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The **Economic Research Digest** monitors recently published research across a number of economic areas relevant to the work of the Department for the Economy such as competitiveness, innovation, enterprise, trade, FDI, tourism and infrastructure. The Skills Research Digest deals separately with recently published skills and labour market research.

In each case, we provide a short summary of the key points and web links to the full article or report*. A full list of sources can be found at the end of the publication.

Highlights this quarter include:

- NI Composite Index results for 2021 Q4 indicate a 4.6% increase in economic output in the year up until Q3.
- According to the Department for Business, Energy and Industrial Strategy's Energy Trends report for July to September 2021, 2.9% of the UK's electricity consumption came from Northern Ireland.
- R&D statistics from NISRA highlight that in-house business R&D spend in Northern Ireland in 2020 expressed as a proportion of GVA (2019) equated to 1.5%, this placed Northern Ireland as 5th out of all 12 UK regions.

** Links are correct at the time of publication, however it is likely that some will break over time. The list of sources has more general links, which should help the reader to track down the original report.*

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The Economic Research Digest is issued by:

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The research summarised here presents the views of various researchers and organisations and does not represent the views or policy of the Northern Ireland Executive or those of the authors.

Economic Outcomes

COMPETITIVENESS

[UK Competitiveness Index 2021 - Local, Urban and Regional Competitiveness in a Pandemic](#) published by Cardiff University School of Geography and Planning, in conjunction with Nottingham Business School, provides a benchmarking of competitiveness in UK localities.

- Whilst measuring the long-run potential of cities, localities and regions to generate economic growth, this edition of the UK Competitiveness Index accounts for the impacts of both the UK's withdrawal from the EU and the Covid-19 pandemic.
- By constructing a single index which reflects the measurable criteria constituting place competitiveness, the UKCI aims to assess the relative economic competitiveness of UK regions. This index is underpinned by a three factor model consisting of a linear framework for analysing competitiveness based on input, output and outcome factors.
- This report also highlights how the planned levelling up of the UK economy in the coming years is unlikely to take place if existing trends persist. UKCI growth forecasts indicate that the boroughs of London are expected to experience the fastest rates of growth and with their current status of being the most competitive localities in the UK by some distance (The City of London ranks first, followed by Westminster), there doesn't seem to be much hope for levelling out.
- Rural areas and industrial towns appear to have been the least competitive. The restrictions imposed by government to tackle the spread of Covid-19 appear to have heavily impacted the dominant sectors in industrial localities and Brexit has limited access to the cheap labour that the likes of agriculture and hospitality rely on in more rural areas. It seems that without significant investment in the areas of the UK left behind, the aforementioned levelling up is unlikely.

[Economic Activity in Northern Ireland by quarterly NI Composite Economic Index \(NICEI\)](#) published by the Northern Ireland Statistics and Research Agency measures the performance of the NI economy based on available official statistics.

- Economic output in Northern Ireland increased by 1.5% in Q3 of 2021 and by 4.6% over the year to Q3, with output has increasing by 3.0% when compared to Q3 2019. These increases in economic growth were largely driven by contributions made by the services sector. It is perhaps best to consider the aforementioned biennial change to mitigate any statistical volatility arising from the Covid-19 pandemic.
- According to the NICEI, NI economic activity increased at a faster rate than UK GDP in Q3 of 2021, however over the year UK GDP grew at a faster rate (4.6% for NI and 6.8% for the UK). Furthermore, according the ONS's accounts, NI had the third lowest real GVA per head of population (£22,298) amongst the UK countries and 12 regions of the UK in 2019.
- There has been a reduction in air transport movements in NI Airports since February 2020, falling 3.3% between November 2020 and November 2021.
- Danske Bank reports a decrease in consumer confidence in Q3 of 2021. The Northern Ireland Consumer Confidence Index decreased to 137 in Q3 2021, down from 149 in the previous quarter. In terms of the factors impacting this figure, the vaccine programme had the largest positive impact, with the new post-Brexit trading arrangement in NI having the most significantly negative impact.
- Published by NISRA in December 2021, the annual Broad Economy Sales and Exports Statistics (BESES) for 2020 estimates local business sales to markets outside Northern Ireland. Total sales by companies in NI amounted to £67.1bn in 2020, £45.9bn (68.4%) of which were sales within NI. The remaining sales were relatively evenly split between GB and exports.
- CSO reports that imports into the Republic of Ireland from NI increased by €168 million (66%) to €422 million between October 2020 and October 2021, with Irish exports to NI also increasing by €107 million (53%) across the same time period.

PRODUCTIVITY AND GROWTH

[UK Economic Outlook](#) published by PwC provides forecasts for the UK economy as of December 2021.

- Month-on-month GDP growth in September 2021 (largely driven by the reopening of previously “locked down” sectors) was 0.6%, following growth or -0.2% and 0.2% in July and August respectively. These monthly figures mean the UK saw growth of 1.3% in Q3 of 2021 following q-on-q growth of 5.5% in Q2, marking a slowdown in the pace of the recovery attributable to the positive economic effects from reopening fading.
- Sectoral data illustrates the uneven nature of the UK’s recovery. The sectors that are thriving are those that benefited, either directly or indirectly, from government support and those which are struggling with supply restrictions and weakened demand.
- The UK’s continued economic recovery is dependent on a number of factors. Firstly, the development of the pandemic. Providing no disruptive measures are required to contain the spread of Covid-19, the UK could experience an “accelerated growth” scenario. A second factor is fiscal policy developments. The existence of “accelerated” or “limited” growth scenarios will be dependent on if the economy is resilient to further tightening of the government’s fiscal policy over the short/medium term. Supply-side factors will also play a role, with growth dependent on whether trade frictions post-Brexit ease quickly (and how smooth the transition to the implementation of the Northern Ireland Protocol (NIP) is) how long supply chain bottle necks take to normalise. Finally, inflationary pressures will play a role. The UK may witness accelerated growth if the high inflation rate proves to be transitory and the CPI rate returns to the 2% target in Q4 2023, or limited growth could occur if inflation, while still transitory, reaches a higher peak and fails to return to the 2% target until Q3 2024.
- As of Q3 2021, the unemployment rate in the UK is just 0.3 percentage points higher than it was pre-Covid, with the number of payrolled employees increasing in October despite the conclusion of the furlough scheme. However, it is worth noting that increases in employment are partly due to growth in more insecure forms of work such as part-time and zero hour contracts which may have implications on the long term health of the labour market.
- A record 3.2% of workers changed jobs in Q3 of 2021, mainly driven by resignations as opposed to dismissals. This reflects a combination of rising vacancies, workers being keen for a fresh start post-pandemic, a backlog of workers who delayed moving jobs over the pandemic and rising confidence in the economy.
- With lockdowns implemented in 2020 to curtail the spread of Covid-19, large differentials had opened up between sectors based on their vulnerability to the imposed restrictions, with some sectors producing only 50-70% of their Q4 2019 output. Growth throughout 2021 and the easing of restrictions has allowed some of the sectors most heavily impacted to recover, such as hospitality. However, other sectors such as transport and storage continue to be impacted by new ways of working and travelling, as well as supply disruptions.

UK productivity flash estimate: July to September 2021 published by the Office for National Statistics compares UK Q3 productivity with the last stable period prior to Covid-19 (2019 average)

- Due to the volatile nature of movements in 2020 and 2021, resulting in estimates being subject to uncertainty, this release from the ONS compares 2021 Q3 figures with the 2019 average.
- As furlough levels declined in Q3 of 2021, the number of hours worked increased. As a result of the tendency for furloughed workers to be employed in lower-productivity industries, the return to work of furloughed staff reduced whole economic activity. Furthermore, and as a result of productivity in lower-productivity industries being curtailed, higher-productivity industries came to make up a proportionately larger share of the economy. The “allocation effect” is accountable for the overall productivity growth in 2020 and 2021.
- Output per hour worked decreased by 1.2% when compared with the previous quarter and output per worker was 1.1% below pre-coronavirus levels. Historically, these two productivity measures have had similar growth rates. However, the Coronavirus Job Retention Scheme (CJRS) has caused these productivity measures to diverge as the furlough scheme has drastically lowered the number of hours worked while it left employment relatively unchanged.
- As restrictions throughout Q3 of 2021 continued to ease and economic activity moved closer normal levels, GVA continued to move towards pre-pandemic levels with a 1.3% quarter-on-quarter rise.

LIVING STANDARDS, WELLBEING AND PROSPERITY

Income inequality in the UK published by the House of Commons Library presents statistics on income inequality, including trends, the impact of Covid-19 and income inequality between UK regions.

- In terms of redistribution, the efficacy of the tax and benefit system can be exemplified through the Gini coefficient. The Gini coefficient in 2019/2020 was 50.5% for equivalised original income, 40.8% for equivalised gross income and 36.3% for equivalised disposable income. However, the UK tax and benefit system redistributes income to a lesser extent than countries with similar inequality in original incomes such as Germany and France. The OECD also indicates that with a figure of 37%, the UK had a higher level of income inequality than most European OECD members based on the Gini coefficient for disposable income.
- Nonetheless, income inequality still exists throughout the UK in many forms, including between regions. Over the three year period 2017/18 to 2019/20, the North East had the lowest median weekly household income before housing costs at £480, while London had the highest at £615.
- Across the same three year period, income gaps amongst ethnic groups were prevalent and persistent. Despite increases in the incomes of Pakistani and Bangladeshi households for example over the timeframe, incomes are still over 40% lower than that of white households. There is also a disparity between the proportion of people in different ethnic groups at the top and bottom of the income distribution. 47% of people from the Pakistani ethnic group were in the bottom fifth of incomes, compared to only 18% of people from a white ethnic group.
- The wages of low-income households were disproportionately affected by the economic impact of Covid-19. However, the fall in the Gini coefficient from 39.1% to 37.9% from 2019/20 to 2020/21 reflects the temporary increase in benefits which ensured that the incomes of low-income households were not more affected than other households.
- Whilst the long-term impacts on income inequality attributed to the pandemic are not yet known, the Resolution Foundation found that incomes across the income distribution were more likely to have improved than deteriorated between February and June 2021, attributable to the start of the economic recovery as restrictions eased.

Poverty in the UK: statistics published by the House of Commons Library outlines levels and rates of poverty in the UK, including historical trends and forecasts for future years.

- In 2019/2020, relative poverty remained at a similar level to the previous year, both before and after housing costs. However, after housing costs the number of individuals in absolute poverty decreased by 1.12 million. In Northern Ireland, between 2017/18 and 2019/20 the before housing costs equalled the UK average at 17%. However, after housing costs NI's rate of 18% was the lowest of all UK regions and 4% below the UK average.
- Also in 2019/2020, relative child poverty before housing costs increased by 400,000 from the previous year, however remained at a similar level after housing costs were considered.
- In 2019/2020 relative poverty amongst pensioners remained relatively unchanged from the previous year. These calculations were carried out using AHC incomes as approximately ¾ of pensioners own their own home and so otherwise figures relating to living standards may give a misleading impression of the relative living standards of pensioners who do not own their own home.
- Despite the Family Resources Survey (FRS), which surveys over 19,000 households in the UK per annum, being widely considered as the best source of data on the distribution of income in the UK, poverty levels could be lower than the official statistics estimate as the FRS underestimates the total amount of benefit income received by households. The Resolution Foundation estimates in 2016/2017 18% of people were in relative low income AHC, compared to 22% based on the unadjusted survey data.
- Looking at more long term trends, the proportion of people in absolute low income has greatly reduced over the past fifty years. This is attributable to the fact that over this time frame, income growth has exceeded inflation. This overall trend does however mask disparities between groups. While the proportion of pensioners in poverty has decreased since the 1960s, poverty rates amongst children and working-age adults are much higher.
- This report refers to a number reports discussing the reasons associated with entering and exiting poverty. Whilst educational attainment wasn't found to be associated with poverty in the short

term, it was a main driver behind poor children becoming poor adults, as well as parental qualifications and home learning environment.

Innovation and Enterprise

INNOVATION

[Evidence for the UK Innovation Strategy](#) published by the Department for Business, Energy & Industrial Strategy reiterates the importance of innovation outlined in the UK Innovation Strategy and complements the strategy with evidence against its four pillars on the current strengths and areas for improvement for the UK.

- This report outlines how long-term productivity improvements are strongly correlated with innovation. For example, investments in intangible capital, (which surpassed total tangible investment in 2018 such is its importance) which is a good proxy for innovation related activities, contributed 33% to UK labour productivity growth between 2000 and 2013.
- Many UK businesses are at the cutting edge of technology but too few currently excel in adopting existing innovations. The percentage of UK businesses that were innovation active declined from 49% between 2014 and 2016 to 38% between 2016 and 2018. The consequences of this are illustrated by statistics which outline how businesses that consistently invest in R&D are 13% more productive than those who don't.
- Adapting to Covid-19 has seen a certain level of accelerated innovation activity, as well as the implementation of new technology to keep up with evolving work patterns. The shift to working from home forced workplaces to innovate in order to facilitate online and remote working and a survey of 375 UK businesses drew the conclusion that innovation rates might not have been as high in the absence of Covid-19. Throughout the duration of the pandemic over 60% of respondents adopted digital technologies and new management practices and 45% adopted a new product or service. However, most available evidence indicates a downturn in innovation inputs such as investment intentions, adoption of technology and innovation activities.
- This report also outlines the social benefits of innovation and the rationale for government investment. While businesses benefit directly from innovation, society as a whole benefits from better quality, more affordable products and it is this existence of high social returns from innovation that provides the rationale for government investment in innovation. Social returns are typically two to three times larger than private returns due to spillover benefits and a study using US firm level data to create a ratio of marginal social returns to private returns for R&D investment derived a factor of four.
- Furthermore, government investment in innovations tends to attract additional private investment. Evidence over a fifteen year period revealed that on average, £1 of public investment leads to an additional £2 of private investment.

RESEARCH AND DEVELOPMENT

[Research and Development Activity in Northern Ireland - Findings from the 2020 Northern Ireland Research and Development Survey](#) published by NISRA (Northern Ireland Statistics and Research Agency) provides an insight into numerous aspects of business R&D activity in Northern Ireland including employment, sectoral breakdowns and regional comparisons.

- In 2020, 72.5% of the £912.6 million total expenditure on R&D in NI was carried out by businesses, 24.4% by Higher Education establishments and 3.2% by government departments. This total expenditure figure of £912.6 million is up by £29.6 million in comparison to 2019, primarily driven by increased business spend however, in real terms there was a 2.6% decrease in total R&D spend.
- Large companies (250 employees or more) accounted for 46.6% of BERD (business expenditure on research and development) in 2020 despite only representing 6.9% of all R&D performing companies. Small firms (less than 50 employees) on the other hand accounted for 24.4% of BERD but over 70% of R&D performing companies.
- In NI in 2020, there were 8,460 FTE (Full-Time Equivalent) staff, which was 9% lower than in 2019. 38% of these FTE staff were working in research roles (PhD students, graduates and

scientists), technicians accounted for 29% and "other staff" 33%. The spend on salaries per R&D FTE was £45,800 in 2020.

- 49.2% of all business expenditure on R&D can be attributed to the manufacturing sector (£325.7 million), with the manufacturing of transport equipment being the largest sub-sector accounting for £77 million alone. Businesses in the information and communication sector accounted for almost half (46.4%) of service sector spend in 2020 and with a spend of £130.2 million, businesses in the "Professional, scientific, technical, administrative and support service activities sector accounted for 44.6% of service sector R&D spend. In-house spending accounted for the majority of R&D spending in both sectors.
- 38% of total BERD in NI was attributed to companies in the Belfast LGD (Local Government District) in 2020 and £94.4 million, or 14.3% was accounted for by firms in the Armagh, Banbridge & Craigavon LGD.
- Total business expenditure on R&D as a percentage of GVA is one of the medium term targets for measuring progress in the Northern Ireland Innovation Strategy. In 2020, the £661.4 million equated to 1.6% of GVA, and in-house R&D expenditure equated to 1.5% of 2019's GVA which is above the UK average and ranks 5th out of the 12 UK regions.

Business enterprise research and development, UK: 2020 published by the Office for National Statistics evaluates R&D spending in the UK by businesses, broken down by product sector and civil defence work, along with numbers employed.

- Expenditure on R&D performed by UK businesses grew to £26.9 billion in 2020, an increase of 3.5% which is similar to recent year-on-year figures. The software development product group had the largest growth in expenditure on R&D in 2020, with an increase of 18.3%.
- The East of England had the largest growth in the value of regional expenditure in the UK, with a 7.8% increase taking the value to £5.8 billion.
- In 2020, total UK business employment in R&D exhibited a 6.8% year-on-year increase, with 283,000 full-time equivalent positions. 75% of business R&D was funded by businesses' own funds in the same year and 15% was funded from overseas. Business R&D consisted of civil R&D of 93% and defence R&D of 7% in 2020, a split that has evolved over time, with civil accounting for 88% and defence 12% in 2009.

SECTORS AND TECHNOLOGIES

CBI/PwC Financial Services Survey, published by PWC in October 2021, analyses key challenges facing the financial services sector.

- Optimism throughout the FS sector has grown, with business volume, profitability and employment all on the rise. This confidence partially stems from banks' confidence in the economic recovery and the resilience of their customers which is partly underpinned by an anticipated fall in Non-performing loans. However, this survey also outlines some potential challenges, such as the tightening of spreads as a result of heightened competition in key markets such as mortgages.
- 44% of firms strongly agree that financial services organisations have a significantly increased role to play in supporting society more broadly since the pandemic, with firms believing that public perceptions of the FS sector have improved as a result of the Covid-19 pandemic.
- Approximately 80% of FS firms stated that CSR (Corporate Social Responsibility) and diversity were priorities within its ESG (Economic, Social and Governance) agenda. Actively increasing diversity at management level was also cited by 80% of firms as an action taken to boost D&I (Diversity and Inclusion).
- Financial services firms are upskilling existing staff (78%) and recruiting new staff (74%) to equip themselves for future skills needs. Furthermore, 89% are expected to automate standardised or repetitive tasks over the next five years, which may be attributable to the fact that the majority of firms (72%) are employing new technology or adapting existing tech capabilities. These statistics support the claims of the 85% of firms that say advances in technology and business transformation are priorities in future business strategies. This also reflects the increase in firms realising the benefits of investing in modernising technology (31% compared to 15% one year ago).

ENTREPRENEURSHIP

[Entrepreneurship Statistics UK](#) published by Cybercrew outlines how the UK fares in terms of entrepreneurship and uses 2021 startup statistics from a range of sources including statista and gov.uk to show the dynamism of entrepreneurship in the UK.

- There are 5.93 million businesses in the UK, of which only 43,300 aren't classified as small (less than 49 employees) which gives an overall understanding of British entrepreneurship.
- Furthermore, sole proprietorships account for 59% of firms in the private sector which provides an insight to the overall number of UK entrepreneurs.
- Between 2018 and 2020 the number of private sector businesses increased by 3.5%. Approximately 76.3% of the 200,000 new businesses this equates to are single person businesses and the rapid increase over this time can be at least partially attributed to the inability to find traditional employment.
- The primary reasons for startup failures are that there is no market need for the product or service (42%) and a lack of capital (29%).
- In terms of demographics, the highest number of business owners are in their forties (31%) and approximately one in three entrepreneurs are female, with childcare responsibilities being cited as a major driving force behind the desire for self-employment. 29.4% of business owners in the UK are educated to at least A level standard and two thirds had no prior experience in managing or owning a business.

BUSINESS GROWTH

[Agents' summary of business conditions - 2021 Q4](#) published by the Bank of England summarises intelligence gathered by the Bank's Agents between mid-October and late November.

- Consumer spending remained elevated with growth in retail sales observed. Many contacts attribute this to consumers bringing forward Christmas shopping as a result of concerns regarding shortages. However, contacts in supermarkets who saw sales volume decline in comparison with last year, feared early Christmas shopping exacerbated shortages despite consumer's relative willingness to switch to alternatives.
- Demand in the services sector strengthened, particularly in financial services, IT and dining out which saw demand for home deliveries increase by 25% in some cases.
- Despite continued improvement in business services activity, growth was constrained by a shortages of goods and labour. Professional services in legal, consultancy, engineering and IT services said revenues exceeded pre-pandemic levels which allowed them to raise fees and select higher-margin work, particularly in tight labour markets. However, amongst recruitment agencies and logistics firms, labour shortages continued to constrain growth.
- The easing of travel restrictions made it easier for UK-based companies to provide services abroad and as a result exports of services continued to improve. International tourism also saw slight improvements however Covid-related restrictions continued to hamper demand.
- Shortages of materials, components and labour caused output growth to slow in the manufacturing sector despite demand remaining steadfast. Construction output also slowed for similar reasons, as well as cost increases weighing on activity.
- Investment intentions continued to recover as companies sought to alleviate capacity constraints and increase efficiency. In manufacturing, investment had taken place in automation and upgrading machinery, while in business services investment was mostly focused on digital and information technology.
- Firms appeared to be more willing to pass through higher costs to prices as input price inflation remained high, and contacts expect further price increases in 2022 driven by pay and energy costs. These input prices pressures are attributed to factors such as strong recovery in demand and supply-chain disruptions caused by plant shutdowns and adverse weather.

BUSINESS REGULATION

Being better informed: December 2021 published by PwC reviews a number of developments in the financial sector including proposed reforms to the UK financial services the regulatory framework.

- The Financial Conduct Authority (FCA) has set out how it will regulate funeral plans by publishing "PS21/15: Regulation of funeral plans" on November 15th 2021. In order to protect funeral plan customers, the new regulations will allow for the transfer of plans to a new provider on the same terms if the original provider fails and consumers will be compensated by the original provider if a transfer is not possible.
- The FCA also published a consultation paper on proposed rules to improve outcomes for consumers saving into non-workplace pensions (NWP). Under the new proposals, providers would be required to offer a "default" investment option (which would need to be an appropriately diversified basket of investments) to new non-advised customers. The FCA wants providers to design default options that offer fair value and build "lifestyling" into the design so that investments are "de-risked" in the run up to a target date of retirement.
- On the 9th of November, HMT published proposals for reforming the UK's financial services framework that includes adopting a comprehensive FSMA (Financial Services and Markets Act 2000) regulatory model that would delegate rulemaking powers to the FCA and the PRA (Prudential Regulation Authority), broadening the regulator's statutory objectives to include a focus on international competitiveness.
- The PSR (Payment Systems Regulator) issued a consultation on APP (Authorised Push Payment) scams on November 18th 2021. The payments regulator proposes that the largest banks publish their APP performance data and that reimbursement should be mandatory for all scam victims who have exercised "sufficient caution". Consequently, HMT has indicated that it will make legislative changes to provide for mandatory reimbursement of scam victims.

Succeeding Globally

TRADE

UK trade: October 2021 published by the Office for National Statistics outlines key trends in UK exports and imports and analyses a host of trade related data

- Total imports, excluding precious metals, declined by 1.1% in October 2021 when compared with September. This £0.4 billion decline came as a result of a 3.6% reduction in EU imports which was offset partially by a 1.2% increase in imports from non-EU countries. October 2021 was also the tenth consecutive month imports from non-EU countries exceeded imports from EU countries.
- Notable increases in the importation of fuel from both EU and non-EU countries can be attributed to increases in quantity imported, as well as increased prices which reflects global demand driven by the economic recovery from the Covid-19 pandemic.
- Total exports, again excluding precious metals, increased by 1.6% from September to October 2021. Exports to EU countries declined by 2.7% in October as a result of a decrease in the exportation of machinery and transport, chemicals, material manufactures and miscellaneous manufactures. Fuel exports to the EU increased by £0.3 billion but it must be considered that, as with fuel imports, rising prices play a large role in this figure.
- The increase in exports to non-EU countries was attributable to increases in the exportation of chemicals, fuels machinery and transport equipment.
- The UK's total trade balance, excluding precious metals, decreased by £4.5 billion in the three months to October 2021. The primary driver behind this decrease was the trade in goods balance which decreased by £6.2 billion. The trade in services balance surplus offset this figure, but not completely.
- While the above statistics provide a monthly narrative which is useful to an extent, the ongoing Covid-19 pandemic and recession make it difficult to assess the extent to which these trade movements reflect short-term trade disruption or longer-term supply chain adjustments. It can be beneficial to make some comparison with equivalent 2018 data which was the UK's most recent

“stable” period. In the three months to October 2021, both imports and exports were lower than when compared with the same period in 2018.

INWARD INVESTMENT

[Foreign direct investment, experimental UK subnational estimates: October 2021](#) published by the Office for National Statistics summarises inward foreign direct investment positions and earnings by industry and region.

- In 2019, the highest proportion of inward FDI in each UK country and region could be attributed to either financial activities or manufacturing, with manufacturing accounting for the highest value of inward FDI in seven out of sixteen city regions. Information, professional and administration services accounted for the highest proportion in another five.
- The inward FDI position is the financial balance sheet value of the stock of UK companies controlled by foreign companies, including buildings, property and equipment. London controlled the highest value of inward FDI stock of all UK regions (36.9% of which was financial activities) followed by the South East, with Northern Ireland only 10.5% of the UK total.
- There were three city regions where one industry accounted for more than half of the inward FDI position for 2019. For the Tees Valley Combined Authority manufacturing accounted for 65.7%, 65.6% of Cambridgeshire and Peterborough Combined Authority’s inward FDI was attributable to information, professional and administration activities and 65.5% of the Aberdeen City region’s inward FDI was dependent on other production industries.
- The distribution of industrial activity in the Greater Manchester Combined Authority was the most evenly distributed across groupings outlined, being the only city region where each industry group accounted for more than 10 percentage points of that city region's inward FDI position.

TOURISM

[No relevant material sourced for this quarter’s release.]

Economic Infrastructure

ENERGY

[Energy Trends UK, July to September 2021](#) published by the Department for Business, Energy & Industrial Strategy provides data on energy production and consumption in the UK for both total energy and specific fuels.

- Final energy consumption rose 6.4% in Q3 of 2021 when compared with 2020, with most sectors returning to pre-pandemic levels (with the exception of transport fuel demand which is still down 17% on the same period in 2019).
- Energy production has decreased by 8.8% in comparison with the same period last year, partially attributable to maintenance on the UK’s Continental shelf and prevailing weather conditions impacting wind, solar and hydro energy production.
- Coal production fell to a record low of 246 thousand tonnes in Q3 of 2021 due to decreased demand, mine closures and Covid-19 restrictions impacting production. There was also an 18% increase in coal imports from 2020 Q3.
- Production of crude oil and (Natural Gas Liquids) NGLs was down 7.4% in Q3 of 2021 when compared to the same period last year. Due to increases in demand from the transport sector as well as increased domestic demand following historic lows, overall demand for petroleum increased by 13%.
- Demand for gas was relatively stable throughout the period July to September 2021. Domestic demand was down considerably due to higher average temperatures, however this was counteracted by an increase in industrial demand which continued to recover from the impact Covid-19 had in 2020.

- While consumption continued to reflect changing consumer behaviours such as working from home, milder temperatures were the primary cause of a 4.2% decrease in domestic consumption of electricity. This is reflected in a 0.3% decrease in total electricity consumption in Q3 of 2021 in comparison with the same period in 2020.
- 2.9% of the UK's electricity consumption came from Northern Ireland, with NI also observing a year on year increase in total generation (between 2019 and 2020) in contrast to the UK trend. NI was also the only UK country to observe an increase in coal generation with a 16% increase from 2019.

TELECOMS

Telecommunications Market Data Update published by Ofcom highlights key trends from Q2 2021 in the UK telecommunications market.

- In Q2 of 2021 UK fixed voice services generated £1.5bn in revenue (88.9% of which was attributable access and add-on bundles), a decrease of 4.3% (£68m) when compared to Q1 of the same year. BT's share of these revenues remained stable at 51%.
- At the end of Q2 2021, there were 27.5 million fixed broadband lines, which represented an increase of 53,000 or 0.2% from Q1 and 427,000 (1.6%) year-on-year. The number of ADSL (Asymmetric Digital Subscriber Line) lines fell by 314,000 (6.7%) in Q2, while the number of cable broadband lines increased by 43,000.
- Mobile telephone services generated £3.06bn in retail revenues in 2021 Q2. A £54m decrease from the previous year. Over the same time period, the average monthly revenue per subscriber was 312.20, with most post-pay subscribers generating more than pre-pay users on average.
- The number of mobile-originated voice call minutes decrease by 3.4 billion (6.8%) to 46.2 billion minutes year-on-year, with calls to landlines also decreasing by 10.2%. Roaming call volumes also decreased by 7.2% which may be attributable to the easing of Covid-19 restrictions and the associated increase in travelling.

AIR ACCESS

Overseas travel and tourism, provisional: April to June 2021 published by the Office for National Statistics estimates visits to the UK by overseas residents and spending by travellers, using administrative sources of passenger travel data.

- Using data from the International Passenger Survey (IPS) it is estimated that 277,000 visits were made to the UK by air by overseas residents in Q2 of 2021, 97% fewer than in the same period of 2019. This decline is attributable to the restrictions imposed to limit the spread of the Covid-19 virus and consumer caution regarding the safety of travel, with these reasons also driving the decrease in all of the following statistics. Visiting family and friends declined by 93%, with holiday visits declining by 99.6% and business trips by 97%.
- Furthermore, there was a decline of £386 million in spending made by overseas residents on their visits to the UK, a decrease of 94% on the same period in 2019.
- UK residents made 95% fewer visits abroad by air in Q2 of 2021 when compared with Q2 of 2019, and spent 93% less. Visiting family and friends (60%) was the most common reason for outward trips by air, while holidays (173,000) was the least likely reason.

Government

NORTHERN IRELAND

[No relevant material sourced for this quarter's release.]

ENGLAND

[No relevant material sourced for this quarter's release.]

SCOTLAND

[State of the Economy November 2021](#) published by the Office of the Chief Economic Advisor provides an overview of economic activity in Scotland during the third quarter of 2021.

- As of August 2021, Scotland's GDP (which grew 0.1% in August and 2.6% between June and August inclusive) was edging closer to its pre-pandemic level. In April 2020, Scottish GDP was 22.6% below pre-pandemic levels. However, by August 2021, GDP was only 1.6% below pre-pandemic levels. However, as expected the rate of growth over Q3 slowed as the boost in output associated with restrictions easing had moderated, further impacted by supply chain disruption.
- A number of consumer facing sectors such as accommodation and food (-11.2%) and arts, culture and recreation (-16.8%) are further below their pre-pandemic levels, reflecting the impact the Covid-19 restrictions have had over the course of the pandemic.
- The number of payrolled employees rose above pre-pandemic levels for the first time in Q3 of 2021. Scotland's employment rate increase by 0.6 percentage points in the 3 months until September 2021, while inactivity fell by 0.4 percentage points to 22%. However, uncertainty has increased as a result of labour shortages and the impact the 80,000 jobs still on furlough (911,700 unique Scottish jobs were supported since the inception of furlough in total) when the scheme ended have had on official employment figures is still unknown.
- Supply chain disruption and inflationary pressures on input costs have presented issues for many businesses. Energy cost rises and upward pressure on wage costs are also impacting. Whilst it is believed that businesses are absorbing at least part of these higher costs, much is being passed on to the consumer which heightens fears that inflation could rise towards 5%. Globally, food commodity prices have increased by 31%, metals by 57% and energy by 60%.
- In terms of inflationary pressures, (UK inflation was 4.2% in the UK in October 2021) the cause was a mix of domestic and global factors. Domestically, 2021 saw strengthened demand for goods and services while globally, disruption within supply chains and the feed through of rising input costs to consumer prices have been a key driver.
- In October 2021 the Office for Budget Responsibility revised down their estimates of medium term scarring on potential output in the UK economy to 2% from 3% in March. The Scottish Fiscal Commission also revised up the rate at which GDP is expected to return to pre-pandemic levels of output. This illustrates stronger growth in Scotland than what was expected in Scotland in the previous forecast in January. The medium/long term outlook is more uncertain in terms of the labour market, skills and capital investment and the extent to which falls in these areas will recover.
- Consumer sentiment recovered steadily throughout 2021, which likely reflects growing confidence as Covid-19 restrictions eased, as well as the delivery of the vaccination programme. As of October 2021, the Scottish Consumer Sentiment Indicator stood at 4.8 and was the fifth consecutive positive month. However, this figure of 4.8 is down 1.1 points from September. The strengthening of consumer sentiment across 2021 is most clearly seen through increased retail sales which have recovered to 4.2% higher than before the pandemic.

WALES

[No relevant material sourced for this quarter's release.]

REPUBLIC OF IRELAND (ROI)

[No relevant material sourced for this quarter's release.]

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