	-
Lowest	17.4	3.9	-

Source: United Nations

⁸ *Gender Inequality Index, from the United Nations Development Programme (UNDP)*

⁹ *Gender Development Index, from the UNDP*

¹⁰ The World Bank, 2019, op cit.

¹¹ *The Global Gender Gap Report 2018*, World Economic Forum, December 2018.

¹² *Social Institution & Gender Index*, OECD.

¹³ *Human Development Indices and Indicators 2018 Statistical Update*, UNDP.

¹⁴ World Economic Forum, 2018, op cit.

Gender inequality: an overview

Globally, women earn about 20% less than men...

Table 2
Gender pay gap (%; 2017)

Gender income gaps remain substantial

According to International Labour Organisation (ILO) data, on a global average basis, men are paid about 20% more than women (see Table 2).¹⁵ High-income countries have the smallest gender pay gaps. The gap is largest in low and middle-income countries.

	Mean gender pay gap (hourly wage)	Median gender pay gap (hourly wage)	Mean gender pay gap (monthly earnings)	Median gender pay gap (monthly earnings)
World	18.8	18.4	21.2	21.4
High income	15.5	15.0	18.3	17.0
Upper-middle income	20.9	20.1	22.6	23.1
Lower-middle income	16.9	18.2	21.4	22.8
Low income	18.8	18.4	20.2	19.2

Source: *Global Wage Report 2018/19*, ILO

... even though women in similar jobs tend to be more highly educated

Are men paid more than women because they are better educated, or because they have other observable characteristics or attributes associated with higher labour productivity? The ILO report finds that, on average, education and labour market attributes explain relatively little of the gender pay gaps, and that this is true across all income groups and in all but a few countries.¹⁶ The findings are that women in paid employment tend to be educated to a higher level than men in similar jobs. Further, a large share of women with low levels of education stay out of the labour market altogether or are self-employed. In considering these findings, a note of caution: current capabilities for the systematic collection, curation and analysis of gender data are limited, and large knowledge gaps remain (see box on “Gender data gaps”).

¹⁵ International Labour Organization, January 2019, op cit.

¹⁶ Labour market attributes refer to (1) human capital characteristics – typically age, experience and education; (2) the characteristics that define the jobs held by individuals – for example, occupational category or working time; and (3) the characteristics that describe the workplace where production takes place – industrial sector, geographical location, and so on.

Neoclassical economic theory predicts closing the gender gap may lead to lower employment opportunities but...

...alternative economic theories see a positive effect of closing the gender pay gap on employment.

Equal pay and trade-offs in employment?

Some may argue that a change in the gender wage structure may have trade-offs with employment opportunities. Given the over-representation of women in low-paying jobs, minimum wages can reduce the gender pay gap in many countries.¹⁷ However, neoclassical economic theory predicts that in a perfectly competitive labour market, where wages are paid according to worker productivity, a statutory minimum wage set at about market clearing levels would lead to job losses. Minimum wages may force enterprises to raise prices, translating into lower demand. Moreover, firms may decide to replace a part of the expensive workforce with machines, leading to a reduction in employment opportunities.

Although studies in the 1970s based on non-skilled teenage unemployment tend to confirm the theory, others find either no or small impact on unemployment.¹⁸ More importantly, the labour market may not be perfectly competitive. Alternative economic theories see positive employment effects. For example, monopsonistic discrimination may be a key factor behind the overall gender wage gap, particularly with respect to differences arising between occupations and establishments.¹⁹ Under a monopsony model, where many employers have market power to set wages below workers' productivity, a minimum wage (up to certain level) can actually raise employment.²⁰

¹⁷ ILO

¹⁸ D. Card and A. B. Krueger, *Minimum wages and employment: A case study of the fast-food industry in New Jersey and Pennsylvania*, American Economic Review, September 1994; S. Antonova and M. Tudoreanu, *The effects of a raised minimum wage on employment: difference across states and social groups*, Issues in Political Economy, Vol 19 2009.

¹⁹ E. Barth, H. D. Olsen, *Monopsonistic discrimination and the gender-wage gap*, the National Bureau of Economic Research (NBER) Working Paper No. 7197, June 1999; B. Hirsch, *Gender wage discrimination; Does the extent of competition in labour markets explain why female workers are paid less than men*, Leuphana University of Lüneburg, and The Institute for the Study of Labor (IZA) Germany, 2016

²⁰ V. Bhaskar, T. To, *Minimum wages, employment and monopsonistic competition*, US Department of Labour, August 2003; O.C. Ashenfelter, H. Farber, M.r. Ransom, *Modern models of monopsony in labour markets: a brief survey*, The Institute for the Study of Labor, Discussion Paper No. 4915, April 2010

Gender inequality: an overview

Cultural and legal barriers to women's labour market participation represent a source of economic inefficiency...

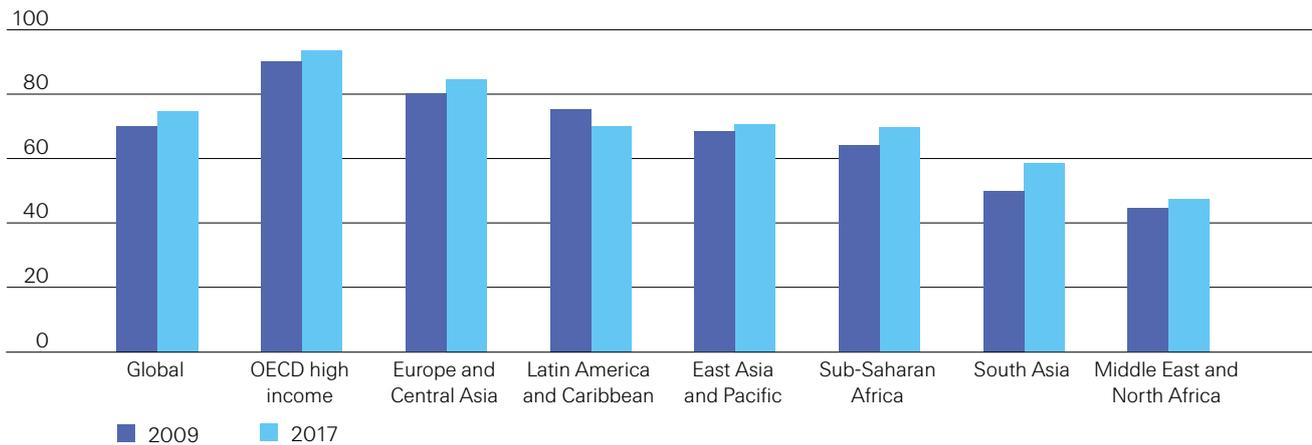
...including influencing the employment choices that woman make.

Cultural and legal barriers to gender equality

Many countries in the world have statutory laws which explicitly discriminate against women by differentiating their incentives or capacity to engage in waged work or to set up businesses. The World Bank's latest *Women, Business and the Law* report measured gender discrimination in 187 countries, finding that only six grant women the same work rights as men.²¹ Over 180 countries still have labour laws that restrict the types of work women may engage in, and when and where. A typical economy only gives women three-quarters the rights of men in the measured areas, the report says. In some regions such as the Middle East and North Africa, it is less than half (see Figure 1).²²

Legal gender discrimination affects the employment choices of 2.7 billion women, according to estimates.²³ Some 61 countries have statutory retirement ages that force women to retire earlier than men (typically five years earlier), despite women having longer life expectancy. Those countries include some economies that score very high on UN's Human Development Index²⁴ like Austria, Italy and the UK, as well as Algeria, Panama, the Russian Federation and Sri Lanka. Such discriminatory policies can be a disincentive to hire, promote and invest in women.

Figure 1
Women, Business and the Law Index



Source: The World Bank

²¹ *Women, Business and the Law 2019: A decade of reform*, The World Bank, 2019.

²² Ibid.

²³ *Women, Business and the Law 2018*, The World Bank, 2018.

²⁴ The UN's *Human Development Index (HDI)* assesses the development of a country in terms of three key dimensions of human development: a long and healthy life, being knowledgeable and have a decent standard of living.

Globally, female participation in the jobs market is much lower than for males...

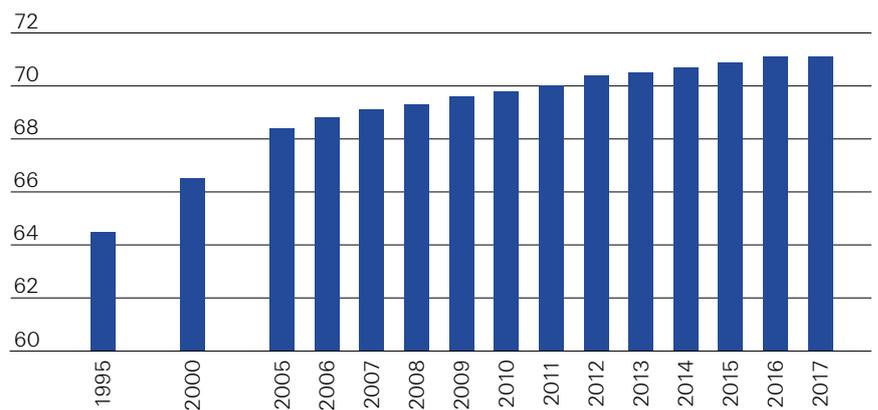
... due to a number of interconnected factors.

Low female economic participation despite highly educated

Gender-based legal restrictions have a significant negative impact on the economic participation rate of women and hinder full-potential economic growth. Globally and across all income groups, the gender gap among employers is large: the share of women as employers was half that of men in 2018, according to data from ILO.²⁵ Low-participation of half the working-age population in any economy will limit aggregate output and hamper the prospects of individual sectors even more so (lack of specific skills and talent).

Gender gaps in the labour market arise from a multitude of interrelated factors, including social norms, gender roles and often deep-rooted socio-economic constraints. In almost every country, men are more likely to participate in the labour market than women. According to ILO data, although the global gap in labour force participation rates between women and men has narrowed over the past quarter century, it remained wide at 27 percentage points (ppt) in 2018, at 48% for working-age women versus 75% for men.²⁶ Further, according to UN Human Development Indicators, the ratio of female-to-male labour force participation has improved but remains well below 1:1 in most countries, even when the female labour force is highly educated (see Figure 2, Table 3 and Table 4).

Figure 2
Female-to-male labour force participation rate, global (% , 1995–2017)



Source: UN Human Development Indicators

Table 3
Female-to-male labour force participation rate, by region (% , 1995–2017)

	1995	2017	Change ppt
Western Europe	67.0	79.3	12.3
Latin America and Caribbean	57.2	67.5	10.4
Advanced Asia	63.6	73.4	9.8
North America	78.2	84.4	6.2
Africa	71.5	76.5	5.0
Middle East and Central Asia	45.4	49.8	4.5
Oceania	73.2	77.0	3.8
South and East Asia	65.0	68.2	3.3
Eastern Europe	75.3	76.4	1.1

Source: UN Human Development Indicators, Swiss Re Institute

²⁵ International Labour Organization, January 2019, op cit.

²⁶ Ibid.

Gender inequality: an overview

Table 4

Tertiary school enrolment and labour force participation (%)

	Tertiary school enrolment (%, 2017)		Labour force participation rate (%, 2018)	
	Female	Male	Female	Male
World	40	36	48	75
North America	100	74	57	68
Latin America & Caribbean	52	41	52	77
Euro area	78	67	51	63
East Europe and Central Asia	70	66	49	70
East Asia & Pacific	50	43	59	76
South Asia	23	24	26	79
Middle East & North Africa	42	40	20	74
Sub-Saharan Africa	8	11	61	73

Source: World Bank and ILO data

The gender employment gap exists even where more women than men enrol in tertiary education or universities.

Worldwide, even in advanced markets, a larger share of women than men are enrolled in tertiary education, but a smaller share of women participate in the labour market (see Table 4). Lack of labour participation is due largely to social norms with married women staying at home, leaving a significant source of talent and productivity untapped, although legal hurdles also remain. Moreover, at 11%, the labour under-utilisation rate for women was much higher than for men (7.1%) in 2018.²⁷ Similarly, women are more likely to work part time, even when they may want more employment hours.

²⁷ "Underutilised labour" refers to people who are in the potential labour force, ie. looking for a job but not available to take up employment, or available but not looking for a job.

Occupational segregation, stereotypes and prejudices are also key factors behind gender pay gaps...

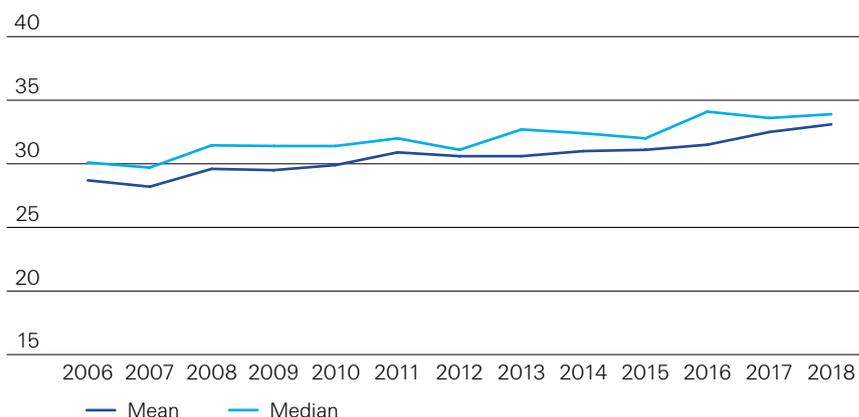
...including at senior management level.

Occupational segregation and prejudice in promotion decisions

In the workplace, women are under-represented in traditionally male-occupied categories. Gender roles may also lead to further occupational segregation, whereby women are channelled into teaching or nursing, for example, while being discouraged from careers in (broadly speaking) areas of better-paid jobs, such as science, technology, engineering and mathematics.²⁸ Within similar job categories too, women are consistently paid less than men, even if as well or better educated than men performing similar work. Pay is lower also for mothers, between 1–30% less than for women without children. Career prospects for mothers tend also to be less favourable due to career interruptions, reduced working hours, stereotypical hiring and prejudices in promotion decisions.

Job segregation based on gender discrimination extends to prejudice in promotion decisions. Globally, women accounted for about one-third of all managerial positions in 2017 (see Figure 3). Between 1991 and 2018, comparing regional averages, North America had the highest share of women in management positions, followed closely by Latin America and the Caribbean. The lowest average rates of women in management positions were in the Middle East and North Africa (see Figure 4). The share is even smaller at senior management level. For instance in the US, women represent 22% of boardroom members. In South Korea, the share is 2%.²⁹

Figure 3
Women’s share of employment in senior and middle management (% , 2006–2017)

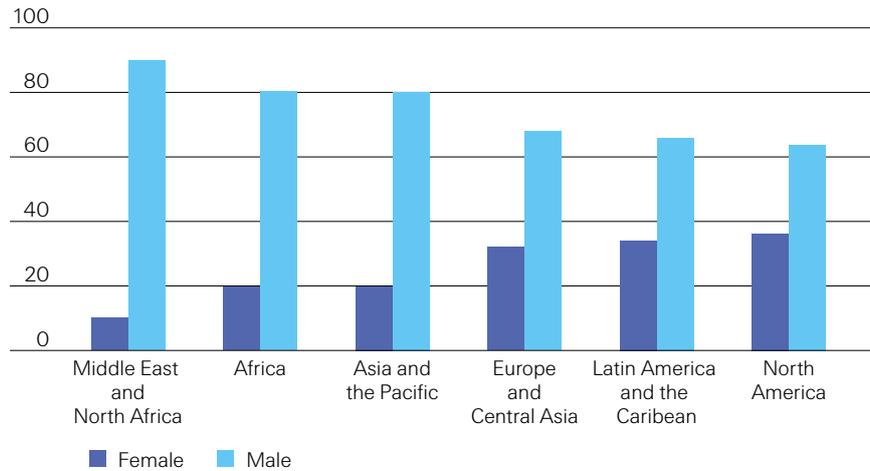


Note: Women’s share of employment in managerial positions includes junior, middle and senior management positions. Employment in management is defined according to the International Standard Classification of Occupations (ISCO). 2018 shares were calculated using data from a subset of countries. Source: ILO, Swiss Re Institute

²⁸ International Labour Organization, January 2019, op cit., *WOMENOMICS 5.0*, Goldman Sachs, 2019, K.A. Weeden, M. Newhart, and D. Gelbgiser, *Occupational Segregation*, Stanford Center on Poverty and Inequality, 2018.

²⁹ *Women in Work Index 2019*, PWC, 2019.

Figure 4
Share of employment in management by region (% , 1991–2018)



Note: ILO modelled estimates, November 2018. Employment in managerial positions is based on ISCO. Source: ILOSTAT

Shorter career and lower earnings result in lower retirement corpus for women.

Together with higher life expectancy, this exposes women to the higher risk of old age poverty.

Gender pension gap and higher risk of female old-aged poverty

The accumulated effects of gender pay gap also contribute to higher retirement saving gaps for women. As, on average, women are paid less, they have lower direct and employer-matching contributions towards their retirement corpus. In addition, many countries, women are deemed to have been given the benefit (or forced) to retire early. For instance, the female pensionable age is lower than the retirement age for men in most OECD countries. In 2016, the average retirement age of men was 64.3 years, versus an average of 63.7 years for women.³⁰ These factors lead to women having shorter careers and lower retirement corpus, resulting in a higher risk of old-age poverty.

WEF estimate that the size of the global retirement savings gap (or the shortfall in pension funding) was USD 70 trillion in 2015, and that this will grow to USD 400 trillion by 2025. It should be noted that the retirement balance of women in many countries is typically 30-40% lower than men, meaning women face larger pension gaps.³¹ For instance, the average gender pension gap in OECD was 25% in 2016, and was highest in Germany at 46%.³² A longer retirement period is often associated with higher healthcare costs and less money for daily expenses. If retirees rely on defined contribution pension systems, women will need to save a larger portion of their income than men to cover their retirement expenses. The issue is compounded by women having higher life expectancy, and may translate into a higher risk of old-aged poverty. For instance in 2014, the OECD average of old-age poverty among women was 13.6%, compared to 8.7% for men.³³

³⁰ *Pensions at a glance 2017*, OECD, 2017

³¹ *We'll live to 100 – how can we afford it?*, World Economic Forum, May 2017

³² "Gender gap in pensions: 2016 or latest" in *OECD Reviews of Pension Systems: Portugal*, OECD, 2019

³³ *Pensions at a glance 2017*, OECD.

Women allocate a substantial amount of time to the informal economy and unpaid care giving.

Gender gap in the informal economy and unpaid caregiving

Women all over the world allocate a substantial amount of time to the informal economy and unpaid caregiving, typically not deemed/recorded as economic activity. According to the ILO, employees are considered to have informal jobs if their employment relationship is not subject to national labour legislation, income taxation, social protection or entitlement to certain employment benefits such as paid annual or sick leave.³⁴ For instance, women are around three times more likely than men to be contributing family workers who usually do not have explicit, written contracts of employment, and their employment is usually not subject to labour legislation, social security regulations or collective agreements. One reason for the wide discrepancy is that in many countries, property rights are biased in favour of men as landholders. Women in those societies are expected to become contributing family workers. These expectations tend to drop sharply as income levels rise. In 2018, the share of female family workers was around 30% in low-income countries and less than 1% in high-income ones.³⁵

Fewer family burdens and more compatible work conditions have helped increase female labour force participation over the past century.

How long will it take to close gender gaps?

Between 1995-2017, there were positive trends across all regions. Female-to-male labour force participation rates improved the most in western Europe, followed by Latin America and advanced Asia (see Table 3). Studies show that most of the long-term increase in women's participation throughout the last century came from higher-income countries. This trend was accompanied and supported by broader access to child- and elderly-care services, more sharing of family duties between men and women, more compatible company policies on flexible working-time arrangements, and programmes to support women returning to work after child birth and other reasons for prolonged period of absence.³⁶

More vigorous efforts on political commitment and social transformation are required to close gender gaps.

Even so, and despite growing initiatives and calls for more gender equality, and a flurry of news coverage and social-media hashtags, progress on narrowing gender gaps has been slow. More vigorous and decisive action is needed. At current rates, it may take another 202 years to close the overall global gender gap on economic participation, and 107 years to achieve gender parity on political empowerment, according to WEF projections.³⁷ Faster progress will require political commitment and social transformation. Public policies to enhance education, labour and social protections, and to improve social infrastructure are essential to close the gender pay gap. But policy effectiveness also depends on a change in social norms and gender stereotypes.

³⁴ See description of the *Informal economy as according to the ILO*

³⁵ *World Employment and Social Outlook -Trends 2019*, ILO, February 2019.

³⁶ International Labour Organization, January 2019, op cit., and E. Ortiz-Ospina and S. Tzvetkova, *Working women: Key facts and trends in female labour force participation*, Our World in Data, 16 October 2017,

³⁷ World Economic Forum, 2018, op cit

Gender equality and insurance

Gender equality will accelerate global GDP growth.

Women are under-represented among entrepreneurs.

Investment in female education raises overall productivity.

Gender equality benefits the world economy

More gender equality will drive higher global growth through increases in economic efficiency, human capital productivity and investment. Additional factor inputs into the formal economy, a larger workforce from higher female labour participation, and higher productivity will raise output. Closing gender wage gaps will also boost economic growth by raising household income levels and thus aggregate demand.

Gender discrimination is not limited to labour participation and pay. Unequal access to financial services has also resulted in women's under-representation among entrepreneurs. Teignier and Cuberes (2016) showed that gender gaps cause an average income loss of 15% in the OECD, 40% of which is due to female entrepreneurs being under-represented.³⁸ Studies show that on a performance basis, women are better entrepreneurs with higher revenues per dollar invested than men, but receive significantly less funding.³⁹ More recently, in the context of tech start-ups, even in supposedly more open environments, it is reported that globally less than 10% of funding goes to women-led tech start-ups.⁴⁰ Guzman and Kacperczyk examined data on the population of American entrepreneurs between 1995 and 2018, showing that female-led ventures are significantly less likely than male-led ones to obtain venture capital, albeit they are equally likely to achieve exit outcomes through IPOs or acquisitions.⁴¹ Tech is a visible driver of value in the economy and there is a specific opportunity here to make change. Removing these barriers can unlock the potential of talented women entrepreneurs and workers who can add value to the economy.

Investing in female education increases the quality of human capital input. In countries where women are less educated than men, marginal gains from education for women exceed those for men, assuming diminishing marginal returns to schooling.⁴² Gender diversity, too, appears to be a win-win proposition. Observations have shown that women and men bring different skillsets and perspectives to the workplace. An empirical study testing this complementarity argument finds that female and male labour are complementary, not substitutes, suggesting that gender diversity improves productivity even more than classical growth models would predict.⁴³ As gender diversity increases a company's productivity, male wages are also likely to rise.

³⁸ M Teignier and D Cuberes, "Aggregate Costs of Gender Gaps in the Labor Market: A Quantitative Estimate", *Journal of Human Capital*, vol.10, issue 1 2016, pp 1–32.

³⁹ *Why Women-Owned Startups are a Better Bet*, Boston Consulting Group, June 2018.

⁴⁰ *Women who tech: opening investor doors to fund women-led startups*, Forbes, 29 July 2019.

⁴¹ J. Guzman and A. Kacperczyk, *Gender Gap in Entrepreneurship*, November 2018.

⁴² T. Schultz, *Why governments should invest more to educate girls*, Yale University, September 2001.

⁴³ Lagarde and Ostry estimated the elasticity of substitution (ES) between women and men using macro, sectoral, and firm-level data. ES is a measure of the change in the amount of female labour employed when female marginal productivity increases. When ES is zero, it is impossible to substitute female labour for male labour, and production requires fixed proportions of both. When ES approaches infinity, male and female labour are interchangeable. The resulting estimates of ES ranged from just below 1 to around 3, implying that male and female labour are complementary

Women tend to save more, which can boost the aggregate savings rates and productive investment.

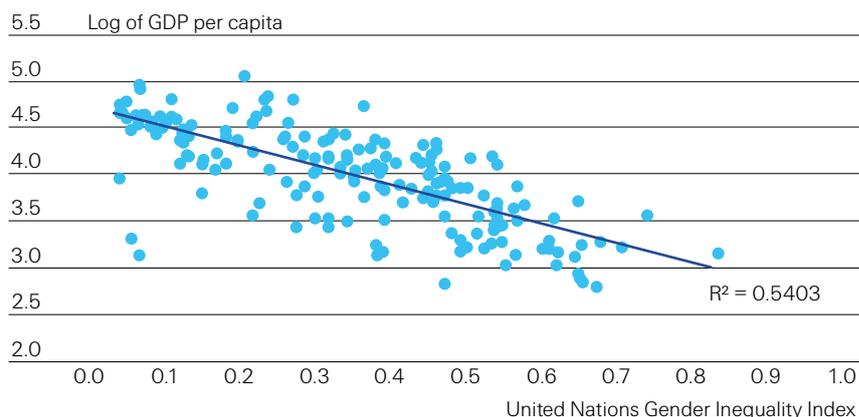
Finally, promoting equal pay for equal work will enable countries to leverage the differences in savings rates between men and women. This difference may come from inherent preferences, with some evidence suggesting that women tend to save more than men.⁴⁴ For example, women are more likely to use savings as a tool for consumption smoothing and risk management, especially in developing countries without state-sponsored social security programmes. Social norms and gender roles may also mean that women have stronger motives to leave money to the next generation (bequest motive) in their role as “principal home builder”.⁴⁵ Increasing the wage share of women would increase their bargaining power within the household, leading to higher aggregate household savings. Another explanation from cross-country data shows a strong correlation between higher female wage shares and increased domestic savings rates.⁴⁶ This may reflect women moving from the informal sector to formal employment. As women take up paid employment, they begin to save, adding to the overall share of savings. In either case, if the domestic savings rate increases, and if these savings are channelled into productive investment, GDP growth will accelerate.

A positive correlation between gender equality and income levels.

Gender equality and income levels

There is strong evidence that promoting gender equality can help countries realise their economic potential and stimulate growth. Recent empirical evidence using the UN Gender Inequality Index (GII) shows that gender inequality is strongly associated with lower development and income-levels, as measured by GDP per capita (see Figure 5).⁴⁷

Figure 5
Gender inequality and GDP per capita, 2017*



Note: *GDP per capita (2011 international dollars using purchasing power parity rates).
Source: UN Human Development Indicators, Swiss Re Institute.

⁴⁴ A. Morrison, D. Raju and N. Sinha, *Gender Equality, Poverty and Economic Growth*, World Bank Policy Research Working Paper, September 2007.

⁴⁵ Ibid.

⁴⁶ S. Seguino and M.S. Floro, *Does Gender have any Effect on Aggregate Saving? An empirical analysis*, *International Review of Applied Economics*, vol 17, issue 2 Jul 2010, pp 147-166.

⁴⁷ C. Lagarde and J.D. Ostry, “The macroeconomic benefits of gender diversity”, *VoxEU.org*, December 2018, <https://voxeu.org/article/macroeconomic-benefits-gender-diversity>, *Catalyst for Change: Empowering Women and Tackling Income Inequality*, IMF Staff Discussion Note, October 2015. D. Hakura, M Hussain, M Newiak, V Thakoor, and F Yang, *Inequality, Gender Gaps and Economic Growth: Comparative Evidence for Sub-Saharan Africa*, IMF Working Paper WP/16/111, 2016.

Gender equality and insurance

Closing the gender gap in labour force participation would lead to an additional gain of 12% GDP in OECD by 2030.

Emerging markets stand to gain more from gender parity.

The economic benefits from gender equality depends on the extent to which equality can be achieved.

We estimate equality could generate an additional USD 2.1 trillion in global insurance premiums by 2029.

Most will come from China and India.

The Nordic countries (Denmark, Finland, Iceland, Norway and Sweden) are closer than most to achieving gender equality in the labour market. Their improvements in gender equality have contributed considerably to economic growth. Across the states, increases in female employment alone are estimated to have contributed between 3-20% of total GDP per capita growth over the past 50 years.⁴⁸ A separate OECD study, says closing the gender gap in labour force participation would lead to an additional increase in GDP of about 12% by 2030.⁴⁹ A more recent report found an average gender pay gap of 15% in OECD countries. Eliminating this gap would contribute USD 2 trillion or 2.3% to global GDP.⁵⁰

Women in underdeveloped regions are more likely to face codified and informal barriers to entering the workforce. These include unequal educational opportunities, social stigma, bans on working in certain professions, and restrictions on working hours. By implication, there is a much greater pool of untapped female potential. One study estimates that if men and women had the same labour-force participation rates, average working hours and sector representation, USD 28 trillion⁵¹ could be added to global GDP by 2025. This is roughly equivalent to two-times China's current GDP. The same report estimated that closing gender gaps in labour-force participation would grow regional GDP in South Asia, Latin America, and Sub-Saharan Africa by 48%, 34% and 27%, respectively.

A gender-equal labour market: implications for insurance

Gender equality is also important for re/insurers. Various studies show that global GDP will increase as female labour force participation and wages rise. By how much depends on the extent to which equality can be achieved in terms of labour force participation alone (by an extra 12% by 2030 in OECD countries⁵²) or in combination with equal pay (globally by 26% by 2025 with the best-in-class country as benchmark, according to a study from the McKinsey Global Institute⁵³). The same study contains another scenario, where countries achieve the same improvement in gender gaps as the best-performing country in their region, adding 11% to global GDP beyond business-as-usual growth.

Real GDP growth is closely linked to the insurance demand (see S-curve). As per the Swiss Re Institute's estimates, an increase in GDP due to gender parity, could translate into an additional USD 2.1 trillion in global insurance premiums by 2029 (see Table 5). In the advanced markets, which are larger, absolute volume is important. Here, where gender gaps are smaller in percentage but larger in dollar terms, achieving gender parity can still add significantly to GDP and insurance premiums. In 2018, advanced markets accounted for about 59% of global GDP and 79% of total insurance premium.⁵⁴

We estimate that more than one-third of the potential additional insurance premiums resulting from gender equality would come from Asia, primarily China and India. In emerging markets, it is the pace of growth that matters. Gender inequality is greater there and narrowing those gaps would have a more notable impact on absolute GDP growth rates. In some low-income countries, the additional economic gains could be significant enough to raise them to "middle-income" nation status, in turn leading to more rapidly rising insurance penetration.

⁴⁸ *Is the Last Mile the Longest? Economic Gains from Gender Equality in Nordic Countries*, OECD, May 2018.

⁴⁹ OECD, 2015, op cit.

⁵⁰ PWC, 2019, op cit.

⁵¹ *The Power of Parity*, McKinsey Global Institute, 2015

⁵² Note: It is estimated that "a 50% reduction in the gender gap in labour force participation would lead to an additional gain in GDP of about 6% by 2030, with a further 6% gain (12% in total) if complete convergence occurred" OECD, 2015, op cit.

⁵³ McKinsey Global Institute, op cit.

⁵⁴ Swiss Re Institute *sigma* database.

The S-curve incorporates regression analysis using data from 140 countries.

Figure 6

S-curve relationship of GDP per capita in USD and life and health (L&H) insurance premiums as a % of GDP

S-curve

The S-curve, developed by Swiss Re,⁵⁵ is updated annually with regression analysis using data from more than 140 countries. It illustrates the global average relationship between economic development (GDP per capita) and insurance market development (share of premiums in GDP).



Source: Swiss Re Institute

Insurance spending rises fastest in countries where GDP per capita ranges from USD 5 000 to USD 35 000.

The S-curve reveals that insurance spending has the potential to accelerate in countries where GDP per capita rises from lower to middle-income status. In these countries, consumers have pent-up demand for risk protection as they acquire more assets, and spending on insurance grows significantly faster than income. In countries with low and higher income levels, by contrast, the income elasticity of insurance demand⁵⁶ is closer to one. In these countries, insurance premium grows at about the same rate or slightly faster than GDP. And in low-income countries, the levels of wealth and of insurance awareness are low, such that insurance demand does not grow faster than income.

The S-curve does not account for all of the definitional, cultural and institutional differences between countries.

In high-income countries, the income elasticity of insurance penetration is lower, implying that only a very small share of further increases in income (inflation-adjusted) will go to buying additional insurance cover. Nonetheless, careful consideration should be given to the limitations of the S-curve approach. It does not take into consideration other factors such as cultural or institutional differences. Moreover, state-sponsored social security schemes, regulation (compulsory lines) and tax advantages may be major determinants of a decision to buy an insurance policy. Straining government budgets, particularly in ageing economies, may force governments to partly withdraw or limit such schemes, thereby adding further demand for insurance even in high-income markets.

⁵⁵ This finding was presented in sigma 5/1999 and R. Enz, "The S-curve relation between per-capita income and insurance penetration," *The Geneva Papers on Risk and Insurance*, vol 25, No 3, July 2000.

⁵⁶ Income elasticity of insurance demand refers to the sensitivity of the demand for insurance to a change in per capita income.

Gender equality and insurance

Table 5

Incremental GDP and insurance premium gains by 2029 (across all lines of business)

Region	Incremental GDP gain (USD trillions)	% change in GDP	Incremental insurance premium gain (USD billions)	% change in insurance premium
World	16–37	11–26	900–2 100	14–32
Regions				
Asia (excl. Central Asia)	6–15	11–29	364–866	19–45
Asia (excl. China, India and Central Asia)	1–5	9–33	71–301	15–63
China	4–6	12–20	264–442	20–33
India	1–4	16–60	29–123	24–101
Middle East and North Africa	1–3	11–47	33–160	19–93
Latin America	1–2	14–34	37–95	24–63
Sub-Saharan Africa	0.4–1	12–27	7–16	15–35
North America and Oceania	4–7	11–19	238–412	11–19
Eastern Europe and Central Asia	0.7–2	9–23	50–129	15–39
Western Europe	2–6	9–23	146–371	9–24

Note: The range indicates the potential gains in GDP/insurance premium under the different gender parity scenarios, ie. from bridging gender gaps at the same rate as the fastest-improving country in its regional peer group to achieving complete gender parity.

Source: McKinsey Global Institute, Swiss Re Institute

Scenario analysis: closing the Asia health protection gap

We look at how gender equality in the labour market affects demand for health insurance in Asia.

Background

A narrowing gender gap will lead to an increase in the overall income in an economy, and higher income is associated with an increase in insurance penetration, especially for lower and middle income countries. Here we quantify the impact on the size of health protection gaps under a gender parity labour market scenario (equal workforce participation and equal pay), using a set of survey data from more than 16 000 households across 12 Asian markets.⁵⁷

Key assumptions and definitions:

- **Labour market:** the labour force participation rate is the same for both genders and there is no gender pay gap.
- **Household income:** labour market gender parity increases household income and the impact on household income is more substantial for lower income families, given more severe gender inequality.
- **Healthcare expenditure:** the income elasticity of healthcare expenditure is higher for low income households than for high income households.⁵⁸
- **Health protection gap (HPG):** this is the share of out-of-pocket (OOP) expenditure on health that causes stress to household finances. The size of the health protection gap represents the amount of financial resources needed to avoid financial stress arising from unpredictable direct medical expenses (see Figure 7).
- **Non-treatment:** this represents the estimated cost of foregone treatment due to lack of financial resources. This part is excluded in the estimation of the impact of gender parity on the size of the health protection gap.
- **Health protection gap as a percentage of household income:** this is the share of average household income that is exposed to the average health protection gap, ie. the stressful portion of out-of-pocket expenditure on health.
- **Average size of health protection gap:** this is the size of the health protection gap per household. At sub-sample level, it is calculated as the total size of the gap for the given sub-segment divided by the total number of households in that sub-segment.⁵⁹
- **Household income level:** The categorisation of respondents into the income segments (high-income, middle-income and low-income) is based on the average income level of the market and varies widely across markets. For instance, the household income range to be classified as “middle-income” in Japan is much higher than the household income range to be classified as “middle-income” in China or India or in any other emerging Asian markets.
- **Other factors:** socio-economic factors, such as female empowerment, which may be positively influenced by greater gender equality but are not explicitly modelled.

⁵⁷ The data set is from a previous Swiss Re Institute study, 2018, op cit.

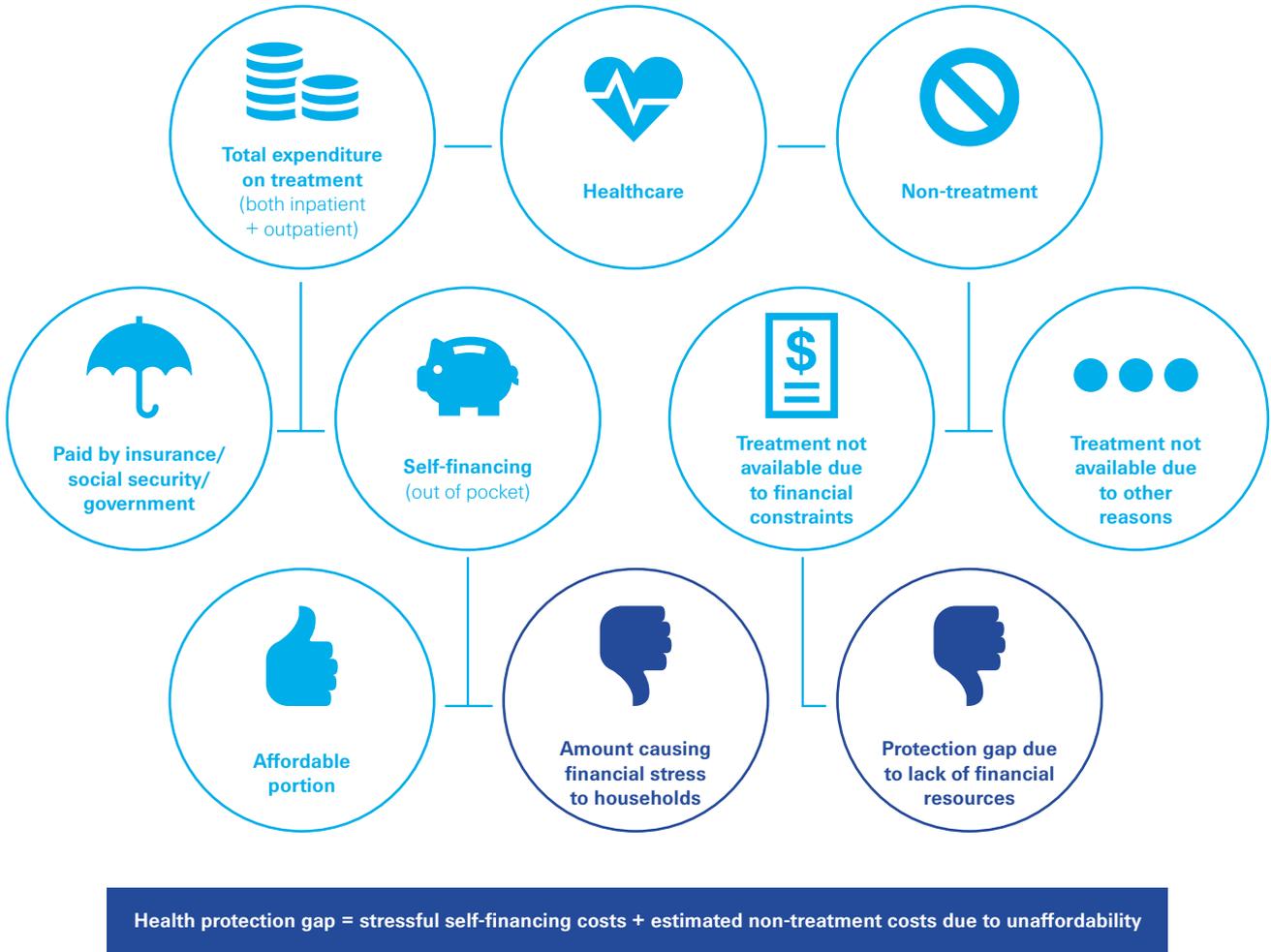
⁵⁸ Various studies showed that healthcare is a necessity good, meaning that healthcare spending will level off after household income reaches a certain (high) threshold. Gerdtham and Löthgren used a panel cointegration analysis for 21 OECD countries for the period 1960-1997 and found both healthcare expenditure and GDP to be non-stationary and cointegrated. Narayan and Narayan (2008) also examined OECD countries, eight, for the period 1980-1999 and also used panel cointegration techniques. Chakroun (2009) used a panel smooth transition regression model to investigate the relationship between income and healthcare expenditures. Baltagi and Moscone (2010) used a panel analysis, and Wang (2011) considered 1986-2007 data for 31 countries using quantile-type panel analysis.

⁵⁹ Sub-sample refers to further classifying the population based on various socio-demographic attributes like, age, gender, income level, etc.

Scenario analysis: closing the Asia health protection gap

Figure 7

A graphic illustration of the health protection gap



Note: In this report, non-treatment component of health protection gap is excluded in the estimation of impact of gender parity on the size of health protection gap
 Source: Swiss Re Institute

Household income could increase by about 23% under a labour market gender equality scenario.

Labour market gender equality improves household income

Applying the above assumptions to our set of survey data shows that in Asia, on average household income could increase by about 23% (see Table 6). The improvement in income levels would be higher in emerging Asia, where the gender gap is higher than in advanced Asian countries. In emerging Asia, gender equality in labour market could increase household income by about 27%, compared to about 15% in advanced Asia (see methodology in the Appendix).

Table 6

Increase in household income under a gender parity labour market scenario

	Improvement in household income*
Emerging Asia	26.6%
Advanced Asia	14.7%
Asia	23.1%

*Asia refers to the 12 Asian markets covered in this study. Emerging Asia includes China, India, Indonesia, Malaysia, Philippines, Thailand and Vietnam. Advanced Asia includes Hong Kong, Singapore, Japan, South Korea and Taiwan.

Source: Swiss Re Institute

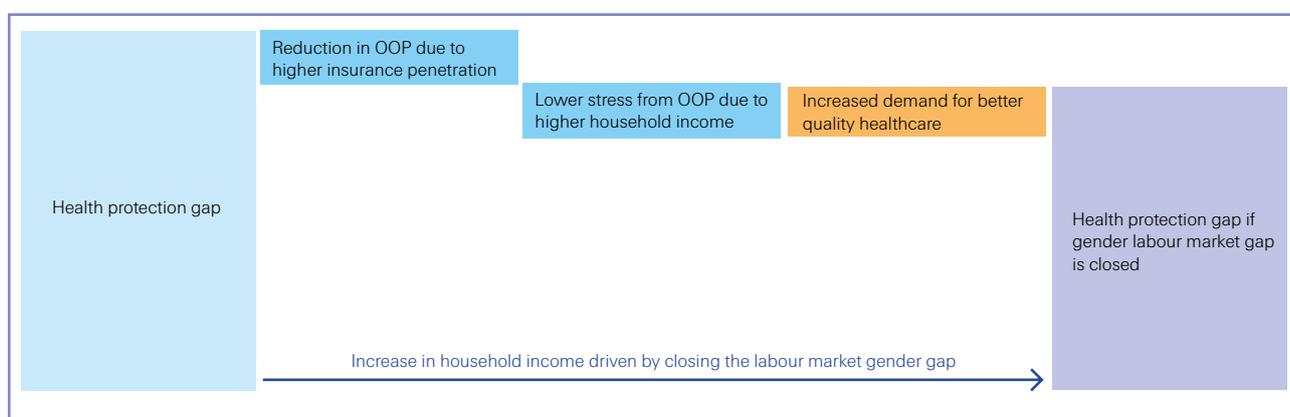
Gender equality: narrowing the health protection gap

Gender labour market equality will reduce stress on household finances caused by out-of-pocket healthcare expenditure

Gender equality in the labour market will improve household resilience. An increase in household income is linked to lower financial stress levels caused by out-of-pocket (OOP) expenditure on health, but it is not necessarily linked to lower healthcare spending. The latter grows with rising income, particularly for low and middle income households, mainly due to increased demand for better-quality healthcare services. Empirical evidence shows that an increase in household income results in lower stress from OOP expenditure on health, meaning it helps narrow the health protection gap (see Figure 8).

Figure 8

Framework to show the impact of closing the labour market gender gap on the size of the health protection gap



Source: Swiss Re Institute

Closing the gender gap could reduce health protection gap by 11% in the 12 Asian markets.

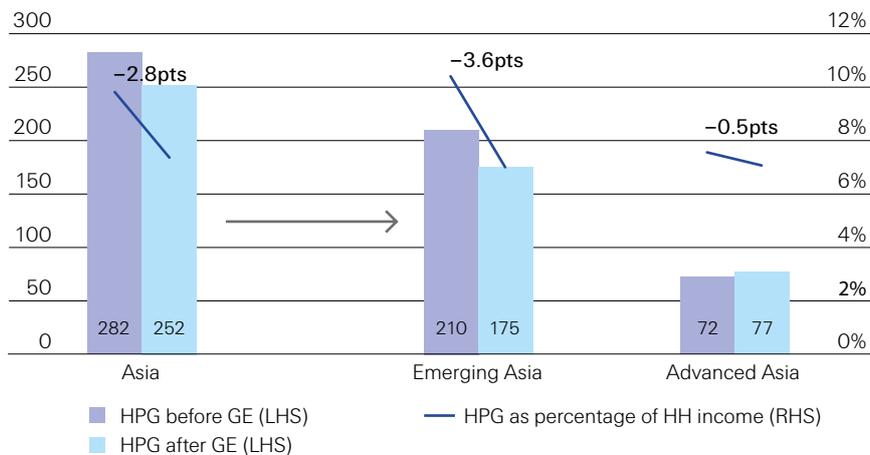
Closing the labour market gender gap could help improve average household income by about 23%, which we estimate could drive the size of the health protection gap down by about 11% for the whole of Asia, and by 17% for emerging Asia (see Figure 9).⁶⁰ In emerging Asia, it could reduce the health protection gap as a percentage of household income by 3.6 ppt. In advanced Asia, closing the gap could reduce such financial stress by 0.5 ppt, given higher insurance penetration and better public healthcare systems.

⁶⁰ The analysis is based on the current healthcare situation in the 12 Asian markets and does not account for any current or future regulatory or local government action to improve access and quality of healthcare. Please refer to methodology section in the appendix for details of the estimation.

Scenario analysis: closing the Asia health protection gap

Figure 9

Estimated impact of gender equality in labour market on the size of health protection gap (LHS, in USD billion) and percentage points reduction in stress to household finance (RHS)



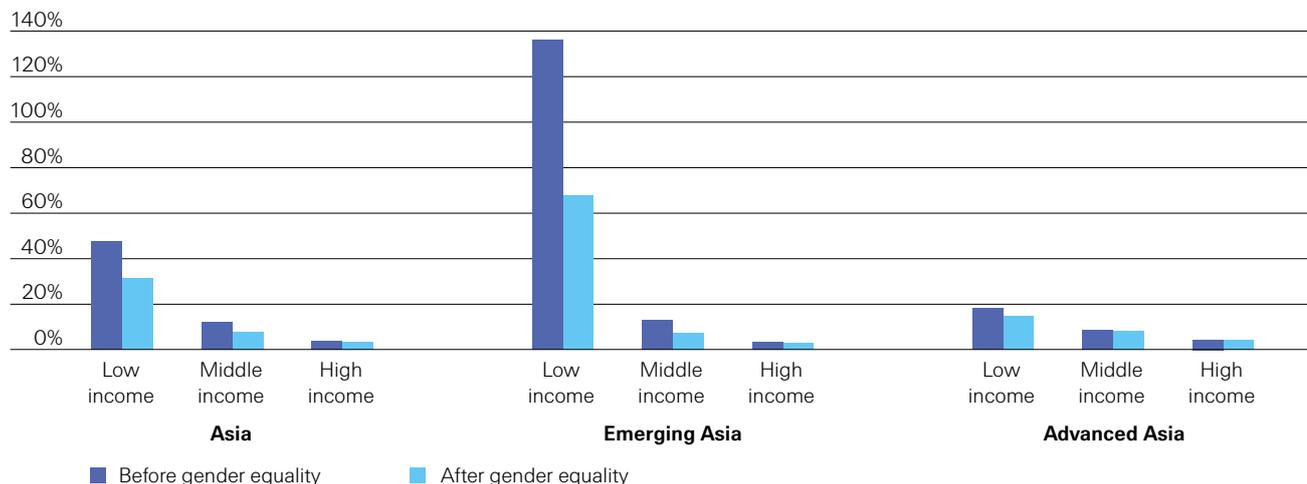
Note: HPG: insurance premium equivalent of health protection gap; HH: household; GE: gender equality.
Source: Swiss Re Institute

For low income households in emerging Asia, closing the gender gap could halve the financial stress from OOP health.

By household income level, gender parity could have significant positive impact on lower income families. The health protection gap in Asia as a percentage of household income for low income households could go down from 47% to 31%. In emerging Asia, the stressful portion of OOP healthcare expenditure could be reduced by more than half to 68% from 138% (see Figure 10).

Figure 10

Estimated impact of a gender-equal labour market on health protection gap (as a percentage of household income), by household income level



Source: Swiss Re Institute

India ranks low on gender equality. In 2017, women were paid 34% less than men.

China and India

Gender inequality in India is among the highest in the world. Of 160 countries, India ranked 127th on the UNDP's Gender Inequality Index for 2017. There is a wide discrepancy in access to healthcare, education, and also in economic and political power between men and women in India. For instance, on average women are paid 34% less than their male counterparts for the same work. Moreover, women spend around five hours a day on unpaid care giving, and men 30 minutes. As a result, India's female labour force participation rate is one of the lowest in the world, at around 27% between 2012 and 2017.

Table 7

UN Gender Inequality Index (GII)

	India	China
UN Gender Inequality Index*	0.524	0.152
Gender pay gap**	34.5%	17.2%
Female labour force participation	27.2%	61.5%

Note: * GII values range between 0 and 1, with 0 being 0% inequality, indicating women fare equally in comparison to men, and 1 being 100% inequality, indicating women fare poorly in comparison to men.

**Mean gender pay gaps using hourly wages.

Source: UN, ILO

China has among the highest female labour participation in the region, but the gender pay gap remained high at 17% in 2017.

China fares better in terms of gender equality than most of its peers in Asia and farther afield. It ranked 5th in Asia and 36th globally in the UNDP's Gender Inequality Index for 2017. China has made significant progress on women's health over the past few decades. Maternal mortality in China has dropped from 80 per 100 000 in 1991 to 30 in 2010.⁶¹ UNDP statistics show that women's participation in the labour force in China is among the highest in Asia, but the gender pay gap remains significant. Almost 2.5 in four women in China work, compared to barely more than one in four in India, and one in two in Japan, South Korea, Malaysia, Indonesia and the Philippines.⁶² Nevertheless, the gender pay gap in China was still more than 17% in 2017, according to ILO data.

Closing the gender gap could improve average household income by 32% in India and by 20% in China.

Swiss Re Institute's analysis of more than 2 000 households surveyed in India last year shows that closing the labour market gender gap could boost average household income by 32% overall. The improvement could be around 182% for low income households and 49% for middle income households in India. Gender inequality persists at every level of society but is less pronounced higher up. In China, closing the labour market gender gap could increase average household income by 20%. The analysis is based on the data set from a primary survey of more than 3 000 households in China. By household income level, closing the labour market gender gap could increase household income by 53% for low-, 27% for middle-, and 5% for high-income households in China (see Table 8)

Table 8

Increase in household income under a gender equal labour market scenario

	India	China
High-income households	18%	5%
Middle-income households	49%	27%
Low-income households	182%	53%
Average	32%	20%

Source: Swiss Re Institute

⁶¹ I. Attane, "Being a Woman in China Today: A Demography of Gender", *China Perspectives*, No. 4, 2012.

⁶² *Charting international Labor Comparisons – 2 Section Labour Market*, US Bureau of Labor Statistics, August 2011.

Scenario analysis: closing the Asia health protection gap

Closing the gender gap could reduce the size of the HPG by 25% in India and ...

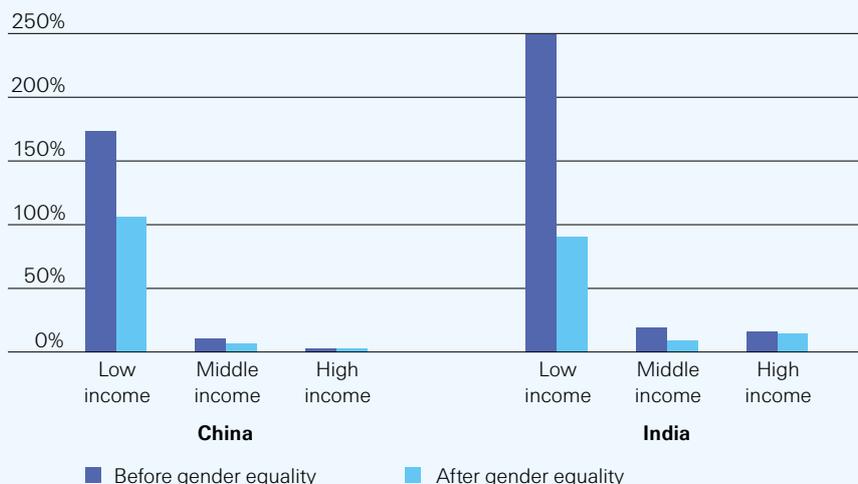
... by 12.5% in China.

Under a gender-equal labour market scenario for India, we estimate the health protection gap could narrow by 25%. In terms of the share of household income, it could reduce by 8 ppt to 10.5% for the whole of India. For low-income families, the stressful portion could shrink by a significant 159 ppt to 90% (see Figure 11).

In China, a gender-equal labour market could help reduce the size of health protection gap by 12.5%. Expressed as a percentage of household income, the health protection gap could drop by 2.7 ppt to 7.3% for the whole of China. For low-income families, the stressful portion of OOP expenditure on healthcare could drop by 68 ppt to 106% of household income (see Figure 11).

Figure 11

HPG as a percentage of household income by household income level, in China and India



Source: Swiss Re Institute.

Gender parity should look beyond labour market equality.

In the above analysis, we show how a gender-equal labour market could help close health protection gaps and improve household resilience. But efforts to address gender equality should go far beyond labour market issues. In health, for instance, efforts should be made to investigate how well health systems meet the needs of women. Women and men interact differently with health systems, partly as a consequence of differences in reproductive health needs, and because men and women tend to vary in their concern, awareness and action on health issues. These difference needs to be taken account of in efforts to build gender equality.

Capturing differences in gender requirements

Reforms and regulations are increasingly being put in place to facilitate gender equality.

While steps towards gender equality are positive, they also mean more constraints for insurers to consider.

Insurers have to evolve input characteristics to differentiate between good and bad risks.

Regulatory environment

Women are disproportionately more represented among the poor and informal jobs sector. In emerging markets, female access to finance and insurance is in the interest of policy makers. Insurance solutions such as microinsurance can provide significant positive impacts, giving women affordable means to manage their risks, instead of having to sell assets or run into debts in the event of a shock. The rapid growth of mobile technology has enabled insurers to develop and leverage innovative partnerships to reach out to low-income women and enhance women's access to insurance. In the advanced markets, social awareness of gender inequality is increasing, and reforms and regulations are increasingly being put in place to address the issue. For instance, the European Court of Justice ruled as far back as 2012 that insurers were not allowed to take the gender of their customers into account when setting insurance premiums.⁶³ Likewise in the US, the California Insurance Commissioner issued new regulation prohibiting the use of gender in consumer motor insurance rating starting 2019.⁶⁴ Although these steps towards gender equality are positive, for insurance companies they mean one fewer variable to use when setting prices.

The impact of these changes on insurance companies has been varied. A 2010 Oxera paper modelled the effect of banning gender-based pricing on various insurance markets in the UK, including motor, medical, term life, and pension annuity insurance. The paper found no significant systematic bias against either gender in insurance pricing, as any overcharging on a product would not be competitive. The paper laid out that unisex pricing would likely make women worse off in motor and life insurance, and disadvantage men in pension annuities.⁶⁵ Since the EU gender directive was implemented in 2012, experience has not corroborated these model results: in 2018, men were still paying higher motor insurance premiums than women. In the UK the gap is now around USD 152 per year, compared to USD 161 when the EU directive was introduced, a negligible change.⁶⁶

Insurers are now pricing covers based on vehicle type and the client's history of traffic violations. As men tend to drive more powerful cars and also have more traffic violations, on average the gender premium gap persists. However, changes have not been the same for all men. Younger men (aged 17 to 24) have seen the gender premium gap shrink by 40%, while men in their early 40s are now paying more than before.⁶⁷ In the US, there is a lack of consensus around which gender is more prone to high-risk driving and as a result, the gender premium gap varies in direction across US states.⁶⁸ The removal of gender as a pricing variable has resulted in insurers looking for other differentiating characteristics.⁶⁹ This is where technology – being gender blind – may provide a solution. Innovative solutions such as pay-as-you-drive ensure gender neutrality in insurance pricing.

⁶³ ECJ rules that gender cannot be considered in assessing insurance risk premiums, Allen & Overly, 2011.

⁶⁴ Commissioner issues regulations prohibiting gender discrimination in automobile insurance rates, California Insurance Commissioner, January 2019.

⁶⁵ *The use of gender in insurance pricing – Analysing the impact of a potential ban on the use of gender as a rating factor*, Oxera, ABI Research paper no. 24, 2010.

⁶⁶ Calculated using 2018 average exchange rate of 1.33 USD/GBP.

⁶⁷ O. Ralph, "Car insurance groups keep driving hard bargain for men", *Financial Times*, Jan 2018.

⁶⁸ Gal and Loudonback, "Car insurance rates are going up for women across the US – here's where they pay more than men", *Business Insider*, April 2019.

⁶⁹ P. Collinson, "How an EU gender equality ruling widened inequality", *The Guardian*, Jan 2017.

There is also a gap in the availability of data with respect to gender equality.

Clinical data gaps put women at higher risk of overdose and unexpected side effects.

Not having data at all has been a key obstacle to achieving gender equality.

Gender data gaps

The first step in addressing any problem is recognising and acknowledging that it exists. Yet efforts to rectify gender disparities are still hampered by missing and incomplete data. There are two main types of data gaps: 1) gaps where existing data have been skewed by under-representation of women: and 2) gaps where no statistical data are available. Both are significant concerns for policymakers and closing the data gap would aid countries in their efforts to reduce the gender equality gap. Better availability of data on women is important for the insurance industry too.

Gaps where existing data have been skewed by underrepresentation of women: Underrepresentation of women in data occurs when researchers fail to include sufficient women in sample populations, causing findings to be weak or misrepresentative. For instance, researchers in science, medicine and engineering may take “white, able-bodied 70-kg males as the norm” and assume that, physiologically or cognitively, other demographic segments may be treated as derivations of that standard.⁷⁰ In other cases, the practice is intended to reduce unintended harm to higher-risk populations like women of childbearing age. Although the risks of this approach are now better understood and regulators and researchers have made laudable progress towards greater inclusivity⁷¹ in studies and clinical trials, data gaps persist, with harmful consequences for women.⁷² Women are still at a higher risk of overdose from clinically approved medicines,⁷³ dangerous, unexpected side effects,⁷⁴ and lower levels of predictive accuracy for dangerous conditions than men.⁷⁵ For insurers this translates into higher claims costs, which could be reduced or avoided entirely if the data gaps were eliminated. Insufficient data on drug effects for half the population can lead to miscalculations about the efficacy of certain treatments. Insurers could end up spending significant funds on treatments that are superfluous or even counterproductive for their clients. Beyond healthcare, insurers may find that studies on human behaviour are not as applicable to female subjects, affecting population-wide risk profiles.⁷⁶ Closing the gender data gap can lead to better performance for insurers and better health outcomes for women.

Gaps where no statistical data are available: The more challenging type of data gap is the dearth of data altogether. In countless countries there is a lack of detailed census data on gender and income by household member (making it hard to isolate the income of each household member), as well as firm level data on employee pay. This, along with many other issues, means that there are few avenues to gain insight into the scale and scope of gender disparity. Without the necessary data to analyse, researchers and policymakers are left in the dark. Unsurprisingly, efforts to redress inequities in recent years have been bolstered by stricter reporting standards across the developed world. As of April 2017, all UK employers with 250 or more employees must publish a report on their gender pay gap, and companies in France and Germany have to comply with similar legislation. When the information was first made available to the European Commission, the EU’s executive body found an outsized pay disparity in Germany, which prompted the German government’s ambitious goal of cutting the gap to 10% by 2020.⁷⁷ This example serves to highlight just how little can be known about gender issues without access to relevant data. Having the data available is an important first step towards gender equality. Recording the data on a consistent basis allows for better tracking of policy effectiveness and for a clearer understanding of when gender equality has been achieved.

⁷⁰ *Rethinking Standards and Reference Models*, Stanford University.

⁷¹ *Sex-Specific Medical Research: Why women’s health can’t wait*, Brigham and Women’s Hospital, 2014

⁷² *Do Clinical Trials Have a Sex Problem*, Elysium Health, May 19, 2018.

⁷³ R.C. Rabin, “The Drug-Dose Gender Gap,” *New York Times*, January 28, 2013.

⁷⁴ *Most Drugs Withdrawn in Recent Years Had Greater Health Risk for Women*, US Government Accountability Office, January 19, 2001.

⁷⁵ *Heart Disease is the Leading Cause of Death Among Women*, Harvard University, March 25, 2017; .

⁷⁶ T. Hartford, “Gender Bias in Data Affect Health and Wealth”, *Financial Times*, March 8, 2019.

⁷⁷ S. Donaldson, *Gender Pay Gap Reporting: the International Perspective*, Pinsent Masons, 5 December 2018.

What women buy: women's decision-making process

To tap into the potential of greater female purchasing power, insurers need to understand the differences in preferences.

Once equal pay and equal opportunity is achieved and feeds through to the global economy, and demand for insurance gathers pace along with GDP growth, the key question for insurers is how to tap into this potential.⁷⁸ Equal male and female access to employment opportunities will also bring on changes in household lifestyles, household financial assets and workplace dynamics. More importantly, more women buyers/decision-makers will have growing purchasing power, and also growing access to the formal financial system as financial inclusion spreads. We need to ask: how will insurance buying behaviours be different – in terms of preferences in product offerings or distribution channels – if women are the key decision-makers? Literature review showed notable gender differences in needs, preferences and purchasing behaviour. Insurers need to understand the difference and acknowledge the demand for tailored products addressing women's needs. They need to avoid "gender-washing products", that is, simply offering the "shrink it and pink it" version of products that target men.⁷⁹

Women are key final decision-makers for a numbers of household products and...

Women's household decisions: men and women have distinctly different consumption patterns. Considerable literature exists on how women's bargaining power within the household affects household consumption patterns, holding overall income constant. Women's spending focus is often on improving and protecting their household's welfare. There is compelling evidence at the micro level too, that higher earnings for women increase household spending on children and basic necessities, such as healthcare, food, and education, while decreasing expenditure on alcohol, tobacco, and personal recreation.⁸⁰ Research covering 12 000 women and 40 geographies shows that women make the final decision in 91% of home purchases, 80% of healthcare choices, 66% of computers and 65% of new car purchases.⁸¹

... with their focus on household welfare, tend to spend more on insurance than men do.

Women are more willing to spend on insurance: there is a study showing that as their economic contributions and household bargaining and spending power increase, women tend to be more willing to spend on insurance. However, it is important to take social and cultural factors into account, which may vary market by market. For example, a South African mutual insurer, Assupol, found that as women become more substantial contributors to household income, they are more likely to purchase insurance than men because they are more concerned about protection. Business from women accounted for two-thirds of Assupol's new sales in 2014.⁸²

⁷⁸ *Economic Insights: Gender diversity increases economic and insurance sector growth*, Swiss Re Institute, Issue 9/2019.

⁷⁹ J. Darroch, "Avoid Gender Washing", *huffingtonpost.com*, 10 August 2014.

⁸⁰ Morrison et. al. op cit., J.G. Stotsky, *Gender and Its Relevance to Macroeconomic Policy: A Survey*, IMF Working Paper, 2006, S. Lawson and D.B. Gilman, *The Power of the Purse: Gender Equality and Middle-Class Spending*, Goldman Sachs Global Market Institute, 2009, p 1–22.

⁸¹ M.J. Silverstein and K. Sayre, *The Female Economy*, Harvard Business Review, September 2009.

⁸² *Women and Insurance – an Assupol Perspective*, Assupol, 2014.

Capturing differences in gender requirements

They also spend more on healthcare.

Healthcare expenditure is a key example of differing spending and product preferences between men and women. As studies found, “women’s income [generally] goes towards domestic expenses and the family while men keep some portion for their personal use, even in situations of dire poverty”.⁸³ A Harvard Business Review study found that “women want money not so much for what it can buy, but rather for what it can do”.⁸⁴ There is a direct read-across to healthcare spending, which contributes to the health of children in particular, and studies show a preference of women for spending on such goods.⁸⁵ These findings substantiate our above results from the analysis of the health protection gap and explain why the gap could be narrowed. For insurers, it is important to understand these differences and adjust their products, communication and sales processes accordingly. Products which reduce women’s household and work-life burdens could prove to be successful here.

Lower financial literacy and understanding of insurance ...

Financial literacy, trust and understanding of insurance: insurers also need to understand that there are gender differences in the level of financial literacy and therefore trust and understanding of insurance. While financial literacy matters for making insurance decisions, a literature review found notable gender differences in financial knowledge, for instance, a survey conducted by OECD showed 61% of men achieving the minimum target score compared with only 51% of women across participating countries and economies. Scores are significantly lower for women than men after controlling for country level differences, age and education.⁸⁶ A study on the gendered aspects of willingness to pay for index-based insurance in Bangladesh found that women had less education and lower financial literacy than their male counterparts, as well as less background in understanding agricultural risk. This placed them at a disadvantage when making insurance purchase decisions.⁸⁷ Lower financial literacy is generally associated with lower levels of financial inclusion. A study on the life insurance of Italian households concluded that financial inclusion is the main driver of insurance demand.⁸⁸ Another study by UNTACD showed financial inclusion raised demand for financial services including insurance, through financial education and consumer empowerment.⁸⁹ Insurers can help more women to have better understanding of insurance products, concepts and risks and to make informed choices.⁹⁰

... as well as the level of trust are key factors driving the different preferences of men and women.

It should be noted that even if an individual has sufficient knowledge, their attitude will influence their decision. There are some noticeable differences in financial attitudes between men and women on average across all participating countries and economies, with 53% of women showing positive attitudes towards the longer term security compared with just 47% of men. Another study showed that women tend to be influenced by those whom they consider important in their lives when they make insurance purchase decisions.⁹¹

⁸³ U. Funk, “Review of A Home Divided: Women and Income in the Third World by Daisy Dwyer and Judith Bruce”, *American Anthropologist*, vol 91, issue 4 1989, pp 1059-1060, International Finance Corporation and AXA, 2015. op cit.

⁸⁴ *The Financial Services Industry’s Untapped Market*, Harvard Business Review, 2014.

⁸⁵ *The influence of gender and household headship on voluntary health insurance: the case of North-West Cameroon*, National Center for Biotechnology Information, March 2018.

⁸⁶ *International survey of adult financial literacy competencies*, OECD, October 2016.

⁸⁷ *Microinsurance decisions: Gendered evidence from rural Bangladesh*, International Food Policy Research Institute, 2015.

⁸⁸ E. Luciano and M. Rossi, op. cit. 2014

⁸⁹ *Impact of access to financial services, including by highlighting remittances on development: Economic empowerment of women and youth*, UNCTAD 3 September 2014.

⁹⁰ *Women in finance: An economic case for gender equality*, IMF, 19 September 2018; *Promoting financial inclusion through financial education: OECD/INFE evidence, policies and practice*, OECD, 2013; *Survey on Financial Inclusion and Access (SOFIA) Focus Note on Gender*, November 2017,

⁹¹ Y. Kharde, Dr. PS Madan, *Influence of intentions on buying behaviours of women towards insurance purchase: an empirical study*, *International Journal of Business and Management Invention*, Volume 7 Issue 2 Ver. II, February 2018 p19-27.

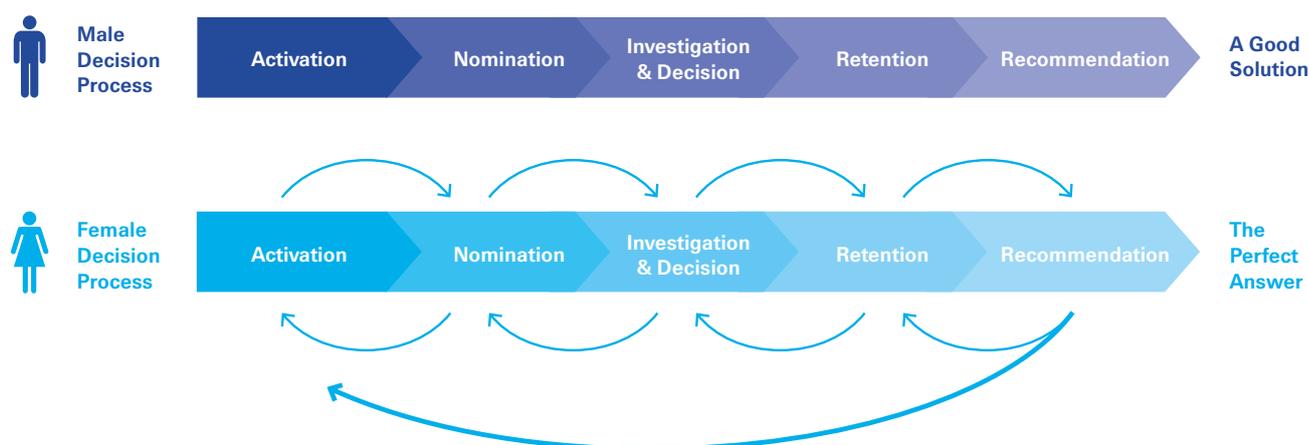
How women buy

Women's buying behaviour is more iterative.

Women's buying path is generally less straightforward than men's. Insurers need to recognise that for a woman, the purchasing process tends to be less linear than it more often is for a man. Women's buying path is more iterative, with continuous reviews in search of the "perfect answer". Men by contrast are more focused on and satisfied with a "good solution" (see Figure 12).⁹²

Figure 12

Women's versus men's buying paths



Source: martibarletta.com

Women prefer having various options available to fulfil a need. They prefer personalised advice...

Women tend to be more discovery-oriented shoppers – rather than focusing on a specific item, they are willing to entertain various options that help satisfy a given need.⁹³ The key characteristics of women shoppers for insurers to consider in their approach to communicating with women are that women i) are loyal once persuaded, ii) rely on recommendations, and iii) research and compare.

... which helps build brand loyalty.

Women tend to be more loyal customers with lower retention costs. The nature of loyalty differs between men and women. Because of the extra effort involved in reaching the "perfect answer" in their iterative buying path, women tend to be far more loyal customers once a product has won them over. But until they are won over, women want to receive personalised advice and individual attention from a designated point of contact. Women seek out and appreciate the knowledge this person can share, unlike men who can be resistant to taking advice from a third party.⁹⁴ As a result of this personalised approach, women tend to be more loyal to the individual providing the service than to the brand.⁹⁵ An Accenture survey found that women clients were 8% less likely than men to switch their insurance provider, while a study in the Netherlands indicated that women respondents were less likely than men to switch health insurers (81% vs. 83%).⁹⁶

⁹² *Marketing to Women Requires Focus*, martibarletta.com, 30 August 2016.

⁹³ *How Women Decide*, Harvard Business Review, September 2013.

⁹⁴ *Decoding the Female Consumer & Brand Loyalty*, Harbinger Communications Inc, 2014.

⁹⁵ *Are Men or Women More Brand-Loyal?*, Marketing Charts, December 2014, and V. Melnyck, S.M.J. van Osselaer and T.H.A. Bijmolt, "Are Women More Loyal Customers Than Men? Gender Differences in Loyalty to Firms and Individual Service Providers", *Journal of Marketing*, vol 79, July 2009, pp 82–96.

⁹⁶ *Why Claims Services Matter*, Accenture, 2015, M. Hendriks, J.D. de Jong, A. van den BrinkMuinen, and P. Groenewegen, "The Intention to Switch Health Insurer and Actual Switching Behavior: Are There Differences between Groups of People?" *Health Expectations*, vol 13 no 2, 2010, pp 195-207.

Capturing differences in gender requirements

Women rely more on recommendations than men do.

Women tend to rely more on recommendations than men do, and they particularly value word of mouth – not just face-to-face interactions, but also blogs or social media.⁹⁷ However, there are differences among women themselves as well. Women in emerging markets tend to value word of mouth recommendations more highly than do women in advanced markets, followed by advertising. Women in advanced markets are influenced by multiple channels during the decision process, and overwhelmingly by information from the internet at the moment of purchase – perhaps a reflection of the shift in sales channels towards e-commerce.⁹⁸ China however, is a phenomenon in itself. There, women represent 70% of online shoppers and “she-commerce” is the world’s single biggest consumer market. Women are more likely than men to recommend a product or service to their friends and family and are also greatly influenced by advice from their female peers. Over their lifetime, women in China average 26 referrals to their financial advisors – more than twice the average of 11 referrals made by men.⁹⁹

Women also tend to research products more thoroughly than men do.

Women tend to be rigorous in searching for an ideal solution. At the final stage of the decision process, when it comes to choosing a product, research is much more important to women than to men. Women are inclined to want more information when faced with an attractive option, compared to men, who are more likely to settle for the first good solution they find. Women are much more inquisitive and rigorous in considering and evaluating possible solutions, which again reflects the iterative buying path discussed above.¹⁰⁰ By extension, women also tend to be interested in creative solutions that could provide a more holistic approach to the need they are trying to satisfy. This presents tremendous opportunities for technology to facilitate the customer journey, which could be particularly relevant for women as (potential) clients. According to a survey, 54% of women respondents said they are willing to purchase insurance if it is available online. A similar number expressed interest in researching via mobile, but only 45% were willing to actually purchase via mobile, due to concerns about payment security.¹⁰¹

Insurers need to tailor their communication with women.

Insurers need to tailor their communication with women. The outcomes may be the same, in that insurance is purchased, but the process is entirely different, and as may be the product. As part of knowing their customer, insurance companies need to recognise women’s different path to a purchase and adjust their communication with women accordingly. Of course, the above necessarily simplifies complex realities, as does any model, and we need to be careful not to assume that all women in all circumstances (or men, for that matter) consistently exhibit the same decision-making and buying behaviour. However, insurance communication with women is still farther from acknowledging their needs and adjusting the customer journey, and there is often a disconnect between what female consumers need and want, and what the marketplace offers them. Keeping in mind that women tend to rely more on recommendations from each other and are more rigorous in researching will help insurers be more effective in reaching female insurance purchasers.

⁹⁷ “Women Trust Word-of-Mouth Recommendations From Their Friends”, adweek.com, data from *Ladies Home Journal*, January 2014 and Swiss Re’s *European Insurance Report*, 2015.

⁹⁸ *A new way to measure word-of-mouth marketing*, McKinsey Quarterly, April 2010.

⁹⁹ A. Osterland, “Female Clients more Likely than Men to Make Referrals,” *Investment News*, April 24, 2014.

¹⁰⁰ Harvard Business Review, 2013 op cit.

¹⁰¹ *She for shield: insure women to better protect all*, International Financial Corporation, Accenture and AXA, 2015.

Conclusion

Progress towards gender equality is happening, slowly.

That is good news for global resilience, as greater female participation in the labour market will raise household income levels, and also increase the uptake of insurance.

To optimise the potential, insurers need to pay more attention to women's needs and preferences.

The world is moving towards narrower gender gaps. Nevertheless, the path to gender parity still faces substantial barriers on social and legal fronts. Today, few countries offer women equal legal work rights, and the earnings gap between men and women remains high the world over. Further efforts to address gender disparities are still hampered by missing and incomplete data.

Closing the labour market gender gap would raise income levels, make societies more resilient and generate opportunities for insurers. Greater female participation in the labour market will raise household income levels, and also likely greater uptake of insurance. As an example, we estimate that in Asia, this dynamic would reduce the combined size of the region's health protection gap by as much as 11%.

To maximise the opportunity of more women able and wanting to buy risk protection covers, it is important that the insurance industry pays greater attention to women's needs and preferences when designing products. They should also understand what solutions to offer, how and where. Insurers need to ensure that their communication with women reflects an understanding of women's needs and considers their more iterative buying path. Successful adherence and understanding of these differences will help insurers, too, to benefit from greater gender equality. Insurers also need to prepare for regulatory changes as reforms and regulations are increasingly put in place to facilitate gender equality.

Appendix

Background

To understand how gender equality could improve household resilience, we applied the assumption of labour market gender parity to a set of survey data from more than 16 000 households across 12 Asian markets (data obtained as part of our previous study) to quantify its impacts on the size of the health protection gaps.¹⁰²

Methodology

Our approach uses out-of-pocket (OOP) expenditure on healthcare and the financial status of households (HH) to estimate the size of the health protection gap (HPG) and premium equivalent of HPG. Since not all OOP expenditure contributes to the HPG, the HPG is defined as that part of the OOP cost that causes stress to HH finances. The level of stress depends on a combination of factors, namely, the income level of a HH, the out-of-pocket costs relative to this income level, and financial preparedness.

The study captures five scenarios to understand the level of stress caused by out-of-pocket expenditure:

Table 9

Stress scenarios and the share of out-of-pocket expenses that create financial stress

Stress scenarios	Share of OOP that can cause stress to the financial position of the HH
Cut discretionary/luxury spending	20%
Cut savings contributions	30%
Borrow money from family and friends	50%
Borrow money from bank	60%
Cut back on essentials	80%

Source: Swiss Re Institute.

Calculation of the health protection gap (HPG) and premium equivalent of HPG

Total size of HPG = [Average HPG per HH] * [Total number of HHs]

Premium equivalent of HPG = [Average HPG per HH] * [Total number of HHs] * [Hospitalisation rate]

- **HPG per HH** = [OOP expenditure on health per HH if gender equality gap is closed] * [Severity score].
- **Severity score** is based on: 1) income level of the HH if gender equality gap is closed, 2) OOP expenditure as a % of HH income, and 3) stress caused by OOP health expenditure (see Table 9) as reported by the respondents.
- **Labour market gender parity** is defined as equal pay and an equal labour force participation rate between female and males. Labour market inequality is assumed to be inversely related to HH income levels (ie, smaller for higher income families and greater for lower income families).

¹⁰² The data set is from a previous study. Swiss Re Institute, *Asia's health protection gap: insights for building greater resilience*, 2018.

Table 10

Scenarios of gender labour market parity and improvement in household income

	Gender inequality index	Household income level	Change in household income if gender equality is closed
Emerging Asia	0.307	Low Income	85%
		Middle income	35.6%
		High income	8.6%
		Overall	26.6%
Advanced Asia	0.089	Low income	35.3%
		Middle income	13.7%
		High income	3.1%
		Overall	14.7%
Asia	0.288	Low income	47.6%
		Middle income	29.6%
		High income	6.9%
		Overall	23.1%

Source: United Nations Development Programme (UNDP); Swiss Re Institute

- **Out-of-Pocket (OOP) expenditure on health per HH based on current level of gender inequality** = OOP expenditure per HH requiring hospitalisation in the past 12 months from the survey is adjusted for the total OOP expenditure, based on World Health Organisation (WHO) health statistics.
- **OOP expenditure on health per HH if gender inequality is closed** = OOP expenditure on health per HH based on current level of gender inequality * (1 + net change in OOP expenditure on health as a result of increase in HH income if gender equality gap is closed) * (1 – net change in insurance penetration as a result of increase in HH income if gender equality gap is closed; see box on S-curve).
- **Net change in OOP expenditure on health as a result of increase in HH income if gender equality gap is closed** is based on the assumption that the change in household income is positively correlated to the total expenditure on health. A linear regression analysis was performed to understand the average sensitivity of a change in household income on the OOP expenditure on health. Results were then adjusted for the relative sensitivity of a change in healthcare expenditure to the change in income level by different income groups. For instance, change in healthcare expenditure for high income households has lower sensitivity to the change in income level and vice-versa.
- **Net change in insurance penetration is positively correlated to the change in HH income** but the sensitivity is not linear. (See box on S-curve for more details.)
- **Total number of households** is sourced from government agencies and other statistical authorities.
- **Change in household income** is estimated based on the UNDP Gender Inequality Index (GII) and the household income level.
- **Number of households hospitalised** = [Total number of households] * [Hospitalisation rate].
- **Hospitalisation rate** = [No. of households hospitalised] as a percentage of [Total number of households]; data sourced/estimated based on information provided by statistical authorities, OECD and other secondary sources.

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