The impact of Covid-19 on the NI economy: modelled results for Q3 2020

December 2020

Background

The Fraser of Allander Institute is working on a project examining the potential impact of the current coronavirus pandemic on the Northern Ireland economy, on behalf of the Department for the Economy.

The figures contained in this analysis are modelled from (mainly) UK level sectoral detail. It does not replace the official data for Q3 2020, which will be available when the official NI Composite Economic Index (NICEI) is published. The official figures for Q2 are available on the NISRA website.

Therefore, the analysis should only be used with appropriate caveats. Primarily it is based on UK GDP data. However, different countries and regions in UK have had slightly different lockdown experiences, with slightly different restrictions and differential timing of when these were relaxed.

Impacts on headline GDP

We have been provided with the detailed weights and sources used to build the short-term indicator for NI and are also examining the methodology used for the new GDP measure.

Following the publication of UK GDP in November, we have produced a detailed set of quarterly results based on:

- The low-level aggregates data which shows very detailed sectoral changes in Q2 & Q3 at the UK level;

- Monthly GDP data;

- The Business Impacts of Coronavirus Survey (BICS), up to wave 16; and

- BRES 2019 for NI, to calculate updated regional impacts.

Data from the BICS survey at the start of the first lockdown in April has shown that there was a higher level of business closure in Northern Ireland than the UK average (Chart 1). However, since May the gap in the level of openness between the UK and NI narrowed as more businesses resumed trading.

Whilst in broad terms, the experience of countries and regions in the UK tracks the UK pattern, some regional disparities are to be expected. The gap between the UK average and NI became apparent in the first publication of the country and regional breakdown in Wave 3 of the survey, and persisted through most of the severest lockdown period, easing slightly between the middle to the end of May. Both this regional disparity and the sectoral levels of closure apparent in the BICS have now been incorporated into our modelling to try to capture the differential impact on the NI economy.

Chart 1: Level of openness of businesses, early April to early October
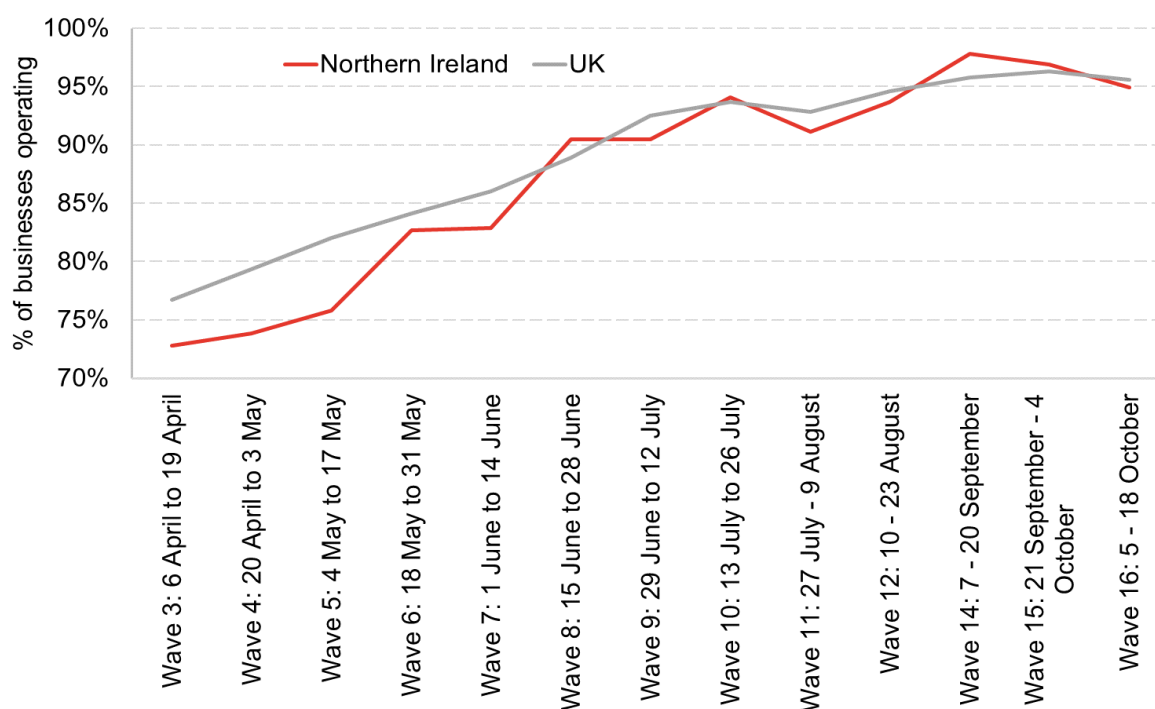

Source: ONS BICS Survey

Table 1: Modelled growth in NI and outturn data for the UK: Q2 & Q3 2020

SIC code	Sector name	NI Weight	NI Q2	NI Q3	UK Weight	UK Q2	UK Q3
A	Agriculture	1.8%	-6.8%	6.4%	0.6%	-6.0%	5.8%
B	Mining and Quarrying	0.2%	-1.5%	1.3%	1.1%	-1.5%	1.3%
C	Manufacturing	15.2%	-26.6%	19.1%	10.1%	-21.2%	18.8%
D	Electricity	1.2%	0.0%	0.0%	1.4%	-5.6%	8.1%
E	Water Supply	1.6%	-6.3%	1.2%	1.3%	-4.2%	4.8%
F	Construction	6.7%	-47.5%	20.0%	6.4%	-35.8%	41.9%
G	Wholesale and retail	13.8%	-28.2%	36.1%	10.4%	-20.8%	30.8%
H	Transport & storage	3.9%	-40.1%	15.5%	4.0%	-29.7%	24.0%
I	Accommodation & food services	2.5%	-130.6%	392.8%	2.9%	-85.8%	454.5%
J	Info & communication	3.5%	-12.4%	-0.1%	6.6%	-10.6%	4.8%
K	Finance & insurance	3.6%	-5.9%	2.5%	6.8%	-4.6%	2.2%
L	Real estate	11.4%	-3.8%	0.3%	13.5%	-2.7%	0.6%
M	Professional, scientific & tech	4.0%	-19.4%	2.2%	7.7%	-18.1%	8.8%
N	Admin & support services	3.1%	-32.4%	3.9%	5.3%	-30.3%	14.2%
O	Public admin. and defence	8.4%	0.6%	0.5%	4.9%	0.6%	0.5%
P	Education	8.4%	-34.7%	2.0%	5.7%	-27.6%	25.3%
Q	Human health & social work	10.6%	-29.1%	0.7%	7.5%	-27.2%	11.7%
R	Arts, entertainment, & recreation	1.2%	-79.9%	10.9%	1.6%	-42.2%	33.5%
S	Other services	1.4%	-52.5%	74.6%	1.8%	-48.4%	52.5%
T	Activities of HHs as employers	0.2%	-42.0%	41.3%	0.3%	-42.0%	41.3%
			-22.5%	**21.5%**		**-19.8%**	**15.6%**

Source: FAI Analysis

The table above shows the results of our analysis. The overall results suggest, as before, that we are likely to see a more severe initial impact on the NI economy followed by a faster recovery than the UK average. However, this masks larger differences at a sectoral level given the detailed weighting of the NI economy.

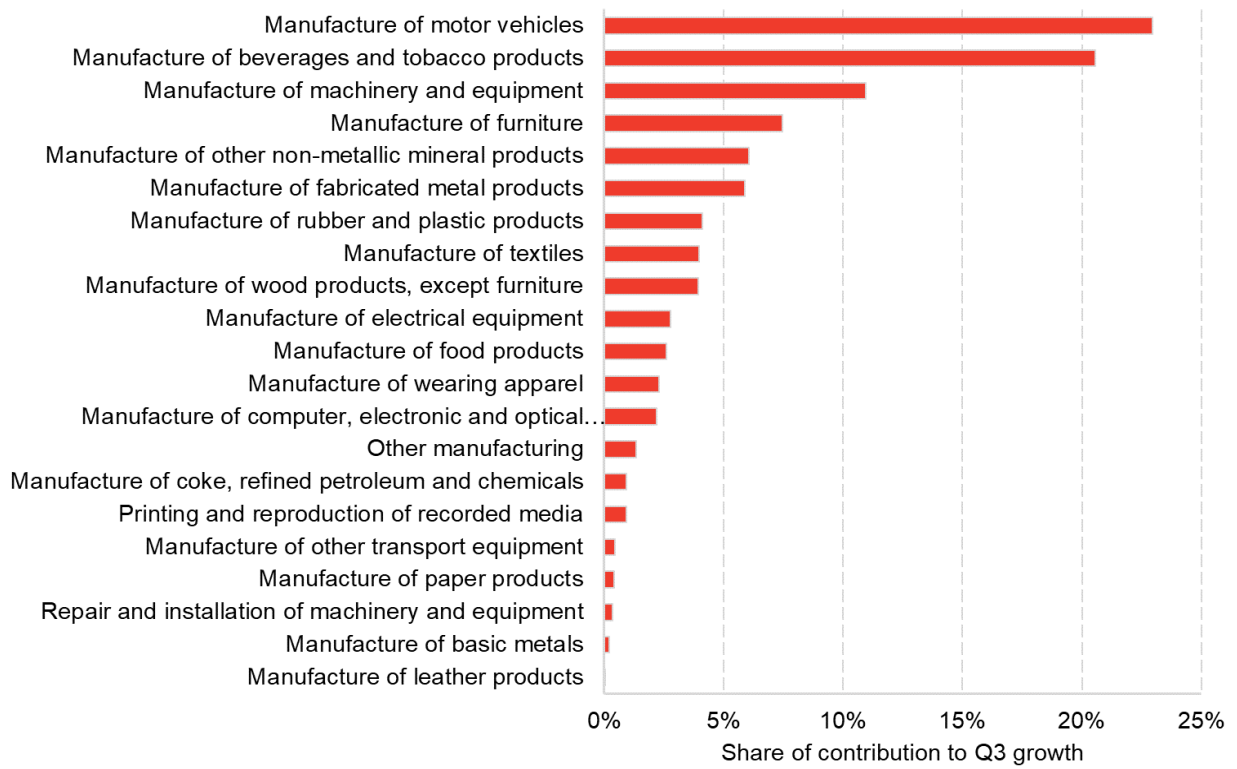*Chart 2: Specialisation in the NI Economy*
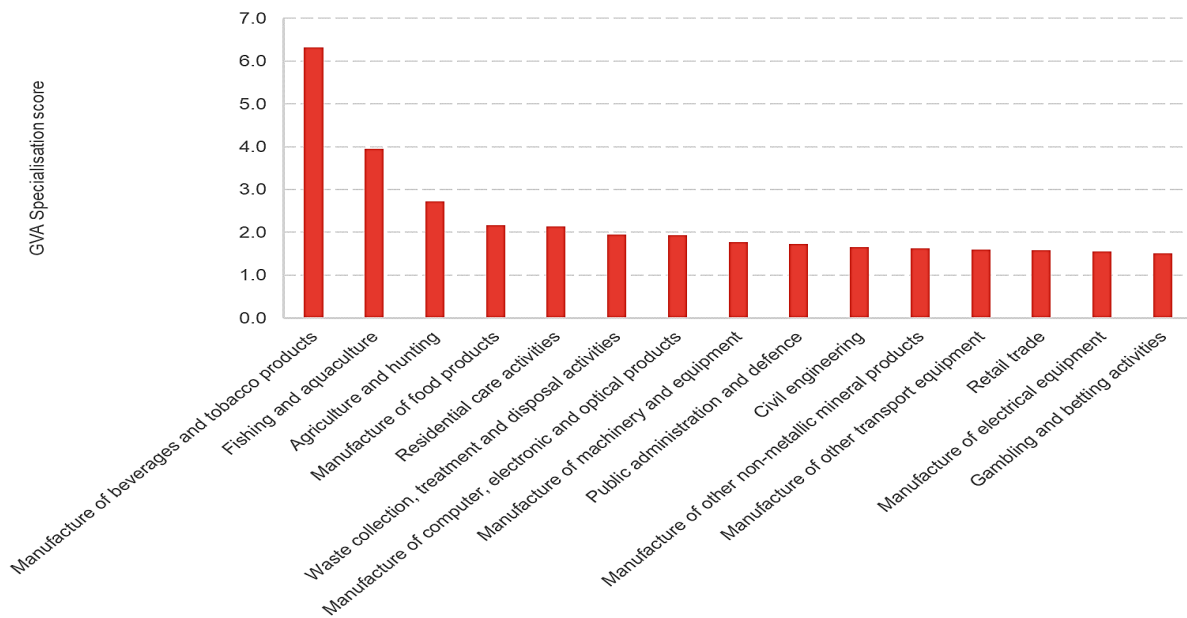
Source: FAI Analysis

Chart 2 above shows the areas where the NI economy has a specialisation compared to the UK average, based on the GVA weights. For example, the modelled larger fall in agriculture, forestry and fishing in NI compared to the UK is because of the relative size of the Fishing and aquaculture industry in NI, which has been hit harder than agriculture or forestry.

Charts 3 and 4 show the contributions to Q3 growth of various sub-sectors within Manufacturing and Wholesale & Retail, which have both been important sectors driving growth during lockdown easing.

The manufacturing of motor vehicles, beverages and tobacco products, and machinery and equipment made the strongest contribution to our modelled Q3 growth within the manufacturing sector. Within the wholesale & retail sector, motor trades were the most important driver of growth followed by retail. This is in line with trends captured by real time indicators which show a strong recovery in consumer interest in cars during Q3. This could be due to both pent-up demand (delayed purchases) and a shift away from using public transport.

4

## Chart 3: Estimated contributions to Q3 growth in the Manufacturing sector in NI

Sector	
Manufacture of motor vehicles	
Manufacture of beverages and tobacco products	
Manufacture of machinery and equipment	
Manufacture of furniture	
Manufacture of other non-metallic mineral products	
Manufacture of fabricated metal products	
Manufacture of rubber and plastic products	
Manufacture of textiles	
Manufacture of wood products, except furniture	
Manufacture of electrical equipment	
Manufacture of food products	
Manufacture of wearing apparel	
Manufacture of computer, electronic and optical…	
Other manufacturing	
Manufacture of coke, refined petroleum and chemicals	
Printing and reproduction of recorded media	
Manufacture of other transport equipment	
Manufacture of paper products	
Repair and installation of machinery and equipment	
Manufacture of basic metals	
Manufacture of leather products	

Share of contribution to Q3 growth

Source: FAI analysis

Chart 4: Estimated contributions to Q3 growth in the Wholesale & Retail sector in NI

Share of contribution to Q3 growth
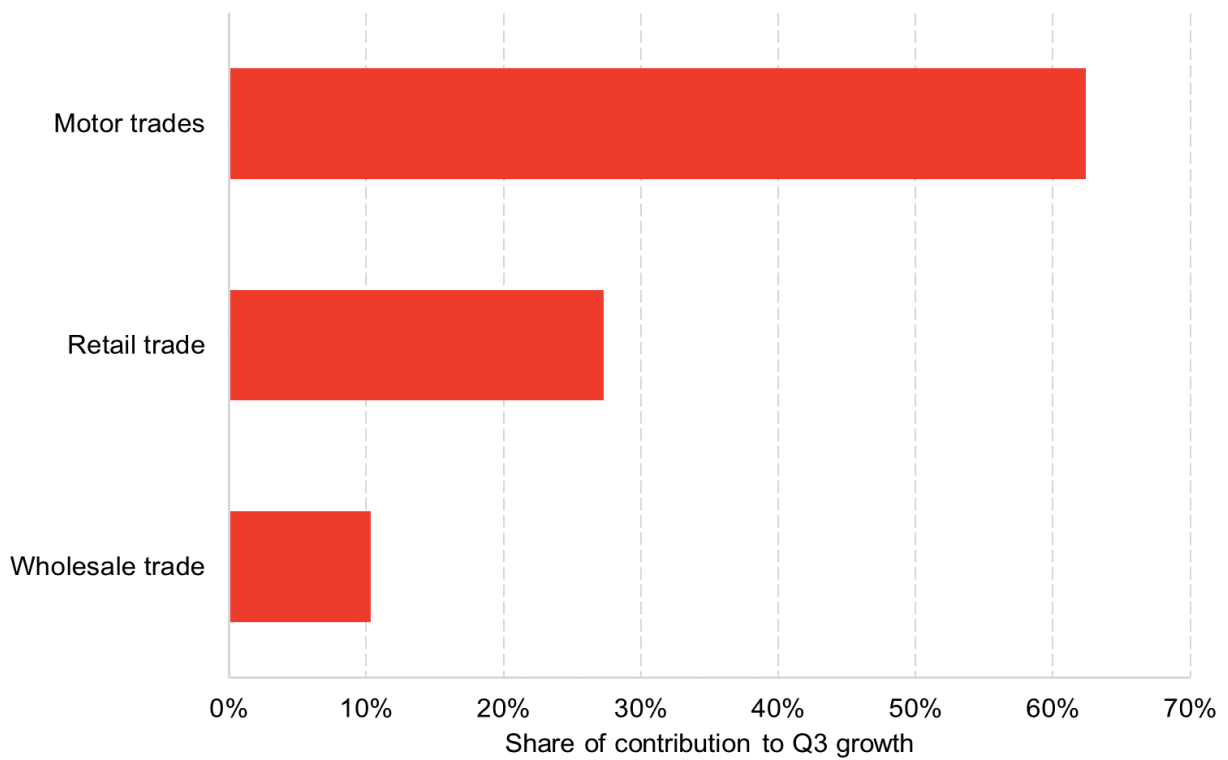
Source: FAI analysis

Again, we need to remember that this may not be how the results manifest themselves in the published Northern Ireland Composite Economic Index for Q2 2020. Obviously, this will have actual outturn data from businesses in NI to draw on for most of the economy. In addition, the measurement of the public sector in the index is currently based on employment, so will not show the falls that we would see in a GDP measure, which captures output (mainly through cost-weighted activity indices). We show, for completeness, our modelled GDP estimate from Q1 2019 to Q3 2020 compared to the NICEI.

Chart 5: Modelled fall in NI GDP / CEI based on UK sectoral falls and outturn GDP (Q1 2019=100)
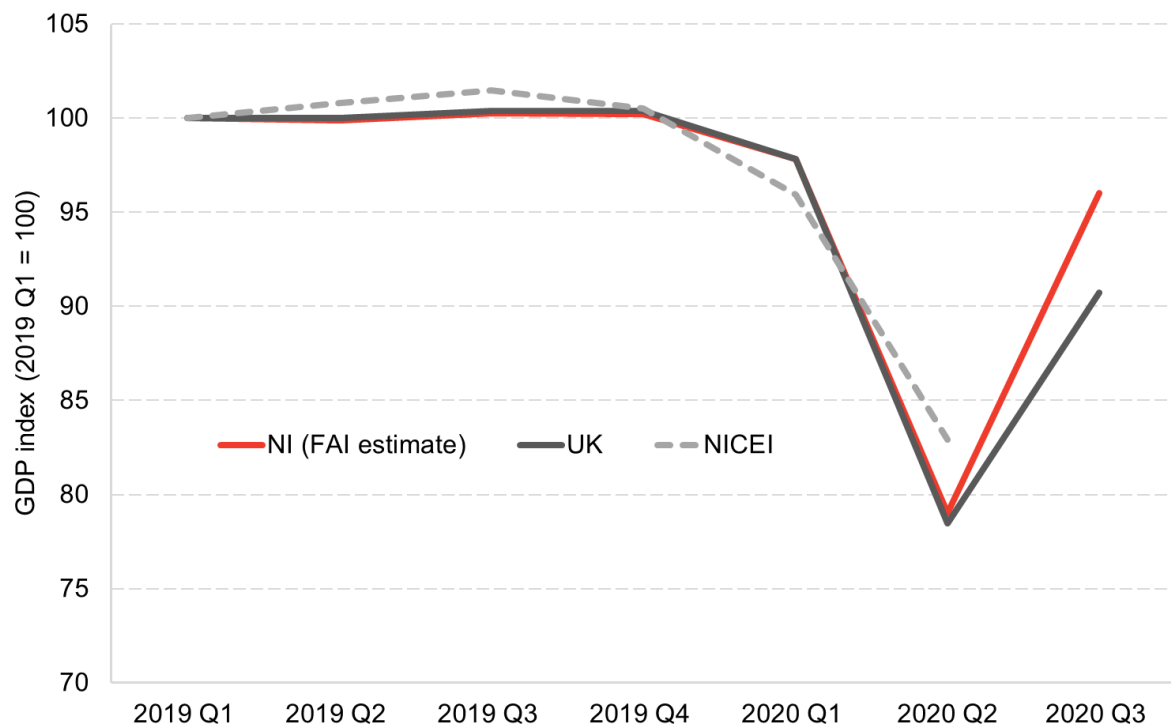
Source: FAI Analysis

The quarterly data mask somewhat the path of the lockdown (during March and April) followed by the easing of restrictions (during May to September). Whilst the monthly data is not as detailed as the quarterly data, we have also modelled the pathway of monthly GDP based on the UK sectoral pathways, benchmarked to the quarterly growth rates we have modelled above.

Table 2: Modelled monthly growth in NI and outturn data for the UK

Time period	NI (modelled)	UK
March	-7.5%	-7.3%
April	-20.4%	-19.5%
May	4.3%	2.6%
June	13.0%	9.1%
July	8.2%	6.3%
August	3.0%	2.2%
September	1.1%	1.0%
Trough to peak (growth from April to September)	32.7%	22.9%
Current position vs February	-2.3%	-8.3%

Source: FAI Analysis

This shows the larger fall in NI during March and April. However, the modelled results suggest that the recovery has been more rapid for this lower base in NI, with higher growth than the UK average throughout May to September. Our estimated trough to peak growth (April – September) was 32.7% in NI compared to 22.9% in the UK. This chimes with the BICS data, which shows a higher degree of "opening up" of the NI economy compared to the UK average.

Chart 6: UK and NI (modelled) monthly GDP (August 2019 =100)
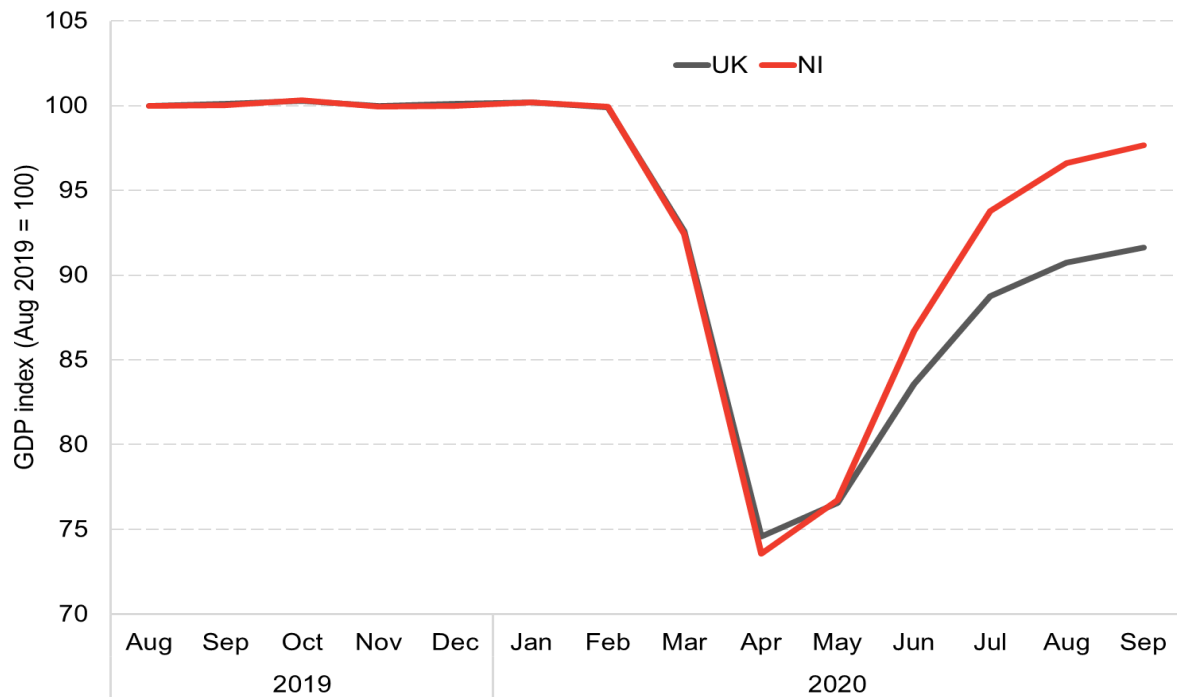
Source: FAI Analysis

Chart 7 shows the regional impacts by District Council Area, based on employment shares of different industries. This shows that all regions have grown in Q3 2020, but at a different pace.

*Chart 7: Modelled regional GDP growth in Q3, NI district council areas*
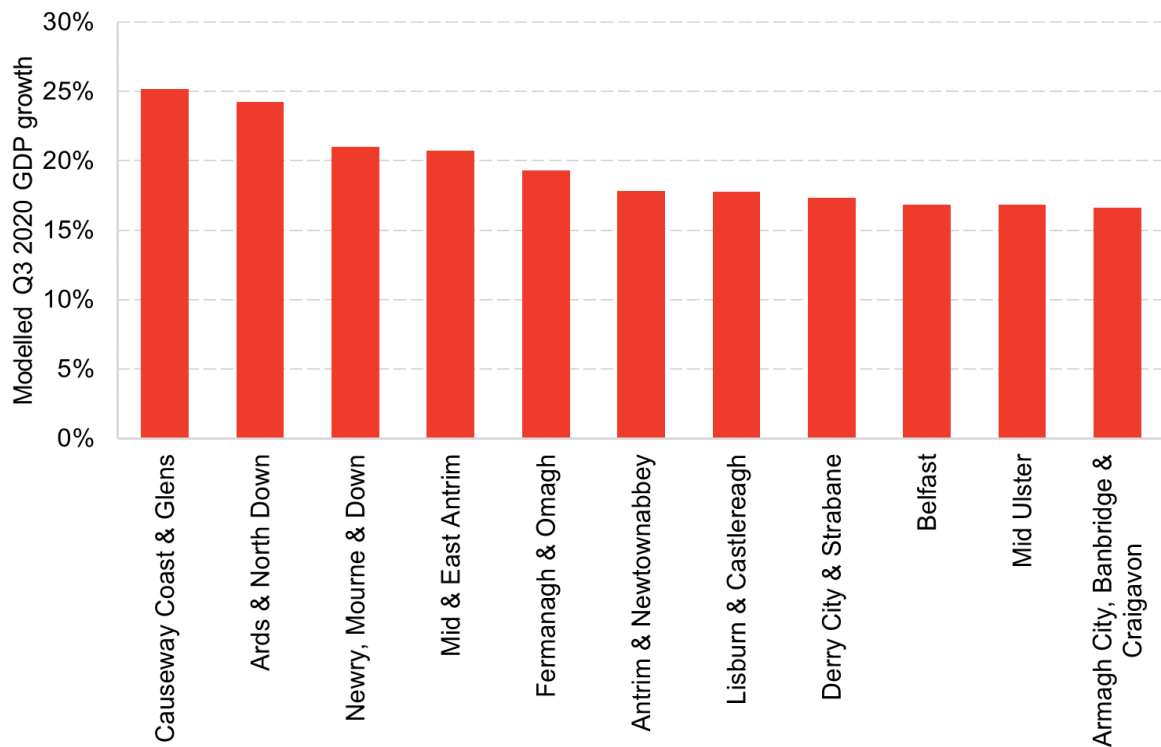
Source: FAI Analysis

In general, the regions which saw the fastest recovery have a specialisation in Accommodation & Food Services, Manufacturing and Wholesale & Retail. These were sectors which were sharply impacted by the first lockdown and a subsequent easing of restrictions helped growth through 'pent-up' demand (purchases which were put on hold in Q2).

For comparison, Chart 8 shows the share of eligible employments furloughed by NI district council area.

Chart 8: Share of eligible employments furloughed as at 31st August 2020
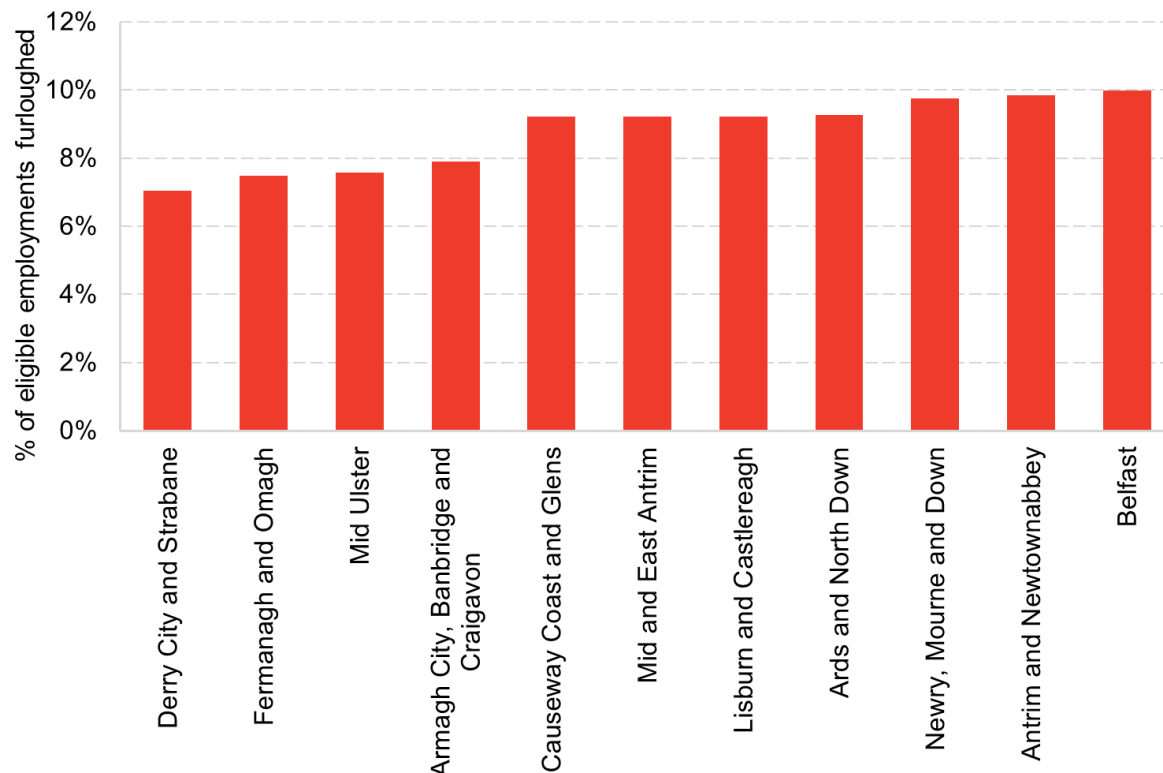
Source: HMRC

There is not a clear correlation between the share of furloughed employments and GDP growth in Q3. There are several possible reasons for this:

- The modelled results are constructed using NI data on employment in local area using the GDP estimates obtained from UK sectoral data. Therefore, the modelled regional GDP estimates are not going to directly capture the experience of firms if there have been specific local issues.

- Productivity (captured by GVA per employee) varies across sectors. For example, productivity in the manufacturing sector is higher than productivity in the arts, entertainment and recreation sector. As a result, there may be a relatively high share of furloughed jobs in a region, but GDP in that region could still have grown more than in other areas due to a re-opening of highly productive sectors.

- The public sector is not eligible for the furlough scheme. As a result, areas with a higher share of public sector employment may have had lower output (e.g. due to a temporary closure of offices), but they would not have been eligible to furlough their employees.

- Regional furlough statistics are based on an employee's last known address to HMRC. The furlough statistics are residence-based but GVA statistics are workplace based. This can have an impact on the modelled estimates especially if there is commuting for work between different local areas.

Alternative real-time economic indicators for Northern Ireland

Traditional economic indicators such as GDP or the unemployment rate are usually available with a significant lag. During the Covid-19 pandemic the FAI has been using several other high-frequency indicators to track developments in the economy. Below we present some of these indicators to give a more complete picture of developments in Northern Ireland compared to the rest of the UK.

Chart 9: Mobility to different venues in major UK cities, Q3 2020
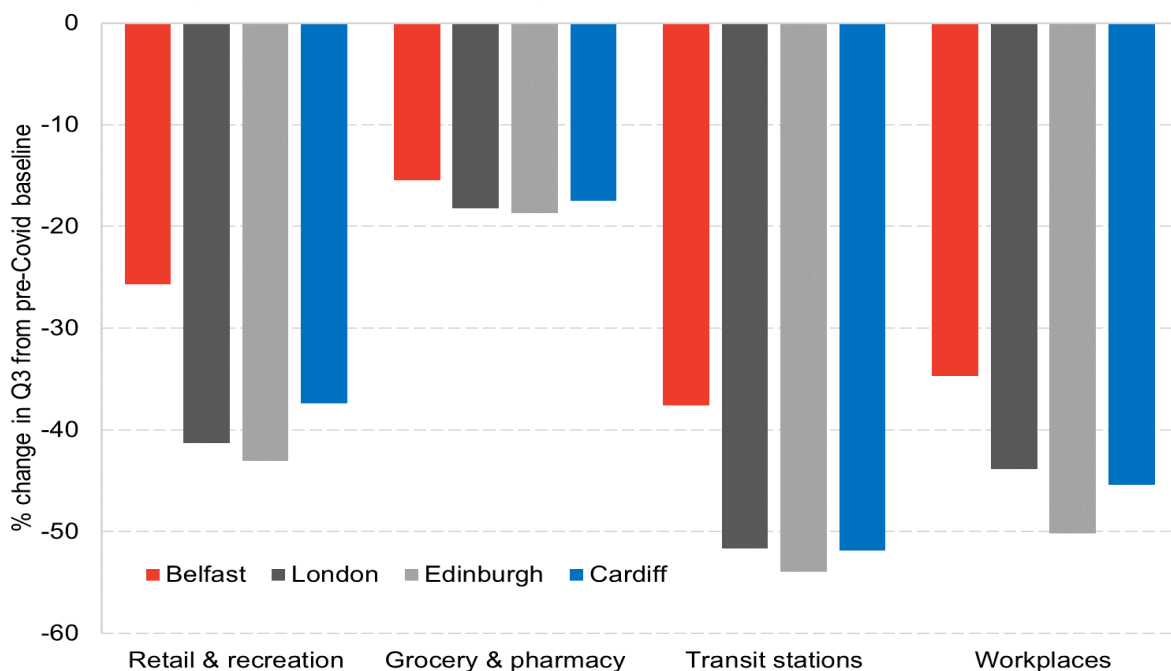

Source: Google Covid Mobility Trends, FAI calculations

Mobility of the population has been restricted since the start of the pandemic. The fall in mobility was the sharpest in Q2 and it remained below pre-Covid levels in Q3. However, as shown in Chart 9 there are differences in mobility across UK cities. In Q3 mobility in Belfast has increased faster compared to London and the other capitals of devolved UK nations. The difference was largest in footfall to retail and recreational venues which was down only 26% in Belfast compared to over 40% in London and Edinburgh.

Trends in Google searches may be a useful indicator of consumer sentiment. Chart 10 below shows the recovery in Google searches for cars, which was driven by the easing of lockdown restrictions over the summer and a potential shift away from using public transport.

*Chart 10: Google searches for cars in Northern Ireland and the UK*
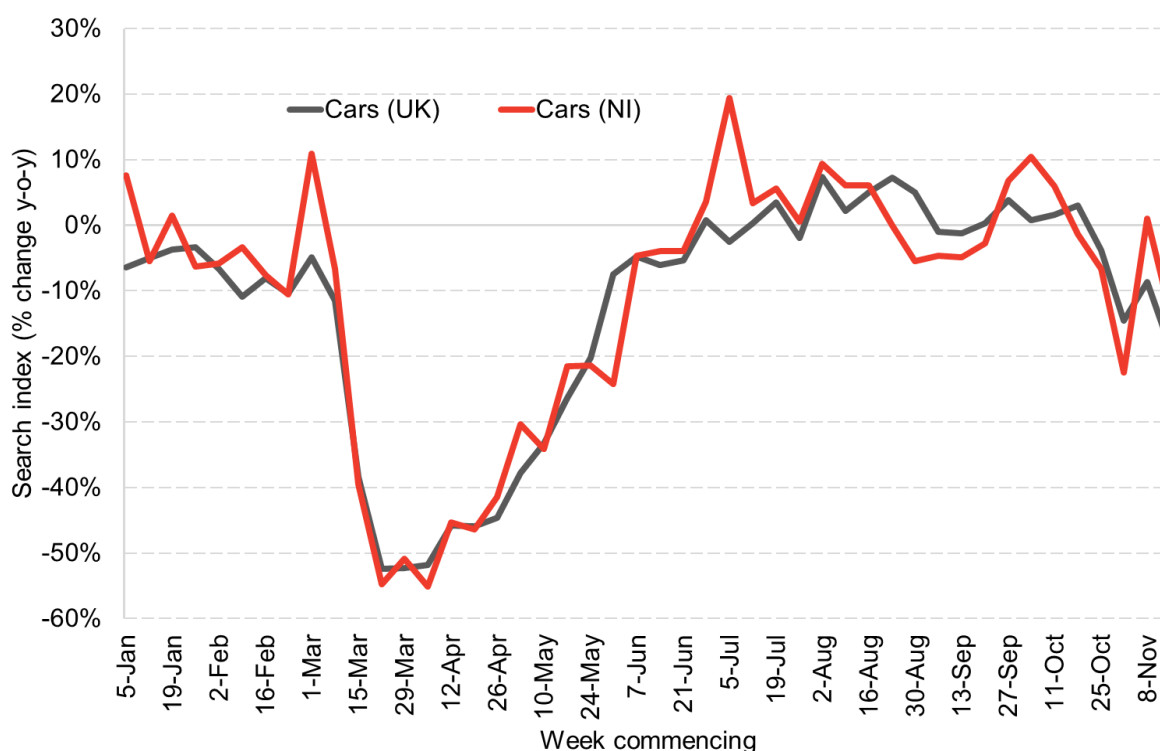
Source: Google Trends, FAI calculations
Note: The search index is an average for the 5 most sold car brands in the UK.

As shown in Chart 11, Northern Ireland had a lower share of the workforce on furlough throughout July and August compared to the rest of the UK. At the end of July, a considerable share of employees returned from furlough once employers had to start contributing to the cost of furloughing employees. However, as of the end of August, the share of furloughed employees was still higher in the UK by circa 2 percentage points compared to NI.

Chart 11: Share of eligible employments furloughed, 1ˢᵗ July – 30ᵗʰ August 2020
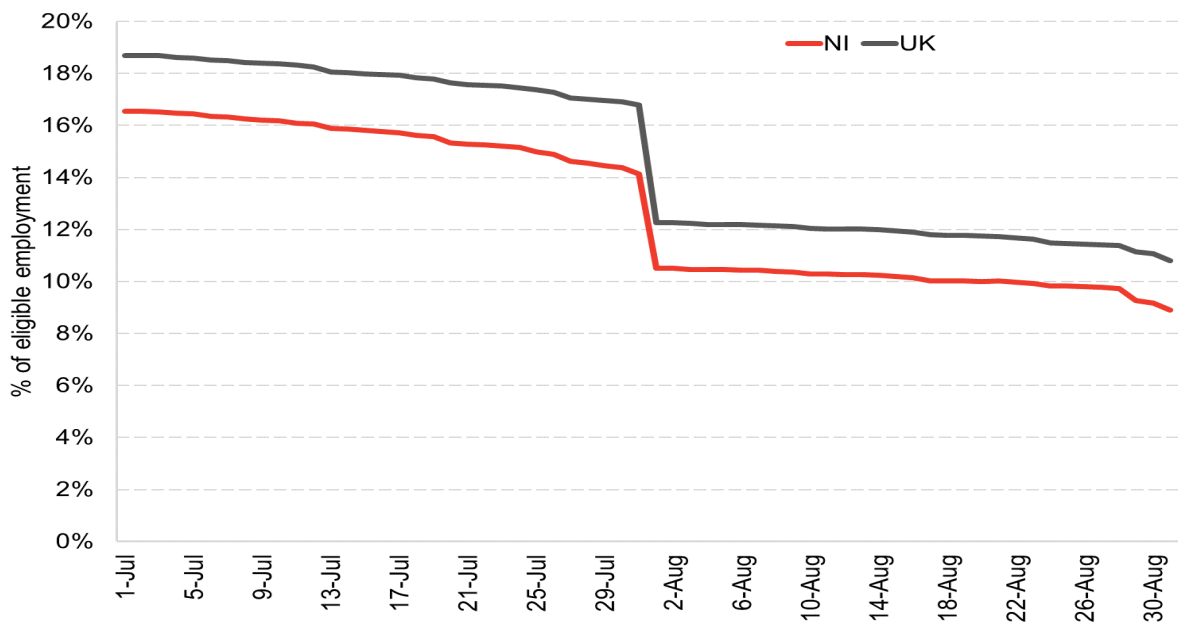
Source: HMRC, FAI calculations

Despite support from the furlough scheme many employers have had to resort to job cuts. Chart 12 shows the Claimant Count (the number of people claiming Universal Credit and Job Seekers Allowance) as a share of the workforce. Although not directly comparable to the unemployment rate, the Claimant Count gives an indication of the number of people out of work in a timelier fashion.

Chart 12: Claimant Count as a share of the workforce, January 2019 – October 2020
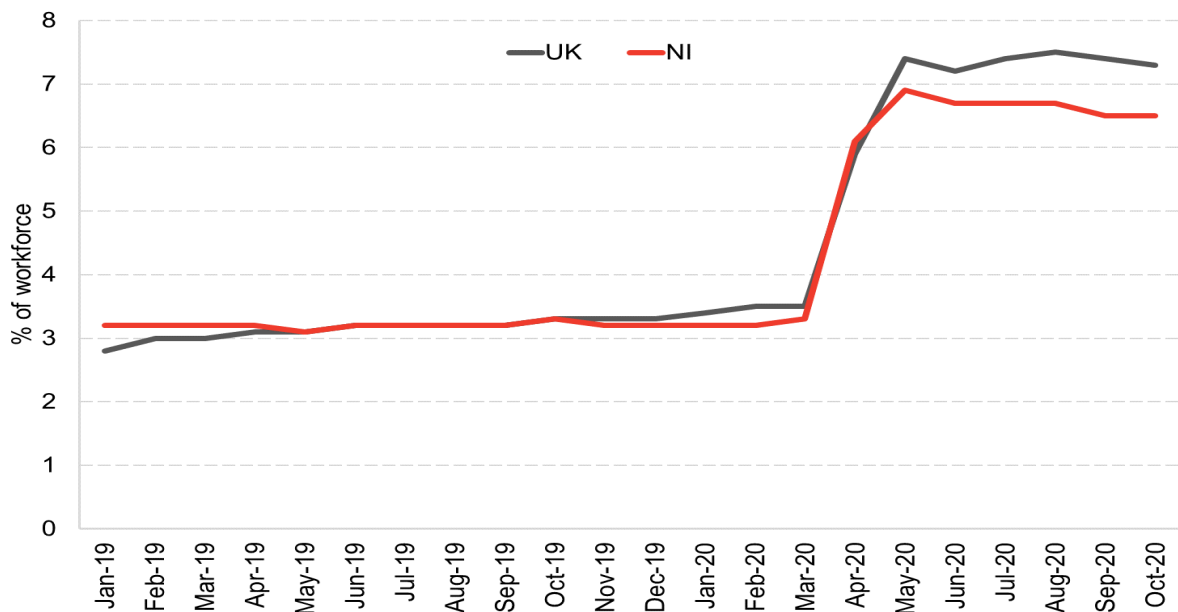

Source: NOMIS

In February the share of claimants in the working age population was 0.3 percentage points higher in the UK compared to NI. In subsequent months the number of claimants rose sharply across all regions, but NI was proportionately less affected. In September the share of claimants was higher by 0.9 percentage points in the UK compared to NI.

The number of employees registered for PAYE is another timely indicator which can provide signs about the health of regional labour markets.

Chart 13: Index of employees registered for PAYE (January 2019 = 100)
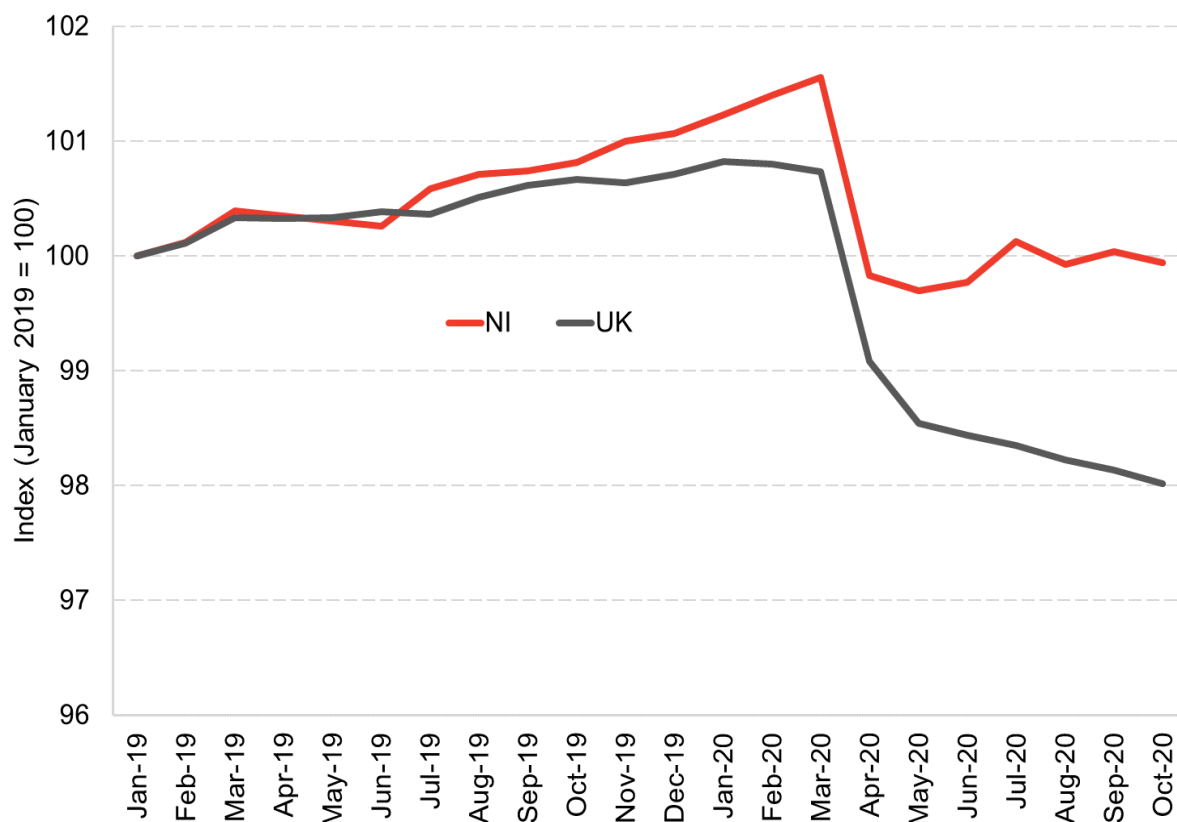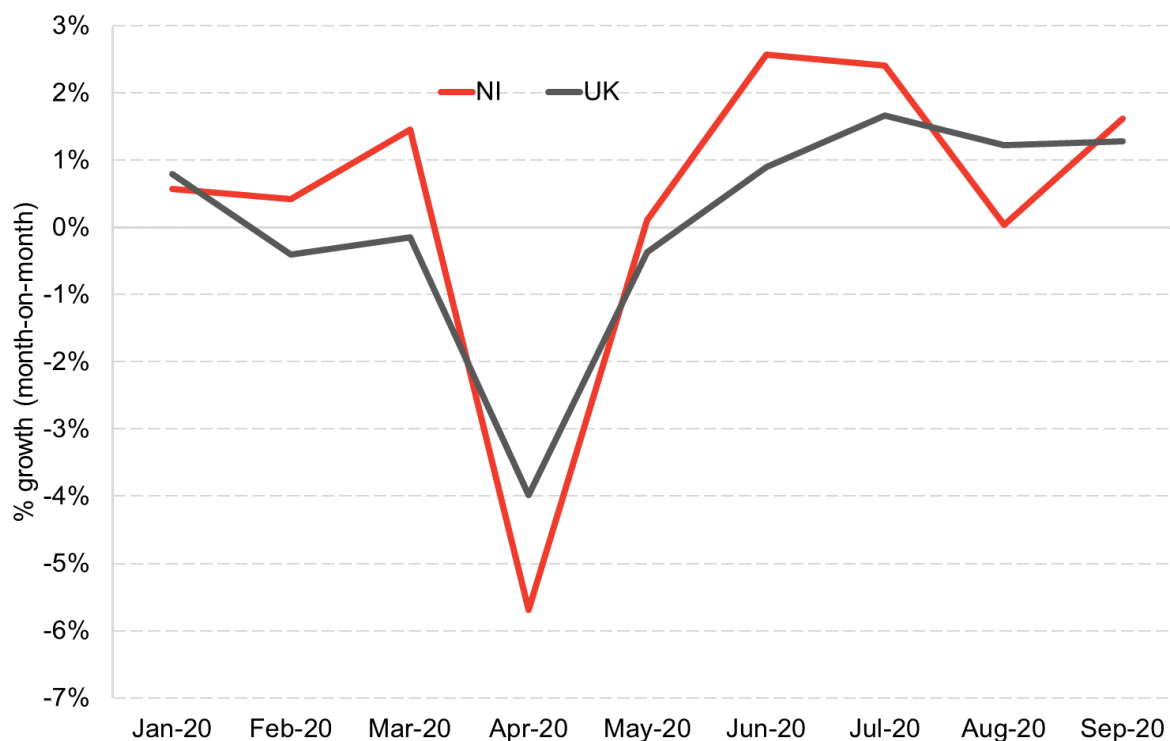

Source: ONS, FAI calculations

Between February and May the number of employees in Northern Ireland fell by 1.7% compared to a decline of 2.2% in the UK. Moreover, between May and September the number of employees grew by 0.3% in Northern Ireland and declined by 0.4% in the UK. As a result, the number of employees in September 2020 was back at the level from the start of 2019 in NI but remained still circa 2% lower in the UK.

The decline in aggregate pay in April was stronger in Northern Ireland compared to the UK by 1.7 percentage points. However, between May and September aggregate pay grew faster in Northern Ireland each month except August. This suggests that disposable income for Northern Irish households has grown faster compared to the rest of the UK, further supporting growth in the consumption side of GDP in Q3.

Chart 14: Aggregate pay growth from PAYE RTI, Northern Ireland and UK, January – September 2020

Source: ONS, FAI calculations

The faster recovery in Northern Ireland's labour market is also evident in data on vacancies 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 15: Number of advertised vacancies, Northern Ireland and the UK
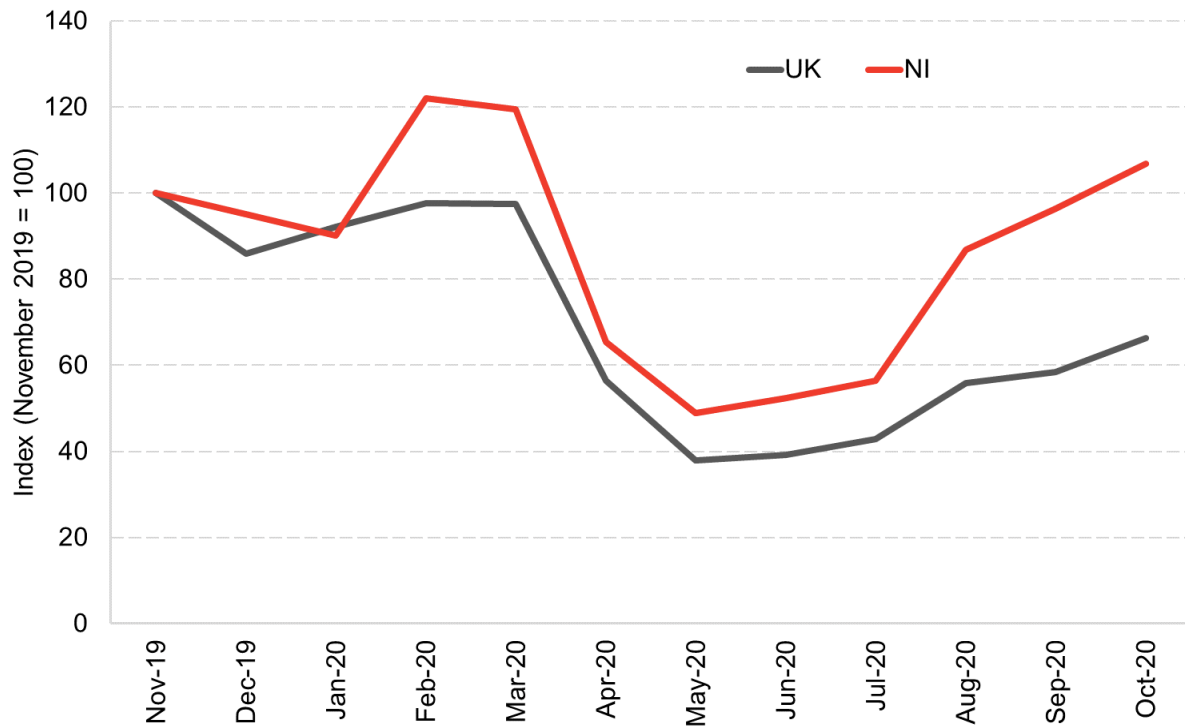
Source: Adzuna Labour Market Stats

The magnitude of decline in vacancies between February and May was similar for NI and the UK, but the subsequent recovery has been faster in NI. In September the number of vacancies in NI was close to last year's levels, but it remained circa 40% lower in the UK.

Overall, real-time indicators of economic activity and the labour market point to a strong recovery in Northern Ireland which exceeds the pace seen in the rest of the UK, adding further robustness to our modelled results.

Fraser of Allander Institute

December 2020