

Past the Peak

Exploring and forecasting the economic impact of COVID19 on NUTS2 regions in England and Wales

Esther Barrott

Executive Summary

- Covid-19 has brought unique challenges to all sectors throughout the UK, with some better equipped to manage than others.
- There is clear evidence that the manufacturing, retail, accommodation, food service activities, arts, entertainment and recreation sectors have all been severely affected in the short-term.
- The communication and health sectors have both seen limited output gains from the new challenges posed by the current epidemic.
- Sectors hit severely may be able to begin to recover in Q3&4, however the pace of this recovery will be dependant on the magnitude of the economic contraction suffered as a result of the initial lockdown period and crucially whether there will be another global spike in infection in the future.
- Short-term economic planning after lockdown by local economic growth teams in councils should seek to develop short term investment and skills partnerships with local business, and identify where labour can be reassigned should long-term economic trends deteriorate.
- Long-term development of regions should focus on re-skilling the workforce and encourage investment in low-carbon jobs which is crucial to future economic and environmental sustainability.
- Manufacturing, services, utilities and construction should be at the forefront of post-Covid economic development as there is evidence of long-term low-carbon jobs growth within the sectors and GVA output is high and equally spread across regions.

Methodology

Part 1: Regional impact analysis

To calculate the impact on gross value added in the top five GVA producing sectors in UK regions, the GVA figures for 2018 were used from the '*Regional activity by gross value added (income approach) by industry*' dataset published by the ONS. From this, the top five SIC07 sectors were extrapolated based on GVA per region.

For each sector, the percentage change forecast from output estimates by the Office for Budget Responsibility as of April 14th 2020 was applied. This allowed the economic impact of COVID-19 to be forecast on a sectoral basis. From this the percentage GVA change of the top five sectors per region was illustrated and the risk level forecast. The risk level was calculated on an equally distributed three point scale.

Part 2: Sectoral impact analysis

A range of qualitative and quantitative sources were analysed to rank demand, import and exports, labour market and productivity on a scale of four - positive impact, minimal impact, significant impact, severe impact. Sources drawn upon included, but were not limited to, *ONS Business Impact of COVID19 Survey* and reports by associations and industry leaders.

Good growth potential was analysed through three factors - environmental sustainability, adaptability and skills and economic sustainability.

Environmental sustainability considers how the sector can adapt to a world increasingly under the pressures of climate change. Adaptability focuses on the way in which sectors can change to develop new revenue streams and operate in a post-Covid economy. Whereas skills focuses on the way labour can be transferred between sectors to sustain employment and develop the economy through challenging conditions. Sustainability looks at long-term job growth, creation and retention. A particular focus is on low-carbon jobs. The evidence gathered is a mix of anecdotal and empirical in all three categories.

Part 1

The Impact of Covid-19 on the top five GVA Producing Sectors in NUTS2 Regions

Summary

- All NUTS2 regions in England and Wales are expected to experience output reductions of **greater than 20% in their top five GVA producing sectors**, according to calculations based on OBR long term estimates.
- **Retail and real estate** are the two key drivers of regional GVA, as they are the most prevalent sectors across the top five of each region. Despite their considerable output, research suggests they are also two of the most economically fragile sectors and dependant on primary industry. **Manufacturing and construction** also feature prominently.
- All four sectors could be highly susceptible to the long-term negative impact of the **magnitude of the economic contraction** suffered as a result of the initial lockdown period and if there will be another **global spike in infection within the next year**. There is the possibility that retail could be particularly vulnerable, as 27% of businesses interviewed have less than three months worth of cash reserves left (BICS).
- Regions with the largest percentage reduction in GVA within their top five sectors by GVA are spread across the country **without particular geographic concentration** in any specific area.
- While overall traditional sectors such as retail have seen a negative employment trend since the 2008 financial crisis, local areas should use the current crisis as an opportunity to plan an **environmentally and economically sustainable future**.
- Through the creation and co-ordination of new **local skills plans**, harnessing **preexisting economic regional sectoral speciality** and new **environmentally sustainable resources**, local areas can plan for a long-term economic transition to harness the potential of low-carbon jobs and manage the decline of certain sectors.
- Local government should look to develop **short-term investment and skills partnerships with local business**, and identify where labour can be reassigned should long term economic trends deteriorate. Short-term development of the health sector and information and communication sector may be appropriate to take advantage of current demand.
- In addition, local government could focus on developing and adapting sectors to create **sustainable low carbon jobs** with long-term sustainable growth potential. Manufacturing, services, utilities and construction should be considered to be at the forefront of post-Covid economic development.

National Risk Matrix and Regional Top 5 GVA Impact Analysis

Region	Total Top 5 GVA Forecast (£mil)	Total Top 5 GVA 2018 (£mil)	Percentage GVA Change in Top 5	Risk Level to Top 5
Bedfordshire and Hertfordshire	£17,393	£31,966	-46%	Severe
Hampshire and Isle of Wight	£15,382	£27,834	-45%	Severe
Cheshire	£10,477	£18,636	-44%	Severe
Berkshire, Buckinghamshire and Oxfordshire	£31,852	£54,309	-41%	Severe
Gloucestershire, Wiltshire and Bath/Bristol Area	£21,046	£35,223	-40%	Severe
Outer London - West and North West	£25,757	£42,537	-39%	Severe
Herefordshire, Worcestershire and Warwickshire	£13,236	£20,484	-35%	Severe
Leicestershire, Rutland and Northamptonshire	£15,723	£24,103	-35%	Severe
West Midlands	£23,292	£35,672	-35%	Severe
East Yorkshire and Northern Lincolnshire	£7,824	£11,858	-34%	Severe
Cumbria	£4,707	£7,095	-34%	Severe
Derbyshire and Nottinghamshire	£17,933	£26,868	-33%	Severe

Region	Total Top 5 GVA Forecast (£mil)	Total Top 5 GVA 2018 (£mil)	Percentage GVA Change in Top 5	Risk Level to Top 5
Lancashire	£13,787	£20,648	-33%	Severe
North Yorkshire	£7,327	£10,964	-33%	Severe
Essex	£16,504	£24,629	-33%	Severe
South Yorkshire	£10,088	£15,047	-33%	Severe
Outer London - East and North East	£14,826	£22,056	-33%	Severe
Shropshire and Staffordshire	£13,378	£19,821	-33%	Severe
Kent	£15,220	£22,472	-32%	Severe
Lincolnshire	£5,694	£8,391	-32%	Severe
Cornwall and Isles of Scilly	£4,253	£5,984	-29%	Significant
Merseyside	£12,486	£17,525	-29%	Significant
Dorset and Somerset	£11,855	£16,620	-29%	Significant
Inner London - East	£47,054	£65,671	-28%	Significant
Inner London - West	£99,312	£137,520	-28%	Significant
East Anglia	£23,426	£32,070	-27%	Significant
Outer London - South	£13,644	£18,341	-26%	Significant

Region	Total Top 5 GVA Forecast (£mil)	Total Top 5 GVA 2018 (£mil)	Percentage GVA Change in Top 5	Risk Level to Top 5
Surrey, East and West Sussex	£31,804	£42,494	-25%	Significant
Greater Manchester	£26,419	£34,936	-24%	Significant
Northumberland and Tyne and Wear	£12,503	£16,248	-23%	Significant
Tees Valley and Durham	£9,716	£12,625	-23%	Significant
West Yorkshire	£21,441	£27,372	-22%	Significant
West Wales and The Valleys	£16,271	£20,680	-21%	Significant
Devon	£10,675	£13,499	-21%	Significant

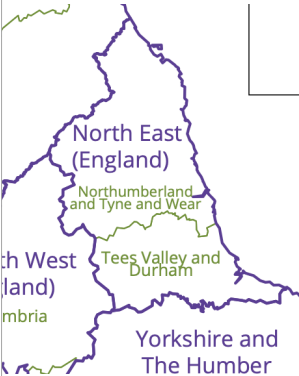
GVA - Northumberland and Tyne and Wear

	1	Manufacturing	£4,089m	-55
	2	Real Estate Activities	£3,859m	-20
	3	Human health and social work activities	£3,323m	+50
	4	Wholesale and retail trade; repair of motor vehicles	£2,166m	-50
	5	Public administration and defence	£1,628m	-20
			Output Loss Total:	-95

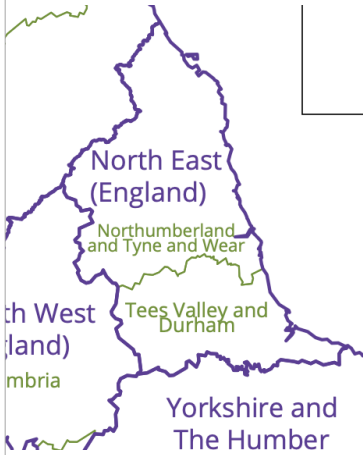
Employees - Northumberland and Tyne and Wear

	1	Human health and social work activities	102,000
	2	Wholesale and retail trade; repair of motor vehicles	86,000
	3	Manufacturing	64,000
	4	Administrative and support service activities	57,000
	5	Education	55,000


Tees Valley and Durham

	1	Manufacturing	£3,722m	-55
	2	Real Estate Activities	£2,868m	-20
	3	Human health and social work activities	£2,241m	+50
	4	Wholesale and retail trade; repair of motor vehicles	£2,930m	-50
	5	Information and Communication	£2,047m	-45
			Output Loss Total:	-120

Employees - Tees Valley and Durham

	1	Human health and social work activities	68,000
	2	Wholesale and retail trade; repair of motor vehicles	64,000
	3	Manufacturing	50,000
	4	Education	45,000
	5	Administrative	30,000


GVA - Cumbria

	1	Manufacturing	£2,498	-55
	2	Real Estate Activities	£1,666m	-20
	3	Wholesale and retail trade; repair of motor vehicles	£1,237m	-50
	4	Human health and social work activities	£936m	+50
	5	Construction	£758m	-70
			Output Loss Total:	-145

Employees - Cumbria

	1	Wholesale and retail trade; repair of motor vehicles	40,000
	2	Manufacturing	37,000
	3	Human health and social work activities	30,000
	4	Accommodation and food service activities	27,000
	5	Education	19,000


GVA - Greater Manchester

	1	Real Estate Activities	£8,311m	-20
	2	Wholesale and retail trade; repair of motor vehicles	£7,976m	-50
	3	Manufacturing	£7,065m	-55
	4	Human health and social work activities	£6,281m	+50
	5	Professional, scientific and technical activities	£5,303m	-40
			Output Loss Total:	-115

Employees - Greater Manchester

	1	Wholesale and retail trade; repair of motor vehicles	224,000
	2	Human health and social work activities	159,000
	3	Administrative and support service activities	142,000
	4	Professional, scientific and technical activities	121,000
	5	Manufacturing	104,000


GVA - Lancashire

	1	Manufacturing	£6,293 m	-55
	2	Wholesale and retail trade; repair of motor vehicles	£5,080m	-50
	3	Real estate activities	£3,863m	-20
	4	Human health and social work activities	£3,084m	+50
	5	Construction	£2,328m	-70
			Output Loss Total:	-145

Employees - Lancashire

	1	Wholesale and retail trade; repair of motor vehicles	113,000
	2	Human health and social work activities	94,000
	3	Manufacturing	87,000
	4	Education	58,000
	5	Accommodation and food service activities	46,000


GVA - Cheshire

	1	Manufacturing	£7,092m	-55
	2	Real estate activities	£3,495m	-20
	3	Wholesale and retail trade; repair of motor vehicles	£3,397m	-50
	4	Professional, scientific and technical activities	£2,507m	-40
	5	Administrative and support service activities	£2,145m	-40
			Output Loss Total:	-205


Employees - Cheshire

	1	Wholesale and retail trade; repair of motor vehicles	84,000
	2	Professional, scientific and technical activities	65,000
	3	Human health and social work activities	52,000
	4	Administrative and support service activities	46,000
	5	Manufacturing	41,000


GVA - Merseyside

	1	Manufacturing	£4,262m	-55
	2	Real estate activities	£3,861m	-20
	3	Human health and social work activities	£3,667m	+50
	4	Wholesale and retail trade; repair of motor vehicles	£3,513m	-50
	5	Education	£2,222m	-90
			Output Loss Total:	-165

Employees - Merseyside

	1	Human health and social work activities	110,000
	2	Wholesale and retail trade; repair of motor vehicles	99,000
	3	Education	58,000
	4	Administrative and support service activities	53,000
	5	Manufacturing	49,000


GVA - East Yorkshire and Northern Lincolnshire

	1	Manufacturing	£4,634m	-55
	2	Real estate activities	£2,268m	-20
	3	Wholesale and retail trade; repair of motor vehicles	£2,069m	-50
	4	Human health and social work activities	£1,686m	+50
	5	Construction	£1,201m	-70
			Output Loss Total:	-145

Employees - East Yorkshire and Northern Lincolnshire

	1	Manufacturing	68,000
	2	Wholesale and retail trade; repair of motor vehicles	58,000
	3	Human health and social work activities	53,000
	4	Education	35,000
	5	Administrative and support service activities	34,000


GVA - North Yorkshire

	1	Real estate activities	£3,242m	-20
	2	Manufacturing	£2,441m	-55
	3	Wholesale and retail trade; repair of motor vehicles	£2,294m	-50
	4	Human health and social work activities	£1,564m	+50
	5	Education	£1,423m	-90
			Output Loss Total:	-165

Employees - North Yorkshire

	1	Wholesale and retail trade; repair of motor vehicles	56,000
	2	Human health and social work activities	46,000
	3	Accommodation and food service activities	44,000
	4	Manufacturing	36,000
	4	Education	36,000

GVA - West Yorkshire

	1	Manufacturing	£6,810m	-55
	2	Real estate activities	£6,085m	-20
	3	Wholesale and retail trade; repair of motor vehicles	£2,924m	-50
	4	Human health and social work activities	£4,509m	+50
	5	Financial and insurance activities	£3,913m	-5
			Output Loss Total:	-80

Employees - West Yorkshire

	1	Wholesale and retail trade; repair of motor vehicles	157,000
	2	Human health and social work activities	138,000
	3	Manufacturing	116,000
	4	Administrative and support service activities	105,000
	5	Education	103,000


GVA - South Yorkshire

	1	Wholesale and retail trade; repair of motor vehicles	£3,398m	-50
	2	Manufacturing	£3,119m	-55
	3	Human health and social work activities	£2,924m	+50
	4	Real estate activities	£2,913m	-20
	5	Education	£2,693m	-90
Output Loss Total:				-165

Employees - South Yorkshire

	1	Human health and social work activities	88,000
	2	Wholesale and retail trade; repair of motor vehicles	87,000
	3	Manufacturing	64,000
	4	Education	60,000
	5	Administrative and support service activities	47,000

GVA - Derbyshire and Nottinghamshire

	1	Manufacturing	£7,774m	-55
	2	Wholesale and retail trade; repair of motor vehicles	£6,084m	-50
	3	Real estate activities	£5,335m	-20
	4	Human health and social work activities	£4,541m	+50
	5	Education	£3,134m	-90
			Output Loss Total:	-165

Employees - Derbyshire and Nottinghamshire

	1	Wholesale and retail trade; repair of motor vehicles	151,000
	2	Human health and social work activities	132,000
	3	Manufacturing	125,000
	4	Education	89,000
	5	Administrative and support service activities	70,000


GVA - Leicestershire, Rutland and Northamptonshire

	1	Manufacturing	£6,860m	-55
	2	Wholesale and retail trade; repair of motor vehicles	£5,858m	-50
	3	Real estate activities	£5,145m	-20
	4	Construction	£3,141m	-70
	5	Human health and social work activities	£3,099m	50
			Output Loss Total:	-145

Employees - Leicestershire, Rutland and Northamptonshire

	1	Wholesale and retail trade; repair of motor vehicles	143,000
	2	Manufacturing	102,000
	3	Human health and social work activities	97,000
	4	Administrative and support service activities	82,000
	5	Education	76,000


GVA - Lincolnshire

	1	Manufacturing	£2,261m	-55
	2	Wholesale and retail trade; repair of motor vehicles	£1,932m	-50
	3	Real estate activities	£1,892m	-20
	4	Human health and social work activities	£1,254m	+50
	5	Construction	£1,052m	-70
			Output Loss Total:	-145

Employees - Lincolnshire

	1	Wholesale and retail trade; repair of motor vehicles	50,000
	2	Human health and social work activities	41,000
	3	Manufacturing	38,000
	4	Administrative and support service activities	27,000
	5	Education	24,000

GVA - Herefordshire, Worcestershire and Warwickshire

	1	Manufacturing	£6,450m	-55
	2	Real estate activities	£5,122m	-20
	3	Wholesale and retail trade; repair of motor vehicles	£4,465m	-50
	4	Human health and social work activities	£2,224m	+50
	5	Construction	£2,223m	-70
			Output Loss Total:	-145

Employees - Herefordshire, Worcestershire and Warwickshire

	1	Wholesale and retail trade; repair of motor vehicles	104,000
	2	Manufacturing	82,000
	3	Human health and social work activities	77,000
	4	Administrative and support service activities	53,000
	5	Education	52,000


GVA - Shropshire and Staffordshire

	1	Manufacturing	£5,457m	-55
	2	Wholesale and retail trade; repair of motor vehicles	£4,585m	-50
	3	Real estate activities	£4,289m	-20
	4	Human health and social work activities	£2,960m	+50
	5	Construction	£2,530m	-70
			Output Loss Total:	-145

Employees - Shropshire and Staffordshire

	1	Wholesale and retail trade; repair of motor vehicles	120,000
	2	Human health and social work activities	93,000
	3	Manufacturing	89,000
	4	Education	57,000
	5	Administrative and support service activities	51,000


GVA - West Midlands

	1	Manufacturing	£10,173m	-55
	2	Wholesale and retail trade; repair of motor vehicles	£7,753m	-50
	3	Real estate activities	£6,845m	-20
	4	Human health and social work activities	£5,908m	+50
	5	Education	£4,993m	-90
			Output Loss Total:	-165


Employees - West Midlands

	1	Wholesale and retail trade; repair of motor vehicles	200,000
	2	Human health and social work activities	175,000
	3	Manufacturing	132,000
	3	Education	132,000
	4	Administrative and support service activities	118,000


GVA - East Anglia

	1	Real estate activities	£7,953m	-20
	2	Manufacturing	£7,943m	-55
	3	Wholesale and retail trade; repair of motor vehicles	£6,708m	-50
	4	Human health and social work activities	£4,951m	+50
	5	Professional, scientific and technical activities	£4,515m	-40
			Output Loss Total:	-115


Employees - East Anglia

	1	Wholesale and retail trade; repair of motor vehicles	180,000
	2	Human health and social work activities	147,000
	3	Education	110,000
	4	Manufacturing	106,000
	5	Administrative and support service activities	102,000


GVA - Bedfordshire and Hertfordshire

	1	Wholesale and retail trade; repair of motor vehicles	£7,836m	-50
	2	Real estate activities	£7,713m	-20
	3	Manufacturing	£6,304m	-55
	4	Construction	£5,335m	-70
	5	Professional, scientific and technical activities	£4,778m	-40
			Output Loss Total:	-235

Employees - Bedfordshire and Hertfordshire

	1	Wholesale and retail trade; repair of motor vehicles	152,000
	2	Administrative and support service activities	132,000
	3	Professional, scientific and technical activities	112,000
	4	Human health and social work activities	88,000
	5	Education	77,000

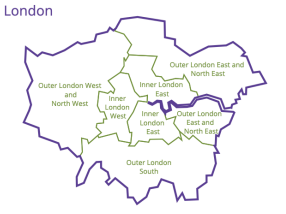
GVA - Essex

	1	Real estate activities	£6,958m	-20
	2	Wholesale and retail trade; repair of motor vehicles	£5,659m	-50
	3	Construction	£4,693m	-70
	4	Manufacturing	£4,075m	-55
	5	Human health and social work activities	£3,244m	50
			Output Loss Total:	-145

Employees - Essex

	1	Wholesale and retail trade; repair of motor vehicles	129,000
	2	Human health and social work activities	94,000
	3	Education	69,000
	4	Professional, scientific and technical activities	62,000
	5	Administrative and support service activities	58,000

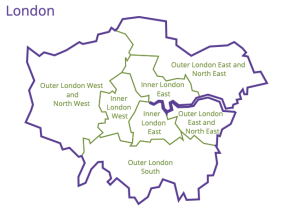
GVA - Inner London - West

	1	Financial and insurance activities	£43,381m	-5
	2	Professional, scientific and technical activities	£34,240m	-40
	3	Information and communication	£26,872m	-45
	4	Real estate activities	£20,877m	-20
	5	Wholesale and retail trade; repair of motor vehicles	£12,150m	-50
			Output Loss Total:	-160

Employees - Inner London - West

	1	Professional, scientific and technical activities	354,000
	2	Financial and insurance activities	239,000
	3	Information and communication	200,000
	4	Administrative and support service activities	196,000
	5	Accommodation and food service activities	191,000

GVA - Inner London - East

	1	Financial and insurance activities	£16,008m	-5
	2	Information and communication	£14,411m	-45
	3	Professional, scientific and technical activities	£14,344m	-40
	4	Real estate activities	£13,844m	-20
	5	Administrative and support service activities	£7,064m	40
			Output Loss Total:	-150

Employees - Inner London - East

	1	Professional, scientific and technical activities	201,000
	2	Human health and social work activities	152,000
	2	Administrative and support service activities	152,000
	3	Wholesale and retail trade; repair of motor vehicles	121,000
	4	Information and communication	115,000

GVA - Outer London - South

	1	Real estate activities	£7,839m	-20
	2	Wholesale and retail trade; repair of motor vehicles	£2,665m	-50
	3	Construction	£3,718m	-70
	4	Professional, scientific and technical activities	£2,456m	-40
	5	Human health and social work activities	£2,409m	50
			Output Loss Total:	-130


Employees - Outer London - South

	1	Wholesale and retail trade; repair of motor vehicles	75,000
	2	Administrative and support service activities	63,000
	3	Human health and social work activities	62,000
	4	Education	46,000
	5	Professional, scientific and technical activities	40,000

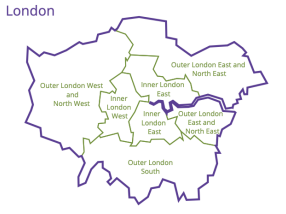
GVA - Outer London - East and North East

	1	Real estate activities	£9,123m	-20
	2	Construction	£4,050m	-70
	3	Wholesale and retail trade; repair of motor vehicles	£3,718m	-50
	4	Human health and social work activities	£2,812m	+50
	5	Education	£2,353m	-90
			Output Loss Total:	-180

Employees - Outer London - East and North East

	1	Wholesale and retail trade; repair of motor vehicles	95,000
	2	Human health and social work activities	80,000
	3	Administrative and support service activities	66,000
	4	Education	63,000
	5	Accommodation and food service activities	39,000


GVA - Outer London - West and North West

	1	Real estate activities	£13,123m	-20
	2	Information and communication	£8,705m	-45
	3	Wholesale and retail trade; repair of motor vehicles	£3,708m	-50
	4	Transportation and storage	£7,325m	-35
	5	Construction	£2,453m	-90
Output Loss Total:				-220


Employees - Outer London - West and North West

	1	Wholesale and retail trade; repair of motor vehicles	123,000
	2	Human health and social work activities	96,000
	3	Administrative and support service transport and storage activities	82,000
	4	Administrative and support service activities	89,000
	5	Professional, scientific and technical activities	39,000


GVA - Berkshire, Buckinghamshire and Oxfordshire

	1	Information and communication	£14,169m	-45
	2	Wholesale and retail trade; repair of motor vehicles	£12,342m	-50
	3	Real estate activities	£11,729m	-20
	4	Professional, scientific and technical activities	£8,489m	-40
	5	Manufacturing	£7,580m	-55
			Output Loss Total:	-210


Employees - Berkshire, Buckinghamshire and Oxfordshire

	1	Wholesale and retail trade; repair of motor vehicles	212,000
	2	Professional, scientific and technical activities	140,000
	3	Education	139,000
	4	Human health and social work activities	136,000
	5	Administrative and support service activities	123,000

GVA - Surrey, East and West Sussex

	1	Real estate activities	£14,666m	-20
	2	Wholesale and retail trade; repair of motor vehicles	£8,624m	-50
	3	Professional, scientific and technical activities	£6,994m	-45
	4	Manufacturing	£6,431m	-55
	5	Human health and social work activities	£5,779m	+50
			Output Loss Total:	-170

Employees - Surrey, East and West Sussex

	1	Wholesale and retail trade; repair of motor vehicles	202,000
	2	Human health and social work activities	179,000
	3	Education	119,000
	3	Professional, scientific and technical activities	119,000
	4	Administrative and support service activities	107,000


GVA - Hampshire and Isle of Wight

	1	Real estate activities	£7,655m	-20
	2	Wholesale and retail trade; repair of motor vehicles	£6,510m	-50
	3	Manufacturing	£5,069m	-55
	4	Information and communication	£4,568m	-45
	5	Construction	£4,032m	-70
			Output Loss Total:	-240


Employees - Hampshire and Isle of Wight

	1	Wholesale and retail trade; repair of motor vehicles	141,000
	2	Human health and social work activities	116,000
	3	Education	82,000
	4	Administrative and support service activities	74,000
	5	Professional, scientific and technical activities	70,000

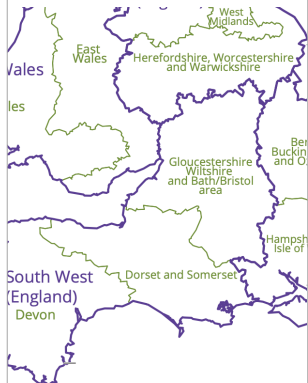
GVA - Kent

	1	Real estate activities	£7,146m	-20
	2	Wholesale and retail trade; repair of motor vehicles	£4,967m	-50
	3	Construction	£4,146m	-70
	4	Manufacturing	£3,375m	-55
	5	Human health and social work activities	£2,838m	+50
Output Loss Total:				-145

Employees - Kent

	1	Wholesale and retail trade; repair of motor vehicles	123,000
	2	Human health and social work activities	95,000
	3	Education	72,000
	4	Administrative and support service activities	61,000
	5	Accommodation and food service activities	51,000

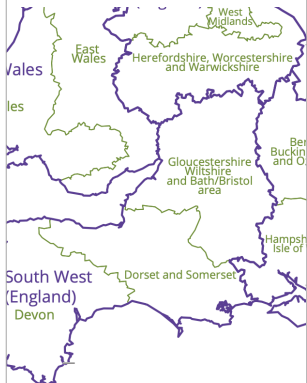
GVA - Gloucestershire, Wiltshire and Bath/Bristol area

	1	Real estate activities	£9,367m	-20
	2	Manufacturing	£8,033m	-55
	3	Wholesale and retail trade; repair of motor vehicles	£7,566m	-50
	4	Professional, scientific and technical activities	£5,375m	-40
	5	Administrative and support service activities	£4,882m	-40
			Output Loss Total:	-205

Employees - Gloucestershire, Wiltshire and Bath/Bristol area

	1	Wholesale and retail trade; repair of motor vehicles	181,000
	2	Human health and social work activities	163,000
	3	Professional, scientific and technical activities	106,000
	4	Public administration and defence	104,000
	5	Manufacturing	99,000


GVA - Dorset and Somerset

	1	Real estate activities	£5,245m	-20
	2	Manufacturing	£3,420m	-55
	3	Wholesale and retail trade; repair of motor vehicles	£3,203m	-50
	4	Human health and social work activities	£2,577m	+50
	5	Construction	£4,882m	-70
			Output Loss Total:	-145

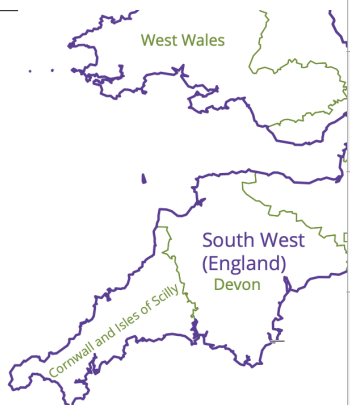
Employees - Dorset and Somerset

	1	Human health and social work activities	91,000
	1	Wholesale and retail trade; repair of motor vehicles	91,000
	2	Manufacturing	56,000
	2	Accommodation and food service activities	56,000
	3	Education	49,000


GVA - Devon

	1	Real estate activities	£4,142m	-20
	2	Wholesale and retail trade; repair of motor vehicles	£2,744m	-50
	3	Manufacturing	£2,481m	-55
	4	Human health and social work activities	£2,239m	+50
	5	Public administration and defence	£1,893m	-20
			Output Loss Total:	-95


Employees - Devon

	1	Wholesale and retail trade; repair of motor vehicles	80,000
	2	Human health and social work activities	78,000
	3	Accommodation and food service activities	53,000
	4	Education	45,000
	5	Manufacturing	41,000


GVA - Cornwall & Scilly

	1	Real estate activities	£1,612	-20%
	2	Wholesale and retail trade; repair of motor vehicles	£626	-50%
	3	Construction	£298	-70%
	4	Human health and social work activities	£1,344	50%
	5	Manufacturing	£373	-55%
			Output Loss Total:	-145

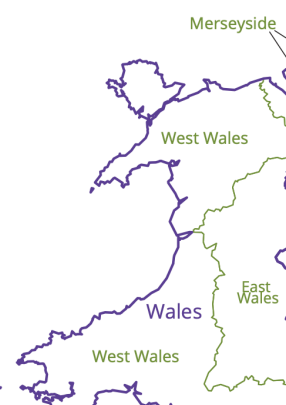
Employees - Cornwall & Scilly

	1	Wholesale and retail trade; repair of motor vehicles	38,000
	2	Accommodation and food service activities	34,000
	3	Human health and social work	33,000
	4	Education	17,000
	5	Manufacturing	15,000


GVA - West Wales and The Valleys

	1	Manufacturing	£5,741m	-55
	2	Real estate activities	£4,432m	-20
	3	Human health and social work activities	£3,989m	+50
	4	Wholesale and retail trade; repair of motor vehicles	£3,521m	-50
	5	Public administration and defence	£2,997m	-20
			Output Loss Total:	-95


Employees - West Wales and The Valleys

	1	Human health and social work activities	130,000
	2	Wholesale and retail trade; repair of motor vehicles	106,000
	3	Manufacturing	81,000
	4	Education	70,000
	5	Accommodation and food service activities	62,000

GVA - East Wales

	1	Manufacturing	£5,049m	-55
	2	Real estate activities	£3,313m	-20
	3	Human health and social work activities	£2,711m	+50
	4	Wholesale and retail trade; repair of motor vehicles	£2,471m	-50
	5	Public administration and defence	£2,012m	-20
			Output Loss Total:	-95

Employees - East Wales

	1	Human health and social work activities	83,000
	2	Wholesale and retail trade; repair of motor vehicles	71,000
	3	Manufacturing	62,000
	4	Administrative and support service activities	48,000
	5	Education	45,000

Part 2

An Economic Sectoral Impact Analysis of Covid-19

Summary

- Analysis suggests sectors with **high instances of face-to-face contact** and **output that occurs 'in situ'** have been hit hardest by the short-term impact of Covid-19 due to the impact of the government lockdown.
- Negative labour market impact across the sectors has been limited. This mitigation may be due to the widespread adoption of the **Coronavirus Job Retention Scheme**. Demand, and productivity, to a lesser degree, have been the main drivers of short-term negative economic impact.
- Instances of **severe short-term damage** to output may include, but are not limited to, the manufacturing, retail, accommodation, food service activities, arts, entertainment and recreation sectors.
- The communication and health sectors have both seen **limited output gains** from the new challenges posed by the current epidemic.
- As the government lockdown eases through the summer months, sectors may **struggle with new trading conditions**. Sectors hit severely could be most affected if they are unable to adapt to operation outdoors or socially distanced indoors.
- Long-term growth may depend on a number of factors. The **magnitude of the economic contraction** suffered as a result of the initial lockdown period, whether there will be another **global spike in infection in the future** and **whether consumers are willing to return to pre-Covid spending levels** could be considerable factors. These three aspects are seen to be key to understanding and planning the long-term resilience of businesses across all sectors.
- A second spike in infections could lead to further social distancing and lockdown procedures. Although businesses would be far better equipped to adapt due to the precedents from the initial spike, a **lack of outdoor adaptation potential** in the winter months and the **limiting of already depleted cash reserves** may see terminal decline in some sectors.
- Sectors where research suggests there is possible risk of **long-term decline** include retail, accommodation, food, administrative, support services, arts, entertainment and recreation.
- **Good growth potential for short-term** economic adjustment focuses on the ability to quickly re-skill and adapt local economies to absorb job losses. Sectors with the highest instances may include manufacturing, health and transportation.
- **Long-term good growth** potential for economic adjustment focuses on environmental and economic sustainability. Sectors with potentially **high levels of green jobs** include utilities, professional services and manufacturing.

Sector	GVA Output Change	Demand	Imports & Exports	Labour Market	Productivity
Agriculture, Forestry and Fisheries (A)	0	Minimal Impact	Minimal Impact	Severe Impact	Significant Impact
Mining and Quarrying (B)	-20	Significant Impact	Severe Impact	Minimal Impact	Significant Impact
Manufacturing (C)	-55	Significant Impact	Severe Impact	Significant Impact	Significant Impact
Utilities (D & E)	-20	Severe Impact	Significant Impact	Minimal Impact	Minimal Impact
Construction (F)	-70	Severe Impact	Minimal Impact	Significant Impact	Significant Impact
Wholesale and retail trade; repair of motor vehicles (G)	-50	Severe Impact	Severe Impact	Significant Impact	Severe Impact
Transportation and Storage (H)	-35	Minimal Impact	Severe Impact	Significant Impact	Minimal Impact
Accommodation and food service activities (I)	-85	Severe Impact	N/A	Significant Impact	Severe Impact
Information and Communication (J)	-45	Positive Impact	Minimal Impact	Minimal Impact	Significant Impact
Financial and insurance activities (K)	-5	Minimal Impact	Minimal Impact	Minimal Impact	Minimal Impact
Real estate activities (L)	-20	Significant Impact	N/A	Minimal Impact	Severe Impact
Professional, scientific and technical activities (M)	-40	Significant Impact	Significant Impact	Minimal Impact	Significant Impact
Administrative and support service activities (N&O)	-40	Severe Impact	Significant Impact	Significant Impact	Severe Impact
Education (P)	-90	Severe Impact	Minimal Impact	Minimal Impact	Severe Impact
Human health and social work (Q)	+50	Positive Impact	Significant Impact	Positive Impact	Minimal Impact
Arts, entertainment and recreation (R)	N/A	Severe Impact	Severe Impact	Significant Impact	Severe Impact

Section A - Agriculture, forestry and fishing

Sector	GVA Output Change	Domestic Demand	Imports & Exports	Labour Market	Productivity
Agriculture, Forestry and Fisheries (A)	0	Minimal Impact	Minimal Impact	Severe Impact	Significant Impact

Impact Analysis

- **Both domestic demand and imports/exports have suffered in the short-term, however long-term indicators suggest the sector could rebound, with the exception of concerns among dairy farmers.**
 - ILO data suggests that global food demand has not fallen to previously estimated levels, and should recover as nations exit lockdowns. However, the NFU has outlined concerns from dairy industry representatives throughout the supply chain that the industry may suffer irreparable damage in the long term.
- **Sectoral dependance on migrant and older workers could be a severe long-term threat to the sector. This could have a knock on effect on productivity.**
 - 47% currently employed are aged between 60-69 (ONS: *Labour market economic commentary: April 2020*). This raises the risk of future shielding requirements if there is a 'second wave'. Migrant workers total around 75,000 strong each year, however this pool of labour is at risk due to the changes outlined in the Immigration Bill.

Good Growth

Environmental Sustainability	Adaptability and Skills	Economic Sustainability
<ul style="list-style-type: none"> • There is no agreed definition of what constitutes environmentally sustainable agriculture. However it is to be the centrepiece of the government's '25 Year Future Farming Plan'. • Government focus on restoring natural capital and improving resource efficiency to be outlined in post-Brexit legislation. Scope for long term development. 	<ul style="list-style-type: none"> • A sector that is already highly diversified, with over 60% of farms reporting they have alternative revenue streams (DEFRA, <i>Defra's Farm Business Survey</i>). 	<ul style="list-style-type: none"> • Potential for over 100,000 jobs in bioenergy nationally by 2050 (LGA: <i>Estimating the number of low-carbon and renewable energy jobs.</i>) • The sector's importance may be amplified by a reduction in imports due to post-Brexit tariffs.

Section B - Mining and Quarrying

Sector	GVA Output Change	Domestic Demand	Imports & Exports	Labour Market	Productivity
Mining and Quarrying (B)	-20	Significant Impact	Severe Impact	Minimal Impact	Significant Impact

Impact Analysis

- **Research suggests there could be severe short-term weakening of the import/export market and failure of increased domestic demand, with potential long-term implications on financial viability.**
 - Chinese demand for oil imports year on year are 2.5% below Q2 2019, however are expected to recover to up to 13 million barrels per day (b/d) in Q2 2020, up 16.3% compared to Q1 2020 (Wood Mackenzie.).
- **Minimal labour market issues however evidence suggests productivity affected by lockdown. If demand was not to recover, long-term redundancy may be an issue.**
 - Oil and gas workers have been given a Covid-19 quarantine exemption by the UK Home Office, allowing for favourable labour market conditions and long-term insurance productivity.
 - Heavy use of the furlough scheme in the short-term by firms (Energy Voice, *Petrofac to furlough 200 north-east workers*), and risk of further long-term layoff (Sky News, *Coronavirus: BP slumps to loss as industry body warns on UK oil and gas jobs.*).

Good Growth

Environmental Sustainability	Adaptability and Skills	Economic Sustainability
<ul style="list-style-type: none"> • Mining supports around 45% of the world's economic activities, however is extremely unsustainable. There may be little scope for an environmentally sustainable future. • With the transition to green energy alternatives, the industry is under pressure to adapt (Kellogg Innovation Network). 	<ul style="list-style-type: none"> • Technological change and automation estimated to lead to job losses of 35% in traditional mining practices (and up to 75% for operators of mining equipment like truck drivers (United Nations Conference on Trade and Development.)) • Lack of short-term up-skilling potential due to structure of high-tech stem education to equip skills for the mining industry. 	<ul style="list-style-type: none"> • Demand for the UK mining sector internationally is predicted to increase into the future due to rising energy costs, social and geopolitical risks, infrastructure shortages and resource nationalism (Deolitte).

Section C - Manufacturing

Sector	GVA Output Change	Domestic Demand	Imports & Exports	Labour Market	Productivity
Manufacturing (C)	-55	Significant Impact	Severe Impact	Significant Impact	Significant Impact

Impact Analysis

- **Domestic demand, imports and exports all fell to record lows during Q1, however businesses are recovering with the easing of lockdown.**
 - Businesses are importing and exporting, but less than usual (Exports: 58%, Imports 78% (BICS)).
- **Businesses are fairly resilient, with 43% reporting reserves that can last four months or more (ONS BICS) however most expect annual profits to be significantly lower than usual.**
 - 86% expect profits to be reduced or much reduced over the next six months and 85% see sales turnover being reduced or much reduced over the same period (Manufacturing Barometer Q4).
- **Research suggest significant reliance on furlough and prediction of layoff in the long-term.**
 - 89% of business relied on the furlough scheme when temporarily closed (BICS) and 55% expect staff numbers to be reduced or much reduced over the next six months (Manufacturing Barometer Q4).

Good Growth

Environmental Sustainability	Adaptability and Skills	Economic Sustainability
<ul style="list-style-type: none"> • Scope for optimising processes that minimise negative environmental impacts, such as conserving energy and natural resources. • Manufacturing innovations like IOT, automation, 3D print offer lower production and labour costs and greater efficiency, aiding environmental sustainability. 	<ul style="list-style-type: none"> • Prevalence of manual jobs makes the sector ideal for up-skilling workers from other sectors more effected by Covid-19. • Sector has adapted to meet demand in different manufacturing areas, such as pharmaceutical and medical goods. Examples include the manufacture of surgical scrubs, ventilators and face-masks. 	<ul style="list-style-type: none"> • Potential for a share of jobs from the low emission vehicles and infrastructure, specifically in the manufacture of EV batteries and electric cars. • Future sector worth 200,000 jobs by 2050 and is crucially environmentally sustainable, however is dependant on the development of skills within the workforce.

Sections D & E - Utilities

Sector	GVA Output Change	Domestic Demand	Imports & Exports	Labour Market	Productivity
Utilities (D & E)	-20	Severe Impact	Significant Impact	Minimal Impact	Minimal Impact

Impact Analysis

- **Domestic demand is around 15% lower than this time last year.**
 - The impact of COVID-19 on public finances has led to the cancellation of direct debits. These have run at three times their normal levels for domestic suppliers, and 10 times for non-domestic suppliers (KPMG).
- **The impact on energy companies may be delayed as profits are reduced in the long-term.**
 - Future cash flow problems and bad debts mixed with the operational challenges around social distancing rules may have led to late requests for government support (67% have applied for the Job Retention Scheme (BICS)).
- **Dependence on commodities and primary sectors of the economy could leave utilities at risk of future long-term economic risk.**
 - The collapse in the oil price may lead to the cutting back on capital spending and potential job losses (KPMG).

Good Growth

Environmental Sustainability	Adaptability and Skills	Economic Sustainability
<ul style="list-style-type: none"> • Significant potential for environmentally sustainable growth during the transition to carbon zero. • Expansion of low-carbon electricity, heat and alternative fuels may help reduce the dependance on fossil fuels such as gas and coal. 	<ul style="list-style-type: none"> • Lack of short term up-skilling potential possibly due to structure of high-tech stem education to equip skills for the utilities industry. 	<ul style="list-style-type: none"> • Future sectoral growth could create over 625,000 jobs by 2050 in low-carbon electricity, heat and alternative fuels (LGA: <i>Estimating the number of low-carbon and renewable energy jobs</i>). • Impact of sectoral growth onto secondary and tertiary industry may allow for security of investment opportunity.

Sections F - Construction

Sector	GVA Output Change	Domestic Demand	Imports & Exports	Labour Market	Productivity
Construction (F)	-70	Severe Impact	Minimal Impact	Significant Impact	Significant Impact

Impact Analysis

- **Despite sites suffering little loss to productivity as a result of limited closure, evidence suggests construction demand fell in the short-term.**
 - The decrease in total demand (6.2%) in March 2020 could be due to falls in all new work sectors; private new housing and private commercial were the largest contributors, falling by 6.4% and 7.1% respectively (ONS).
- **Imports and labour supply has also been reduced.**
 - Demand for labour fell by 70% in April and 51% of businesses found that they were able to import less than normal (BICS).
- **High levels of self employment and macroeconomic trends may suggest long-term difficulty.**
 - 36% of all people working in the sector are self employed (NOMIS) and the sector only reached pre-crisis levels of growth this year. The sector may struggle to recover from a prolonged period of economic stress.

Good Growth

Environmental Sustainability	Adaptability and Skills	Economic Sustainability
<ul style="list-style-type: none"> • Some potential for of “carbon locked” materials and other eco-friendly materials may help reduce the environmental impact of new building projects. 	<ul style="list-style-type: none"> • Skills gap as of 15 key trades in the sector, 40% show skills shortages (The Federation of Master Builders.) • Ageing workforce as one in five construction employees were aged over 55 (ONS.) • With the correct skills strategy, the sector may have considerable scope for adaptation. 	<ul style="list-style-type: none"> • Future growth opportunity linked to the infrastructure required to reach carbon neutral. • Low-carbon infrastructure will create a predicted 200,000 jobs nationally by 2050 (LGA: <i>Estimating the number of low-carbon and renewable energy jobs</i>).

Sections G - Wholesale and retail trade; repair of motor vehicles

Sector	GVA Output Change	Domestic Demand	Imports & Exports	Labour Market	Productivity
Wholesale and retail trade; repair of motor vehicles (G)	-50	Severe Impact	Severe Impact	Significant Impact	Severe Impact

Impact Analysis

- **With the closure of all non-essential retailers, evidence shows the demand for and productivity of the sector has been hampered in the short-term.**
 - Despite online sales surging in certain sub-sectors, short term footfall fell by 45% in March and sales by 18% in April.
- **A long-term economic recession and possible second spike in infections could suggest poor demand may continue.**
 - In the short-term, 96% of retailers reported cashflow difficulties, with 40% facing difficulties meeting tax liabilities. A further 31% of retailers also faced constraints on the availability of external finance (CBI).
- **High profile insolvencies so far may be the tip of the iceberg, as more businesses could be at risk of collapse in the long-term.**
 - Thousands of jobs have been lost at Debenhams, Laura Ashley, Oasis and Warehouse, and BrightHouse. 27% of businesses interviewed have less than three months worth of cash reserves left (BICS).

Good Growth

Environmental Sustainability	Adaptability and Skills	Economic Sustainability
<ul style="list-style-type: none"> • Some potential to reduce the 300,000 tonnes of clothing every year that is incinerated or sent to landfill in the UK by investing in a smarter supply chain using blockchain and automation technology. 	<ul style="list-style-type: none"> • Prevalence of manual jobs makes the sector ideal for up-skilling workers from other sectors more effected by Covid-19. However, the long-term viability of jobs may be hampered by a second lockdown. • Skills in the sector are transferable within sub-sectors. 	<ul style="list-style-type: none"> • There are indicators that long-term economic sustainability in the traditional retail setting is diminishing. • A hybrid model of online and traditional retail may be the answer to ensure stability in the long-term to ensure post-Covid resilience.

Section H - Transportation and storage

Sector	GVA Output Change	Domestic Demand	Imports & Exports	Labour Market	Productivity
Transportation and Storage (H)	-35	Minimal Impact	Severe Impact	Significant Impact	Minimal Impact

Impact Analysis

- **In the short-term, evidence suggests the impact of the closure of air transport hubs has appeared devastating for the transportation sector.**
 - British Airways and Virgin Atlantic have seen vast redundancies. BA has given contract ultimatums to staff that has led to '42,000 people having their pay, terms and conditions totally torn up' (Transport Select Committee).
- **However, significant demand for transportation and storage services have persisted domestically.**
 - 95% of firms continued to trade during the height of the lockdown and government funding for domestic travel has seemingly safeguarded the industry.
- **Long-term financial pressure and consumer confidence may lead to redundancies in international focused industry.**
 - The air transport industry may not reach 2019 levels of demand until 2022 (IATA) and 28% of transport firms report that they have less than three months worth of cash reserves to remain operating.

Good Growth

Environmental Sustainability	Adaptability and Skills	Economic Sustainability
<ul style="list-style-type: none"> • The transport sector is seen to be highly environmentally unsustainable, especially with its dependance on aviation and shipping. • An economic shift to electric vehicles may help combat the negative environmental impact. • Production of low-carbon infrastructure and batteries will assist the creation of low carbon jobs in other sectors. 	<ul style="list-style-type: none"> • Transport and storage requires relatively low levels of formal training, therefore may be idea for short term re-skilling. 	<ul style="list-style-type: none"> • The sector is a vital support sector for the wider economy, therefore research suggests it will be sustained in the long-term.

Section I - Accommodation and food service activities

Sector	GVA Output Change	Domestic Demand	Imports & Exports	Labour Market	Productivity
Accommodation and food service activities (I)	-85	Severe Impact	N/A	Significant Impact	Severe Impact

Impact Analysis

- **The sector has been forced to near totally shut down as a result of the widespread lockdown which is suggested to have stifled domestic demand and productivity.**
 - 78.1% of businesses had temporarily closed or paused trading during the lockdown and the hospitality sector saw sales decline 21.3% in the first quarter of 2020.
- **Adaptation by businesses may be seen to have helped combat some of the negative impact.**
 - A government statutory instrument has allowed food service businesses to temporarily open as takeaways until March 2021, a move which has allowed large companies such as Pret and smaller businesses to 'get their supply chain up and running'.
- **Long-term recovery may be dependent on the easing of the lockdown, tourism and public health, all of which are unpredictable factors.**
 - 44% of businesses surveyed had less than three months of cash reserves available (the highest rate in the BICS), suggesting the sector is extremely vulnerable to any further economic shocks or shutdown.

Good Growth

Environmental Sustainability	Adaptability and Skills	Economic Sustainability
<ul style="list-style-type: none">• Some opportunity for suitability development of waste by the sector. Food being wasted in the sector is estimated at £3billion per year (WRAP). Future planning brings opportunities to reduce waste and save money.	<ul style="list-style-type: none">• As a sector under intense pressure and with a primarily youthful workforce (NOMIS), the skills in the sector are highly useful to diversify other economic sectors.	<ul style="list-style-type: none">• Further adoption and development of takeaway and outdoor retail opportunity.

Section J - Information and Communication

Sector	GVA Output Change	Domestic Demand	Imports & Exports	Labour Market	Productivity
Information and Communication (J)	-45	Positive Impact	Minimal Impact	Minimal Impact	Significant Impact

Impact Analysis

- **Computer technology and cloud solutions have seen record levels of demand and potentially remain relatively unaffected by the virus.**
 - 94.4% of companies interviewed have continued to trade through the lockdown period in some capacity, and demand for cloud computing solutions in particular has soared, particularly in the health sector. Exports and imports have also remained steady, and could recover.
- **Research suggests creative media, especially film and television, has suffered issues of productivity due to lockdown limitations however this could improve in the long-term.**
 - ITV outlined losses of 42% in advertising revenue, furloughing 800 members of staff and 50,000 freelancers are estimated to have lost work as film production stalled (BECTU).
- **Long-term issues may hamper the viability of offline media, such as the publishing industry.**
 - Newspapers have seen a fall in sales of around 30% (The Guardian) and hyper-regional promotional events such as the Edinburgh Book Festival and Hay Literary Festival have been cancelled.

Good Growth

Environmental Sustainability	Adaptability and Skills	Economic Sustainability
<ul style="list-style-type: none"> • Some opportunity for circular economic adaptation within the sector, and more broadly across the economy is necessary, such as increasing reliance on secondary metal production and encouraging a more effective, concerted waste management with a zero landfill approach. 	<ul style="list-style-type: none"> • Lack of short-term re-skilling potential due to structure of high-tech stem education to equip skills for the technological subsection of the industry. 	<ul style="list-style-type: none"> • Information and technology will gain a share of future jobs in the low-carbon services sector. The sector is estimated to create an extra 164,000 jobs by 2050.

Section K - Financial and insurance activities

Sector	GVA Output Change	Domestic Demand	Imports & Exports	Labour Market	Productivity
Financial and insurance activities (K)	-5	Minimal Impact	Minimal Impact	Minimal Impact	Minimal Impact

Impact Analysis

- **Analysis suggests short-term financial and insurances activates have taken an expected hit, however the markets have stabilised thanks to the interventions of central banks.**
 - The FTSE 100 index fell by a fifth since the start of the year so far, down from 7,604 points. The Bank of England's Term Funding Scheme with additional incentives for SMEs helped reassure investors in March.
- **Recent signals in the financial markets demonstrate stocks rallying as a result of national lockdowns being lifted.**
 - In the penultimate week of May, the FTSE enjoyed four consecutive days above 6,000 points for the first time since the UK went into lockdown.
- **Financiers may be reluctant to commit to any further long-term investments and the long-term impact of the virus and any further lockdown could determine the response of the markets.**
 - Further analysis of financial market trends should be developed as the virus is tracked and either resurges or is repressed.

Good Growth

Environmental Sustainability	Adaptability and Skills	Economic Sustainability
<ul style="list-style-type: none"> • Sector leaders may wish to integrate climate risk into their operations and transitioning from measurement to management. • The sector may wish to emphasise cross-firm collaboration and engage governments with action on climate change. 	<ul style="list-style-type: none"> • Skills in the sector are highly specialist, and it is not easy to up-skill labour quickly. 	<ul style="list-style-type: none"> • Financial and insurance activities will gain a share of future jobs in the low-carbon services sector. The sector is estimated to create an extra 164,000 jobs by 2050.

Section L - Real estate activities

Sector	GVA Output Change	Domestic Demand	Imports & Exports	Labour Market	Productivity
Real estate activities (L)	-20	Significant Impact	N/A	Minimal Impact	Severe Impact

Impact Analysis

- **Real estate activity may have been drastically impacted by the government lockdown and the closure of some construction sites, reducing supply of housing stock.**
 - 74% of estate agents found that buyer enquires had fallen and 69% reported falls in sales (Residential Market Survey).
- **There is evidence that, as the lockdown is lifted, the sector will not suffer 2008 financial crisis-style consequences.**
 - Whereas house prices fell by 16% in 2008, economists are predicting only a 4% reduction in the figure in the wake of Covid-19 (Capital Economics) and suggest that consumers are postponing property purchases rather than cancelling them altogether.
- **Long-term estimates could be dependant on the wider macroeconomic trends of the incoming recession, and whether consumer confidence is able to be maintained.**

Good Growth

Environmental Sustainability	Adaptability and Skills	Economic Sustainability
<ul style="list-style-type: none"> • Real estate is predicted to be an extremely challenging sector to become environmentally sustainable, as it has little environmental output. • Investment in environmentally sustainable real estate may be a potential innovation. 	<ul style="list-style-type: none"> • Skills in the sector are highly specialist, and are not easy to re-skill labour quickly. • The sector is also not a large employer, despite its GVA output. 	<ul style="list-style-type: none"> • The sector is a vital support sector for the wider economy, therefore is guaranteed to be sustained in the long-term and is dependant on wider macroeconomic trends.

Section M - Professional, scientific and technical activities

Sector	GVA Output Change	Domestic Demand	Imports & Exports	Labour Market	Productivity
Professional, scientific and technical activities (M)	-40	Significant Impact	Significant Impact	Minimal Impact	Significant Impact

Impact Analysis

- **As a highly productive sector, short-term indicators suggest the sector has lacked the capacity to maintain levels of exports and imports.**
 - 74% of businesses are still able to export, but less than usual (BICS).
- **There highly adaptable nature of the sector has allowed it to continue to trade, however certain sub-sectors that are dependant on primary/secondary industry may suffer, such as legal services.**
 - Through the refocusing of all scientific activity to COVID-19 related work, most businesses have continued to trade.
- **There is the possibility that the sector could be affected by a potential lack of long-term demand if consumers view services as non-essential.**
 - Long-term demand is potentially a serious hindrance to its long-term economic prospects as both business and consumer finance worsens as profits narrow.

Good Growth

Environmental Sustainability	Adaptability and Skills	Economic Sustainability
<ul style="list-style-type: none"> • The sector may wish to adapt to the low-carbon services sector. Further information under economic sustainability. • Expansion of corporate social responsibility and other development methods may be a possible option. 	<ul style="list-style-type: none"> • A highly specialised profession that requires high levels of educational and vocational training. • Relative ease of adaptation to cope with changing and diverse socio-economic factors. • Unsuitable for short-term re-skilling from other Covid-19 hit sectors. 	<ul style="list-style-type: none"> • The sector will gain the bulk share of future jobs in the low-carbon services sector. The sector is estimated to create an extra 164,000 jobs by 2050.

Section N & O - Administrative and support service activities

Sector	GVA Output Change	Domestic Demand	Imports & Exports	Labour Market	Productivity
Administrative and support service activities (N&O)	-40	Severe Impact	Significant Impact	Significant Impact	Severe Impact

Impact Analysis

- **With the sector dependant on primary and secondary industry, analysis suggests the sector has suffered a serious decline in productivity and demand.**
 - Swissport, an aviation support service provider has seen a 95% drop in income and 70% of their costs are on salaries, and 56% of businesses that responded stated that income had dropped by more than 20% since the start of the lockdown (BICS).
- **As a sector reliant on supporting other industry, the extent to which the short-term impact can be negated may depend on wider macroeconomic factors.**
 - 36% of business that responded had less than six months of cash reserves left (BICS). The sector includes tour guides and tourist services. With tourism seen to be severely hit by the crisis, this too may be an area that struggles in the medium to long-term until tourism returns to pre-COVID levels.

Good Growth

Environmental Sustainability	Adaptability and Skills	Economic Sustainability
<ul style="list-style-type: none"> • The sector may wish to adapt to the low carbon infrastructure sector. Further information under economic sustainability. 	<ul style="list-style-type: none"> • Skills required for the sector are extremely varied, which may make the sector valuable to mitigate job losses, depending on long-term economic trends. 	<ul style="list-style-type: none"> • The sector will gain a share share of future jobs in the low carbon infrastructure and vehicle sector. The sector is estimated to create an extra 200,000 jobs by 2050.

Section P - Education

Sector	GVA Output Change	Domestic Demand	Imports & Exports	Labour Market	Productivity
Education (P)	-90	Severe Impact	Minimal Impact	Minimal Impact	Severe Impact

Impact Analysis

- **State and private educational bodies have seen a closure of 'face to face' services, however the sector has adapted to using online technology to continue to provide limited services.**
 - All universities in England and Wales had closed their physical spaces. Some schools are currently only allowing selected year groups.
- **The government plans to reopen state education in the medium-term. Universities are planning to teach a greater proportion of classes via online methods.**
 - A recent announcement by the University of Cambridge that all teaching is to take place online is set to be the norm for further education, as per anecdotal evidence from university staff.
- **Long-term demand from overseas and domestic higher education applicants may be severely diminished the long-term, and output may be hugely reduced.**
 - Universities UK announced that they are "looking at at least a five-year recovery period in terms of the global numbers of people who move between countries for education."

Good Growth

Environmental Sustainability	Adaptability and Skills	Economic Sustainability
<ul style="list-style-type: none"> • As per the 2019 Sustainability in Education Report, the sector will continue to integrate UN Development Goals within both public and private institutions. It is already relatively environmentally sustainable. 	<ul style="list-style-type: none"> • Skills in the sector are highly specialist, and it is not easy to re-skill labour quickly. 	<ul style="list-style-type: none"> • The sector is crucial in the development of the UK workforce, and is seen to be heavily reliant on government assistance.

Section Q - Human Health and social work activities

Sector	GVA Output Change	Domestic Demand	Imports & Exports	Labour Market	Productivity
Human health and social work (Q)	+50	Positive Impact	Significant Impact	Positive Impact	Minimal Impact

Impact Analysis

- **Evidence suggests this sector has been one of the few that has seen a considerable increase in short-term demand and labour.**
 - Despite businesses in the sector struggling with higher prices for goods and services, general demand has been extremely high due to the short-term pandemic conditions.
- **As the lockdown eases, demand could remain high and may increase as consumer confidence to engage with health services improves.**
 - Visits to A&E have been around 50% less than usual due to reservations about Covid-19 infection rates. As confidence in public health increases, human health and social work may see an increase in demand and brace itself for a productivity boom.
- **Irregardless of the pandemic, demographic changes in the UK population may increase demand in the long-term.**
 - With an increasingly ageing population, health and social care should be a crucial area for long-term.

Good Growth

Environmental Sustainability	Adaptability and Skills	Economic Sustainability
<ul style="list-style-type: none"> • Research suggests little opportunity for further environmental sustainability, other than using technological solutions and blockchain to prevent wastage of resources. 	<ul style="list-style-type: none"> • Skills required for the sector are extremely varied, which may make the sector valuable to mitigate job losses, depending on long-term economic trends. 	<ul style="list-style-type: none"> • The sector is crucial in the health of the UK workforce, and is heavily reliant on government assistance. Its economic sustainability may be dependent on government policy and NHS leadership.

Section R - Arts, entertainment and recreation

Sector	GVA Output Change	Domestic Demand	Imports & Exports	Labour Market	Productivity
Arts, entertainment and recreation (R)	N/A	Severe Impact	Severe Impact	Significant Impact	Severe Impact

Impact Analysis

- **Due to the face-to-face nature of the services provided by the sector, evidence suggests its output and productivity has been severely diminished due to the pandemic.**
 - 80% of businesses were closed in May and 42.6% reported turnover has been reduced by greater than 50% (BICS).
- **As the government lifts lockdown restrictions, it is possible that the sector will be one of the least able to adapt to social distancing regulations.**
- **Long-term economic prospects may be dependent on a return to usual trading conditions. As a result, any further disruption may be detrimental for many in the industry.**
 - Many cultural venues and businesses rely on donations to remain viable. A deep recession may diminish the rate and size of donations. Cash flow and reserves are extremely low in the sector.

Good Growth

Environmental Sustainability	Adaptability and Skills	Economic Sustainability
<ul style="list-style-type: none"> • Evidence suggests little opportunity for further environmental sustainability as the sector is already relatively sustainable. 	<ul style="list-style-type: none"> • Skills in the sector are highly specialist, and it is not easy to re-skill labour quickly. 	<ul style="list-style-type: none"> • The sector has possible issues of sustainability due to its dependence on face-to-face service provision. Its ability to operate in the post-Covid economy will depend on social distancing.