

WHEN DOES THE GENDER GAP BEGIN? AN EXPLORATION OF EARLY CAREER DISPARITIES

by Anis Farhana Amran



ABSTRACT

Public discourse on the gender gap in employment and economic inclusion often centres on motherhood and caregiving, with women's disproportionate share of domestic responsibilities frequently cited as the main barrier to workforce participation. According to the Labour Force Survey Report 2023, 62% of women outside the labour force reported "housework or family responsibilities" as the reason for not seeking employment, compared to just 4% of men.

While these factors are undoubtedly significant, this article shifts the lens upstream to examine whether gender disparities already exist prior to the typical age of marriage and motherhood. Drawing on data from the *Labour Force Survey, Salaries and Wages Survey*, and *Graduates Tracer Study*, the analysis reveals that gender gaps are indeed present at the point of entry into the labour market. Women encounter lower labour force participation rates, higher unemployment, and lower earnings during the early stages of their careers, pointing to structural and institutional barriers that extend beyond caregiving responsibilities.

The article also examines the persistent concentration of women graduates in specific fields, particularly education and healthcare, which mirrors and likely reinforces occupational segregation in the labour market. Together, these findings highlight the need to address upstream inequalities that shape women's economic outcomes long before motherhood becomes a factor.

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by **Anis Farhana Amran**

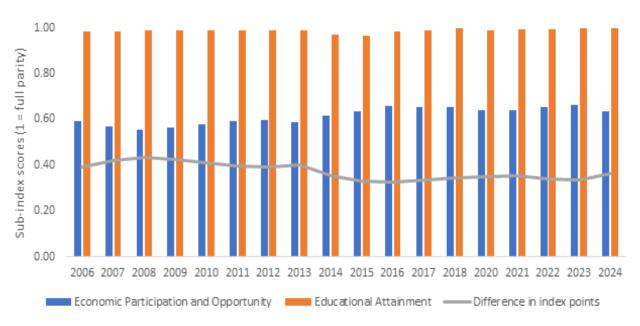
Malaysia's progress in closing the gender gap reveals a disconnect between progress and potential. In conjunction with Malaysia's ASEAN Chairmanship 2025, experts highlight that harnessing the latent intellectual potential of women should be a key regional priority – particularly in light of declining fertility rates and the growing frequency and severity of economic shocks.

Despite achieving near parity in educational attainment between women and men, as consistently highlighted by the World Economic Forum's Global Gender Gap Reports since 2006, the inclusion of women in the Malaysian economy continues to lag significantly behind (Figure 1 below). This mirrors a global trend, in which countries tend

to perform better on the education subindex (94.9% of the gap closed globally) than on the economic participation subindex (only 60.5% closed). In other words, Malaysia is not unlike other countries – successful in educating girls but faces challenges in retaining women in the workforce.

Yet, some countries, including those in our region, have made more substantial strides in translating educational gains into economic inclusion for women. For instance, Singapore ranks 18th globally in women's economic participation with a score of 0.779, while the Philippines follows closely at 20th with 0.775. In contrast, Malaysia ranked far behind at 102nd place.

Figure 1: Malaysia's Scores on the Global Gender Gap Subindices – Economic Participation and Opportunity, and Educational Attainment, with Index Point Differences, 2006–2024



Source: Annual Publications of Global Gender Gap Insight Reports, World Economic Forum, (2006-2024)

As shown in Figure 1 above, Malaysia's education subindex has consistently hovered around 0.99, reaching full parity (1.00) in recent years. Conversely, the economic participation subindex has shown mere marginal improvements over the past two decades, barely surpassing the 0.70 mark.

This raises a critical question: how can a country that has made such significant strides in educating its girls remain so far behind in terms of economic inclusivity for women? Education is often hailed as the "great equaliser" (Mann, 1848). Yet, in Malaysia, these figures indicate that academic achievement alone is insufficient to translate into equitable labour market outcomes.

According to a Women's Aid Organisation (2021) study, less than half of Malaysians (46%) expressed support for gender equality. This limited public awareness and endorsement may be one of the factors tempering the country's progress toward gender parity. In the discussions on gender parity, much of the existing discourse on Malaysia's gender employment gap centres on women's overall Labour Force Participation Rate (LEPR), frequently pointing to:

- i. Motherhood penalties;
- ii. Career interruptions; and
- Barriers to re-entry into the labour market (Megat Muzafar & Abdul Hamid, 2024; Parasuraman, 2024; UNDP, 2021).

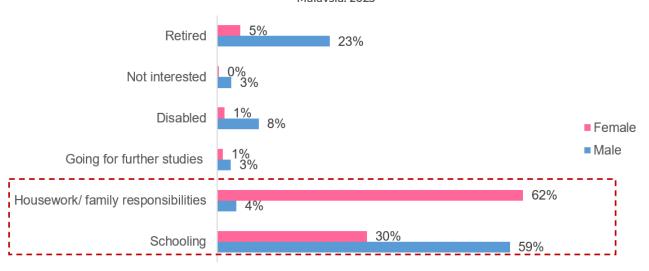
These existing discussions often focus on women leaving the labour force due to later-life obligations, such as motherhood or caregiving. To build on them, this article attempts to provide insights from a novel perspective, that is, at the upstream. We are interested in examining gender disparities at the very point of entry into the workforce. To that end, the Graduates Tracer Study (GTS) serves as the baseline for this analysis, complemented by the Labour Force Statistics (LFS) and Salaries and Wages Survey (SWS). By examining employment outcomes among the early and entry-level female workforce, this article aims to highlight patterns that may signal underlying barriers to full economic participation among women from the outset of their careers.

Challenging the Dominant Narrative of Caregiving as the Cause of the Economic Participation Gap Among Women

The gender gap in economic participation has been widely studied, with caregiving responsibilities consistently identified as the most significant barrier to economic participation among women. In 2023, Malaysia's labour force participation rate (LFPR) for women stood at 56.2%, significantly lower than the 82.3% recorded for men (DOSM, 2024a). As shown in Figure 2 below, according to the Labour Force Survey, as

many as 62.1% of women outside the labour force cited "housework or family responsibilities" as their reason for not seeking work, compared to just 3.9% of men. In contrast, the majority of men outside the labour force (59.3%) attributed their absence from the labour force to "schooling", reflecting deeply ingrained assumptions about gender roles.

Figure 2: Population outside labour force, by reason for not seeking work and by gender, Malavsia. 2023



Source: Labour Force Survey Report 2023, Department of Statistics Malaysia (DOSM), 2024a

shoulder disproportionate responsibilities (UNDP, 2021). A significant indicator of this disparity is the phenomenon of career breaks, which disproportionately affects women (EMIR Research, 2023). The COVID-19 pandemic further exacerbated this gender gap, as more women than men exited the labour force due to unpaid care obligations, reinforcing perceptions of women's work as secondary to the male "breadwinner" role within households (WAO, 2020a). This disparity is compounded by the "motherhood penalty" and "fatherhood premium", as research by Khazanah Research Institute using ILO data shows; women's workforce participation declines after having young children, while men's often increases (Megat Muzafar & Abdul Hamid, 2024).

But are there other factors that may have shaped women's economic participation, particularly much earlier in life, before such penalties kick in?

While much of the gender gap in economic participation has been attributed to caregiving responsibilities, this is only one part of the story. Equally critical – but perhaps less apparent – are the indirect and unconscious biases that may have shaped women's economic outcomes long before caregiving becomes a factor. These biases can emerge as early as the entry-level stage of employment, potentially influencing hiring decisions, wages, and career trajectories in ways that are difficult to measure, but result in significant and lasting gender disparities in the workforce.

Starting Behind: Unpacking Gender Gaps at the Point of Entry

Representation

According to the latest marriage data from DOSM (2022), approximately 15% of women aged 25-29 got married in 2022. For those aged 20-24, the figure was just 5.3%, while for women under 20, it was a mere 0.14%. Additionally, the mean age of mothers at first childbirth rose from 27.6 years in 2014, to 28 years by 2023 (DOSM, 2024c), indicating that most women under 25 have yet to assume childcare responsibilities. This suggests that most women under 25 are less likely to face gender gap, as they tend to not be impacted by the often cited gendered barriers, care and family responsibilities – or so it seems.

LFPR data by age group and gender reveal that women are consistently underrepresented in the labour force, even before reaching the typical age of marriage and childbearing. Figure 3 below underscores the persistent gender disparities in LFPR across all age groups in 2023. Notably, among those aged 20-24, the LFPR gap is rather pronounced at 28 percentage points (pp), surpassing the gaps recorded for women at later stages, such as those aged 25-¬34, those aged 30-34, and those aged 40-44.

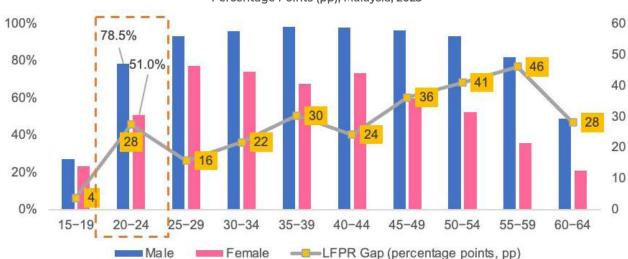


Figure 3: Labour Force Participation Rate (LFPR) by Gender and Age Group, with Gender Gaps in Percentage Points (pp), Malaysia, 2023

Source: Labour Force Survey Report 2023, Department of Statistics Malaysia (DOSM), 2024a; PNBRI Analysis

Notes:

- Labour Force Participation Rate (LFPR) refers to the proportion of the working-age population who are part of the labour force, which includes those who are either (i) employed, or (ii) unemployed but actively seeking work (DOSM, n.d.); and
- ii. <u>Labour Force Participation Rate (LFPR) gap</u> refers to the difference in the proportion of men and women who are either employed or actively seeking employment within the working-age population.

The narrowing of the gender participation gap in the 25-29 age group suggests that more women are participating in the workforce later in life, most likely as a result of extended years in education. This delay is supported by the Graduates Tracer data by MOHE (2024), which show that more women are attending universities, making up 59% of bachelor's degree graduates in 2023. Among these graduates, 92% of those from public universities (IPTA)

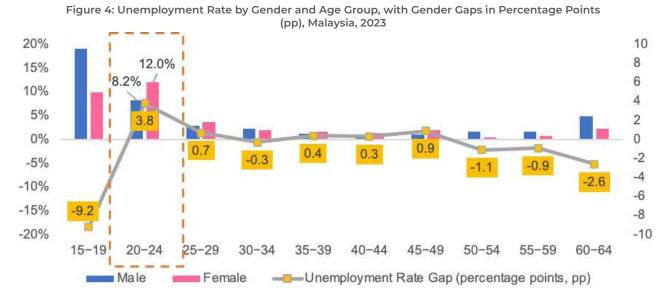
and 84% from private institutions (IPTS) are aged between 21 and 25. These figures indicate that more women than men are taking their time in early 20s attaining higher education before transitioning into the workforce.

However, despite a lower LFPR gap between women and men within the 25-29 age group, the gap of 16 pp is quite significant. Even though women graduates make up a larger proportion (59%) of the bachelor's degree population than men (MOHE, 2024), the female workforce participation rate at the typical graduate entry age (25-29) continues to lag behind that of men. This disparity signals the deeply ingrained nature of structural barriers to gender equality in workforce participation, which have emerged very early on in women's economic journeys. The gap then widens again as age groups increase, reinforcing earlier discussions about uneven care responsibilities and other factors that arise after marriage and childbearing.

Unemployment

The unemployment rate is also higher for women, particularly at the early stages of their careers. This means that within the already relatively smaller number of women participating in the labour force, they face a higher likelihood of unemployment compared to men. Except for the 15-19 age group, Figure 4 below illustrates that women experience higher unemployment rates than

men from the outset. The gap is most pronounced in the 20-24 age group, where women face a 3.8 pp difference, and remains at 0.7 pp in the 25-29 age group. These early age ranges mark a critical period when individuals often search for their first jobs, highlighting the higher barriers women encounter as they enter the workforce.



Source: Labour Force Survey Report 2023, Department of Statistics Malaysia (DOSM), 2024a; PNBRI Analysis

Moreover, when examining the broader labour force participation, data from the Labour Force Survey Report (DOSM, 2024a) indicated that a **disproportionate number of women in the labour force are employed as unpaid family workers.** Approximately 4% of the total female labour force are in such roles, compared to only about 2%

of the male labour force. This further proves the gendered dynamics within the labour market, in which women not only face higher unemployment rates but are also more likely to be engaged in unpaid work, thereby increasing their economic vulnerability.



Image source: Lexiconimages (2025) from Adobe Stock



Image source: Zarzosa, David (2025) from Adobe Stock

Pay

Pay gap also emerges at the very start of women's careers. As shown in Figure 5 below, the pay gap is already present and significant among younger women aged 15-29. The gap has fluctuated over time, but it has widened in recent years. For both the 15-19 and 20-24 age groups, this gap was the largest in 2021 since 2018. Based on the

median salary data, women aged 15-19 in 2021 earned roughly one-third less than men, while those aged 20-24 earned about one-fifth less. For the 25-29 age group, the gap remains significant at about 7.7%, worsening to about 11.2% by 2022.

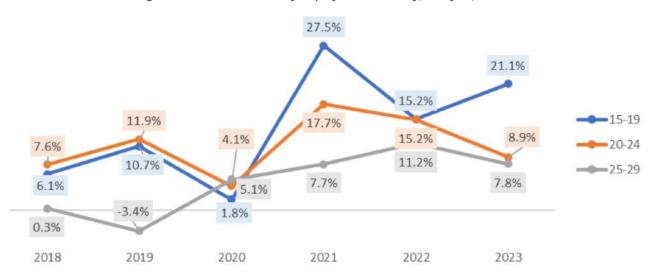


Figure 5: Relative Gender Pay Gap by Median Salary, Malaysia, 2018-2023

Source: Salaries and Wages Survey Report 2023, Department of Statistics Malaysia (DOSM), 2024b; PNBRI Analysis

These are indications that women not only tend to leave the workforce first due to caregiving responsibilities, but they are also among the first to experience wage suppression and job instability during economic downturns. The sharp increase in the male-female pay gap in 2021 suggests that women may be particularly vulnerable to economic shocks during the COVID-19 pandemic. In other words, economic shocks such as the one created by the pandemic can disproportionately impact women's employment and income. This aligns

with earlier findings on women's increased risk of leaving the workforce during crises (WAO, 2020a), implying that barriers to economic participation may emerge as early as the entry-level stage.

To delve deeper into gender-based gaps at the point of entry and early employment, it is essential to consider the role of educational attainment and qualifications, which significantly impact labour outcomes.

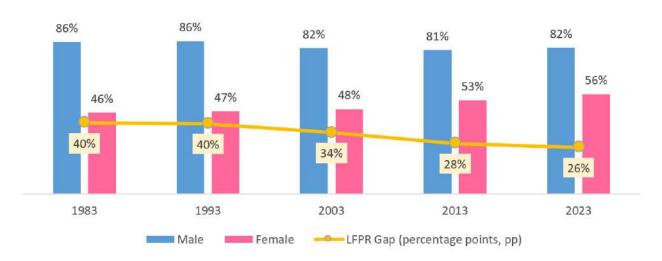
Education No Longer Such a "Great Equaliser"

Participation and Pay

Education has long been regarded as the "great equaliser" (Mann, 1848) in enhancing economic opportunities, a notion that is hardly reflected in Malaysia's LFPR.

Overall LFPR trends (Figure 6 below) show that the gender gap persists, and progress towards parity has been slow. The LFPR differential between men and women narrowed by only about 14 pp over four decades, from about 40% in 1983 to 26% in 2023.

Figure 6: Trends in Labour Force Participation Rate (LFPR)(%) by Gender, and the LFPR Gap (%), Malaysia, 1983–2023

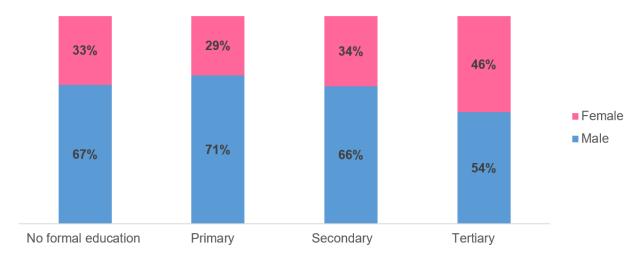


Source: Labour Force Survey Report 2023, Department of Statistics Malaysia (DOSM), 2024a; PNBRI Analysis

However, women are nearly as represented as men in the tertiary-educated workforce, accounting for nearly half (46.3%) in 2023 (Figure 7 below). The data also shows that women's participation rates rise with higher education levels, with higher representation at the tertiary level compared to the secondary level, and at

the secondary level compared to the primary level. This trend aligns with Becker's (1964) Human Capital Theory, which posits that higher education enhances individual capabilities – a phenomenon that, in this case, is reflected through the increased labour force participation.

Figure 7: Proportion of Male and Female Labour Force by Educational Attainment, Malaysia, 2023



Source: Labour Force Survey Report 2023, Department of Statistics Malaysia (DOSM), 2024a; PNBRI Analysis

Nonetheless, this encouraging observation is not necessarily accompanied by fairer or more equitable pay for women, including at the outset of their careers. In an ideal scenario, pay would reflect individuals' qualifications, skill sets, and experience, irrespective of gender. Yet, real-

world evidence shows that these factors are just a few among many that influence labour market outcomes like wage disparity between women and their men counterparts (Tan, 2023).

RM7,000 25% RM6,000 21% 20% 20% 18% RM5,000 16% 15% 15% RM4,000 11% RM3,000 10% RM2.000 5% RM1,000 RM-0% 2018 2019 2020 2021 2022 2023 Female ■ Male Pay Gap (percentage, %)

Figure 8: Median Monthly Salaries and Wages of Bachelor's Degree Holders by Gender and Gender Pay Gap (Relative), Malaysia, 2018-2023

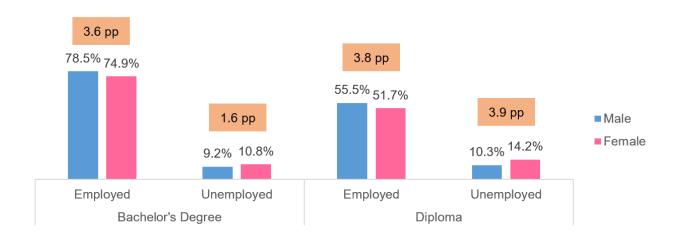
Source: Salaries and Wages Survey Report 2023, Department of Statistics Malaysia (DOSM), 2024b; PNBRI Analysis

A clear example of this is how consistent the earnings gap had been between women and men with the same qualifications, as illustrated in Figure 8 above. According to median wage data from the Salaries & Wages Survey Report (DOSM, 2024b), women degree holders

consistently earn less than their men counterparts, with the gap remaining significant each year, despite women earning higher than men in certain sectors, such as finance (Lopez, 2025).

Employment and Employability

Figure 9: Employment and Unemployment Rates for Graduates (Bachelor's Degree and Diploma Holders), by Gender, and the Gender Gap in Employment and Unemployment Rates, Malaysia, 2023



Source: Graduates Tracer Study Report 2023, Ministry of Higher Education Malaysia (MOHE), 2024; PNBRI Analysis

Note: The figure for "employed graduates" presented here differs from the published Graduate Employability (GE) rate. The GE rate includes graduates who are employed, pursuing further studies, upskilling, or awaiting job placement. In this figure, only the percentage of graduates who are employed is reflected. The GE rate is calculated by excluding the percentage of unemployed graduates from the total graduate population each year.

There are also notable disparities in the employability of equally qualified men and women. Focusing specifically on the transition from higher education to employment, data from the Graduates Tracer Study Report (MOHE, 2024) on recent tertiary graduates revealed that men graduates consistently achieve higher employment rates and lower unemployment rates than their female counterparts, as shown in Figure 9 above. This is consistent among both bachelor's degree and diploma holders. For bachelor's degree holders, there were about 3.6 pp fewer women employed and 1.6 pp more women unemployed. The disparity is even more pronounced among diploma holders, with 3.8 pp more men in employment and 3.9 pp more women unemployed.

This is yet another evidence of a gender gap that manifests as early as the point of entry into the workforce. The narrowing gap from diploma to degree holders suggests that higher qualifications do enhance women's chances of employment. While this highlights the role of higher education in improving women's employment prospects, it reiterates the earlier discussion on gender gaps in employment at the point of entry into the workforce, even among equally educated men and women.

Field of Study

Graduates' employment prospects may also be influenced by their chosen fields of study. Analysing data from Graduates Tracer Study Report (MOHE, 2024), women tend to dominate the sectors where unemployment rates are notably higher. As illustrated in Figure 10 below, women make up 81% of graduates in the education sector - a long-standing trend (National Higher Education Research Institute, 2012) - yet the unemployment rate for women education graduates is the highest among all sectors, at 14.7%. Notably, despite being under-represented, male graduates in the education field have a relatively high unemployment rate of 93%

15% 100% 16% 90% 14% 80% 12% 70% 10% 60% 9% 50% 8% 5% 6% 6% 40% 30% 4% 20% 2% 10% Indomation and Confiningization Technologies South Sciences Journalism and Information Castalic Production and a said Child life an Engineering Manufacturing and Construction 0% 0% Male representation Female representation Unemployment rates for male graduates Unemployment rates for female graduates

Figure 10: Proportion of Graduates by Gender Across All Fields of Study and Unemployment Rates by Gender and Field of Study, Malaysia, 2023

Source: Graduates Tracer Study Report 2023, Ministry of Higher Education Malaysia (MOHE), 2024; PNBRI Analysis

This suggests that the issue may extend beyond gender and points to broader structural challenges, such as a mismatch between graduates' skills or qualifications and the current demands of the labour market. The same pattern is observed in other female-dominated fields, suggesting that degree-to-job alignment may be a more critical factor than gender alone.

In contrast, the field of study most dominated by men, engineering, manufacturing, and construction, exhibits significantly lower unemployment rates among its graduates. Men graduates in this field experience an unemployment rate of only 6.2%. Interestingly, women graduates who enter this male-dominated field also experience the lowest unemployment rate at 4.8%, suggesting that this field offers better employment prospects regardless of gender.

Furthermore, this concentration in specific fields of study among the women graduate population, as observed in Figure 10 above, closely mirrors the sectoral concentrations in the overall labour force and is likely to reinforce them over time. Analysis of data from the Labour Force Survey Report (DOSM, 2024a) reveals that women are overrepresented in only two sectors: health and social work (64.1%) and education (60.8%). They achieve just slightly higher than parity in three other industries, while men comfortably dominate 14 of the 19 industries. This underscores the persistence of occupational segregation across qualification and skill levels, with women across diverse educational backgrounds consistently concentrated in education and healthcare.

These evident disparities align with broader theories of occupational segregation (Reskin & Roos, 1990), which suggest that gendered patterns in education funnel women into fields with weaker labour market demand, reinforcing employment inequalities. The concentration of women in specific fields underscores the long-term impact of early educational choices on labour outcomes such as opportunities for advancement and pay.

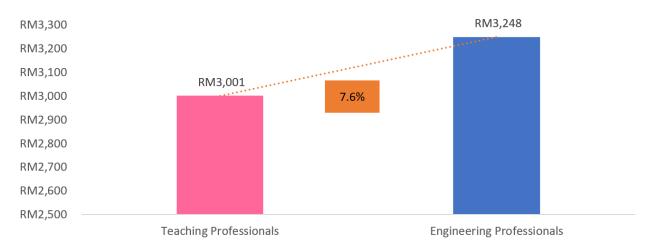
Policy strategies should therefore focus on addressing gender concentration in field-of-study selection to help reduce disparities in job prospects and support a more equitable transition into the workforce.

There are also differences in the earning potential between male- and female-dominated fields. Based on data from the Guidebook of Starting Basic Salaries and Annual Salary Increment for Selected Sectors by MOHR (2024), the average basic starting salary for entry-level teaching professionals – of which women graduates make up the overwhelming majority – is 7.6% lower than that of entry-level engineering professionals, a field largely dominated by men (Figure 11 below). While this gap in starting salaries is already significant, it likely understates the true disparity in lifetime earnings. Studies have shown that male-dominated fields tend to offer steeper wage growth over time, higher performance-based bonuses, and better long-term career advancement opportunities (Blau & Kahn, 2017).



Image source: Honey (2025) from Adobe Stock

Figure 11: Starting Basic Salary for Entry-Level Employees, Average by Profession, Malaysia, 2024



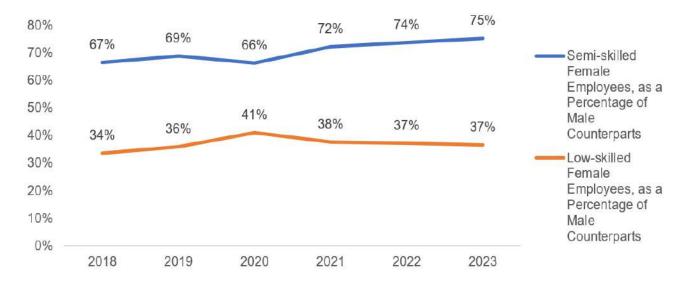
Source: Guidebook of Starting Basic Salaries and Annual Salary Increment for Selected Sectors, Ministry of Human Resources Malaysia (MOHR), 2024; PNBRI Analysis

While higher education has undoubtedly improved women's labour market outcomes – including narrowing the employment gap between diploma and degree holders – these entrenched disparities in pay structures may impede true equity. The gendered distribution of graduates across fields of study means that, despite achieving similar qualifications, women are still systematically steered into lower-paying career paths, limiting their financial independence and long-term economic mobility.

Addressing this segregation requires not only encouraging women to enter higher-paying fields but also elevating the wage structures of traditionally femaledominated professions to reflect not only their economic value, but also social value.

Beyond Higher Education: Ensuring Equal Opportunities for Women Entrants Across All Education and Skill Levels

Figure 12: Female Employees in Low- and Semi-skilled Roles as a Percentage of Male Counterparts, 2018–2023



Source: Salaries and Wages Survey Report 2023, Department of Statistics Malaysia (DOSM), 2024b; PNBRI Analysis

The persisting gender-based disparity in labour force participation may be explained by Malaysia's continued reliance on semi-skilled (57.2%) and low-skilled (12.4%) labour (DOSM, 2024a). The semi-skilled labour force and low-skilled labour force make up as high as 57.2% and 12.4% of the Malaysian employed persons, respectively. Yet, over the five years analysed in Figure 12, the number of women in low-skilled employment has remained around one-third of men, while women in semi-skilled roles still account for around three-quarters of the number of men, despite some narrowing of the gap.

Thus, the structure of the Malaysian economy and the outsized importance of low- and middle- skill jobs may help explain this continued dismal LFPRs among the Malaysian female workforce. Compared to the relative female participation in low- and middle-skilled jobs, female workers make up nearly 71% of men in skilled jobs. This squares in neatly with the high rates of educational attainment among women. In summary, it is the underrepresentation of women in the larger (low- and semi-skilled) sectors that is dragging down aggregate LFPRs. Households may be making the economic calculus of putting mothers and wives at work, relative to the cost of outsourcing care and household chores, and finding it uneconomic to do so.

The focus should not be limited to educated women. Admittedly, it is tempting to focus on women graduates, given that higher education has somewhat helped improve labour market outcomes for women graduates, as discussed earlier. However, it is equally important to ensure greater inclusivity for women with lower educational backgrounds in low- and semi-skilled employment.

This may include policies around a fair or "living pay" (in reference to the Living Wage agenda), such that the household's calculus for women staying in work would remain superior to opting out. This is crucial, particularly as the country faces a depleting demographic dividend and a rapidly ageing population (Lopez, 2025). The goal of increasing Malaysia's female LFPR must extend beyond just the tertiary-educated population.

The International Labour Organization (ILO, 2023) suggested that creating an inclusive labour market policies must extend beyond creating high-skilled employment to ensure economic resilience and equity. Similarly, the OECD (2021) emphasises that a nation's long-term economic sustainability relies on integrating semi- and low-skilled workers into stable jobs, as countries that invest in workforce upskilling and equal employment opportunities across all skill levels see higher GDP growth and reduced dependency on social welfare.

Furthermore, the World Bank (2018) warns that labour policies disproportionately focused on high-skilled employment can widen labour market disparities, reinforcing economic stratification. Instead, ensuring quality employment opportunities for semi- and lowskilled workers is crucial for poverty reduction and inclusive national development.

Technical and Vocational Education and Training (TVET) presents a crucial opportunity to expand women's access to low- and semi-skilled employment by equipping them with industry-relevant skills that enhance employability. TVET qualifications span from post-secondary to tertiary levels, covering a wide range of practical, career-oriented fields (MQA, 2020; TVET Madani, 2024). Institutions such as community colleges, Institut Latihan Kemahiran Belia Negara (IKBN), and GiatMARA offer structured foundational training for low- and semi-skilled areas like livestock management. industrial automation, machining, alongside fields more popular among women, such as fashion design and beauty therapy.

TVET has also consistently demonstrated strong employability outcomes, with 74% of TVET graduates securing employment in 2023, compared to about 68% of overall graduates (MOHE, 2024) - reinforcing its potential as a viable pathway for women too. TVET programmes at the post-secondary, non-tertiary level, particularly skills certificate courses, can serve as an accessible entry point for women into the workforce, with the flexibility to upskill and obtain higher qualifications either immediately or later in their careers. Given the demand-driven nature of TVET courses (MTVET, 2024), expanding women's enrolment can significantly enhance their employment prospects, particularly in industries with high job absorption rates.

37% 38% 39% 41% 40% Female Male 62% 63% 60% 61% 59%

2022

Figure 13: Proportion of Male and Female TVET Graduates, Malaysia, 2019-2023

Source: Graduates Tracer Study Report 2023, Ministry of Higher Education Malaysia (MOHE), 2024; PNBRI Analysis

2021

To date, gender concentrations persist in technical fields, with women remaining underrepresented (National Higher Education Research Institute, 2012). Recent TVET graduate data (MOHE, 2024) illustrated in Figure 13 above further reflects this trend where women make up less than two in every five TVET graduates annually,

2020

2019

highlighting the need for targeted initiatives to encourage greater women participation in TVET. Strengthening women's participation in TVET is not only essential to close workforce gender gaps, but also to ensure that women have equal access to secure, well-compensated employment across all skill levels.

2023

The Influence of Early Structural Factors

The preceding discussion highlighted how gender disparities in participation, pay, employment, employability, and representation in technical fields of study can emerge as early as the point of entry into the workforce, evidenced by lower employment opportunities and earnings for women compared to their male counterparts. Even after discounting caregiving responsibilities - a crucial factor in later career trajectories the disparities observed here may point to deeprooted structural factors that take shape long before employment begins.

A key example is the sectoral concentration of women, where such structural factors may have manifested. As discussed, women's early academic choices significantly influence their job prospects and earnings potential. However, the continued tendency for women to cluster in certain fields of study suggests that this pattern may not merely be a matter of preference but is shaped by underlying structural forces. These gendered career pathways are not driven by inherent differences but rather by societal expectations and cultural norms (Correll, 2004; Virtudazo, 2024), in which young women may have been socialised to opt for career paths that will accommodate their future roles as mothers and caregivers. Research suggests that gender stereotypes, which associate specific jobs with specific genders, are socially constructed and reinforced through institutional practices (Bridges et al., 2020; West & Zimmerman, 1987). These stereotypes not only shape individual career choices but also influence employer perceptions, creating biases that limit women's access to diverse employment opportunities.

Discriminatory hiring practices further entrench these disparities. From male-coded language in job advertisements to explicit exclusionary criteria, biases against women remain deeply embedded in recruitment processes (Bridges et al., 2020). According to a study by WAO (2020b), 47% of women reported being asked about their marital status during job interviews, while one in every five were questioned about their ability to perform tasks solely because they are women. These experiences not only reflect discriminatory mindsets, but also reinforce the perception that certain roles are inherently unwelcoming or inaccessible to women thereby perpetuating occupational gender segregation.

Gender segregation persists far beyond physically intensive sectors. Admittedly, some studies have shown that jobs in physically demanding industries, such as heavy manufacturing, may pose higher physical risks to women, with female workers experiencing greater susceptibility to musculoskeletal injuries (Taiwo et al., 2008). These differences are real and significant for workplace safety considerations. However, sectors such as information and communication technology (ICT) which do not rely on physical strength - remain heavily male-skewed, with men outnumbering women in 14 out of 19 industries in Malaysia, according to the Labour Force Survey (as discussed earlier). This underscores that the core issue is not in physical suitability, but in persistent and deeply ingrained gender biases.

Girls may for instance be generally more inclined towards people-oriented professions not with standing personal preferences, as found by (Busch-Heizmann, 2015) in their study in Germany. They found that personal preferences alone cannot account for the patterns observed. In fact,

a study by Seehuus (2023) found that women often dominate sectors like nursing, despite showing relatively lower preference scores for them, while also expressing interest in male-dominated fields like engineering and finance at levels comparable to men. Conversely, men are far less likely to express interest in female-dominated occupations.

The above patterns suggest that structural and cultural biases - rather than individual capabilities or preferences - are driving "occupational sorting". Occupational sorting refers to the act of making occupational choices based on one's sociodemographic characteristics and comparing those against those of the job, resulting in skills mismatch and potentially perpetuating gender-based representation and wage gaps (Pepin & Vanderberg, 2021). When such barriers are ingrained early in educational pathways and hiring practices, they restrict women's options from the outset, ultimately shaping unequal career trajectories and contributing to long-term disparities in economic participation.

Way Forward: Advancing Gender Equity from **Workforce Entry**

Closing the gender gap at the point of workforce entry and throughout the early stages of women's careers requires sustained, targeted efforts. Addressing these entrenched disparities is not an overnight process - it demands a structural shift in how gendered career pathways are shaped. Central to this transformation is dismantling gender stereotypes and ensuring equitable opportunities for women across all skill levels and industries.

Addressing occupational segregation and sectoral concentration must be a key priority. As previously discussed, while some physically demanding industries may justifiably attract more male workers due to inherent physical requirements, this does not explain the persistent gender segregation observed across a wide range of non-physical, high-growth sectors such as ICT. Instead, these patterns point to entrenched structural and cultural barriers, ranging from gendered expectations in education to biases in recruitment and workplace norms, that limit women's access to diverse and high-paying career paths.

It is equally important to elevate the wage structures of traditionally female-dominated professions. Encouraging greater female participation in these underrepresented fields is critical for closing longterm gender gaps in employment outcomes. Beyond expanding career options, government support is

necessary to ensure that female-occupied jobs reflect their true economic and social value rather than the obvious commercial or accounting values. Both dimensions - expanding opportunities and improving the valuation of existing roles - are essential to building a more inclusive and equitable labour market.

Moreover, advancing women's economic inclusion must not be confined to high-skilled or elite professions, such as corporate board memberships and meeting symbolic and exclusive "30% club" type of leadership positions, or women entrepreneur venture funding targets. Policies and interventions should empower women at all skill levels, beginning at the entry level where structural barriers can compound and create lasting impact on retention and performance in later stages of their careers.

A truly inclusive workforce is one where all women regardless of industry, skill level, or background - can fully participate and thrive.

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