

Annex A: EU comparisons of innovation activity, 2014-2016

The UK Innovation Survey (UKIS) is part of the wider Community Innovation Survey (CIS) covering European countries, which makes it possible to compare the rates of business innovation across the EU. However, it is important to note that the headline rate of the proportion of innovation active businesses as per the EU results differs from the headline rate of the proportion of innovation active businesses as per the UK Innovation Survey 2017 publications¹. This difference is as a result of the EU rates being focussed on a smaller group of industrial sectors compared to the UKIS rates. For example, the UKIS results include businesses in the Construction (section F), Retail (Division 47) and Hotels & restaurants (section I) sectors – whereas for the EU results these sectors are excluded. This difference in sectoral definition has a considerable impact on Scotland's position; as per the UKIS results for 2014-16 the proportion of innovation active businesses in Scotland was 45.0%, lower than the rate for the UK at 49.0%. However, on the EU results sectoral definition, the 2014-16 share for Scotland was 59.7%, higher than the rate for the UK at 58.7%.

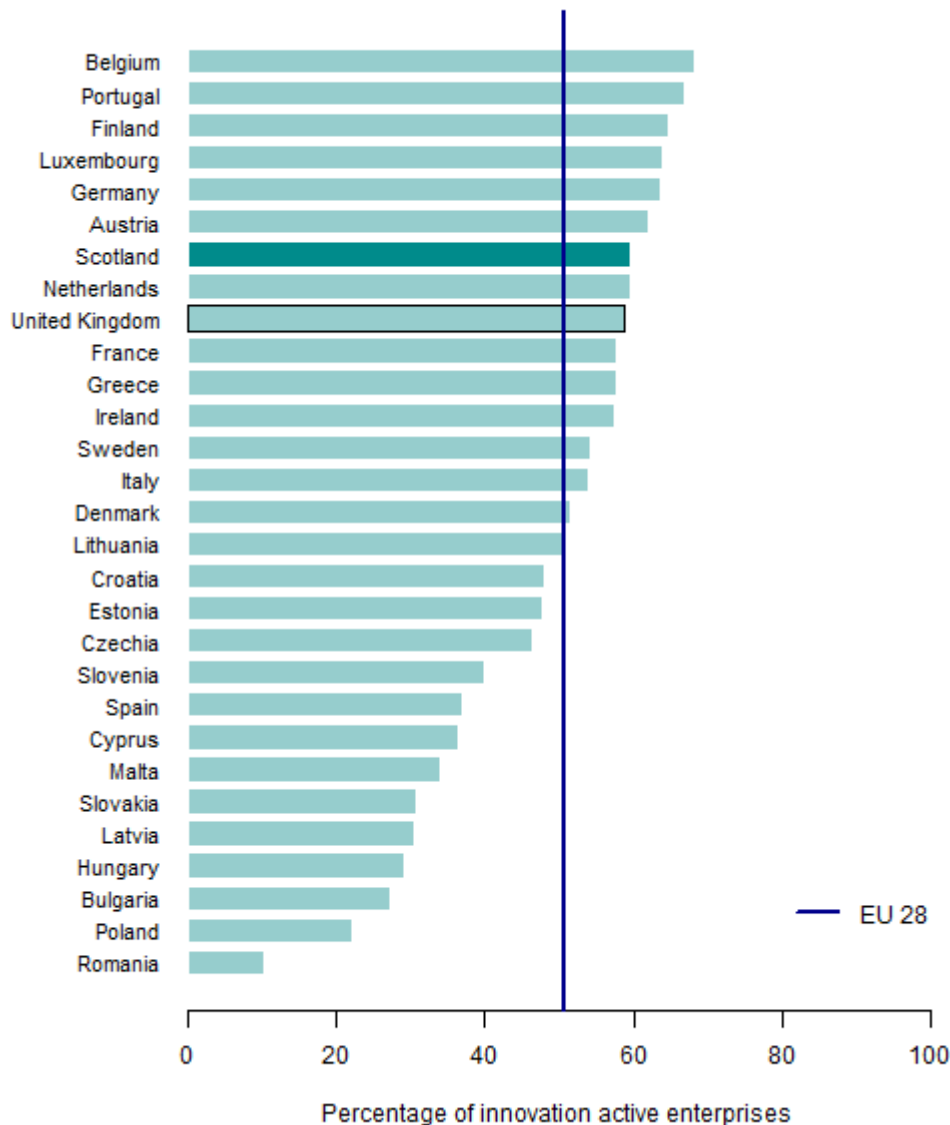
The industries and services included in CIS 10 reported by EuroStat are:

- Core NACE (NACE Rev. 2 sections & divisions B-C-D-E-46-H-J-K-71-72-73)
- B MINING AND QUARRYING
- C MANUFACTURING
- D ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY
- E WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES
- 46: Wholesale trade, except of motor vehicles and motorcycles
- H TRANSPORTATION AND STORAGE
- J INFORMATION AND COMMUNICATION
- K FINANCIAL AND INSURANCE ACTIVITIES
- 71: Architectural and engineering activities; technical testing and analysis
- 72: Scientific research and development
- 73: advertising and market research

¹ Results for Scotland: <http://www.gov.scot/Topics/Statistics/Browse/Business/Publications/UKIS> and the UK: <https://www.gov.uk/government/collections/community-innovation-survey>

For 2014-16, Scotland's share of innovation active businesses was 59.7% - higher than the UK where 58.7% of businesses were innovation active. In 2014-16, Scotland ranked in the first quartile of EU countries for the proportion of innovation active businesses – above the UK, which ranked in the second quartile in 2014-16. Innovation activity in both Scotland and the UK was above the EU (28 countries) average of 50.6% (Figure 1).

Figure 1. Share of innovation activity by EU country, 2014-2016²

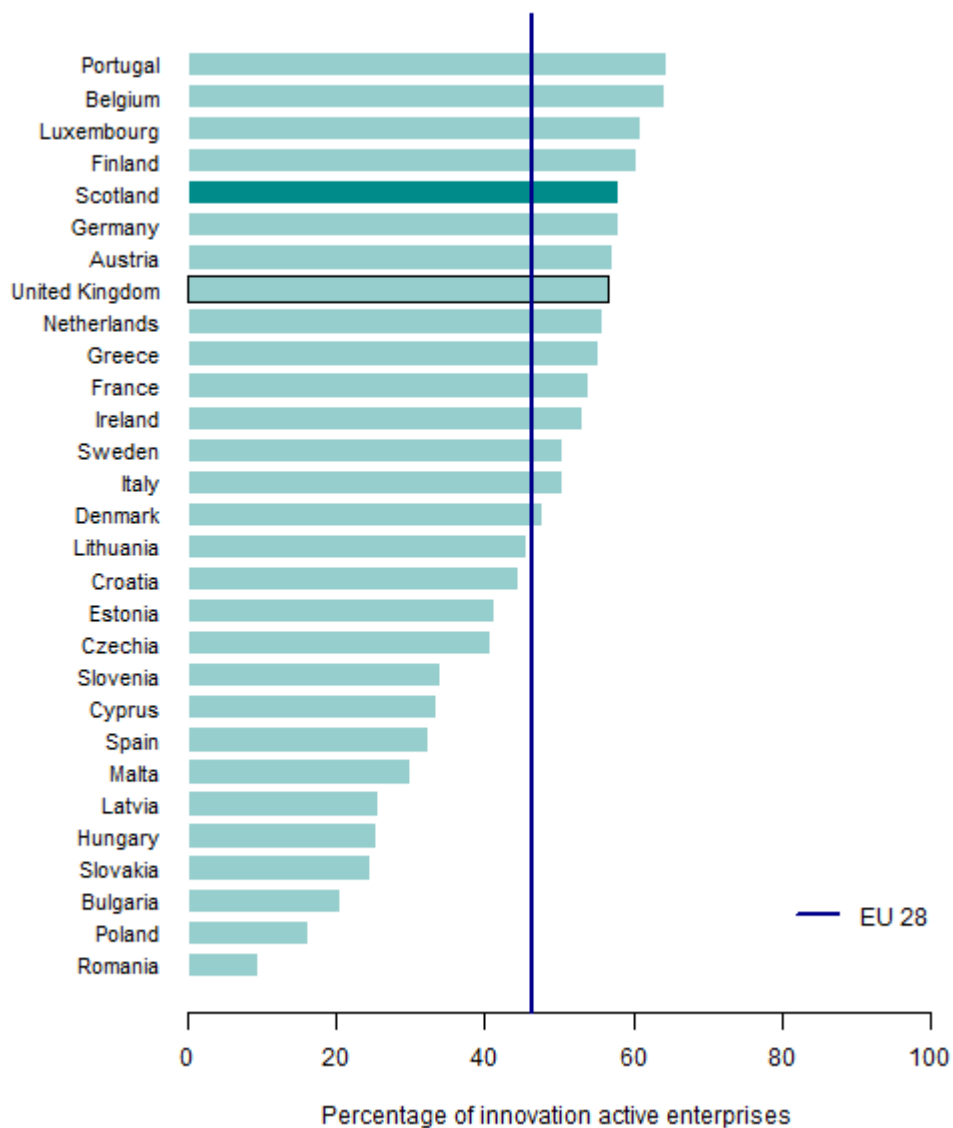


Source: Eurostat, Department for Business, Energy and Industrial Strategy and Scottish Government

² Source: Eurostat. Please note that the sector coverage across Europe is different to that from the UK's Innovation Survey, so the UK and Scotland figures used here are higher than the published innovation active shares of 49% and 45% respectively.

For small businesses with 10-49 employees, the share of innovation activity in Scotland (57.9%) was higher than both the UK (56.7%) and the EU average (46.4%; Figure 2). In terms of the proportion of small business that were innovation active in 2014-16, Scotland ranked in the first quartile of EU countries - as did the UK.

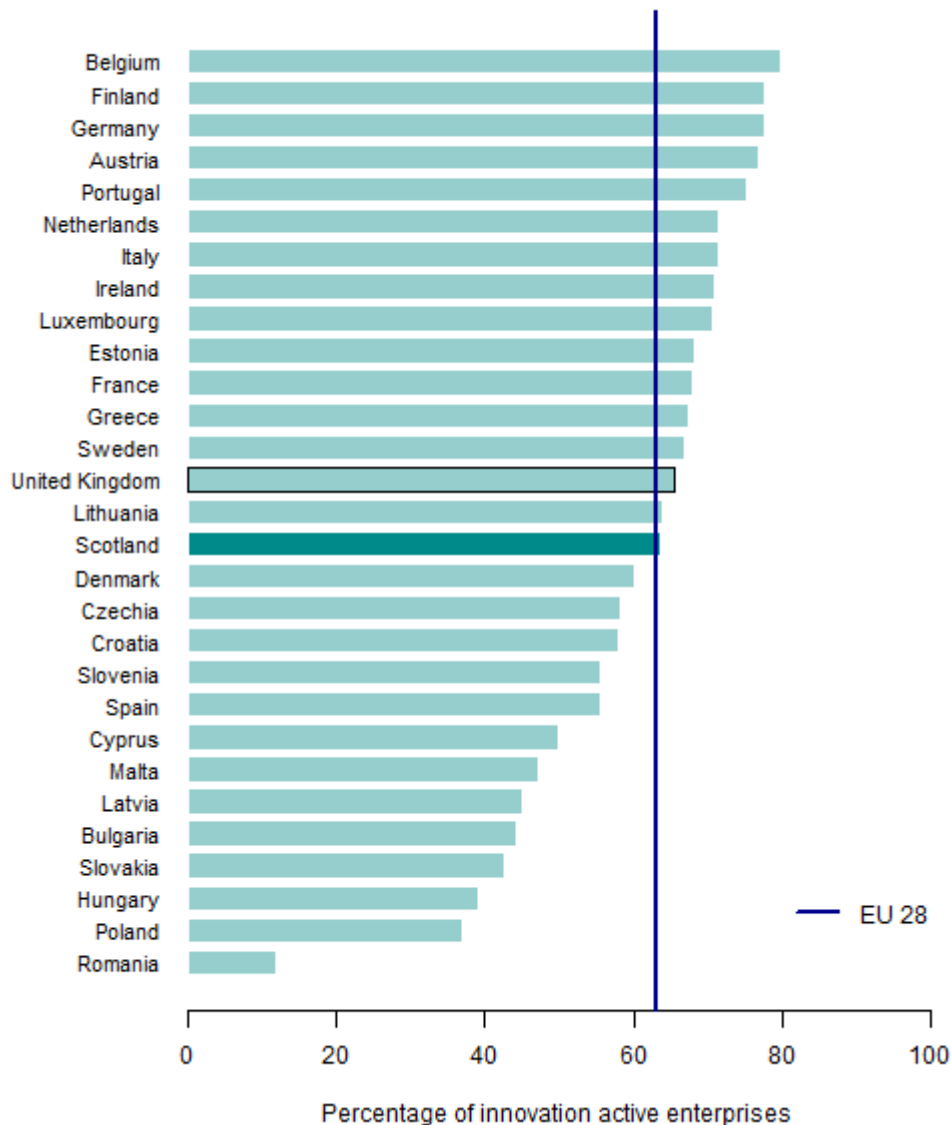
Figure 2. Share of innovation activity by EU country for businesses with 10 to 49 employees, 2014-2016



Source: Eurostat, Department for Business, Energy and Industrial Strategy and Scottish Government

For medium-sized businesses with 50-249 employees, the share of innovation activity was lower in Scotland (63.7%) than the UK (65.5%) in 2014-16 but very similar to EU average (63.2%; Figure 3). In terms of the share of innovation activity in businesses of this size, Scotland ranked in the third quartile of EU countries – while the UK ranked in the second quartile.

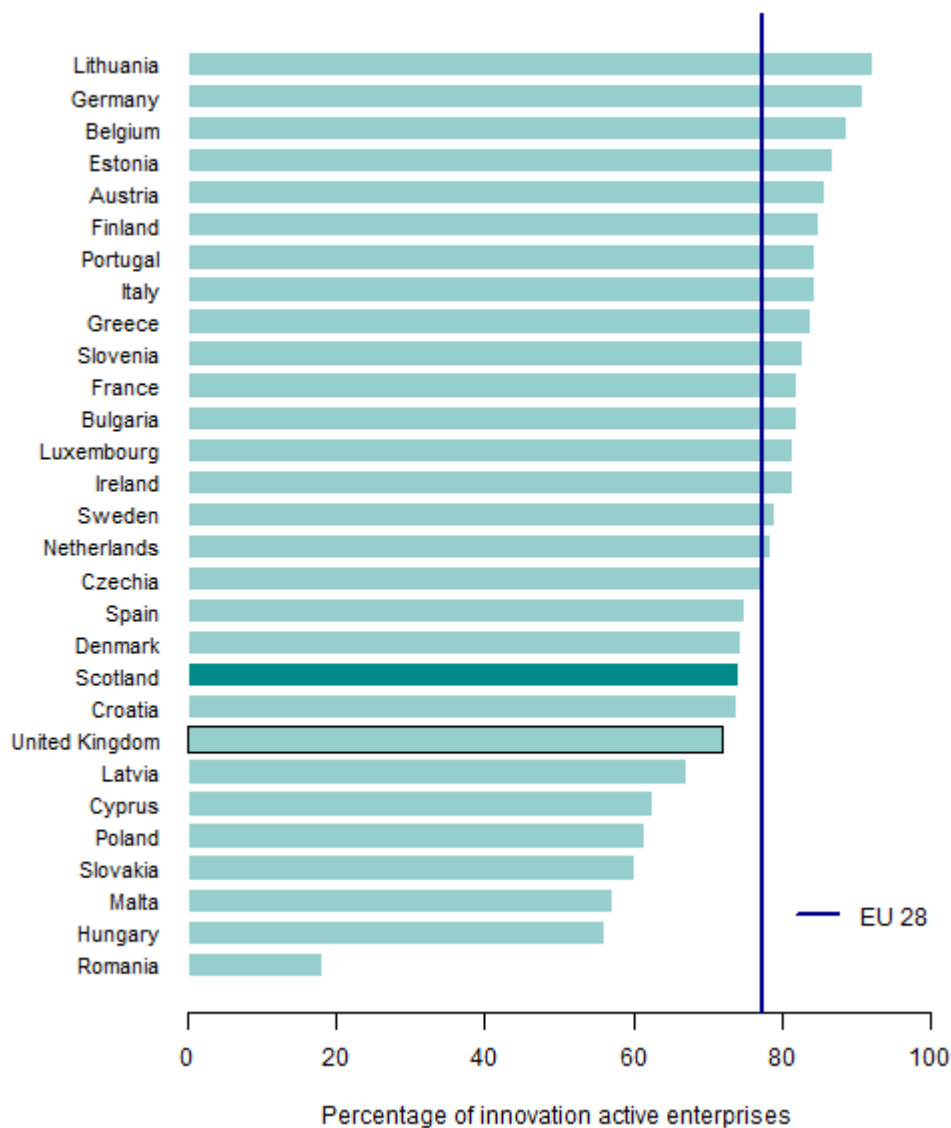
Figure 3. Share of innovation activity by EU country for businesses with 50 to 249 employees, 2014-2016



Source: Eurostat, Department for Business, Energy and Industrial Strategy and Scottish Government

For large businesses with 250 or more employees, the share of innovation activity in Scotland (74.2%) was above the UK (72.0%) but below the EU average (77.4%; Figure 4). Scotland therefore ranked in the third quartile of EU countries for innovation activity in large businesses – as did the UK.

Figure 4. Share of innovation activity by EU country for businesses with 250 or more employees, 2014-2016



Source: Eurostat, Department for Business, Energy and Industrial Strategy and Scottish Government

Table 1. Percentage of innovation active businesses in EU countries by size of business, 2014-16

Country/region	Percentage of innovation active businesses			
	From 10 to 49 employees	From 50 to 249 employees	250 employees or more	Total
Belgium	64.2	79.7	88.8	68.1
Portugal	64.5	75.3	84.4	66.9
Finland	60.5	77.8	84.9	64.8
Luxembourg	60.8	70.6	81.5	63.8
Germany	57.9	77.6	91	63.7
Austria	57.1	76.8	85.7	62
Scotland	57.9	63.7	74.2	59.7
Netherlands	55.8	71.4	78.4	59.7
United Kingdom	56.7	65.5	72	58.7
France	53.8	67.9	81.9	57.7
Greece	55.3	67.3	83.9	57.7
Ireland	53.1	70.9	81.4	57.3
Sweden	50.5	66.8	79.1	54.2
Italy	50.5	71.4	84.3	53.8
Denmark	47.6	60.2	74.5	51.5
Lithuania	45.6	64	92.3	50.5
Croatia	44.5	58	73.8	48
Estonia	41.3	68.1	86.8	47.7
Czechia	40.7	58.2	77.4	46.3
Slovenia	34	55.6	82.7	39.8
Spain	32.2	55.5	74.9	36.9
Cyprus	33.3	49.8	62.5	36.5
Malta	29.8	47.1	57.1	33.9
Slovakia	24.6	42.7	60.1	30.7
Latvia	25.5	45.1	67.2	30.3
Hungary	25.3	39	56.2	29
Bulgaria	20.5	44.3	81.9	27.2
Poland	16.1	36.8	61.6	22
Romania	9.3	11.9	17.9	10.2
European Union - 28 countries	46.4	63.2	77.4	50.6

Source: Eurostat, Department for Business, Energy and Industrial Strategy and Scottish Government

Like the majority of EU countries in 2014-16, Scotland had higher levels of organisational/marketing innovation than product and process innovation. The share of Scottish businesses involved in process innovation (21.9%) was lower than the EU average (24.9%), whereas the proportions of Scottish businesses involved in product (29.1%) and organisational or marketing innovation (40.7%) were higher than the EU averages (25.9% and 36.6% respectively; Table 2).

Table 2. Percentage of businesses involved in various types of innovation activities in European countries in 2014-16.

Country/region	Percentage of businesses		
	Organisation and/or marketing innovation	Process innovation	Product innovation
Austria	51.8	36	34.4
Belgium	46	36.8	35.4
Bulgaria	17.3	11.9	12.8
Croatia	38.7	27	20.5
Cyprus	28.2	26.3	19.4
Czechia	32.7	27.7	25.7
Denmark	40.1	23	24.9
Estonia	21.5	34.3	20.5
Finland	45.9	41	42.7
France	46.4	30.5	27.9
Germany	46.9	27.4	31.9
Greece	46.7	39.3	30.7
Hungary	19.6	10.6	14.3
Ireland	49.5	30.5	29.1
Italy	39.5	31.4	31.4
Latvia	22.4	15.1	13.4
Lithuania	34.6	33.5	26.4
Luxembourg	52.8	24.6	31
Malta	26.8	19	16.5
Netherlands	32.4	31.8	35.9
Poland	12.3	13.1	10
Portugal	47.8	46.8	40
Romania	7.7	3.5	3.3
Scotland	40.7	21.9	29.1
Slovakia	21.2	14.2	14
Slovenia	28.5	18.9	20.4
Spain	28	14.8	11.3
Sweden	37.1	23.5	29.5
United Kingdom	40.5	20.8	30.4
European Union - 28 countries	36.6	24.9	25.9

Source: Eurostat, Department for Business, Energy and Industrial Strategy and Scottish Government