





Policy Briefing The impact of flexible work on SME performance: An analysis of flexible working arrangements, innovation and productivity in Scotland

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Key findings

According to the most recent data available, one out of three jobs advertised in Scotland offers flexible working (Timewise, 2023) while 67% of Scottish workers work flexibly and a further 18% would like to (Flexibility Works, 2024), while recent UK Government legislation — the Employment Relations (Flexible Working) Act 2023, effective from April 6, 2024 — grants employees the right to request flexible working from day one in a new job. This significant legislative change reflects a growing recognition of the need for flexible work arrangements (FWAs) across the UK, addresses the recruitment difficulties arising from an increased level of economic inactivity post-pandemic, offers the possibility of a better work-life balance to workers while adapting to their needs at different stages of the life course, and potentially improves productivity and innovation as several studies have found around the world. In Scotland, the Government's Fair Work Action Plan further reinforces this commitment by promoting fair and inclusive workplaces tailored to the unique needs of Scottish workers. The Scottish Government's National Strategy for Economic Transformation also places emphasis on achieving a fairer society, including through the adoption of fair work practices and an emphasis on enhancing wellbeing.

However, the factors behind FWAs adoption and its impact on business performance for small and medium enterprises (SMEs) in the UK remain underexplored. Drawing on data from Scottish SMEs in the Longitudinal Small Business Survey (LSBS) between 2015 and 2022, this report provides a comprehensive evidence-based analysis of the determinants of FWAs adoption and its relationship with SME productivity and innovation. We do this by investigating both any FWAs as an aggregate (i.e. analysing data on firms that have adopted any FWAs) and disaggregating FWAs into eight distinct types (flexitime, annualised hours contract, term-time working, job sharing, nine-day fortnight, four-a-half-day week, zero hours contracts and on-call working) in addition to a nineth type comprising any other flexible working hours arrangement. In modelling productivity and innovation, we also control for a set of other business characteristics including sector, age, location in rural areas, female ownership, exporting status, plans for the future and major obstacles to business success, allowing a rich analysis of Scottish SMEs behaviour. Through this analysis, we aim to bridge the knowledge gap and inform policymakers and business leaders about the critical role of flexible work in enhancing SME performance.

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It is found that, overall, three out of four Scottish SMEs with employees offer some form of flexible working arrangements. The type of contract more likely to be adopted is flexitime, or flexible working hours, offered in the period 2015-22 by more than two out of three FWAs firms on average, and just over half of all Scottish SMEs with employees.

Table 1 below highlights the patterns of FWAs among Scottish SMEs from 2015 to 2022. For example, flexitime is consistently offered by 69% of SMEs offering flexible working hours, with a dip to 53% during the 2020 pandemic, recovering since then. Job sharing declined from 25% in 2015 to 17% in 2022, averaging 20%, with a pandemic-related drop to 14%. Zero-hours contracts averaged 20%, increasing since 2018 but falling to 18% in 2020. Overall, although the pandemic led to a temporary decline in the variety of FWAs offered, almost all Scottish firms (99%) in our sample in 2020 adapted to the exceptional circumstances by adopting some form of flexible working arrangements, even if they offered fewer FWAs types at individual level.

Type of contracts	Number of Scottish SMEs responding to flexible work questions by year								Average SMEs for 2015-22
	2015	2016	2017	2018	2019	2020	2021	2022	
Flexible working hours (Flexitime)	428 (68%)	373 (70%)	384 (71%)	416 (71%)	435 (72%)	266 (53%)	369 (73%)	398 (70%)	384 (69%)
An annualised hours contract	183 (29%)	154 (29%)	148 (28%)	176 (30%)	201 (33%)	90 (18%)	155 (31%)	186 (33%)	162 (29%)
Term-time working	144 (23%)	119 (22%)	120 (22%)	152 (26%)	131 (22%)	71 (14%)	120 (24%)	126 (22%)	123 (22%)
Job sharing	158 (25%)	114 (21%)	105 (20%)	143 (24%)	131 (22%)	71 (14%)	87 (17%)	99 (17%)	114 (20%)
A nine-day fortnight	42 (7%)	33 (6%)	40 (7%)	50 (9%)	44 (7%)	29 (6%)	38 (7%)	32 (6%)	38 (7%)
A four and a half day week	151 (24%)	125 (23%)	119 (22%)	149 (26%)	122 (20%)	69 (14%)	100 (20%)	104 (18%)	117 (21%)
Zero-hour contracts	114 (18%)	93 (17%)	91 (17%)	122 (21%)	127 (21%)	91 (18%)	124 (24%)	127 (22%)	111 (20%)
On-call working	141 (23%)	117 (22%)	89 (17%)	121 (21%)	98 (16%)	57 (11%)	95 (19%)	125 (22%)	105 (19%)
None of these	190 (30%)	243 (45%)	201 (37%)	242 (41%)	244 (40%)	142 (28%)	168 (33%)	178 (31%)	201 (36%)
Any type of flexible working agreements	625 (76%)	536 (68%)	538 (73%)	584 (70%)	606 (71%)	505 (99%)	507 (75%)	571 (76%)	559 (75%)
Total SMEs with employees	820	781	740	838	854	509	677	751	746

Note: The percentages in the first nine rows refer to the total number of Scottish SMEs offering any type of FWAs, whereas the percentage in the tenth row is calculated out of the total number of Scottish SMEs with employees.

Key findings reveal that innovation plays a crucial role in the adoption of FWAs among Scottish SMEs. Firms characterised by innovative practices are more likely to adopt flexible arrangements, such as flexitime and alternative work schedules.

Additionally, the FWAs adoption patterns vary across sectors. The primary and the construction sectors are less likely to offer any type of FWAs, while ITCs and the professional and scientific sector are more likely to offer flexitime, the hospitality and the healthcare and social sectors are more likely to offer zero-hours contracts, in the education sector term-time work is more prevalent and in the administrative and support services sector there is a higher chance of finding on-call working arrangements. Some of these sectoral differences in the adoption of FWAs are related to the different prevalence of







females working in them, as female-dominated roles are more likely to be offered flexible work contracts (Timewise, 2023). However, these sectoral differences can self-reinforce the job segregation by gender as they can be perceived as barriers to entering inflexible professions by those workers who need such flexibility. This distinction suggests that tailored sector-specific policies may be necessary to address the unique challenges and needs of different industries.

Location seems to matter for on-call working which is more likely to be offered by SMEs in rural areas. Also, business size matters in the adoption of FWAs: while medium-sized firms are inclined to adopt any type of FWAs, smaller firms are less likely to offer flexitime (the most common type of FWAs among SMEs in Scotland) and instead they rely more on zero-hours contracts. Understanding what prevents small firms from adopting more of the other types of FWAs would be a first step in addressing this disparity across business sizes. It also suggests that policy support initiatives should focus on the smaller firm segment of the business population with campaigns to inform about the benefits of introducing FWAs both for the employees (better work-life balance) and for their employers (improving staff recruitment and retention). It would be helpful if such campaigns are sensitive to the characteristics of the geographical context in which businesses are operating, such as the recruitment and retention challenges often experienced by rural-based enterprises.

We also shed some light on the differences in adopting two types of contracts used by businesses to manage their variability of demand for labour: on-call working and zero-hours contracts. Zero-hours contracts are prevalent in the hospitality and healthcare sectors, while on-call working arrangements are more common in rural areas and administrative roles. SMEs with formal business plans and those planning to invest in the development of their workforce are more likely to adopt on-call working, whereas SMEs planning to invest more in capital are more likely to rely on zero-hours contracts. This different strategic approach to workforce management requires more investigation, especially in light of the disruptive impact of artificial intelligence (AI) and robotisation in production, which may further push some firms to reduce their reliance on labour with secure contracts and resort to more FWAs without guarantee of work.

Although on-call working and zero-hours contracts may often be viewed as less preferable, they remain critical in some sectors such as healthcare and hospitality, where flexibility is necessary to meet fluctuating demands. It is important for policymakers to recognise the nuanced role of these contracts, which may be chosen for their flexibility by workers (like students working in the hospitality sector to help pay for their studies while retaining the possibility to refuse to work when called). Hence, we recommend a balancing act between the need for flexibility on the part of the employers and workers and the need to avoid exploitative contracts where workers work regular hours but are not given secure contracts. In such cases, policymakers should consider designing regulation to incentivise the adoption of alternative FWAs, for example an annualised hours contract which would give workers a more predictable income. Again such incentives need to recognise the particular challenges and opportunities faced by businesses operating in different spatial contexts, where there may be other factors impacting on workers' requirements or potential to work flexibly (such as a lack of childcare or public transport, and a limited supply of labour).

Considering the link between flexible work and SME labour productivity, the results indicate that offering flexible working arrangements does not influence labour productivity in a statistically significant way, except for the nine-day fortnight working, which is positively associated with improved productivity and statistically significant, but it is also the least used flexible work contract among those adopted by SMEs.

The lack of any association between labour productivity and FWAs more generally could be due to data issues and is therefore unsurprising. This is because to calculate labour productivity we use the number of employees per firm, but despite the most frequently used form of flexible employment in the UK being part-time, accounting for 24% of all employees (75% of whom are women), the LSBS data does not allow to consider the number of part-timers due to the lack of granularity of the survey information relating to the quantity of labour employed by SMEs. We are also limited to only use a measure of whether a business







adopts any FWAs because the LSBS does not record how many employees are covered by such agreements, hence it is impossible to know the extent of their usage and therefore to draw quantitatively firm conclusions on their impact. Improving data collection is thus a priority to provide deeper analyses at a time when we are on the cusp of dramatic changes in employment and production practices due to flexible work, Al and other disruptive technologies. We support the introduction of a linked employers-employees survey in the UK as advocated by Forth and Bryson (2022).¹

As for innovation, we consider both actual innovation in the previous three years and the intention to innovate in the following three years. Our analysis finds that SMEs offering flexible working hours arrangements, particularly flexitime, are more likely to report innovation. This supports the argument that flexibility fosters a creative environment, enhancing product and process development as found in the literature. The results also indicate that different types of FWAs contribute to the intention to innovate, particularly flexitime and term-time working contracts. These findings highlight how flexible work models can be a win-win arrangement for workers and the firm, stimulating innovation plans and activities that help the firm compete and stay in the business.

Younger firms exhibit a stronger inclination to innovate, while older firms (over 20 years) are less prone to innovation, which may exhibit resistance to change due to established business practices. Additionally, SMEs that prioritise workforce skill enhancement, invest in capital, and adopt new working practices are more committed to innovation. Firms involved in exporting and those seeking external advice or maintaining formal business plans are also more inclined to pursue the development of new products and services. Also, firms in more dynamic sectors, such as information and communication, are more likely to articulate plans for innovation compared to those in less dynamic sectors like primary, construction and healthcare sector.

Policy implications

Given the impact of flexible work arrangements (FWAs) on business performance as measured by innovation and the increasing demand for FWAs adoption, this report provides some key policy recommendations as follows:

- Promoting FWAs, especially flexitime, is crucial for enhancing innovation within SMEs since i) they are likely to foster a more creative and dynamic environment by changing employees' attitudes, behaviour and wellbeing; and ii) they foster more inclusivity, attraction and retention of talent as found in many studies. This FWAs promotion can be achieved through awareness campaigns and resources that highlight the benefits of FWAs, particularly targeted towards smaller firms and towards the population at large to raise awareness of the new legislative right to flexible work from day one in a new job. This could also support Scottish Government's policy priorities as set out in the National Strategy for Economic Transformation and the National Innovation Strategy (2023 to 2033), which place emphasis on enhancing wellbeing and eradicating poverty (particularly child poverty), in order to create a fairer, more equal and wealthier Scotland.
- There is a need for more research and critical assessments of the impact of different types of FWAs on productivity, as not all types of FWAs may contribute to higher productivity. Our results do not draw firm conclusions on the matter as they do not rely on high-quality data when it comes to measuring SMEs labour productivity.

¹ Forth, J. and Bryson, A., 2022. Options for a New Linked Employer-Employee Survey, Final Report to the ESRC. Available at: https://drive.google.com/file/d/11qv96LHjJqa3QEdCx1IY4r9r2MymTWny/view







- It is important to implement sector-specific policies by developing tailored regulations that address the unique challenges faced by different sectors. For instance, recognising the prevalence of zero-hours contracts in hospitality and healthcare can lead to the design of regulations that ensure fair working conditions while also promoting the benefits of stable employment.
- The differential spatial impacts of policies and interventions to support FWAs should be investigated before these are introduced ². Following this, place-tailored approaches should be adopted which consider the mix of firms and varying patterns of FWAs within local areas, particularly in rural locations. These policies can facilitate the implementation of FWAs that align with local economic goals and labour market conditions, which address the specific needs of local businesses. This would recognise the wider challenges which impact on the ability of businesses and employees to adopt FWAs in some rural and island locations (including relating to childcare, housing and transport availability).
- Fair work can be achieved by implementing policies that avoid the burden of risk (of variable demand for work) falling disproportionately on workers under flexible arrangements. Employers should aim to increase the predictability of working time and be required to recognise FWAs workers as having the same rights and protections as full-time employees, including access to benefits like sick pay and pensions, and job security guarantees when work becomes regular.
- National governments and statistical authorities should improve business statistics collection by systematically recording the typologies of FWAs contracts offered by businesses following Scotland's example. All UK nations could supplement the information on FWAs adoption by businesses with data on the number of workers covered by FWAs allowing quantitative impact analyses. We recommend either expanding the LSBS or introducing a linked employers-employees survey (which does not exist anywhere in the UK currently), which would allow a rich dataset on workers' characteristics and employment contracts to be combined with firm-level performance measures in order to accurately capture firm labour productivity and understand its relationship with workforce quantity and quality.

Full paper link:

http://enterpriseresearch.ac.uk/publications/erc-research-papers/

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² In England this could be done through the application of rural proofing for example. In Scotland, this could be done for island-based businesses through the (legislative) Island Community Impact Assessment process, and for rural businesses through the application of the recently developed Rural Lens Toolkit to the policy design phase.