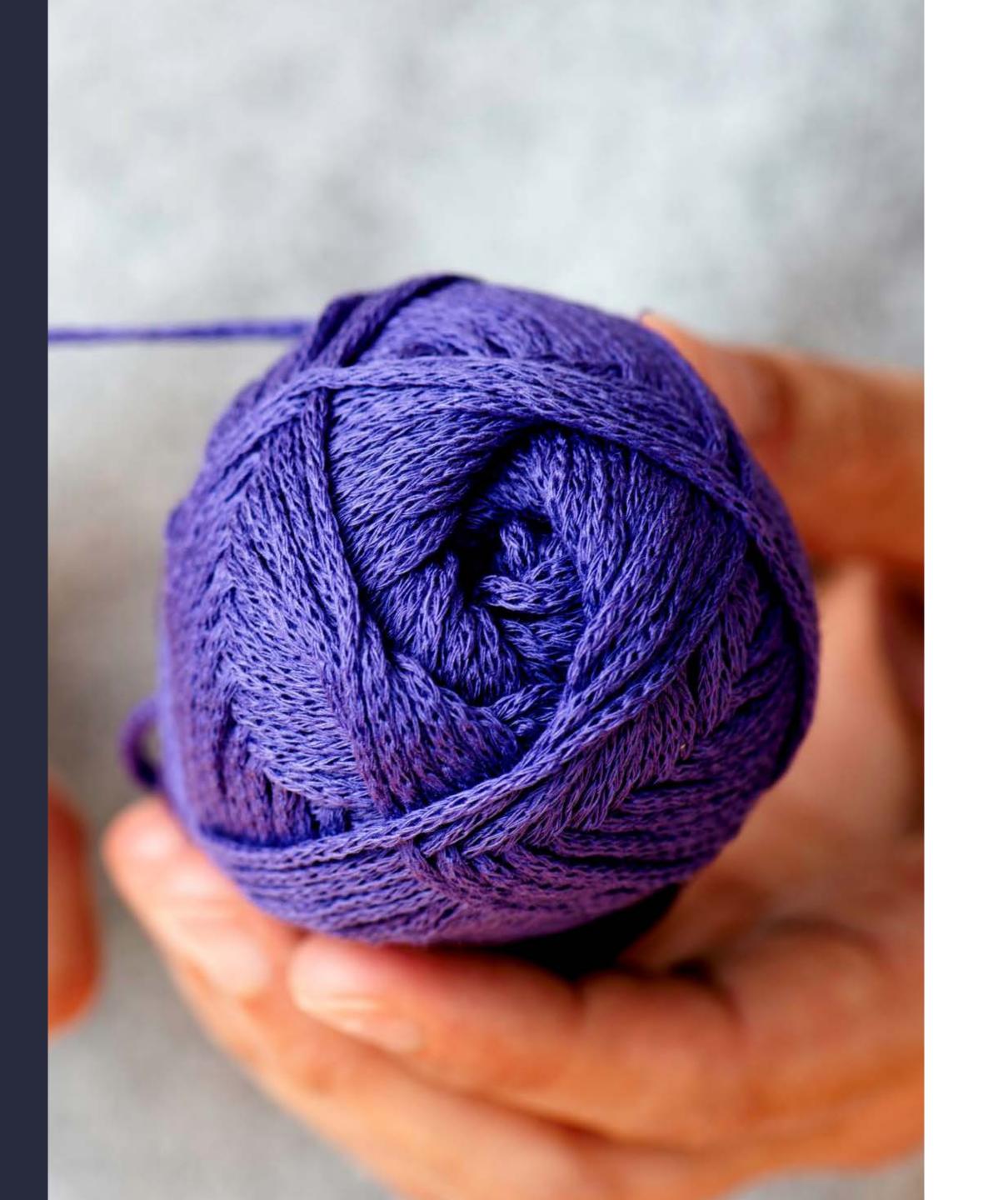


Diverse Asia – Observing Asia's gender pension disparities



Observing Asia's gender pension disparities

In the latest in our series of Diverse Asia articles, Manulife Investment Management explores the gender-related challenges and opportunities found within Hong Kong, Indonesia, Malaysia, and Taiwan. The content has been developed with insight and research from our proprietary data as well as the Sau Po Centre on Ageing at "HKU".

Understanding pension income *disparities* between men and women

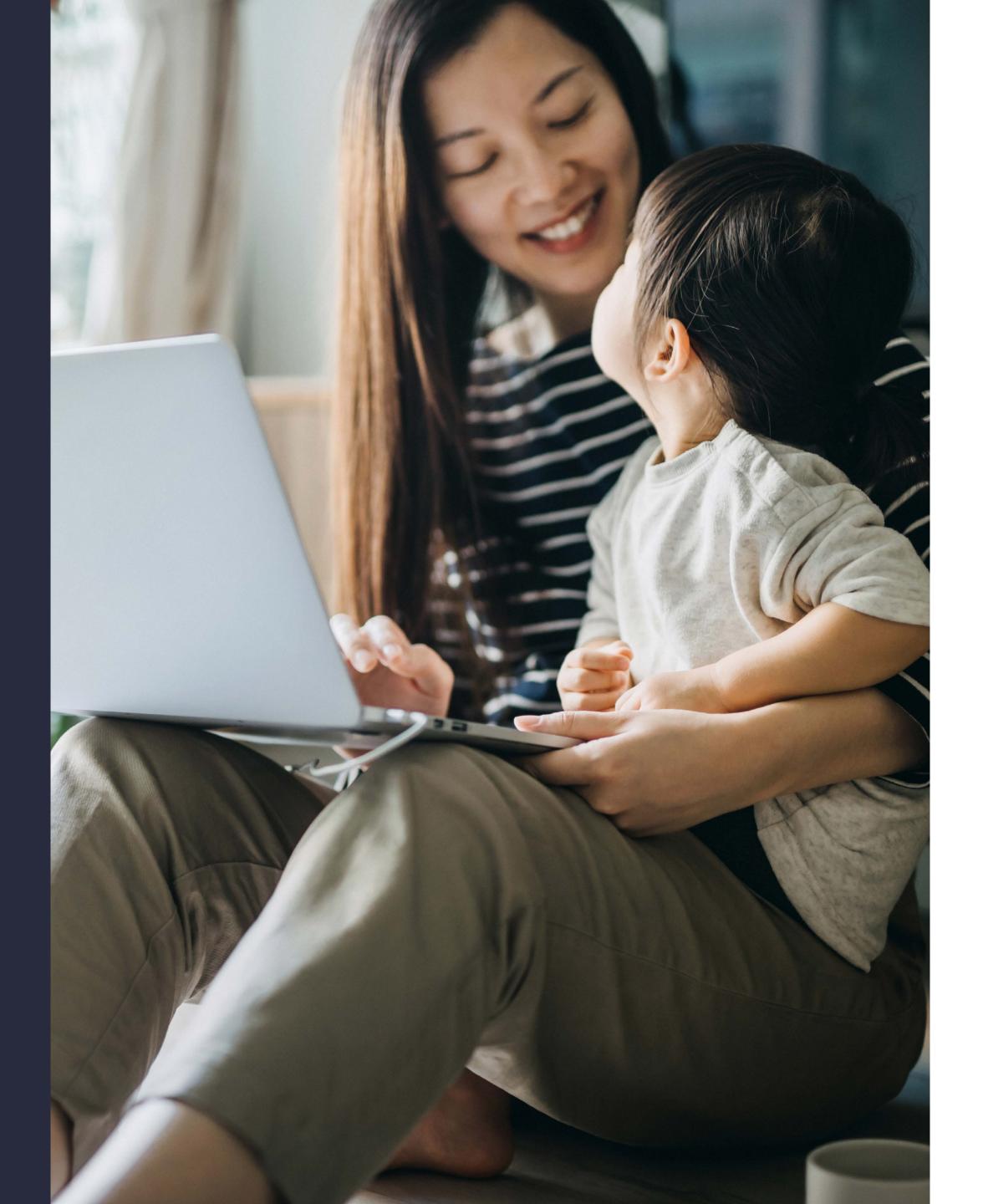
A 2021 report from the Organisation for Economic Co-operation and Development (OECD) found that among member states, women aged 65 or older received on average 26% less income from pensions than men.

In Asia, we believe the existence of pension inequality between men and women is even more pronounced due to disparities in labour market participation, disproportionate participation in the informal market, and persistent pay gap in the context of the rapidly ageing demographic profile.

In most markets for which data is available, pension recipients are more likely to be men than women. According to International Labour Organization, 38.7% of working age men are covered under a pension scheme, however, this percentage for women is only 26.3%. In other words, in most markets, women are forced to live on significantly lower pension benefits.



In most markets for which data is available, pension recipients are more likely to be men than women.

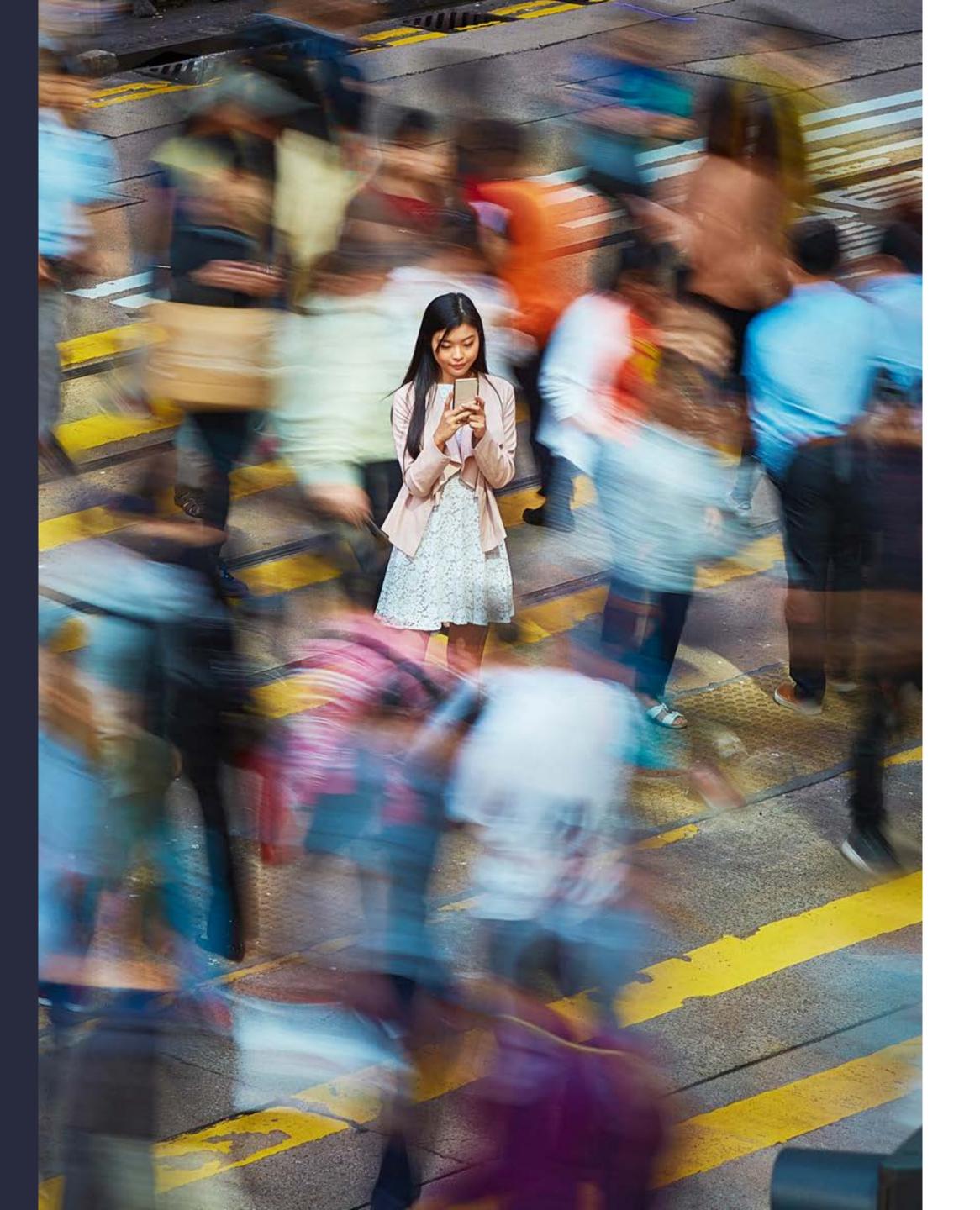


While the challenge of achieving gender income parity is a universal issue, it's also a very complicated issue that requires local insights and observations. Indeed, much of the data only captures part of the challenge, which is why it's important to understand the disparities of pension provision in Asian markets through both theory and practice.

At Manulife Investment Management, with our on-the-ground insight as well as Asia-based research in partnership with the Sau Po Centre on Ageing at the University of Hong Kong ("HKU")¹, we're taking a deeper dive into the gender-related challenges and opportunities in a diverse Asia, as well as adding local observations for Hong Kong, Indonesia, Malaysia, and Taiwan. We believe current gender pension and income disparities can be bridged in three ways:

- By identifying those inequalities at different life stages that widen the pension income shortfall for women
- By contextualising structural inequality and traditional status quo attitudes towards wealth, health, and social mobility
- By highlighting how governments and the private sector can prioritise women's empowerment and develop more innovative ways to ensure women adequately prepare for their retirement

¹ Manulife Investment Management engages the Sau Po Centre on Ageing at the University of Hong Kong ("HKU") in the capacity of consultant (consultancy fee incurred) to perform the consultancy services for the thought leadership series.



Identifying the *causes* for income and pension inequality

Gender income gaps exist almost everywhere in the world and tend to be the result of broader inequalities that affect women throughout their life courses.

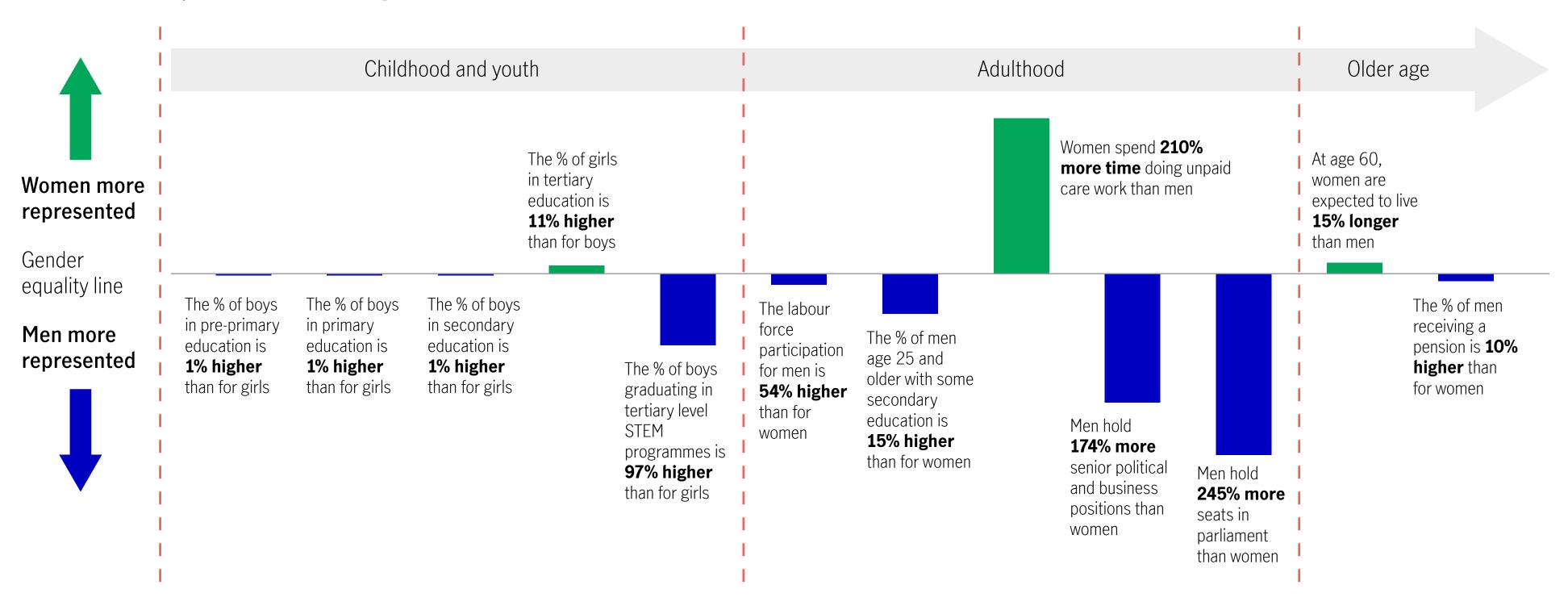
In labour markets, for example, women participate less and for a shorter time than men, on average. When they do participate, they tend to earn lower wages and face more career interruptions—usually after childbirth and/or to care for dependents—than men. Women are also overrepresented in informal and precarious work or work in industries that pay relatively lower wages, such as caregiving and service sector jobs. They're also underrepresented in industries that pay relatively higher wages, such as science and technology jobs.

Moreover, because employer-related pension schemes are usually based on regular payroll contributions, women are likely to have contributed less—and less frequently—to their pension compared with men. This results in markedly lower retirement income. But the inequalities that women face begin well before they enter the workforce and continue long after their working lives have ended.

The cumulative, lifelong disadvantages faced by women

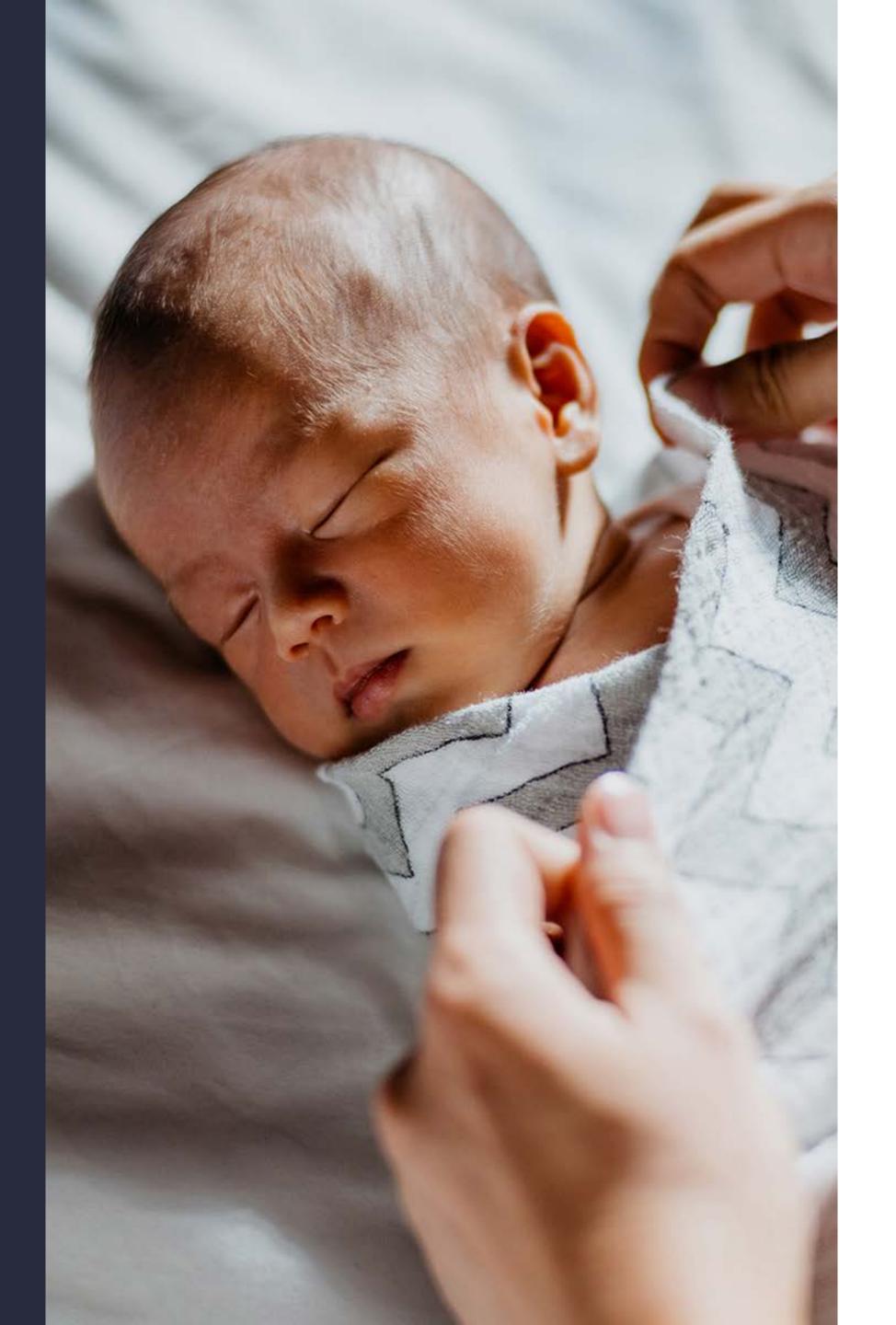
In 2018, the United Nations Development Programme published a report and experimented with presenting data that demonstrated how gender issues <u>accumulate over the course of a lifetime</u>, with a view to breaking patterns of inequalities that include those men and women tend to face over the course of childhood and youth, adulthood, and older age. As the report noted, "This perspective provides a more holistic view of how gender disparities accumulate through life, helps to identify bottlenecks to progress, and highlights the need for comprehensive intervention strategies." (Bonini & Hsu, 2018).

Gender inequalities throughout the life course



Source: "Closing gender gaps throughout the life course," <u>Human Development Reports</u>, 7 March 2018. In the updated version of <u>Human Development Report 2021/2022</u>, enrolment ratios (primary, secondary, and tertiary education) as well as time spent on unpaid care work are updated.

Data source: 2016 Human Development Report, Life-Course Gender Gap Dashboard. The most recent comprehensive data set available. Data on share of science, mathematics, engineering, manufacturing and construction (STEM) graduates at tertiary level are from UNESCO Institute for Statistics (2018), Data Centre. Data on total time spent on unpaid care work are from the 2015 Human Development Report, Figure 4.1. Data on life expectancy at age 60 are from UNDESA (2017), World Population Prospects: The 2017 Revision. STEM includes science, mathematics, engineering, manufacturing and construction graduates.

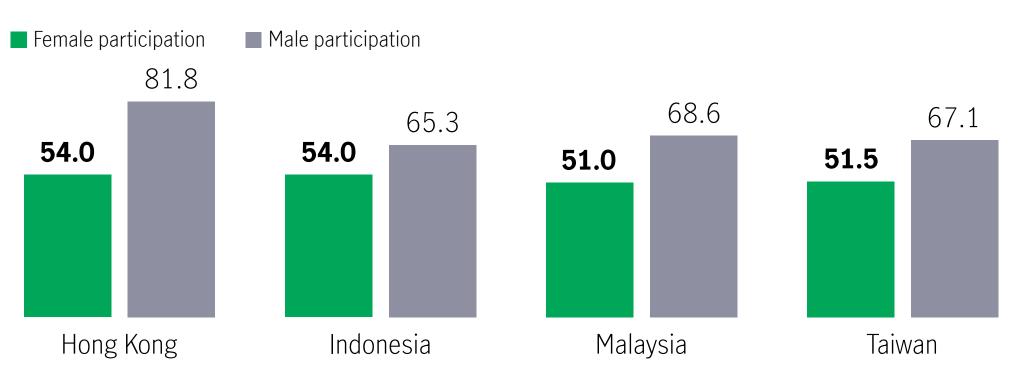


Contextualising structural inequalities in Asia

Employment discontinues with marriage and childbearing

Such embedded inequalities mean that, globally, women have lower probability to access formal employment, and are likely to have considerably shorter careers than their male counterparts. When women do work, they tend to earn less and are less likely to have opportunities for business expansion or career progression. According to the World Bank, the global labour force participation rate for women is 46% compared with 72% for men. This statistic varies in our four Asian markets—Hong Kong, Indonesia, Malaysia, and Taiwan—that represent a diverse Asia, but in every case is still lower than that of men.

Labour force participation in our four key Asia markets (%)

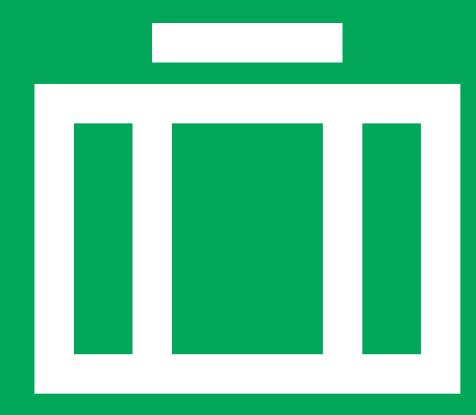


Source: International Labour Organization, ILOSTAT database, as of June 2022; data for Taiwan is from the Ministry of Labor, Taiwan, as of June 2022.

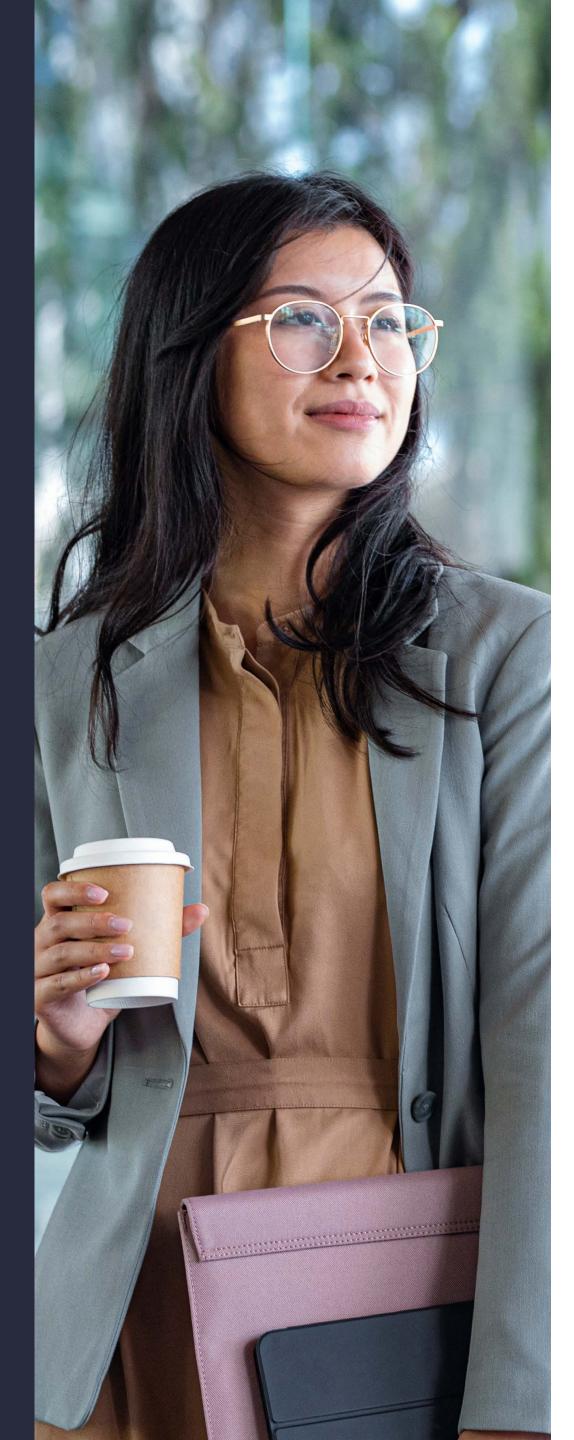
Another significant factor that frequently impedes women's accumulation of retirement wealth is the stop-start nature of their working lives. Typically, working age participants can expect to experience a gradual increase in income throughout their working lives. But for women in particular, having children creates career interruptions that have lifelong implications for their financial well-being. As one study noted, women tend to find themselves faced with the challenge of building their career and raising their own family at the same life stage. Having children frequently means women must put their career on hold—often indefinitely. Women also tend to earn a reduced income after giving birth, resulting in lower lifetime earnings and <u>a slower</u> accumulation of pension benefits.

The impact of marriage and childbearing on women's labour participation is significant and widely observed in all four of our key markets. For example, a qualitative study in Indonesia (Diahhadi, 2014) found that marriage and the onset of motherhood have been positively associated with the risk of leaving employment. In particular, the effect of entering marriage on employment exit is stronger for women in low-level occupations and those with junior and senior secondary levels of education. In aged markets such as Hong Kong, approximately 65% of women who ever married (includes now married, widowed, divorced/separated) are active in the labour market, while up to 96% of their male counterparts are still employed or actively seeking work.²

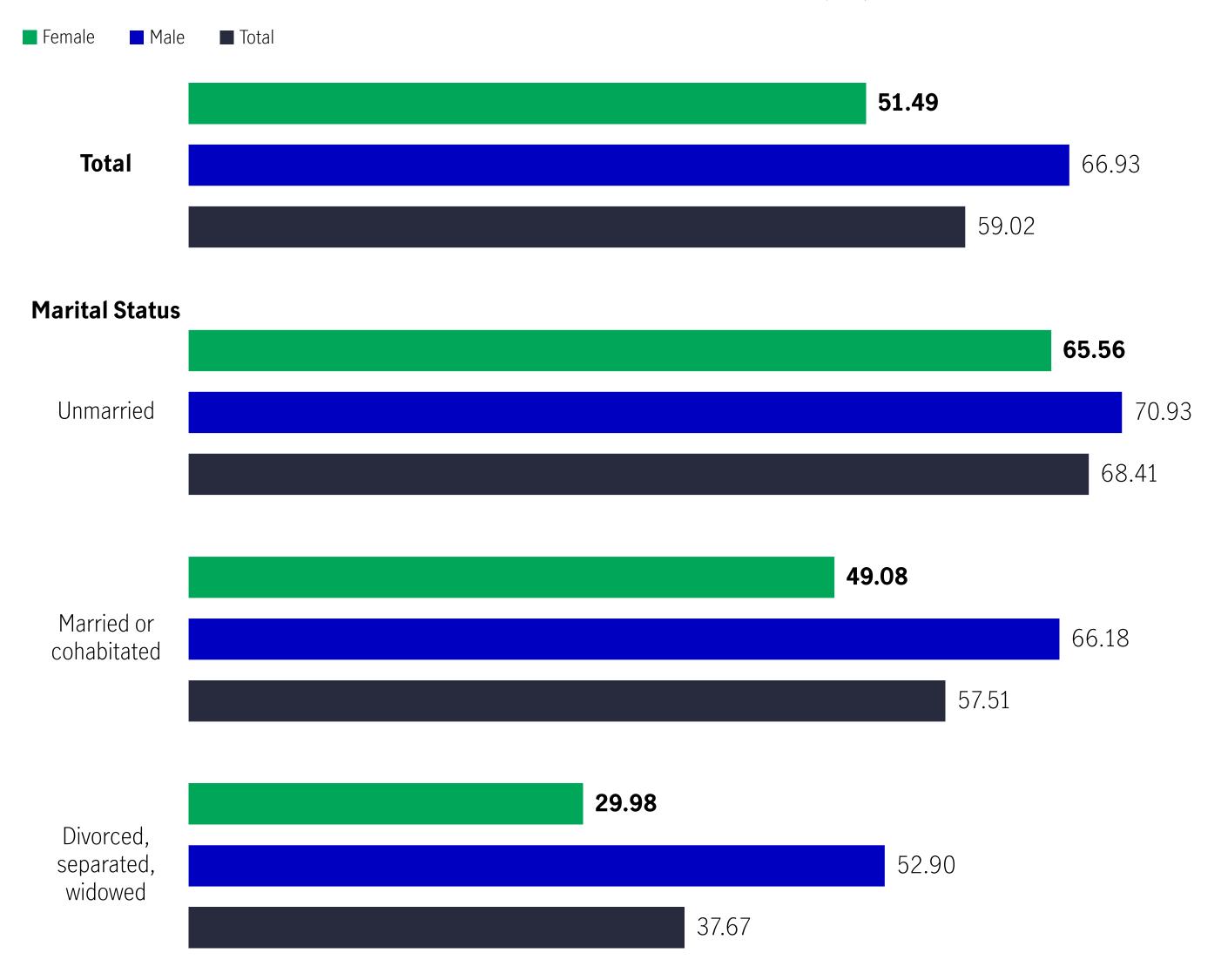
Taiwan is another aged market which shows how marital status affects men and women differently in terms of labour participation. Women have significantly lower labour participant rates than men across all marital status groups. Also, the difference in labour participation rates among males across the different marital status groups was relatively small, which may imply a disparity in the impact of marriage on women and men in terms of labour participation.



In aged markets such as
Hong Kong, approximately
65% of women who ever
married (includes now
married, widowed, divorced/
separated) are active in the
labour market, while up to
96% of their male counterparts
are still employed or actively
seeking work.



Labour force participation rate in Taiwan (%)



9

Pay disparities interrupt wealth accumulation in Malaysia

In a 2021 analysis of gender-based income disparities in Malaysia, one study noted that women's participation in the Malaysian labour market has increased significantly in recent years. Even so, the female labour force participation rate is still at a low level when compared with the male labour force participation rate. The same study also noted that because women earn a lower income throughout their careers, wealth accumulation is harder for women, even though men and women do similar jobs.

Malaysian national employees by occupation and gender, plus median monthly basic salary



Gender pay-disparities in Indonesia despite the enhancement of education for women

Although in Indonesia more women workers have a college or university degree compared with male workers, higher education hasn't succeeded in narrowing income disparities between genders. According to UN Women, women in Indonesia earn 23% less (Rp2,454,023, monthly, equivalent to US\$160) than their male counterparts (Rp3,184,084, monthly, equivalent to US\$208). Additionally, <u>higher-paying jobs are dominated by men</u>. While the average wage for both sexes is higher in urban areas of Indonesia, the benefits of urbanisation, in terms of higher monthly wages, also tend to benefit male workers more than female workers.

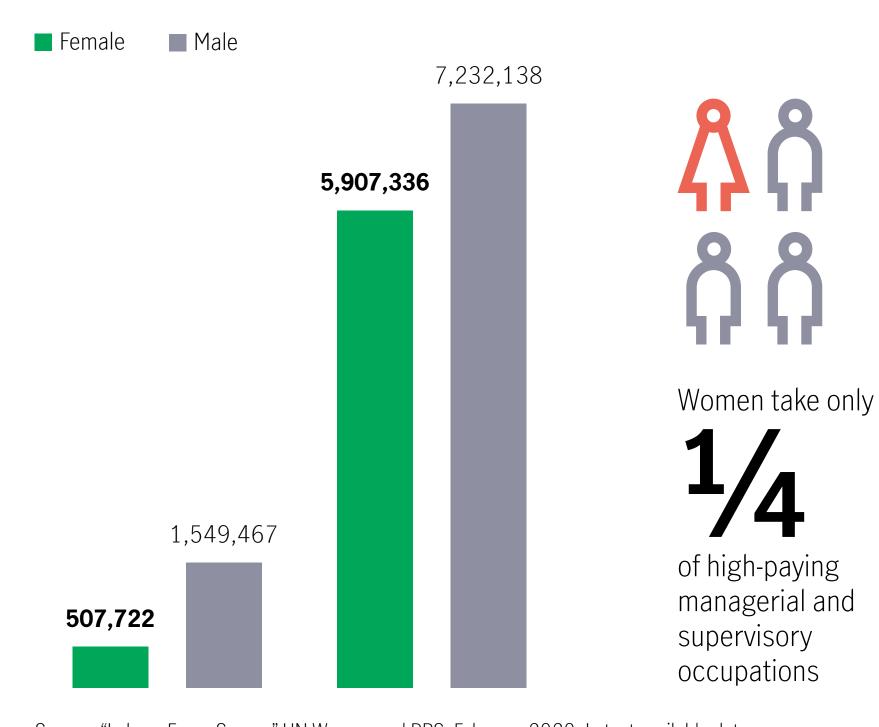
Female workers with tertiary education degrees earn substantially less than male counterparts

(Rp, Indonesian rupiah)

Level of education	Men	Women
Primary school	2,117,361	1,280,826
Junior high school	2,357,497	1,658,672
General high school	3,099,936	2,115,726
Vocational high school	3,059,119	2,288,670
College (D1-D3)	4,414,594	2,930,465
University	5,436,083	3,701,652

Source: "Labour Force Survey," UN women and BPS, February 2020, latest available data.

Higher-paying jobs are dominated by men in Indonesia (Rp, Indonesian rupiah)



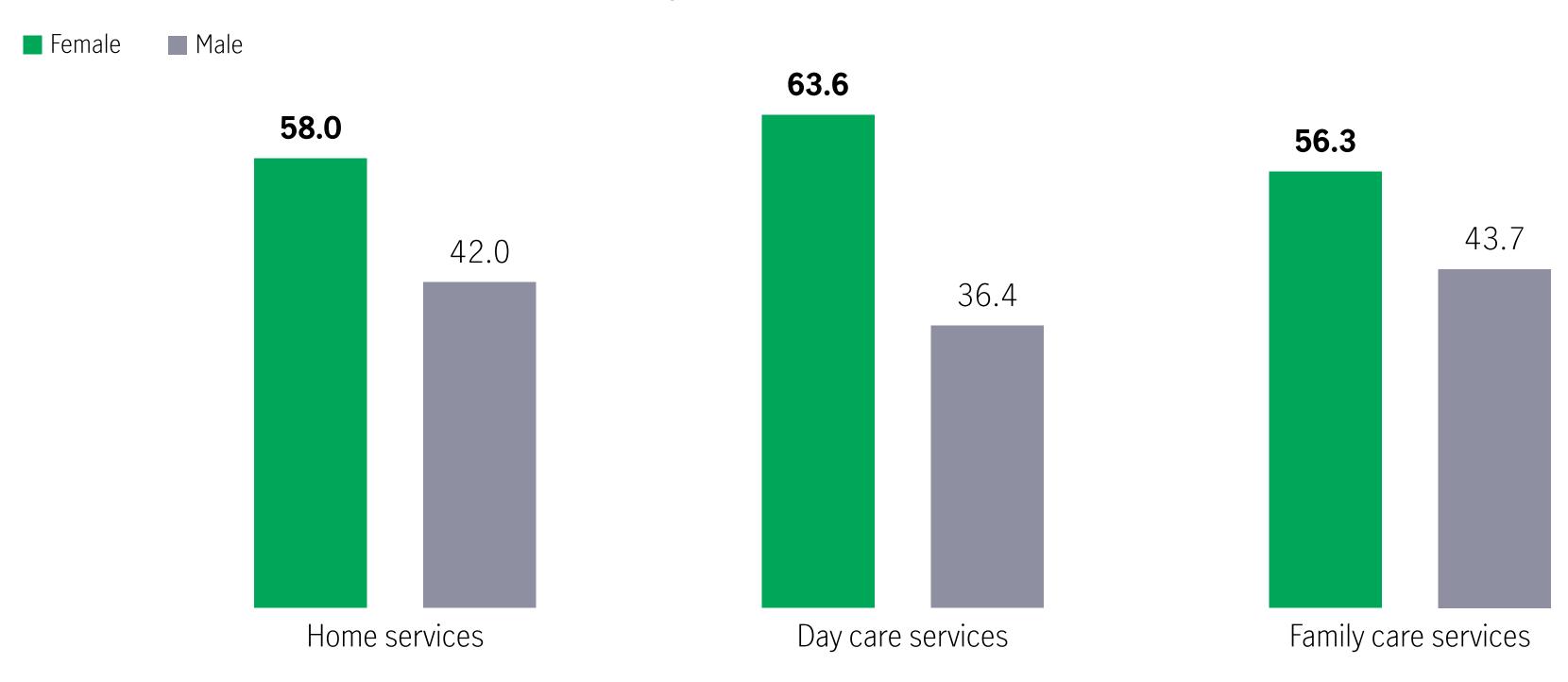
Source: "Labour Force Survey," UN Women and BPS, February 2020. Latest available data.

Gender-specific risks extend to greater care needs in later life among women

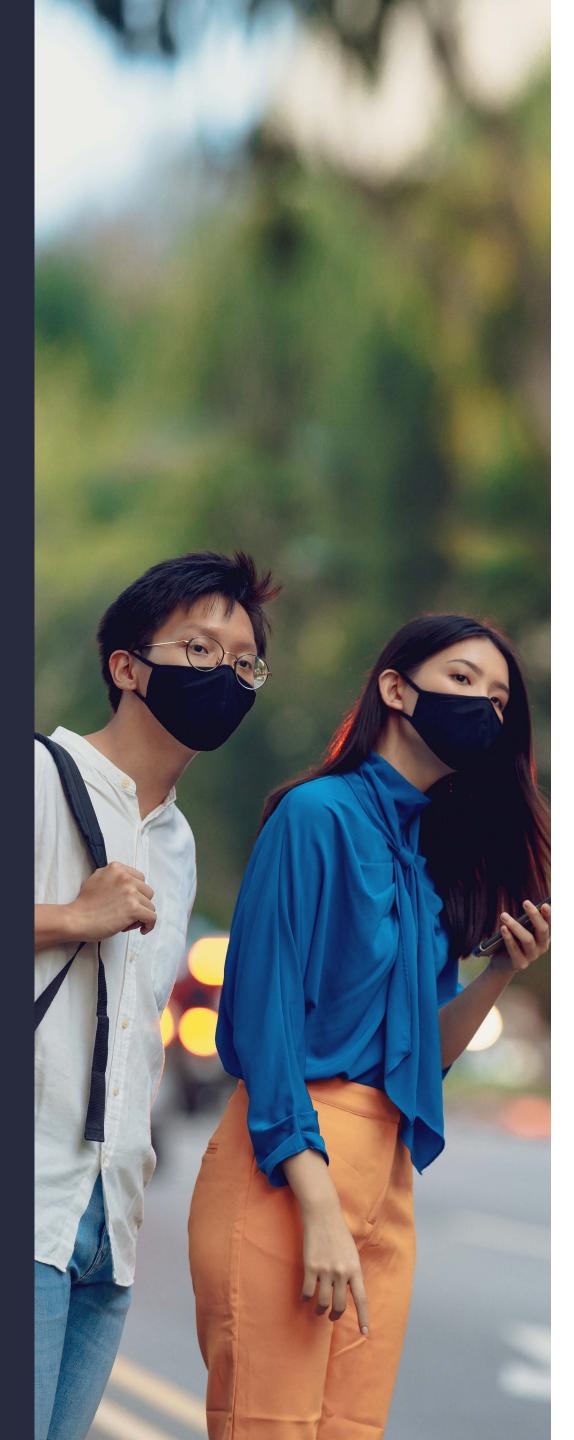
We've noted the impact that marriage and childbearing can have on women's wealth accumulation, but what about other family responsibilities? And do gender-based health issues—such as women outliving men or having shorter healthy life expectancy—create greater challenges for women to fulfil their care needs?

An example from Taiwan shows how gender inequality can result in later-life disparities. <u>In 2020</u>, the average healthy life expectancy of Taiwanese people was 84.7 years for women and 78.1 years for men, meaning women outlive men by 6 to 7 years. However, living longer doesn't mean living longer and healthier. In fact, the average unhealthy life expectancy was 9.39 years for women and 7.64 years for men. In most of our observed markets, although women tend to live longer than men, they have higher morbidity rates and suffer from a diminished quality of life. It's unsurprising, therefore, that in Taiwan, statistics show that more women than men are using long-term care services.

2020 users of long-term care services, by sex (%)



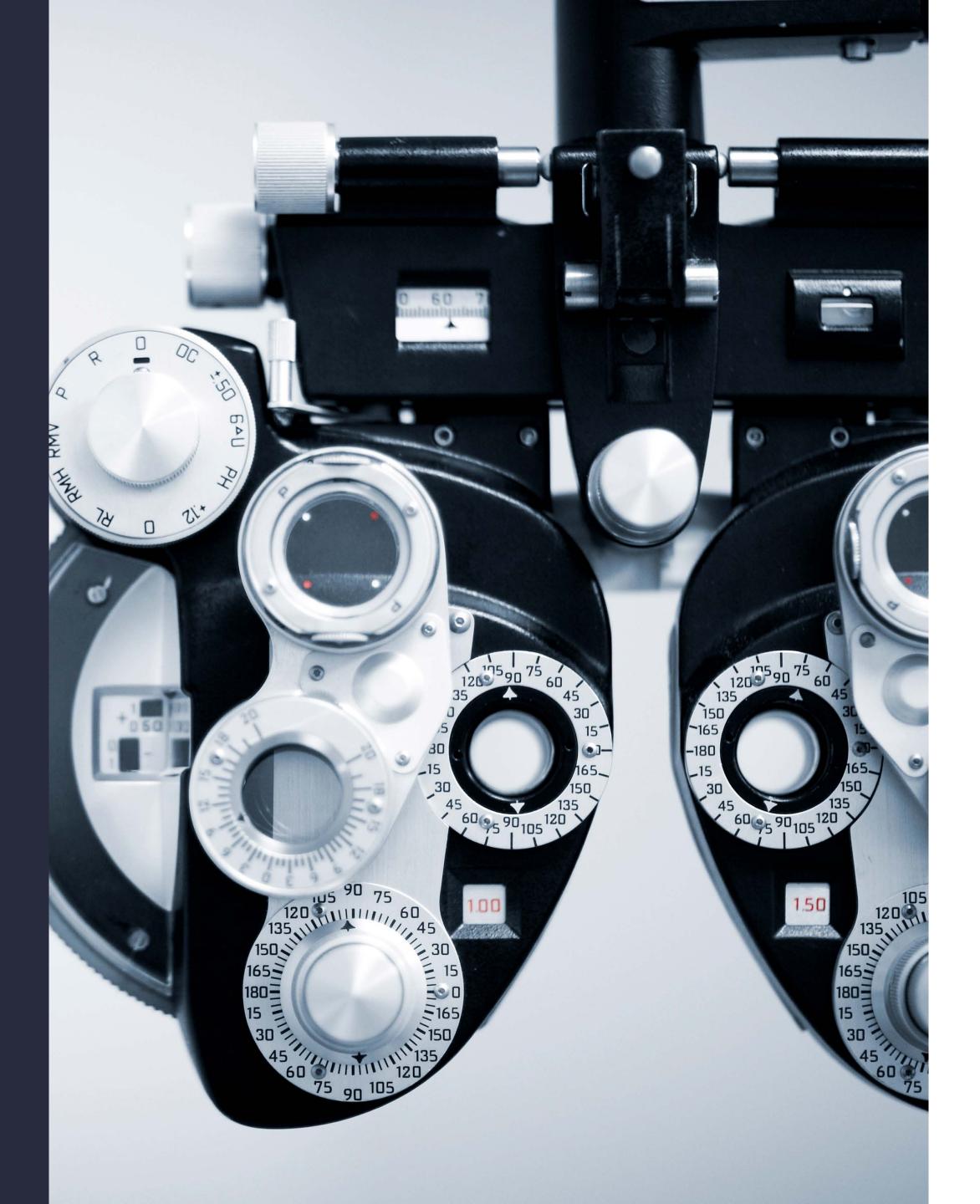
Source: Executive Yuan, Taiwan, 2022, latest available data.



Caregiving for older adults is also a predominantly women-centred issue and another reason for economic gender disparity. For example, in Hong Kong, caregiving responsibilities are largely shouldered by women, which often results in women dropping out of the workforce and facing increased care costs without income.

Hong Kong non-working household members who had quit a job because of the need to take care of members with disabilities by age group and sex (thousands)

Age group	Sex	2007	2013
30–39	Female	0.8	0.8
	Male	0.0	0.0
40–49	Female	2.3	2.2
	Male	0.3	0.8
50-59	Female	2.1	3.2
	Male	0.8	1.6
≥60	Female	0.8	2.2
	Male	0.5	0.6
Total	Female	6.0	8.5
	Male	2.0	3.1
	Total	7.9	11.6



Inequality is a life course-perpetuating problem; therefore, to break up consistent patterns of inequality, we need to consider how failing to address causes early on can lead to lifelong and life-changing deprivations.

For example, children who lack access to education early in life may be forced to resort to informal work or suffer periods of unemployment, which can lead to disruption of wealth accumulation and an impoverished old age. Older people may also suffer from illnesses or disabilities brought on by lack of preventive healthcare or medicine or from injuries sustained by physical labour, which could also add to the burden on their retirement income as it decumulates.

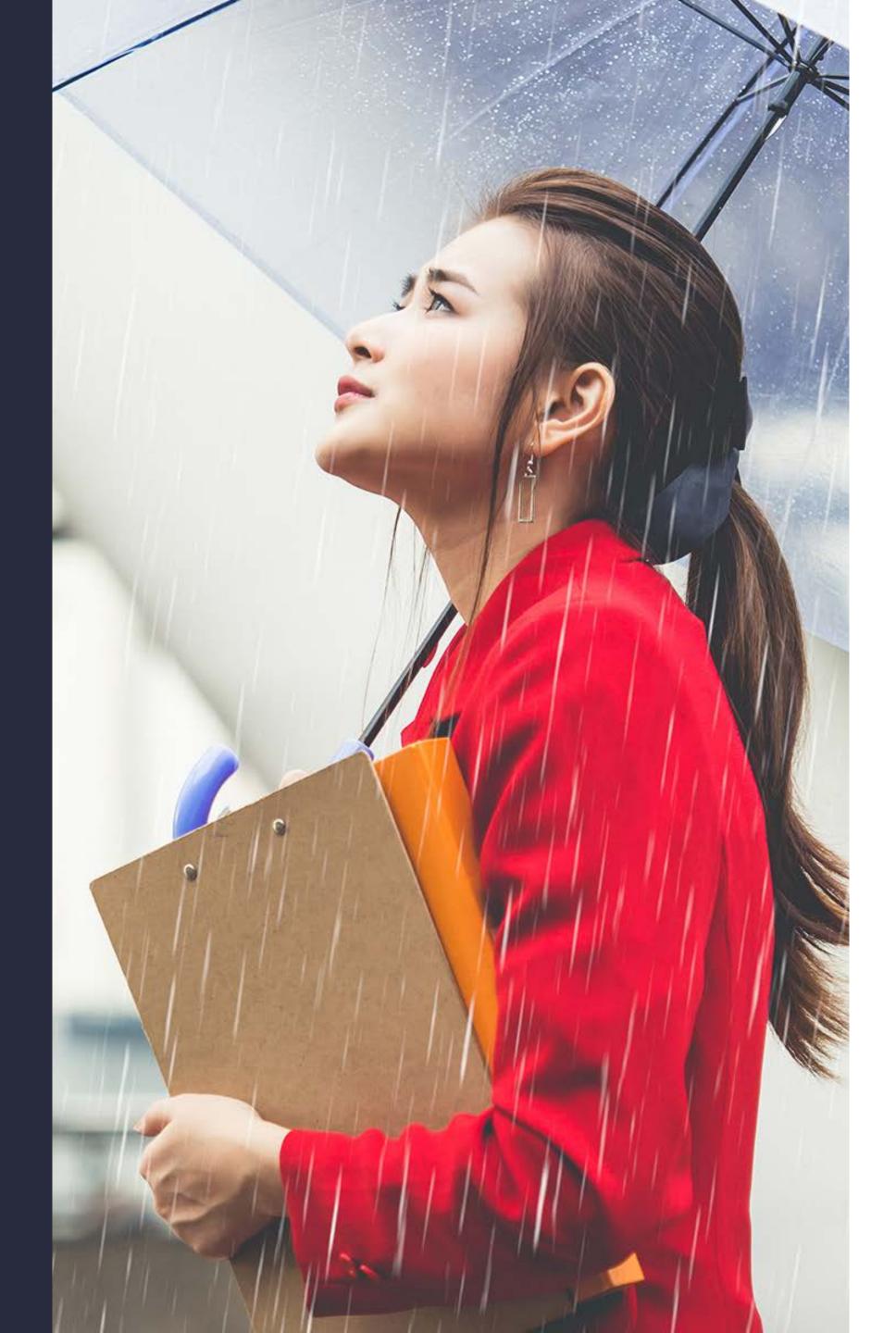
The impact of COVID-19

The COVID-19 pandemic has had a disproportionally negative effect on women from a health, well-being, and financial perspective.

- According to the "Global Gender Gap Report 2021" issued by the World Economic Forum, "The hardest hit sectors by lockdowns and rapid digitalisation are those where women are more frequently employed. Combined with the additional pressures of providing care in the home, the crisis has halted progress toward gender parity in several economies and industries."
- According to International Labour Union statistics, COVID-19 caused women's employment in Asia and the Pacific to decrease by 3.8%, whereas men's employment fell just 2.9%.
- For example, after Indonesian workers were sent home during the pandemic, its Chamber of Commerce and Industry predicted layoffs would result in 6.4 million jobs being lost. Indonesia's garment industry employs 2.1 million workers, of which women make up 80% of the total workforce.
- The sharp rise in poverty caused by the pandemic is believed to have had a larger impact on women and female-led households. World Bank research suggests <u>74%</u> of female-headed household received less or no payment during the pandemic, and significant numbers of migrant workers returned home after losing their income.



World Bank research suggests 74% of female-headed household received less or no payment during the pandemic.



Case studies: ways to enhance gender pension *protection*

Policy intervention to enhance women's pension protection

As demonstrated, gender inequality is deeply embedded across many aspects of society, and at every life stage. While much still needs to be done, local governments are attempting to address gender income inequality via enhanced governance and proactive fiscal measures.

In **Indonesia**, some of the economic and social disadvantages faced by women, are now being addressed by gender-responsive budgeting (GRB) that is attempted to confront some of the reasons for structural inequality. In 2018, Indonesia introduced its "National Strategy on Acceleration of Gender Mainstreaming through Gender Responsive Planning and Budgeting", which was updated in 2021 to align with the UN SDGs. There has also been a strong focus on women's empowerment at local government levels.

In **Malaysia**, the Malaysia Gender Gap Index (MGGI)³ has been introduced to examine male/female disparities across four key categories: economic participation and opportunity; educational attainment; health and survival, and political empowerment. Malaysia has also been appointed as a focal point for a UN initiative to develop training on gender statistics.

Public policy can also influence pension take-up through different channels. Indeed, government-sponsored or industry-driven incentives could also play a role in levelling the playing field for pension income protection. Despite the numerous challenges facing women, some Asian governments are adopting innovative policies to initiate more women into the workforce and to also return after childbirth.

Malaysia has prioritised the issue by implementing several initiatives aimed at increasing the percentage of women with jobs; for example, in 2019, the Career Comeback programme offered annual individual tax exemptions for women aged 30 to 50 who reentered the workforce after at least a two-year hiatus. In addition, the Malaysian government added subsidies for women and employees: Women who reentered the workforce would receive RM 500 a month for two years, while employers would receive RM 300 over the same period. These policies were renewed until 2023 under the 2020 budget. Although still in its early stages, initial results have been positive. Since the subsidies were introduced, 855 women have returned to work, with 323 employers recruiting career-break women since 2015.

We would also be keen to see employers of our four target markets—and the rest of Asia—implement pay transparency tools. Pay transparency and wage mapping policies are a promising way of highlighting structural wage gaps within organisations. At present, 18 out of 38 of the OECD members have introduced legislation that demands regular gender wage gap reporting by private sector employers (OECD, 2021). Their introduction has been successful in encouraging employers to address pay inequality, equipping employees with the information needed to help fight pay discrimination and helping governments and institutions to identify and establish best practices.

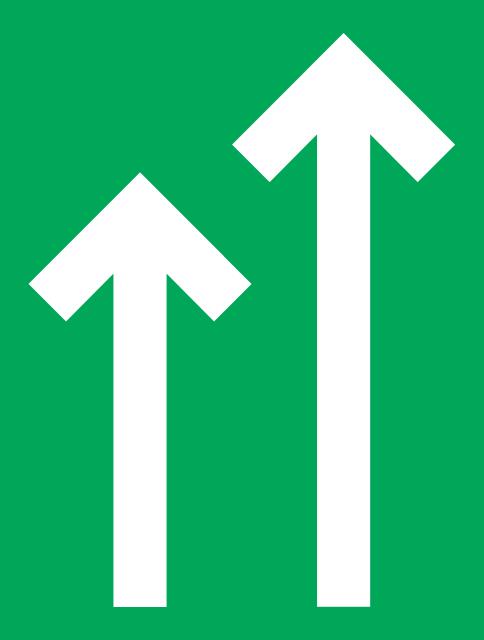


At present, 18 out of 38 of the OECD members have introduced legislation that demands regular gender wage gap reporting by private sector employers (OECD, 2021).

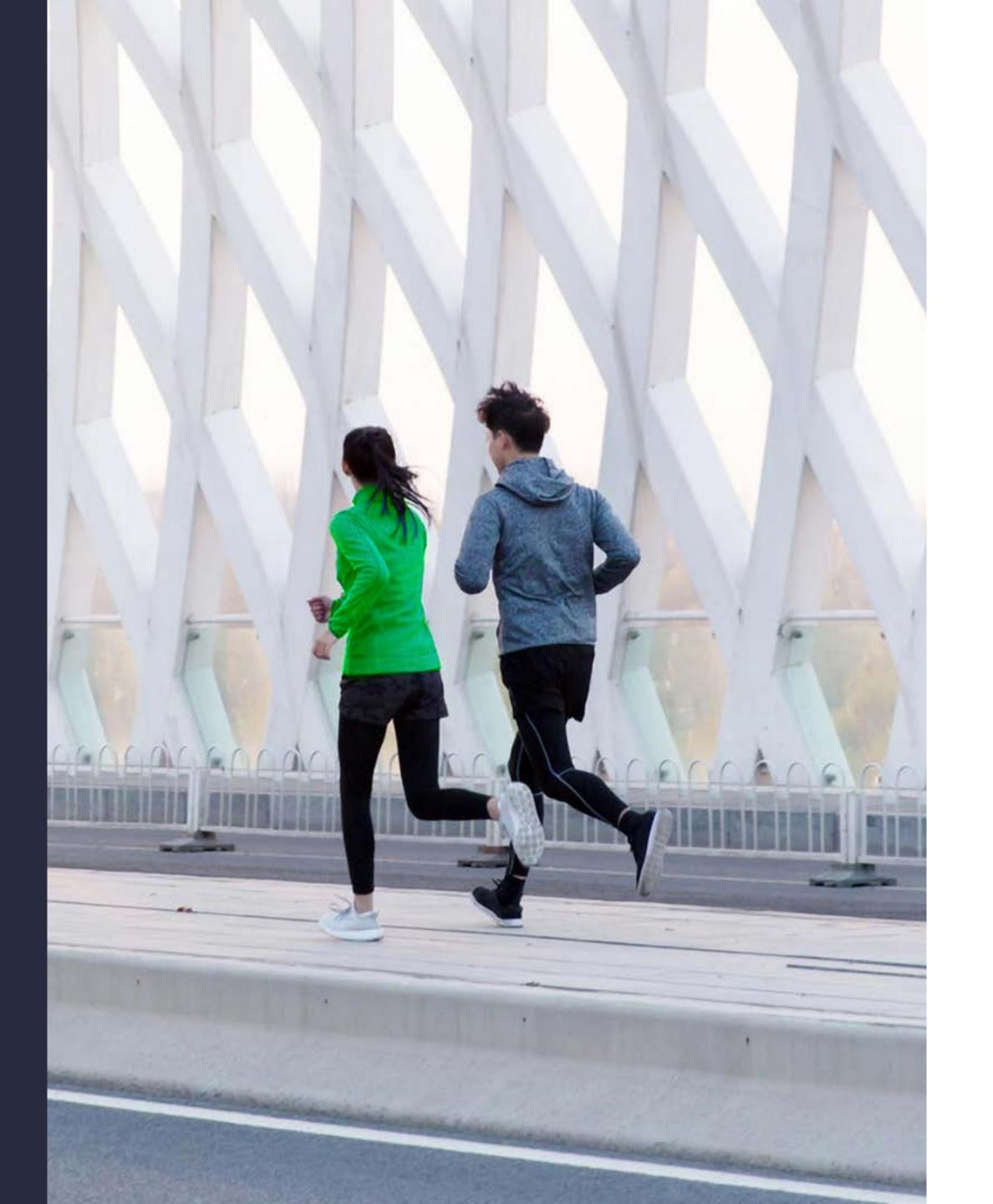
Industry-led: gender-appropriate policies to boost labour participation

The gig economy, a topic we'll cover in more depth in our upcoming release, is also opening new avenues for women. In Malaysia, the percentage of self-employed women nearly doubled from 11.6% in 2010 to 19.5% in 2020, an indication that the gig economy may be increasing women's participation in the labour force, even if such jobs are unlikely to include pension benefits. In Indonesia, initial survey evidence has suggested robust participation by women in gig economy industries, particularly among younger workers.

While gig work offers opportunities, it also poses challenges, particularly for the safety and well-being of female employees; some companies are introducing new policies to address these concerns. Grab, one of the largest online apps in Southeast Asia, offers ride-hailing as well as food and product delivery services across emerging Asia. It has also introduced new policies to help boost women employment and assuage their concerns over safety after earlier missteps. In Indonesia, women have the option to deliver goods and food rather than passengers. Grab has also installed CCTV on motorbikes in Malaysia to increase safety precautions. Some companies have also created women-only passenger services, such as LadyJek, to ensure female employees feel safer in their roles.



In Malaysia, the percentage of self-employed women nearly doubled from 11.6% in 2010 to 19.5% in 2020.

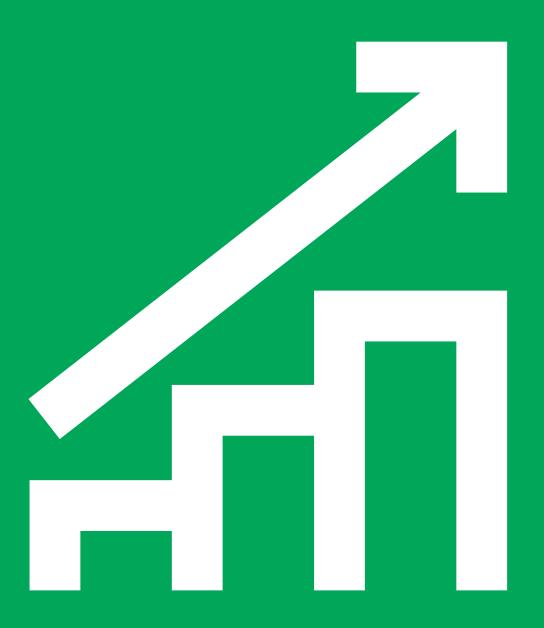


Manulife Investment Management's experience in bridging the gap

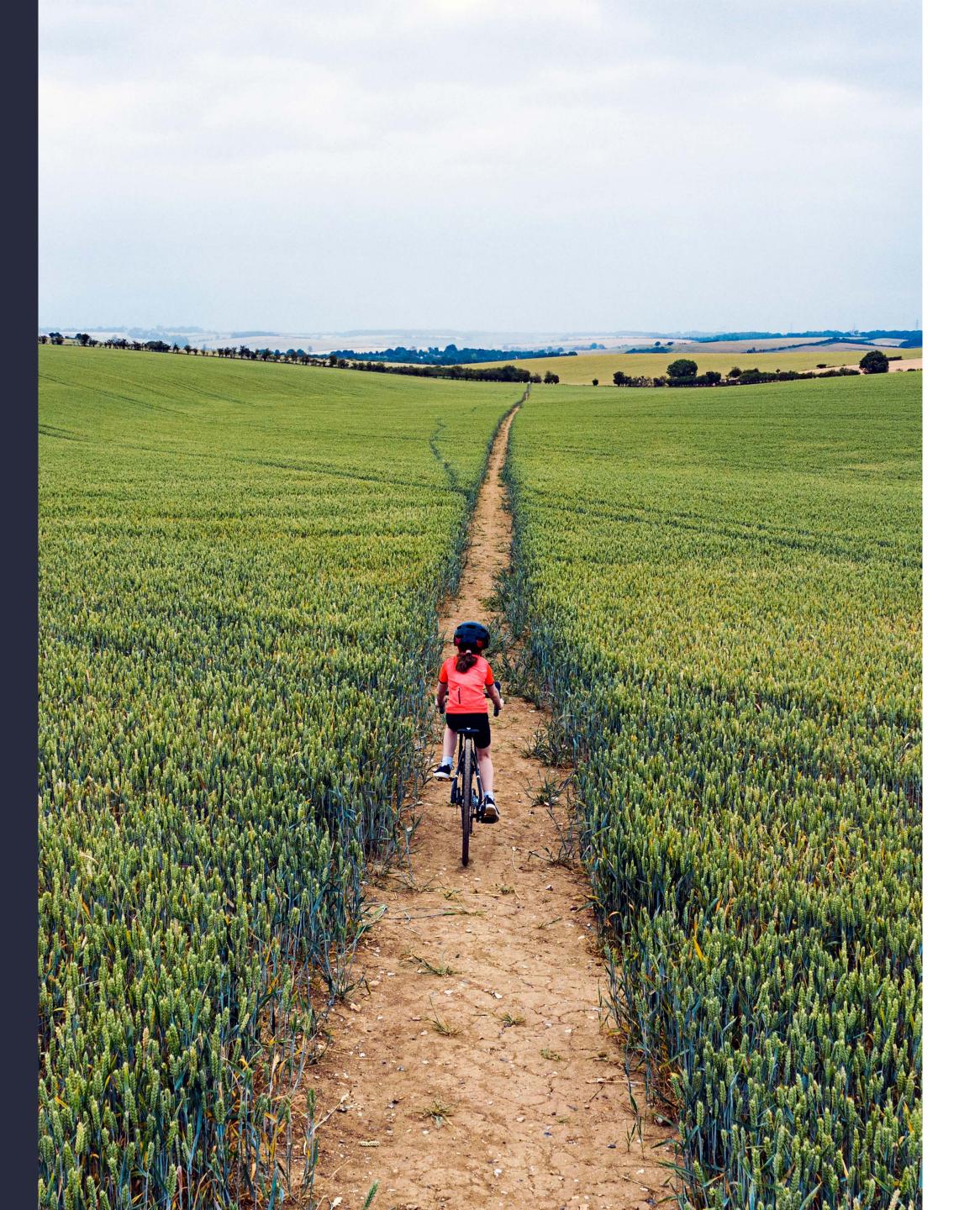
While the gender gap in women's earnings and pension savings is structural, public policy incentives coupled with new digital corporate innovations can help bridge the gap, as our experience and data illustrate.

• In Hong Kong, the government announced a tax-deductible voluntary contribution scheme in 2019 to help individuals supplement their mandatory corporate contributions. The policy has seen a notable uptake, particularly among women. According to Manulife Investment Management data, women have been significant participants in the new voluntary scheme, particularly among those in their late 30s to middle age, a critical time to accrue long-term savings for retirement; therefore, providing targeted tax incentives appears to be one way to address the issue.

- The use of digital tools to engage investors and personalise the experience is another means to build engagement. In 2019, Manulife Investment Management launched digital platform as a one-stop investing platform for funds in Hong Kong; we've also launched regionally in Malaysia, Indonesia and the Philippines. In Hong Kong, our data shows significant online participation and management of investments by women investors, particularly among investors over 35, during times of increased volatility. In Malaysia, the initial uptake of investment and digital tools is popular among younger women in their 20s and 30s. While there could be many reasons for the divergent demographics seen in the two markets, such as the age structure of the markets, the availability and literacy of using internet tools could also help to explain the diversity of its use in Asia.
- Finally, our experience shows the importance of investor education and literacy at all levels. While better pay and greater savings are necessary, increased education and empowerment for women investors to understand their unique circumstances and long-term investing goals can come through numerous sources: insurance agents, wealth managers, and digital content. To serve a diverse Asia, a multichannel approach is needed.



In Hong Kong, our data shows significant online participation and management of investments by women investors, particularly among investors over 35, during times of increased volatility.



A long road ahead

It's indisputable that gender income and pension income disparities aren't caused by a single factor; rather, they're influenced by a complex and interconnected set of issues. This is true of Asia as much as across the rest of the world. As a result, the drive towards gender parity won't happen overnight but will involve extensive structural reform across many aspects of society, including education, employment law and practices, and government involvement in regulation and oversight.

Gender gaps exist at all life stages; therefore, policy attention must be directed towards all stages. However, to attain the <u>UN's Sustainable Development Goal 5</u>: "Achieve gender equality and empower all women and girls," particular attention must be placed on childhood education and also in the choices available to young working women—especially when making financial decisions that will help them to secure their future and improve their retirement prospects.

While achieving gender-responsive reform might sound overwhelming, reforming pensions is a good place to start. Effective action that protects women's right to be employed—and ensuring they have an income that supports them through old age—has the potential to make a demonstrable difference in lifting women out of the lifecycle of inequality.

For the next article in our Diverse Asia series, we'll take a deeper look at how the concept of the family structure is evolving across Asia and how the changing nature of family relationships is having a significant economic and social impact, creating a truly diverse Asia.

References

ASEAN. (2021) Gender Mainstreaming Strategic Framework 2021- 2025. ASEAN Committee on Women (ACW) and ASEAN Commission on the Promotion and Protection of the Rights of Women and Children (ACWC).

Bird, C. E., & Rieker, P. P. (2008) Gender and health: The effects of constrained choices and social policies. Cambridge University Press.

Bonini, A. & Hsu, Y.C. (2018, March 7). Closing gender gaps throughout the life course. Human Development Reports (UNDP). https://hdr.undp.org/content/closing-gender-gaps-throughout-life-course.

Bruckner, C., & Forman, J. (2022) Women, retirement, and the growing gig economy workforce. Georgia State University Law Review, 38(2), 259-402.

Census and Statistics Department. (2021). Women and Men in Hong Kong Key Statistics. HKSAR. Retrieved from https://www.censtatd.gov.hk/en/ElndexbySubject. https://www.censtatd.gov.hk/en/ElndexbySubject.

Cheng, C. (2022) The Socioeconomic Impacts of Covid-19 in Malaysia. Asia Policy 29(1), 35-44. doi:10.1353/asp.2022.0002.

Gender Equality Committee. (2022). Gender at A Glance 2022. Executive Yuan, Taiwan. Retrieved from https://eng.stat.gov.tw/ct.asp?xltem=33469&ctNode=6032&mp=5.

Guinea-Martin, D., Mora, R. & Ruiz-Castillo, J. (2018) The Evolution of Gender Segregation over the Life Course. American Sociological Review, 83(5), 983–1019. https://doi.org/10.1177/0003122418794503 International Labour Organization (2018) Global Wage Report 2018/19: What lies behind gender pay gaps. International Labour Office – Geneva: ILO.

Kässi, O., Lehdonvirta, V., & Stephany, F. (2021) How many online workers are there in the world? A data-driven assessment. Open Research Europe 2021, 1:53. https://open-research-europe.ec.europa.eu/articles/1-53/v3.13639.3.

OECD (2021) Towards Improved Retirement Savings Outcomes for Women, OECD Publishing, Paris, https://doi.org/10.1787/f7b48808-en.

OECD (2021) Pay Transparency Tools to Close the Gender Wage Gap, OECD Publishing, Paris, https://doi.org/10.1787/eba5b91d-en.

Setyanti, A.M. (2020) Informality and the Education Factor in Indonesian Labor. Journal of Indonesian Applied Economics 8(2), 71-80.

Stephany, F., Kässi, O., Rani, U., & Lehdonvirta, V. (2021) Online Labour Index 2020: New ways to measure the world's remote freelancing market. Big Data & Society. https://doi.org/10.1177/20539517211043240.

UN Women (2015) Protecting women's income security in old age: Toward gender-responsive pension systems, Policy Brief 3, New York, https://www.unwomen.org/en/digital-library/publications/2015/12/women-income-security-in-old-age.

World Bank. (2020). Indonesia Country Gender Assessment: Investing in Opportunities for Women. © World Bank. https://documents1.worldbank.org/ curated/en/732951615961029941/pdf/Indonesia-Country-Gender-Assessment-Investing-in-Opportunities-for-Women.pdf">Investing-in-Opportunities-for-Women.pdf

Important Note

A widespread health crisis such as a global pandemic could cause substantial market volatility, exchange-trading suspensions and closures, and affect portfolio performance. For example, the novel coronavirus disease (COVID-19) has resulted in significant disruptions to global business activity. The impact of a health crisis and other epidemics that may arise in the future, could affect the global economy in ways that cannot necessarily be foreseen at the present time. A health crisis may exacerbate other pre-existing political, social and economic risks. Any such impact could adversely affect the portfolio's performance, resulting in losses to your investment.

Investing involves risks, including the potential loss of principal. Financial markets are volatile and can fluctuate significantly in response to company, industry, political, regulatory, market, or economic developments. These risks are magnified for investments made in emerging markets. Currency risk is the risk that fluctuations in exchange rates may adversely affect the value of a portfolio's investments.

The information provided does not take into account the suitability, investment objectives, financial situation, or particular needs of any specific person. You should consider the suitability of any type of investment for your circumstances and, if necessary, seek professional advice.

This material is intended for the exclusive use of recipients in jurisdictions who are allowed to receive the material under their applicable law. The opinions expressed are those of the author(s) and are subject to change without notice. Our investment teams may hold different views and make different investment decisions. These opinions may not necessarily reflect the views of Manulife Investment Management or its affiliates. The information and/or analysis contained in this material has been compiled or arrived at from sources believed to be reliable, but Manulife Investment Management does not make any representation as to their accuracy, correctness, usefulness, or completeness and does not accept liability for any loss arising from the use of the information and/or analysis contained. The information in this material may contain projections or other forward-looking statements regarding future events, targets, management discipline, or other expectations, and is only current as of the date indicated. The information in this document, including statements concerning financial market trends, are based on current market conditions, which will fluctuate and may be superseded by subsequent market events or for other reasons. Manulife Investment Management disclaims any responsibility to update such information.

Neither Manulife Investment Management or its affiliates, nor any of their directors, officers or employees shall assume any liability or responsibility for any direct or indirect loss or damage or any other consequence of any person acting or not acting in reliance on the information contained here. All overviews and commentary are intended to be general in nature and for current interest. While helpful, these overviews are no substitute for professional tax, investment or legal advice. Clients should seek professional advice for their particular situation. Neither Manulife Investment Management, nor any of their affiliates or representatives is providing tax, investment or legal advice. This material was prepared solely for informational purposes, does not constitute a recommendation, professional advice, an offer or an invitation by or on behalf of Manulife Investment Management to any person to buy or sell any security or adopt any investment strategy, and is no indication of trading intent in any fund or account managed by Manulife Investment Management. No investment strategy or risk management technique can guarantee returns or eliminate risk in any market environment. Diversification or asset allocation does not guarantee a profit or protect against the risk of loss in any market. Unless otherwise specified, all data is sourced from Manulife Investment Management. Past performance does not guarantee future results.

Manulife Investment Management

Manulife Investment Management is the global wealth and asset management segment of Manulife Financial Corporation. We draw on more than a century of financial stewardship to partner with clients across our institutional, retail, and retirement businesses globally. Our specialist approach to money management includes the highly differentiated strategies of our fixed-income, specialized equity, multi-asset solutions, and private markets teams—along with access to specialized, unaffiliated asset managers from around the world through our multimanager model.

This material has not been reviewed by, is not registered with any securities or other regulatory authority, and may, where appropriate, be distributed by the following Manulife entities in their respective jurisdictions. Additional information about Manulife Investment Management may be found at manulifeim.com/institutional

Australia: Manulife Investment Management Timberland and Agriculture (Australasia) Pty Ltd, Manulife Investment Management (Hong Kong) Limited. Canada: Manulife Investment Management Limited, Manulife Investment Management (Investment Management (North America) Limited, Manulife Investment Management (North America) Limited Company. European Economic Area Manulife Investment Management (Ireland) Ltd. which is authorised and regulated by the Central Bank of Ireland Hong Kong: Manulife Investment Management (Hong Kong) Limited. Indonesia: PT Manulife Aset Manajemen Indonesia. Japan: Manulife Investment Management (Japan) Limited. Malaysia: Manulife Investment Management (M) Berhad 200801033087 (834424-U) Philippines: Manulife Investment Management and Trust Corporation. Singapore: Manulife Investment Management (Singapore) Pte. Ltd. (Company Registration No. 200709952G) South Korea: Manulife Investment Management (Hong Kong) Limited. Switzerland: Manulife Investment Management (Europe) Ltd. which is authorised and regulated by the Financial Conduct Authority United States: John Hancock Investment Management (Luc, Manulife Investment Management (Investment Management (Investment

Manulife, Manulife Investment Management, Stylized M Design, and Manulife Investment Management & Stylized M Design are trademarks of The Manufacturers Life Insurance Company and are used by it, and by its affiliates under license.

