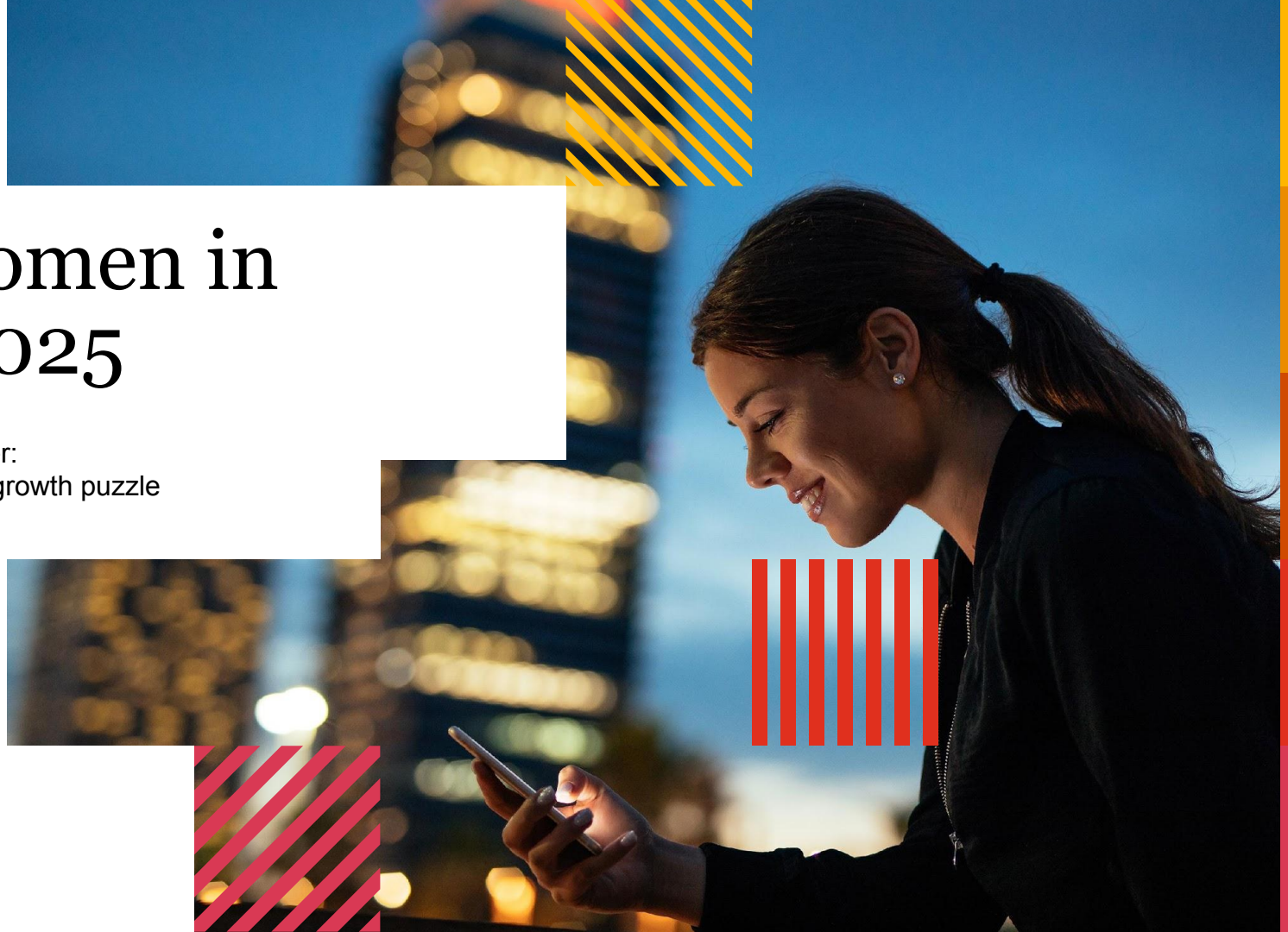
PwC Women in Work 2025

Productivity and Gender:
The key to solving the growth puzzle

March 2025



Executive summary

This year marks the 12th anniversary of PwC's Women in Work (WiW) report, released during a time of significant demographic and socio-economic change. We are witnessing stagnating economic growth, the dual challenges of declining fertility rates and aging populations, and the transformative effects of the AI-driven fourth industrial revolution in the workplace. Moreover, the rise of the anti-DEI movement has led some organisations to reassess or backtrack on their commitments and pledges.

In this context, this year's update of the WiW Index—tracking the performance of the OECD[1] across five key indicators of gender diversity—along with our special article examining the impact of female participation on productivity and economic growth, is more critical than ever. As highlighted by the UK Government's Areas of Research Interest[2], the need for further research and evidence to understand the economic costs of gender inequality in the workforce is a vital area of interest.

The results of this year's index show promising progress, with the average OECD score rising 13 points to 69 since 2011, driven by increased female workforce participation and a narrowing gender wage gap.

However, despite these improvements, the pace of change remains slow; the latest index data suggests it will take almost half a century to close the gender gap across the OECD.

UK's performance - summary

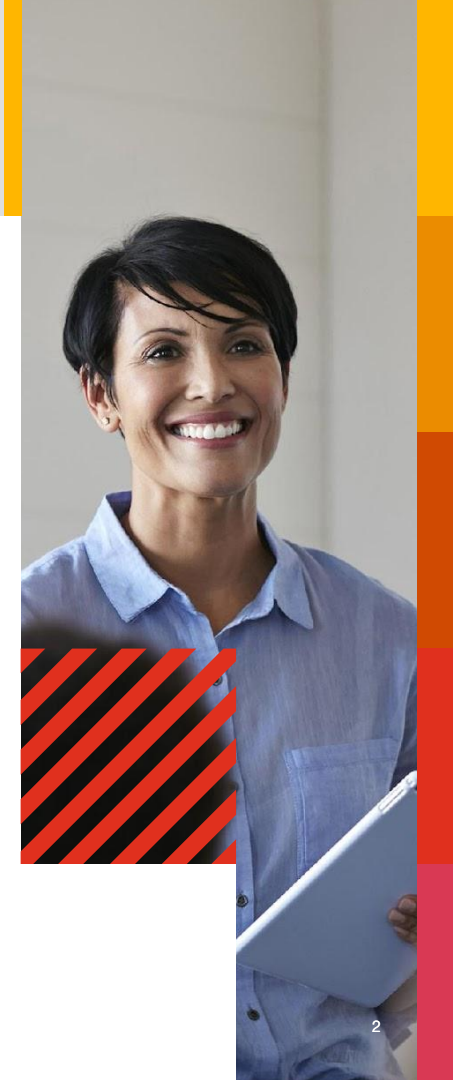
This year's index update highlighted a further decline for the UK, dropping to 18th place, even as it improved in two key indicators: the gender wage gap and female labour force participation rate. Amidst this slow progress and the need for data on the benefits of gender equality, our special article quantifies the impact of rising female participation on productivity. The findings reveal that since 2011, increased female participation has added a remarkable £6.2 billion annually to the UK economy, with similar positive effects seen at the OECD and G7 average levels.

In light of these insights, the need for ongoing efforts to promote gender equality in the workplace is more urgent than ever. Women constitute an increasingly significant proportion of the global population, making their underrepresentation and disadvantage in the workplace not only unjust but also economically counterproductive. We have presented an overview of our key findings in the rest of this executive summary.

> "This year's report underscores that addressing gender equality in the workplace is crucial not only for unlocking growth but also for building a more equitable future for all."

In the latest Index update, the average OECD score was

69 points



Executive summary

Key Index Results

Progress to date

Over the past 12 years, the WiW Index has shown a general upward trajectory for the OECD average, the G7 average, top performers, and the UK, with improvements evident across all five indicators. More women are entering and remaining in the workforce, and are receiving fair compensation, contributing to a more equitable and inclusive labour force.

Top and bottom performers

Since the launch of the Index, Nordic countries like Iceland and Sweden have consistently topped the rankings, thanks to their generous childcare policies and proactive government initiatives promoting pay equity and parental support. In contrast, Korea and Mexico continue to rank at the bottom of the Index, hindered by entrenched gender biases and structural inequalities.

UK

The UK's performance in the WiW Index has varied since its inception in 2011, averaging 16th place over the years since. It peaked at 10th in 2020, in large part due to the COVID-19 furlough scheme. **The latest result (for 2023 data) is the lowest the UK has ranked in over a decade**. For the first time since 2019, the UK is no longer ranked number one among the G7 economies, and is now second behind Canada.

Key Figures

Since 2011, the average OECD score has risen by

13points

The top performing country on the Index is

Iceland

The UK's rank this year on the Index is

18th

Executive summary

This year, we conducted further analysis to quantify the impact of increased female participation on productivity and GDP:

Impact channels

We identified **two impact channels** through which female participation increases productivity: labour supply and workplace diversity.

Approach

Using 2011 - 23 data on the 33 OECD countries included in the Index, we conducted a **panel regression analysis** to estimate the impact of female participation on productivity. We controlled for socioeconomic factors such as education and innovation to fully isolate the impact of female participation.

Key findings

Improvement in female participation over 2011 - 2023 produced a productivity uplift of 0.30% per annum or 3.59% across the whole period. If female participation rates were to keep improving at the same pace until 2030, this could lead to an **aggregate increase in UK GDP of approximately £43.5 billion ($54.7 billion) by 2030**.

Key Figures

Contribution of improvement in female participation between 2011-23 to productivity and GDP (per annum, 2023 GBP/USD)

UK productivity and GDP (per annum, 2023 GBP)

UK

% increase in productivity	Increase in GDP
0.30%	£6.2bn ($7.8bn)

OECD, G7 productivity and GDP (per annum, 2023 USD)

	% increase in productivity	Increase in GDP
OECD average	0.30%	$4.5bn
G7 average	0.30%	$15.2bn

Contents

1

Key Index results and insights

Introduction

Introduction

In the current macroeconomic landscape, gender equality in the workplace remains a crucial determinant of economic vitality and social progress. In the UK, the ongoing cost of the living crisis exemplifies challenges that disproportionately affect women: they are more likely than men to be in low-paid work, have fewer savings to rely on, and are more prone to being in debt[3]. Additionally, caring responsibilities and unpaid domestic labour may hinder their ability to work additional hours to cope with increased costs.

This year marks a pivotal moment in assessing gender equality in the workplace, as we observe indicators largely recovering from their pandemic-induced decline. With three years having passed since the pandemic began, we now have a unique opportunity to evaluate its impact on our index and reflect on broader trends in gender parity.

The first section of this year's report presents a comprehensive update on index results and reviews the UK's performance over time relative to the OECD, the G7, and top performers, as well as changes in trends pre- and post-pandemic. In line with previous years, we also provide a detailed focus on the UK's performance across indicators, highlighting the gender wage gap and participation rates. Finally, this section of the report presents regional index results to highlight employment disparities across the UK.

Having detailed the changes in the performance of the OECD, UK, and G7 on the Index over time, the second section of the report presents our special article. This year, we analyse how progress in female participation rates within the WiW Index has influenced productivity from 2011 to 2023, revealing insights that could reshape our understanding of gender equality's impact on economic growth.

a) Index results

This year's Women in Work Index reveals promising progress, with the average OECD score rising 13 points to 69 since 2011, driven by higher female workforce participation and a narrowing gender wage gap.

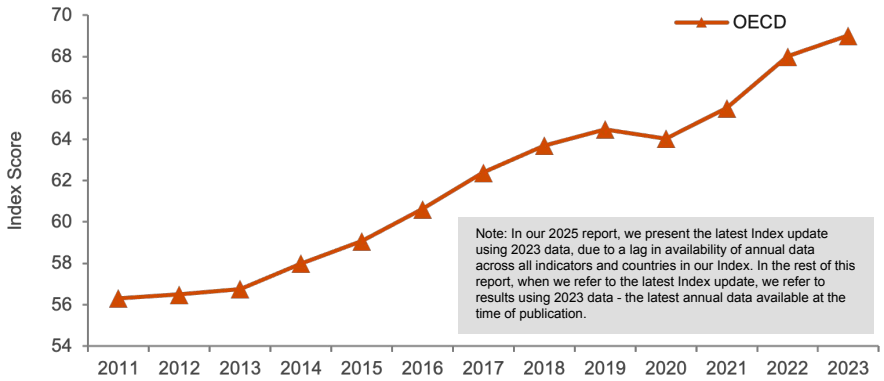
PwC's Women in Work Index measures progress made towards gender equality in the workplace across 33 OECD countries. The Index comprises five indicators that assess various aspects of gender equality in work.

Despite all countries making progress over the past decade, our analysis indicates that there is an enduring gender gap in the workplace. Since 2011, the average Index score across the OECD increased, from 56.3 in 2011 to 69.0 in 2023. In the latest Index update, the average OECD score improved by approximately 1 point from a score of 68 in 2022 to 69 in 2023.

Since the inception of our Index in 2011, on average **there has been a steady improvement across all five indicators**, indicating that more women are entering and remaining in the workforce, and are receiving fair compensation, contributing to a more equitable and inclusive labour force.

In particular, between 2022 and 2023, the majority of the improvement across the OECD was driven by **an increase in the female participation rate** from 72.1% to 72.7%, and a decrease in the wage gap from 13.5% to 13.1%.

Figure 1a: Women in Work Index OECD average score across 33 countries



Sources: PwC analysis; OECD

Table 1a: Women in Work Index Indicators – OECD average (2011, 2022 and 2023)

Indicator	Description	2011	2022	2023	Change from 2011 to 2023	Change from 2022 to 2023
Female participation rate	The proportion of women of working age (15 to 64) who either have a job or are seeking work.	**66.3%**	**72.1%**	**72.7%**	↑ **+6.4pp**	↑ **+0.6pp**
Participation rate gap	The difference between the female participation rate (see above) and the male participation rate.	**12.8%**	**9.2%**	**8.8%**	↓ **-4.0pp**	↓ **-0.4pp**
Female unemployment rate	The number of women of working age who are seeking work as a proportion of the total female workforce.	**8.5%**	**5.3%**	**5.3%**	↓ **-3.2pp**	↓ **-0.0pp**
Female full-time employment rate	The proportion of employed women who work full time.	**74.3%**	**77.9%**	**78.1%**	↑ **+3.7pp**	↑ **+0.2pp**
Gender wage gap	The difference between median hourly earnings of men and women.	**16.5%**	**13.5%**	**13.1%**	↓ **-3.4pp**	↓ **-0.4pp**

At the historical rate of progress observed between 2011 and 2023, **it would take more than 46 years* to close the gender pay gap** across the OECD.

Sources: PwC analysis; OECD

*The constant average per annum percentage points change between 2011 and 2023 is applied linearly to estimate the number of years to reach 'parity'.

Iceland leads this year's index with Ireland showing remarkable improvement; opportunities for growth noted in Korea and Mexico.

Iceland ranks first on our Index, followed by New Zealand and Luxembourg. The top five countries on the Index in 2022 continue to rank in the top five in 2023, but the ordering has changed.

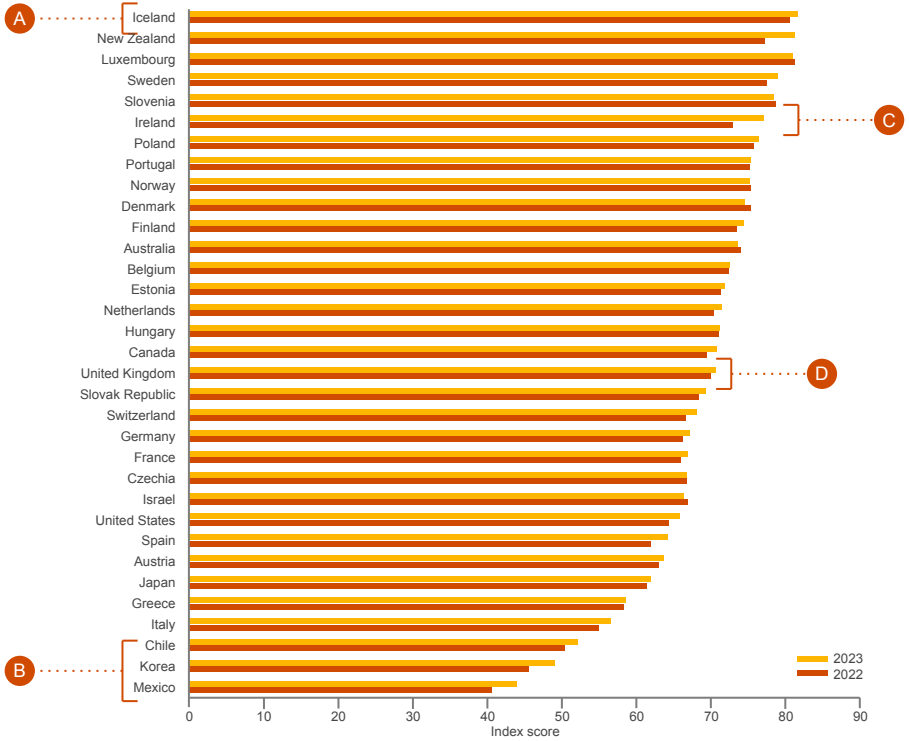
Ireland saw the largest improvement in the rankings, moving up six places, while Israel saw the biggest fall, moving down four places. Korea and Mexico remain at the bottom of the Index. Further country spotlights have been provided in the Technical Appendix.

A

Iceland's strong performance, (moving up three places from last year's report), was **driven by an improvement in the wage gap, the female unemployment rate and the female full-time employment rate.** Iceland continues to have **the highest female participation rate in the OECD.**

B

Chile, Korea and Mexico ranked at the bottom of the Index. Despite being lowest-ranked, in the last year, all three countries improved their overall index score, notably through improvements in the female unemployment rates in Korea and Mexico, and an improvement in the participation rate gap in Chile.



C

Ireland recorded the biggest improvement in its rank, rising six places from 12th place in 2022 to sixth place in 2023, with a 4.1 point increase in its Index score. Driven by an **improvement** across all indicators (excluding the female full-time employment rate). In particular, the wage gap decreased from 6.7% to 3.7% in 2023.

D

The **UK fell in its ranking by one place, falling from 17th in 2022 to 18th in 2023**. This was primarily a relative change. However, further analysis of UK's results revealed a **marginal deterioration of the female unemployment rate and of the participation rate gap,** but these are **very small** in absolute terms, implying that the UK is being overtaken by other countries on the Index. Despite this, the **UK's total score on the index of 70.72** remains above the OECD average of 69.03.

A retrospective analysis of the WiW index shows steady progress across all indicators, though the COVID-19 pandemic caused significant disruptions, altering established trends.

This year's update offers an analysis of gender equality trends from 2011 to 2023, divided into pre- and post-pandemic (COVID-19) periods. For comparability, it examines the UK's performance against three groups: the top five performers, the G7, and the OECD average, uncovering key insights.

Overall trends (2011-2023)

Over the past 12 years, the WiW Index has shown a general upward trajectory for the OECD average, the G7 average, top performers, and the UK, with improvements evident across all five indicators. Throughout this period, the UK exhibited robust performance, consistently outperforming both the OECD and G7 on average by 1.7pp and 3.9pp respectively*. The UK also improved at a faster rate than the OECD: between 2011 and 2023, the OECD improved by 12.7 points and the UK improved by 14.5 points.

This trend was largely driven by the UK's efforts to **narrow the participation rate gap by 4.4pp** and **increase female full-time employment by 8.2pp** in absolute terms. Since 2011, the UK has also maintained the lowest female unemployment rates among these groups. Despite these advancements, challenges remain in areas such as the female labour force participation rate and the gender wage gap, where the UK is slightly outpaced by top performers and the OECD averages. Notably, even with a reduction of 5pp in the gender wage gap, the UK still lags behind the OECD average (of 3.4pp) in this metric.

Pre pandemic (2011-2019)

All groups showed gradual improvement on the WiW Index during this period, with gains observed across all five indicators. The UK's index score increased by 10.2 points, outpacing all other groups, particularly the OECD, which experienced an improvement of 8.2 points between 2011 and 2019. This growth was predominantly driven by the UK's efforts **to reduce the participation rate gap by 3.3pp** and **lower female unemployment levels by 3.6pp**.

Post pandemic (2020-2023)

The pandemic significantly disrupted the trends observed on the WiW Index. In the immediate pandemic period, there was a marginal decline in overall OECD performance, with a slight decrease of 0.12% between 2019 and 2020. This setback delayed progress by at least two years, with the 'COVID-19 gap' closing only in 2022. During this period (2020-2023), the UK experienced a marginal decrease in its overall index score by 0.1 points. In contrast, overall OECD performance on the Index improved by 4.6 points between 2020 and 2023, through modest improvements in all indicators with the exception of the gender wage gap, which experienced a marginal decline.

The UK also experienced a **decline in female participation rates by 0.3pp** and **a widening of the participation rate gap by 0.2pp** unlike the other three groups that progressed on these metrics. The most notable post-pandemic impact for the UK, however, was **a widening of the gender wage gap by 1.3pp**, emphasising the challenges that remain in achieving gender equity in the workforce.

Table 1b: Performance on the Women in Work Index, 2011-2023

	Top Performers average change in performance			G7 average change in performance			OECD average change in performance			UK average change in performance		
	2011-2023	2011-2019	2020-2023	2011-2023	2011-2019	2020-2023	2011-2023	2011-2019	2020-2023	2011-2023	2011-2019	2020-2023
Female labour force participation rate	5.8 pp	4.6 pp	2.1 pp	5.3 pp	3.7 pp	2.1 pp	6.4 pp	3.9 pp	3.2 pp	4.5 pp	4.0 pp	-0.3 pp
Participation rate gap	-2.8 pp	-2.4 pp	-0.2 pp	-3.8 pp	-2.7 pp	-0.8 pp	-4.0 pp	-2.4 pp	-1.4 pp	-4.4 pp	-3.3 pp	0.2 pp
Female unemployment rate	-2.3 pp	-2.1 pp	-1.7 pp	-2.6 pp	-2.0 pp	-1.9pp	-3.2 pp	-2.7 pp	-1.4 pp	-3.8 pp	-3.6 pp	-0.7 pp
Female full time employment rate	6.0 pp	3.8 pp	2.6 pp	3.7 pp	0.9 pp	2.6 pp	3.7 pp	1.4 pp	1.9 pp	8.2 pp	3.2 pp	3.4 pp
Gender wage gap	-3.3 pp	-1.6 pp	0.02 pp	-2.9 pp	-1.5 pp	-0.1 pp	-3.4 pp	-1.9 pp	-0.1 pp	-5.0 pp	-2.2 pp	1.3 pp
Index score	11.2 points	8.2 points	3.6 points	11 points	7.2 points	4 points	12.7 points	8.2 points	4.6 points	14.5 points	10.2 points	-0.1 points

*This average excludes the 2020 value, since the UK's score for that year was significantly higher than the trend due to temporary effects of COVID-19 job retention schemes, and is therefore considered an anomaly.

b) United Kingdom deep dive

The UK falls from 17th to 18th in the OECD index, despite reducing its wage gap in 2023, highlighting gender equity challenges in workforce participation.

As with last year the UK's improvement in its index score by

0.7 points

(from 70.06 to 70.72)

was outpaced by progress by other countries, leading to a drop in rank from 17th to 18th place.

"This is the lowest the UK has ranked in the Index in over a decade, with it having last ranked 19th in 2012. For the first time since 2019, the UK is no longer ranked number one among the G7 economies, and is now second behind Canada."

A deep dive into the UK's performance across the WiW indicators reveals **improvements in two of the five indicators** as follows:

1. **Gender Pay Gap:** The UK's wage gap improved from 14.5% to 13.3% in 2023, bringing the UK's rank up three places (from 18th to 15th), though it remained slightly above the OECD average of 13.1%.
2. **Female Labour Force Participation:** The UK's female labour force participation rate marginally improved (by 0.1%), remaining 2.1% above the OECD average at 74.8% in 2023. Despite this, the OECD average increased by 0.7 percentage points (pp)*, indicating stronger progress in other countries and resulting in the UK dropping from 14th to 15th place on this indicator.
3. **Female Unemployment Rate:** The UK's female unemployment rate worsened marginally but remains 1.8pp lower than the OECD average, at 3.5% compared to 5.3%. The OECD average also saw a marginal improvement.
4. **Participation Rate Gap:** The UK's participation rate gap widened from 7.1% in 2022 to 7.8% in 2023, dropping the UK's rank from 13th to 19th place. However, this gap remains below the OECD average of 8.8%.
5. **Full-Time Employment Rate:** The UK's female full-time employment rate worsened by 0.5% to 68.9%, retaining its ranking of 27th out of 33 OECD countries, and is significantly below the OECD average of 78.1%.

We explore the UK's participation rate and the gender wage gap in more detail later in the report.

Table 1c: The UK's performance on the Women in Work Index, 2023 vs. 2022

	OECD Average Indicator Value		UK Indicator value		UK Rank	
WiW Indicators	2022	2023	2022	2023	2022	2023
Female labour force participation rate	72.1%	72.7%	74.8%	74.8%**	14th	15th
Participation rate gap	9.2%	8.8%	7.1%	7.8%	13th	19th
Female unemployment rate	5.3%	5.3%*	3.5%	3.5%**	9th	10th
Female full time employment rate	77.9%	78.1%	68.4%	68.9%	27th	27th
Gender pay gap	13.5%	13.1%	14.5%	13.3%	18th	15th
Index score	68.0%	69.03	70.1	70.7	17th	18th

Sources: PwC analysis; OECD. Note: Green arrows indicate improvement, while red arrows indicate deterioration.
*Rounding of the indicator values to 1.d.p means the change is 0.7pp. **Marginal change of less than 0.1pp.

UK Spotlight One: For the past decade, the UK has struggled with a gender pay gap larger than the OECD average. Recent efforts, however, show promising progress in narrowing this disparity.

Since the launch of the Women in Work Index in 2011, the UK has consistently surpassed the OECD average in overall terms. However, its gender wage gap remains stubbornly higher than the OECD average, despite some progress. To achieve true pay equity, stronger measures are needed to close the gap and achieve greater equality in remuneration.

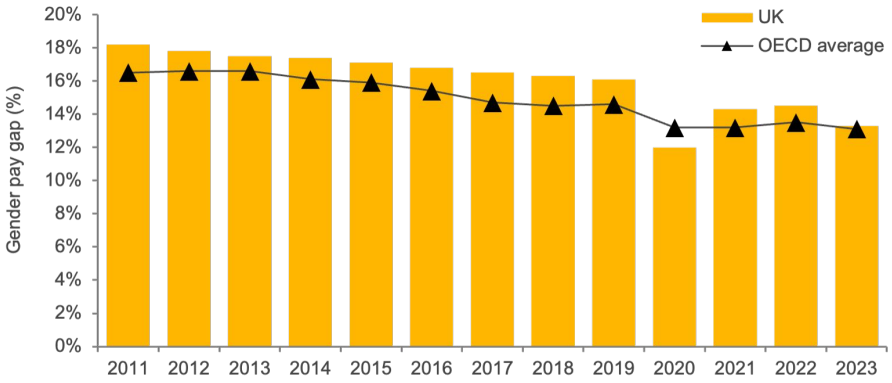
The average gender wage gap across the OECD has been lower than the UK in every year between 2011 and 2023, except 2020*, although the difference between them is decreasing. The wage gap returned to its prior trend in 2021 as these effects tapered off. In 2023, the UK recorded a wage gap of 13.3%. This was an improvement upon the previous year of 1.2pp, but was still 0.2 pp higher than the average wage gap across the OECD in 2023.

The UK is closing its gender pay gap faster than the OECD average and may soon surpass it. From 2011 to 2023, the UK's gap narrowed by 4.9pp, dropping from 18.2% to 13.3%. In contrast, the OECD average decreased by only 3.4pp, from 16.5% to 13.1%.

Despite this, progress remains gradual - if continued at this pace, the gender pay gap in the UK won't close for the next three decades. At the historical rate of progress observed, taking into account this year's relatively fast pace, it would take 33 years for the gender wage gap to close in the UK, **10 years fewer than the 2024 report indicated**.

*Due to the temporary furlough schemes in the UK during the COVID-19 pandemic.

Figure 1b: The UK and the OECD's gender pay gap, 2011-2023



It would take 33 years* to close the gender pay gap in the UK, based on the historical rate of progress.

In **2011**, the gender wage gap in the UK was **18.2%**

Between 2011 and 2023, the gender wage gap has narrowed by 0.41pp per year. If progress continues at this pace post 2023, it will take at least 33 years to close the gender pay gap in the UK.

In **2023**, the gender wage gap in the UK was **13.3%**, narrowing by 4.9pp since 2011.

* The constant average per annum percentage points change between 2011 and 2023 is applied linearly to estimate the number of years to reach 'parity'.

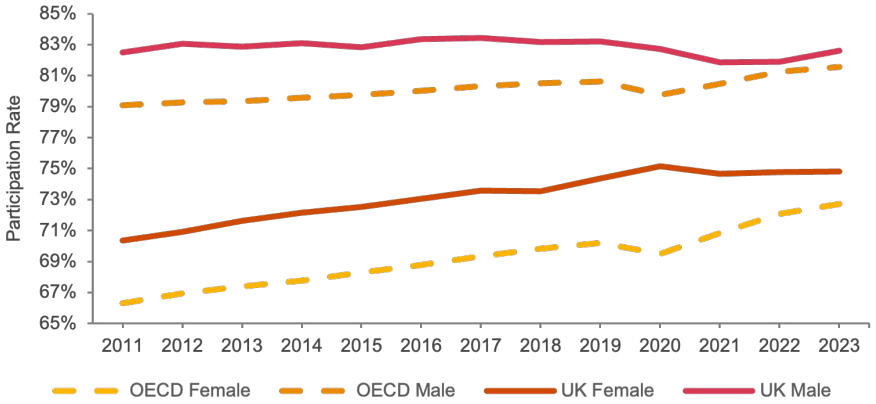
UK Spotlight Two: Despite a narrowing gap, which has shrunk from 4.1 points in 2011 to 2.1 points in 2023, the UK's female participation rate still outpaces the OECD average.

Overall trend: Over the 2011 to 2023 period, the UK's female participation rate increased by 4.4pp, (from 70.4% to 74.8%). Meanwhile, the OECD average which stood at 66.3% in 2011, rose by 6.4 points to 72.7%, with the most notable growth occurring since 2020.

Participation performance of the UK vs the OECD: The UK has seen a decline in participation rates since 2020, with male rates dropping by 0.8pp and female rates by 0.3pp.

In contrast, the OECD has experienced an increase in participation rates for both males and females, outpacing the UK's performance by 0.3pp. This has contributed to a narrowing of the participation rate gap between the UK and the OECD. Before 2020, both the UK and OECD had similar trends in male and female participation rates, although they performed at different levels.

Figure 1c: The UK and the OECD's female and male participation rates, 2011-2023



Sources: PwC analysis; OECD

Over the 2011 to 2023 period, the UK's female participation rate increased by

4.4points

(from 70.4% to 74.8%)

UK Spotlight Two: The largest gaps between male and female participation occur during key childbearing years, demonstrating the impact of the 'motherhood penalty'.

Participation rate by age and gender:
Analysing participation rates by age and gender highlights how life events and gender-specific factors uniquely influence workforce involvement for women compared to men in the UK and the OECD.

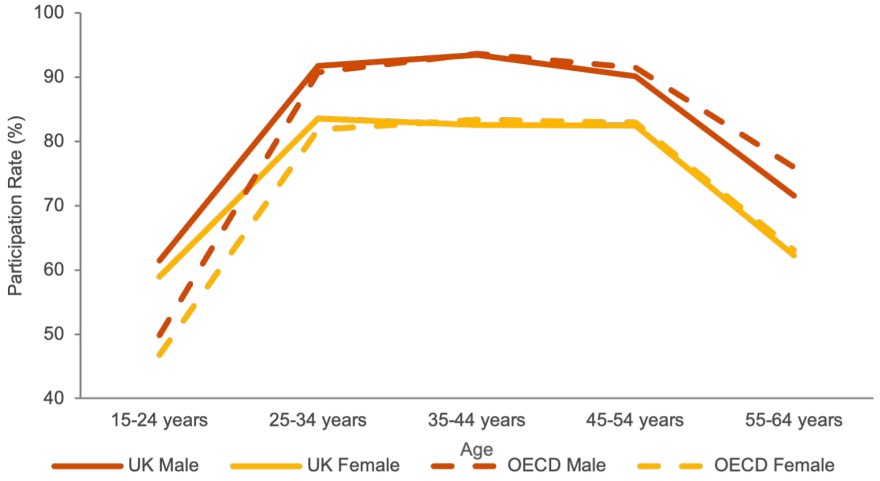
In the UK, the largest gaps between male and female participation occur during key childbearing years*, particularly in the 25-34 age group (8.2%) and the 35-44 age group (10.8%) in 2023. This pattern is consistent across OECD countries revealing a gap of 9% and 10.2% respectively across these groups. Significant gaps of 12.8% also often appear in the pre-retirement age group (55-64), as women reassess career goals and financial planning. Factors such as health, caregiving responsibilities, and financial insecurity may lead to reduced participation or complete withdrawal from the labour market at this stage.

This timeline highlights major influences and average participation rate gaps at each life stage in 2023.

> "Women's career trajectories often experience a 'motherhood penalty,' where the dual demands of professional growth and familial caregiving create a challenging balancing act.[4] Many women face the difficult choice of scaling back their careers to accommodate caregiving duties, which contributes to disparities in workforce participation and advancement opportunities during their prime working years."

Education and Early Career (age 15-24)	Career Establishment/ Family Formation (age 25-34)	Career Advancement/ Caregiving (age 35-44)	Mid-Career & Progression/ Menopause (age 45-54)	Pre-Retirement/ Pension Gap (age 55-64)
UK Gap: **2.6%** OECD Gap: **3%**	UK Gap: **8.2%** OECD Gap: **9%**	UK Gap: **10.8%** OECD Gap: **10.2%**	UK Gap: **7.6%** OECD Gap: **8.7%**	UK Gap: **9.3%** OECD Gap: **12.8%**

Figure 1d: The UK and the OECD's female and male participation rates by age, 2023



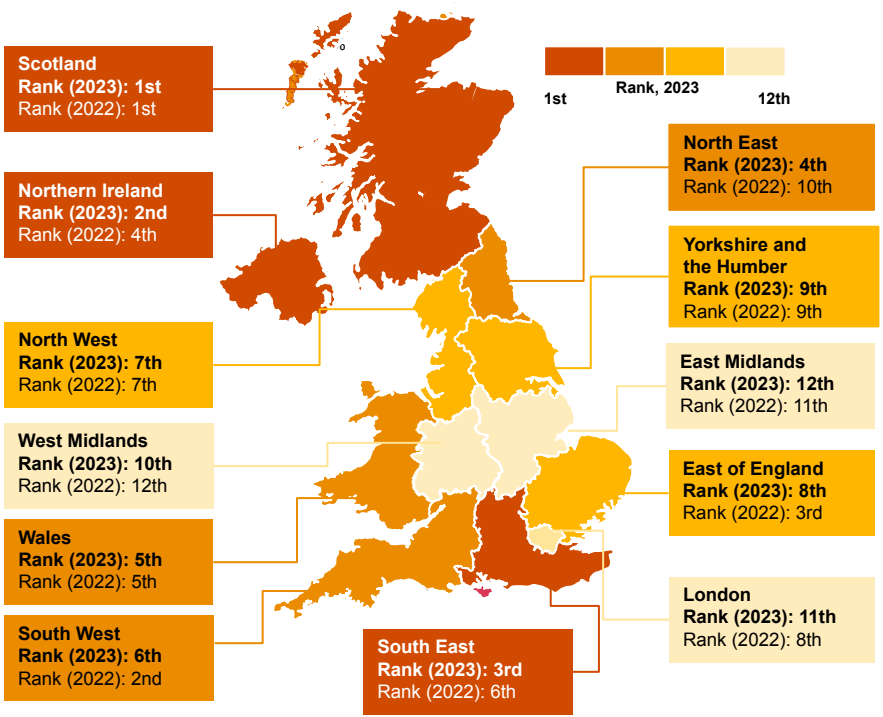
Sources: PwC analysis; OECD

Further Information and contextual background on these factors is available in the Technical Appendix.

*The average age of a mother in the UK and in the OECD is 30.9 years.

Regional Spotlight: Disparities in employment outcomes for women persist across the UK.

Figure 1e: Figure X: UK Regional Index rankings, 2023 vs. 2022



For the second year, Scotland holds the top ranking on the Index. Scotland's index score improved by

0.9 points

with the lowest participation rate gap, and a substantial fall in the gender pay gap.

Our Women in Work Regional Index compares the progress made towards gender equality at work across the UK's nations and regions. **For the second year running, Scotland took the top spot on the Index.** Scotland's Index score increased by 0.9 points between 2022 and 2023. This was primarily driven by improvements in the wage gap, which fell quite significantly over this period from 11.8% in 2022 to 8.3% in 2023. Scotland also continued to record the lowest gap in participation rates between men and women across the UK as of 2023 at 5.1%, a deterioration of 0.7pp compared to last year's 4.4%.

Half of the 12 regions and nations improved their Index scores between 2022 and 2023. The North East led with a 5.6-point increase, also achieving the largest jump in rankings by moving up six places. This improvement was driven by absolute improvements in the female participation and unemployment rates and in the wage gap. Conversely, five regions and nations experienced a deterioration in their Index score from last year, most significantly the East of England and the East Midlands.

The East of England experienced the largest drop in rankings between 2022 and 2023, falling by five places from 3rd place to 8th place. This was driven by deteriorating performance across all indicators between 2022 and 2023.

Overall, the gap between the worst performing region and best performing region has widened, by approximately 7 points, between 2022 and 2023. Indicating higher geographical inequalities in employment outcomes for women across the UK. This is likely due to a combination of macroeconomic factors, including the slowdown of regional growth in certain parts of England, especially in West Midlands, East Midlands, Yorkshire and the Humber, and the East; the differential regional impacts of the UK Government's 'Levelling Up' agenda, in addition to the proactive efforts of the devolved governments in supporting female employment, such as improving childcare accessibility and addressing the gender pay gap.

2

Productivity and gender

Setting the scene for our longitudinal productivity analysis

In the previous section, we detailed our latest findings on the progress toward gender equality in workplaces across OECD countries, as measured by our WiW Index, established in 2011. This index has been instrumental in tracking changes over the past twelve years.

This year, we explore a vital connection: the impact of workplace gender equality on economic performance. Specifically, we assess how increased gender equality correlates with productivity gains in OECD countries. By highlighting this link, we aim to demonstrate the economic benefits of gender equality, particularly in terms of enhanced productivity and its contribution to economic growth.

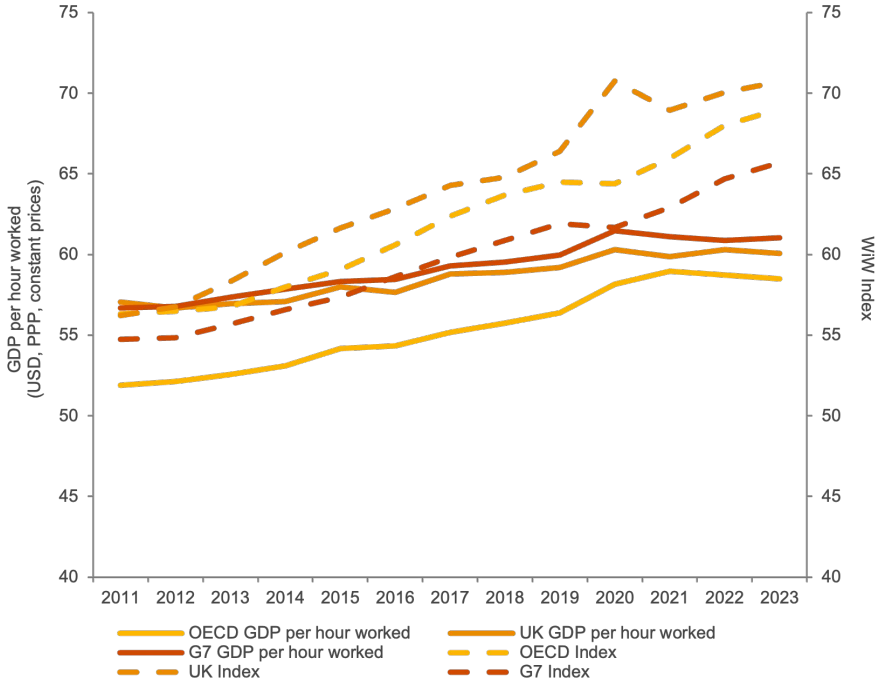
Previous OECD studies have explored the relationship between gender equality and economic growth, primarily focusing on the connection between Gross Domestic Product (GDP) and female participation.[5] Our analysis aims to build on this literature by quantifying the impact of female participation rates on productivity, providing a more comprehensive understanding of its economic implications. This is especially relevant given the UK's sluggish productivity performance, which has struggled with persistently low levels since the financial crisis and has been further affected by reduced business investment post-Brexit (see Figure 2a).

In this analysis, we focus on the performance of the UK and the G7, comparing them against the average OECD performance to estimate the impact over time. Figure 2a showcases how post-pandemic the UK's performance on the WiW Index has slowed down vs the OECD and G7 average, as noted in Section 1, indicating a concerning trend towards declining gender equality levels in the UK along with continual slow productivity growth rates.

The remainder of this section is structured as follows:

- A trend analysis tracking the performance of the WiW Index for the UK, the G7, and the OECD average against productivity over time.
- An overview of our econometric approach to estimating the impact of female participation on productivity.
- A summary of the key impact channels based on existing literature to understand the relationship between gender equality and productivity.
- Presentation of our key findings in GDP terms across three scenarios:
  - I. Impact to date,
  - II. Closing the gender gap and
  - III. Forecast impact over the next 5 years.

Figure 2a: GDP per hour worked (USD, PPP, constant prices) and WiW index performance, 2011-23



Overview of female participation rate and productivity trends across the G7, OECD average and UK, 2011-2023

Before analysing the impact of female participation rates on productivity through econometric modelling, we compared the UK, G7, and OECD nations performance from 2011 to 2023. The scatter plot indicates a positive relationship between female participation rates and productivity (measured in GDP per hour), particularly for the UK, with some variation among the OECD average and the G7 in recent years.

The UK generally outperformed both the G7 and OECD averages on these measures, suggesting that female workforce participation is likely to play a role in productivity. This insight serves as a useful benchmark for assessing the performance of these groups over time.

In 2023, the UK had a female labour force participation rate of 74.8%, surpassing the OECD rate of 72.7% and the G7 rate of 71.7%. The G7 had the weakest performance, with its 2023 figure matching the UK's rate from 2014.

Between 2012 and 2017, the UK's female labour force participation varied significantly, ranging from 70.9% to 73.6%. After 2017, this variability decreased, with rates stabilising between 73.6% and 74.8%. In comparison, the OECD had lower variability initially, with participation rates between 66.3% and 68.3% until 2015, but experienced greater fluctuations afterward, rising from 68.8% to 72.7%. Similarly, the G7 saw lower variability from 2011 to 2015, with rates of 66.4% to 67.9%, but also increased variation post-2016, ranging from 68.5% to 71.7%.The fluctuation in trends can be attributed to several factors, but the economic shock posed by COVID-19 stands as a significant driving factor in the last five years. Female labour force participation was severely affected by the outbreak of the pandemic, particularly in female-dominated sectors. In alignment with the trends seen in Figure 2b, the IMF recorded that within two to three years after the pandemic, participation rates in most OECD countries recovered to their pre-COVID levels.[6]

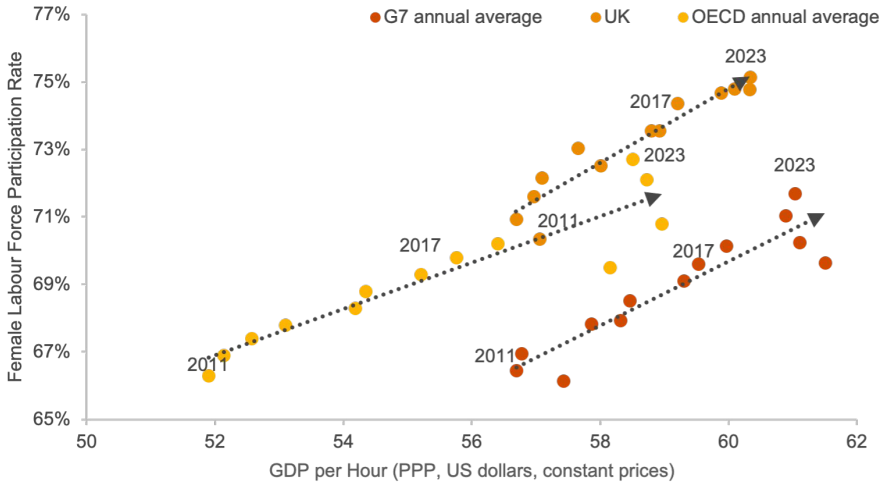
To assess the strength of this relationship and estimate the extent to which changes in female participation have contributed to productivity for each of these groups, we conducted an econometric analysis of the relationship between changes in female participation rates and GDP per hour worked. The results from this analysis have been presented in the rest of this section.

In 2023, the UK had a female labour force participation rate of

74.8%

compared to 72.7% and 71.7% in the OECD and G7, respectively.

Figure 2b: Female labour force participation/GDP per hour hour (2011-2023)



Outlining our econometric approach

Using 2011 - 23 data on the 33 OECD countries included in the Index, we conducted a panel regression analysis to quantify the impact of female participation on productivity. Our approach involved five key steps, which are outlined below.

Literature review

Conducted desk based research on the estimated productivity return from gender equality and the associated methods used

Impact pathways

Identified how each WiW indicator can affect productivity, to identify key impact channels and control variables

Data collection

Collected data from a variety of sources including the OECD, IMF, and the World Bank

Panel regression

Regression in R to estimate the impact of female participation on productivity, measured by GDP per hour worked

Independent variable: female participation

Control variables: education | inflation | investment | urbanisation | sectoral composition | social expenditure | innovation

GDP analysis

Calculated the subsequent impact on GDP driven by the rise in productivity

Understanding the impacts of female participation on productivity

To set the stage for our econometric analysis, we conducted a comprehensive literature review to explore the impact of integrating women more fully into the labour market on economic growth and productivity. By examining existing research, we identified key mechanisms through which gender equality influences productivity and economic expansion. Notably, recent OECD estimates suggest that eliminating disparities in labour force participation could boost GDP by an average of 9.2% across OECD countries by 2060.[7] Drawing from this review, we developed an impact pathway across all five WiW indicators, pinpointing eight critical channels of influence, as detailed in the Technical Appendix.

Our longitudinal productivity analysis, outlined on slide 22, seeks to quantify the impact of increased female participation on productivity through two main channels: labour supply and workplace diversity. An expanded labour supply naturally drives economic growth, while a diverse workplace fosters innovation and creativity, amplifying this effect. Women contribute unique skills and perspectives that complement those of men, enhancing both production and innovation (IMF, 2018; Turban et al., 2019).

In the rest of this section, we present our findings, providing compelling evidence of the positive impact of gender equality on productivity across the OECD, G7, and the UK. Our report highlights the importance of further exploring this relationship and continuing efforts to address gender inequality.

While our research seeks to estimate the observable impacts of integrating women more fully into the economy, further analysis is needed to fully estimate the multifaceted benefits. Greater integration of women can not only boost productivity and growth but also enrich economic diversity, reduce income inequality, enhance adaptability to demographic shifts, and strengthen the overall skills base. An overview of relevant literature can be found in the Technical Appendix.

> “Our analysis seeks to quantify the impact of increased female participation on productivity through two channels: labour supply and workplace diversity. By increasing the available pool of talent and its allocation in the workforce, these factors increase productivity and result in GDP growth.”

* Key channels of impact for all five Women in Work indicators were considered to understand their impacts on productivity. These have been included in the Technical Appendix.

Scenario 1: Improvement in female participation over the WiW Index period (2011-2023) contributed £6.2bn per year to UK GDP

Our analysis focused on quantifying the impact of female participation on productivity and GDP across three geographies: the OECD, the G7 and the UK. We estimated this impact in terms of three scenarios:

1. **Impact over WiW index period:** The contribution of improvement in female participation on productivity and GDP to date (over 2011-23)
2. **Impact of closing the gender gap**: The impact of achieving equitable participation rates between women and men by 2045 on productivity and GDP
3. **Forecast impact to 2030:** The impact of continuing progress made in female participation rates between 2011-23 up to 2030 on productivity and GDP

Our regression analysis was undertaken on the basis of the OECD average performance. Improvement in female participation over 2011 - 2023 revealed a productivity uplift of 0.30% per annum or 3.59% across the whole period. This uplift was applied to the average GDP of the G7 and the GDP of the UK to estimate productivity impacts for these groups.

UK
Applying the 0.30% increase in productivity to UK GDP and employment statistics to obtain an estimate of GDP impact for the UK reveals that improvement in female participation over 2011-23 contributed to an increase in GDP of approximately £6.2 billion ($7.8 billion) per annum.

OECD
To obtain an estimate of the impact of increased female participation on GDP for the OECD, we applied the productivity uplift to average GDP for the OECD countries. This productivity uplift translates to a contribution to GDP of approximately $4.5 billion per annum.

G7
We find that improvement in female participation over 2011-23 contributed to an increase in GDP of approximately $15.2 billion per annum for the average G7 country. The greater impact on the G7 reflects the larger scale of the economies and higher baseline productivity.

Figure 2c: Contribution of improvement in female participation between 2011-23 to UK productivity and GDP (per annum, 2023 GBP/USD)

UK productivity and GDP (per annum, 2023 GBP)

UK

% increase in productivity	Increase in GDP
0.30%	£6.2bn ($7.8bn)

Table 2a: OECD, G7 productivity and GDP (per annum, 2023 USD)

	% increase in productivity	Increase in GDP
OECD average	0.30%	$4.5bn
G7 average	0.30%	$15.2bn

*We only include our central estimate of impact on GDP and productivity in the main section of the report. However, we identified the following ranges for each impact: percentage increase in productivity - all geographies: 0.13% to 0.47%; increase in GDP - OECD: $2.0bn to $7.1bn, G7: $6.8bn to $23.7bn, UK: $3.5bn to $12.3bn. More detail can be found in Technical Appendix.

Scenario 2: Closing the gap between male and female participation by 2045 could contribute an additional £4.7bn per year to UK GDP

We find that closing the gap between male female participation over the next 20 years could contribute to a productivity uplift of 0.22% per annum across all 33 OECD countries on average, leading to a total productivity uplift of 4.46% across the whole period. This uplift was applied to the average GDP of the G7 and the GDP of the UK to estimate productivity impacts for these groups.

UK
We find that the estimated GDP impact for the UK for closing the gap between male and female participation would lead to an increase in GDP of approximately £4.7 billion ($5.9 billion) per annum.

OECD
We estimate that the productivity uplift of 0.22% translates to an increase in GDP of approximately $3.4 billion per annum for the average OECD country.

G7
Closing the gap between male and female participation would lead to an increase in GDP of approximately $11.2 billion per annum for the average G7 country.

Figure 2d: Impact of equating male and female participation on UK, OECD, G7 productivity and GDP (per annum, 2023 GBP/USD)

UK productivity and GDP (per annum, 2023 GBP)

% increase in productivity	Increase in GDP
0.22%	£4.7bn ($5.9bn)

Table 2b: OECD, G7 productivity and GDP (per annum, 2023 USD)

	% increase in productivity	Increase in GDP
OECD average	0.22%	$3.4bn
G7 average	0.22%	$11.2bn

*We only include our central estimate of impact on GDP and productivity in the main section of the report. However, we identified the following ranges for each impact: percentage increase in productivity - all geographies: 0.10% to 0.35%; increase in GDP - OECD: $1.5bn to $5.3bn, G7: $5.1bn to $17.7bn, UK: $2.6bn to $9.2bn. More detail can be found in Technical Appendix.

Scenario 3: Assuming continuing progress on female participation rates of 0.8% per year over the next five years could contribute an additional £43.5bn to UK GDP by 2030

We find that assuming continuing progress on female participation rates is sustained up to 2030, this could contribute to a productivity uplift of 0.30% per annum across all 33 OECD countries on average, leading to a total productivity uplift of 2.08% across the whole period. This estimated productivity uplift was applied to GDP per annum of each of the three groups to estimate GDP impact.

UK
We find that an improvement in female participation rates until 2030 could lead to an increase in GDP of approximately £6.2 billion ($7.8 billion) per annum, equating to an aggregate increase in GDP of approximately **£43.5 billion ($54.7 billion by) 2030.**

OECD
Applying this 0.30% increase in productivity to average OECD GDP translates to an increase in GDP of approximately $4.5 billion per annum for the average OECD country.

G7
Finally for the G7 we find that the productivity uplift of 0.30% from continual improvements in female participation rates till 2030 would lead to an increase in GDP of approximately $15.1 billion per annum for the average G7 country.

Figure 2e: Impact of equating male and female participation on UK, OECD and G7 productivity including GDP (per annum, 2023 GBP/USD)

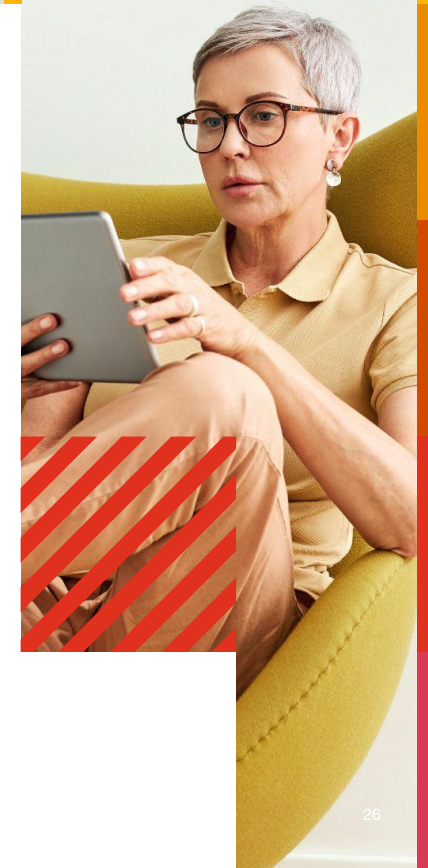
UK productivity and GDP (per annum, 2023 GBP)

% increase in productivity	Increase in GDP
0.30%	£6.2bn ($7.8bn)

Table 2c: OECD, G7 productivity and GDP (per annum, 2023 USD)

	% increase in productivity	Increase in GDP
OECD average	0.30%	$4.5bn
G7 average	0.30%	$15.1bn

*We only include our central estimate of impact on GDP and productivity in the main section of the report. However, we identified the following ranges for each impact: percentage increase in productivity - all geographies: 0.13% to 0.46%; increase in GDP - OECD: $2.0bn to $7.0bn, G7: $6.8bn to $23.5bn, UK: $3.5bn to $12.2bn. More detail can be found in Technical Appendix.



3

Technical Appendix

Definitions and terminology

OECD:

For the purposes of this report, this refers to the 33 OECD countries included in the PwC Women in Work Index. This consists of all OECD members except for Colombia, Costa Rica, Latvia, Lithuania and Turkey.

OECD average:

This refers to the average taken across all 33 OECD countries in the Women in Work Index and applies where we discuss labour market indicators in Section 1. It does not adjust for the population size of different OECD countries.

G7:

This refers to the Group of Seven, which is an informal grouping of seven of the world's most advanced economies, including Canada, France, Germany, Italy, Japan, the UK, and the US. For purposes of this report, we do not examine the European Union, although this is typically considered a 'non-enumerated member'.

Panel regression:

This refers to a statistical method that analyses changes over time for multiple entities; in the case of the special article, these entities are OECD countries. This form of regression allows for controlling unobserved, time-invariant factors.

Control variable:

This refers to a variable that is included in a statistical model alongside the primary independent variable of interest. Its purpose is to eliminate potential confounding effects that could affect the relationship between the main independent and dependent variables.

GDP:

GDP, or Gross Domestic Product, refers to the total monetary value of all goods and services produced within a country's borders in a specific time period, usually measured annually or quarterly. It is a key indicator used to gauge the economic health of a country.

GDP per hour:

GDP per hour, often referred to as labour productivity, indicates how efficiently labour is used in the production process by showing the average amount of goods and services produced for each hour of labour. Higher GDP per hour suggests greater productivity, meaning that more value is being generated by each hour of work.

Gender and sex:

The Authors would like to acknowledge the limitation of the report in its focus on binary gender identities ('men' and 'women'), which excludes analysis of the employment outcomes and experiences of those whose gender identity does not sit comfortably within these two categories. This is mainly due to a lack of available data for other gender identities. Furthermore, in cases where data sources have been disaggregated by 'sex' rather than 'gender', the assumption has been applied that a person's gender identity is aligned with their biological sex characteristics (e.g. we have used 'female' and 'women' interchangeably in some places), however we recognise that the two are not equivalent and that this is not always the case.

Changes to PwC's Women in Work Index results for 2022

Due to retrospective changes to the OECD and Eurostat gender pay gap data used in the Index, the Index scores and rankings for 2022 have changed compared to those reported in the PwC Women in Work Index 2024 (last year's report).

At the time of publication of the 2024 report, actual data for the gender pay gap for 2022 was not available for the majority of countries in the Index. Therefore, we estimated the 2022 gender pay gap by linearly extrapolating historical data. At the time of publication of the Index this year, actual gender pay gap data for 2022 is now available for all OECD countries. We have revised and updated the 2022 estimated gender pay gap with actual data resulting in changes to the Index score and rank in 2022 for a number of countries in the Index.

Changes to the rankings of each country as a result of the update to the gender pay gap data can be seen in the adjacent table.

- France's ranking improved the most, moving four places from 24th to 20th. This was due to a decrease in the gender pay gap by 1.8 percentage points from 15.7% to 13.9% following the revision.
- Poland's ranking changed by 5 places, but unlike France's, its ranking was revised down, from 6th to 11th place. This was due to the gender pay gap increasing by 2.9 percentage points from 4.9% to 7.8%. Israel's ranking was also revised down by 4 places.
- Germany, New Zealand and Portugal saw their ranking rise by two places whilst Czechia and Hungary's ranking saw a decline of two places following the revisions.
- Australia, Denmark, Finland, Iceland, Italy, and the Netherlands saw their ranking rise by one place whilst Greece, Luxembourg, Slovenia and Sweden's ranking saw a decline of one place following the revisions.
- The UK's ranking improved by one place and its gender pay gap decreased by 0.5 percentage points from 14.5% to 14% following the revision.

Figure A1: Changes to PwC's Women in Work Index results for 2022

Country	2022 (old)	2022 (updated)	Change in ranking
Australia	10	9	-1
Austria	26	26	0
Belgium	13	13	0
Canada	18	18	0
Chile	31	31	0
Czechia	21	23	2
Denmark	7	6	-1
Estonia	14	14	0
Finland	11	10	-1
France	24	20	-4
Germany	23	21	-2
Greece	29	30	1
Hungary	15	17	2
Iceland	2	1	-1
Ireland	12	12	0
Israel	20	24	4
Italy	30	29	-1
Japan	28	28	0
Korea	32	32	0
Luxembourg	1	2	1
Mexico	33	33	0
Netherlands	16	15	-1
New Zealand	5	3	-2
Norway	8	8	0
Poland	6	11	5
Portugal	9	7	-2
Slovak Republic	19	19	0
Slovenia	3	4	1
Spain	27	27	0
Sweden	4	5	1
Switzerland	22	22	0
United Kingdom	17	16	-1
United States	25	25	0

Index methodology - Variables included in scoring

Our Index includes all OECD member countries except for Colombia, Costa Rica, Latvia, Lithuania and Turkey. The OECD average refers to the average taken across these 33 countries and applies where we discuss data relating to the main Index results and potential economics grains. Population size for different countries is not adjusted for.

Variable	Weight %	Factor	Rationale	Dataset(s) used
Gender pay gap	25	Constructed by subtracting median female income from median male income and expressing it relative to median male income. Wider pay gap penalised.	Earnings equality underpins the fundamental principle of equal pay for equal work.	**Decile ratios of gross earnings, OECD** Series: Gender wage gap Frequency: Annual **Gender pay gap in unadjusted form by NACE Rev. 2 activity – structure of earnings survey methodology, Eurostat** Frequency: Annual
Female labour force participation rate	25	Higher participation rates given higher score	Female economic participation is one of the cornerstones of economic empowerment, which is a factor of the level of skills and education of women, conducive workplace conditions and broader cultural attitudes outside the workplace (e.g. towards shared childcare and distribution of labour at home).	**Labour force statistics by sex and age – indicators, OECD** Series: Labour force Frequency: Annual Age: 15 to 64
Gap between female and male labour force participation rates	20	Higher female participation rate relative to male participation rate given higher score	Equality in participation rates reflect equal opportunities to seek and access employment opportunities in the workplace.	**Labour force statistics by sex and age – indicators, OECD** Series: Labour force Frequency: Annual Age: 15 to 64
Female unemployment rate	20	Higher unemployment penalised	The female unemployment rate reflects the economic vulnerability of women. Being unemployed can have longer-term impacts in the form of skills erosion, declining pension contributions and increased reliance on benefits.	**Labour force statistics by sex and age – indicators, OECD** Series: Unemployment rate Frequency: Annual Age: 15 to 64
Share of female employees in full-time employment	10	Higher share of full-time employment given higher score	The tendency for part-time employment may adversely affect earnings, pensions and job security. However, this factor is given a lower weight in the Index since some women may prefer part-time jobs to fit flexibly with caring roles. This variable only measures the share for women and does not compare with the share of male employees in full-time employment.	**Incidence of FTPT employment – common definition, OECD** Series: Full-time employment Frequency: Annual Age: 15 to 64 **Household data, US Bureau of Labour Statistics** Series: Employed and unemployed full- and part-time workers by age, sex, race, and Hispanic or Latino ethnicity Frequency: Annual Age: 16 years and over

Data sources - UK regional data

We have applied the same methodology as for the main Index to construct the UK regional Index. This includes using the same weights and factors.

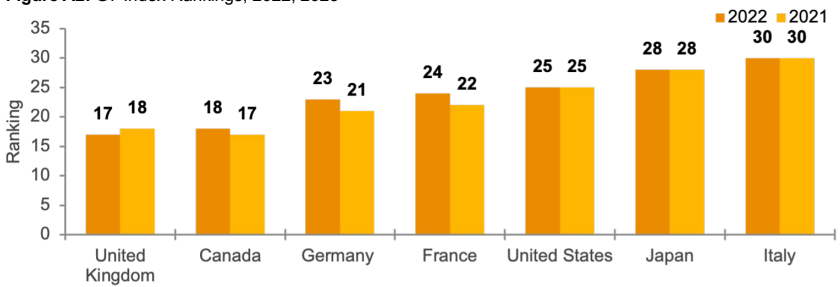
Indicator	Country coverage	Year	Source	Adjustments and assumptions
Female labour force participation rate	UK	2022, 2023	Annual Population Survey, Office of National Statistics Labour Force Survey, Office of National Statistics	
Gap in male and female labour force participation rates	UK	2022, 2023	Annual Population Survey, Office of National Statistics Labour Force Survey, Office of National Statistics	
Female unemployment rate	UK	2022, 2023	Annual Population Survey, Office of National Statistics Labour Force Survey, Office of National Statistics	
Female full-time employment rate	UK	2022, 2023	Annual Population Survey, Office of National Statistics	
Gender pay gap	UK	2022, 2023	Annual Survey of Hours and Earnings, Office of National Statistics Dataset: Gender Pay Gap	Full-time employees only
Median Weekly Earnings	UK	2022, 2023	Annual Survey of Hours and Earnings, Office of National Statistics Dataset: Time series of selected estimates, Table 2	Full-time employees only, excluding overtime, by sex
Median Hourly Earnings	UK	2022, 2023	Annual Survey of Hours and Earnings, Office of National Statistics Dataset: Time series of selected estimates, Table 2	Full-time employees only, excluding overtime, by sex
Weekly Paid Hours	UK	2022, 2023	Annual Survey of Hours and Earnings, Office of National Statistics Dataset: Time series of selected estimates, Table 2	Full-time employees only, excluding overtime, by sex

Index Spotlight: Exploring the driving factors behind index rankings in the G7, the UK and the US

The UK's Performance vs the G7

- Canada has surpassed the UK as the top-performing G7 economy in the PwC Women in Work Index, improving its position from 18th in 2022 to 17th in 2023. Driven by a 1.2-point increase in Canada's Index score, reaching 70.8, due to a reduced gender wage gap and higher female full-time participation. The UK remains closely competitive, trailing Canada by just 0.1 points in the Index.
- All the other G7 countries have either maintained their position on the Index between 2022 and 2023, or in the case of Germany and France, improved their rank.
- The G7 countries are positioned in the lower half of global rankings, underscoring persistent challenges in achieving gender equality in the workplace. While these nations tend to fall below the OECD average across most indicators, their female unemployment rates are comparatively lower. This suggests that although fewer women are entering the workforce, a higher proportion of these women will be employed. It is important to note that the the G7 countries have larger individual populations on average than the OECD average, so this can contribute to the displayed dynamics.
- Across the G7, women are more likely to work in low-paying occupations. For example, 90% of employees in the long-term and elderly care sector are women, and these employees are paid two thirds of the average economy-wide hourly wage.[8]
- Across the G7, the average cost of childcare is approximately 10% of an average income. In comparison, the OECD average is 6.5%.

Figure A2: G7 Index Rankings, 2022, 2023



PwC Women in Work 2025

United Kingdom - Ranked 18th on the Index

- The UK's performance in the Women in Work Index has varied since 2011, averaging 16th place. It peaked at 10th in 2020, possibly due to the COVID-19 furlough scheme, but fell to 18th by 2023 as other countries improved their workforce participation rates.
- In the UK, the sectors with the most women in employment are health and social work (accounting for 21% of all jobs held by women), the wholesale and retail trade (12%) and education (12%).[9]
- Childcare in the UK is moderately expensive, with childcare costs comprising approximately 19% of average income.[10]
- Additionally, over 1.5 million women have left the workforce due to long-term illness, rising by 48% in five years, mainly due to musculoskeletal and mental health issues. Highlighting more need for continuing efforts to enhance gender equality and support women's workforce participation.[11]

United States - Ranked 25th on the Index

- Since ranking 18th in the Women in Work Index in 2011, the United States has struggled to progress, holding steady at 25th for the past three years. This stagnation stems from ongoing issues in female labour force participation (ranked 26th), participation rate gap (25th), and gender pay gap (24th).
- Nearly 60% of women work in low-paid, low-productivity sectors such as education, health, leisure, hospitality, and retail, which were heavily impacted by the pandemic. Those without college degrees were particularly affected.[12]
- The high cost of childcare—consuming 32% of average income—often forces families to opt for one parent, usually the mother, to stay home.

Table A1: UK and US performance on the Women in Work Index, 2023

	United Kingdom		United States	
	Value (2023)	Rank	Value (2023)	Rank
Female labour force participation rate	74.8%	15th	69.9%	26th
Participation rate gap	7.8%	19th	9.6%	25th
Female unemployment rate	3.5%	10th*	3.5%	10th*
Female full time employment rate	68.9%	27th	77.5%	18th
Gender pay gap	13.3%	15th	16.4%	24th
Index score	70.7	18th	65.8	25th

*Ranked the same as both unemployment rates have a value of 3.5% exactly (due to rounding in the OECD dataset used).

Index Spotlight: Exploring the driving factors behind index rankings across the highest and lowest performing OECD countries

Iceland - Ranked 1st on the Index

- Since the launch of the Index, Iceland has been a standout performer, consistently ranking among the top five countries. In 2023, Iceland regained the top spot, a position it previously held for eight consecutive years from 2012 to 2019 inclusive. This achievement reflects its continued focus on workforce gender equality, highlighted by Iceland holding the highest female participation rate in the OECD.
- Iceland invests 1.7% of its GDP in early childhood education, compared to the OECD average of 0.8%. Icelandic families spend just 5% of their income on childcare, contributing to a 96% enrollment rate for children aged three to five.[13]

New Zealand - Ranked 2nd on the Index

- New Zealand has consistently ranked among the top five countries on the Index, reaching 2nd place in 2023, largely due to proactive government initiatives in pay equity and parental support.
- The Equal Pay Amendment Act 2020 has made it easier to address pay equity claims, helping to ensure fair wages, especially in fields like healthcare and education where women are the majority.
- Childcare in New Zealand is among the most expensive childcare in the OECD, with childcare costs comprising approximately 37% of average income.

Korea - Ranked 32nd on the Index

- Korea is ranked second-lowest on the Index and has the widest gender pay gap.
- In 2023, the country's birth rate reached a global low of 0.72, influenced by high child bearing costs. Average income spent on private childcare is 5% but private education is strongly encouraged - this leads to 7.8 times the country's GDP per capita being spent on childcare/education on average.These financial pressures, along with economic uncertainty, tend to discourage family planning.[14]
- Additionally, hierarchical workplace structures contribute to gender disparities, often leading women to choose between career advancement and family responsibilities. This situation can result in a "child earnings penalty," where many married women with children leave the workforce.[15]

Mexico - Ranked 33rd on the Index

- Mexico is the lowest-ranking country on the Index, and is the lowest ranked for both the female labour force participation rate and the participation rate gap.
- Workplace harassment and violence are significant issues, with 23% of women experiencing harassment and 14.4% facing sexual violence, predominantly from colleagues and supervisors.[16] Gender biases and structural inequalities further hinder progress, as 24% of young women report workplace discrimination. These factors in combination reduce female participation.[17]
- Mexico has relatively inexpensive childcare. On average, childcare costs are approximately 7-15% of minimum wage income.

Table A2: Performance on the Women in Work Index, 2025

	Iceland		New Zealand		Korea		Mexico	
	Value (2023)	Rank	Value (2023)	Rank	Value (2023)	Rank	Value (2023)	Rank
Female labour force participation rate	83.7%	1	79.5%	6	63.1%	29	51.2%	33
Participation rate gap	5.8%	9	7.6%	17	15.9%	30	30.5%	33
Female unemployment rate	2.9%	3	4.2%	16	2.7%	2	2.9%	3
Female full time employment rate	77.7%	17	73.1%	24	81.6%	12	75.1%	21
Gender pay gap	10.8%	11	4.2%	3	29.3%	33	15.0%	19
Index score	81.7	1	81.3	2	49.1	32	43.9	33

Regional Index Spotlight: Exploring the driving factors behind index rankings across regions

Scotland - Ranked 1st on the Index

- **No change in rank** - Scotland retained the top spot in the ranking. **Its index score improved by approximately 1 point** from 46.2 to 47.1.
- Scotland had the **lowest participation rate gap of 5.1%**, although this has worsened from 4.4% in 2022.
- The **gender pay gap has also improved by 3.5pp** from 11.8% to 8.3% between 2022 and 2023.
- The **female full-time employment rate worsened by 1pp**, from 58.5% to 57.5%, and the **female unemployment rate worsened slightly by 0.2pp**, from 2.9% to 3.1%.

Northern Ireland - Ranked 2nd on the Index

- Moved **up 2 places** in the ranking from 4th to 2nd. **Northern Ireland's index score improved by 3.3 points** from 42.8 to 46 between 2022 and 2023.
- Northern Ireland had the **lowest female unemployment rate of 1.6%**, which has slightly improved (0.1pp) since 2022's value of 1.7%, and the **lowest gender pay gap of 7.5%** which has stayed the same since 2022.
- However, Northern Ireland also has the **lowest female labour force participation rate of 71.8%**, which has improved (2.1pp) since 2022's value of 69.7%.

London - Ranked 11th on the Index

- Moved **down 3 places** in the ranking from 8th to 11th. **London's index score worsened by 2 points** from 38.8 to 36.8 between 2022 and 2023.
- London had **deteriorating performance across all five indicators**. However, it had **the highest female full-time employment rate of 64%**, although this had decreased by 0.9pp from 64.9%.
- The **gender pay gap widened by 1.8pp** from 12.5% to 14.3%, and the **female participation rate decreased by 1pp**, from 75.4% to 74.4%.

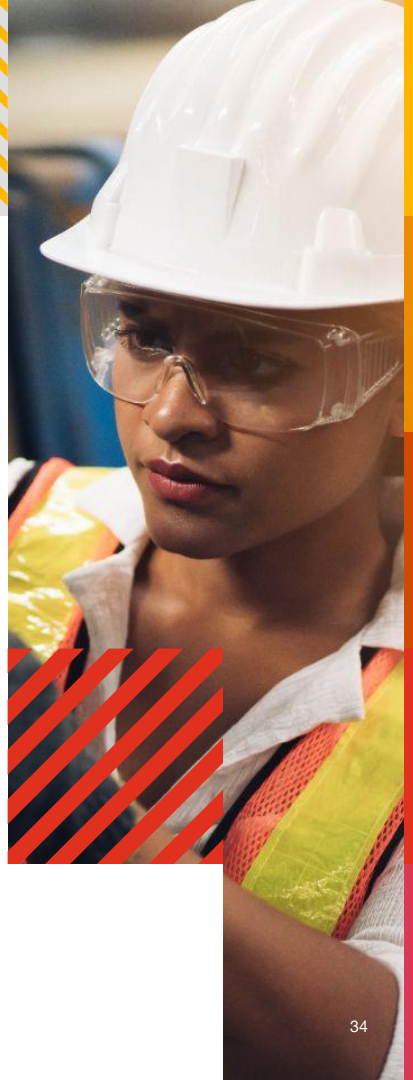


Table A1: Performance on the regional Women in Work Index, 2023

	Scotland		Northern Ireland		London	
	Value (2023)	Rank	Value (2023)	Rank	Value (2023)	Rank
Female labour force participation rate	75.0%	4	71.8%	12	74.4%	5
Participation rate gap	5.1%	1	7.0%	5	8.4%	12
Female unemployment rate	3.1%	5	1.6%	1	5.2%	12
Female full time employment rate	57.5%	8	60.7%	4	64.0%	1
Gender pay gap	8.3%	2	7.5%	1	14.3%	6
Index score	47.1	1	46.0	2	36.8	11

Regional Index Spotlight: Exploring the driving factors behind index rankings across regions (ctd.)

East Midlands - Ranked 12th on the Index

- Moved **down 1 place** in the ranking from 11th to 12th. **The East Midlands' index score worsened by 6.3 points** from 35.9 to 29.6 between 2022 and 2023.
- The East Midlands had the **worst participation rate gap of 12.7%**, and this worsened by 4.5pp from 8.2% in 2022.
- The **female participation rate also decreased by 1.3pp**, from 73.4% to 72.1%. However, the **gender pay gap improved by 1.2pp,** from 17.1% to 15.9%

North East - Ranked 4th with biggest improvement

- Moved **up 6 places** in the ranking from 10th to 4th - this was **the largest movement** of all the regions. **The North East's index score improved by 5.6 points** from 36.6 to 42.2 between 2022 and 2023.
- In particular, **its gender pay gap improved by 3.5pp** between 2022 and 2023, from 13.7% to 10.2%.
- The **female participation rate also increased by 1.6pp**, from 71.2% to 72.8%, and the **female unemployment rate improved by 1.4pp**, from 4.6% to 3.2%

East - Ranked 8th with biggest fall

- Moved **down 5 places** in the ranking from 3rd to 8th. **The East's index score worsened by 5.5 points** from 43.4 to 38 between 2022 and 2023.
- The East had **deteriorating performance across all five indicators**. Notably, the **female participation rate fell by 0.7pp** from 77% to 76.4%, the **gender pay gap widened by 1.2pp** from 14% to 15.2%, and the **female unemployment rate worsened by 1.4pp** from 2.6% to 4%.

Table A1: Performance on the regional Women in Work Index, 2023

	East Midlands		North East		East	
	Value (2023)	Rank	Value (2023)	Rank	Value (2023)	Rank
Female labour force participation rate	72.1%	11	72.8%	10	76.4%	3
Participation rate gap	12.7%	12	6.1%	2	8.4%	10
Female unemployment rate	3.4%	7	3.2%	6	4.0%	11
Female full time employment rate	57.8%	7	56.6%	10	57.0%	9
Gender pay gap	15.9%	11	10.2%	3	15.2%	8
Index score	29.6	12	42.2	4	38.0	8

Throughout a woman's lifespan, she experiences different stages of life that impact her ability to participate in the workforce.

1 Education and Early Career (age 15-24)

This stage of women's working life sets the stage for their employability and earning potential. Since higher educational attainment equips women with the qualifications and skills needed for better-paying jobs, thus increasing their employability and participation in the workforce later in their careers. However, this often comes at the cost of reduced participation during the educational years, as time is dedicated to gaining qualifications. Gender disparities in fields of study, such as underrepresentation in STEM (Science, Technology, Engineering, and Mathematics), can lead to occupational segregation, where women are concentrated in lower-paying industries. Early career roles frequently set the trajectory for future earnings, and disparities at this stage can have long-term effects on income inequality.

Expectations can be a self-fulfilling prophecy - approximately 31% of core STEM students in Higher Education in the UK are female or non-binary, with the remaining 69% being male.[18] However, on average, women tend to achieve higher levels of education: in the UK, 55% of women have taken part in some form of Higher Education, compared to 51% of men. Prevailing industry culture can also deter young women from pursuing certain career paths. A 2008 study revealed that 52% of highly qualified women in STEM roles left their jobs due to unwelcoming work environments and intense job demands, and a further 63% of women in science, engineering and technology fields reported experiencing gender discrimination or sexual harassment.[19] Overall, societal conditioning from early childhood onwards combined with unfavourable work environments has a dampening effect on female labour force participation through discouraging women from entering and remaining in untraditionally feminine roles.

2 Career Establishment/ Family Formation and Childbearing (age 25-34)

Women's careers frequently encounter early disruptions due to maternity leave and the need to work part-time to manage family responsibilities. These interruptions can create significant barriers to re-entering the workforce, often leading to underemployment or a transition to lower-paying jobs that offer more flexibility. Such outcomes perpetuate occupational segregation and widen the gender pay gap, as women may prioritise work-life balance over higher-paying positions. Implementing supportive workplace policies—including flexible work arrangements, comprehensive parental leave, and affordable childcare—can empower women to maintain continuous employment after childbearing, ultimately fostering greater gender equality in the workplace.

There is an increasing tendency for parental leave take-up among both mothers and fathers. Despite these advances, mothers still account for a substantial majority of parental leave usage; for example in 2020-2021, mothers in Iceland and Sweden used 70% of parental leave.[20] In the United Kingdom, according to a report by the CIPD, which surveyed a sample of organisations, there has been a decline in parental leave uptake since 2016. Between 2020 and 2022, 85% of surveyed organisations reported that no new fathers had taken shared parental leave, and 88% indicated that no new mothers had done so.[21] The overall impact of introducing measures that facilitate family formation on female labour force participation depends on their take-up rate, which lags behind in many countries.

3 Career Advancement/ Caregiving responsibilities (age 35-44)

During this period, women often encounter intensified caregiving responsibilities, not only for children but also for aging parents. This phase frequently aligns with critical career advancement opportunities. However, the demands of caregiving can lead to career interruptions or transitions to part-time work, which reduce overall work experience and slow career progression. These interruptions affect not only immediate earnings but also limit opportunities for skill development and access to promotions and leadership roles, perpetuating long-term income disparities. As in earlier stages, women may shift to lower-paying roles that offer greater flexibility, further exacerbating occupational segregation.

Childcare and flexible working arrangements play a critical role in supporting women with caregiving responsibilities throughout their careers. Work-from-home policies are an example of an adopted flexible working arrangement: according to the Global Survey of Working Arrangements, globally, full-time employees worked from home 0.9 days per week on average in Spring 2023.[22] Other examples include flextime, where employers provide flexibility in start and finish times to help with school drop-offs and pick-ups (29% of UK employers currently do so), and other flexible working options such as job-share, term-time working and compressed workweeks (28% of employers proactively promote these).[23] With such adjustments in place, childcare responsibilities are less likely to force women out of the workforce, improving female labour force participation.

Throughout a woman's lifespan, she experiences different stages of life that impact her ability to participate in the workforce (ctd.)

4 Mid-Career and Progression/ Menopause (age 45-54)

Typically occurring between ages 45 and 55, menopause can bring a range of physical and emotional symptoms, including hot flashes, sleep disturbances, mood swings, and cognitive changes, all of which may impact work performance and attendance. These challenges can lead to increased absenteeism or decisions to reduce working hours, thereby affecting career progression and earnings.

Findings reveal that 10% of women leave their jobs due to menopausal symptoms, and 67% report these symptoms negatively affect their work.[24] Furthermore, the stigma and lack of open dialogue about menopause in many workplaces can prevent women from seeking necessary accommodations or support. Without adequate workplace understanding or support, these issues can be exacerbated, making it difficult for women to maintain their employment status or pursue promotions.Over half of the women surveyed by CIPD have taken sick leave due to symptoms, with 20% experiencing negative impacts on career progression and 6% actually leaving work due to insufficient support.

5 Approaching Retirement and Later Life/Pension Gap (55+)

Many women choose to leave the workforce before reaching retirement age due to caregiving responsibilities or health issues. These early exits can lead to reduced lifetime earnings and savings, exacerbating the pension gap—where women typically receive lower retirement benefits than men. This gap is further widened by career interruptions and factors such as previous part-time work, which diminish pension contributions. The average UK pension pot for men and women over 50 is approximately £84,205 for men and £39,654 for women, meaning that the average men's pension pot is more than double that of a woman.[25]

Additionally, women generally have longer life expectancies, resulting in a greater need for financial resources in retirement. The interplay of these factors means that women face a higher risk of financial insecurity in later life. Across all measures of wealth excluding pension pots, women are approximately 10% worse off than men.[26] Therefore, the effects of gender stereotyping and discrimination on labour force participation that a woman experiences from her childhood persists into adulthood and eventually retirement.

6 Career Progression and Related Challenges (various)

Women often encounter a "glass ceiling" that restricts their access to leadership roles. Despite their qualifications, they may be overlooked for promotions due to unconscious biases and organisational cultures that favor traditional male leadership traits. Although gender equality in senior positions has improved, with the proportion of women in C-suite positions increasing from 17% in 2015 to 29% in 2024, there is still significant progress needed to achieve gender parity in management roles.[27] Additionally, previous career interruptions can make it difficult for women to sustain continuous long-term employment, further diminishing their competitiveness for these positions.

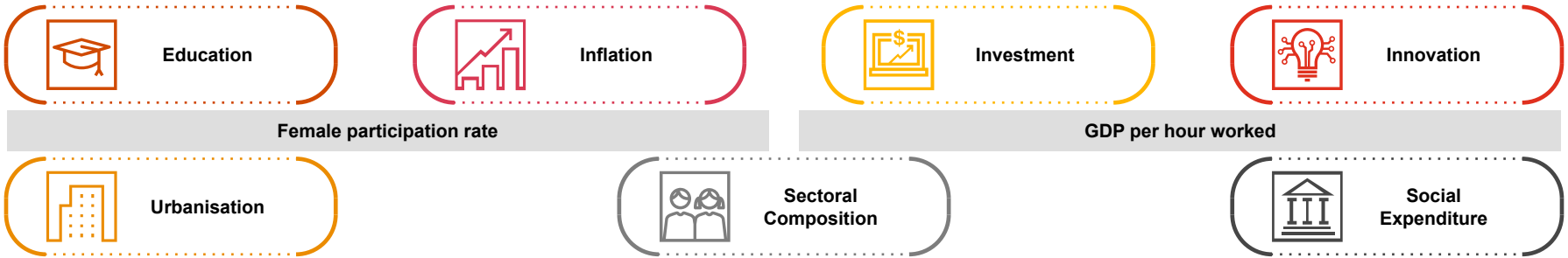
This underrepresentation in leadership roles contributes to the persistent gender pay gap, as higher-level positions typically offer greater compensation. Moreover, the stress of balancing professional and caregiving responsibilities can lead to burnout, affecting both physical and mental well-being, which may further impact women's labour force participation. Between 2017 and 2023, mental-health related absences increased by 300%, and in 2023, 69% of mental health leaves of absence were taken by women.[28] The Centre for Economics and Business Research estimates that the impact on the UK economy of female sick days (including for mental health) is a gross added value yearly loss of approximately £20.2bn[29]. Female labour force participation is negatively impacted as a result of these issues.

Methodology for productivity analysis

Our approach

Using 2011-23 data on the 33 OECD countries included in the Index, we ran a panel regression to quantify the impact of female participation, i.e. the independent variable, on productivity measured as GDP per hour worked, i.e. the dependent variable. Our approach involved the following six steps:

1. **Literature review:** we first conducted a literature review of previously published studies that quantified the impact of gender equality on economic growth and productivity. The literature review focused on the estimated productivity return to gender equality and assessing the methodologies used.
2. **Impact pathways:** We identified different pathways through which each of the Women in Work index indicators, including female participation, can affect productivity. This allowed us to understand how the indicators interplay with other country-specific factors (e.g. education, innovation) in influencing productivity. We then included these other factors as control variables in our regression to isolate the impact of gender equality on productivity. The controls included were: education, inflation, investment, urbanisation, sectoral composition, social expenditure and innovation.
3. **Data collection:** We undertook a data collection exercise for each of the dependent, independent and control variables. We collected data from a variety of sources, including the OECD, IMF and World Bank. When cleaning the data, we made some adjustments to account for data limitations. We then converted the data to panel format in order to input it into the regression model.
4. **Panel regression:** We ran the panel regression in R to estimate the impact of female participation on productivity. We used a two-way fixed effects model which controls for both the unobserved, time-invariant characteristics of each country (e.g. cultural differences, historical gender policies) and time-specific shocks affecting all countries at a given time (e.g., global recessions, policy changes, pandemics) by demeaning the data.
5. **We used the output to estimate the impact on productivity of:** 1) the improvement in female participation between 2011-23; 2) equating male and female participation; 3) assuming female participation keeps improving up until 2030 at the average pace seen in 2011-23.
6. **GDP analysis:** We calculated the subsequent impact on GDP driven by the uplift in productivity. To do this, we determined the initial GDP by multiplying GDP per hour by the average annual hours worked per worker and the total employed population. To calculate the GDP with a productivity uplift, we applied a productivity increase to the GDP per hour and followed the same multiplication process. We then estimated the impact on GDP by finding the difference between the initial GDP and the GDP with the productivity uplift, highlighting the economic effect of increased productivity.



Data sources - Productivity analysis

We use data from various sources in our productivity analysis in Section 2.

Variable	Country coverage	Year	Source
GDP per hour worked	33 OECD countries included in the WiW Index	2011 - 2023	OECD
Adult education level - tertiary	33 OECD countries included in the WiW Index	2011 - 2023	OECD
Employment rate	33 OECD countries included in the WiW Index	2011 - 2023	OECD
Total investment (percentage of GDP)	33 OECD countries included in the WiW Index	2011 - 2023	IMF
Urban population	33 OECD countries included in the WiW Index	2011 - 2023	World Bank
Inflation	33 OECD countries included in the WiW Index	2011 - 2023	IMF
Social expenditure	33 OECD countries included in the WiW Index	2011 - 2023	OECD
Global Innovation Index	33 OECD countries included in the WiW Index	2011 - 2023	World Intellectual Property Organisation
Service value added (percentage of GDP)	33 OECD countries included in the WiW Index	2011 - 2023	World Bank
Gross domestic product (GDP), constant prices	33 OECD countries included in the WiW Index	2023 - 2029	IMF
Average annual hours worked per worker	33 OECD countries included in the WiW Index	2011 - 2023	OECD
Employment rate	33 OECD countries included in the WiW Index	2011 - 2023	OECD
Population (15 to 64 years)	33 OECD countries included in the WiW Index	2011 - 2023	OECD

Key impact channels developed to understand the impact of the Women in Work indicators on productivity

WiW indicator	Key channels of impact	
1 Female participation Rate	a	Increased female participation increases labour supply (helping address labour shortages given demographic trends) increasing GDP growth.
	b	Increased female participation improves allocation of workers across occupations and economics sectors improving productivity and growth.
2 Female Unemployment Rate	C	Reducing female unemployment boosts productivity by expanding the labour force and leveraging diverse skills and perspectives, which enhances innovation and efficiency. Increased female employment also stimulates economic growth by raising household incomes and demand, contributing to a more dynamic and resilient economy.
3 Female Full-time Employment Rate	d	Full time employment is associated with greater productivity due to increased training and work opportunities.
	e	Full time employment results in greater opportunities for job mobility and progression compared to part-time employment.
	f	Full time employment is associated with higher earning occupations
4 Gender Wage Gap	g	Reducing the gender wage gap boosts productivity by increasing female labour force participation and job satisfaction, which expands the talent pool, enhances workplace diversity, and lowers turnover rates, leading to greater innovation and efficiency
5 Participation Rate Gap	h	Improved participation rate gaps signal a larger and more diverse pool of available labour that not only allows for production of more goods and services but also brings a wider range of skills, perspectives and ideas to the workplace that can enhance productivity.

Impact

Change in productivity

Literature review - WiW impact channels

We reviewed existing studies analysing the **relationship between WiW gender equality indicators and productivity**. Key findings include:

- Increases in labour supply from higher female labour force participation rate helps address labour shortages caused by demographic trends
- Female full-time employment rates reflect greater productivity through opportunities for training and higher earnings
- The gender wage gap can have conflicting effects on productivity by negatively affecting work motivation but also serving as a signal of profitability in export-oriented economies

WiW indicator	Key impact channels	Overview of findings
Female labour force participation rate	1. **Increased labour supply helps to address labour shortages from demographic trends:** by improving the female labour force participation rate and increasing labour supply, labour shortages caused by demographic trends seen in many countries such as ageing populations and/ or low fertility rates can be addressed. 2. **Improves allocation of workers:** a higher female labour force participation rate means the improved allocation of workers across occupations and economic sectors, improving productivity and growth.	**OECD - Effects of Reducing Gender Gaps in Education and Labour Force Participation on Economic Growth in the OECD (2012)[31]** A 50% decrease in the gender gap in labour force participation results in an average gain of 0.3 percentage points in the average annual growth rate in GDP per capita and 0.6 percentage points among OECD economies in the scenario that full convergence occurs by 2030. Countries with a larger gender gap and persistently low birth rates currently are expected to see the largest increase by 2030, as potential for growth is greater and the growth of the working age population becomes less restricted. They also find that between 17 and 20% of US economic growth between 1960 and 2008 is due to the improved allocation of underrepresented groups in the workforce, including women.
Female full-time employment rate	1. **Female full-time employment is associated with higher productivity:** due to increased training opportunities, as part-time workers are often excluded from advanced training, full-time employment is often more productive. In turn, this also results in greater opportunities for job mobility and progression.	**Munasinghe et al (2008)[32]:** As women (especially mothers) are less likely to be attached to their employers and jobs than men due to expectations of job interruptions in their life cycle, they're less likely to invest in firm-specific skills. They found that women received only half of the total hours of organisation-related training received by men. Therefore, investment in training would increase

Literature review - WiW impact channels (ctd.)

WiW indicator	Key impact channels	Overview of findings
Female full-time employment rate	2. **Full time employment is associated with higher earning occupations** (i.e. in white collar and professional occupations), so worker motivation would be higher as well as the opportunity cost of not working. Shortages in supply of quality part-time jobs affect productivity.	**Walby & Olsen (2002)[33]:** The occupational structure of the part-time sector is strongly skewed to the lower level occupations in terms of pay. For women working part-time, they must pay the wage penalty of working part-time as well as the gender penalty. **New Earnings Survey (2000)[34]:** Women working part-time have only 61% of men's productivity and wages, in comparison with 82% for full-time women.
Gender wage gap	1. **Increased wage inequality decreases female participation in the labour market decreasing productivity:** Wage inequality between men and women can discourage them from participating in the labour market, limiting the talent pool and decreasing productivity and growth	**Talafha (2024)[35]:** 0.002% decrease in the economic growth rate per capita in OECD countries due to three reasons: 1) increased gender wage gap discourages women from labour market participation; 2) reducing wage gap reduces fertility by increasing the opportunity cost of having children; 3) reducing the gender wage gap will likely delay marriage and fertility as when women earn more, the potential for growth is greater
Participation rate gap	1. **Improvement in the participation rate gap means a more diverse pool of available labour,** which allows for production of more goods and services and brings a wider range of skills, perspectives and ideas to the workplace that can enhance productivity.	**IMF - Badel & Goyal (2023)[36]:** Correcting the misallocation of women's talents and abilities can support stronger and more inclusive growth, serving as a method for boosting productivity. **World Bank - Pennings (2022)[37]:** If gender gaps in employment were closed, GDP per capita in the long run would be almost 20% higher.
Female unemployment rate	1. **Affects productivity through suboptimal allocation of labour:** Higher female unemployment rate due to women taking time out of the labour market means suboptimal allocation of labour, resulting in inefficiencies. 2. Reduced unemployment stimulates economic growth by **raising household incomes and demand,** leading to a more dynamic and resilient economy.	**Duncan, Prus & Sandy (1993)[38]:** Use a probit model to find that a woman's marital status, the presence of children, and the level of the husband's education significantly impact the probability of her working. Female unemployment therefore is largely driven by familial duties as opposed to skillset, implying that the allocation of jobs in the labour market is not optimal as the entire skilled workforce is not utilised.

Full central scenario results

UK Contribution of improvement in female participation (*per annum, 2023 GBP*)

Contribution of improvement in female participation over 2011-2023			Impact of equating male and female participation			Impact of continuing progress made between 2011-23 up to 2030		
% increase in productivity	Increase in GDP per hour worked	Increase in GDP	% increase in productivity	Increase in GDP per hour worked	Increase in GDP	% increase in productivity	Increase in GDP per hour worked	Increase in GDP
0.30%	£0.16 ($0.20)	£6.2bn ($7.9bn)	0.22%	£0.12 ($0.16)	£4.7bn ($5.9bn)	0.30%	£0.16 ($0.20)	£6.2bn ($7.8bn)

	Contribution of improvement in female participation (Full Central Scenario, 2023 USD)								
	Contribution of improvement in female participation over 2011-2023			Impact of equating male and female participation			Impact of continuing progress made between 2011-23 up to 2030		
Per annum	% increase in productivity	Increase in GDP per hour worked	Increase in GDP	% increase in productivity	Increase in GDP per hour worked	Increase in GDP	% increase in productivity	Increase in GDP per hour worked	Increase in GDP
OECD average	0.30	$0.19	$4.5 bn	0.22	$0.14	$3.4 bn	0.30	$0.21	$4.5 bn
G7 average	0.30	$0.20	$15.2 bn	0.22	$0.15	$11.2 bn	0.30	$0.21	$15.1 bn

Upper and Lower Bound Scenarios

	Contribution of improvement in female participation (Lower Bound, 2023 USD)								
	Contribution of improvement in female participation over 2011-2023			Impact of equating male and female participation			Impact of continuing progress made between 2011-23 up to 2030		
Per annum	% increase in productivity	Increase in GDP per hour worked	Increase in GDP	% increase in productivity	Increase in GDP per hour worked	Increase in GDP	% increase in productivity	Increase in GDP per hour worked	Increase in GDP
UK	0.13	£0.07 ($0.09)	£2.8bn ($3.5bn)	0.10	£0.05 ($0.07)	£2.1 bn ($2.6bn)	0.13	£0.07 ($0.09)	£2.8 bn ($3.5bn)
OECD average	0.13	$0.09	$2.0bn	0.10	$0.06	$1.5bn	0.13	$0.09	$2.0bn
G7 average	0.13	$0.09	$6.8bn	0.10	$0.07	$5.1bn	0.13	$0.09	$6.8bn

	Contribution of improvement in female participation (Upper Bound, 2023 USD)								
	Contribution of improvement in female participation over 2011-2023			Impact of equating male and female participation			Impact of continuing progress made between 2011-23 up to 2030		
Per annum	% increase in productivity	Increase in GDP per hour worked	Increase in GDP	% increase in productivity	Increase in GDP per hour worked	Increase in GDP	% increase in productivity	Increase in GDP per hour worked	Increase in GDP
UK	0.47	£0.25 ($0.31)	£9.8bn ($12.3bn)	0.35	£0.18 ($0.23)	£7.3 bn ($9.2bn)	0.46	£0.25 ($0.31)	£9.7bn ($12.2bn)
OECD average	0.47	$0.30	$7.1bn	0.35	$0.22	$5.3bn	0.46	$0.32	$7.0bn
G7 average	0.47	$0.31	$23.7bn	0.35	$0.23	$17.7bn	0.46	$0.32	$23.5bn

Model variations

We ran multiple variations of our panel regression model with different control variables to stress-test whether the impact of female participation (measured by its coefficient) changed significantly. For all regression variations, the dependent variable is GDP per hour worked, and the input variable is female participation.

Main model		Variation 1		Variation 2		Variation 3	
Variable	**Coefficient**	**Variable**	**Coefficient**	**Variable**	**Coefficient**	**Variable**	**Coefficient**
Female participation (log)	0.3808	Female participation (log)	0.3808	Female participation (log)	0.3663	Female participation (log)	0.3877
Education	0.0059	Education	0.0059	Education	0.0068	Education	0.0069
Education (squared)	0.0000	Education (squared)	0.0000	Education (squared)	0.0000	Education (squared)	0.0000
Investment (lagged by one year)	0.0050	Investment (lagged by one year)	0.0050	Investment (lagged by one year)	0.0050	Investment (lagged by one year)	0.0051
Urbanisation	-0.0367	Urbanisation	-0.0367	Urbanisation	-0.0380	Urbanisation	-0.0375
Inflation (log, lagged by one year)	0.0061	Inflation (log, lagged by one year)	0.0061	Inflation (log, lagged by one year)	0.0060	Inflation (log, lagged by one year)	-0.0370
Social expenditure	0.0024	Social expenditure	0.0024	Social expenditure	-0.0029	Social expenditure (log)	0.0002
Social expenditure squared	0.0001	Social expenditure squared	0.0001	Services value added	-0.0040	Services value added	-0.0044
Services value added	-0.0039	Services value added	-0.0039	Innovation	0.0001	Innovation	0.0061
Innovation	-0.0001						

Model variations (ctd.)

Variation 4		Variation 5		Variation 6		Variation 7	
Variable	**Coefficient**	**Variable**	**Coefficient**	**Variable**	**Coefficient**	**Variable**	**Coefficient**
Female participation (log)	0.3782	Female participation (log)	0.2398	Female participation (log)	0.5619	Female participation (log)	0.3240
Education (log)	0.1628	Education	0.0109	Education	-0.0013	Education	0.0072
Investment (lagged by one year)	0.0050	Education (squared)	0.0000	Education (squared)	0.0000	Education (squared)	0.0000
Urbanisation	-0.0375	Investment (lagged by one year)	0.0033	Investment (lagged by one year)	0.0050	Investment (lagged by one year)	0.0051
Inflation (log, lagged by one year)	0.0064	Investment (lagged by two years)	-0.0000	Inflation (log, lagged by one year)	0.0068	Urbanisation	-0.0367
Social expenditure	0.0029	Investment (lagged by three years)	0.0051	Social expenditure	0.0176	Inflation (log, lagged by one year)	0.0048
Social expenditure squared	-0.0001	Urbanisation	-0.0328	Social expenditure squared	-0.0003	Social expenditure	0.0011
Services value added	-0.0043	Inflation (log, lagged by one year)	0.0037	Services value added	-0.0040	Social expenditure squared	-0.0001
Innovation	-0.0004	Social expenditure	0.0176	Innovation	-0.0005	Innovation	-0.0000
		Social expenditure squared	-0.0004				
		Services value added	-0.0004				
		Innovation	0.0003				

Benchmarking estimates

We conducted a comprehensive literature review to benchmark our estimates for the impact of greater female participation on productivity and economic growth. The key data points from this review are presented below.

Paper	Geography	Time period	Key findings
Thevenon, Ali, Adema, Pero (2012): *Effects of Reducing Gender Gaps in Education and Labour Force Participation on Economic Growth in the OECD*	OECD	1960 - 2008	The average gain from a 50% decrease in the gender gap is a **0.3 percentage point increase** in the average annual growth rate in **GDP per capita**, and **0.6 percentage points** if full convergence occurs by 2030.
Talafha (2024): *The Impact of Gender Inequality on Economic Growth: An Empirical Approach for OECD Countries*	OECD	1980 - 2015	An increase of 1% in wage inequality between the two genders leads to a **0.002% decrease in the economic growth rate per capita.**
Fluchtmann, Keese & Adema (2024)[39]: *Gender equality and economic growth: Past progress and future potential*	OECD	2000 - 2022	Increases in women's headcount employment have added **0.37 p.p. to average annual economic growth.** Closing labour force participation and working hours gaps simultaneously could **increase annual growth by 0.22 p.p., boosting GDP per capita by 8.8% by 2060.**
Hsieh, Hurst, Jones & Klenow (2019)[40]: *The allocation of talent and US economic growth*	US	1960 - 2010	**20% - 40% of growth in aggregate US market output per person** can be explained by the improved allocation of talent through the increased participation of more diverse groups, including women.
Ostry, Alvarez, Espinoza & Papageorgiou (2018)[41]: *Economic gains from gender inclusion: new mechanisms, new evidence*	Global	1995 - 2014	Closing the gender gap in labour force participation could **increase GDP by between 10 percent and 80 percent, depending on the initial value of female labour force participation**. When all gender differences are eliminated, and labour force participation and hourly productivity are equalised between men and women, output and welfare gains exceed 50 percent in MENA and increase to about 10 to 15 percent in Europe and Central Asia, sub-Saharan Africa, and East Asia Pacific.

Benchmarking estimates (ctd.)

Paper	Geography	Time period	Key findings
Yilmaz & Unver (2016)[42]: *The relationship between female labour force participation and labour productivity: panel data analysis*	Sample of 111 countries	1985 - 2010	When looking at the relationship between labour productivity and female labour force participation, the study used three different indicators for female labour productivity. The coefficients on the variables were as follows: GDP per person employed in 2012: 0.115426 **GDP per hour in 2012: 0.188652** Gross Value Added at Factor Cost divided by Total Employment: 0.807319
Seguino (2000)[43]: *Gender Inequality and Economic Growth: A Cross-Country Analysis*	Sample of middle income semi-industrialised economies	1975 - 1995	A **0.10 increase in the gender wage gap leads to a 0.60 percentage point increase in the GDP** growth rate.
Onaran, Oyvat & Fotopoulou (2022)[44]: *A Macroeconomic analysis of the effects of gender inequality, wages, and public social infrastructure: the case of the UK*	UK	1970 - 2016	A 1% increase in both women's and men's hourly wage rate in the medium run is associated with a 0.780 percent increase in productivity. A **1 percent increase in only the women's hourly wage rate increases productivity by 0.080 percent.**
McKinsey Global Institute (2015)[45]: The Power of Parity	Sample of 95 countries	2014 - 2025	Advancing gender equality could add $12 trillion to global GDP by 2025. If every country matched the progress towards gender parity of its best-performing neighbour, global GDP could increase by an additional $2.1 trillion.
World Economic Forum (2024)[46]: Global Gender Gap Report:	Sample of 146 countries	2014 - 2024	Closing the gender pay gap in the US could add $512 billion to the economy.
Maceira (2017)[47]: *Economic Benefits of Gender Equality in the EU*	EU	2015 - 2050	By 2050 improving gender equality would lead to an increase in EU GDP per capita by 6.1% to 9.6%. Productive capacity: EU exports would increase by 1.6% to 2.3% and imports would decrease by 0.4% to 0.7% in 2050.

Endnotes

[1] Our Index includes analysis of labour market results in 33 Organisation for Economic Cooperation and Development (OECD) countries. When we refer to the OECD in this report, we are referring to these 33 countries. Please refer to the Technical Appendix: Women in Work Index Methodology for a full list of countries included in our analysis.

[2] Gov.UK, November 2024, **HM Revenue and Customs: Areas of Research Interest 2024**. Available here

[3] UK Parliament, September 2023, **New inquiry: Impact of the rising cost of living on women**. Available here

[4] RTE, March 2024, **What is the motherhood penalty?** Available here

[5] IMF, July 2020, **Gender Inequality and Economic Growth: Evidence from Industry-Level Data**. Available here. OECD, March 2024, **Gender equality and economic growth: Past progress and future potential.** Available here

[6] IMF, September 2023, **The Role of Structural Fiscal Policy on Female Labor Force Participation in OECD Countries**. Available here

[7] OECD, May 2023, **Joining Forces for Gender Equality**. Available here

[8] OECD, December 2023, **Promoting Gender Equality Through G7 Policy**. Available here

[9] UK Parliament, March 2024, **Women and the UK economy**. Available here

[10] The Independent, February 2025, **UK among top five most expensive countries for childcare - as nursery fees set to rise again**. Available here

[11] The Telegraph, May 2024, **More than 1.5m drop out of workforce**. Available here

[12] CAP, February 2023, **Fact Sheet: The State of Women in the Labor Market in 2023**. Available here

[13] The Guardian, May 2023, **The best childcare in the world? Maybe so, but new parents in Iceland are holding out for better.** Available here

[14] Korea Times, May 2023, **Korea is most expensive place to raise child: study.** Available here

[15] PIIE, July 2022, **Why Gender Disparities Persist in South Korea's Labor Market**. Available here

[16] FTI Consulting, November 2024, **Challenges in Investigating Sexual Harassment in the Workplace in Mexico**. Available here

[17] The Dialogue, September 2024, **Can Mexico Bring More Women Into the Workplace.** Available here

[18] HESA, June 2024, **Graduate Outcomes 2021/22: Summary Statistics**. Available here

[19] Harvard Business Review, June 2008, **Stopping the Exodus of Women in Science**. Available here

[20] National Library of Medicine, April 2020, **Longer shared parental leave is associated with longer duration of breastfeeding: a cross-sectional study among Swedish mothers and their partners**. Available here

[21] CIPD, August 2022, **Employer Focus on Working Parents**. Available here

[22] WFH Research, June 2023, **Working from Home Around the Globe: 2023 Report**. Available here

[23] CIPD, August 2022, **Employer Focus on Working Parents**. Available here

[24] CIPD, October 2023, **Menopause in the workplace.** Available here

[25] L&G, January 2025, **Gender Pension Gap**. Available here

[26] Centre for Ageing Better, November 2023, **The State of Ageing 2023 - 24.** Available here

[27] McKinsey & Co, September 2024, **Women in the Workplace 2024: The 10th-anniversary report**. Available here

[28] ComPsych, February 2024, **Mental Health Leaves of Absence Surge, Increasing 33% Over Prior Year**. Available here

[29] CEBR, October 2023, Revealed: The hidden cost of ignoring women's health in the workplace. Available here

[30] OECD, December 2012, **Effects of Reducing Gender Gaps in Education and Labour Force Participation on Economic Growth in the OECD**. Available here

[31] Labour Economics, December 2008, **Gender gap in wage returns to job tenure and experience.** Available here

[32] Women and Equality Unit, November 2002, **The impact of women's position in the labour market on pay and implications for UK productivity**. Available here

[33] ONS, October 2021, **New Earnings Survey (NES) and Annual Survey of Hours and Earnings (ASHE) public and private gross weekly time series**. Available here

[34] Talafha, Q. January 2024, **The Impact of Gender Inequality on Economic Growth: An Empirical Approach for OECD Countries**. Available here

[35] IMF, September 2023, **When Will Global Gender Gaps Close?** Available here

[36] World Bank, February 2022, **A Gender Employment Gap Index: A Simple Measure of the Economic Gains from Closing Gender Employment Gaps, with an Application to the Pacific Islands**. Available here

[37] The Journal of Socio-Economics, June 1993, **Marital status, children and women's labor market choices.** Available here

[38] OECD, March 2024, **Gender equality and economic growth**. Available here

[39] Econometrica, September 2019, **The Allocation of Talent and US Economic Growth**. Available here

[40] IMF, October 2018, **Economic Gains From Gender Inclusion: New Mechanisms, New Evidence**. Available here

[41] Koyuncu, Yilmaz & Unver, August 2016, **The Relationship Between Female Labour Force Participation and Labor Productivity: Panel Data Analysis.** Available here

[42] World Development, July 2000, **Gender Inequality and Economic Growth: A Cross-Country Analysis**. Available here

[43] Feminist Economics, April 2022, **A Macroeconomic Analysis of the Effects of Gender Inequality, Wages, and Public Social Infrastructure: The Case of the UK**. Available here

[44] McKinsey & Co, September 2015, **The Power of Parity: How Advancing Women's Equality Can Add $12 trillion To Global Growth**. Available here

[45] World Economic Forum, June 2024, **Global Gender Gap Report 2024**. Available here

[46] Intereconomics, June 2017, **Economic Benefits of Gender Equality in the EU**. Available here

For more information about this report, please contact our team

Authors

Alia Qamar
Senior Economist
PwC UK
E: alia.qamar@pwc.com

Elliot Mora Zambrano
Economist
PwC UK
E: elliot.mora.zambrano@pwc.com

Yashi Chowdhary
Economist
PwC UK
E: yashi.chowdhary@pwc.com

Laura Diprose
Economist
PwC UK
E: laura.diprose@pwc.com

Sponsoring partners

Simon Oates
Partner, Economics Lead
PwC UK
E: simon.oates@pwc.com

Zlatina Loudjeva
Partner
PwC UK
E: zlatina.d.loudjeva@pwc.com

Many thanks to Lucy Beverley, Neil Scott, Adam Deasy, and Gayatri Sajayan Lali for their contribution to this report.

Our Economics practice in the UK offers a wide range of services covering market reform in a range of industry sectors (including energy, water, media and telecoms, financial services, health and government services); competition policy, disputes and other investigations; economic, social and environmental impact analysis; financial economics; fiscal policy and macroeconomics. This practice forms part of Strategy&, PwC's strategy consulting business.

For more information about our Economics services please visit: www.pwc.co.uk/services/economics

RITM0165675 (02/25)