

Regional Skills Assessments

Oxford Economics Forecasts – Technical Note

July 2021

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1. Introduction

In producing Regional Skills Assessments (RSAs) and their accompanying data matrix, Skills Development Scotland (SDS) draws on evidence from four key sources:

- Published data;
- Real time data;
- Qualitative evidence; and
- Forecast data.

This technical note refers to the fourth of these sources – forecasting data.

SDS has a long-standing partnership with Oxford Economics (OE) who produce economic and labour market forecasts to inform a range of SDS products and services including RSAs and the data matrix. The current set of forecasts was produced in March 2021 and, in normal circumstances, these would be updated annually. Given the evolving impact on the labour market of COVID-19 we plan to update these more frequently this year.

The forecasts are produced by OE's Local Authority District (LAD) Forecasting Model. The model builds evidence from local authority level and then aggregates this up to:

- Regional Outcome Agreement areas (ROAs);
- City Region and Growth Deal areas; and
- Nationally - Scotland and the UK.

Appendix A provides further detail on the spatial cuts of data.

This note is intended to provide information on the coverage, methodology and data sources underpinning the forecasts. The note is structured as follows:

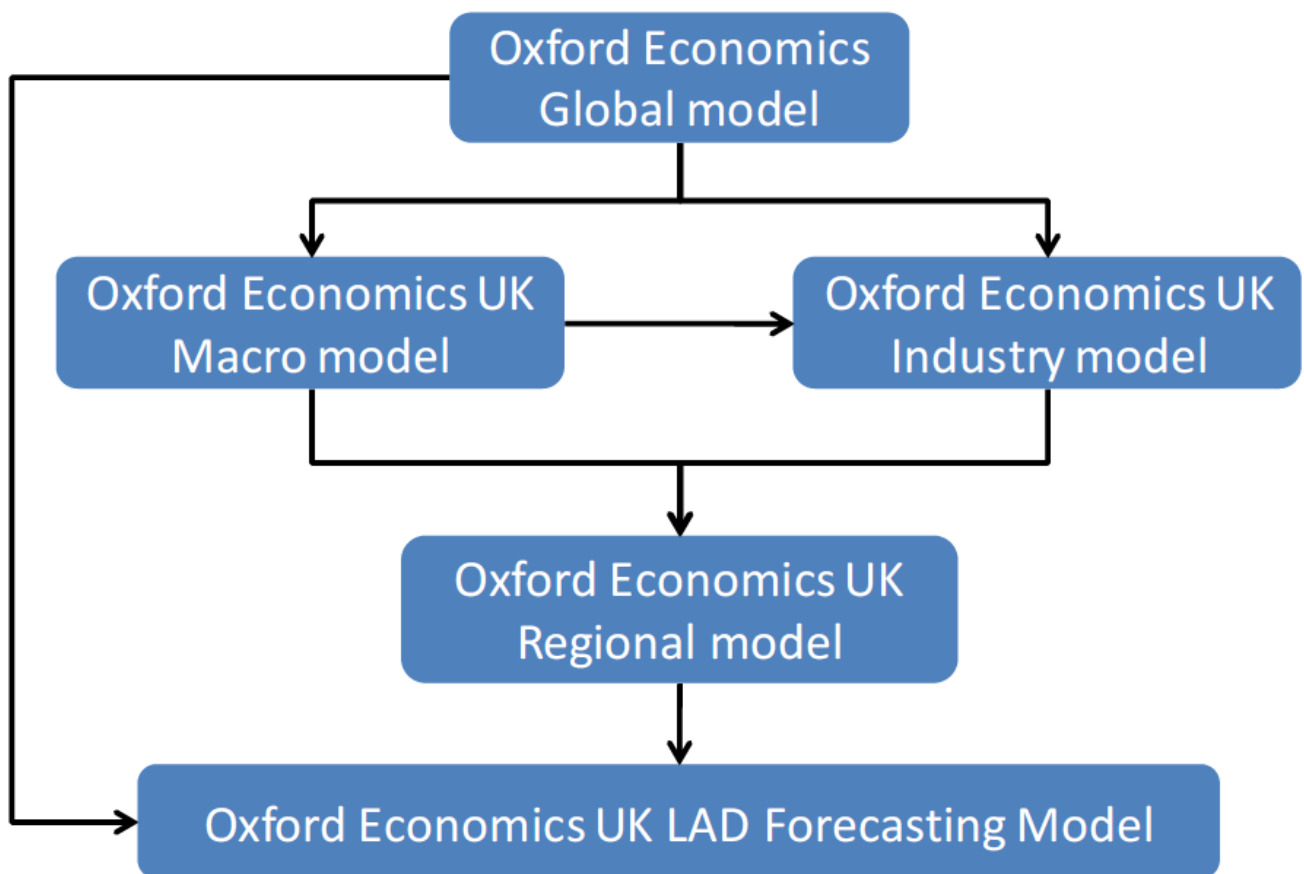
- An overview of the model;
- RSA Reports – explanatory notes on forecast data included in the RSAs; and
- Appendices:
 - Geographic cuts of data;
 - Definitions for Scotland's key sectors.

2. Model Overview

2.1 Local Authority Forecasting Model

OE's Local Authority District (LAD) Forecasting Model sits within the Oxford suite of forecasting models. This structure is unique as it ensures global and national factors (such as developments in the Eurozone, Government fiscal policy and Brexit) have an appropriate impact on the forecasts for a local authority. This empirical framework (or set of 'controls') is critical in ensuring the local area forecasts are much more than just an extrapolation of historical trends and reflect external economic conditions. Rather, the trends in our global, national and sectoral forecasts have an impact on the local area forecasts.

Fig. 1. Hierarchical structure of Oxford Economics' suite of models



The OE local forecasting model depends essentially upon three factors:

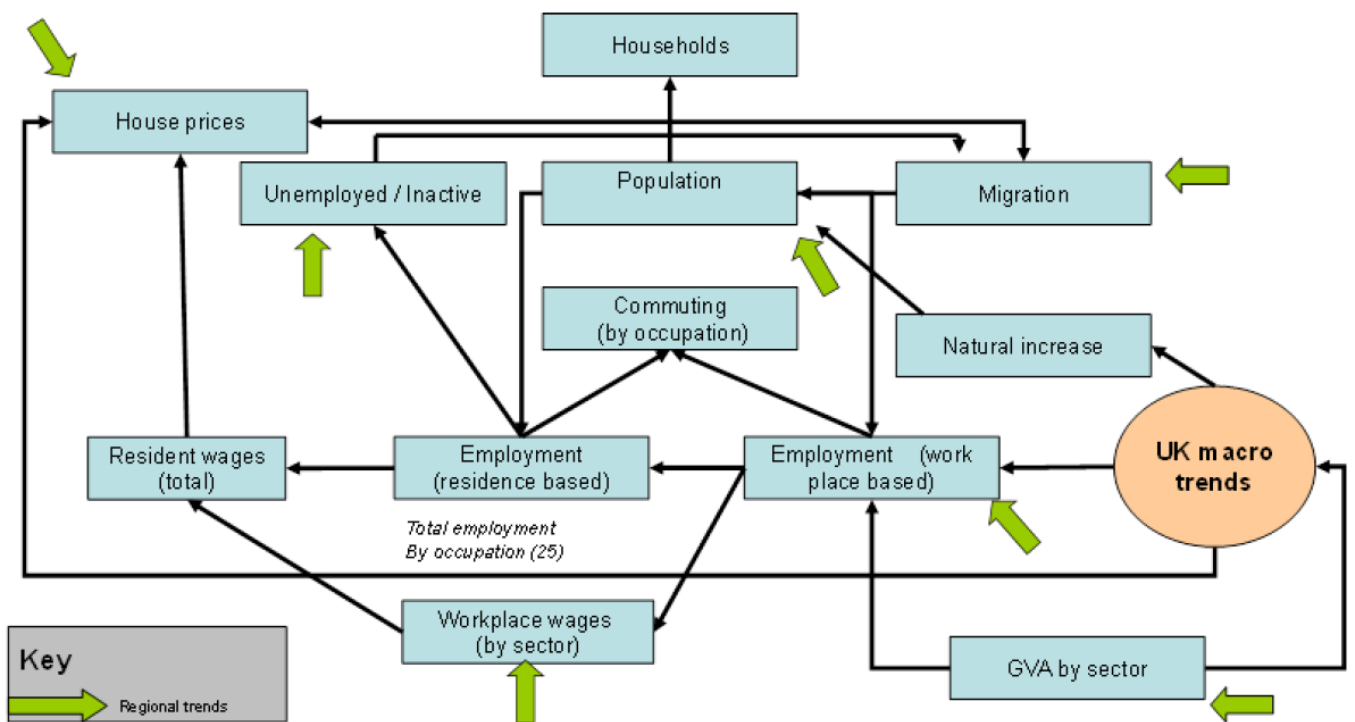
- **International, national and regional outlooks** - all the local area forecasts produced by OE are fully consistent with broader regional, national and international models and forecasts. This ensures global events that impact on the performance of UK local economies, such as the strength of global trade, are fully captured in the forecasts for a local area. So too are national level growth and policies, whether that be the impact of monetary policy on consumer spending or government spending on locally provided public services;

- **Historical trends in an area**, which implicitly factor in supply side factors affecting demand, combined with OE's staff knowledge of local areas and the patterns of local economic development. This ensures for example, that we recognise and factor into the forecasts any evidence of particularly high/low levels of competitiveness that local economies have in particular activities. It also means national policy programmes that have a particular local impact and that are very likely to happen are appropriately reflected in the forecasts; and
- **Fundamental economic relationships** which interlink the various elements of the outlook. OE's models ensure full consistency between variables in a local area. For example, employment, commuting, migration and population are all affected by one another.

All OE models are economically driven, with all aspects of the economy interlinked as they believe that this is the best way to estimate the future outlook for the area. Given changes in economic conditions drive labour market performance, which in turn affects migration patterns and housing demand / make-up, economic based forecasts are essential. For example, if employment or productivity changes in one sector, there are implications for all sectors of the economy through indirect (supply chain) and induced impacts. The employment creation will then put downward pressure on unemployment, while encouraging increased commuting into the economy, and making it a more attractive location for migrants. This would effectively drive up population and housing demand (and put more demand on public services).

The main internal relationships between variables are summarised in Figure 2. Each variable is related to others within the models. Key variables are also related to variables in the other Oxford Economics models.

Fig. 2. Main Relationships between variables



2.2 Time Periods

The model is usually constructed on an annual basis. Historic data for most variables has been collected for 20 or more years to provide a basis for estimating inter-relationships between variables and future trends. Forecasts are currently set up for the period up to 2031 consistent with existing available global, national and regional forecasts. This will be re-visited at more frequent intervals due to ongoing impacts of COVID-19.

2.3 Using the Model

The model provides projections on a 'policy neutral' basis. Unconfirmed, aspirational or policies at planning/development stage are not included. Though forecasts are built primarily around the economic relationships above, the use of local knowledge and published material on local development is required to augment the results of the formal modelling process.

The forecasts assumed the relaxation of restrictions following the roadmap set out by the government in late-February – non-essential retail and outdoor hospitality reopening in mid-April, hotels and indoor hospitality being permitted to open in mid-May and then all remaining restrictions falling away on 21 June. The lifting of restrictions on social consumption, and associated boost to confidence, should trigger a strong consumer-led recovery, with the Budget providing further short-term stimulus.

According to OE, although the UK and EU struck a basic free trade agreement, the switch from EU membership to the new relationship introduced significant new frictions on UK-EU trade. They believe this will result in some degree of trade destruction, limiting improvements in total factor productivity, and will reduce the attractiveness of the UK as a destination for Foreign Direct Investment (FDI). OE expect scarring from the pandemic will exert a further drag, albeit smaller than Brexit, with long-term unemployment set to rise and low levels of business investment reducing the degree of capital deepening. But while the UK is likely to grow at a slower pace than over the past decade, it is still expected to outperform many western European economies.

As with all forms of forecasting there are margins of error associated with the results which get larger over time. Furthermore, the quality of data decreases as the geography gets smaller. Models of this form under current data quality levels are most helpful for identifying trends, growth rates and relativities either across or within areas. The long-term trends are therefore important, and users are encouraged to use the time series information and not rely on 'point-in-time' estimates.

The remainder of this note provides detailed information on the data used within the model and the linkages between variables.

3. RSA Reports

3.1 Regional Economy

There are three indicators included – GVA (output), Productivity and the Coronavirus Vulnerability Index.

Gross Value Added (GVA)/Output

GVA data by sector is published on a nominal basis by the Office for National Statistics for Scotland and the local authorities. These are converted to real prices using the chain linked volume measures which are available for Scotland, NUTS2 regions, NUTS3 regions and local authority districts. The GVA forecast is driven by sectoral employment in each area and Scottish productivity forecast adjusted by relative earnings. At the Scotland level, GVA is driven by sectoral employment and sectoral productivity relative to UK. GVA forecasts by *key sector* are driven by key sector employment and local estimates of productivity adjusted by relative detailed sectoral earnings.

Productivity

Productivity is calculated as GVA per job.

The OE Coronavirus Vulnerability Index

Areas will be vulnerable to the Coronavirus pandemic in many ways and a range of economic commentators have carried out analysis to assess the vulnerability of different areas. As with forecasts, different indicators and assumptions will result in difference in conclusions. The assessment of vulnerability included in the RSAs has been carried out by OE.

OE's Coronavirus Vulnerability Index examined a range of indicators including sectoral structure, the types of businesses in each area as well the ability of workers to adapt to home working. OE's Coronavirus Vulnerability Index is designed to help identify the ability of an area to withstand and respond to the economic shock resulting from the COVID-19 pandemic.

OE's Index is based on three key themes; Economic diversity, Business environment, and Digital connectivity. Table 1 outlines the variables used in the assessment of vulnerability.

Table 1: Coronavirus Vulnerability Index

Theme	Variables
Economic diversity	Share of GVA in arts, entertainment, & recreation, and accommodation & food services
	Share of GVA in manufacturing
	Share of GVA in transportation & storage
Businesses environment	Share of small firms: share of businesses with 0-9 persons employed of the total number of businesses
	Share of employment who are self-employed
	Share of high-growth businesses as a proportion of all firms over 10 persons employed
Digital connectivity	Share of properties that are unable to receive a 10Mbps broadband connection.
	Share of workers that never work from home.

Caveats/Additional Information

Early discussion with partners on the themes and variables used in the OE Index has given rise to some requests for additional information, particularly in relation to how digital connectivity was calculated and assessed. OE has provided further clarification as follows:

- Ofcom data was used to analyse broadband speeds. OE used the share of properties that were unable to receive 10Mbps broadband connection. The rationale for this was that many people will work from home and connectivity of at least 8Mbps is recommended for reliable video conferencing. The data is sourced from [Ofcom](#);
- Home working also feeds into the digital connectivity component. This data was estimated at the LAD level, using Eurostat data on homeworking at NUTS2 level. This was then adjusted to Local Authority areas based on their occupation structure.

3.2 Regional Labour Market

There are four indicators included – Total Employment (workforce size), Employment by Industry, Employment by Key Sector, and Employment by Occupation.

Total Employment (People)

The RSAs include a calculation of current employment of people i.e. workforce size based on OE analysis of the Annual Population Survey (APS) that provides data on employment by occupation for Scotland and its local authorities.

Information is also included for terms of employment or 'status' (i.e. full time / part time). The APS provides data on employment by status for Scotland and its local authority districts. The series are projected in line with the jobs-based employment forecasts by status and gender.

Data on employment by gender is published for Scotland as part of the ONS Workforce Jobs (WFJ) release. Shares of female employment (which are trend forecasts linked to national projections) are applied to the workplace employment estimates. Male total employment is simply the total of employment less female employment. Locally, employment by gender data is not published. Rather, OE apply the gender shares for Scotland adjusted to reflect the Census of Population to the employment forecast for each area.

Employment by Industry (People)

To produce a people-based employment forecast, OE use the Annual Population Survey (APS) data which is available by sector (on a workplace basis). It is driven by the numbers of full-time and part-time employees by sector in each area. Individuals are assumed to hold only one full-time job each. Part-time jobs are assumed to account for half a full-time job. The self-employed people are added to the full-time employees plus half of the part-time employees to arrive at an estimate of workplace-based employment.

Employment by Key Sector (People)

Results for the following are included (details of the definitions used are set out in Annex B).

- Chemical sciences
- Creative industries
- Construction
- Energy
- Engineering
- Food and drink
- Financial and business services
- Health and social care
- Child-day care activities
- ICT/digital
- Life sciences
- Tourism

The results for the key sectors are calculated using shares from BRES of each component of key sector to broad sector. These shares are applied to the broad sector results, to produce an estimate of the occupations within each of the key sectors.

Employment by Occupation (People)

The APS provides data on employment by occupation for Scotland and its local authorities. The forecasts are derived using a SIC/SOC (Standard Industrial Classification/Standard Occupational Classification) matrix. The ratio of occupations within each sector for 2001 and 2011 is calculated from the Census. For all other years, OE use the Labour Force Survey for Scotland. The share of each occupation by sector is forecast based upon trends and are applied to the sectoral employment data for each local area, to give an estimate of occupations within each sector. The results are adjusted to reflect the APS data for each local area. The occupations by sector are then aggregated to give occupations by 25 minor occupation groupings. Therefore, the overall economy occupational structure is heavily dependent upon sectoral composition and future trends can be largely explained by sectoral trends.

3.3 Regional Requirement

In previous iterations of the RSAs, forecasts have been presented for a 10-year period. Given the particular circumstances of the current time, this suite of RSAs presents forecasts for the mid-term (2021-2024) and for the longer-term (2024-2031). Forecasts in the RSAs include information on:

- Total Requirement – Expansion and Replacement Demand;
- Total Requirement by Qualification;
- Total Requirement by Industry; and
- Employment by Occupation and Qualification.

Total Requirement – Expansion and Replacement Demand (People)

Expansion demand refers to the net change in total employment over the forecast period and thus the results can be positive or negative.

Replacement demand represents how many more people will be required due to people leaving the workforce. There are many reasons why people leave the labour market - with retirement perhaps the prime example – and need to be replaced. Whilst replacing the vacant position creates additional labour demand, it has no net effect on total employment. Reasons for leaving employment include:

- Unemployment;
- Inactivity;
- Out migration;
- Retirement;
- Death; and
- Leaving for another job in a different occupational group or sector.

This 'replacement' category is much larger than expansion demand and explains why even declining sectors still require new staff / advertise vacancies.

Replacement demand and expansion demand are summed to produce total requirement.

Total Requirement by Qualification (People)

Expansion demand refers to the net change in total employment by qualification over the forecast period and thus the results can be positive or negative. The results are presented for each of the 6 SCQF qualification groupings.

For replacement demand, the net occupation demand figures are applied to an occupation by highest level of qualification matrix to produce an estimate of the likely skills requirements over the forecast period. The matrix is generated using the Labour Force Survey. The data is filtered to select only those people who were in employment one year ago and who changed their job. A crosstabulation is run on this sample for each of the last three years and taking a three-year average. Rather than use the current qualification structure of all employed people, the qualification structure of 'inflows' is used to try and capture the fact that entry requirements to occupations have increased over time. In other words, it is entirely possible that current corporate managers who are approaching retirement may have climbed up the career ladder without having any formal qualifications whereas, to become a corporate manager now will most likely require a degree or similar formal qualification.

Replacement demand by qualification and expansion demand by qualification are summed to produce total requirement.

Total Requirement by Industry (People)

Expansion demand refers to the net change in total employment by industry over the forecast period and thus the results can be positive or negative. The results presented are jobs based for each of the 1-digit industries and key sectors.

For replacement demand, leaver rates by industry are calculated from the Labour Force Survey for Scotland. These rates are forecast and applied across all geographies. The number of leavers by 1-digit industry are apportioned to key sectors using employment shares from the Business Register and Employment Survey (BRES).

Replacement demand and expansion demand are summed to produce total requirement.

Employment by Occupation and Qualification (people)

The APS provides data on employment by qualification for Scotland and its local authorities. The forecasts are derived using a matrix of qualification by occupation calculated using the Labour Force Survey for Scotland. The share of each qualification category within each occupation is forecast and is applied to the occupation employment data for each local area, to give an estimate of qualifications by each occupation. The results are adjusted to reflect the APS data for each local area.

3.4 Spotlight on Regional Employment and Equalities

The RSAs also include a spotlight on regional employment and equalities. This section draws on the following information from the OE forecasts:

- Total Employment (people) including terms of employment (as above) but disaggregated by gender.

The preceding sections of this note explain how this has been derived.

Appendix A: Spatial Cuts of Data

OE forecasts have been developed using Local Authorities as building blocks and then aggregating this into various spatial levels:

The results have been provided for Regional Outcome Areas (ROAs), City Regions, Growth Deals and at national level – Scotland and UK.

Details of the local authorities used for ROAs, City Regions and Growth Deals are outlined below:

ROAs	Local Authorities
Aberdeen City and Shire	Aberdeen City, Aberdeenshire
Ayrshire	East Ayrshire, North Ayrshire, South Ayrshire
Borders	Scottish Borders
Dumfries and Galloway	Dumfries and Galloway
Edinburgh and Lothians	East Lothian, Edinburgh, Midlothian
Fife	Fife
Forth Valley	Clackmannanshire, Falkirk, Stirling
Glasgow	East Dunbartonshire, East Renfrewshire, Glasgow
Highlands and Islands	Argyll and Bute, Eilean Siar, Highland, Moray, Orkney Islands, Shetland Islands
Lanarkshire	East Dunbartonshire, North Lanarkshire, South Lanarkshire
Tayside	Angus, Dundee, Perth and Kinross
West	East Renfrewshire, Inverclyde, Renfrewshire, West Dunbartonshire
West Lothian	West Lothian
City Regions	
Edinburgh and South East Scotland	Edinburgh, Midlothian, East Lothian, West Lothian, Fife, Scottish Borders
Glasgow	Glasgow, East Dunbartonshire, East Renfrewshire, Inverclyde, North Lanarkshire, Renfrewshire, South Lanarkshire, West Dunbartonshire
Inverness	Highland
Stirling and Clackmannanshire	Clackmannanshire, Stirling
Growth Deals	
Argyll and Bute	Argyll and Bute
Falkirk	Falkirk
Islands	Eilean Siar, Orkney Islands, Shetland Islands
Moray	Moray
Other	
South of Scotland	Dumfries and Galloway, Scottish Borders

Appendix B: SIC Definitions for Scotland's Key Sectors

The Office for National Statistics Standard Industrial Classifications can be found [here](#), the Standard Occupational Classifications can be found [here](#). The SIC definitions for the SDS Key Sectors are as follows:

Creative industries		Attributable Activity
73.11	Advertising agencies	100%
73.12	Media representation	100%
71.11	Architectural activities	100%
90.03	Artistic creation	70%
47.78/1	Retail sale in commercial art galleries	100%
31.09	Manufacture of other furniture	100%
16.29	Manufacture of other wood products	30%
32.12	Manufacture of jewellery and related products	100%
32.13	Manufacture of imitation jewellery and related articles	100%
23.41	Manufacture of ceramic household and ornamental articles	35%
23.49	Manufacture of other ceramic products	35%
23.13	Manufacture of hollow glass	15%
23.19	Manufacture of other glass	15%
47.79/1	Retail sale of antiques and antique books	100%
95.24	Repair of furniture and home furnishings	100%
13	Manufacture of textiles	25%
14	Manufacture of wearing apparel	20%
15	Manufacture of leather and related products	20%
74.1	Specialised design activities	25%
71.12/1	Engineering design activities for industrial process and production	100%
74.1	Specialised design activities	75%
90.01	Performing arts	100%
90.02	Support activities to performing arts	100%
90.04	Operation of arts facilities	100%
78.10/1	Motion picture, television and other theatrical casting	100%
59.2	Sound recording and music publishing activities	100%
18.20/1	Reproduction of sound recording	100%
32.2	Manufacture of musical instruments	100%
74.20/1	Portrait photographic activities	100%
74.20/2	Other specialist photography (not including portrait photography)	100%
74.20/9	Other photographic activities (not including portrait and other specialist photography and film processing) n.e.c.	100%
18.20/2	Reproduction of video recording	100%
59.11/1	Motion picture production activities	100%
59.11/2	Video production activities	100%
59.12	Motion picture, video and television programme post-production activities	25%
59.13/1	Motion picture distribution activities	100%
59.13/2	Video distribution activities	100%
59.14	Motion picture projection activities	100%
58.21	Publishing of computer games	100%
62.01/1	Ready-made interactive leisure and entertainment software development	100%
59.11/3	Television programme production activities	100%
59.13/3	Television programme distribution activities	100%
59.12	Motion picture, video and television programme post-production activities	75%
60.1	Radio broadcasting	100%
60.2	Television programming and broadcasting activities	100%
90.03	Artistic creation	30%
58.11	Book publishing	100%
58.13	Publishing of newspapers	100%
58.14	Publishing of journals and periodicals	100%
58.19	Other publishing activities	100%
18.11	Printing of newspapers	100%
18.129	Other printing (not labels)	100%
18.13	Pre press and media services	100%
63.91	News agency activities	100%
91.01	Libraries and archive activities	100%
58.29	Other software publishing	100%
62.01/2	Business and domestic software development	100%
62.02	Computer consultancy activities	100%

Construction		Attributable Activity
02.2	Logging	20%
08.11	Quarrying of ornamental and building stone, limestone, gypsum, chalk and slate	70%
08.12	Operation of gravel and sand pits; mining of clays and kaolin	70%
16.23	Manufacture of other builders' carpentry and joinery	40%
20.30/1	Manufacture of paints, varnishes and similar coatings, mastics and sealants	25%
20.30/2	Manufacture of printing ink	25%
22.11	Manufacture of rubber tyres and tubes; retreading and rebuilding of rubber tyres	20%
22.19	Manufacture of other rubber products	20%
22.23	Manufacture of builders' ware of plastic	35%
23.32	Manufacture of bricks, tiles and construction products, in baked clay	85%
23.41	Manufacture of ceramic household and ornamental articles	60%
23.42	Manufacture of ceramic sanitary fixtures	60%
23.43	Manufacture of ceramic insulators and insulating fittings	60%
23.44	Manufacture of other technical ceramic products	60%
23.49	Manufacture of other ceramic products	60%
23.51	Manufacture of cement	25%
23.52	Manufacture of lime and plaster	25%
23.61	Manufacture of concrete products for construction purposes	90%
23.62	Manufacture of plaster products for construction purposes	90%
23.63	Manufacture of ready-mixed concrete	90%
23.64	Manufacture of mortars	90%
23.65	Manufacture of fibre cement	90%
23.69	Manufacture of other articles of concrete, plaster and cement	90%
25.11	Manufacture of metal structures and parts of structures	60%
25.12	Manufacture of doors and windows of metal	60%
25.21	Manufacture of central heating radiators and boilers	40%
25.29	Manufacture of other tanks, reservoirs and containers of metal	40%
25.3	Manufacture of steam generators, except central heating hot water boilers	40%
26.11	Manufacture of electronic components	35%
41.10	Development of building projects	100%
41.20/1	Construction of commercial buildings	100%
41.20/2	Construction of domestic buildings	100%
42.11	Construction of roads and motorways	100%
42.12	Construction of railways and underground railways	100%
42.13	Construction of bridges and tunnels	100%
42.21	Construction of utility projects for fluids	100%
42.22	Construction of utility projects for electricity and telecommunications	100%
42.91	Construction of water projects	100%
42.99	Construction of other civil engineering projects n.e.c.	100%
43.11	Demolition	100%
43.12	Site preparation	100%
43.13	Test drilling and boring	100%
43.21	Electrical installation	100%
43.22	Plumbing, heat and air-conditioning installation	100%
43.29	Other construction installation	100%
43.31	Plastering	100%
43.32	Joinery installation	100%
43.33	Floor and wall covering	100%
43.34/1	Painting	100%
43.34/2	Glazing	100%
43.39	Other building completion and finishing	100%
43.91	Roofing activities	100%
43.99/1	Scaffold erection	100%
43.99/9	Specialised construction activities (other than scaffold erection) n.e.c.	100%
46.13	Agents involved in the sale of timber and building materials	50%
46.63	Wholesale of mining, construction and civil engineering machinery	50%
46.73	Wholesale of wood, construction materials and sanitary equipment	50%
71.11/1	Architectural activities	100%
71.11/2	Urban planning and landscape architectural activities	50%
71.12/1	Engineering design activities for industrial process and production	50%
71.12/2	Engineering related scientific and technical consulting activities	50%
71.12/9	Other engineering activities (not including engineering design for industrial process and production or engineering related s	50%
74.90/2	Quantity surveying activities	100%

Financial and Business Services		Attributable Activity
64.1	Monetary intermediation	100%
64.3	Trusts, funds and similar financial entities	100%
64.9	Other financial service activities, except insurance and pension funding	100%
65	Insurance, reinsurance and pension funding, except compulsory social security	100%
66	Activities auxiliary to financial services and insurance activities	100%
69.1	Legal activities	100%
69.2	Accounting, bookkeeping and auditing activities; tax consultancy	100%
70.2	Management consultancy activities	100%
71.129	Other engineering activities (not including engineering design for industrial process and production or engineering related s	100%
73.2	Market research and public opinion polling	100%
74.3	Translation and interpretation activities	100%
78.109	Activities of employment placement agencies (other than motion picture, television and other theatrical casting) n.e.c.	100%
78.3	Other human resources provision	100%
82.1	Office administrative and support activities	100%
82.2	Activities of call centres	100%
82.30	Organisation of conventions and trade shows	100%
82.91	Activities of collection agencies and credit bureaus	100%
82.99	Other business support service activities n.e.c.	100%
of which, Financial and Professional Services		
64.1	Monetary intermediation	100%
64.3	Trusts, funds and similar financial entities	100%
64.9	Other financial service activities, except insurance and pension funding	100%
65	Insurance, reinsurance and pension funding, except compulsory social security	100%
66	Activities auxiliary to financial services and insurance activities	100%
69	Legal activities and accounting activities	100%
70.2	Management consultancy activities	100%
82.91	Activities of collection agencies and credit bureaus	100%
of which, Financial Services		
64.1	Monetary intermediation	100%
64.3	Trusts, funds and similar financial entities	100%
64.9	Other financial service activities, except insurance and pension funding	100%
65	Insurance, reinsurance and pension funding, except compulsory social security	100%
66	Activities auxiliary to financial services and insurance activities	100%
of which, Professional Services		
69	Legal activities and accounting activities	100%
70.2	Management consultancy activities	100%
82.91	Activities of collection agencies and credit bureaus	100%

Health and Social Care		Attributable Activity
86.1	Hospital activities	100%
86.21	General medical practice activities	100%
86.22	Specialist medical practice activities	100%
86.23	Dental practice activities	100%
86.9	Other human health activities	100%
87.1	Residential nursing care activities	100%
87.2	Residential care activities for learning disabilities, mental health and substance abuse	100%
87.3	Residential care activities for the elderly and disabled	100%
87.9	Other residential care activities	100%
88.1	Social work activities without accommodation for the elderly and disabled	100%
88.91	Child day-care activities	100%
88.99	Other social work activities without accommodation n.e.c.	100%
of which, Social care		
87.1	Residential nursing care activities	100%
87.2	Residential care activities for learning disabilities, mental health and substance abuse	100%
87.3	Residential care activities for the elderly and disabled	100%
87.9	Other residential care activities	100%
88.1	Social work activities without accommodation for the elderly and disabled	100%
88.91	Child day-care activities	100%
88.99	Other social work activities without accommodation n.e.c.	100%
of which, Health		
86.1	Hospital activities	100%
86.21	General medical practice activities	100%
86.22	Specialist medical practice activities	100%
86.23	Dental practice activities	100%
86.9	Other human health activities	100%

ICT/Digital		Attributable Activity
18.20/3	Reproduction of computer media	100%
26.11	Manufacture of electronic components	100%
26.12	Manufacture of loaded electronic boards	100%
26.20	Manufacture of computers and peripheral equipment	100%
26.30	Manufacture of communication equipment	100%
26.40	Manufacture of consumer electronics	100%
26.8	Manufacture of magnetic and optical media	100%
27.31	Manufacture of fibre optic cables	100%
58.21	Publishing of computer games	100%
58.29	Other software publishing	100%
61.1	Wired telecommunications activities	100%
61.2	Wireless telecommunications activities	100%
61.3	Satellite telecommunications activities	100%
61.9	Other telecommunications activities	100%
62.01	Computer programming activities	100%
62.02	Computer consultancy activities	100%
62.03	Computer facilities management activities	100%
62.09	Other information technology and computer service activities	100%
63.11	Data processing, hosting and related activities	100%
63.12	Web portals	100%
63.99	Other information service activities n.e.c.	100%
95.11	Repair of computers and peripheral equipment	100%
95.12	Repair of communication equipment	100%

Life Sciences		Attributable Activity
21	Manufacture of basic pharmaceutical products and pharmaceutical preparations	100%
26.6	Manufacture of irradiation, electromedical and electrotherapeutic equipment	100%
32.5	Manufacture of medical and dental instruments and supplies	100%
72.11	Research and experimental development on biotechnology	100%