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#### **Disclaimer**

The analysis in this report has been conducted by the Fraser of Allander Institute (FAI) at the University of Strathclyde. The FAI is a leading academic research centre focused on the Scottish economy.

The report was commissioned in July 2020 by North Ayrshire Council.

The analysis and writing-up of the results was undertaken independently by the FAI. The FAI is committed to informing and encouraging public debate through the provision of the highest quality analytical advice and analysis. We are therefore happy to respond to requests for factual advice and analysis. Any technical errors or omissions are those of the FAI.

## **Executive Summary**

- Arran is a unique economy within North Ayrshire, and Scotland, and has a number of strengths that are highlighted throughout this report. We discuss the key challenges facing this Island economy as it begins its economic recovery from the ongoing Coronavirus pandemic.
- It is clear that Arran is a relatively prosperous part of North Ayrshire and performs well on many economic measures, such as education. However, we discuss many of the challenges when using current official statistics to properly measure island economies like Arran. In terms of what data is available from the UK and Scottish governments, it is evident that there is little data that can be used to inform policy in this area, a common finding for island economies in Scotland.
- The current outlook for economic growth in Arran is dominated by the immediate impact of Covid-19. Although many of these economic shocks should be temporary, there is a risk that these disruptions may have longer-term implications. That is, as the furlough and self-employment income support schemes are scaled back and job losses increase, we could see long-term scarring effects in the local labour market.
- While the UK and Scottish governments have implemented a range of measures to support the economy throughout this pandemic, the true effects of lockdown measures will not be felt until the scaling back starts, and job losses begin to crystalise. Already we are seeing rising unemployment and Universal Credit claims.
- Policy must focus on limiting 'hysteresis' effects from plaguing the labour market and ensure that young people are not left behind.
- Arran, like most island economies, is limited by its infrastructure and rurality and is highly dependent on its ferries to transport commuters and tourists.
- We estimate that, on average, each day of ferry operation contributes just under £170,000 to the island's economy.
- Due to its prevalent tourism industry, Arran has been disproportionately impacted by the lockdown restrictions. The subsequent capacity constraints in restaurants, bars and cafes have meant that even as lockdown restrictions have eased, businesses in these tourism-facing industries are still highly dependent on government support.
- National policy must recognise that the Arran economy is very different to the North Ayrshire and Scottish economy. Policy makers must take care when determining policies for this area as the implications may differ greatly between North Ayrshire and Arran.

## 1. Introduction

Arran is a unique part of North Ayrshire and is a strong island economy in Scotland with a successful hospitality sector.

It performs well in terms of education and has strong tourism-facing industries.

However, like the rest of Scotland, it faces challenges. Both in the short and long term.

The coronavirus outbreak represents the greatest public health crisis in a generation. Whilst the immediate health risk for the families impacted is the most important concern, the pandemic will have a significant and potentially long-lasting economic impact.

The ongoing pandemic has had an immediate impact on the economy however, there will likely be long-term implications, both in terms of the economic downturn to follow and the structural effect on the economy, which will shape the outlook for Arran.

Arran's dominant hospitality sector has meant that the immediate impact of Coronavirus has been stark. The impact of reduced ferry passengers alone has been seriously damaging to the local economy. Due to the nature of this island economy, Arran is sensitive to the route map out of this crisis and the following economic recovery plan.

Although Arran is a part of North Ayrshire, it is an island and policy must acknowledge this in the economic recovery strategy that follows this pandemic. This means that there should be a tailored approach to island economic recovery rather than a one-size-fits-all policy for the North Ayrshire economy. This report outlines the uniqueness of the Arran economy and the impact that Covid-19 has had on this island economy.

This report is structured as follows:

- Firstly, we set out the key economic indicators for Arran, outlining key trends and highlighting limitations of data for the local economy.
- Secondly, we outline the business base and industrial mix of the Arran economy.
- Thirdly, we highlight the immediate effect of Coronavirus on businesses operating in Arran.
- Fourthly, we discuss the immediate impact of Coronavirus on universal credit claimants and unemployment in the local economy.
- Fifthly, we discuss the potential impact of the roll back of government support and restrictions on ferry capacity.
- Finally, we model the impact of restrictions on ferry capacity on Arran's GVA.

## 2. Economic indicators and trends in Arran

Exploring economic indicators available for Arran is important for understanding the long-term challenges in the economy in the face of the pandemic. Furthermore, some of these indicators point to structural challenges which may be further exacerbated by the coronavirus crisis.

As discussed in the 2017 Annual Report of the Arran Economic Group, establishing a core set of indicators is crucial for monitoring the long-term progress of the Arran economy<sup>1</sup>.

GVA is a key measure of the final value of goods and services produced in an area - after accounting for intermediate goods and costs. However, GVA is not produced for small local areas such as Arran.

But there are employment figures by sector available for Arran which allows us to estimate the approximate size of the Arran economy. See Box 1.

Using employment data for Arran, from BRES<sup>2</sup>, and GVA data for North Ayrshire, from the ONS<sup>3</sup>, we have produced estimates of GVA by sector for Arran. See Table 1.

Table 1: Estimates of GVA by sector in Arran, 2018

Sector	GVA (£ million) 2.3		
Agriculture, mining, electricity, gas, water and waste			
Manufacturing	18.5		
Construction	5.2		
Wholesale and retail trade; repair of motor vehicles and motorcycles	9.4		
Transportation and storage	7.7		
Accommodation and food service activities	8.1		
Information and communication	1.2		
Financial and insurance activities	0.9		
Real estate activities	5.5		
Professional, scientific and technical activities	1.3		
Administrative and support service activities	0.6		
Public administration and defence; compulsory social security	5.5		
Education	3.9		
Human health and social work activities	4.1		
Arts, entertainment and recreation	2.4		
Other service activities	0.5		
Total GVA	77.1		

Source: ONS, BRES, FAI calculations

According to our estimates, GVA in Arran was just over £77m in 2018.

Manufacturing is the largest sector in the local economy despite employing less workers than some other sectors such as accommodation and food services. If all industries had the same productivity then employment shares would match GVA shares one-for-one however, productivity varies massively among industries and this is reflected in GVA constructed using employment and productivity.

<sup>1 2017</sup> Annual Report of the Arran Economic Group

<sup>2</sup> Retrieved from NOMIS (Business Register and Employment Survey: open access dataset)

<sup>3</sup> ONS Regional gross value added (balanced) by industry: local authorities by NUTS1 region

#### Box 1: Estimating GVA in Arran

The most detailed regional estimates of GVA are the ONS' GVA by industry and local authority, meaning there are no official estimates of GVA regularly produced for Arran.

Using labour productivity (GVA per job) for industries in North Ayrshire, we were able to estimate GVA by industry for Arran using employment data for the island – a robust method typically used to regionalise economic indicators for official statistics.

But there are some shortcomings of this method. For example, these estimates rely on the assumption that productivity in Arran is identical to that in North Ayrshire which is highly unlikely.

For example, North Ayrshire has a very productive manufacturing sector - around £123,000 GVA per job compared to £80,000 in Scotland overall - and this is driven by the manufacturing of metals, electrical products and machinery and other manufacturing and repair activities. Arran has very few or no employment in these industries. Of the manufacturing industries in North Ayrshire, the manufacturing of food, beverages, textiles and clothing – which is the largest manufacturing employer in Arran - is the least productive.

Therefore, there is an argument that Arran's manufacturing GVA is lower than the estimates in table 1 because these highly productive manufacturing industries are less prevalent in Arran.

On the other hand, Arran is home to two distilleries, Lagg Distillery and Lochranza Distillery, which are typically highly productive due to their greater dependence on machines over manpower. This means that the productivity of drinks manufacturing in Arran is likely greater than in North Ayrshire.

Therefore, there is some evidence that suggests that productivity in North Ayrshire's manufacturing sector would be higher than Arran's (meaning Arran's manufacturing GVA has been overestimated) and vice versa (meaning it has been underestimated).

This example covers just one sector of the economy and there will be differences across all industries when comparing Arran to mainland North Ayrshire.

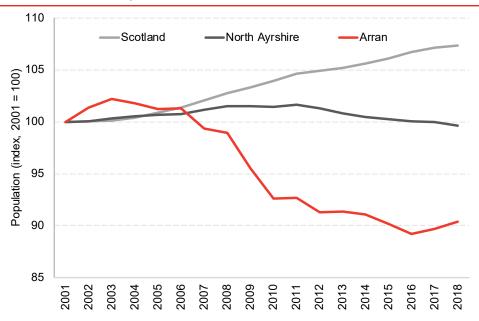
It is important to note that these estimates are based on official statistics and follow standard regionalisation practice however, they should be treated with some caution because there are some important differences between North Ayrshire as a whole and the Isle of Arran.

The wholesale and accommodation and food services sectors are also important players in the island economy, contributing 12% and 11% respectively to total GVA in Arran.

An important piece of feedback from stakeholders highlighted that, due to being in a small island economy, businesses in Arran's accommodation and food services sector, along with businesses in other industries, face costs that mainland North Ayrshire businesses typically would not incur. i.e. housing staff members and paying more for the transportation of goods and services.

One of the major long-term challenges facing the Arran economy is population growth. As shown in Chart 1, the population of Arran has shrunk by around 10% since the start of this century. This is in stark contrast to trends experienced in the rest of Scotland – population growth has been positive for the past two decades. North Ayrshire is also suffering from a gradual decline in population, but the pace has not been as severe as in Arran.

Chart 1: Population in Arran, North Ayrshire, Scotland, 2001 - 2018

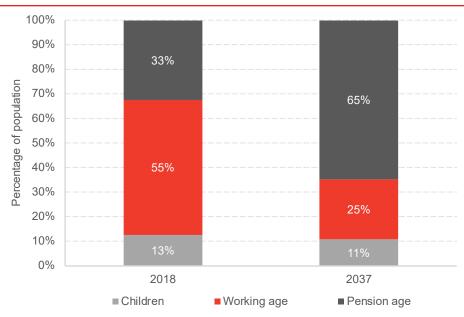


Source: National Records of Scotland

Furthermore, official projections from the National Records of Scotland (NRS) show that if current trends continue the Arran population is projected to age rapidly in the coming years. See Chart 2.

By 2037 the whole island's population would, under these projections, shrink to almost a half of its current level. Moreover, the population in this scenario would be two thirds of pensioners (based on today's pension age of 64) and only a quarter of working age people.

**Chart 2:** Projected Projected composition of the population in Arran, 2018 and 2037 (2012-based NRS population projections)



**Note:** The projections for 2037 are experimental statistics and should therefore be interpreted with caution. Rather than a precise point-based estimate they capture the situation if the current trends continued.

Source: National Records of Scotland

Since the 2012-based NRS population projections for Arran were produced, several policy interventions have been implemented - such as new social affordable housing and private business linked accommodation. Along with the fact that there was a slight increase in population between 2016 – 2018 this suggests that the aging effect may perhaps not be as severe as initially suggested by the projections. However, it does not detract from the fact that an aging population is a considerable challenge facing Arran and Scotland as a whole.

One of the possible reasons for the decline in the island's population is the sharp rise in property prices on the island experienced over the past two decades. As shown in Chart 3, property prices on the island were similar to North Ayrshire and Scotland in the early noughties. However, with the rise of the tourism industry on the island, property prices grew rapidly until the Financial Crisis, and have remained higher than both Scotland and North Ayrshire in subsequent years. In 2018, the average house price in Arran was almost twice the average house price in North Ayrshire.

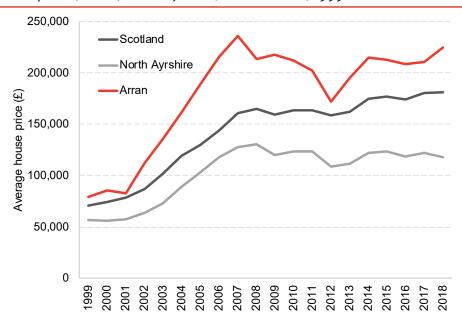


Chart 3: Average house prices, Arran, North Ayrshire, and Scotland, 1999 - 2018

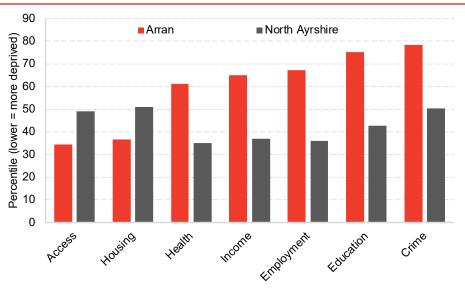
**Source:** Scottish Government

The rise in prices — potentially driven by holiday homes and rentals — has depressed the supply of affordable housing for workers in Arran. Affordable housing is a key determinant in attracting young professionals to any area and Arran's inflated house prices have likely acted as a deterrent to commuters considering the move to the island. As shown in later sections, there is a portion of people who also live on the mainland in North Ayrshire and commute to the island daily for work.

Moving forward, to encourage working age population growth, Arran will need to invest in affordable housing and community areas to attract young professionals and families to the island. The coronavirus crisis and fall in tourism on the island may lead to a temporary fall in property prices. This may in turn improve the supply of affordable housing on the island. However, many people have lost jobs as a result of the crisis and may struggle to purchase housing in the face of reduced earnings.

The Scottish Index of Multiple Deprivation (SIMD) is a relative measure of deprivation across 6,976 small areas, looking at a variety of indicators related to quality of life such as: income, employment, education, health, access to services, crime, and housing. SIMD can be used as a useful indicator of economic performance of Arran relative to other areas in Scotland.

Chart 4: Scottish Index of Multiple Deprivation, Arran and North Ayrshire, 2020



Source: SIMD

We can see that Arran performs better than North Ayrshire across most of the measures in the SIMD. The only areas where Arran performs worse are in geographic access to services and housing. Given the unique position of Arran as an island it is understandable that residents need to travel further for key services such as a GP, schools, or retail venues. However, there are still areas where Arran lags behind the rest of North Ayrshire. For example, according to the SIMD, on average, 26% of households in Arran do not have access to superfast broadband, compared to only 6% in North Ayrshire. Other estimates from Highlands and Islands Enterprise show that in October 2017 10% of premises in Arran did not have access to superfast broadband.

As noted in the Annual Report of the Arran Economic Group, there have been significant improvements in broadening access to superfast broadband in recent years. However, further public investment in broadband infrastructure could help strengthen the resilience of the Arran economy to shocks like Covid-19 and enable people to adapt faster to such crisis'.

In terms of education, Arran has a more educated and skilled workforce relative to the rest of North Ayrshire. Arran has a lower share of people with no qualifications relative to the Scottish average and North Ayrshire. It also has a higher share of young people entering university – 10% in Arran and only 7% in North Ayrshire. Arran also performs better than North Ayrshire in school pupil attendance, attainment of school leavers, and proportion of young people not participating in education or employment.

Table 2: SIMD indicators related to education, skills, and training, Arran and North Ayrshire, 2020

Indicator	Arran	North Ayrshire
School pupil attendance	86%	78%
Attainment of school leavers (score, higher = better)	5.9	5.5
Working age people with no qualifications: standardised ratio (a value of 100 is the Scotland average for a population with the same age and sex profile)	55	116
Proportion of people aged 16-19 not participating in education, employment or training	0.4%	3.0%
Proportion of 17-21-year olds entering university	10%	7%

Source: SIMD

Jointly these indicators suggest that the young workforce in Arran may be better placed to recover from Coronavirus-induced job losses relative to the rest of North Ayrshire. However, unemployment can have a long-term scarring effect on the prospects of young people and therefore they typically require training and support to ensure that skills are not lost during prolonged periods of unemployment. That is, support must be provided to prevent 'hysteresis' effects from taking hold.

Furthermore, many school pupils leave the island following their secondary education for further study and work and are therefore not available to businesses. As a result, even though Arran has a well-educated young population, local businesses may struggle to fully secure the associated benefits this brings.

### **Box 2:** Improving economic indicators for Arran

Arran is a Scottish Intermediate Zone, and this limits the availability of traditional economic data which is used to gauge the performance of local authorities or Scotland as a whole. Moreover, much of the data is collected through surveys at a national level. Whilst it is possible to obtain a 'local' view, the sample sizes for local areas are generally small. This means that there is greater margin for error.

The Arran Economic Group set out the following metrics in its 2017 Annual Report which are to be monitored to measure progress of the local economy:

- Arran turnover
- GVA
- GVA per employee
- Employment
- Quality of life

These are important indicators and continuing to monitor them will serve well to track progress in Arran.

There are also other indicators which could be tracked / improved on to provide a better picture of Arran's economic performance. These include:

- Income publicly available estimates of median income for Arran are available on the Scottish Government's website. However, these have been produced as part of a one-off Income Modelling Project carried out by Herriot-Watt University and are only available for 2008/09. As a result, they may not accurately reflect the current situation of households on the island. North Ayrshire Council has more recent data from Paycheck, a gross household income model, provided by CACI Ltd. This database provides estimates of mean income and income by bands of £5,000 for different local areas in North Ayrshire (including Arran). Analysis of the data made available to the FAI from the North Ayrshire Research Briefing shows that mean income in Arran is the highest out of all North Ayrshire data zones. More detailed, individual level survey-based estimates of income could be constructed to infer the degree of income inequality and affordability of housing on the island for different parts of the Arran population.
- Employment by occupation employment figures are currently only available from BRES by industry. Tracking employment by occupation would allow policymakers to better understand the composition of the local labour force and design more targeted policies for reviving the labour market after the pandemic.

- Business survey data on cashflow, revenue, employment, furlough numbers business surveys are an important source of information during crises. The Arran Community Recovery Survey has been helpful in establishing important facts such as the degree to which government schemes have helped businesses or the number of tourists required to sustain business. However, further data looking at indicators which have a material impact on the functioning of the economy such as cashflow, revenue, employment, and furlough numbers split out by sector would be helpful to give a more accurate picture about the state of the business base. The ONS Business Impact of Coronavirus Survey conducted for the UK and devolved nations can serve as an example of the most relevant business indicators.
- Tourist spending data the FAI was provided with tourist spending data from a STEAM report produced by Global Tourism Solutions (UK) Ltd. This dataset provides a useful starting point and includes a breakdown of visitor numbers and associated spending on different areas, employment supported via the spending, and the resulting economic effect. This data has been helpful in conducting our own modelling. However, further detail on the sampling methodology used to collect the data would help add to the robustness / validity of this dataset for future use. The spending data would also benefit from a better categorisation by official sectors as recognized by the ONS via SIC codes. Furthermore, without a detailed model of the Arran economy specifically, there are assumptions that have to be made in calculating indirect and induced economic effects of the spending. A detailed list of these assumptions could be made available to add to the validity of the data.

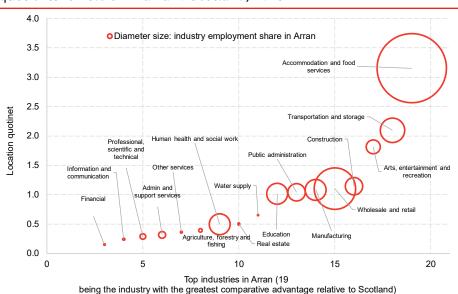
# 3. Business base and industrial mix of the local economy

In order to understand the impact the pandemic has had on the island it is useful to look at the business base and industrial make-up of the Arran economy. In 2018 the Isle of Arran had approximately 4,600 residents. Circa 2,500 of these residents are of working age (16-64) and 2,000 are in employment.

To provide further insights, we calculated location quotients using the Business Register and Employment Survey. See Chart 5.

Location quotients indicate the industries particularly prevalent in Arran compared to the rest of Scotland. They are calculated as the ratio between the local share of employee jobs in a specific industry and the local share of national employee jobs in that same industry. A quotient greater than 1 indicates a greater concentration of an industry in Arran compared to the rest of Scotland. Data on employment in each sector in Arran, which is used to calculate the location quotients, is presented in Appendix 1 at the end of the report.

Chart 5: Location quotients for Isle of Arran and Scotland, 2018



Note: Farm agriculture (SIC subclass 01000) is not included in the data for Arran in BRES

Source: ONS BRES /NOMIS

The unique nature of Arran as an island economy also determines its industrial structure.

Tourism is the main driver of economic activity and as a result a quarter of all people in employment work in the accommodation and food services sector. It is also the sector with the greatest prevalence over the rest of Scotland. Scotland's Economic Strategy identifies sustainable tourism<sup>4</sup> as one of the growth sectors where Scotland has a distinct competitive advantage. Using SIC codes we can identify sectors which fall under the sustainable tourism industry category. Our calculations show that 32% of all employment in Arran is in the sustainable tourism sector.

<sup>4</sup> Scottish Government Growth Sector Statistics

This compares to circa 12% in North Ayrshire and 9% in Scotland.

It is worth flagging that there will be other businesses in other SIC codes which would consider that their businesses are supported by tourism

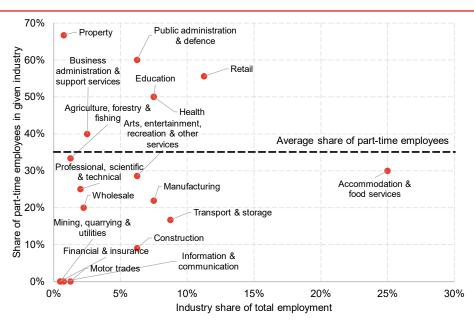
Tourism is a difficult industry to define and although the sustainable tourism industry definition indicates that tourism is more prevalent in Arran over mainland North Ayrshire and Scotland, there is a larger share of businesses partly or fully dependent on tourism in Arran which this definition does not capture.

Distilleries are good examples of this — they are primarily manufacturers but depend significantly on visitors doing tours, purchasing from their distillery retail outlets and eating in their cafes and restaurants.

Additionally, the transport sector supports around 9% of all employment in Arran and it is relatively more prevalent in Arran compared to Scotland as a whole. This may be due to ferries being the primary mode of transport to and from the island. The arts, entertainment, and recreation and retail sectors are also prominent and support 6% and 11% of employment respectively.

Part-time employees are more likely to have temporary or zero-hour contracts than full-time employees and are thus more vulnerable to job losses or reductions in working hours in the case of an economic downturn.

**Chart 6:** Share of part-time employees in each industry and industry share of total employment in Arran, 2018

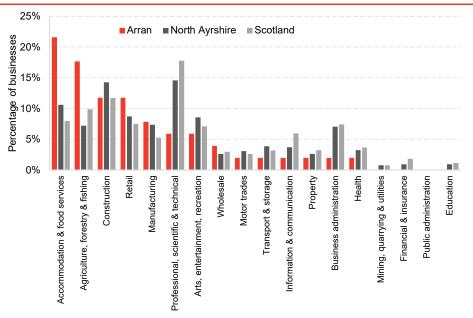


**Source:** ONS BRES /NOMIS

Chart 6 shows that Arran has just over a third of all employees working part-time, which is similar to North Ayrshire and Scotland. However, employees in certain sectors are more likely to work-part time compared to the rest of the Arran economy. Retail, the second most important sector in Arran, had 56% of all employees working part-time. The accommodation & food services sector had 30% of employees working part-time. However, it must be noted that the share of part-time jobs in the accommodation & food services sector in Arran is significantly lower compared to North Ayrshire and Scotland where 57% of jobs are part-time (see Appendix 2 for more details).

Looking at the number of businesses in each industry from the Interdepartmental Business Register<sup>5</sup> can also help to provide an indication of the sectoral make-up of the Arran economy.

Chart 7: Share of businesses by industry, Arran, North Ayrshire, and Scotland, 2019



**Source:** ONS IDBR /NOMIS

The business data confirms that accommodation & food services is the most important sector of the Arran economy. However, it also shows that Arran has quite a sizable share of businesses operating in the agriculture, forestry, and fishing sector. It is possible that most of these businesses are local family-run farms with only a few employees. However, since farm agriculture is not included in the employment data from BRES for Arran, looking only at employment counts could understate the prominence of this sector in the Arran economy.

Furthermore, the business data also shows that the large number of jobs in the transport sector on Arran is supported by only a small number of companies (most likely ferry and bus operators). Given that during the height of the lockdown ferry capacity was significantly reduced it is possible that many jobs in this sector have been put on furlough.

Tourism and tourism-facing industries have been disproportionately impacted by the Coronavirus pandemic as more employees were furloughed in these industries and capacity constraints have meant that, even as we return to 'normality', less staff are needed compared to the pre-Covid period. Therefore, it is expected that these industries, which make up a large part of the Arran economy, will have taken a significant hit from the ongoing pandemic.

<sup>5</sup> Source: NOMIS

## 4. The immediate impact of Covid-19

According to data from HMRC, 29% of all eligible jobs in North Ayrshire were furloughed in July. Data for small local areas is not available, however, we can extrapolate this figure to obtain an estimate of the total number of jobs furloughed in Arran. Applying the share of furloughed employment in North Ayrshire to Arran, our estimates indicate that in July there may have been around 580 people on furlough in Arran.

We can further look at the share of jobs furloughed in each sector in the UK from the ONS Business Impact of Coronavirus Survey to estimate the number of jobs furloughed in each sector in Arran.

300 70% Estimated number of jobs furloughed 60% portion Estimated number of jobs furloughed (LHS) 250 Share of jobs furloughed in sector (RHS) 200 40% 30% furloughed in sector 10% 0% 150 100 50 Education Manufacturing Water Supply & Waste **Entertainment and** Transportation and Storage Construction Admin and Support Services Human Health And Social Work Professional, Scientific And Real Estate Information And Accommodation And Food Wholesale and Retail Communication Management Recreation Arts,

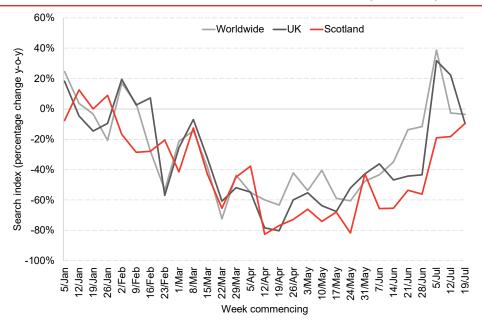
Chart 8: Estimated number and share of jobs furloughed by sector, Arran, July 2020

**Source:** HMRC, ONS BICS, FAI calculations

Our estimates show that almost half of all furloughed jobs in Arran may be in the accommodation & food services sector. This constitutes around 14% of overall employment in Arran.

The tourism industry has clearly taken a hit from the pandemic due to social distancing measures and restrictions on travel. Quantifying the impact of Covid-19 on the tourism industry in small local areas can be difficult due to the lack of data availability. Therefore, looking at high-frequency indicators and 'big data' can provide useful insights into consumer sentiment and behaviour. Chart 9 shows data for Google searches for 'Isle of Arran' which can be used as a proxy for tourist interest in the island.

Chart 9: Google searches for Isle of Arran, in Scotland, UK, and Worldwide, 5th January – 26th July 2020



Source: Google Trends

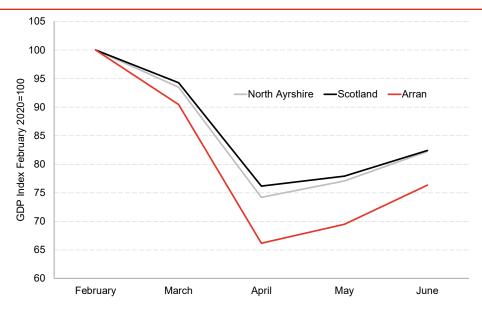
At the beginning of the lockdown interest in the Isle of Arran fell to 60% below the levels seen last year. With news of the easing of lockdown restrictions and reopening of the tourism sector in Scotland interest started recovering in June, albeit at a faster pace in the UK and worldwide than in Scotland. At the start of July interest in the UK and worldwide even exceeded last year's levels. This suggests that interest in tourism to the island may be strong over the summer months and any limits to ferry capacity may act as an obstacle to meet the levels of consumer demand.

### Modelled Impact on the Arran economy

The Scottish Government now produce monthly GDP for Scotland, which have provided a number of insights into the effect on the Scottish economy first of the lockdown in March and April, and then of the easing of restrictions during May and June.

We can model the potential impact on the Arran economy, based on the sectoral mix as set out in Table 1. As expected, this shows that the impact of the lockdown is more severe on the Arran economy than the Scottish average, due to the large concentration of Accommodation & Food Services and Transport & Storage, which have both been hit very hard.

Chart 10: GDP Index, Modelled for Arran & North Ayrshire, Outturn for Scotland, Feb-June 2020, Feb 2020=100



Source: Scottish Government, FAI Modelling

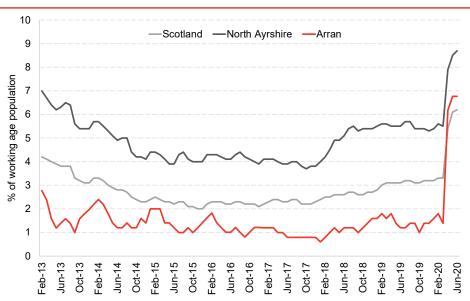
# 5. Impact of Covid-19 on Universal Credit Claimants and unemployment

Despite support from various government schemes many businesses have been unable to cope with the fall in demand induced by Covid-19 and have had to resort to reducing workforce numbers. Headline unemployment data are usually available with a lag and given the survey-based nature of the data it may not provide an accurate picture of the labour market in a small local area.

Chart 10 shows the Claimant Count (a composite of the number of people claiming Jobseeker's Allowance and those claiming Universal Credit who are required to seek work to qualify for their benefits) in Arran, North Ayrshire and Scotland as a share of the working age population.

This indicator is not directly comparable to the unemployment rate because there are people who are unemployed and not claiming a benefit and there will also be people who claim benefits but do not fall under the statistical definition of unemployment. However, it serves as a useful, timely indicator of people who are out of work when looking at local areas.

**Chart 11:** Claimant Count as a share of working age population, Arran, North Ayrshire and Scotland, February 2013 – June 2020



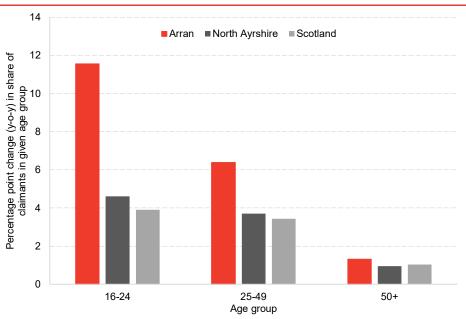
**Source:** ONS NOMIS

Historically, Arran has had a lower number of benefit claimants as a share of working age population compared to North Ayrshire and Scotland. In March 2020 there were around 35 people claiming benefits in Arran. In April this number rose to 155, further rising to 170 in May and remaining at this level in June. This represents a 5.4 percentage point (p.p.) increase in the share of the working age claimants between March and June, compared to an increase of 3.2p.p. in North Ayrshire and 2.9p.p. in Scotland as a whole. This suggests that the Arran labour market has been more severely affected than surrounding areas and Scotland.

This increase may be due to the disproportionate impact of the lockdown on services which rely on 'social spending' such as accommodation and food services. Furthermore, the tourism industry which supports most of the Arran economy effectively came to a standstill for 2 months. The uncertain outlook for the tourism industry likely led many employers to reduce workforce numbers.

As is the case with most economic crises, certain groups in society are more affected by job losses than others. Chart 12 shows that young people have been the most severely affected age group in terms of job losses and even more so in Arran than in the rest of North Ayrshire and Scotland.

**Chart 12:** Change in claimant shares across different age groups, Arran, North Ayrshire, Scotland, June 2019 and June 2020



Source: ONS NOMIS

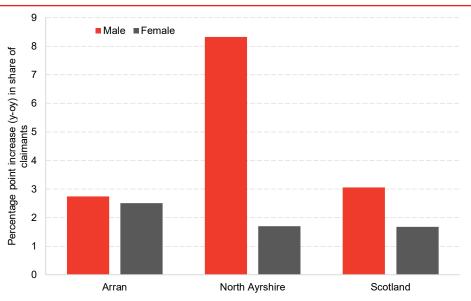
The share of claimants in the population of 16-24-year olds increased by 11.6p.p. in Arran, compared to 4.6p.p. in North Ayrshire and 3.9p.p. in Scotland. The impact has also been more severe compared to North Ayrshire amongst 25-49-year olds, but similar amongst the 50+ age group.

The OECD points out that the loss of jobs for young people may have long-term scarring effects on their future career paths and earnings<sup>6</sup>. Young people with a history of unemployment are likely to have fewer career development opportunities, lower wages, poorer prospects for better jobs and lower pensions.

Chart 13 shows that the crisis has had a differing impact on men and women in North Ayrshire and Scotland. However, despite this difference, the impact of job losses in Arran were fairly even amongst both men and women. The disproportionate impact on men in North Ayrshire relative to Arran and Scotland may be a result of a higher concentration of the manufacturing industry, which typically employs a higher share of men.

<sup>6</sup> OECD

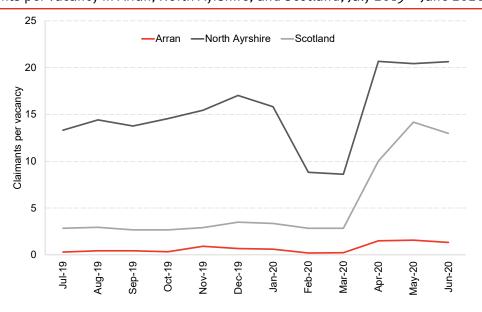
**Chart 13:** Change in claimant shares for men and women, Arran, North Ayrshire, Scotland, June 2019 and June 2020



Source: ONS BICS

Furthermore, it is also important to consider how the number of vacancies has changed in Arran because it determines the pace at which people who have lost jobs are able to regain employment. Chart 14 shows the ratio of claimants to vacancies; using vacancy data from job search engine Adzuna which collates data on the number of jobs advertised from different sources. These range from direct employers' websites to recruitment software providers to traditional job boards thus providing a comprehensive view of current online job adverts.

Chart 14: Claimants per vacancy in Arran, North Ayrshire, and Scotland, July 2019 – June 2020



Source: ONS NOMIS, Adzuna Labour Market Stats

Arran has historically had a higher number of advertised vacancies relative to the size of its workforce compared to North Ayrshire and Scotland. In fact, before the coronavirus crisis, Arran had been facing a shortage of labour supply – with less than one claimant for each advertised vacancy.

At the beginning of the crisis the number of vacancies in Arran halved from around 200 in February to just over 100 in April. This constitutes a similar magnitude of decline to North Ayrshire and Scotland. However, given the small size of the Arran workforce, the ratio of claimants per vacancy did not rise as sharply as in North Ayrshire and Scotland.

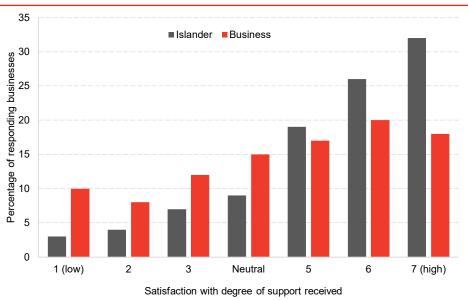
Nevertheless, given the labour shortages experienced prior to the pandemic, it may be the case that a large share of these vacancies have been unfilled for several months. Some of the jobs may require skills which the local population cannot offer. This means that businesses in Arran have to rely on commuters from North Ayrshire and other parts of Scotland to meet these skill requirements, making ferry transport a crucial mode of transport for local employers.

# 6. Impact of roll back of government support and restrictions on ferry capacity

Government support has been provided widely to businesses on Arran, especially through the Coronavirus Job Retention Scheme and Self-Employment Income support scheme. As shown in the previous section, almost a half of all furloughed jobs on the island are likely to be in the accommodation and food services sector, which is almost entirely reliant on tourism. These jobs are at particular risk once the government's job retention scheme is wound down.

According to the Arran Recovery Community Survey, most businesses (55%) have been satisfied with the amount of funding support they have received during the crisis.

**Chart 15:** Satisfaction with amount of information, support funding and services received during the crisis, surveyed 29th May – 2nd June 2020



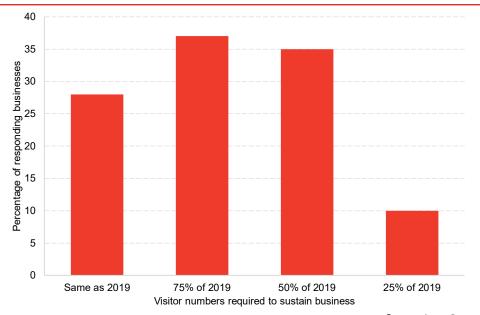
Source: Arran Recovery Community Survey

However, starting from August, the job retention and income support schemes will begin to be wound down and businesses will need to contribute more towards the wages of their employees. In the case of Arran, this means that most businesses will need to rely on tourists again in order to generate revenue.

According to the Arran Recovery Community Survey almost 70% of businesses, directly or indirectly, depend on the tourism sector. The previous section showed that tourist interest in Arran fell by around 60% during the height of the lockdown but returned to pre-crisis levels at the start of July. Nevertheless, businesses have already faced several months without the inflow of tourists and thus overall visitor numbers are likely to be down substantially for 2020.

The Arran Recovery Community survey also asked businesses what number of tourists, compared to last year, they will need in order to sustain their business. See Chart 16.

Chart 16: Visitor numbers required to sustain business, surveyed 29th May – 2nd June 2020

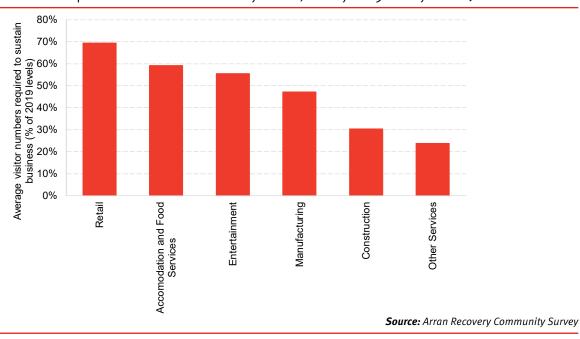


Source: Arran Recovery Community Survey

28% of businesses require the same visitor numbers as in 2019 to survive and are thus already at risk. A further 37% of businesses require at least 75% of last year's visitor numbers, putting them at risk too. These businesses are the most vulnerable as government support is scaled back.

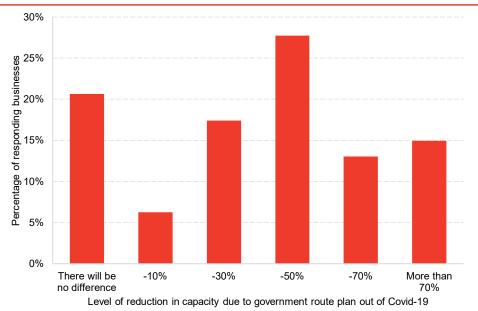
Looking across sectors, retail and accommodation and food services are the most reliant on tourists to sustain their business. See Chart 17.

Chart 17: Visitor numbers required to sustain business by sector, surveyed 29th May – 2nd June 2020



Furthermore, even though some sectors of the Scottish economy have been able to resume trading, they are likely to face a reduction in capacity due to social distancing measures remaining in place for some time to come. The Arran Recovery Community Survey asked businesses to what degree will the government's route map from Covid-19 reduce the capacity of businesses on Arran. See Chart 18.

Chart 18: Level of reduction in capacity due to government route map out of Covid-19, surveyed 29th May – 2nd June 2020



**Source:** Arran Recovery Community Survey

28% of businesses will see their capacity to provide services fall by 70% or more and 28% of businesses will see their capacity fall by 50% due to government restrictions. Social distancing measures are likely to have the greatest negative impact in sectors such as accommodation and food services and entertainment, which have already been the most severely hit by the crisis.

Ferries are the primary mode of transport to and from Arran. Restrictions on ferry capacity are a primary concern for the tourism industry. According to data from the Arran Ferry Committee, the number of ferry passengers dropped significantly in 2020. See Chart 19.

Chart 19: Number of ferry passengers travelling to and from Arran, January 2018 – June 2020

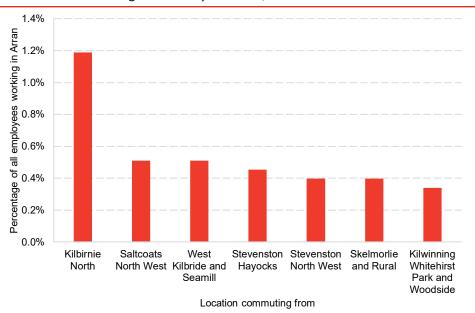


**Source:** Arran Ferry Committee

The number of passengers started falling already at the start of the year when the pandemic started surfacing in some parts of the world. In January and February 2020, the number of passengers fell by 17% and 44% respectively compared to the same months in 2019. However, the full effect of Covid-19 on ferry capacity came into effect in April and May 2020. The number of ferry passengers fell by 98% in both months compared to the previous year. In June the number of passengers rose only slightly and remained 95% below last year's levels.

However, apart from for tourists, ferries are also used by local workers for commuting to and from the island. The latest data available on commuting flows – which is from the 2011 census – can provide some indication of the scale of jobs on the island that are reliant on ferries.

Chart 20: Share of workers commuting to Arran by location, 2011



**Source:** Commute Datashine based on 2011 census data from National Records of Scotland

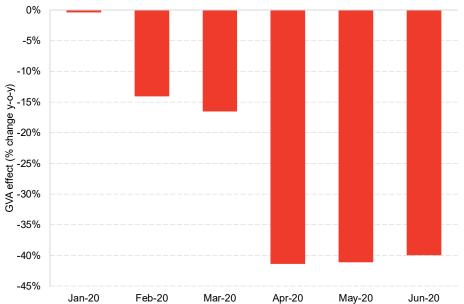
According to the most recent census, there were 134 workers commuting to and from Arran on a regular basis. Half of these people were commuting to Arran from surrounding areas in North Ayrshire. This constitutes 3.8% of all people in employment in Arran. Most workers were commuting from Kilbirnie North, with a relatively even share of workers commuting from other parts of North Ayrshire.

# 7. Impact of restrictions on ferry capacity on Arran's GVA

Lower ferry capacity to and from Arran has clearly led to a lower number of tourists and visitors to the island. As a result, the Arran economy has taken a hit through a loss of revenue that tourists generate through direct and indirect spending on goods and services.

Using our own GVA estimates for Arran (see economic indicators section), data on tourist spending, from the STEAM report from Global Tourism Solutions (UK) Ltd., ferry passenger numbers, from the Arran Ferry Committee, and sector reliance of the Arran economy, from the Arran Community Recovery Survey, we have estimated the impact that a reduction in the number of ferry passengers this year may have had on Arran's GVA.

Chart 21: Monthly effect of reduction in ferry passengers on GVA in Arran, 2020



**Note:** The figures presented in this chart constitute the 'net effect' of a reduction in tourist numbers on the island's GVA as a result of reduced ferry capacity. A contraction in domestic spending may have further decreased the island's overall economic output on top of the effects presented above.

Source: FAI calculations based on ONS, BRES, North Ayrshire Council, Arran Ferry Committee, Arran Community Recovery Survey data

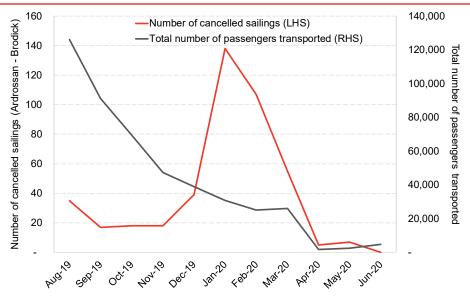
According to our estimates, Arran's GVA in the first half of 2020 has fallen by 33% as a result of a lower number of ferry passengers compared to the first half of 2019. In cash terms, GVA in the first half of 2020 was lower by circa £9.3m compared to the first half of 2020. The effect was most severe in April and May when monthly GVA fell by around 41% compared to the same months last year. The number of ferry passengers in June rose only slightly and thus monthly GVA was down 40% in that month compared to June last year.

Furthermore, our estimates show that on average, each day of ferry operation contributes approximately £169,000 to the island's economy. This effect is higher in summer months when tourist and passenger numbers are high, and consequently lower during the winter months.

We have estimated that between August and December 2019 a single ferry journey on average contributed circa £13,200 to Arran's economy. Since in 2020 there was a lower average number of passengers on each ferry, we have estimated that between January and June 2020, the average contribution of a single ferry journey to the island's economy was circa £4,900.

As shown in Chart 22, there have also been several cancellations of scheduled ferry services over the past year. These cancellations could have also contributed to a loss in GVA.

Chart 22: Cancelled sailings and total number of passengers transported, August 2019 – June 2020



Source: Ferry Committee and Caledonian MacBrayne Route Performance data

The highest number of cancellations reported on the main route (Ardrossan – Brodick) that tourists rely on was in February 2020. The number of cancellations subsequently fell from April 2020 onwards. However, as discussed earlier, the majority of GVA loss during these months may have occurred on the demand side due to a lower number of passengers coming to the island and an associated reduction in the number of passengers travelling on each ferry, rather than on the supply side (passengers being unable to travel due to a lower frequency of services).

## 8. Conclusions

Arran is a unique island economy in North Ayrshire and its industrial mix has made it particularly exposed to the ongoing Coronavirus pandemic. A large number of businesses in Arran depend upon so-called 'social spending' and its tourism industry along with tourism-facing industries have been disproportionately impacted by lockdown measures and subsequent capacity constraints in restaurants, bars and cafes.

Arran is reliant upon its ferry services to transport commuters and tourists to the local area. We estimated that, on average, each day, the ferries contribute just under £170,000 to the island's economy. With passenger numbers almost falling to zero, due to lockdown restrictions, the immediate impact of Covid-19 on the local economy is clear.

As the government begins scaling back its furlough and self-employment income support schemes, the true impact of Covid-19 on unemployment and living standards will begin to crystalise. Unfortunately, due to capacity constraints, a large number of businesses in Arran remain reliant upon government support despite eased lockdown measures.

Although Arran is a part of North Ayrshire, its economy is different and economic policy to support this island out of the ongoing crisis must reflect this.

# 9. Appendices

### Appendix 1

Table 3: Employment by sector in Arran, 2018

Industry	Employment count		
Accommodation and food services	500		
Transportation and storage	175		
Arts, entertainment and recreation	100		
Construction	125		
Wholesale and retail	300		
Manufacturing	150		
Public administration	125		
Education	150		
Water supply	10		
Real estate	15		
Human health and social work	150		
Agriculture, forestry and fishing	25		
Other services	15		
Admin and support services	50		
Professional, scientific and technical	40		
Information and communication	15		
Financial	10		
Mining and quarrying	0		
Electricity, gas, steam and air conditioning supply	0		

**Note:** These figures exclude farm agriculture (SIC subclass 01000). The level of rounding applied varies by estimate. Please see article for further information on how rounding is applied  $\frac{\text{https://www.nomisweb.co.uk/articles/1103.aspx}}{\text{https://www.nomisweb.co.uk/articles/1103.aspx}}$ .

Source: BRES

Appendix 2

Table 4: Full-time / part-time employees by sector in Arran, North Ayrshire, and Scotland, 2018

Sector	Arran				North Ayrshire	Scotland
	Full-time (count)	Full-time (% of all employees)	Part-time (count)	Part-time (% of all employees)	Part-time (% of all employees)	Part-time (% of all employees)
Agriculture, forestry and fishing	20	67%	10	33%	50%	46%
Mining and quarrying	0	N/A	0	N/A	0%	4%
Manufacturing	125	o%	35	22%	8%	9%
Electricity, gas, steam and air conditioning supply	0	N/A	0	N/A	2%	10%
Water supply; sewerage, waste management and remediation activities	O	N/A	0	N/A	10%	9%
Construction	100	91%	10	9%	11%	10%
Wholesale and retail trade; repair of motor vehicles and motorcycles	125	50%	125	50%	54%	46%
Transportation and storage	150	83%	30	17%	20%	18%
Accommodation and food service activities	350	70%	150	30%	57%	57%
Information and communication	10	100%	0	0%	17%	15%
Financial and insurance activities	10	100%	0	0%	20%	17%
Real estate activities	5	33%	10	67%	22%	27%
Professional, scientific and technical activities	30	75%	10	25%	24%	21%
Administrative and support service activities	30	60%	20	40%	42%	36%
Public administration and defence; compulsory social security	50	40%	75	60%	20%	29%
Education	75	50%	75	50%	43%	44%
Human health and social work activities	75	50%	75	50%	42%	46%

	_	Ar		North Ayrshire	Scotland	
Sector	Full-time (count)	Full-time (% of all employees)	Part-time (count)	Part-time (% of all employees)	Part-time (% of all employees)	Part-time (% of all employees)
Arts, entertainment and recreation	75	75%	25	25%	54%	51%
Other service activities	5	50%	5	50%	50%	42%
Total	1,250		700			

**Note:** The totals above may vary slightly from the totals in the table in Appendix 1 since they reflect the number of employees. Appendix 1 reports the 'employment' variable from NOMIS, which is a preferred measure, but does not include a part-time / full-time breakdown.

**Source:** BRES

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