

EMPLOYEE-OWNED BUSINESS CENSUS 2022

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Report to Scottish Enterprise and Co-operative Development Scotland

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EXECUTIVE SUMMARY

The report accompanies a census of the number of employee-owned businesses operating in Scotland in early 2022 and provides estimates of the economic significance of these businesses alongside information on ownership types and the governance of employee-owned businesses (EOBs). The project examines three types of employee-owned business: EOBs based and registered in Scotland, workers' co-operatives based in Scotland, and employee-owned businesses registered elsewhere but with some operations in Scotland.

In the census, companies are defined as EOBs if there is an employee stake of more than 25 per cent with no other single majority shareholder. Employee ownership can be direct (individual ownership of shares) or indirect (trust ownership on employees' behalf) or a combination of both. Minimum size thresholds are 5 employees for EOBs and 2 for worker co-operatives.

Information on possible employee-owned businesses was gleaned from a variety of information sources, and then checked using Companies House, the Co-ops UK Register of Co-operatives, and internet sources. This information was supplemented by a short survey sent to all 'shortlisted' companies. Where feasible, missing information or survey non-response was supplemented by information obtained from the FAME financial database.

The census shows that there are 146 employee-owned businesses in Scotland of which 119 are Scottish-registered employee-owned business and 27 Scottish-registered workers' co-operatives. There are 49 non-Scottish-registered employee-owned businesses (including 1 co-operative), giving a combined total of 195 employee-owned businesses operating in Scotland.

Scottish-registered EOBs are concentrated in five industrial sectors: Professional, Technical, and Scientific; Manufacturing; Wholesale and Retail; Construction; and Information and Communication. Worker co-operatives are highly concentrated in five core areas - Wholesale and Retail, followed jointly by Professional, Technical, and Scientific, Information and Communication, Education and Agriculture, Forestry and Fishing. The non-Scottish EOBs are focused on the 'Professional' sector, alongside the Administration and Support Services and the Wholesale/Retail sector.

Scottish-registered EOBs are found in all areas of Scotland but there are natural clusters of EOBs in Eastern Scotland and South-West Scotland, notably in Lanarkshire, Midlothian, Angus, Aberdeenshire, Inverness-Shire and Fife with over 70 per cent of Scottish registered EOBs found in these six areas. Worker co-operatives, although lesser in number, are concentrated in a smaller number of regions notably Midlothian, Lanarkshire and Aberdeenshire.

With regard to the survey instrument, in total 112 usable survey responses were received largely from the Scottish registered EOBs, with a lower response from worker co-operatives and the non-Scottish registered EOBs. These indicate that nearly all Scottish-registered EOBs utilise a trust, with 17 per cent of companies having some direct, individual ownership. 63 per cent of companies with an employee ownership

trust (EOT) are 100 per cent employee-owned with an average level of employee ownership of 90 per cent.

All Scottish-based EOBs have some forms of employee participation in governance that are not typically used by non-employee-owned businesses. These include worker directors (58 per cent) and regular meetings of employee shareholders (44 per cent). 82 per cent of companies with a trust had one or more employee trustees.

Total employment in Scottish-registered EOBs is 5000, with an average per firm of 42 employees and median of 23. Total co-operative employment is around 350. Estimated total turnover in Scottish EOBs is £661 million, and just over £30 million in worker co-operatives.

Estimating employment and turnover of the Scottish segment of employee-owned businesses registered outside Scotland is extremely challenging because businesses either do not make these calculations or do not report them. Further, these estimates are sensitive to a small number of large values. Using a variety of estimation methods designed to err on the side of caution it is evident that the addition of the non-Scottish registered EOBs to the total would push the turnover figure well over £1 billion pounds and employment comfortably over 8000 employees. However, caution should be exercised in trying to determine the total size of the employee-owned sector in Scotland given the high margin of error in the estimates of the non-Scottish registered EOBs.

Introduction.

Employee ownership (EO) has become a key theme of the Scottish Government's economic strategy around growth, fair work, productivity, sustainability, and wellbeing. It's commitment to growing the employee ownership sector is emphasised by the manifesto pledge to increase the number of employee-owned companies to 500 by 2030. With this target in mind, the White Rose Employee Ownership Centre (WREOC) under the auspices of Professor Andrew Pendleton and Professor Andrew Robinson were commissioned to undertake a baseline census of the number of employee-owned businesses in Scotland by Scottish Enterprise and its employee ownership arm, Co-operative Development Scotland (CDS).

While attempts have been made in the past to gather data on the number of EO businesses and their economic impact in Scotland, comprehensive and accurate figures are difficult to come by. In part this is due to significant changes in the world of EO, where the number of EO companies in the U.K. is increasing at over 20 per cent year on year (see WREOC, 2021). The absence of any official statistics or records of companies with employee ownership further complicates the difficulties of developing an accurate picture of employee ownership. Uncertainty around the nature and definition of employee-ownership also adds to these difficulties. At what level of ownership, and what proportion of employee participants, can it be judged that a business is employee-owned rather than one with some ownership by (some) employees?

This project was therefore established to undertake a census of all employee-owned businesses (EOB and worker co-operatives) operating in Scotland (as of April 5th 2022). This will enable policy implementers to track recent developments in the size of the sector and provide a baseline figure against which to evaluate the success of the policy objective to increase the incidence and coverage of EO in Scotland.

In this report we outline the methodology used to carry out the census (involving documentary and survey-based research) and set out the key findings on the number and type of EO businesses operating in Scotland, their economic impact (employment and revenue generated), and the role of employees in corporate governance structures.

Definition of employee ownership.

There are two main forms of employee ownership in Britain: workers' co-operatives and majority or co-employee-owned businesses (hereafter referred to as EOBs). Workers' co-operatives are organisations that adhere to all or most of the International Co-operative Principles (<https://www.ica.coop/en/cooperatives/cooperative-identity>) and are notable for equal ownership shares and governance rights between participating employees. Other businesses with substantial employee ownership have a variety of ownership and governance forms. The Nuttall Review of Employee

Ownership¹ defined employee ownership as: 'a significant and meaningful stake in a business for all its employees. If this is achieved, then a company has employee ownership: it has employee owners. What is 'meaningful' goes beyond financial participation. The employees' stake must underpin organisational structures that ensure employee engagement. In this way employee ownership can be seen as a business model in its own right.' (Nuttall, 2012, p.74-75).

While there is no clear standard as to what proportion of issued share capital signifies a meaningful stake, from a legal standpoint over 25 per cent is viewed as 'significant control'. Hence, a company can be defined as having employee ownership where more than 25 per cent of the company's ordinary share capital is broadly held, either directly or indirectly, by all or most of the employees, and this shareholding underpins genuine employee engagement. In reality, most businesses that are portrayed or self-identify as employee-owned have significantly larger employee stakes, with the average employee holding amongst our survey of Scottish registered businesses being over 90% per cent.² The Employee Ownership Trust (EOT) model, which is becoming the dominant mode of employee ownership in the UK, requires that employees own more than 50 per cent (to secure the tax benefits associated with the EOT).

The 25 per cent criteria assumes that no other single party owns a majority stake. A company that is 25 per cent employee owned and 75 per cent private equity owned would not be viewed as employee-owned as the private equity owner would clearly be the controlling owner. In reality, this issue does not arise, since in nearly all cases those owning significant stakes other than the employee stake are either particular employees (typically directors) or previous owners in the process of exiting.

A further criterion concerns the size of employee-owned businesses. Very small businesses composed solely of founding entrepreneurs might be viewed as employee-owned. On this basis there would be many thousands of employee-owned businesses, but this would clearly stretch what is normally meant by employee ownership. For this reason, we adopt a cut-off of 5 employees for employee-owned businesses other than workers' co-operatives. This means that there will typically be some employees other than directors participating in ownership: note that EOT regulations require that former owners should not exceed 40% of trust beneficiaries, meaning that most EOT businesses have 5 or more employees. The cut-off is more challenging for co-operatives since many have fewer than 5 employees. We adopt a minimum size threshold of two employees for co-operatives (a one-person co-operative would in effect be a sole trader).

¹ Graeme Nuttall, Sharing Success: The Nuttall Review of Employee Ownership (Department for Business, Innovation & Skills), 2012, pp74-76. Published on 4 July 2012 this was an independent review for the UK Government. It explained the obstacles to promoting employee owned companies and set out a framework for knocking them down. It made recommendations to the Government on how to promote employee ownership. Retrieved from: <https://www.gov.uk/government/publications/nuttall-review-of-employee-ownership>

² Note that some finance sector companies portray themselves as 'employee-owned' but are in reality owned by a small number of partners (and a minority of employees).

Methodology.

The census consisted of several stages. The initial phase of the project involved drawing up a list of 'potential' EOB's in Scotland comprised of well-known EO companies and a growing number of 'possibles' requiring further investigation. In establishing a robust and current list of EOBs operational in Scotland various categories of EOB were considered. Of primary importance are those EO businesses based in Scotland (their registered office is in Scotland, and they are incorporated at Companies House in Edinburgh). However, in order to build a complete picture of the extent and impact of EO businesses in Scotland we also capture information on the growing number of EO companies registered elsewhere in the UK that have a subsidiary, office or trading base in Scotland. An obvious example is the John Lewis Partnership which has John Lewis and Waitrose stores across Scotland but is registered in England and Wales. Distinctions within each grouping – Scottish registered and non-registered companies, were made between employee-owned and worker co-operatives.

In drawing up this initial list, core information was taken from the CDS list of 'known' EOBs operating in Scotland and the UK-wide database of EOBs maintained by the WREOC. The WREOC database has provided the statistical backdrop to the growth of the EOB sector in the UK since 2014 and proved particularly adept at identifying additional non-Scottish registered EOBs which had operational bases in Scotland. This information was complemented by additional searches of information at Companies House, the Co-opsUK Register of Co-operatives, and the internet to identify any new EOBs or companies whose status had changed – either no longer EO or no longer in business.

This led into a more detailed process of authentication and cross-checking across the various sources to ensure the correct classification of a company as employee-owned and whether Scottish-registered or not. For non-Scottish registered EOBs information was gathered from their company website in order to identify whether they had a subsidiary, office or trading base in Scotland. This process of checking, re-checking, and updating of information continued throughout the project.

Running concurrently with the development of the Census database, an electronic survey instrument was designed to capture more detailed information on individual companies' ownership structure and core governance practices as well as information to assess the economic contribution of the sector to the Scottish economy (employment and sales). The focus on a limited number of core questions was done with the intention of restricting the size of the survey so as to maximise potential responses. A link to the survey was distributed via email by either CDS or the research team with CDS taking the lead where it had a more established relationship or contact with a company³.

In total around 200 companies from the 'possibles' list were contacted via emails sent out in the first week of March 2022 with follow-up reminder emails sent over the next few weeks. The survey was closed towards the end of March. Overall, over 150 individuals connected to the survey with 120 complete or partially complete responses

³ We would like to thank Carole Leslie (Ownership Associates), Andrew Harrison (Co-ownership Solutions) and Ralph Leishman (4-Consulting) for their assistance throughout this study.

recorded. After accounting for duplicate responses from the same company, we had 112 useable responses. An initial use of the responses was to verify the EO status of the companies on our database (see above) as well as resolve some of the 'contested' decisions about the EO status of a small number of businesses. This resulted in a final tally of 195 EO companies that were operational in Scotland (see later). The largest component of this number was Scottish-registered EO companies and particular efforts were focused on getting information from this core category so that an accurate picture of the Scottish-based EO sector could be established. The response rate for this group was 68 per cent. For a survey of this type and distribution method the response rate was above expectations and companies were very forthcoming in providing the requested information.

A key part of the survey was to collect information on the numbers employed in each company and their sales revenue in order to calculate an estimate of the size of the sector. This was particularly important where we were trying to generate Scotland-specific figures for companies registered outside Scotland. To deal with non-response to the survey on these key variables we utilised a financial database (FAME) comprised of accounting information deposited at Companies House. In nearly all instances this allowed us, after careful consideration, to identify the numbers employed by each company according to their latest financial statements. This proved less successful in the case of turnover due to the accounting exemptions available to many smaller businesses. The legal requirements governing what businesses need to make publicly available is governed by a number of considerations notably the size of the businesses (variously defined). In general, the smaller the business the 'lighter the touch' and the lower is the burden on providing detailed financial information. While we can fill most of the gaps on turnover relevant to larger businesses, this is not possible in the case of smaller ones amongst whom EO is most prevalent.

This financial database was also utilised to collect additional information on each employee-owned company, notably their primary industrial classification (SIC2007), registered office location, and accounts type.

Findings

Currently, there are nearly 200 employee-owned companies operating in Scotland (see Table 1). At this level, over 85 per cent of EO companies operating in Scotland are employee-owned as against worker co-operatives with 146, nearly three-quarters of the total, being Scottish registered companies (both EOBs and worker co-operatives). In this Scottish registered grouping, EOBs outnumber worker co-operatives by over four to one. Approximately 50 non-Scottish EO businesses employ individuals in Scottish subsidiaries, offices or trading bases. Nearly all of these are employee-owned rather than worker co-operatives.

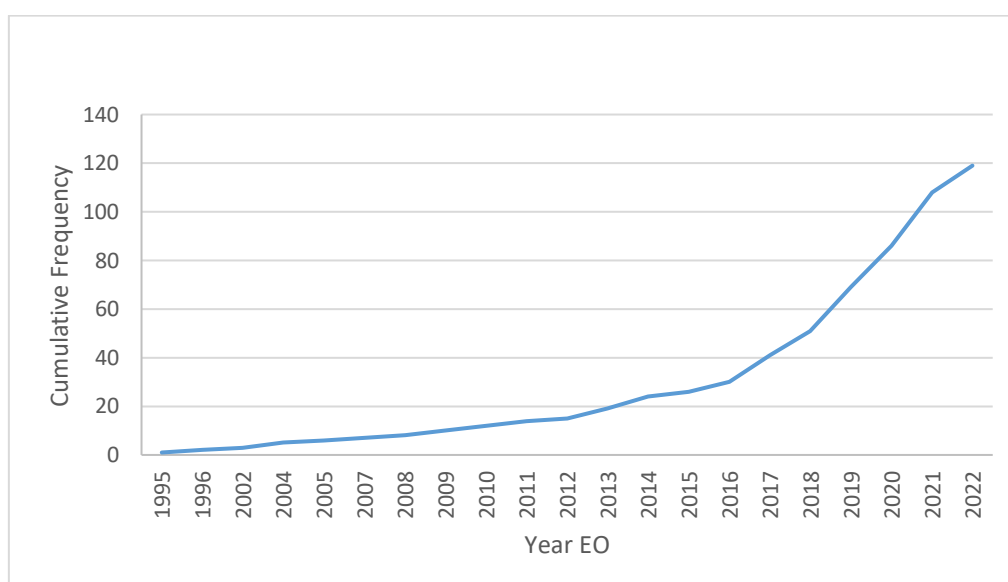
Table 1: Incidence and Category of Employee Ownership

Type	Number	Percent
Scottish Registered		
EOB	119 ⁴	61.0
Worker Co-operatives	27	13.8
Non-Scottish Registered		
EOB	48	24.6
Worker Co-operatives	1	0.5
Total	195	100.0

Focusing on the largest and fastest growing category - the Scottish-registered EOBs - we can see that 80 per cent of the transitions to EO occurred from 2014 onwards (when the Finance Act 2014 established the EOT) and nearly three-quarters of all EO transitions have occurred since 2017. This number has increased year on year with 2021 being the best year to date (22 conversions). 2022 is on track to match or beat this figure.

Figure 1. Size of the Scottish-registered Employee-Owned Sector

(Number of companies: cumulative)



Note: Worker co-operatives are not included in this graph

⁴ This total includes 3 companies who were non-Scottish registered but upon further investigation were judged to be 'Scottish' either because their EOT was registered under Scottish law and/or their only business base is in Scotland.

The sectoral classification of all EOBs across the different groupings are presented in Table 2. In terms of the Scottish-registered EOBs, the largest clusters are in the following sectors: Professional, Technical, and Scientific; Manufacturing; Wholesale and Retail; Construction; and Information and Communication. Over 75 per cent of Scottish EO businesses operate in these five sectors, the same ‘top 5’ as in the UK more generally.

An even higher concentration of sectors can be found in the non-Scottish registered EOBs with over three-quarters found in just three sectors - Professional, Technical, and Scientific; Administration and Support Service Activities; and Wholesale and Retail. Even more than the Scottish-registered EOBs, the mode of production in these companies is primarily human-capital based.

Worker co-operatives again reveal a similar high degree of concentration but slightly different composition. The dominant sector is Wholesale and Retail, followed jointly by Professional, Technical, and Scientific, Information and Communication, Education and Agriculture, Forestry and Fishing. These five industrial sectors make up over 85 per cent of all Scottish- based worker co-operatives.

Table 2. Sectoral Distribution of Scottish Employee-Owned Companies (%)

Sector	Scottish Registered		Non-Scottish Registered	
	EOB	Co-op	EOB	Co-op
Agriculture, Forestry and Fishing	1.0	14.8	0.0	-
Mining and Quarrying	1.0	0.0	2.1	-
Manufacturing	19.3	0.0	8.3	-
Electricity, Gas, Steam and Air Conditioning	0.0	0.0	0.0	-
Water, Sewerage, Waste Management	1.0	0.0	0.0	-
Construction	11.8	3.7	4.2	-
Wholesale and Retail: Repair of Motor Vehicles	14.3	25.9	10.4	-
Transportation and Storage	0.0	3.7	0.0	-
Accommodation and Food Service Activities	1.7	3.7	2.1	-
Information and Communication	10.9	14.8	2.1	-
Financial and Insurance Activities	2.5	0.0	2.1	-
Real Estate Activities	0.0	0.0	0.0	-
Professional, Scientific and Technical Activities	20.2	14.8	47.9	-
Administration and Support Service Activities	8.4	0.0	16.7	-
Public Administration and Defence	0.0	0.0	0.0	-
Education	1.0	14.8	0.0	-
Human Health and Social Work	3.4	3.7	2.1	-
Arts, Entertainment and Recreation	1.0	0.0	2.1	-
Other Service Activities	3.4	0.0	0.0	-
Total	100	100	100	-

It is also evident from the geographical distribution of Scottish EOBs and worker co-operatives (see Table 3a) that all areas have some incidence of employee ownership although there are natural conglomerations of EOBs in Eastern Scotland and South-West Scotland. Disaggregating this information further we can see concentrations of EOBs in the more populous areas of Lanarkshire, Midlothian, Angus, Aberdeenshire, Inverness-Shire and Fife with over 70 percent of Scottish registered EOBs found in these six areas. Worker co-operatives, although lesser in number show a good spread but are concentrated in a smaller number of regions notably Midlothian, Lanarkshire and Aberdeenshire. Likewise, this concentration can be shown by looking at the distribution of EOBs and worker co-operatives across the three Scottish Enterprise Agencies (see Table 3b).

**Table 3a. Geographical distribution of Scottish employee-owned companies
Percentage of companies in Eurostat NUTS Regions**

NUTS region	Scottish Registered EOBs (%)	Worker Co-ops (%)
Eastern Scotland	42.8	51.8
South-Western Scotland	33.5	29.6
North-Eastern Scotland	7.5	14.8
Highlands and Islands	15.6	3.7
Totals (%)	100	100

Based on NUTS categorizations of registered office location

Table 3b. Distribution of Scottish employee-owned companies by Enterprise Agency.

	Scottish Registered EOBs (%)	Worker Co-ops (%)
Highlands and Islands Enterprise	15	4
Scottish Enterprise	82.5	89
South of Scotland Enterprise	2.5	7
Grand Total	100	100

Based on Enterprise Agency categorizations of registered office location

Scottish-Registered EOB's

In this section of the report we focus on the Scottish-based and registered EOB sector of 119 companies. By employment and turnover this grouping constitutes the vast

majority of the ‘home grown’ EO companies. Further, this grouping also provides the best coverage of more detailed information via the survey instrument with over two-thirds of companies responding (81/119). We examine the forms of employee ownership, governance arrangements, company size, and company turnover. We then examine more briefly Scottish workers’ co-operatives and EO companies based outside Scotland.

Forms of Employee Ownership

An employee trust is used in nearly all employee-owned businesses (see Table 4). The Census Survey shows that 98 per cent have a trust, and that 83 per cent rely solely on an employee trust to achieve employee ownership (this proportion has grown since the introduction of the EOT in 2014). Seventeen per cent have some individual employee ownership, possibly using one of the tax-advantaged employee share ownership plans, but only 3 per cent rely solely on direct individual ownership (whereby a clear majority of employees hold ownership of shares to a combined level of 25 per cent or more). Around 15 per cent of the sector are hybrids that is they use some combination of indirect and direct employee ownership. Over 63 per cent of EOT’s are 100 per cent employee-owned with an average level of nearly 90 per cent employee ownership.

Table 4. Forms of employee ownership

<i>Form of employee ownership</i>	<i>Percentage of companies (rounded)</i>
Trust (EBT or EOT) present	98
Trust only (no direct ownership)	83
Direct ownership (by employees) present	17
Direct ownership (by employees) only	3
Hybrid direct and indirect ownership	15

Based on survey sample of 81 companies

It is also noteworthy that while the above discussion focuses solely on how shares are distributed between a trust and direct ownership by employees only, it is also evident from the survey that these indirect, direct and hybrid categorisations may co-exist within a more diverse distribution of company ownership, where shares are held by one or more of directors, previous owners and to a lesser extent external parties.

Where data is available in the survey (n=69), there is evidence of the use of share scheme arrangements, notably the Share Incentive Plan (SIP) and the Enterprise Management Incentive (EMI) and to a lesser extent the Company Share Option Plan (CSOP) and ‘Other’ share option arrangements. Of those with some form of trust 13 per cent operated a SIP and 16 per cent had an EMI scheme.

Employee Governance

A key issue that defines active employee ownership is employee engagement and governance. We asked about eight potential forms of employee participation in governance, based on previous research into employee ownership. These include employee directors on the company board, presence of an employee shareholder council, employee trustees, use of a 'shadow board' etc. These forms of employee participation are not typically found in non-employee-owned companies but at least one is usually found to be present in employee-owned companies. The rationale is that ownership rights should give some control rights if ownership is to be meaningful to employees.

An important consideration facing many new employee-owned companies is whether to have employee representatives on the company board or an employee ownership council that in effect oversees the company board. Alternatively, many smaller companies may favour more informal forms of employee governance. A further issue concerns the extent of employee involvement in the ownership trust (where present) since the trust holds ownership on behalf of employees.

Across the eight forms of governance companies were asked about (see survey), over 80 per cent of companies reported using two or more different practices, while no company reported using none of these arrangements. Of those who reported using only one governance arrangement this tended towards an employee representative sitting on the trust board (EOT or EBT). No company reported the use of an employee representative on a 'shadow board', whilst there was minimal evidence of collective bargaining with trade unions over wages and conditions in our sample. Overall, these findings indicate that employee-owned businesses have some provisions for employee involvement that are not typically found in non-employee-owned companies.

Table 5. Forms of Employee Governance

<i>Form of employee governance</i>	<i>Percentage of companies (rounded)</i>
Employee director on company board	58
Employee representatives on an ownership or employee council	14
Regular meetings of all employee shareholders	44
Given our size we rely on more informal governance arrangements	23

Based on survey sample of 80 companies

Within our sample of Scottish-registered EO companies nearly 60 per cent of respondents ($n = 46$) reported having an employee director sitting on the company board. Employee directors were observed across all sizes of company (by number of employees) but their incidence tended to increase with company size. Regular meetings of all employee shareholders were utilised by 44% of companies, its use

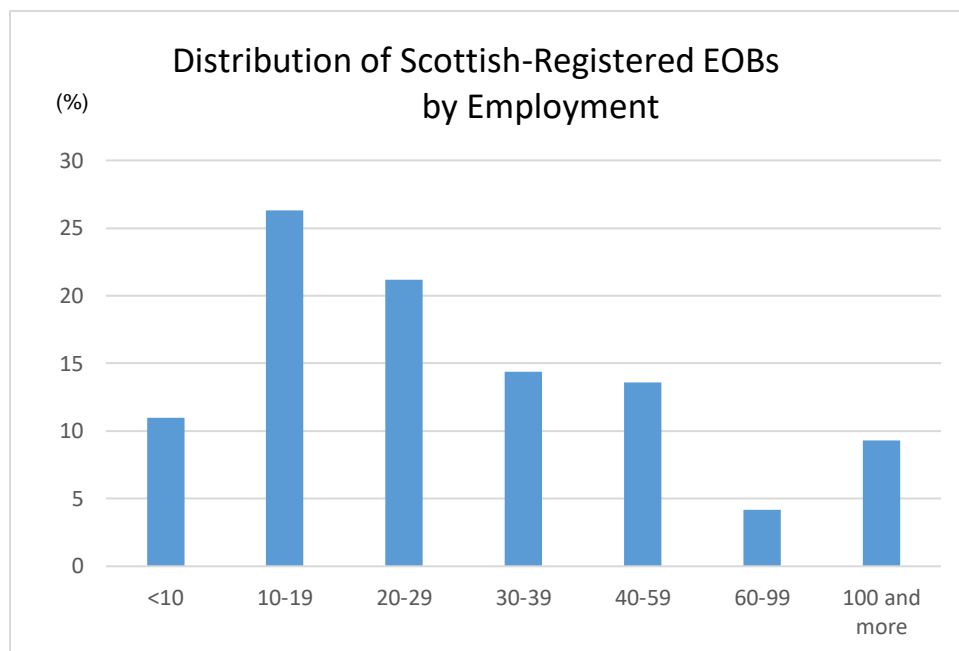
tending to increase with business size but tailing off amongst businesses with 100 or more employees. Conversely, it is evident that smaller businesses tend to rely on more informal governance arrangements with over 80 per cent of companies ticking this category employing less than 20 employees. Employee representatives on an ownership or employee council were less prevalent (14 per cent) but were more likely to be found in larger businesses with a half of companies with 100 or more employees using this practice.

Amongst those with some form of indirect ownership via an EOT or EBT, 82 per cent had an employee representative sitting on the trust board, with 17 per cent of these reporting this as their only form of employee governance amongst the arrangements we measured.

Employment

Given complete data on 'numbers employed' the average number of employees across the 119 Scottish registered EO businesses is 42 with a median of 23. This discrepancy between these two measures of the average indicates a positive skew, where a smaller number of large employees pull the mean value above that of the median (see distribution of employment by category below). Collectively, Scottish-registered EOBs employ 5000 employees.

Figure 2. Employment in Scottish Employee-owned Businesses



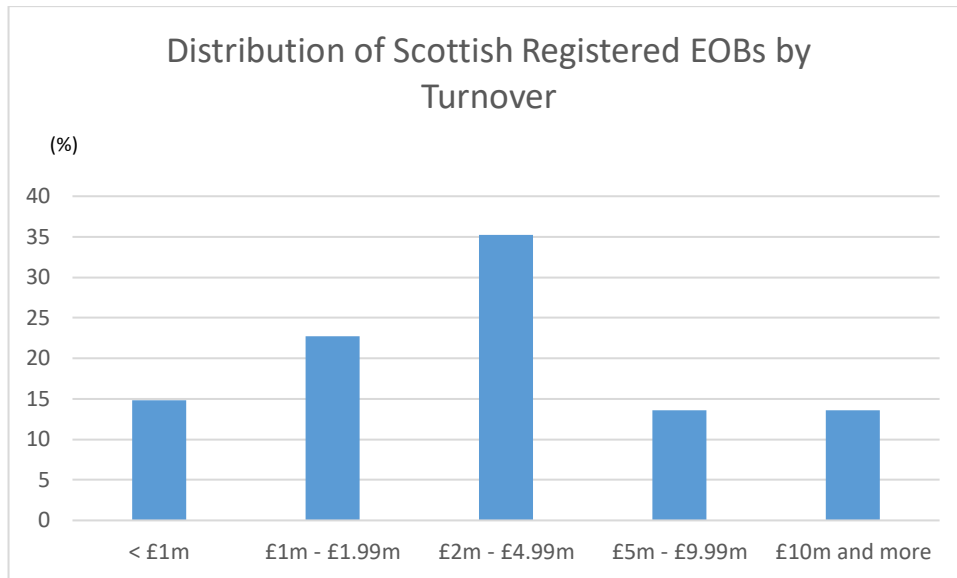
Source: survey data

Company turnover

Capturing the value of their output to the Scottish economy provides a series of challenges, largely due of the afore-mentioned data problems of obtaining measures of company revenue. Unlike figures on employment, where there is complete

coverage, we only have partial evidence on turnover from 88 of the 119 EO businesses. Based on the available evidence Scottish-registered EO businesses have an average turnover of £6.62 million with a median of £2.53 million. Businesses varied from sales of less than £1 million to that of over £100 million (see distribution by turnover below). In total these 88 businesses generated £583 million of revenue.

Figure 3. Turnover of Scottish Employee-owned Businesses



Source: survey data

To estimate a value for all 119 Scottish registered EOBs we need an appropriate way of scaling up this value from the 88 companies to the group as a whole. Two approaches are suggested:

1. Given the impact of a positively-skewed distribution on the value of the mean, one approach would be to use the more representative median value (£2.53m) for each company with no turnover figure (31). This would add an additional £78.43million pounds to the data-driven figure of £583 million, giving a total sector size for Scottish-registered EOBs of £661 million.
2. As an alternative, we look at the distribution of employment (where we have complete data) across those companies with missing values for turnover and match this against companies for which we have information on both employment and turnover to find a representative turnover value for businesses with a similar number of employees. On average those companies with no turnover figure employed 28 people (median 22). Looking at businesses with between 20 and 29 employees their median turnover is £2.40 million, which would give a total sector size for Scottish registered EOBs of £657 million

(£583m + £74.4m). This figure is very similar to the value in (1) using the median approximation approach.

Worker Co-operatives

Worker co-operatives are smaller in number (27) and the available information on them is more limited. The identification of worker co-operatives from public sources was more challenging and only a quarter of those identified (7) responded to the survey limiting any resulting analysis. Nevertheless, the general pattern is that they are smaller than the employee-owned cohort. In terms of the sector size, we again have good information on employment and, to a lesser extent, turnover (which diminishes the accuracy of our estimates of size based on turnover). Based on employment data on 25 of the 27 known worker co-operatives, the average co-operative has 14 employees with a median of 5. This gives a total employment figure amongst responding companies of 341 employees. Scaled up to the full number of companies using the median value gives a total employment of 351 employees in Scottish worker co-operatives.

Figures on turnover are similarly positively skewed and very sensitive to the small number of observations. It is more appropriate therefore to use the median rather than average value. On this basis the median turnover is £433,000, with a total revenue of £22.9 million across the 10 observations. Scaling this up to the 27 worker co-operatives as a whole generates a total sector turnover of just over £30 million.

The general small scale of worker co-operatives is reflected in their choice of governance structures with the majority reporting the use of regular meetings of all employee shareholders.

EOBs registered outside Scotland

Gathering robust and comprehensive information on EOBs based outside of Scotland prove more of a challenge on various counts. First, by their very nature, companies registered elsewhere with operations in Scotland tend to be the larger UK EOB's. Hence they will have a significant weighting when trying to come up with an overall figure for the size of the EO sector in Scotland, and may therefore distort the overall picture. This proviso has to be borne in mind when interpreting the employment and turnover figures for employee ownership in Scotland as a whole. Second, financial accounts for these companies do not distinguish where turnover is generated geographically nor the numbers employed in specific locations. Hence it is difficult to identify the size of their Scottish employment or turnover.

We deal with this second issue by designing a specific questionnaire for the non-Scottish registered companies so that the questions on employment and turnover relate specifically to Scotland. Unfortunately, this survey had the lowest response rate (23% - 11 from the 48 companies identified). In many cases, respondents were unable

to provide Scotland-specific figures for turnover or employment. Furthermore, the approach was inconsistent between survey responders. Some provided values which relate specifically to Scotland, others to the UK as a whole, and others still to their global operations.

There is no ideal way of dealing with these various issues and the subsequent estimates come with a strong 'health warning'. This is not a precise science and the figures estimated rely heavily on the appropriateness of a range of assumptions and adjustments made. The resulting figures inevitably have a large margin of error and should be viewed as suggestive/indicative only.

To deal with some of these problems the data went through various transformations depending upon the information that was available, as follows.

1. Where the survey gave us Scotland-specific figures for employment and turnover no transformation was necessary.
2. For those UK companies whose survey response related to their overall UK employment and turnover figures, we weight these values by Scotland's proportion of UK GDP (7.6%)^{5,6}. We repeat this calculation for those companies where employment and turnover figures could be obtained from their company accounts. This allocation is applied equally across all EOBs, both big and small.
3. In a small number of cases, responses in the survey/accounts gave the number of workers employed in their Scottish operations, but a UK wide measure of turnover. In these instances, rather than using the GDP adjustment as in (2) we estimated 'Scottish turnover' according to the proportion of their total workforce that was employed in Scotland. For example, in one instance (Shaw Ltd) only 73 of their total work force of 3497 (around 2%) were employed in Scotland, a significantly lower proportion than 7.6% applied by the GDP correction. Conversely, W.L. Gore, has around 220 of a total UK workforce of 251 employed in Scotland. In this instance the GDP weighting would significantly underplay its impact on the Scottish economy.
4. A final issue specific to some of the largest EOBs in the UK is that the turnover and employment figures reported in their group accounts relate to their global operations rather than that which is UK-generated. Hence any GDP adjustment cannot be made on an appropriate UK-based figure and would consequently overstate each businesses contribution to the Scottish economy. To address this issue, a review of the accounts of the largest EOBs in this category (11 in total) was undertaken to try and identify information which was more UK-specific. For a small number of companies with global operations we were able to find information on 'turnover by destination' which gave a UK-specific value⁷. This figure was then adjusted as in (1) for turnover and employment. For most companies this review revealed that their turnover figures were solely or largely UK-generated so no further adjustment was required and the GDP adjusted

⁵ A number of GDP measures are available, but this was felt to be the most appropriate and 'conservative' measure.

⁶ The percentage of Scottish to total UK employment is similar.

⁷ Although turnover by origin would be preferable, this was seen as a reasonable approximation in that work in the UK is likely to be carried out by their UK operations.

figures (as in (1)) were used. In the case of Mott Macdonald, we were only able to identify a broad measure of employment and turnover based on ‘UK and Europe’, but without any other information this was deemed the best available.

This range of adjustments was incorporated into a single measure of ‘Scottish’ turnover and employment stemming from the non-Scottish registered EOBs.

In order to emphasise the importance of a small number of large operators to this category, we also report a stripped-down measure of the above in which we exclude three of the largest UK based EOBS - JLP, Arup and Mott Macdonald.

Table 6 presents information on the turnover and employment of employee-owned businesses operating in Scotland but registered elsewhere. This information is computed using the methods outlined above. Note that there are some missing values in most of the columns – this is where information was not available using any of the methods above. We used the median value to proxy for these missing observations and these were added to the sum figures to provide a total for the whole of the sub-sector.

Table 6. Estimates of Turnover and Employment for Employee-owned Businesses Registered Outside Scotland

	Turnover		Employment	
	All adjustments	All adjustment excluding large EOBS	All adjustments	All adjustment excluding large EOBS
Mean	17,128	4,429	102	25
Median	1,506	1,272	13	12
Sum	667,976	159,452	4876	1147
Observations	39	36	48	45
Sub-sector value (median adjustment)	681,530	174,716	4876	1183

Notes: rounded figures

The first column presents total turnover in £’000s (Scotland-specific figures used where available plus 7.6% allocation where UK figures available plus other adjustments where applicable). The second column uses the afore-mentioned adjustments but omits three of the largest EOBS – JLP, Mott Macdonald and Arup. This process is then repeated using employment data.

The evidence points to non-Scottish-registered EOBs as being comparable in size (both turnover and employment) as the Scottish-registered EOBs, but there are a number of strong caveats on this finding both in terms of the appropriateness of this

methodology to accurately capture the scale of operations amongst this cohort and the distorting impact of a small number of businesses on the scale of operations. The exclusion of data on the three of the largest UK EOBs (notably JLP) significantly reduces the scale of operations and clearly has a severe and distorting effect on the overall picture of employee ownership in Scotland.

Combined size of the employee ownership sector in Scotland

Using the information generated on the previous pages, we can provide estimates of the total size of the employee ownership sector in Scotland. These calculations are the sum of employment and turnover for employee-owned businesses registered in Scotland, workers' co-operatives based in Scotland, and companies with Scottish workplaces but registered elsewhere.

Table 7. The size of the employee-owned sector in Scotland

	Scottish EOBs	Worker co-operatives	Non-HQ EO business (excluding 3 large EOBs)	Total	Non-HQ EO business (All)	Total
Employment (number of employees)	4977	345	1,183	6,505	4876	10,198
Turnover (million)	661	30	175	866	682	1373

Notes: rounded figures

As stated earlier, the figures for the businesses registered outside Scotland can distort the total figures and perhaps provide a misleading picture of the extent of employee ownership in Scotland. Not only are these estimates subject to a high degree of error but they are also sensitive to the inclusion of a small number of large values, as shown in Table 7. Estimated employment ranges from 6,505 to 10,198 with the inclusion of JLP, Arup and Mott Macdonald. Similarly, turnover ranges from £866 million to £1,373 million. With the exclusion of these companies, it is evident that the Scottish-registered EOBs are clearly the dominant force in Scottish employee ownership. However, these results also highlight the distorting effect of a few large observations. Nonetheless, it is fair to say that the addition of the non-Scottish registered EOBs to the Scottish based EOBs and worker co-operatives would push the turnover figure well over £1 billion pound mark and employment comfortably over 8,000 employees⁸.

⁸ On the basis that Scottish registered EOBs and worker co-operatives have total turnover £691m and with the known Scottish values for non-EOBs, notably JLP, turnover would break through the £1bn mark. On the same basis the cautious value for employment would be over 8,000 employees.

It is evident that further work is needed to reliably estimate the size of employment and turnover in employee-owned companies that are registered outside Scotland. This is no easy exercise as the companies either do not present Scottish-specific figures or even routinely calculate them. More reliable figures might only be generated therefore by developing close relationships with these companies so that relevant information might be generated and shared.

Conclusions

The purpose of the project was to determine the number of employee-owned businesses operating in Scotland in March 2022, and to provide estimates of the significance of these businesses as shown by employment numbers and company turnover.

The census shows that there are 146 Scottish registered employee owned businesses in Scotland (119 Scottish-registered employee-owned businesses, 27 Scottish-registered workers' co-operatives) and 49 non-Scottish-registered employee-owned businesses (including 1 worker co-operative), giving a combined total of 195 businesses. There has been substantial growth in the number of Scottish-registered EOBs since 2017. By contrast, the co-operative sector has been far more stable. We do not examine the reasons for growth in EOBs in the report but the emergence of the EOT has clearly facilitated growth. Most of the recent conversions have used the EOT mechanism. It also seems likely that the presence of a specialist unit to promote employee ownership within the Scottish Government has also contributed to the rate of growth.

Employee ownership tends to be concentrated in a small number of sectors, as has been found in the UK more widely by the White Rose Employee Ownership Centre (see <https://employeeownership.co.uk/resources/what-the-evidence-tells-us/>). Scottish EOBs are concentrated in five industrial sectors: Professional, Technical, and Scientific; Manufacturing; Wholesale and Retail; Construction; and Information and Communication. Worker co-operatives are concentrated mainly in Wholesale and Retail followed by Professional, Information and Communication, Education and Agriculture, Forestry, and Fishing. The non-Scottish EOBs are concentrated in the Professional, Wholesale/Retail sectors along with Administration and Support Services.

Scottish-registered EOBs and worker co-operatives are found in all areas of Scotland but there are natural clusters of EOBs in Eastern Scotland and South-West Scotland, notably in Lanarkshire, Midlothian, Angus, Aberdeenshire, Inverness-Shire and Fife.

Nearly all Scottish-registered EOBs utilise a trust with the majority of EOTs being 100 per cent employee-owned. Direct individual ownership is prevalent in less than a fifth of businesses.

All Scottish-based EOBs have some forms of employee participation in governance that are not typically used by non-employee-owned businesses. These include worker directors (58 per cent) and regular meetings of employee shareholders (44 per cent). 82 per cent of companies with a trust had one or more employee trustees.

Total employment in Scottish-registered EOBs is 5000, with a median of 23. Total worker co-operative employment is around 350 with a median of 5. Estimated total turnover in Scottish EOBs is £661 million, and just over £30 million in worker co-operatives.

Estimating the total economic impact of the EOB sector in Scotland can be obtained by adding the non-Scottish registered EOBs to the above values. This, as we have discussed, is very challenging because these businesses either do not make these calculations or do not report them. Using a variety of estimation methods designed to err on the side of caution it is evident that the addition of the non-Scottish registered EOBs to the total would push the turnover figure well over £1 billion pounds mark and more than 8,000. However, given the high margin of error in the estimates of the non-Scottish registered EOBs, these 'total' estimates should be treated with some care and it is suggested that the generation of more reliable figures can only be secured by a longer-term process of collaboration with these businesses to generate either reasonably precise information or better methods to generate estimates.

These issues with employee-owned businesses based elsewhere notwithstanding, the census exercise has provided a robust estimate of the number of employee-owned businesses registered in Scotland, and it should provide a useful benchmark study to evaluate the success of policy initiatives to grow the employee-owned sector in Scotland.

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