

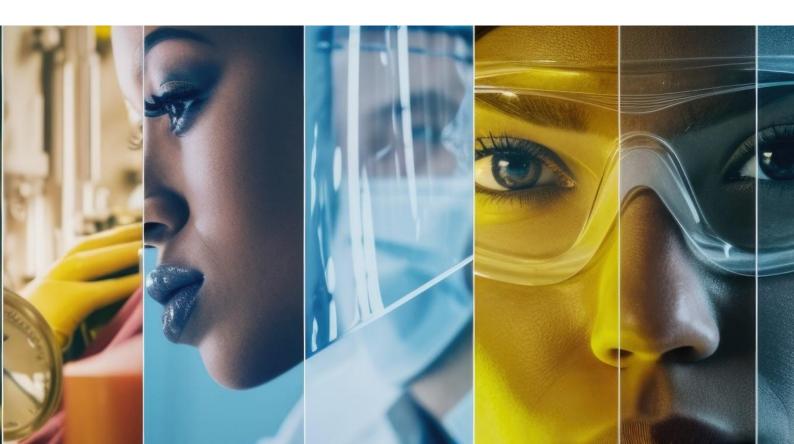






# Women in Manufacturing's response to the UK Government's **Industrial Strategy Green Paper**

Invest 2035: The UK's Modern Industrial Strategy



#### About this response

This document has been drafted as a response to the UK Government's Industrial Strategy Green Paper by the Policy and Research Group of the Women in Manufacturing UK initiative. The views and opinions expressed herein are solely those of the authors and contributors and do not necessarily reflect the positions, strategies, or endorsements of any organisations, institutions, or affiliated bodies. This response is intended to contribute constructively to the ongoing dialogue surrounding the industrial strategy, with a particular focus on issues affecting women in the manufacturing sector.

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#### Introduction

In response to the UK Government's Industrial Strategy Green Paper, the Policy and Research Working Group, of the Women in Manufacturing UK Initiative, presents a series of recommendations aimed at addressing gender disparities in the manufacturing sector. The manufacturing sector in the UK faces significant challenges, not least of which is the persistent gender gap. Despite women comprising nearly half of the UK workforce, they represent only 26% of employees in manufacturing and face a 15.9% wage gap compared to their male counterparts (Castañeda-Navarrete, et al., 2023).

This disparity not only affects women's current and future living standards but also limits the industry's potential for innovation, creativity, and overall business outcomes. Our recommendations are grounded in evidence that demonstrates the positive impact of diversity on business performance, talent attraction, and retention. Moreover, addressing the barriers to women's participation in manufacturing is crucial for tackling the skills gap that has affected the industry for over a decade. Make UK's estimates suggest that filling current manufacturing vacancies could add an extra £7 billion annually to the UK's GDP (Make UK, 2023).

The Women in Manufacturing UK Initiative, established in 2022, is a non-profit network of professionals with a shared interest in increasing diversity and inclusion in the manufacturing sector. Founding organisations include the Institute for Manufacturing (IfM), University of Cambridge and the High Value Manufacturing Catapult, supported by Innovate UK.

Our response to the Industrial Strategy Green Paper focuses on five key areas:

- 1. Growth-driving sectors
- 2. Innovation and investment
- 3. People and skills
- 4. Regulation, and
- 5. Place

Each recommendation is designed to integrate gender perspectives and promote inclusive practices across these critical domains of the Industrial Strategy. By implementing these recommendations, we believe the UK can create a more equitable, innovative, and competitive manufacturing sector that fully leverages the talents of its entire workforce.

## 1. Growth-driving sectors

Q1. How should the UK government identify the most important subsectors for delivering our objectives?

Prioritisation of sectors within manufacturing should consider not only their productivity levels and growth rates of innovation intensity but also their economic scale, which ultimately reflects their contribution to the economy. Activities that may be regarded as 'foundational' sectors, such as the manufacture of food products, beverages, and tobacco; and the manufacture of basic metals and metal products, employ particularly large workforces. Additionally, the manufacture of food products, beverages, and tobacco has among the largest multiplier effects within the UK economy (ONS, 2024).

As highlighted in the introduction, the underrepresentation of women in manufacturing is one of the key weaknesses of UK manufacturing. Among the main manufacturing economies, the UK has the lowest representation of women, only 26% in 2023, while women from a non-White ethnic group represented less than 10% and women with disabilities only 4.7% (Castañeda-Navarrete, et al., 2024).

As advanced manufacturing is set to be prioritised in the Industrial Strategy, it is crucial that this focus is used as an opportunity to reduce gender gaps. Industries typically classified under the 'advanced manufacturing' umbrella, such as automotive and aerospace, have some of the highest levels of underrepresentation of women.

Given the long-term focus of the Industrial Strategy and the pressing societal challenges that extend beyond competitiveness—such as an ageing population and climate change—the government could consider reframing the narrative around 'growth'. Rather than emphasising growth solely in economic terms, the strategy could outline broader long-term objectives. For instance, according to the OECD (2014), inclusive growth is defined as: 'Economic growth that creates opportunity for all segments of the population and distributes the dividends of increased prosperity, both in monetary and non-monetary terms, fairly across society.'

As feminist economists have advocated, it is also important to recognise the value of the care economy and social infrastructure, including its role in the achievement of the Net Zero target, considering care is a low-carbon sector (Onaran, Oyvat and Fotopoulou, 2022; Perrons and De Henau, 2016). While investments in the care system are beyond the scope of the Industrial Strategy, it could recognise the interconnection between productive and reproductive activities, while leveraging the contribution of the care economy which is expected to continue growing.

Practical examples include Singapore's <u>SkillsFutures</u>, which prioritises the development of skills for the care economy alongside the skills needed for the green and digital economies. Under this programme, the care economy is defined as 'a vast ecosystem that extends beyond medical professionals encompassing various sectors, including healthcare, community care, social service, general education, training and adult education, early childhood, wellness and human resource.'

## Q6. What are the key enablers and barriers to growth in these subsectors and how could the UK government address them?

As the government prepares to develop programmes in support of UK manufacturing, we encourage it to **adopt a gender-responsive approach**. This would ensure that gender equality is not an afterthought but a fundamental consideration at every stage of the policy process. This helps to reduce existing disparities and prevents the creation of new inequalities as programmes and projects evolve. Examples of actions in this direction include (Castañeda-Navarrete, et al., 2024):

- Promote the active participation of women in leadership and decision-making roles within
  all programmes and projects, ensuring their voices and perspectives are fully
  represented. Achieving this requires fostering inclusive workplaces that support the
  growth and advancement of diverse demographic groups. Additionally, targeted initiatives
  such as mentorship programs can help dismantle systemic barriers and create pathways
  for equitable leadership opportunities.
- Assess the potential impact of the programme on gender equality and gender relations, bringing back gender equality assessments.
- Implement systematic collection and monitoring of gender-disaggregated data. For
  instance, the <u>Made Smarter Adoption Research Project</u> collected gender- and ethnicitydisaggregated data on leadership within participating firms. This approach revealed
  significant differences in technology adoption and the benefits reported by these groups
  (DBT, 2023).
- Set clear targets to ensure balanced representation and participation of all genders. For example, a programme could aim to have 30%–40% of its supported companies womenled or women-owned. The <a href="Inter-American Development Bank">Inter-American Development Bank</a> recently implemented a gender-sensitive approach in a loan to assist MSMEs. The bank set targets for the percentage of women-owned businesses to be supported through loans and advisory services. Additionally, it provided funding for campaigns aimed at reaching out to businesses operated or owned by women.
- Integrate a gender perspective in public procurement processes. <u>The European Institute</u> for Gender Equality, the BS ISO 538000 2024-05 Guidelines for the promotion and implementation of gender equality and women's empowerment, and the <u>UNIDO Guide to Gender Analysis and Gender Mainstreaming the Project Cycle</u> provide guidance on gender-responsive public procurement.
- Ensure that all communications are gender-sensitive, using inclusive language and imagery, and that dissemination activities target organisations of under-represented groups.

#### 2. Innovation and investment

Q7. What are the most significant barriers to investment? Do they vary across the growth-driving sectors? What evidence can you share to illustrate this?

Promote investment and innovation in women-led businesses.

The Industrial Strategy Green Paper outlines the objective of addressing barriers to investment. For women entrepreneurs in the UK, limited access to finance and caregiving responsibilities remain among the primary obstacles (Ebiquity, 2016; HMT, 2019). In 2023, all-women founder teams received only 2.8% of total equity investment, while mixed-gender teams secured 18%. By comparison, all-male founder teams raised over three times more funding in 2023 alone than all-women teams have raised since 2014 (British Business Bank, 2024). These gaps are even wider for Non-White women. Between 2009 and 2019, only ten Black women founders in the UK received venture capital funding (HMT, 2024).

Women are less likely than men to apply for funding and, when they do, tend to secure smaller amounts (HMT, 2024). Contributing factors include limited information of funding organisations, perceptions that innovation funding organisations are men-dominated and difficult to access, along with application processes that are seen as overly bureaucratic and time-consuming. These challenges are especially relevant for women, who often shoulder a disproportionate share of caregiving and unpaid domestic responsibilities (Ebiquity, 2016; HMT, 2019).

Bridging this gap would not only open opportunities for women. The 2019 Rose Review estimated that if women started and scaled businesses at the same rate as men, up to £250 billion could be added to the UK economy (HMT (2019). In light of these challenges, we welcome the announcement in the Autumn Budget 2024 that the British Business Bank will invest £50 million in women-led funds.

Manufacturing industries with the lowest productivity levels often account for the largest shares of employment. Therefore, boosting productivity growth requires not only supporting 'growth-driving' manufacturing industries but also enhancing innovation and competitiveness in traditional industries where the majority of the manufacturing workforce is employed. Adopting digital technologies is a key strategy in this regard (Mahmood, Asghar and Kousha, 2024). While the Made Smarter Adoption programme has proven effective in promoting the use of digital technologies among manufacturers, it also presents an opportunity to address gender disparities in technology adoption (DBT, 2023).

Adoption rates of Al and related technologies among women-led SMEs remain significantly lower—just 10% compared to 89% for men-led businesses. Similar disparities are evident in the uptake of HR management software, Virtual Reality (VR), Augmented Reality (AR), accountancy tools, and Enterprise Resource Planning systems. Although adoption has increased for both men-led and women-led businesses between 2018 and 2022, these gaps persist and pose a critical challenge for women-led enterprises (Mahmood, Asghar and Kousha, 2024).

As with the broader funding landscape, research indicates that women entrepreneurs face financial constraints in technology adoption. This is compounded by persistent societal stereotypes suggesting women lack technological proficiency, partly rooted in biases within STEM education and the tech industry (Mahmood, Asghar and Kousha, 2024).

Nonetheless, the Made Smarter Adoption Research Project revealed that when provided with access to information and funding for digital adoption, women-led businesses are more likely to report benefits from this adoption. Among participant firms, businesses with equal or greater female representation in leadership were more likely to report positive impacts on business growth compared to those without female representation. These impacts included safeguarding turnover during the COVID-19 pandemic and increasing profits (DBT, 2023).

To further enhance investment access for and innovation in women-led innovation businesses, additional initiatives could include:

- Expand and improve assessment criteria and transparency of public innovation funding programmes targeted at women, ensuring these programmes support businesses from start-up through to scale-up stages.
- For programmes non-targeted at women, such as the Small Business Research Initiative
  and Made Smarter Adoption and Innovation, include specific gender and diversity
  indicators into project assessment criteria, establish targets for a balanced gender
  representation, disseminate funding calls through women's innovation and business
  networks, and collect and assess gender-disaggregated data on programme
  participants.

For example, the <u>European Union</u> has included having a gender equality plan as an eligibility criterion to gain access to Horizon Europe. Gender balance among researchers involved in projects is also included as an assessment criterion for awarding funding (EU, 2021). In the UK, the Women-Led High-Growth Enterprise Taskforce uses the following criteria to define a women-led enterprise: "at least one woman should be in one of the top three positions in the organisation and that women must hold a fair proportion of founder and employee equity share. This ensures that the high-growth enterprise is truly "woman-led" and not just that there is a woman present, while leaving space for the proven value of gender-diverse teams" (HM Government, 2024).

## 3. People and skills

Q8. Where you identified barriers in response to Question 7 which relate to people and skills (including issues such as delivery of employment support, careers, and skills provision), what UK government policy solutions could best address these?

Address challenges associated with attracting and retaining women in manufacturing and engineering.

The Industrial Strategy Green Paper proposes tackling skills shortages by highlighting initiatives such as the establishment of Skills England and the introduction of the new Growth and Skills Levy. Developing skills among girls and women, alongside boosting their participation in the labour market, is essential for addressing these shortages.

Numbers of women and non-binary students in science, technology, engineering, and mathematics (STEM) have steadily increased since 2015. In 2022/23 women and non-binary people accounted for around a third of the STEM students; however, during the same period, they only represented 26% of the workforce (STEM Women, 2023).

The gender gap in **T-levels and apprenticeships** is even larger. In 2023/24 there were only 7.8% women students in T-level pathways related to manufacturing and engineering (Department for Education, 2024). Meanwhile, during the 2022/23 period, women accounted for less than 9% of engineering and manufacturing apprenticeships in England (Institute for Apprenticeships and Technical Education, 2024).

Recent studies have highlighted that **engineering and manufacturing face challenges in both, attracting and retaining women** into these fields. In manufacturing, women's participation rates tend to decline after their 30s, a period when they also encounter wider gender pay gaps (Castañeda-Navarrete, et al., 2024).

Women's participation in manufacturing professional occupations, such as engineering, IT, marketing and finance professionals, fell from 28.6% in 2022 to 24.2% in 2023, and in process, plant and machine operative roles it decreased from 22.5% in 2022 to 20.6% in 2023 (Castañeda-Navarrete, et al., 2024).

A recent report published by EngineeringUK also highlighted a worrying decline in the percentage of women working in engineering and technology occupations, from 16.5% in 2022 to 15.7% in 2023. The report noted that while more women are entering these fields, organisations are struggling to retain them, particularly those aged 35 to 64 (EngineeringUK, 2024).

There are two key factors that could contribute to address attraction and retention challenges: (i) promoting a diverse and inclusive culture in manufacturing workplaces; and (ii) reforming and investing in social care. Studies have consistently found that diversity and inclusion are important factors in attracting and retaining employees, particularly those underrepresented in the workforce (BIA and Diversio, 2023; Carey et al., 2024; InterAct, 2023; and McGee, 2024).

The UK Department for Business and Trade (DBT) could play a catalytic role in advancing gender diversity across manufacturing industries by building in efforts such as UK

Automotive Diversity and Inclusion Charter and the Women in Aviation and Aerospace Charter and the Women in Manufacturing call for firm-specific commitments.

An example of a government-led initiative in this direction is the <u>SG Women in Tech (SGWIT)</u> <u>Corporate Pledge</u>. Led by Singapore Infocomm Media Development Authority (IMDA), Corporate Pledge is a platform where more than 60 companies have shared their commitments to create a conducive environment for women tech professionals. In addition, recent experiences of countries such as <u>India</u> and <u>Australia</u> have shown that despite traditional social norms, which may take decades to change, it is possible to narrow gender gaps in manufacturing.

To further develop the pathways for women into manufacturing, it is essential to address the significant gender gap in engineering and manufacturing apprenticeships. This involves creating more opportunities for girls and women to learn and be exposed to manufacturing and engineering (Egglestone, Jones and Aldridge, 2018). While women's applications to apprenticeships are just as likely to succeed as those from men, they submit significantly fewer applications in the engineering, manufacturing, and technology sectors. After rejections, they are more likely to apply for positions in other fields (Egglestone, Jones and Aldridge, 2018). Evidence suggests that gender stereotypes may play a significant role in these decisions (Fuller, Beck and Unwin, 2005).

Specific initiatives that could contribute to increase the number of women's applications to T-levels and apprenticeships include:

- Enhancing the quality of careers advice for girls and teenagers. Ensure visibility of
  opportunities across various sectors, accompanied by guidance for parents on the range
  of roles, career pathways, and associated pay.
- Providing mentoring and buddy programmes for young girls and women: Integrate these initiatives into the recruitment process of T-levels and apprenticeships.
- Promoting the visibility of role models. Highlight successful figures from diverse backgrounds to inspire and encourage participation of women in manufacturing. For example, <a href="Germany's EXIST-Potentials">Germany's EXIST-Potentials</a> programme aims to increase the start-up potential of female students and scientists through the use of role models (OECD, 2021). Similarly, between 2008 and 2014, <a href="Sweden's Women Ambassadors programme">Sweden's Women Ambassadors programme</a> engaged approximately 1,000 women entrepreneurs, who undertook a range of activities such as speaking in schools and developing networks of women in business, reaching an estimated 170,000 women, with programme participants found to have greater interest in entrepreneurship after meeting an ambassador (OECD, 2016).

Additionally, efforts should also focus on attracting women at later stages of their careers, including those returning after career breaks.

As highlighted by the Women's Budget Group, the crisis in social care—traced back to the 1980s—disproportionately affects women, who make up the majority of those needing care, social care workers, and unpaid carers (WBG, 2024). Across economic activities, human health and social work activities face the largest number of vacancies in the UK economy, around 150,000 in 2024 (ONS, 2024).

In manufacturing, the social care crisis, compounded with the traditional gender-based division of unpaid work makes women more likely to work part-time than men. In December 2023, 26.2% of the women in manufacturing worked part-time, compared to only 6% of men. This

represents a 2-percentage-point increase in the proportion of women working part-time compared to December 2022 (Castañeda-Navarrete, et al., 2024).

We welcome gender-responsive measures considered in the Autumn Budget 2024, such as raising the Carer's Allowance Weekly Earnings Limit, the increase in the National Living Wage, £1.8 billion for government-funded childcare, and £600 million to support social care (HMT, 2024). Although these measures are in the right direction, there are still opportunities to narrow the gaps created by more of a decade of underspending. While investments in the care system are beyond the scope of the Industrial Strategy, it could recognise the interconnection between productive and reproductive activities, while leveraging the contribution of the care economy which is expected to continue growing in the future.

## 4. Regulation

Q. 19 How can regulatory and competition institutions best drive market dynamism to boost economic activity and growth?

Promote gender-responsive standards and regulations.

The Industrial Strategy Green Paper proposes the development of regulatory frameworks that can assist in the development of new technologies. Although regulations and standards are often perceived as gender-neutral, research shows that technologies are frequently designed around a reference individual, typically a Caucasian man aged 25-30, weighing 70 kg (UNECE, 2023). Additionally, women are often underrepresented in technical committees influencing standards (UNECE, 2023).

This bias can overlook critical factors that vary by age, gender, ethnicity, and body size, sometimes even leading to harm. Products that have adversely impacted women due to a **lack of gender-sensitive design** include personal protective equipment, vehicle passive restraint systems, construction equipment, and pharmaceuticals (UNECE, 2023).

Drawing on <u>guidelines from the United Nations Economic Commission for Europe</u> (UNECE, 2018) and the <u>UN Commission on the Status of Women</u> (2023), we recommend the following actions:

- Assess the gender balance within regulation and standards committees, particularly among chairs and senior roles.
- Engage women's innovation and business organisations to enhance the representation of women on regulation and standards committees.
- Transition gradually from voluntary to mandatory measures that promote inclusive innovation and prevent discrimination and harm, including gender impact assessments, audits, and regulations that define responsibilities of companies and mitigation mechanisms.
- Offer **inclusive innovation training** for relevant government officials and members of technical committees.
- Share best practices in inclusive innovation, such as those recognised by Innovate UK's Inclusive Innovation Award.
- Establish a **network of gender experts** to support regulation and standards development committees.

#### 5. Place

Q28. How should the Industrial Strategy accelerate growth in city regions and clusters of growth sectors across the UK through Local Growth Plans and other policy mechanisms?

Q29. How should the Industrial Strategy align with devolved government economic strategies and support the sectoral strengths of Scotland, Wales, and Northern Ireland?

Collaborate with local stakeholders to address place-specific gender disparities in industrial activity, while leveraging manufacturing to tackle broader societal challenges

As outlined in the Industrial Strategy Green Paper, collaborations to develop place-based initiatives are essential. We urge the government to use these collaborations to expand the evidence base on gender disparities in industrial activity and address these disparities, while harnessing manufacturing's potential as both a productivity booster and an equaliser.

While gender disparities in manufacturing are evident across English regions and UK nations, there are also notable differences, which can be partly attributed to the varying economic structures across these geographies. Northern Ireland, the North East of England, the West Midlands, and Wales have some of the lowest levels of female representation in manufacturing (ONS, 2024). Meanwhile, the largest gender pay gaps are found in London, the South West of England, the East Midlands, and Yorkshire and The Humber. Interestingly, **some of the most significant gender disparities are observed in regions with the highest manufacturing value added shares**, such as the East Midlands, Wales, and the North East of England (ONS, 2024).

Research on gender disparities across UK's regions and nations is limited, however, a recent study identified the following gaps based on data of the Longitudinal Small Business Survey from 2015 to 2020:

- Women-led businesses are less prevalent in the East and West Midlands, North East and Yorkshire and the Humber in England.
- 17.2% of all UK small businesses are women-led, with 1.2% and 1.4% of these located in the West Midlands and East Midlands, respectively. This is a lower proportion than the rest of England except for the North East of England and Yorkshire and the Humber.
- The East and West Midlands have relatively lower business density rates for all small businesses (1.80 and 1.58) and women-led businesses (0.64 and 0.57).
- The proportion of women with majority ownership of a business in the East and West Midlands is 7.5% each, lower than most of the regions in England except for the North East and Yorkshire & the Humber.
- The funding gap is more evident for small businesses solely or jointly led by women in the Midlands (Mahmood, Asghar and Kousha, 2024).

As this data demonstrates, gender disparities intersect with place-based gaps. As regions transition towards greener industrial activities, it is crucial that these transitions do not exacerbate existing inequalities. Instead, they should be leveraged as opportunities to enhance the participation of women and other underrepresented groups in manufacturing and other male-dominated industries (ILO, 2022).

In addition, manufacturing has an equalising effect across regions and nations. Manufacturing has productivity levels above the average of the UK economy and it also exhibits faster productivity growth (CIIP, 2023). Unlike the productivity gaps observed in other sectors, manufacturing productivity is higher or very close to London's productivity levels across the UK, and the participation of manufacturing in regional economies is also higher outside of London (CIIP, 2023).

Manufacturing also plays a key role in socioeconomic resilience and is a key contributor to the achievement of the Sustainable Development Goals (UNIDO, 2021). Highlighting this crucial role could also attract more women to the sector, as there is some evidence that women are more likely to be interested in roles that have a positive impact on society (CIIP, 2023).

Against this background, we encourage the UK government to **consider a gender perspective in place-based initiatives**. Examples of these measures may include:

- Support the development of research and analysis on gender disparities in industrial activity across UK's regions and nations.
- Collaborate with local actors to promote manufacturing as a as a viable and rewarding career path from the early stages in education through initiatives such as outreach programmes in collaboration with manufacturing companies.
- Support local actors in addressing gender-disparities in industrial activities, through
  initiatives such as awareness campaigns, training and awards that recognise best
  practices. For example, Belfast City Council has developed and implemented an Inclusive
  Growth City Charter.
- Promote challenge-led competitions aimed at leveraging manufacturing and other
  engineering capabilities to address place-specific societal challenges, including genderdisparities. For example, <u>Vinnova</u>, the <u>Swedish Innovation Agency</u>, has launched a call
  for projects to develop tools and methods to ensure gender equality in the digital
  transformation of the Swedish industry. This may include: frameworks for analysis, new
  methods for risk analysis, and new methods and tools for promoting gender equality in
  recruitment, among others.
- Leverage green transitions to enhance the participation of women and other underrepresented groups in manufacturing and other male-dominated industries.

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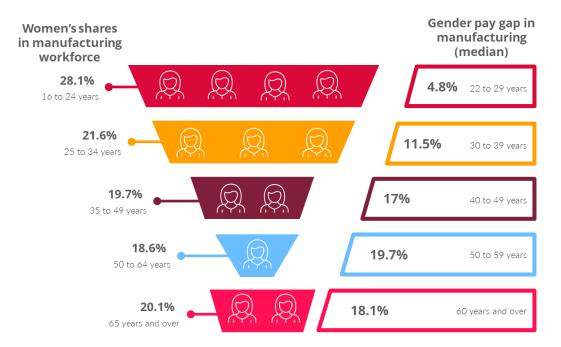
## **Appendices**

TABLE A1. PERFORMANCE OF MANUFACTURING SECTORS AND WOMEN'S PARTICIPATION IN THE WORKFORCE

| Industry   | Labour<br>productivity<br>(output per<br>hour, 2021 Q3) | Labour<br>productivity<br>growth (annual<br>average, 2012-<br>2021) | Labour<br>shares in total<br>economy<br>(hours, 2021<br>Q3) | Contribution to<br>aggregate<br>productivity<br>growth (average,<br>2012-2020) | Women's<br>share in the<br>workforce<br>(2023) |
|--|---|---|---|--|--|
| Manufacture of coke, and refined petroleum products                                | 207.28  | 22.90   | 0.03  | 0.03   | 13.89  |
| Manufacture of basic pharmaceutical products and pharmaceutical preparations       | 165.63  | -0.25   | 0.17  | -0.01  | 37.59  |
| Manufacture of chemicals and chemical products                                     | 84.78   | 11.56   | 0.32  | 0.07   | 40.06  |
| Manufacture of computer, electronic & optical products                             | 60.57   | 2.29  | 0.39  | 0.01   | 30.87  |
| Manufacture of textiles, wearing apparel and leather products                      | 58.22   | 11.01   | 0.25  | 0.03   | 44.51  |
| Manufacture of machinery and equipment n.e.c.                                      | 46.02   | 0.75  | 0.59  | -0.01  | 26.34  |
| Manufacture of transport equipment   | 43.13   | -2.31   | 0.97  | -0.04  | 15.21  |
| Manufacture of wood and paper products, and printing                               | 39.14   | 5.19  | 0.72  | 0.04   | 22.35  |
| Manufacture of food products, beverages and tobacco                                | 38.22   | 1.55  | 1.56  | 0.03   | 38.37  |
| Other manufacture and repair   | 38.21   | 1.21  | 1.01  | 0.00   | 24.04  |
| Manufacture of electrical equipment  | 38.17   | 5.00  | 0.25  | 0.01   | 18.10  |
| Manufacture of rubber and plastics products, & other non-metallic mineral products | 36.30   | 3.45  | 0.84  | 0.02   | 23.72  |
| Manufacture of basic metals and metal products                                     | 36.22   | 2.04  | 1.24  | 0.03   | 15.57  |

**Source:** ONS (2022). Labour productivity statistics for division-level industries, and their contributions to growth in whole economy productivity; ILO (2024). ILOSTAT. Employees by sex and economic activity – ISIC level 2.

FIGURE A1. THE LEAKING PIPELINE OF WOMEN IN MANUFACTURING



**Note:** Women's shares in the manufacturing workforce by age correspond to March 2021, while data on the pay gap corresponds to 2023.

**Source:** Castañeda-Navarrete, J., et al., (2023). <u>Women in UK Manufacturing 2024: Addressing labour shortages and bridging the gender gap. A review of best practices for diversity and inclusion</u>. University of Cambridge.

TABLE A2. GENDER GAPS IN MANUFACTURING BY REGION AND NATION, UK

| Nation / England region                 | Share of women in manufacturing, 2023 | Gender pay gap in<br>manufacturing<br>(median), 2023 | Manufacturing<br>value added<br>shares, 2022 |
|---|---------------------------------------|--|--|
| London                                  | 34.0%                                 | 22.9   | 2.1%   |
| South West of England                   | 29.3%                                 | 19.1   | 10.8%  |
| East of England                         | 26.6%                                 | 15.7   | 10.9%  |
| Scotland                                | 26.4%                                 | 18.2   | 10.4%  |
| East Midlands                           | 26.3%                                 | 18.5   | 16.8%  |
| England                                 | 26.3%                                 | NA   | 9.4%   |
| South East of England Yorkshire and The | 25.5%                                 | 17.1   | 7.9%   |
| Humber                                  | 25.4%                                 | 18.5   | 14.9%  |
| North West of England                   | 25.1%                                 | 12.9   | 14.0%  |
| Wales                                   | 24.7%                                 | 15.6   | 15.3%  |
| West Midlands                           | 24.1%                                 | 17.6   | 13.6%  |
| North East of England                   | 23.8%                                 | 8.3  | 15.1%  |
| Northern Ireland                        | 23.6%                                 | NA   | 12.8%  |
| United Kingdom                          | 26.1%                                 | 15.9   | 9.7%   |

**Source:** ONS (2024). Annual Survey of Hours and Earnings; ONS (2024). Regional gross value added (balanced) by industry: all International Territorial Level (ITL) regions; ONS (2024). Workforce jobs by industry (SIC 2007) and sex – unadjusted.