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**APPG FOR  
ENTREPRENEURSHIP  
WOMEN IN LEADERSHIP**



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# FOREWORDS

**RT HON LIAM BYRNE MP**

Shadow Minister (Digital Economy)  
and Chair of the APPG for  
Entrepreneurship

The APPG for Entrepreneurship exists to encourage, support and promote entrepreneurship. Through events and research, it ensures Parliament is kept up-to-date on what is needed to create and sustain the most favourable conditions for those who choose to take risks and strike out alone. An important part of what we do is working closely with experts and entrepreneurs to establish the barriers to starting and scaling up and examine how best they can be broken down.

In 2017/18, we approached two policy streams: Tax Reform and Women in Leadership. With our Secretariat, The Entrepreneurs Network, and our sponsors Octopus, we launched a Call for Evidence, asking the country's leading academics, relevant organisations and policy experts for their views on these specific issues.

Their responses, in addition to extensive research and a survey of over 500 entrepreneurs, formed the basis for these two short reports, which will be disseminated among politicians, the media and business owners. Currently, Britain sits in fourth place on the ranking of top countries for entrepreneurship. We hope that these reports will mark the start of new action by the government to ensure Britain becomes the best place in the world to start and grow a business.

**SEEMA MALHOTRA MP**

Vice Chair of the APPG for  
Entrepreneurship

Over half a million businesses are founded each year, with an increasing percentage started by female entrepreneurs. Further, many studies reveal that women display similar levels of ambition for their businesses as their male counterparts. Yet just a tenth of growing firms with revenues between £1m and £250m are run by women: in the US, this figure is closer to a fifth.

Today, few would question that women and men make equally capable entrepreneurs and business leaders. Yet the APPG for Entrepreneurship's Call for Evidence revealed that women faced "difficulties and obstacles in maintaining businesses, including networking opportunities that favour men, and less access to finance". Just 1 per cent of companies in the UK get to £1m in revenue: if we want to create more scale-ups, we must identify ways that untapped potential of female founders can be capitalised.

There is no single solution to this issue, but there is a need for an integrated strategy and the work of the APPG for Entrepreneurship is vital to help achieve this. Tweaking maternity pay and childcare can help boost female labour market participation. More consistent, regular data collection on growth businesses can provide policymakers with stronger evidence on female entrepreneurship, while demonstrating that returns offered by women-founded businesses can and should match returns from companies led by men.

A little recognition can go a long way. Female entrepreneurship needs to be on Parliament and the Government's radar and more consistently so. And the media needs to look more widely and fairly when profiling Britain's most successful founders for us female entrepreneurs to achieve recognition and see the wider culture change and shift in perception of women in business. The prize is a big one. As Facebook's Sheryl Sandberg poignantly once said: "In the future, there will be no female leaders. There will just be leaders."

There is a strong economic and moral case for ensuring women-led businesses scale up and are better represented in the fastest growing sectors of our economy. With better access to investors, support, great role models and networks, we will go a long way to levelling the playing field.

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**"There is a strong economic and moral case for ensuring women-led businesses scale up and are more represented in the fastest growing sectors of our economy."**



**CHRIS HULATT**  
Co-Founder, Octopus

The UK is home to some of the most exciting small businesses in the world, and at Octopus we have the honour of supporting some of them as they develop and grow. However, it should concern us that just a fraction – one tenth – of these growing businesses with revenues between £1m and £250m were started by women. Octopus is therefore delighted to partner with the APPG for Entrepreneurship to shine a light on this crucial issue.

If the Government wants our businesses to compete on global markets after Brexit, it has to break down the barriers facing female entrepreneurs. At Octopus, we're fortunate enough to work with some inspiring and dedicated female entrepreneurs, including Caroline Plumb of Fluidly and Tania Boler of Elvie, who have brought drive and creativity to their industry and helped grow the UK's economy.

The report rightly outlines ways in which we can all – the Government, the media, and the industry – be better in breaking down the barriers that hinder female entrepreneurs. We echo the calls for the Government to improve the collection of gender-disaggregated data on business ownership and STEM education drop-off rates, to ensure policy is based on accurate and up to date evidence.

We also recognise there is important work for us to do as an industry, with the report exposing the fact just 16 per cent of companies with a female founder had secured funding between 2009 and 2017. If the Government's Global Britain is to be a success, no stone can be left unturned when it comes to investment, and we look forward to working with the APPG as it carries forward the proposals in this report.

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**“We echo the calls for the Government to improve the collection of gender-disaggregated data on business ownership and STEM education drop-off rates.”**

# INTRODUCTION

Female entrepreneurs are starting up businesses at pace.<sup>1</sup> The latest statistics indicate that there are now 1.2m women-led SMEs in the UK, contributing an estimated £75bn to economic output.<sup>2</sup> However, few can be found among the entrepreneurial elite. Just half of women entrepreneurs, or 4 per cent of the female adult population, will own and manage a business that has paid salaries, wages or any other payments to the owners for more than 42 months.<sup>3</sup> Only a tenth of growing firms with revenues between £1m and £250m are run by women.<sup>4</sup>

The reasons behind the gender scale-up gap are complex. First, despite the recent surge towards entrepreneurship, fewer women overall found businesses. 11.5 per cent of the male adult population is currently engaged in entrepreneurial activity, compared with 5.3 per cent of women.<sup>5</sup> Second, longevity rates for women-led early-stage businesses in the UK have historically been lower.<sup>6</sup> A lower survival rate has, perhaps inevitably, contributed to the proportion of women-led businesses scaling less effectively.<sup>7</sup>

Third, gender differences – namely education, experience, networks and access to capital – have an effect on the ways in which men and women approach and practice entrepreneurship. In response to the APPG's Call for Evidence, experts from the Women's Organisation said: "women faced difficulties and obstacles in maintaining businesses, including unfavourable business regulations, networking opportunities that favour men, and less access to finance."<sup>8</sup>

**"The latest statistics indicate that there are now 1.2m women-led SMEs in the UK, contributing an estimated £75bn to economic output."**

- 1 Aston University, "Surge in female startups narrows 'enterprise gap'" (July 2017), <http://www.aston.ac.uk/news/releases/2017/july/surge-in-female-start-ups-narrows-enterprise-gap/>
- 2 C. Rhodes, "Business Statistics", House of Commons Library: Briefing Paper 06152 (28th December 2017) The study found that 21 per cent of all SMEs are female-led
- 3 Department for Business, Energy & Industrial Strategy, "Longitudinal Small Business Survey Year 2 (2016): SME employers – cross-sectional report" (July 2017), [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/624580/small-business-survey-2016-sme-employers.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/624580/small-business-survey-2016-sme-employers.pdf)
- 4 Lauren Davidson, "Mapped: The UK's mid-sized businesses run by women", Telegraph (8th March 2016), <https://www.telegraph.co.uk/business/2016/03/08/mapped-the-uks-mid-sized-businesses-run-by-women/>
- 5 Global Entrepreneurship Monitor, "GEM 2017/2018 Global Report" (6th April 2018), <https://www.gemconsortium.org/report/50012>
- 6 Kiran Bhagotra, in response to our Call for Evidence, adds: "women's failures are scrutinised harder. We could have greater acceptance of failure across the entrepreneurial sphere and society."
- 7 Global Entrepreneurship Monitor, "GEM 2015/2016 Adult Population Survey" (5th February 2016), <https://www.gemconsortium.org/report/49480>
- 8 The Women's Organisation, "Response to APPG for Entrepreneurship Women in Leadership Call for Evidence" (July 2018)

These impediments tend to influence prospects and recognition, the types of firms that women launch, and the subsequent success of those firms. Further, conformity to social expectations, gender stereotypes or gender roles, combined with family responsibilities were listed, by women, as the top issues holding them back from greater entrepreneurial success.

Finally, just as in the wider labour market, there are male and female entrepreneurs in all sectors, but there are relatively more women in services, be they healthcare, education or retail. Companies in the service sector are generally smaller than those in, for example, manufacturing and construction.<sup>9</sup>

There is a strong economic case for ensuring women-led businesses scale.<sup>10</sup> As Women's Enterprise Scotland highlighted in response to our Call for Evidence, without a gender-aware and informed business ecosystem, women are "20 per cent less likely than men to gain support for their ideas, inhibiting economic growth".

If we can increase the current levels of participation to match those of men, women-led SMEs could potentially contribute in excess of £180bn gross value added to the UK economy by 2025, over twice the 2014 level of £85bn.<sup>11</sup> Further, if women have lower levels of self-belief, a lower appetite for risk<sup>12</sup>, fewer role models and limited access to finance and networks, it is worth examining how the playing field can be levelled.<sup>13</sup> An entrepreneurial ecosystem encompassing women entrepreneurs as well as public policies addressing regulative and cultural barriers is needed.<sup>14</sup>

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**"There is a strong economic case for ensuring women-led businesses scale"**

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9 Department for Business, Energy & Industrial Strategy, "Longitudinal Small Business Survey Year 2 (2016): SME employers – cross-sectional report" [July 2017] [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/624580/small-business-survey-2016-sme-employers.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/624580/small-business-survey-2016-sme-employers.pdf)

10 S. Coleman, L. Foss, C. Henry and B Orser, "Women's Entrepreneurship Policy: A 13-Nation Cross-country Comparison", *International Journal of Gender and Entrepreneurship* (August 2017), [https://www.researchgate.net/publication/319297367\\_Women%27s\\_entrepreneurship\\_policy\\_a\\_13\\_nation\\_cross-country\\_comparison](https://www.researchgate.net/publication/319297367_Women%27s_entrepreneurship_policy_a_13_nation_cross-country_comparison)

11 Deloitte, "Women Entrepreneurs: Developing Collaborative Ecosystems for Success" (April 2016), <https://www.womensbusinesscouncil.co.uk/wp-content/uploads/2017/02/deloitte-uk-wom-entr20161.pdf>

12 Kate Lester of Diamond Logistics has supported this claim with anecdotal evidence. She says, "My experience in employing women and working with female entrepreneurs is that they are a little more risk averse – so their probability of success is higher. But long-term parity in terms of ownership is possible."

13 Ibid.

14 H. Neergaard and C. Thrane, "The Nordic Welfare Model: barrier or facilitator of women's entrepreneurship in Denmark?" *International Journal of Gender and Entrepreneurship* (2011), <https://www.emeraldinsight.com/doi/abs/10.1108/17566261111140189>

# KEY RECOMMENDATIONS

1. Improve data collection on business ownership. There is currently a lack of comprehensive and regularly updated gender-disaggregated business ownership data. This would help provide policymakers with a stronger evidence base on women's entrepreneurship.
2. More data collection on STEM drop-off rates. These must be broken down by age and region, and regularly published, so government can implement policies where they are most needed.
  - a. Government should work closely with schools and universities to address this issue, and examine how careers guidance should be re-considered to ensure pupils of both genders are aware of future job opportunities in all sectors – not just those they most enjoy.
3. Maternity pay. We cannot divorce female scale-up rates from a country's treatment of women when they choose to start a family.
  - a. Remove the Keeping In Touch restriction on women receiving Maternity Allowance (MA). At present, women receiving MA will forfeit the benefit if they work more than ten days during the 39-week Maternity Pay Period (MPP).
  - b. Extend Small Employers' Relief on Statutory Maternity Pay. This would mitigate any possible unconscious bias against female candidates for roles within smaller businesses.
  - c. Offer Paternity Allowance to male entrepreneurs. Uptake may be low, but it would have the wider effect of ensuring British society re-examines the expectations placed on women to carry out certain roles.
4. Take measures to lower the cost of childcare. It is currently three times the cost (as a percentage of average income) as in France and Germany. Current costs mean childcare arrangements have eliminated choice for many families, and disproportionately hurt women's prospects:
  - a. Review nursery and pre-school teacher-child ratios. The UK has among the most stringent regulations in the OECD.
  - b. Review the Early Years Foundation Stage, which may have placed excessive bureaucratic burden on nurseries and pre-schools.
  - c. Remove the "free" childcare allowance for children aged 3-4. Studies have shown it may increase childcare prices for other groups, as providers need to cross-subsidise to remain economic.

5. Open up doors to Parliament and Number 10 to female entrepreneurs. This would formally validate their efforts, provide much-needed media coverage, and give MPs the opportunity to understand the challenges female entrepreneurs face.
6. Address Local Enterprise Partnerships' current levels of inconsistent or insufficient engagement with diversity.
  - a. Appropriate government bodies should engage in active support for mentoring schemes aimed at female founders and women in business.
  - b. Government should develop dedicated investment strands targeting LEPs and city regions which optimise women's enterprise in their localities.



# WOMEN-LED SCALE-UPS: A GLOBAL PERSPECTIVE

We see a gender divide in new venture creation and business ownership across the globe. However, the UK's rates of female early-stage entrepreneurship remain below many other advanced economies. Canada has the highest absolute rate of female early-stage entrepreneurs (11.6 per cent). Spain has the closest male:female ratio of any developed country, with 74 Spanish women entrepreneurs for every 100 men, compared with 53 for the UK.<sup>15</sup>

**“Barriers to starting up are being broken down worldwide, but women are still struggling to scale.”**

This is only half the picture, however. Barriers to starting up are being broken down worldwide, but women are still struggling to scale. In 2016 an estimated 163m women were starting or running new businesses in 74 economies around the world, yet fewer than two-thirds could be described as “established”.<sup>16</sup> Globally, just 15.8 per cent of companies with at least one female founder had initial funding between 2009 and 2017.<sup>17</sup> In Canada, just 10 per cent of companies with over 100 employees are owned by women.<sup>18</sup>

The US and Sweden rank highest overall for business environments that provide high R&D investments, strong innovation ecosystems, and availability of capital combined with relatively low levels of business regulations.<sup>19</sup> Yet these factors do not always translate into gender equality in entrepreneurship.

Sweden has commendable levels of gender equality at a societal level, yet this has been shown to promote women's participation in the conventional job market over entrepreneurship.<sup>20</sup> For instance, Scandinavian nations provide for ample maternity leave, yet women there sit below the OECD average in terms of entrepreneurial aspirations. In Sweden, overly generous

15 Aston University, “Surge in female startups narrows ‘enterprise gap’” (July 2017), <http://www.aston.ac.uk/news/releases/2017/july/surge-in-female-start-ups-narrows-enterprise-gap/>

16 Global Entrepreneurship Monitor, “Women's Entrepreneurship 2016/2017 Report” (2017), <http://www.babson.edu/Academics/centers/blank-center/global-research/gem/Documents/GEM%202016-2017%20Womens%20Report.pdf>

17 Gene Teare, “In 2017, only 17 per cent of startups have a female founder”, TechCrunch (19th April 2017), <https://techcrunch.com/2017/04/19/in-2017-only-17-of-startups-have-a-female-founder/>

18 Government of Canada, “Key Small Business Statistics” (June 2016), [https://www.ic.gc.ca/eic/site/061.nsf/eng/h\\_03018.html](https://www.ic.gc.ca/eic/site/061.nsf/eng/h_03018.html)

19 Representatives from Subway Development Agency suggest we look to the US government for inspiration. “They have more female-focused business support,” they said in response to our Call for Evidence.

20 C.G. Brush, L.F. Edelman, T.S. Manolova, A. Robb and F. Welter, “Entrepreneurial Ecosystems and Growth of Women's Entrepreneurship”, Cheltenham: 2017

childcare policies – the cost of childcare is just 3 per cent of a household's income – mean traditional employment is perceived as more advantageous, given it will generally allow for a longer maternity leave.<sup>21</sup>

In the US, however, parents cannot rely on parental insurance or public childcare, but must resolve those issues privately.<sup>22</sup> Statutory maternity leave is available, but it is only 12 weeks and unpaid. Unsympathetic though this may appear, it could controvert societal perceptions that childcare should take place in the home, carried out largely by women.

Alongside France and Germany, the US is also one of few nations which collects gender-disaggregated business information.

- The UK should follow suit and improve data collection on business ownership. There is currently a lack of comprehensive and regularly updated gender-disaggregated business ownership data.<sup>23</sup> This would help provide policymakers with a stronger evidence base on women's entrepreneurship.

A long-term sustained national commitment in the US to policies focused on women in business, as well as programmes to ensure widespread female-targeted business support and joined up visible programmes, may be contributing to its success. After all, the US is now home to three of the top five – and six in the top ten – cities globally for “high-potential” female entrepreneurs.<sup>24</sup>

- We must address Local Enterprise Partnerships' current levels of inconsistent or insufficient engagement with diversity. Appropriate government bodies should engage in active support for mentoring schemes aimed at female founders and women in business. Government should develop dedicated investment strands targeting LEPs and city regions which optimise women's enterprise in their localities.

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21 H. Neergaard and C. Thrane, “The Nordic Welfare Model: barrier or facilitator of women's entrepreneurship in Denmark?” *International Journal of Gender and Entrepreneurship* (2011), <https://www.emeraldinsight.com/doi/abs/10.1108/17566261111140189>

22 H. Ahl and T. Nelson, “Welfare Systems and Policies for Women's Entrepreneurship in Sweden and the United States”. Submission to the Triple Helix 9 Scientific Committee (2011)

23 The Women's Organisation, “Response to APPG for Entrepreneurship Women in Leadership Call for Evidence” (July 2018)

24 Dell, “Overcoming Barriers to Success: Dell Ranks Top 50 Global Cities for Women Entrepreneurs” (17th July 2017), <http://www.dell.com/learn/si/en/sicorp1/press-releases/2017-07-17-dell-ranks-top-50-global-cities-for-women-entrepreneurs>

# THE MOTHERHOOD PAY GAP

Drawing on comparisons from other nations, it becomes clear we cannot divorce female scale-up rates from a country's treatment of women when they choose to start a family. If policy is too generous, it can have the perverse effect of removing incentives to starting up a business. Too stringent, and it may have wider societal implications: some, for example, have linked the lack of government-subsidised maternity leave in the US to declining birth rates.<sup>25</sup>

The UK has relatively generous maternity policies for female employees. Statutory Maternity Pay (SMP) can be paid for up to 39 weeks; for the first six weeks women will receive 90 per cent of their average weekly earnings before tax, then £145.18 for the remaining 33 weeks. If a woman is receiving SMP from one employer and does work in a self-employed capacity during her Maternity Pay Period (MPP), such work will not affect the subsidy. This is good policy: it enables potential female entrepreneurs to use time away from the traditional workplace to set up a business, with the SMP safety net still in place.

**“We cannot divorce female scale-up rates from a country's treatment of women when they choose to start a family.”**

## REFORMING MATERNITY ALLOWANCE

Maternity Allowance (MA) is a benefit paid weekly to self-employed (though not exclusively) pregnant women and new mothers. Women can expect to receive £145.18 for a 39-week period. However, there are restrictions on the number of Keeping In Touch days women receiving MA are permitted to work. Once these exceed 10, the benefit is withdrawn: this is tantamount to a penalty on women who choose to be self-employed. In Denmark, which has a similar policy, academics believe it has contributed to “women being generally much older than men when starting a business”.<sup>26</sup> Further, as the Association of Independent Professionals and the Self-Employed pointed out in response to our Call for Evidence, UK parents who work for themselves are not entitled to shared parental leave, which serves to “reinforce women's traditional roles as mothers”.

25 Centers for Disease Control and Prevention, “National Vital Statistics System” (2018), <https://www.cdc.gov/nchs/nvss/births.htm>

26 H. Neergaard and C. Thrane, “The Nordic Welfare Model: barrier or facilitator of women's entrepreneurship in Denmark?” *International Journal of Gender and Entrepreneurship* (2011), <https://www.emeraldinsight.com/doi/abs/10.1108/17566261111140189>

- Government should remove the Keeping In Touch restriction on women receiving Maternity Allowance, to enable them to continue work in the 39 weeks following pregnancy, while opening up shared parental leave to the self-employed.<sup>27</sup>

Only male employees with a contract can receive Statutory Paternity Pay (SPP) and leave. The statutory rate is £145.18, which matches SMP after the first six weeks. SPP is an important benefit, and there is an argument for bringing it in line with SMP in the initial period. It provides vital flexibility, while ensuring there is no onus on the woman alone to raise a family. However, there is no self-employed equivalent, and the expectation is that expecting fathers will save a percentage of their monthly income in the months and weeks up to the birth to cover the paternity leave they may wish to take.

- Government should offer Paternity Allowance to male entrepreneurs. Again, this would have the wider effect of encouraging society to re-examine the expectations put on women to carry out certain roles.

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## SHOULDERING THE SMP BURDEN

Currently, an employer can usually reclaim 92 per cent of employees' SMP, Paternity, Adoption and Shared Parental Pay from HMRC. If a business qualifies for Small Employers' Relief, it can reclaim 103 per cent. To qualify, a business must pay £45,000 or less in Class 1 National Insurance (ignoring any reductions like Employment Allowance) in the previous year.

We believe this should be increased, to ensure the burden of SMP does not disincentivise smaller firms from hiring skilled women – especially in higher-paid, leadership roles. The proportion of women in scale-up C-level positions is rising, which will, over time, lead to more women transitioning into entrepreneurship.<sup>28</sup>

- Increasing the Small Employers' Relief threshold will mitigate any unconscious bias against female candidates for roles within smaller firms. It would also mitigate any time pressure on female founders to time maternity leave with when it best suits their careers or businesses.

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27 Association of Independent Professionals and the Self-Employed, "Response to APPG for Entrepreneurship Women in Leadership Call for Evidence" (July 2018)

28 The Entrepreneurs Network, "Untapped Unicorns: Scaling Up Female Entrepreneurship" (2016), [https://static1.squarespace.com/static/58ed40453a04116f46e8d99b/t/5a5cda2df9619a9a19211b7e/1516034698203/Untapped\\_Unicorns.pdf](https://static1.squarespace.com/static/58ed40453a04116f46e8d99b/t/5a5cda2df9619a9a19211b7e/1516034698203/Untapped_Unicorns.pdf)



# PAYING TO WORK: THE CHILDCARE PUZZLE

Female labour market choices depend on the availability, affordability and quality of childcare, yet over the past decade childcare arrangements have become less choice and more necessity. Many families in the UK now spend a third of their income on childcare, three times that of France or Germany.<sup>29</sup>

As children spend more time in non-parental care, concerns over the quality of out-of-home care have risen, and to address those concerns, the UK has established requirements and regulations designed to improve the quality of care.<sup>30</sup> But these are costly – both to government (which spends around £7bn annually on the childcare sector) and parents.<sup>31</sup> It is an area where state intervention, while with the best intentions, has been ill-judged and too heavy-handed.

Childcare subsidies have had a significant displacement effect on private sector activity, and there is only limited evidence that it increases female labour force participation. Regulation of childcare and pre-schools through the Early Years Foundation Stage – a national framework – may have contributed to the squeezing out of other, cost-effective alternatives like childminders. The “free” childcare allowance, extended from 15 to 30 hours last September, may have increased childcare prices for other groups, as providers have cross-subsidised to remain economic, with perverse distributional consequences.<sup>32</sup> Our teacher to child ratios – which are far more stringent than in most OECD countries – have further pushed up costs for parents.

- Government should reassess nursery and pre-school teacher:child ratios. It should review the Early Years Foundation Stage, which may have placed excessive bureaucratic burden on nurseries and pre-schools. And it should remove the “free” childcare allowance for children aged 3-4.

Parents should be free to make choices about the types and quality of provision they want for their children. In scaling back regulation of the sector, we can create a competitive environment in which costs could drop, while government intervention could be replaced by private forms of quality assurance.<sup>33</sup>

**“Our teacher to child ratios – which are far more stringent than in most OECD countries – have further pushed up costs for parents.”**

29 D. Martin, “UK childcare is the most expensive in the world”, The Daily Mail (11th October 2016), <http://www.dailymail.co.uk/news/article-3831626/UK-childcare-expensive-world-Families-spend-income-nurseries-childminders.html>

30 D. Gorry and D.W. Thomas, “Regulation and the Cost of Childcare” (August 2015), <https://www.mercatus.org/system/files/Thomas-Regulation-Child-Care.pdf>

31 R. Bourne and L. Shackleton, “Getting the State out of Pre-School and Childcare” (6 February 2017), <https://iea.org.uk/publications/getting-the-state-out-of-pre-school-childcare/>

32 Ibid.

33 Ibid.

# BRIDGING THE GENDER FUNDING GAP

The amount of funding flowing into UK startups doubled in 2017 compared to the year before, yet women-led businesses in Britain have received less than 10 per cent of the funding pie in the past two years.<sup>34</sup> This is troublesome: companies which secure external financing scale up to 81 per cent faster.<sup>35</sup>

There are a number of reasons why female entrepreneurs raise less funding, and discrimination is not the sole culprit. Many female founders, for example, express a desire to create lifestyle businesses. Yet while some are happy to grow their ventures organically, with little desire to dissolve their stake in a company for additional funding, surveys have shown that men and women display similar levels of ambition when it comes to scaling up.<sup>36</sup>

Research suggests that women are facing barriers in accessing business funding via traditional routes, possibly as a result of unconscious bias. A series of randomised controlled trials, conducted at Harvard Business School, revealed that a female name, picture or voice cuts the odds of receiving investment.<sup>37</sup> In the real world, women make up such a small percentage of angels and venture capitalists that this could have significant implications.

Further, a new study from Columbia Business School and the Wharton School revealed that investors pose different types of questions to male and female entrepreneurs: men were typically asked about the potential for gains and women about the potential for losses.<sup>38</sup>

Of the £10bn raised by companies in 2017, just 8.7 per cent had at least one female founder, in part because the businesses women create

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34 The Entrepreneurs Network, "Mentoring Matters" (2018) [https://static1.squarespace.com/static/58ed40453a04116f46e8d99b/t/5aa7bd6871c10b916708d654/1520942482730/005\\_FFF\\_2018\\_AWK\\_WEB.pdf](https://static1.squarespace.com/static/58ed40453a04116f46e8d99b/t/5aa7bd6871c10b916708d654/1520942482730/005_FFF_2018_AWK_WEB.pdf)

35 Goldman Sachs 10,000 Small Businesses, "Building Small Business Britain" (2016), <http://www.goldmansachs.com/citizenship/10000-small-businesses/UK/news-and-events/building-smallbusinesses-f/report.pdf>

36 Ben Lobel, "Is starting a business as a woman easier than ever?" *Smallbusiness.co.uk* (8th March 2018), <http://smallbusiness.co.uk/international-womens-day-is-starting-a-business-as-a-woman-easier-than-ever-2543109/>

37 A. Wood Brooks, L. Huang, S. Wood Kennedy and F.E. Murray, "Investors Prefer Entrepreneurial Ventures Pitched by Attractive Men", Harvard Business School (20th February 2014)

38 M.A. Conley, L. Huang, D. Kanze and E.T. Higgins, "Entrepreneurs get asked different questions by VCs – and it affects how much funding they get", *Harvard Business Review* (June 2017), <https://hbr.org/2017/06/male-and-female-entrepreneurs-get-asked-different-questions-by-vcs-and-it-affects-how-much-funding-they-get>

tend to be in industries that do not typically scale quickly.<sup>39</sup> The bulk of women-led businesses are in Retail/Wholesale (making up 20 per cent of the total), Education (45 per cent), Human Health (56 per cent), Arts/Entertainment (21 per cent), and Other Services (31 per cent). Women-led businesses are less common in Transport/Storage (11 per cent), Information/Communication (11 per cent), Construction (13 per cent) and Manufacturing (13 per cent).<sup>40</sup>

As representatives from Aldermore highlighted in response to our Call for Evidence, it is difficult to build revenue, profits and start hiring employees at these firms. As a consequence, men are “six times more likely to find themselves managing medium-sized enterprises”.<sup>41</sup> Yet plenty of female entrepreneurs are at the helm of fast-growth, tech businesses.

- Government should open up doors to Parliament and Number 10 to female entrepreneurs. This would formally validate their efforts and give MPs the opportunity to understand the challenges female entrepreneurs face. Further, it would raise their profile, providing media coverage and helping reverse any misconceptions that women exclusively run smaller businesses that are less likely to scale.

The trend is not unique to Britain: in the US women own around one-third of small businesses, yet receive just 10 per cent of VC funding.<sup>42</sup> Last year, around €16.35bn was invested across 3,465 VC deals in Europe. For female founders, these figures dropped dramatically, to €1.84bn and 553, respectively.<sup>43</sup> In practice, this means that women-founded companies in Europe receive just 11 per cent of the VC capital spent on the continent.

With female VC partners twice as likely to invest in companies with a woman on the management team, and three times more likely to invest in companies with a female CEO, it is troubling that of the top 100 venture firms globally, just 7 per cent of the partners are women.<sup>44</sup> Here in

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**“Research suggests that women are facing barriers in accessing business funding via traditional routes, possibly as a result of unconscious bias.”**

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39 The Entrepreneurs Network, “Mentoring Matters” (2018), [https://static1.squarespace.com/static/58ed40453a04116f46e8d99b/t/5aa7bd6871c10b916708d654/1520942482730/005\\_FFF\\_2018\\_AWK\\_WEB.pdf](https://static1.squarespace.com/static/58ed40453a04116f46e8d99b/t/5aa7bd6871c10b916708d654/1520942482730/005_FFF_2018_AWK_WEB.pdf)

40 Department for Business, Energy & Industrial Strategy, “Longitudinal Small Business Survey Year 2 (2016): SME employers – cross-sectional report” (July 2017), [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/624580/small-business-survey-2016-sme-employers.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/624580/small-business-survey-2016-sme-employers.pdf)

41 Aldermore, “Response to APPG for Entrepreneurship Women in Leadership Call for Evidence” (July 2018)

42 Gene Teare, “The first comprehensive study on women in venture capital and their impact on female founders”, TechCrunch (19th April 2016), <https://techcrunch.com/2016/04/19/the-first-comprehensive-study-on-women-in-venture-capital/>

43 Sean Lightbrown, “What the venture landscape is really like for Europe’s female founders”, PitchBook (13th April 2018), <https://pitchbook.com/news/articles/what-the-venture-landscape-is-really-like-for-europes-female-founders>

44 The Entrepreneurs Network, “Mentoring Matters” (2018), [https://static1.squarespace.com/static/58ed40453a04116f46e8d99b/t/5aa7bd6871c10b916708d654/1520942482730/005\\_FFF\\_2018\\_AWK\\_WEB.pdf](https://static1.squarespace.com/static/58ed40453a04116f46e8d99b/t/5aa7bd6871c10b916708d654/1520942482730/005_FFF_2018_AWK_WEB.pdf)

Britain, women make up just 14 per cent of business angels.<sup>45</sup> Diversity is vital across all industries, but in the case of investment it is a supply and demand-side necessity. Fortunately, the investment community is increasingly aware of the issue, and many are working closely with the British Venture Capital Association and UK Business Angels Association (UKBAA) in taking steps to break down barriers.

- The government should provide statistics on returns offered by women-founded businesses at the angel level, to encourage an increase in early-stage investment into these firms. It could do this in partnership with UKBAA.

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<sup>45</sup> The Entrepreneurs Network, “Untapped Unicorns: Scaling Up Female Entrepreneurship” (2016), [https://static1.squarespace.com/static/58ed40453a04116f46e8d99b/t/5a5cda2df9619a9a19211b7e/1516034698203/Untapped\\_Unicorns.pdf](https://static1.squarespace.com/static/58ed40453a04116f46e8d99b/t/5a5cda2df9619a9a19211b7e/1516034698203/Untapped_Unicorns.pdf)



# YOUNG GUNS: FEMALE UNDERREPRESENTATION IN STEM

Technological developments are changing working practices and how businesses are operated, while the global nature of business means more young people will have jobs crossing different continents and sectors. It is vital that the UK equip future generations with the skills and mindsets to navigate the future world of work. In short: the right education has never been more important.

It is not the purpose of this report to examine the impact of coding and computational thinking in the curriculum, or programmes like Founders4Schools. But with female under-representation in science, technology, engineering and mathematics (STEM) now front of mind for policymakers and commentators alike, it is worth considering whether there is a gender issue in education that needs to be fixed.

Women make up just 14.4 per cent of all people working in STEM in the UK, far short of the country's goal of a critical mass of 30 per cent.<sup>46</sup> If women are less likely to pursue STEM, yet these academic disciplines often serve as a birthplace for entrepreneurial ventures, should the UK government be doing more to encourage uptake? Further, research suggests that when women do pursue careers in these fields, they encounter male-dominated cultures and hierarchies that are unwelcoming.<sup>47</sup> These factors contribute to industry segregation, such as retail and services. It may serve to exacerbate the STEM gap, with indirect, negative consequences for women on the entrepreneurial journey.

Studies have shown that girls perform better than boys academically, and arguably have more choice to pursue the subjects they enjoy. Further, the more gender equal a nation, the lower the STEM uptake among girls, suggesting that gender equality allows girls to drop STEM subjects if they don't find them of interest.<sup>48</sup> But we should ask why – especially as girls

**“Women make up just 14.4 per cent of all people working in STEM in the UK.”**

46 See, for example: <https://www.wisecampaign.org.uk/resources/2015/09/women-in-the-stem-workforce>

47 S. Coleman, A. Robb and D. Stangler, “Sources of Economic Hope: Women’s Entrepreneurship” Ewing Marion Kauffman Foundation (November 2014), file:///Users/annabeldenham/Downloads/sources\_of\_economic\_hope\_womens\_entrepreneurship%20(1).pdf

48 D.C. Geary and G. Stoet, “The Gender-Equality Paradox in Science, Technology, Engineering and Mathematics Education”, *Psychological Science* (14th February 2018), <http://journals.sagepub.com/doi/abs/10.1177/0956797617741719?journalCode=pssa>

outperform in GCSE science but opt out of these subjects past 16.<sup>49</sup>

- Government should gather more data on STEM drop-off rates. It should consult with schools, universities and experts to examine the role of socialisation in the STEM disparity, and how careers guidance could inform, tackle gender stereotypes, and ensure schoolgirls are aware of job opportunities and options later in life.

Something is pushing girls away from maths and science, even when those are their best subjects. The number of schoolgirls performing well in these disciplines far exceeds the number of women graduating with STEM degrees.<sup>50</sup> Socialisation is in part to blame: there is a notable difference between the progression rates in Physics, for example, from single-sex schools compared with co-ed schools. It would appear that, in many schools, expectations of students are gender stereotyped.<sup>51</sup>

- This must be challenged by a school-wide approach to gender equity, with support from government, if it is to be addressed successfully.<sup>52</sup>

It is not exclusively schools that may be pushing girls towards “reading” subjects. An extensive survey of girls across Europe found that a lack of female role models in STEM was a key reason that they opted out of a career in these sectors. Too often, male entrepreneurs are portrayed – by media and the entertainment industry – as running fast-growth tech companies. The media often portrays women as running “lifestyle” businesses, which have little opportunity for growth. Terms like “mumpreneur” or “lipstick entrepreneur” do little to tackle the stereotype.

- The media should move away from gender altogether when profiling Britain’s most successful entrepreneurs.<sup>53</sup> The sooner women’s success is treated the same as men’s – with the focus on the business rather than the gender – the sooner the public will perceive both male and female entrepreneurs as equal

Lastly, it is worth mentioning that enterprise education at UK universities is essential towards ensuring young people have the entrepreneurial skills needed to take advantage of the digital revolution. This, as the Association of Independent Professionals and the Self-Employed has highlighted, is particularly relevant for women. “Appropriate enterprise training has been shown to double women’s chances of starting a business, and triple their levels of confidence in their abilities,” the lobby group explains.

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**“Appropriate enterprise training has been shown to double women’s chances of starting a business.”**

49 A Microsoft study has found that most girls across Europe become interested in STEM at the age of 11.5 but this starts to wane by 15: a lack of female role models in STEM was cited as a key reason.

50 Wise Campaign, “Analysis of GCSE STEM entries and results” (2017), <https://www.wisecampaign.org.uk/statistics/analysis-of-gcse-stem-entries-and-results/>

51 Institute of Physics, “It’s Different for Girls: The influence of schools” (October 2012), [https://www.iop.org/education/teacher/support/girls\\_physics/file\\_58196.pdf](https://www.iop.org/education/teacher/support/girls_physics/file_58196.pdf)

52 Experts from IPSE have also suggested adding a core business model into all vocational qualifications at Level 3, which would ensure that regardless of subject or chosen career path, students are equipped with the business skills to thrive.

53 As Kate Lester of Diamond Logistics has pointed out, “We need to publicise normal successful entrepreneurs.”

# CONCLUSION

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The UK needs more early-stage businesses achieving longer-term survival and scale. Supporting female entrepreneurs is not just about increasing the number of women-owned businesses: it is about raising their performance and growth potential. Not only will this lead to more established SMEs contributing more to economic growth, but they could also serve as inspiration to young girls.

As more and more women turn promising ideas into thriving businesses, they will make up a greater share of entrepreneurial role models, thereby encouraging more women into the pipeline – from schoolgirls considering STEM to founders scaling big. According to our survey, less than a third of women now think gender has been a hindrance to success. However, the figure for men is a negligible 1 per cent. The APPG for Entrepreneurship will continue to work closely with entrepreneurs, experts and policymakers to ensure women-led businesses can survive and thrive.



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**ANNABEL DENHAM**

Editor, The Entrepreneurs Network

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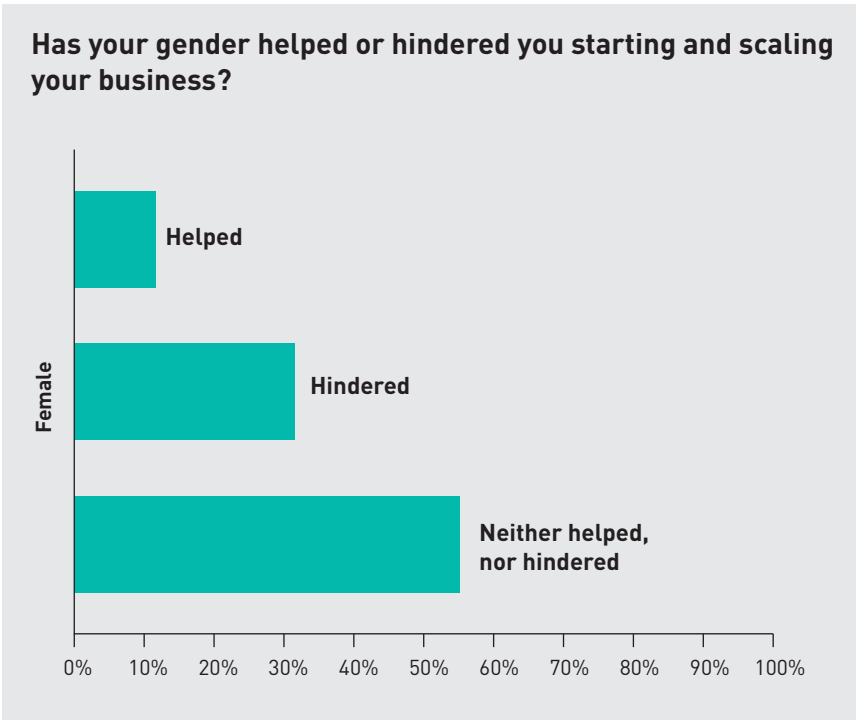
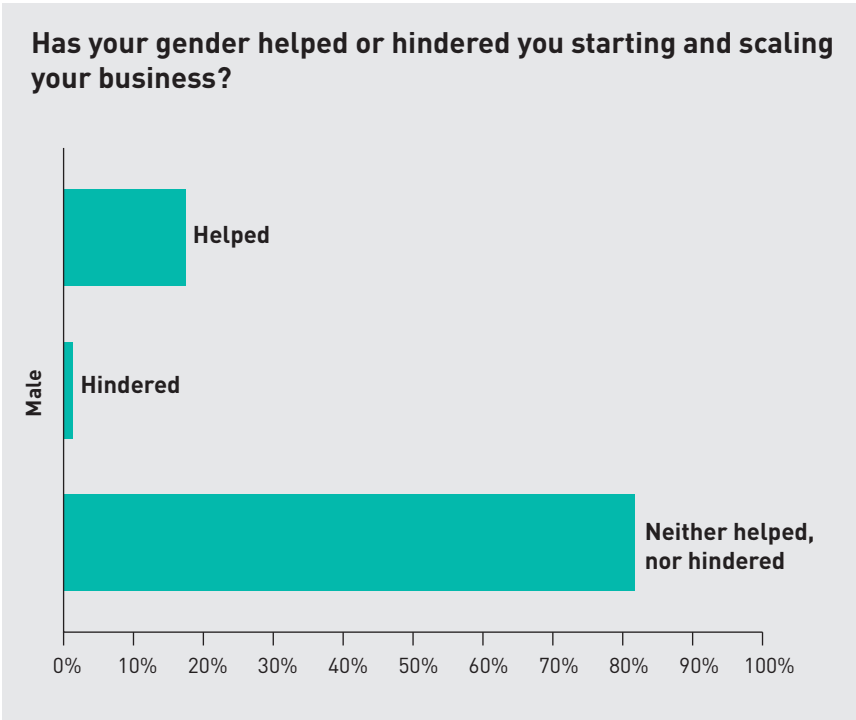
Organisations: Adam Smith Institute, Aldermore, Association of Independent Professionals and the Self-Employed, Beauhurst, British Venture Capital Association, Cicero Group, Diamond Logistics, Subway Development Agents, UK Business Angels Association, Women's Enterprise Scotland, The Women's Organisation

Survey Partners: Accelerator Network, EISA, Enterprise Nation, Entrepreneurs Forum, FSB, Guild of Entrepreneurs, ICE, Innovation Forum, IPSE, Nacue, Nesta, peak b, Platform, Runway East, Small Awards, Supper Club, Tech UK, Tech London Advocates, Tech Nation, The Leap, The Entrepreneurs Network, Toucan Ventures.

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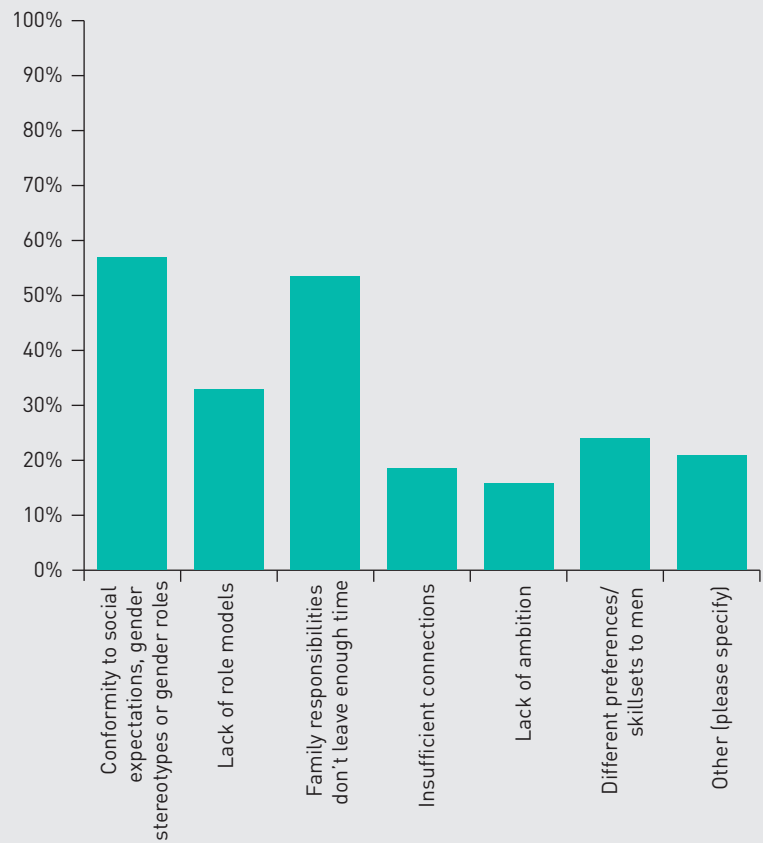
**“As more and more women turn promising ideas into thriving businesses, they will make up a greater share of entrepreneurial role models.”**

# SURVEY CHARTS

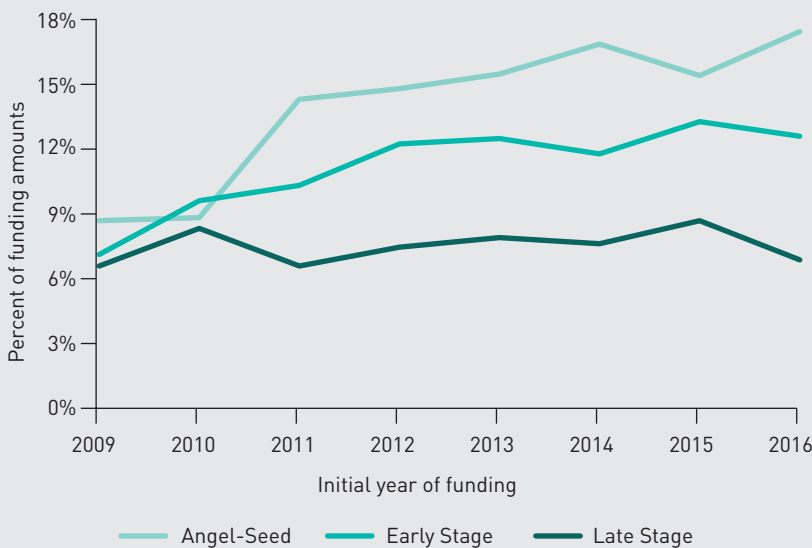




What is holding back women from greater entrepreneurial activity and success? Pick up to 3.



Percent of invested amounts to female-founded companies, grouped by initial funded year.



The Octopus logo consists of the word "octopus" in a dark blue, lowercase, sans-serif font. The letters are closely spaced, and the overall style is clean and modern.

A brighter way

Octopus is a group of companies investing in the people, ideas and industries that will make the world a better place to live. The group has nearly 300,000 customers across six businesses, and their investments have put more than £7.8 billion into the UK economy. Octopus was founded in 2000 by Simon Rogerson and Chris Hulatt, who have taken the spirit of entrepreneurship and applied it to sectors like financial services and energy, where innovation and optimism can help create something better.



