

BUSINESS AND ENERGY

UK Innovation Survey 2019 – Results for Scotland

This report presents the Scottish findings from the UK Innovation Survey 2019, covering the three-year period from 2016 to 2018.

Key Points:

- In Scotland, 32.2% of businesses were innovation active in 2016-18, this compares to 37.6% for the UK as a whole.
- Between 2014-16 and 2016-18, the innovation active share in Scotland fell by 12.8 percentage points - this compares to a decrease of 11.4 percentage points for the UK as a whole.
- Large businesses (those with 250 or more employees) were more likely to be innovators compared to smaller businesses. In 2016-18, 30.2% of small (10-49 employees) businesses in Scotland were innovation active, down from 43.2% in 2014-16. For large businesses, the innovation-active share decreased from 62.5% in 2014-16 to 43.8% in 2016-18.
- Businesses in the 'Research and experimental development on social sciences and humanities' sector were most likely to be innovation active in 2016-18. Business in the 'Accommodation and food services' sector were least likely to be innovation active in 2016-18.
- In 2016-18, the highest share of innovation expenditure in Scotland and the UK was spent on 'In-house research and development'.
- For both Scotland and the UK the main driver for innovation, in 2016-18, was improving the quality of goods or services.
- In Scotland, 42.3% of broader innovators reported co-operating with partners to support innovation in 2016-18. This is a decrease of 13.0 percentage points since 2014-2016.

Contents

The UK Innovation Survey	4
Definition of Innovation	4
Innovation Activity.....	5
Figure 1: Proportion of enterprises engaging in innovation activity in Scotland and the UK, 2016 – 2018	5
Figure 2: Change in the share of innovation active enterprises in Scotland and the UK, 2010-2018	6
Figure 3: Change in the share of enterprises performing innovation activities in Scotland, 2010 – 2018	6
Figure 4: Change in the share of enterprises performing wider innovation activities in Scotland, 2010 – 2018	7
Innovation Activities – by Size.....	7
Figure 5a: Share of innovation active enterprises according to their size, in Scotland and the UK, 2016-2018	8
Figure 5b: Share of innovation active enterprises according to their size, in Scotland, 2010-2018.....	8
Innovation Activity – by Sector	9
Figure 6: Share of enterprises that are innovation active by sector in the UK and Scotland 2016 – 2018.....	9
Figure 7: Share of enterprises involved in product/process innovation by broad sector in Scotland, 2016-2018	10
Innovation Activity – Growth Sector	10
Figure 8: Proportion of innovation active enterprises by Growth Sector, in Scotland and the UK, 2016-2018	11
Geography of Innovation.....	11
Type of Innovation Expenditure	12
Figure 9: Percentage share of innovation expenditure by type of expenditure for all businesses in Scotland and the UK, 2016-18.....	12
Figure 10: Percentage of business’s total turnover from goods and services in 2016-2018.....	13
Context for Innovation.....	14
Figure 11: Motivations for innovation: the share of broader innovators that rated factors as of ‘high importance’ in their decision to innovate, 2016-2018	14
Co-operation Arrangements	14
Figure 12: The proportion of broader innovators that cooperated with various partners in Scotland and the UK, 2016-2018	15
.....	15

Figure 13: Share of broader innovators that cooperated with various partners in Scotland according to number of employees, 2016-2018	15
Figure 14: Share of broader innovators that ranked sources of information as of 'high importance' for innovation activities, 2016-2018	16
Constraints to Innovation	16
Figure 15: Share of broader innovators ranking factors as of 'high importance' to constraining innovation activities in Scotland and the UK, 2016-2018	16
Figure 16: Share of broader innovators ranking factors as of 'high importance' to constraining innovation activities in Scotland' according to number of employees, 2016-2018	17
Exports	17
Figure 17: Value of exports for businesses in Scotland, according to innovation activity in 2018	18
Turnover	18
Figure 18: Change in turnover in businesses in Scotland by innovation activity, 2016 to 2018	19
Figure 19: Change in turnover in innovation active businesses in Scotland and the UK, 2016 to 2018	19
Qualifications and skills	20
Figure 20: Average proportion of employees who held a degree or higher level qualification according to innovation activity in Scotland and the UK in 2018 .	20
Figure 21: Proportion of businesses that employed individuals in-house with particular skills or obtained these skills from external sources in Scotland and the UK, 2016-2018	21
Figure 22: Proportion of businesses that employed individuals in-house with particular skills or obtained these skills from external sources according to number of employees, 2016-2018	21
Figure 23: Proportion of businesses that employed individuals in-house with particular skills or obtained these skills from external sources according to innovation activity, 2016-2018	22
Annex A – Methodology	23
Annex B – Broad Sector break down.....	24
Annex C – Growth Sectors	28
Contact information	31

The UK Innovation Survey

The UK Innovation Survey (UKIS) is the UK contribution to the eleventh Europe-wide Community Innovation Survey. The questions are harmonised across Europe, so the data are directly comparable with those of other European countries.

The sample selection was conducted by the Office for National Statistics (ONS). The 2019 survey sampled 30,942 enterprises with ten or more employees and responses were received from 14,040 businesses UK-wide: 1,536 of these were from businesses based in Scotland.

Responses are weighted to the total business population using the Inter-Departmental Business Register (IDBR) in order to be representative of the business base.

This report summarises the key findings from this survey for Scotland. Further information about the survey, the main findings for the UK and past results for the UK can be found at the [Community Innovation Survey collection](#).

Definition of Innovation

The survey uses the following definitions of innovation drawing on those agreed with Eurostat:

‘Active’ innovators develop:

- new or significantly improved product (good or service) or process
- new or significantly improved forms of organisation, business structures, practices or marketing concepts/strategies
- innovation which is incomplete, reduced or abandoned

‘Broad’ innovators develop:

- new or significantly improved product (good or service) or process
- new or significantly improved forms of organisation, business structures, practices or marketing concepts/strategies
- engage in innovation which is incomplete, reduced or abandoned
- investment in internal research and development, training, external knowledge, machinery and equipment for innovation

‘Wider’ innovators develop:

- new or significantly improved forms of organisation, business structures, practices or marketing concepts/strategies

Innovation Activity

Innovation takes place through a wide variety of business practices and a range of indicators can be used to measure its level within the enterprise or in the economy as a whole. These include the levels of effort employed (measured through resources allocated to innovation) and of achievement (the introduction of new or improved products and processes). This section reports on the types and levels of innovation activity over the three year period, from 2016 to 2018, and makes comparisons with the results for the UK as a whole.

Figure 1 and Table 1 show the share of enterprises engaging in innovation activity for both Scotland and the UK as a whole. For 2016-18, the proportion of innovation active businesses in the UK (37.6%) was higher than in Scotland (32.2%) – and the UK outperformed Scotland across all the innovation activity types.

Figure 1: Proportion of enterprises engaging in innovation activity in Scotland and the UK, 2016 – 2018

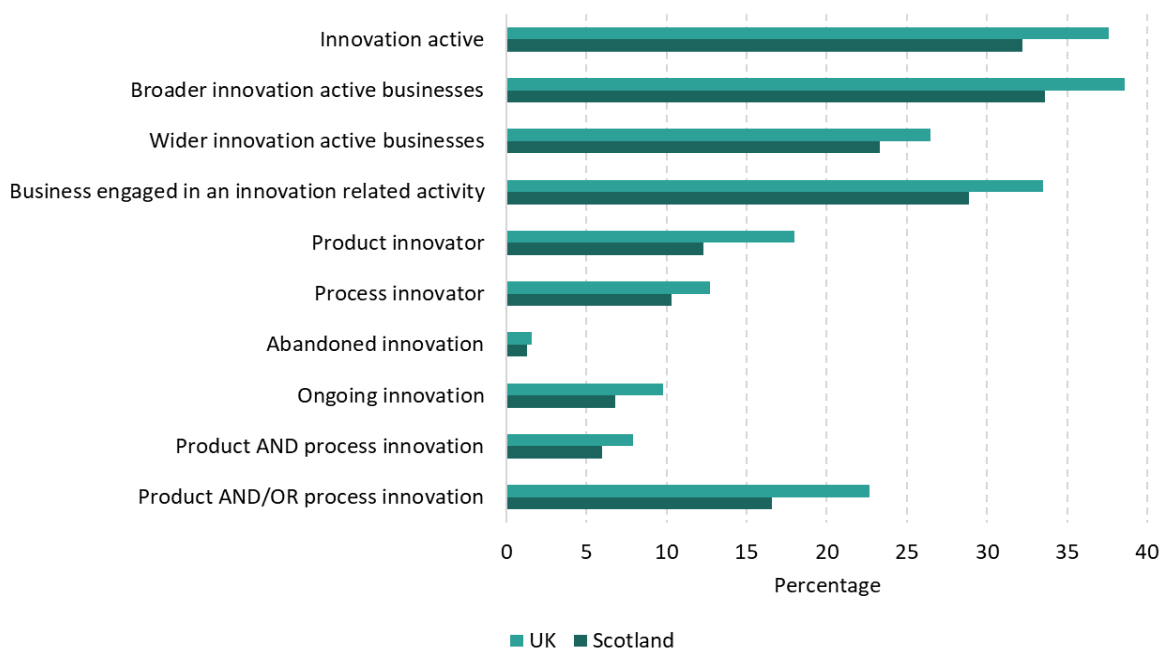
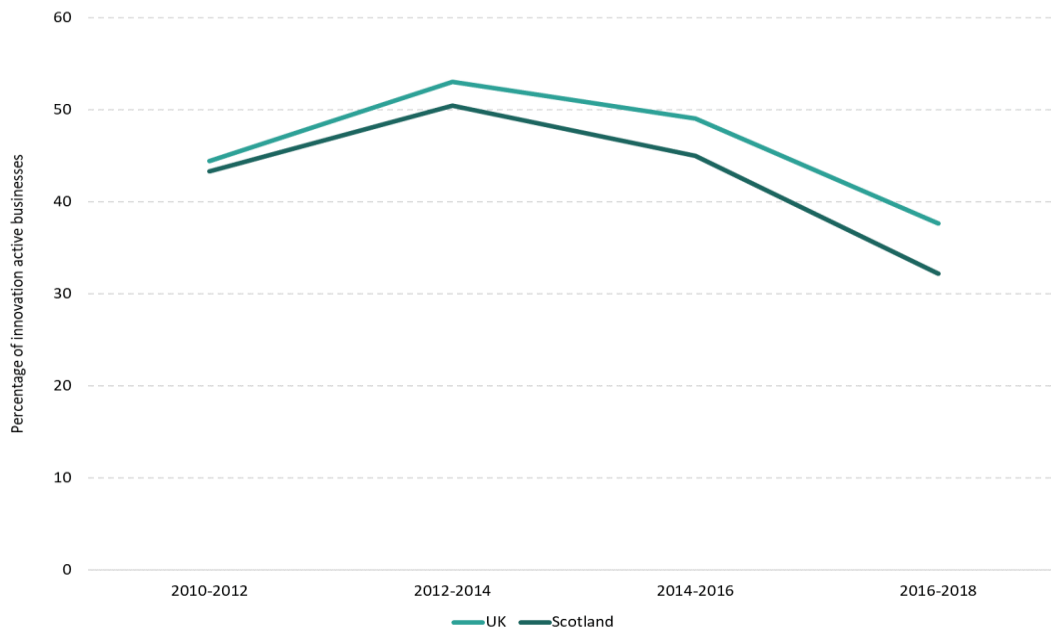


Figure 2 and Table 1 show that between 2014-2016 and 2016-2018 innovation activity dropped in both the UK (-11.4 percentage points) and Scotland (-12.8 percentage points).

Figure 2: Change in the share of innovation active enterprises in Scotland and the UK, 2010-2018



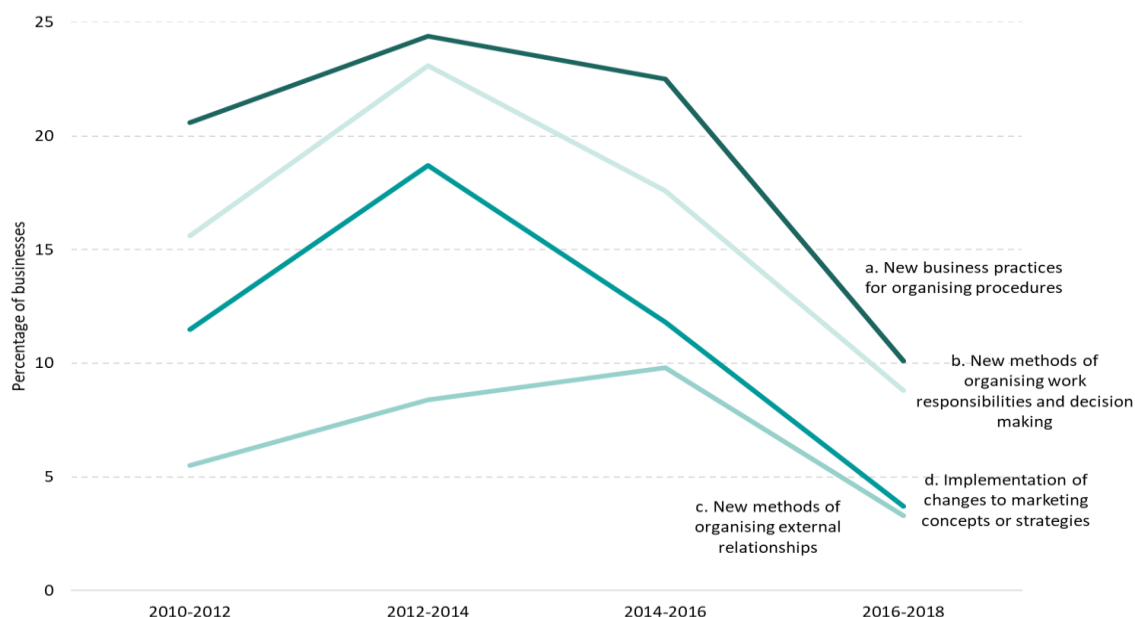
The proportion of businesses involved in all innovation activities decreased in both Scotland and the UK between 2014-16 and 2016-18. Figure 3 and Table 1 show that, for Scotland, the proportions of businesses performing product, process and wider innovation fell over the latest period.

Figure 3: Change in the share of enterprises performing innovation activities in Scotland, 2010 – 2018



Figure 4 and Table 2 show that, in Scotland, the reduction in wider innovation was attributable to decreases in activity across all the wider innovation types.

Figure 4: Change in the share of enterprises performing wider innovation activities in Scotland, 2010 – 2018



Innovation Activities – by Size

In Scotland, in 2016-18, small (10-49 employees) businesses were least likely to be innovation active (30.2% for Scotland) and large (250+ employees) businesses were most likely to be innovation active (43.8%); a similar pattern was found for broader innovators.

Wider innovation exhibited a slightly different pattern: the smallest businesses (10-49 employees) were less likely to be wider innovators (21.8%) than Scottish businesses overall (23.3%), businesses with 50-99 employees were most likely to be wider innovators (31.9%). The largest businesses were slightly more likely to be wider innovators (24.8%) than Scottish businesses in general (Table 3).

Small businesses (10-49 employees) were less likely to be involved in product and/or process innovation than Scottish businesses overall (15.6% vs 16.6%), whereas businesses with 100-249 and 250+ employees were the most likely (23.2% and 22.9% respectively).

Figure 5b and Table 3 show that innovation activity decreased between 2014-16 and 2016-18 among businesses of all sizes. The largest decrease is seen in businesses with 250+ employees (-18.7 percentage points).

Figure 5a: Share of innovation active enterprises according to their size, in Scotland and the UK, 2016-2018

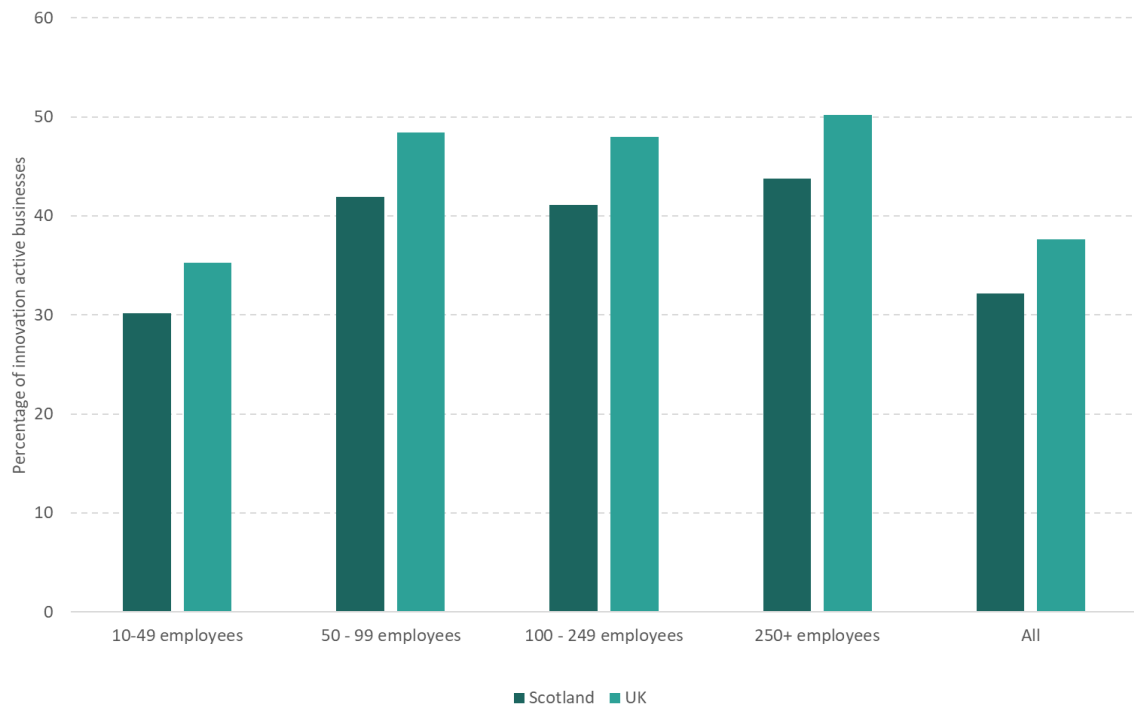
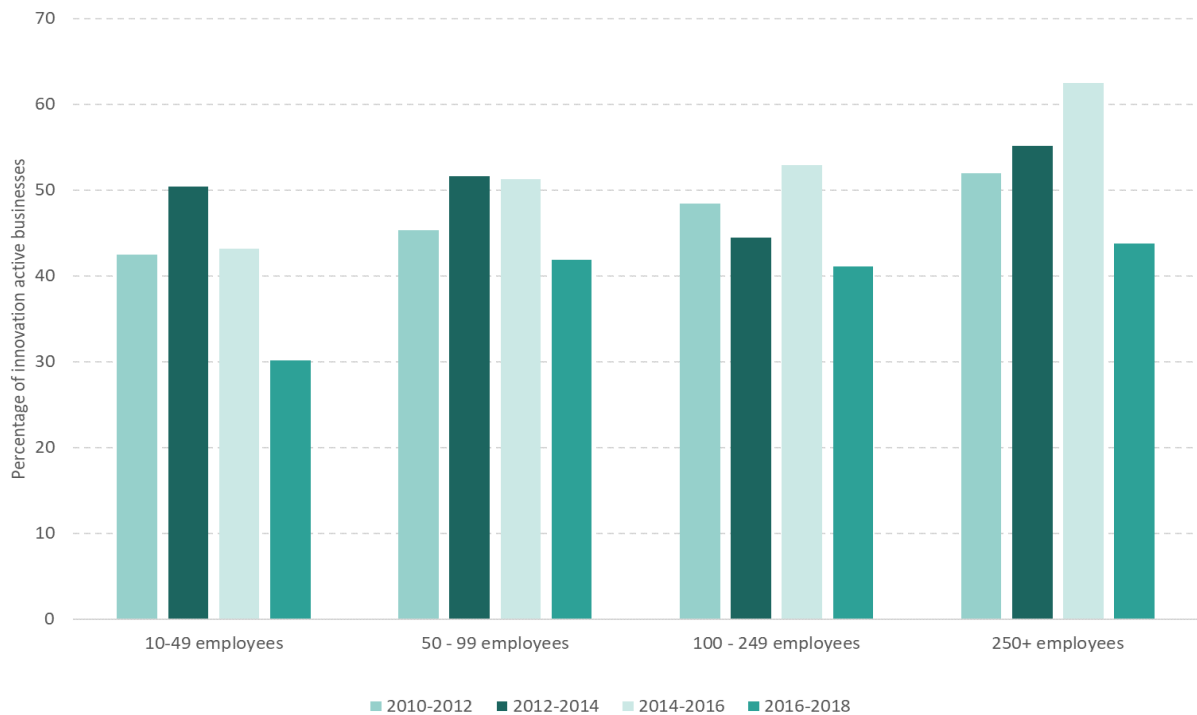


Figure 5b: Share of innovation active enterprises according to their size, in Scotland, 2010-2018



Innovation Activity – by Sector

Innovation activity varies between industry sectors as shown in Figure 6 and Table 4.

Businesses in the ‘Research and experimental development on social sciences and humanities’ sector were the most likely to be innovation active in Scotland (70.2%) and the UK (66.5%). Businesses in the ‘Accommodation and food services’ sector were the least likely to be innovation active.

In Scotland, businesses in the ‘Research and experimental development on social sciences and humanities’ sector were most likely to be wider innovators (37.2%) and enterprises in ‘Accommodation and food services’ were least likely (14.5%).

Businesses in the ‘Research and experimental development on social sciences and humanities’ sector were most likely to be product and/or process innovators (47.6%).

Figure 6: Share of enterprises that are innovation active by sector¹ in the UK and Scotland 2016 – 2018

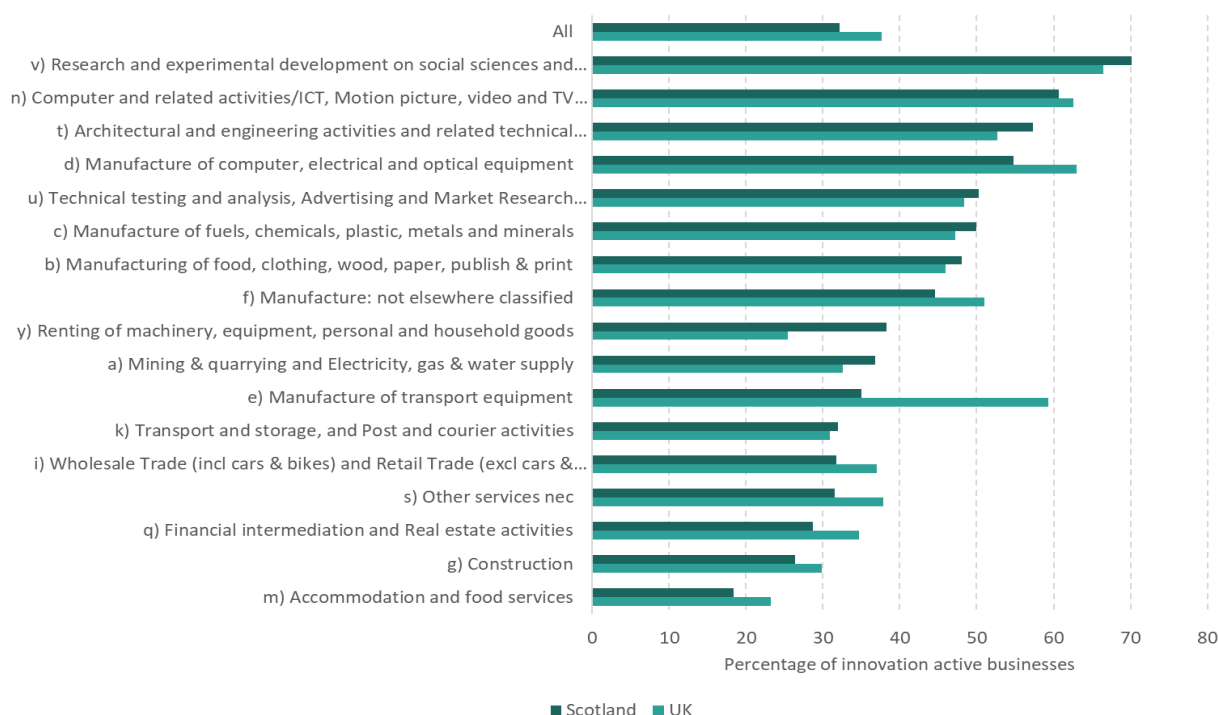


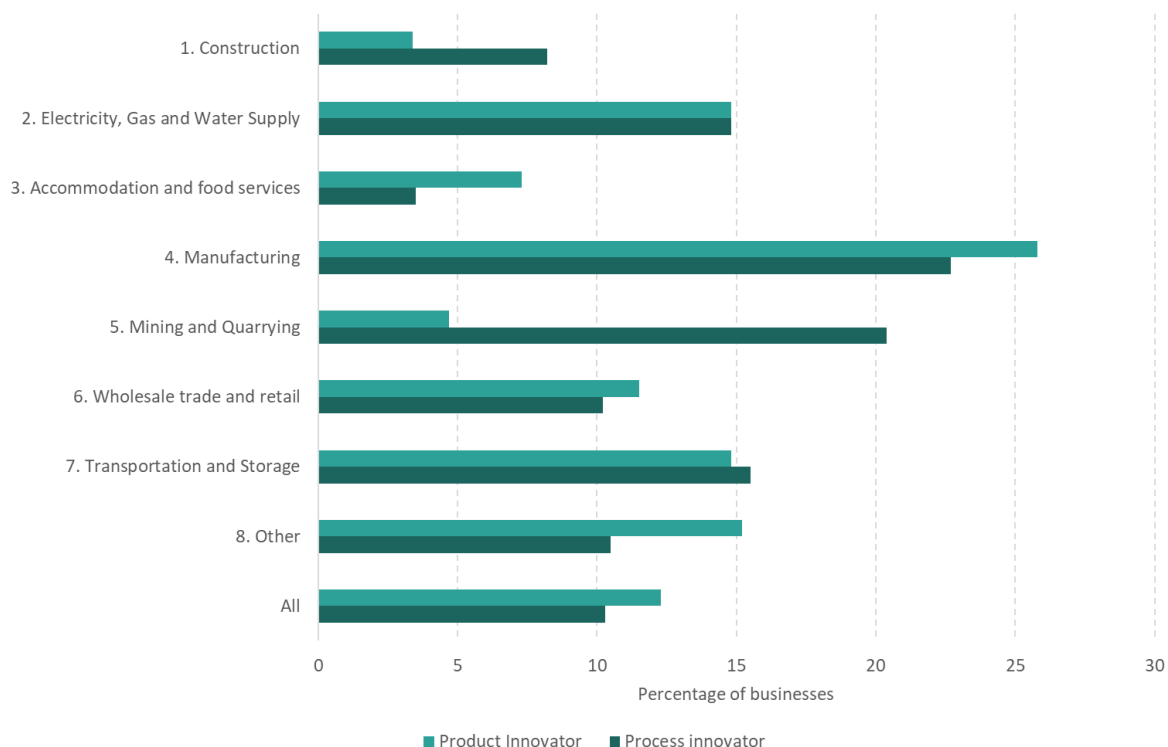
Figure 7 and Table 6 show that in 2016-2018, Scottish businesses within the broad sector ‘Manufacturing’ (25.8%) were most likely to be involved in product innovation; whereas businesses in ‘Construction’, ‘Mining and Quarrying, and ‘Accommodation and food services’ sectors were least likely to be involved in product innovation.

For process innovation; the proportion of Scottish businesses involved in process innovation was higher in the ‘Manufacturing’ (22.7%), ‘Mining and Quarrying’ (20.4%), ‘Transportation and Storage’ (15.5%), and ‘Electricity, Gas and Water Supply’ (14.8%)

¹ Break down of sectors by SIC 2007 code available in Annex B

sectors than in Scottish businesses in general (10.3%); whereas much lower proportions of businesses in ‘Construction’, and ‘Accommodation and food services’ were involved in process innovation.

Figure 7: Share of enterprises involved in product/process innovation by broad sector in Scotland, 2016-2018



Innovation Activity – Growth Sector

The six private sector dominated growth sectors², as identified in Scotland’s Economic Strategy (SES) 2015, are: Food & Drink (including agriculture & fisheries), Creative Industries (including digital), Sustainable Tourism, Energy (including renewables), Financial & Business Services and Life Sciences.

Figure 8 and Table 8 show that the innovation active share varied across the six growth sectors. In Scotland, businesses in the ‘Life Sciences’ growth sector were most likely to be innovation active (72.9%) and those in ‘Sustainable Tourism’ were least likely (18.9%).

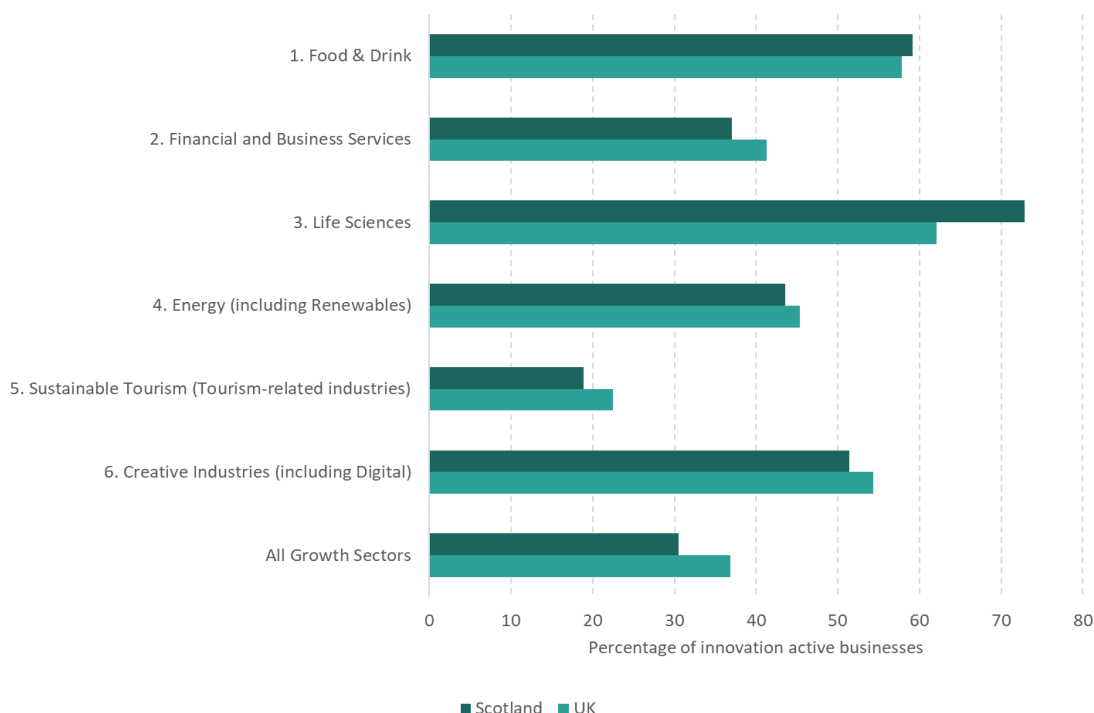
Compared to the Scottish average, the innovation active share was higher in: ‘Life Sciences’ (72.9%), ‘Food and drink’ (59.2%), ‘Creative Industries’ (51.4%), Energy (43.6%), and Financial and Business Services (37.0%). In contrast, the shares of innovation active businesses in ‘Sustainable Tourism’ (18.9%) was lower than the Scottish average.

² The UK Innovation survey does not include all SIC codes that would usually be covered in the Growth Sectors. Please refer to Annex C for a list of Growth Sector SIC codes included and not included in the UK Innovation survey.

Table 8 also shows that in Scotland, between 2014-16 and 2016-18, innovation activity increased in 'Life Sciences' (1.1 percentage points) and 'Energy' (0.6 percentage points); however it decreased in the other four growth sectors. The steepest decline was in 'Food and Drink', where innovation activity dropped by 18.2 percentage points between 2014-16 and 2016-18.

When compared to the UK, enterprises in the Scottish 'Life Sciences' and 'Food and Drink' growth sectors were more likely to be innovation active, but for the other four growth sectors businesses based in Scotland were less likely to be innovation active.

Figure 8: Proportion of innovation active enterprises by Growth Sector, in Scotland and the UK, 2016-2018



Geography of Innovation

Table 10 shows that in 2016-2018, the South West of the UK had the highest share of innovation active businesses in the UK (40.5%) and Northern Ireland had the lowest (32.1%). Innovation activity in Northern Ireland, Scotland, the North East, Wales, the North West and East Midlands was lower than the UK overall; whereas in the South West, South East, Yorkshire and the Humber, West Midlands, the East of England and London it was higher.

In 2016-18, Scotland's share of innovation activity ranked 11th out of the 12 UK regions and countries; this represents a drop from 10th place in the previous Innovation Survey. Northern Ireland (32.1%) was the only region of the UK that had a lower level of innovation activity than Scotland (32.2%).

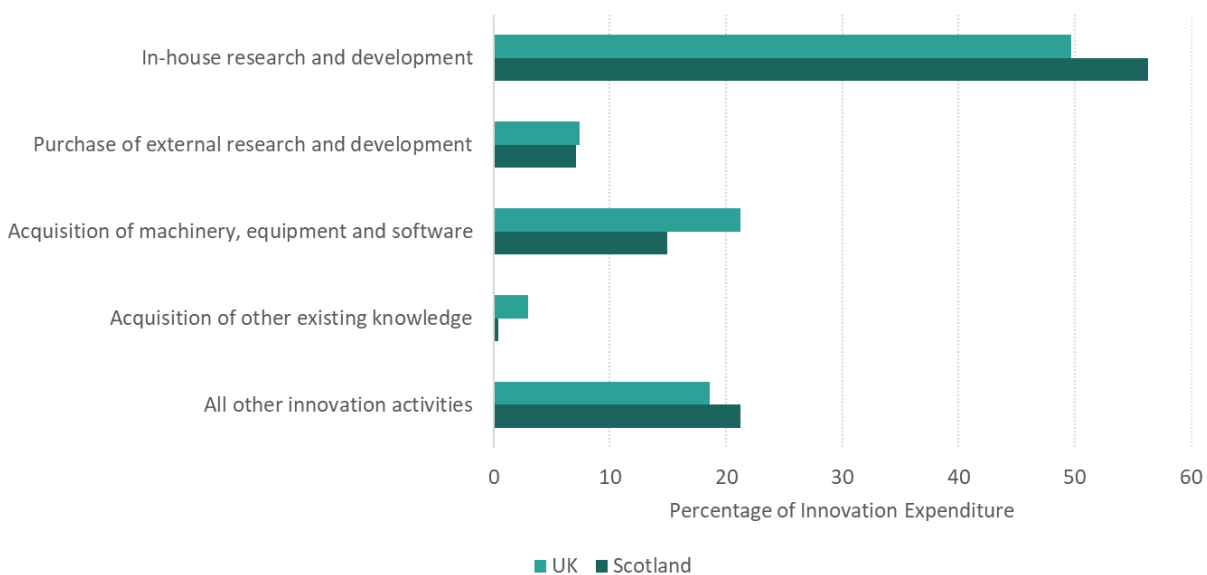
Table 10 shows that all regions of the UK saw a decrease in innovation activity between 2014-16 and 2016-18. East Midlands saw the largest percentage point decrease (-14.6 percentage points) followed by the West Midlands (-13.3 percentage points). In

comparison the share of Scottish businesses that were innovation active decreased by 12.8 percentage points between 2014-16 and 2016-18.

Type of Innovation Expenditure

Figure 9 and Table 11 show that the largest proportion of expenditure for both Scotland and the UK as a whole was on ‘In-house Research and Development’, which represented 56.3% of spending for Scotland and 49.7% for the UK.

Figure 9: Percentage share of innovation expenditure by type of expenditure for all businesses in Scotland and the UK, 2016-18

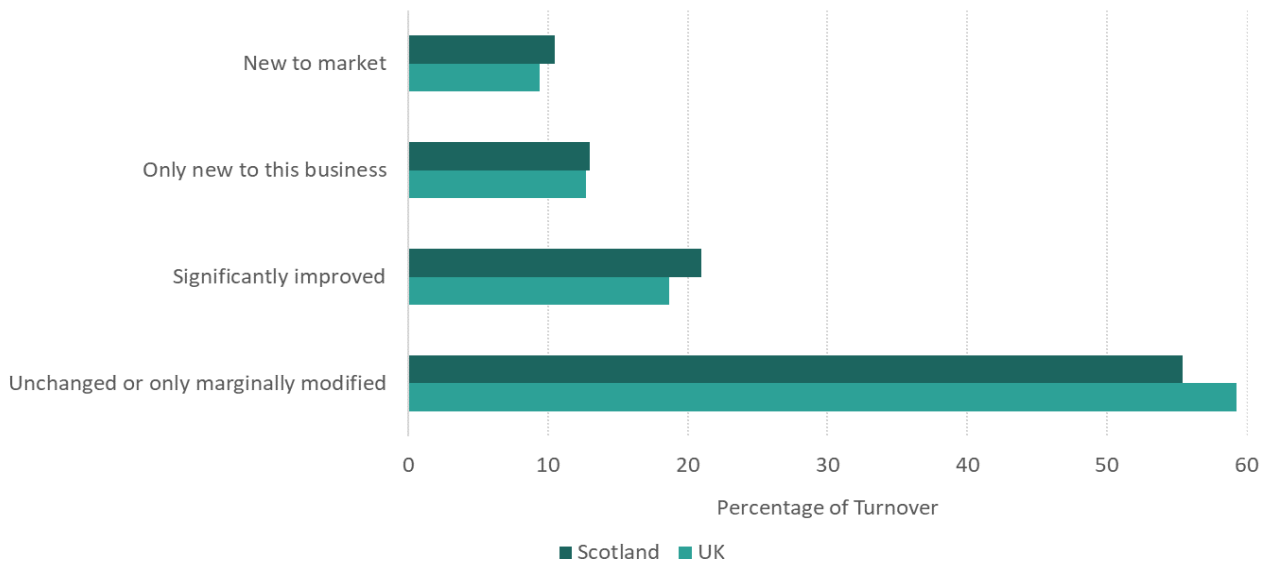


As well as asking about the main innovation related investments and the amount of expenditure in 2018, the UK Innovation Survey also asked the businesses to estimate the percentage of their 2018 turnover that related to goods and services that were;

- new to market in 2016-2018,
- only new to this business in 2016-2018,
- significantly improved in 2016-2018, and
- unchanged or only marginally modified.

Comparing these categories for Scotland and the UK as a whole (Figure 10 and Table 12), Scotland had a higher percentage turnover for ‘new to market’, ‘only new to this business’, and ‘significantly improved’ goods and services, compared to the UK. The UK had a higher percentage of turnover related to unchanged or only marginally modified goods or services (59.3%) than Scotland (55.4%).

Figure 10: Percentage of business's total turnover from goods and services in 2016-2018

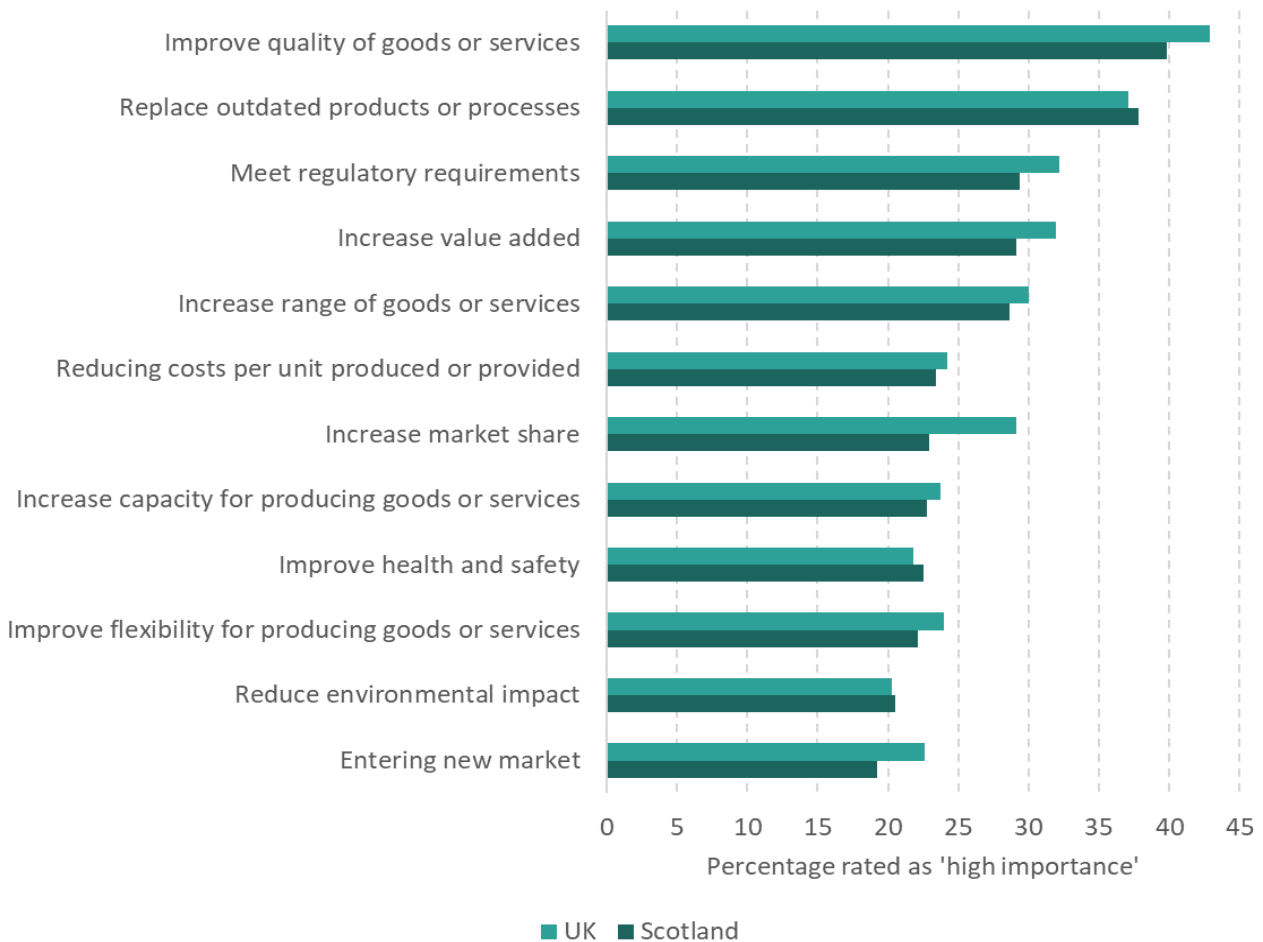


Context for Innovation

Figure 11 and Table 13 show that in both Scotland and the UK, ‘improving the quality of goods and services’ was the main driver of innovation: it was ranked as of high importance by the greatest proportion of businesses; this was followed by ‘replace outdated products or processes’.

For both the UK and Scotland, the factors rated as ‘not important’ as a main innovation driver by the highest proportion of businesses were ‘improve health and safety’, entering a new market’ and ‘reduce environmental impact’ (Table 13).

Figure 11: Motivations for innovation: the share of broader innovators that rated factors as of ‘high importance’ in their decision to innovate, 2016-2018



Co-operation Arrangements

The proportion of broader innovators who reported having co-operation arrangements on innovation activities decreased between 2014-2016 and 2016-2018 for both Scotland (from 55.3% to 42.3%) and the UK (from 57.4% to 48.8%). Of the businesses that had cooperation arrangements, most cooperated with suppliers of equipment, materials, services and software, in both Scotland and the UK (Figure 12 & Table 14); this was the same for businesses of all sizes (Figure 13).

Figure 12: The proportion of broader innovators that cooperated with various partners in Scotland and the UK, 2016-2018

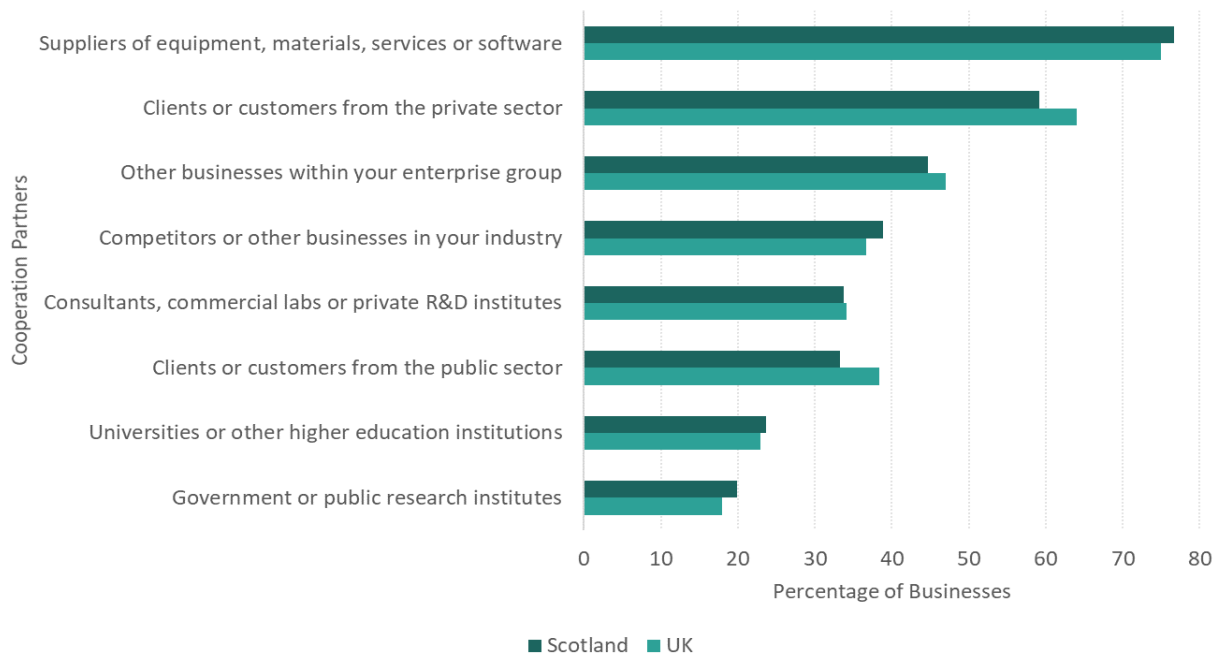


Figure 13: Share of broader innovators that cooperated with various partners in Scotland according to number of employees, 2016-2018

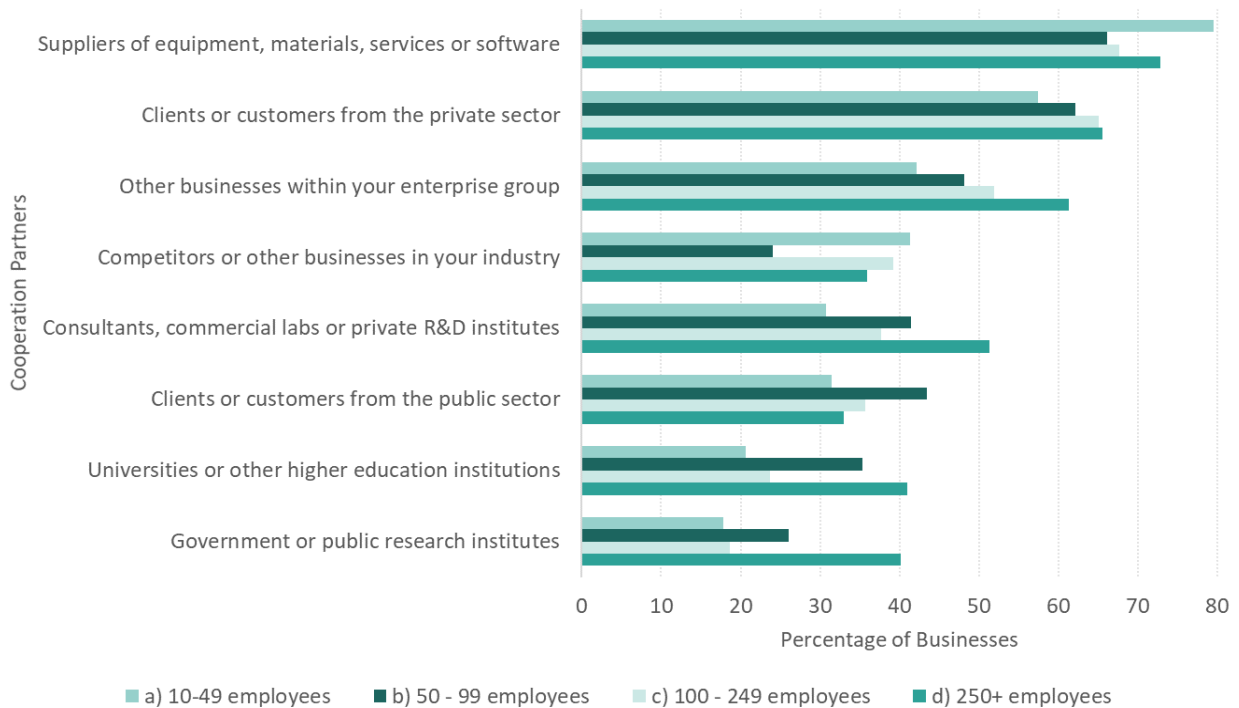
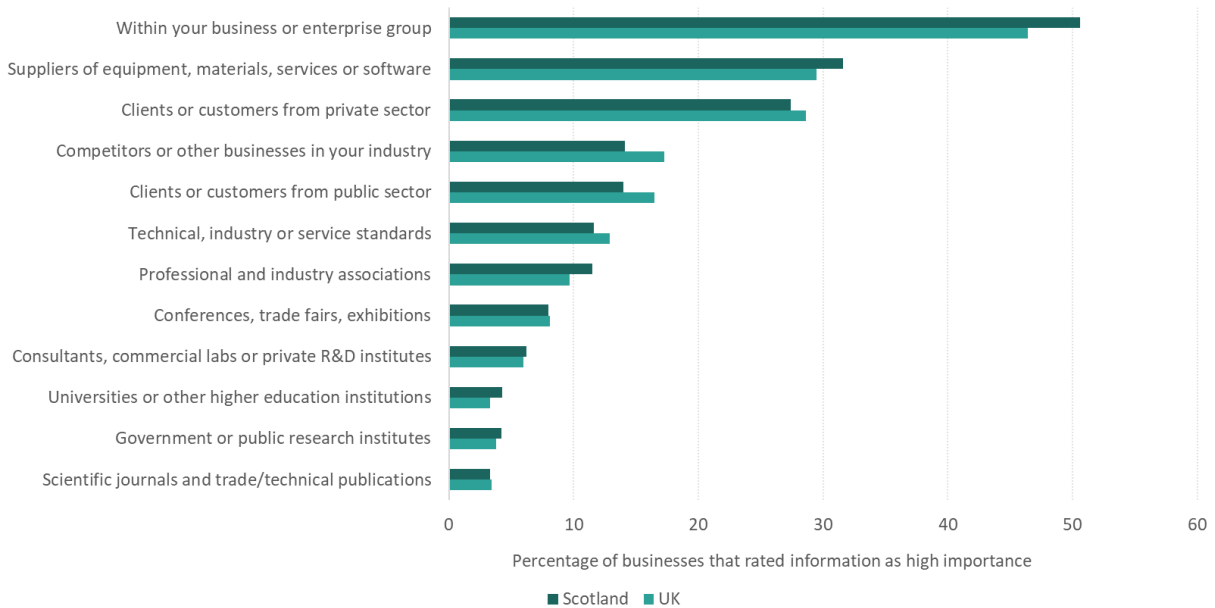


Figure 14 and Table 16 show that when considering sources of information for innovation activities, in both Scotland and the UK, the largest proportion of broader innovators ranked ‘within your business or enterprise group’ as of ‘high importance’. In Scotland and the UK, ‘Universities or other higher education institutions’ were ranked as ‘not important’ as a source of information for innovation activities by the highest proportion of broader innovators (Table 16).

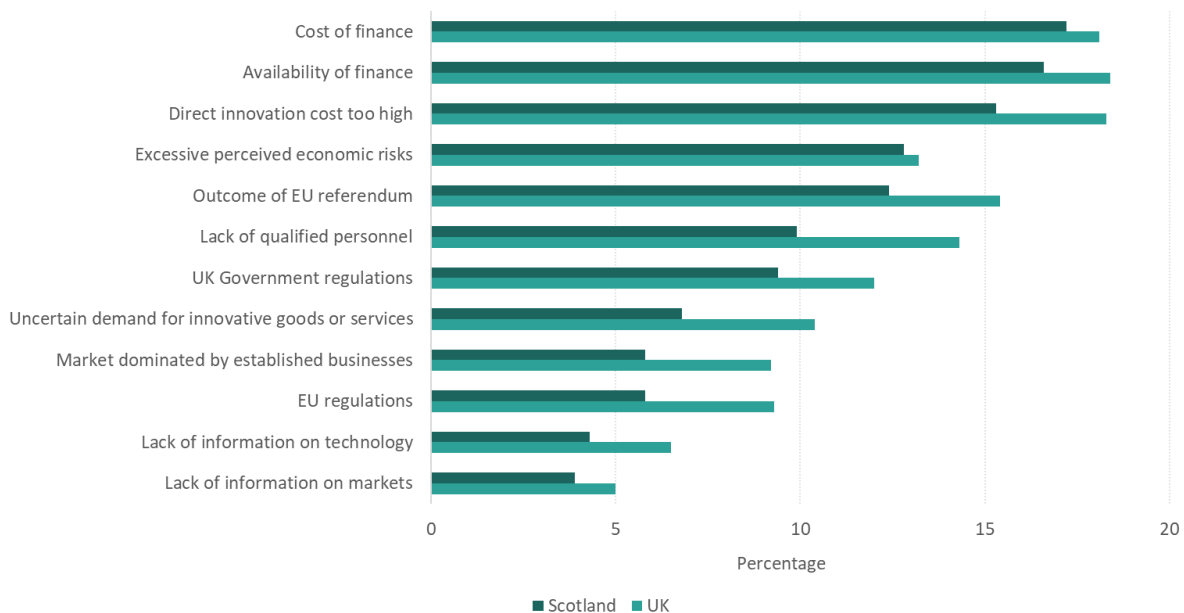
Figure 14: Share of broader innovators that ranked sources of information as of 'high importance' for innovation activities, 2016-2018



Constraints to Innovation

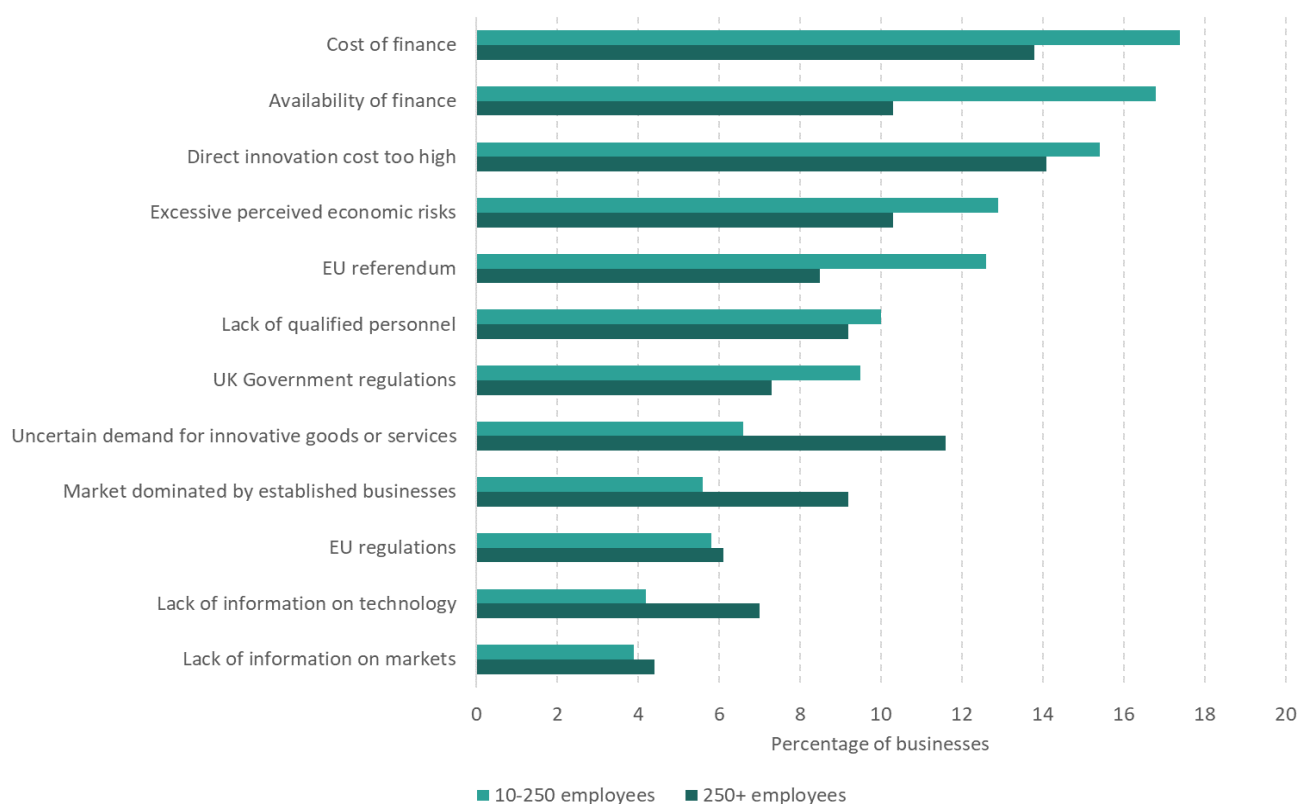
Figure 15 and Table 17 show that among various possible factors constraining innovation activities, 'cost of finance' was ranked as of 'high importance' by the largest proportion of Scottish broader innovators (17.2%), followed by 'availability of finance' (16.6%), and then 'direct innovation costs being too high' (15.3%). These were also the top three constraining factors for the UK as a whole.

Figure 15: Share of broader innovators ranking factors as of 'high importance' to constraining innovation activities in Scotland and the UK, 2016-2018



The relative importance of these factors in constraining innovation activity varies with business size: Figure 16 and Table 19 show that, in Scotland, the highest proportion of smaller businesses (10-250 employees) rated 'cost of finance' as of 'high importance' as a constraint to innovation. Among larger businesses (250+ employees), 'direct innovation cost too high' was rated as of 'high importance' by the highest proportion.

Figure 16: Share of broader innovators ranking factors as of 'high importance' to constraining innovation activities in Scotland' according to number of employees, 2016-2018



Exports

In 2016-18, Scottish businesses were less likely to export to European countries than UK businesses (15.9% vs 21.4%) and less likely to export to countries outside Europe (15.9% vs 19.6%).

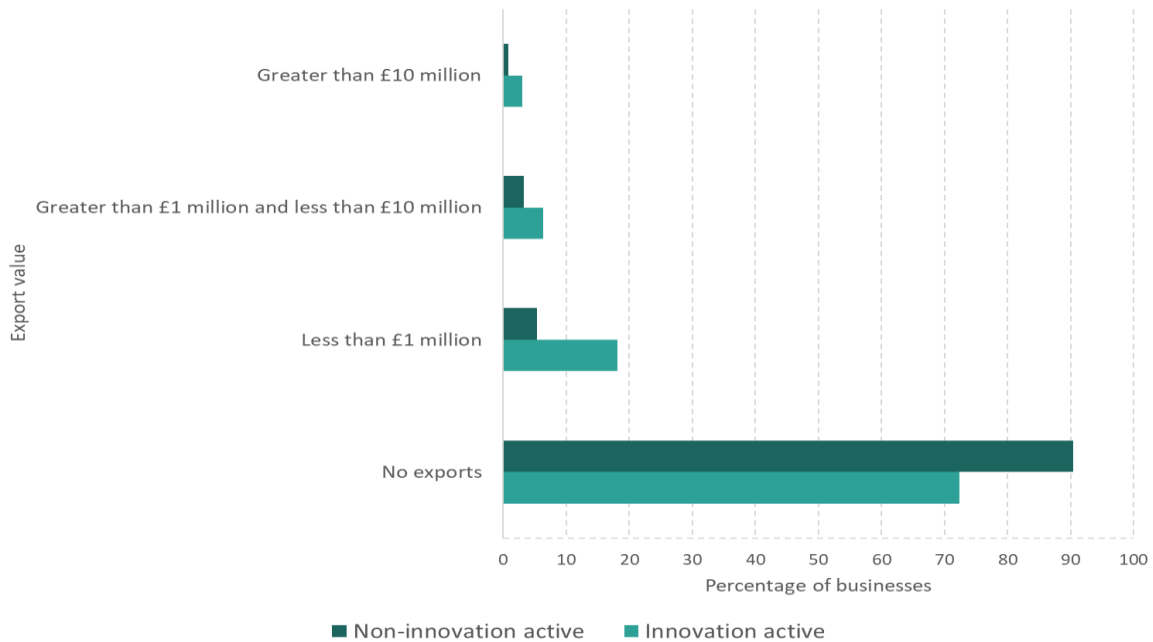
For both Scotland and the UK, a higher proportion of businesses exported to countries outside Europe in 2016-18 than 2014-2016 (Scotland: 1.3 percentage points higher, UK: 2.6 percentage points higher).

Innovation active businesses in Scotland were more likely to export to European countries than non-innovation active businesses (23.7% vs 10.9%). The same was true for exports to countries outside Europe; 23.2% of innovation active businesses in Scotland exported to countries outside Europe compared 11.3% of non-innovation active businesses.

UK innovation active businesses were also more likely to export to both European countries and countries outside of Europe than non-innovation active businesses.

Figure 17 and Table 21 show that among businesses in Scotland, innovation active businesses were more likely to report higher export values than non-innovation active businesses.

Figure 17: Value of exports for businesses in Scotland, according to innovation activity in 2018



Turnover

Figure 18 and Table 22 show the differences in the percentage change in turnover between 2016 and 2018 for innovation active and non-innovation active enterprises in Scotland: a higher share of innovation active businesses than non-innovation active businesses had more than a 10% increase in turnover (55.8% vs 37.8%). Similarly, in the UK, a higher proportion of innovation active (53.9%), compared to non-innovation active businesses (39.9%), reported more than 10% increase in turnover.

Compared to the UK, the proportion of innovation active businesses with more than a 10% increase in turnover was higher in Scotland. However, innovation active business in Scotland were also more likely to report a more than 10% decrease in turnover than UK businesses.

Figure 18: Change in turnover in businesses in Scotland by innovation activity, 2016 to 2018

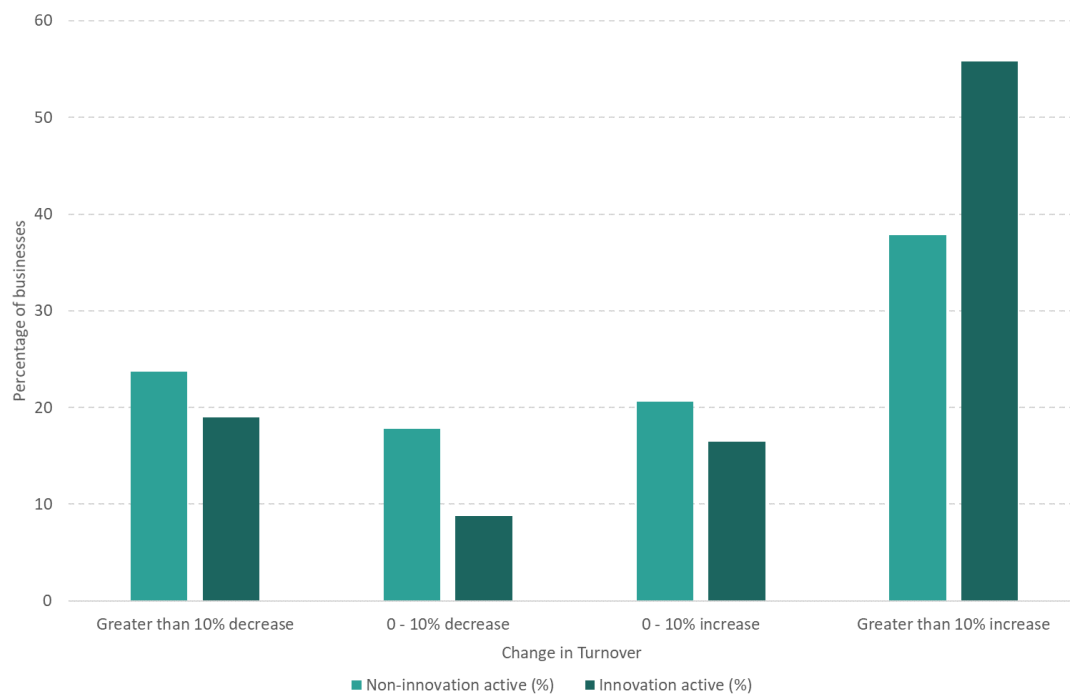
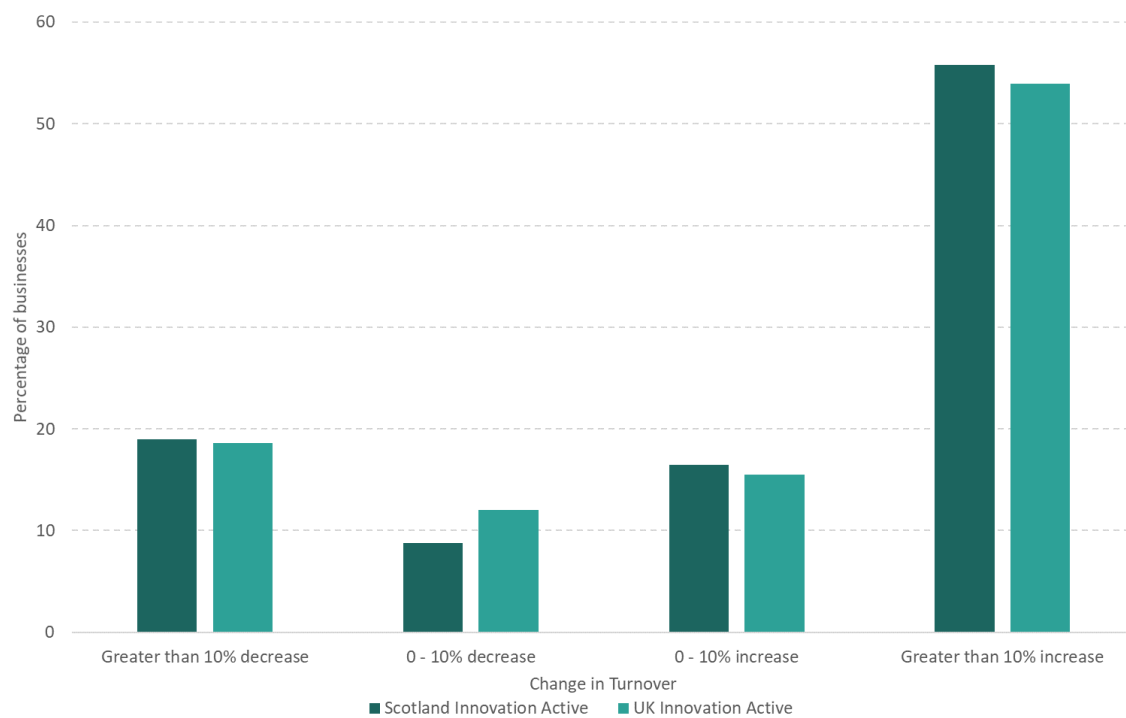


Figure 19: Change in turnover in innovation active businesses in Scotland and the UK, 2016 to 2018



Qualifications and skills

Figure 20 and Table 23 show that in Scotland a higher proportion of the workforce had a degree or higher qualification³ in science or engineering subjects (9.1%) than in the UK (8.4%); but a lower proportion had higher qualifications in other subjects (12.7% vs 14.3%). In both Scotland and the UK, the proportion of employees holding higher qualifications in science or engineering, was lower than other subjects (Figure 20).

In Scotland, businesses that were broader innovators had a higher proportion of employees holding a degree or higher level qualification, than non-innovators. Among non-innovators in Scotland, there was a lower proportion of employees with higher qualifications in science or engineering (4.5%) than in other subjects (10.1%). Broader innovators also employed a smaller proportion of people with higher qualifications in science and engineering than other subjects, but the gap was much smaller (15.6% vs 16.2%).

Figure 20: Average proportion of employees who held a degree or higher level qualification according to innovation activity in Scotland and the UK in 2018

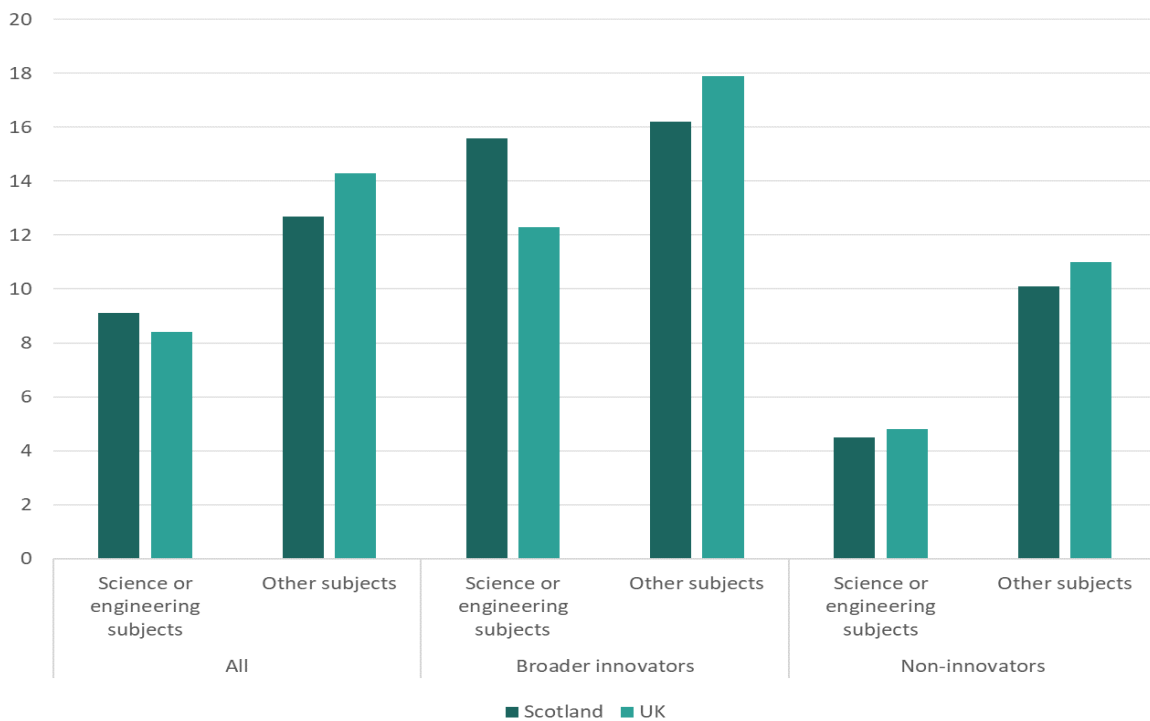


Figure 21 and Table 24 show that for all the skills categories, the proportion of businesses in Scotland that employed individuals with (or obtained from external sources) skills was lower than in the UK.

³ Degree or higher level qualification refers to either a BA, BSc, MA, MSc, PhD etc.

Figure 21: Proportion of businesses that employed individuals in-house with particular skills or obtained these skills from external sources in Scotland and the UK, 2016-2018

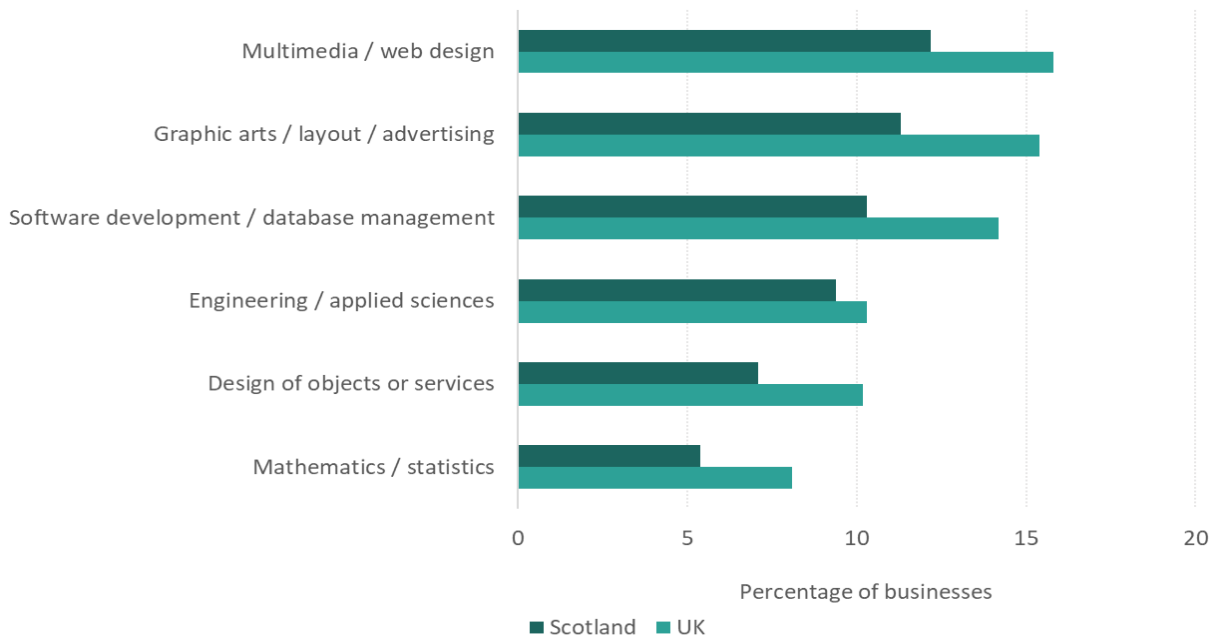


Figure 22 and Table 24 show that in Scotland, a higher proportion of large businesses (250+ employees) employed individuals (or obtained from external sources) with the displayed skills than smaller businesses (10 – 249 employees).

Figure 23 and Table 24 show that in Scotland, a higher share of businesses involved in broader innovation employed individuals (or obtained from external sources) with the displayed skills than businesses that did not innovate.

Figure 22: Proportion of businesses that employed individuals in-house with particular skills or obtained these skills from external sources according to number of employees, 2016-2018

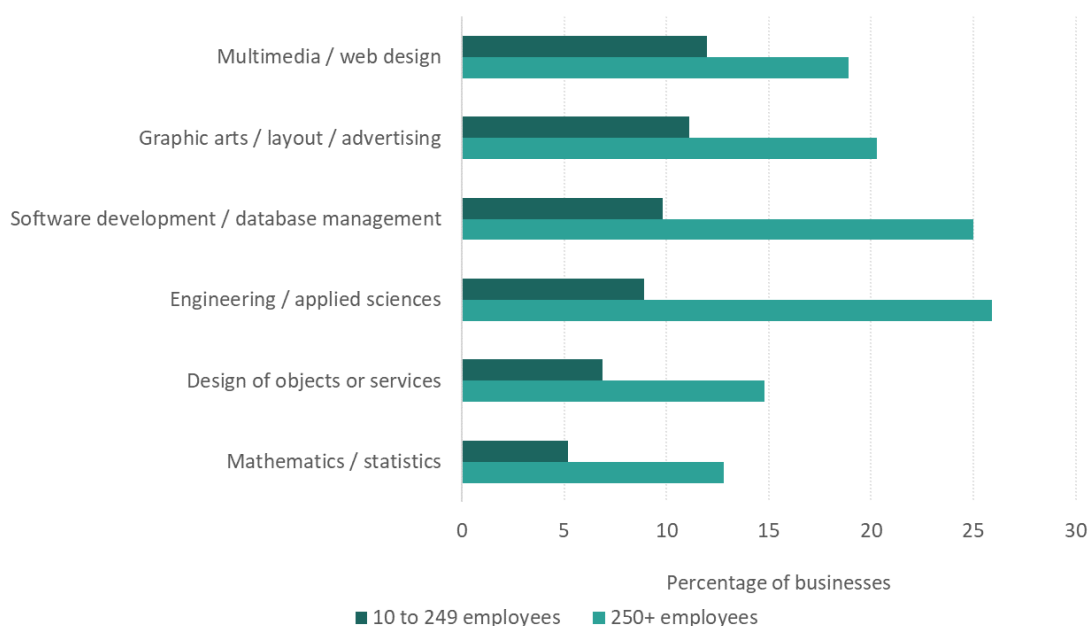
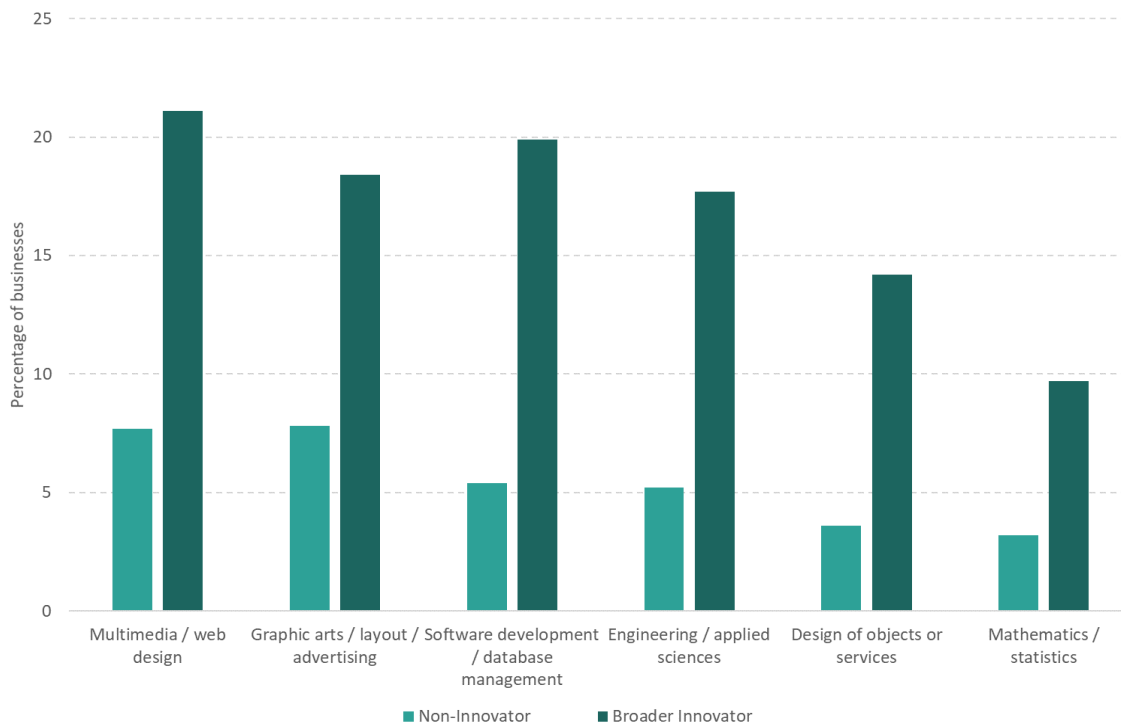


Figure 23: Proportion of businesses that employed individuals in-house with particular skills or obtained these skills from external sources according to innovation activity, 2016-2018



Annex A – Methodology

The UK Innovation Survey 2019 sample selection was conducted by the Office for National Statistics (ONS) and followed very similar sampling methodology to the previous surveys. The questionnaire used for the survey remained mostly the same as in the 2017 survey.

The questionnaires for the survey were distributed from February 25 to March 8 2019. Comparisons are made with the UK Innovation Survey 2017, 2015 and 2013.

UKIS 2019 sampled 30,942 UK enterprises with ten or more employees. The survey was voluntary and was conducted primarily through an electronic questionnaire. Businesses that did not complete an electronic response were offered a telephone interview. Responses were received from 14,040 businesses UK-wide - 1,536 of these responses were from businesses based in Scotland.

This report uses weighted data in order to be representative of the business population. The responses were weighted to the total business population using the Inter-Departmental Business Register (IDBR). They were not weighted by factors which would give more weight to larger firms, such as employment or turnover. The figures in this report are based on weights using the detailed 25 sectors required by Eurostat to enable international comparisons.

Due to smaller sample sizes for sub-groups, the survey's estimates may be affected by sampling errors and therefore apparent differences of a few percentage points may not reflect real differences in the population.

Values were suppressed when the total unweighted bases were less than 20.

Annex B – Broad Sector break down

SIC codes allow businesses to be classified by the type of economic activity in which they are mainly engaged. The broad sectors in Figure 6 are defined by SIC codes as follows;

Mining, quarrying and electricity, gas & water supply

SIC 05 : Mining of coal and lignite

SIC 06 : Extraction of crude petroleum and natural gas

SIC 07 : Mining of metal ores

SIC 08 : Other mining and quarrying

SIC 09 : Mining support service activities

SIC 35 : Electricity, gas, steam and air conditioning supply

SIC 36 : Water collection, treatment and supply

SIC 37 : Sewerage

SIC 38 : Waste collection, treatment and disposal activities; materials recovery

SIC 39 : Remediation activities and other waste management services

Manufacturing of food, clothing, wood, paper, publish & print

SIC 10 : Manufacture of food products

SIC 11 : Manufacture of beverages

SIC 12 : Manufacture of tobacco products

SIC 13 : Manufacture of textiles

SIC 14 : Manufacture of wearing apparel

SIC 15 : Manufacture of leather and related products

SIC 16 : Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials

SIC 17 : Manufacture of paper and paper products

SIC 18 : Printing and reproduction of recorded media

Manufacture of fuels, chemicals, plastic, metals and minerals

SIC 19 : Manufacture of coke and refined petroleum products

SIC 20 : Manufacture of chemicals and chemical products

SIC 21 : Manufacture of basic pharmaceutical products and pharmaceutical preparations

SIC 22: Manufacture of rubber and plastic products

SIC 23: Manufacture of other non-metallic mineral products

SIC 24: Manufacture of basic metals

SIC 25: Manufacture of fabricated metal products, except machinery and equipment

Manufacture of electrical and optical equipments

SIC 26 : Manufacture of computer, electronic and optical products

SIC 27 : Manufacture of electrical equipment

SIC 28 : Manufacture of machinery and equipment n.e.c.

Manufacture of transport equipments

SIC 29 : Manufacture of motor vehicles, trailers and semi-trailers

SIC 30 : Manufacture of other transport equipment

Manufacture: not elsewhere classified

SIC 31 : Manufacture of furniture

SIC 32 : Other manufacturing

SIC 33 : Repair and installation of machinery and equipment

Construction

SIC 41 : Construction of buildings

SIC 42 : Civil engineering

SIC 43 : Specialised construction activities

Wholesale trade (incl. cars & bikes) and retail trade (excl. cars & bikes)

SIC 45 : Wholesale trade and retail trade and repair of motor vehicles and motorcycles

SIC 46 : Wholesale trade, except of motor vehicles and motorcycles

SIC 47 : Retail trade, except of motor vehicles and motorcycles

Transport and post and courier activities

SIC 49 : Land transport and transport via pipelines

SIC 50 : Water transport

SIC 51 : Air transport

SIC 52 : Warehousing and support activities for transportation

SIC 53 : Postal and courier activities

Accommodation and food services

SIC 55 : Accommodation

SIC 56 : Food and beverage service activities

Computer and related activities/ ICT, motion picture, video and tv programme production/ programming broadcasting and telecommunications

SIC 58 : Publishing activities

SIC 59 : Motion picture, video and television programme production, sound recording and music publishing activities

SIC 60 : Programming and broadcasting activities

SIC 61 : Telecommunications

SIC 62 : Computer programming, consultancy and related activities

SIC 63 : Information service activities

Financial intermediation and real estate activities

SIC 64 : Financial service activities, except insurance and pension funding

SIC 65 : Insurance, reinsurance and pension funding, except compulsory social security

SIC 66 : Activities auxiliary to financial services and insurance activities

SIC 68 : Real estate activities

Other services n.e.c.

SIC 69 : Legal and accounting activities

SIC 70 : Activities of head offices; management consultancy activities

SIC 78 : Employment activities

SIC 80 : Security and investigation activities

SIC 81 : Services to buildings and landscape activities

Architectural and engineering activities and related technical consultancy

SIC 711 : Architectural and engineering activities and related technical consultancy

Clinical testing and analysis, advertising and market research and other professional, scientific and technical activities

SIC 712 : Technical testing and analysis

SIC 73 : Advertising and market research

SIC 74 : Other professional, scientific and technical activities

Research and experimental development on social sciences and humanities

SIC 72 : Scientific research and development

Renting of machinery, equipment, personal and household goods

SIC 77 : Renting and leasing activities

Annex C – Growth Sectors

SIC codes allow businesses to be classified by the type of economic activity in which they are mainly engaged. The Growth sectors are defined by SIC codes as follows, those SIC codes in red italics are not surveyed as part of the Innovation Survey;

Energy (including renewables)

SIC 05: Mining of coal and lignite

SIC 06: Extraction of crude petroleum and natural gas

SIC 09: Mining support service activities

SIC 19: Manufacture of coke and refined petroleum products

SIC 20.14: Manufacture of other organic based chemicals

SIC 35: Electricity, gas, steam and air conditioning supply

SIC 36: Water collection, treatment and supply

SIC 38.22: Treatment and disposal of hazardous waste

SIC 71.12/2: Engineering related scientific and technical consulting activities

SIC 74.90/1: Environmental consulting activities

Financial and Business Services:

SIC 64.1: Monetary intermediation

SIC 64.3: Trusts, funds and similar financial entities

SIC 64.9: Other financial service activities, except insurance and pension funding

SIC 65: Insurance, reinsurance and pension funding, except compulsory social security

SIC 66: Activities auxiliary to financial services and insurance activities

SIC 69.1: Legal activities

SIC 69.2: Accounting, bookkeeping and auditing activities; tax consultancy

SIC 70.2: Management consultancy activities

SIC 71.129: Other engineering activities (not including engineering design for industrial process and production or engineering related scientific and technical consulting activities)

SIC 73.2 Market research and public opinion polling

SIC 74.3: Translation and interpretation activities

SIC 78.109: Activities of employment placement agencies (other than motion picture, television and other theatrical casting) n.e.c.

SIC 78.3: Other human resources provision

SIC 82.1: Office administrative and support activities

SIC 82.2: Activities of call centres

SIC 82.3: Organisation of conventions and trade shows

SIC 82.91: Activities of collection agencies and credit bureaus

SIC 82.99 Other business support service activities n.e.c.

Food and Drink:

SIC 01: Crop and Animal Production, Hunting and Related Service Activities

SIC 03: Fishing and Aquaculture

SIC 10: Manufacture of Food Products

SIC 11: Manufacture of Beverages

Life Sciences

SIC 21: Manufacture of basic pharmaceutical products and pharmaceutical preparations.

SIC 26.6: Manufacture of irradiation, electromedical and electrotherapeutic equipment.

SIC 32.5: Manufacture of medical and dental instruments and supplies.

SIC 72.11: Research and experimental development on biotechnology.

SIC 72.19: Other research and experimental development on natural sciences and engineering.

Sustainable Tourism (Tourism related Industries)

SIC 55.1: Hotels and similar accommodation

SIC 55.2: Holiday and other short-stay accommodation

SIC 55.3: Camping grounds, recreational vehicle parks and trailer parks

SIC 56.1: Restaurants and mobile food service activities

SIC 56.3: Beverage serving activities

SIC 79.12: Tour operator activities

SIC 79.9: Other reservation service and related activities

SIC 91.02: Museum activities

SIC 91.03: Operation of historical sites and buildings and similar visitor attractions

SIC 91.04: Botanical and zoological gardens and nature reserves activities

SIC 93.11: Operation of sports facilities

SIC 93.199: Other sports activities (not including activities of racehorse owners) nec

SIC 93.21: Activities of amusement parks and theme parks

SIC 93.29: Other amusement and recreation activities

Creative Industries

Cultural Domains	Scottish Creative & Cultural Industries	SIC 2007		
Visual Art	1. Advertising	SIC 73.11: Advertising agencies SIC 73.12: Media representation		
	2. Architecture	SIC 71.11: Architectural activities		
	3. Visual art	<i>SIC 90.03: Artistic creation (70%)</i> SIC 47.78/1: Retail sale in commercial art galleries		
	4. Crafts and Antiques	SIC 31.09: Manufacture of other furniture		
		SIC 16.29: Manufacture of other wood products (30%)		
		SIC 32.12: Manufacture of jewellery and related products		
		SIC 32.13: Manufacture of imitation jewellery and related articles		
		SIC 23.41: Manufacture of ceramic household and ornamental articles (35%)		
		SIC 23.49: Manufacture of other ceramic products (35%)		
		SIC 23.13: Manufacture of hollow glass (15%)		
		SIC 23.19: Manufacture of other glass (15%)		
	5. Fashion and textiles	SIC 47.79/1: Retail sale of antiques and antique books		
		<i>SIC 95.24: Repair of furniture and home furnishings</i>		
		SIC 13: Manufacture of textiles (25%) SIC 14: Manufacture of wearing apparel (20%) SIC 15: Manufacture of leather and related products (20%)		
	6. Design	SIC 74.1: Specialised design activities (25%) SIC 71.12/1: Engineering design activities for industrial process and production SIC 74.1: Specialised design activities (75%)		
		<i>SIC 90.01: Performing arts</i> <i>SIC 90.02: Support activities to performing arts</i> <i>SIC 90.04: Operation of arts facilities</i>		
Performance	7. Performing arts	SIC 78.10/1: Motion picture, television and other theatrical casting		
Audio-Visual	8. Music	SIC 59.2: Sound recording and music publishing activities		
		SIC 18.20/1: Reproduction of sound recording		
		SIC 32.2: Manufacture of musical instruments		
	9. Photography	SIC 74.20/1: Portrait photographic activities		
		SIC 74.20/2: Other specialist photography (not including portrait photography) SIC 74.20/9: Other photographic activities (not including portrait and other specialist photography and film processing) n.e.c.		
	10. Film and video	SIC 18.20/2: Reproduction of video recording		
		SIC 59.11/1: Motion picture production activities		
		SIC 59.11/2: Video production activities		
		SIC 59.12: Motion picture, video and television programme post-production activities (25%)		
		SIC 59.13/1: Motion picture distribution activities SIC 59.13/2: Video distribution activities SIC 59.14: Motion picture projection activities		
	11. Computer Games	SIC 58.21: Publishing of computer games		
		SIC 62.01/1: Ready-made interactive leisure and entertainment software development		
12. Radio and TV	SIC 59.11/3: Television programme production activities			
	SIC 59.13/3: Television programme distribution activities			
	SIC 59.12: Motion picture, video and television programme post-production activities (75%)			
	SIC 60.1: Radio broadcasting SIC 60.2: Television programming and broadcasting activities			
Books and Press	13. Writing and Publishing	<i>SIC 90.03: Artistic creation (30%)</i> SIC 58.11: Book publishing SIC 58.13: Publishing of newspapers SIC 58.14: Publishing of journals and periodicals SIC 58.19: Other publishing activities SIC 18.11: Printing of newspapers SIC 18.129: Other printing (not labels) SIC 18.13: Pre press and media services SIC 63.91: News agency activities		
		<i>SIC 91.01: Libraries and archive activities</i>		
		SIC 58.29: Other software publishing		
		SIC 62.01/2: Business and domestic software development		
		SIC 62.02: Computer consultancy activities		
		Heritage	14. Libraries and archives	<i>SIC 91.01: Libraries and archive activities</i>
		Digital Industries	15. Software/electronic publishing	SIC 58.29: Other software publishing SIC 62.01/2: Business and domestic software development SIC 62.02: Computer consultancy activities
		Cultural Education	16. Cultural education	<i>SIC 85.52: Cultural Education</i>

Contact information

An Official Statistics publication for Scotland

Official and National Statistics are produced to high professional standards set out in the Code of Practice for Official Statistics. Both undergo regular quality assurance reviews to ensure that they meet customer needs and are produced free from any political interference.

Correspondence and enquiries

For enquiries about this publication please contact:

Marina Curran

Business and Innovation Statistics

e-mail: industrystatistics@gov.scot

For general enquiries about Scottish Government statistics please contact:

Office of the Chief Statistician, Telephone: 0131 244 0442,

e-mail: statistics.enquiries@gov.scot

How to access background or source data

The data collected for this statistical bulletin:

are available in more detail through statistics.gov.scot

are available via an alternative route: [Community Innovation Survey collection](#)

may be made available on request, subject to consideration of legal and ethical factors. Please contact industrystatistics@gov.scot for further information.

cannot be made available by Scottish Government for further analysis as Scottish Government is not the data controller.

Complaints and suggestions

If you are not satisfied with our service or have any comments or suggestions, please write to the Chief Statistician, 3WR, St Andrews House, Edinburgh, EH1 3DG, Telephone: (0131) 244 0302, e-mail statistics.enquiries@gov.scot.

If you would like to be consulted about statistical collections or receive notification of publications, please register your interest at:

<http://register.scotstat.org/Subscribe/Step1>

Details of forthcoming publications can be found at www.gov.scot/statistics

Crown Copyright

You may use or re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. See:

www.nationalarchives.gov.uk/doc/open-government-licence/