

# Profitability of Businesses in Northern Ireland

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## Summary

Utilising data from the Northern Ireland Annual Business Inquiry (NIABI) survey 2017 to 2021, a measure of pre-tax profitability was derived. This measure is comprised of Gross Value Added (GVA) and is net of both wages and salaries and capital expenditure. The NIABI covers most of the economy, excluding Financial Services and the crop and animal production components of agriculture. Government and not for profit businesses have been removed from the analysis.

The proportion of businesses reporting pre-tax profitability between 2017 and 2020 was between 80% and 82%. The proportion of businesses reporting profitability increased to 85% in 2021 reflecting a rebound effect to the Covid-impacted 2020.

As might be expected, the key driver in changes to pre-tax profitability over the period 2017 to 2021, was turnover which increased, amongst the businesses included within these analyses, to £74.55bn in 2021. Whilst the value of purchases and the level of salaries and wages broadly increased 2017 to 2021, the increase in turnover over the period was such that pre-tax profitability rose from £8.12bn in 2017 to £13.18bn in 2021.

Gross Value Added (GVA) rose from £20.61bn in 2017 to £28.51bn in 2021 with pre-tax profitability as a share of GVA at between 39% and 42% between 2017 and 2020, rising to 46% in 2021.

Businesses were categorised into one of five groups reflecting the broad structure of the Northern Ireland economy: Agriculture, Construction, Distribution (wholesale and retail), Production, and Services.

In 2021, turnover was highest for Distribution businesses (£29.52bn) followed by Production businesses (£19.67bn) and Services (£15.8bn). Purchases were highest for Distribution businesses (£23.03bn), followed by Production (£12.8bn) and Construction (£6.09bn). Salaries and wages were highest for Services businesses (£5.93bn), followed by Production (£3.21bn) and Distribution (£2.51bn).

Services businesses as a group had pre-tax profitability of £5.05bn in 2021 compared to £3.62bn for Production businesses, £2.62bn for Distribution (wholesale and Retail) businesses, and £1.82bn for Construction businesses. The increase in total pre-tax profitability in 2021 compared to previous years was driven mainly by Services and Production businesses.

The whole economy average pre-tax profitability per business was £236,000. Given the differences in the number of businesses in each group, average pre-tax profitability per business in 2021 was highest for Production businesses (£651,000), followed by Distribution (£214,000), Services (£193,000) and Construction (£163,000).

Looking at each business groups' pre-tax profitability share of GVA between 2017 and 2021, Distribution (wholesale and retail) businesses was the only group of businesses to show a decline in 2021 compared to previous years reflecting a contraction in the pre-tax profitability values in 2021 to levels last seen in 2017.

At a more disaggregated individual Standard Industrial Classification (SIC) sector level, the three groups of businesses that consistently ranked the highest in terms of values for the key elements underpinning pre-tax profitability were in the Wholesale and Retail, Manufacturing and Construction sectors.

The Wholesale and Retail trade had the highest value of pre-tax profitability in 2021 at £2.62bn, accounting for 20% of all profitability in the economy in that year. This was closely followed by Manufacturing at £2.46bn (19% of all profitability) and Construction at £1.82bn (14% of all profitability).

The analyses at SIC sector level demonstrates that the changes in pre-tax profitability for each sector can represent a unique combination of changes to the underpinning elements of profitability, underlining the need to understand the drivers of change specific to each group and their outcomes over time.

Taken in the round, the approach developed here in utilising the Northern Ireland Annual Business Inquiry survey data to produce estimates of pre-tax profitability, indicates that they may have utility when used appropriately for monitoring business performance, business outcomes and the drivers of change to those outcomes over time.

## Introduction

The Northern Ireland '10x Economy – an economic vision' strategy<sup>1</sup> was launched on the 11 May 2021 by the Department for the Economy setting out the vision for Northern Ireland's decade of innovation, to encourage greater collaboration and innovation to deliver a ten times better economy intended to provide inclusive benefits for both people and place. A potentially important perspective on the aims and objectives of the economic strategy relates to business profitability, on which, there has been relatively little analytical attention to date.

Initial consideration of the Northern Ireland Annual Business Inquiry (NIABI)<sup>2</sup> survey data as the main data source for considering profitability, indicated that a range of preliminary analytical work needed completed in advance. This work was required to explore and understand some of the data important in the calculation of profitability in more detail and to gain more insight into the operating pressures and outcomes for businesses in Northern Ireland. On that basis, a suite of analytical projects were taken forward culminating in the publication of reports into Business Capital Expenditure<sup>3</sup>, Business Purchases<sup>4</sup> and Business Subsidies<sup>5</sup> using NIABI data.

The data insights gained from these projects enabled the current analytical work on developing and deriving potential measures of business profitability to be taken forward using NIABI data.

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<sup>1</sup> [10X Economy - an economic vision | Department for the Economy \(economy-ni.gov.uk\)](https://www.economy-ni.gov.uk/10x-economy-an-economic-vision)

<sup>2</sup> [Annual Business Inquiry | Northern Ireland Statistics and Research Agency \(nisra.gov.uk\)](https://www.nisra.gov.uk/annual-business-inquiry)

<sup>3</sup> [Business Capital Expenditure in Northern Ireland \(economy-ni.gov.uk\)](https://www.economy-ni.gov.uk/business-capital-expenditure)

<sup>4</sup> [Purchases by businesses in Northern Ireland | Department for the Economy \(economy-ni.gov.uk\)](https://www.economy-ni.gov.uk/purchases-by-businesses)

<sup>5</sup> [Subsidies and Businesses in Northern Ireland \(economy-ni.gov.uk\)](https://www.economy-ni.gov.uk/subsidies-and-businesses)

## Method

The NIABI collects both financial and employment information from non-financial businesses and other establishments and covers approximately two thirds of the economy. This coverage includes the production, construction, distribution and service industries in Northern Ireland but excludes public sector activity for the most part, as well as Financial Services and the crop and animal production elements of Agriculture. The 2021 NIABI sampled approximately 11,000 businesses in Northern Ireland from a population of approximately 59,000 businesses in the sample frame: the Inter-Departmental Business Register (IDBR). The IDBR consists of companies, partnerships, sole proprietors, public authorities, central government departments, local authorities and non-profit making bodies in the UK who are VAT and/or PAYE (Pay As You Earn) registered.

The Economic and Labour Market Statistics Branch of the Northern Ireland Statistics and Research Agency (NISRA) administers the survey and data validation is carried out on the returned forms ensuring internal consistency within the form, checking data falls within expected limits, and by contacting the company for clarification where appropriate. For non-returns above a selected employment threshold, data were imputed using a methodology which takes account of previous returned data and the performance of other similar businesses. This information was then grossed up to the reporting unit population, to ensure that results are representative of the sampled population. Published annual data are on a current prices basis and no adjustment is made for inflation as would be reflected in a constant prices series.

In preparation for taking forward analytical work on profitability, the analytical work completed on capital expenditure, purchases and subsidies, as important contributors to calculating profitability, provided a number of learning points in relation to the treatment of the data. These learning points included the identification of outlier values and the appropriate treatment in terms of correcting or estimating returned values and the stability and volatility of various measures collected by the NIABI. Importantly, this work highlighted the need to exclude two types of businesses from any profitability analysis.

In relation to subsidies received, businesses categorised as 'Public corporation or nationalised body', 'Central Government' or 'Local Authority' could report relatively large subsidy values each year which could comprise a mixture of both central and local government contributions to running costs, as well as to other subsidies received. Given it is not possible to unpick the individual sources of the overall value of subsidies reported by each business, these businesses were removed from analyses.

A second group of businesses removed from this analysis of profitability were businesses identified as 'not for profit' for both conceptual reasons and for data issues. Conceptually it appeared inconsistent and inappropriate to include businesses whose operating model was 'not for profit' in a profitability analysis. In addition, the returned data for 'not for profit' businesses often appeared incomplete with the conclusion that revenue streams or sources specific to that sector at a local level, were not being adequately reported and included within the NIABI.

## Calculating Profitability

The NIABI produces estimates of approximate Gross Value Added at basic prices (aGVAbp) which represents the income generated by businesses, out of which is paid wages and salaries and the cost of capital investment. aGVAbp includes taxes on production (e.g. business rates), net of subsidies but excludes subsidies and taxes on products (e.g. VAT and excise duty, corporation tax, etc.). This is an output-based measure of GVA<sup>6</sup>.

Within this paper, and using the available data and measures, profitability is calculated as:

$$\text{aGVAbp} - \text{Wages \& Salaries} - \text{Net Capex} = \text{Pre Tax Profitability}$$

where Net Capital Expenditure (Net Capex) is calculated by subtracting the financial income derived from the disposal of assets from the financial cost of acquisitions.

Profitability as a percentage is calculated as:

$$100 \times \frac{\text{aGVAbp} - \text{Wages \& Salaries} - \text{Net Capex}}{\text{aGVAbp}}$$

An alternative income or revenue-based measure of profitability was also explored calculated as:

$$100 \times \frac{((\text{Turnover} + \text{Subsidies}) - (\text{Salaries \& Wages} + \text{Purchases} + \text{Net Capex}))}{\text{Turnover} + \text{Subsidies}}$$

It is possible to calculate this revenue-based measure of profitability with the data presented within tables in this report. For brevity however, the aGVAbp approach to calculating profitability is reported here and is described in the report simply as GVA.

For this paper, analyses were undertaken using the NIABI data for 2017 to 2021. As detailed above, businesses with a legal status of 'Public corporation or nationalised body', 'Central Government', 'Local Authority' and 'Non-profit body or mutual association' were excluded from analyses.

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<sup>6</sup> Further details can be found at: [ABI background information | Northern Ireland Statistics and Research Agency \(nisra.gov.uk\)](https://www.nisra.gov.uk/ABI-background-information)

## Caveats in Interpretation

Given the treatment of the data in preparing for this profitability analysis and the nature of the estimates produced, there are a number of caveats which should be borne in mind when considering and interpreting the figures reported:

- Businesses not covered by the NIABI survey, or subsequently excluded from analysis here, include: Crop and animal production; Financial Services; Public Corporations or nationalised bodies, Central Government, Local Authority and Non-profit bodies or mutual associations.
- In calculation, these are metrics or measures of profitability designed to provide a means of considering change over time and the components of that change and are constrained in calculation by what is available within the data. In practice, the treatment here is more akin to a profit and loss statement or income statement approach. No account is taken here of depreciation of assets or amortisation as that information is not available within the data.
- Percentage estimates of pre-tax profitability as a share of GVA should not be compared across different types of businesses. For example, the operating model of wholesale and retailers as a group, will differ significantly to that for construction businesses as will their percentage profitability as a share of GVA estimates.
- Change to profitability over time can reflect changes to one or more of the underpinning elements of profitability. To better understand changes to profitability over time, careful consideration should be given to changes in the underpinning elements of profitability as provided.
- Profitability is calculated here on a pre-tax basis.
- The local, national and international context in the years covered by these analyses should be borne in mind when considering the results.

## Results

### Whole Economy Overview of Profitability

**Table 1: Number of Businesses and Pre-Tax Profitability Rates 2017-2021**

	2017	2018	2019	2020	2021
<b>Number of businesses</b>	50,518	51,176	52,402	53,753	55,964
<b>Number of businesses with positive profitability</b>	40,978	41,015	43,127	42,922	47,310
<b>% of all businesses with positive profitability</b>	81%	80%	82%	80%	85%
<b>Pre-tax profitability (£bn)</b>	8.12	9.17	9.83	9.78	13.18
<b>Pre-tax profitability per business (£000s)</b>	161	179	188	182	236

The number of businesses in the economy covered by the approach here increased year on year from 50,518 in 2017 to 55,964 in 2021 (Table 1). The proportion of these businesses who had a positive profitability figure was stable at between 80% and 82% between 2017 and 2020, rising to 85% in 2021. This pattern was also reflected in the pre-tax profitability per business figure which peaked at an average of £236,000 profitability per business in 2021.

**Table 2: Elements of Pre-Tax Profitability (£bn)**

	2017	2018	2019	2020	2021
<b>Turnover</b>	64.05	66.29	68.63	65.50	74.55
<b>Subsidies</b>	0.09	0.09	0.09	1.11	0.88
<b>Revenue [Turnover + Subsidies]</b>	64.14	66.38	68.72	66.61	75.43
<b>Purchases</b>	42.67	44.55	45.34	42.37	47.46
<b>GVA</b>	20.61	22.38	23.44	24.08	28.51
<b>Salaries and Wages</b>	10.26	11.07	11.75	12.28	13.02
<b>Net Capital Expenditure</b>	2.24	2.15	1.86	2.01	2.31
<b>Pre-Tax Profitability</b>	8.12	9.17	9.83	9.78	13.18
<b>Pre-Tax Profitability Share of GVA</b>	39%	41%	42%	41%	46%

Table 2 shows the individual elements which contribute to the calculation of profitability.

Revenue (turnover plus subsidies) increased from £64.14bn in 2017 to £68.72bn in 2019, followed by a fall to £66.61bn in 2020 where Covid-19 closures and restrictions impacted business' ability to trade. As the economy rebounded in 2021, revenue peaked at its highest value in the series at £75.43bn. All of these changes were driven by the turnover element of revenue as while subsidies may have experienced significant rises when compared to previous years, they accounted for 1.7% of revenue at their peak in 2020. This rise in subsidy value is likely to be attributable to Covid-19 specific interventions such as the Coronavirus Job Retention Scheme (CJRS), however no analysis is available as the NIABI only collects total value of subsidies received and not the source.

Purchases values over time are closely linked to revenue values and followed a similar pattern, rising from £42.67bn in 2017 to £45.34bn in 2019 before dropping back to £42.37bn in 2020. Purchases in 2021 rose beyond 2019 levels to peak at £47.46bn.

The changes in revenue and purchases described above are the main factors contributing to the rise in GVA levels from £20.61bn in 2017 to £28.51bn in 2021.

The value of Salaries and Wages also increased each year from £10.26bn in 2017 to £13.02bn in 2021, moderating the increase in value of GVA in the profitability calculation.

As described in the previous research paper on [Net Capital Expenditure](#), the value of capital expenditures and disposal of assets can be volatile and more episodic in nature. While values fell between 2017 and 2019 (£2.24bn to £1.86bn), by 2021 Net Capital Expenditure had risen to £2.31bn. The differences in these figures at whole economy level have little impact on the calculation of profitability although there is some considerable variability in Net Capital Expenditure at a sectoral level over time.

As a result of the increases in GVA, pre-tax profitability was on an upward trend from 2017 (£8.12bn) to 2019 (£9.83bn), before falling slightly in 2020 as could be expected. While revenue fell in 2020, purchases also fell and the net impact on GVA and on pre-tax profitability was minimal, only dropping by £0.05bn to £9.78bn in 2020. In 2021 as the economy rebounded, pre-tax profitability rose by 35% to £13.18bn, underpinned by a large increase in revenue.

Pre-tax profitability as a share of GVA was broadly stable during the years 2017 to 2020 at between 39% and 42%. As the economy rebounded, pre-tax profitability as a share of GVA rose to 46% in 2021.

## Pre-Tax Profitability at Grouped Standard Industrial Classification (SIC) Level

Grouping Standard Industrial Classification (SIC) sectors together (see Annex 1 for further details) can be useful in providing a more nuanced picture to that seen at whole economy level. The grouped Standard Industrial Classification includes:

**Agriculture (SIC Section A)** is a relatively small part of the total agriculture industry, covering agriculture support activities, forestry and fishing. It does not include crop and animal production, details of which are included in statistics produced by DAERA.

**Construction (SIC Section F)** covers the entire Northern Ireland construction sector, including construction of buildings, civil engineering, and specialised construction activities (e.g. demolition and site preparation, electrical, plumbing and other construction installation activities).

**Distribution (SIC Section G)** consists of businesses engaged in the wholesale and retail trade and covers the entire Northern Ireland wholesale and retail sector.

**Production (SIC Sections B-E)** have been grouped to reflect the structure of the Northern Ireland production industries. These include: Mining and quarrying (Section B); Manufacturing (Section C); Electricity, steam and air conditioning supply (Section D); Water supply, sewerage, waste management and remediation activities (Section E).

**Non-Financial Services (SIC Sections H-S excluding K and O)** is composed of Transport and storage (Section H); Accommodation and food service activities (Section I); Information and communication (Section J); Real estate activities (Section L); Professional scientific and technical activities (Section M); Administrative and support service activities (Section N); and other service activities that are grouped to avoid disclosure of returns (Sections P-S).

Table 3 details the elements involved in the profitability calculations for the SIC groups for 2021, with figure 3 focusing on the relative performance of each group in terms of pre-tax profitability values.

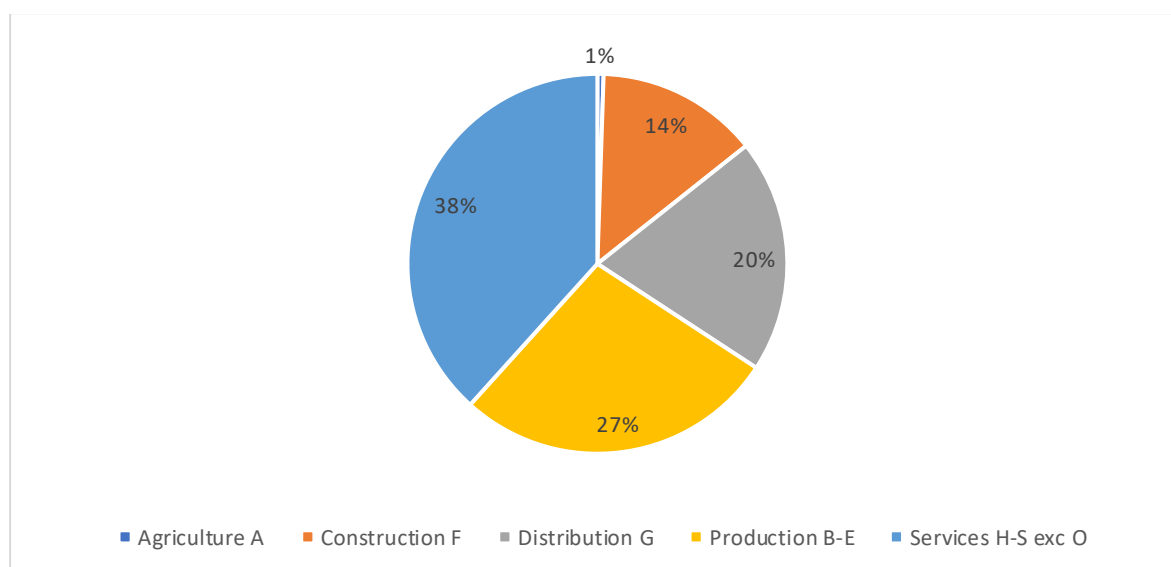
**Table 3: Elements of Profitability by SIC group in 2021 (£bn)**

SIC Group	Agriculture A	Construction F	Distribution G	Production B-E	Services H-S exc K & O
Number of businesses	751	11,185	12,253	5,561	26,214
Turnover	0.14	9.42	29.52	19.67	15.80
Subsidies	0.00	0.06	0.09	0.44	0.29
Revenue [Turnover + Subsidies]	0.15	9.48	29.61	20.10	16.09
Purchases	0.07	6.09	23.03	12.80	5.47
GVA	0.07	3.41	6.86	7.49	10.68
Salaries and Wages	0.02	1.35	2.51	3.21	5.93
Net Capital Expenditure	-0.01	0.24	1.72	0.67	-0.30
Pre-Tax Profitability	0.07	1.82	2.62	3.62	5.05

Businesses within Distribution G had the highest value of revenue in 2021 and the highest value of purchases followed by businesses within the Production group. Services as a group reported the highest value of GVA followed by businesses within the Production group. Salaries and wages were highest within the Services group followed by Production. In terms of values for pre-tax profitability,

businesses in the Services group reported £5.05bn followed by Production (£3.62bn), Distribution (£2.62bn) and Construction (£1.82bn).

**Figure 1: SIC Group Share of Whole Economy Pre-Tax Profitability 2021**



In relation to the share of whole economy pre-tax profitability accounted for by each group, Services account for the single highest share of profitability for 2021 at £5.05bn, equating to 38% of total pre-tax profitability for the year. Production businesses account for 37% of total pre-tax profitability at £3.62bn followed by Distribution at 20% (£2.62bn).

**Table 4: Profitability per Business in 2021**

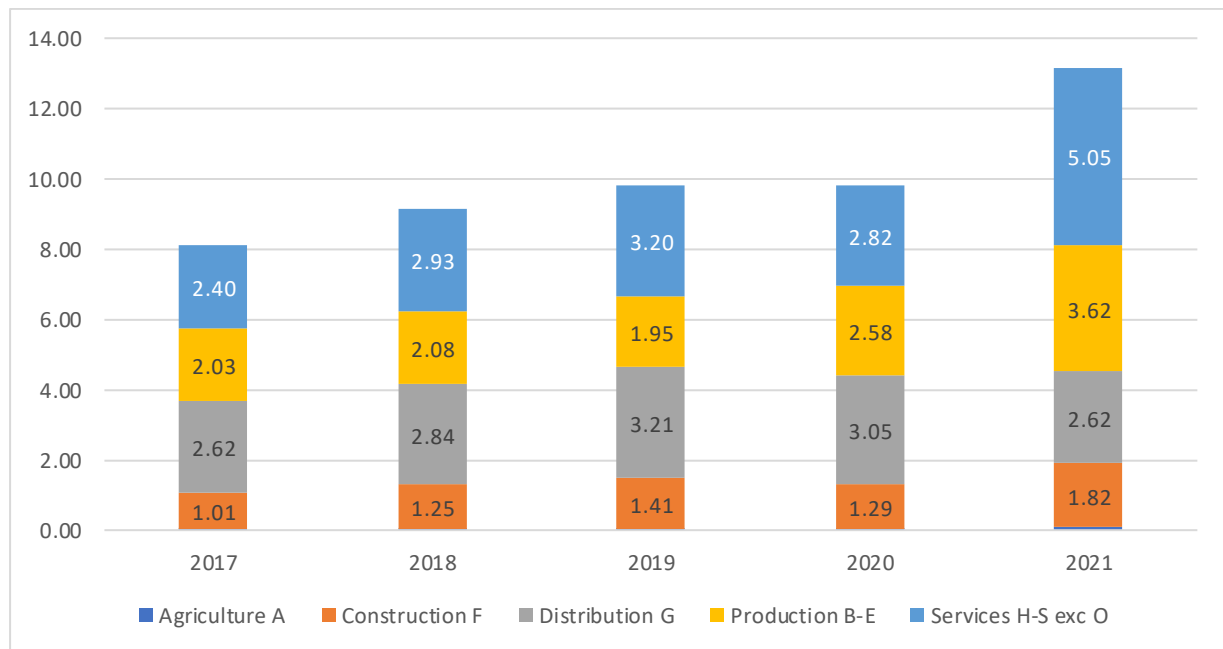
ONS Group	Number of businesses	Pre-tax profitability (£bn)	Pre-tax profitability per business (£)
Agriculture A	751	0.07	93,000
Construction F	11,185	1.82	163,000
Distribution G	12,253	2.62	214,000
Production B-E	5,561	3.62	651,000
Services H-S exc K & O	26,214	5.05	193,000
<b>Total</b>	<b>55,964</b>	<b>13.18</b>	<b>236,000</b>

Averaged pre-tax profitability per business (Table 4) shows that Production as a group has a much higher average pre-tax profitability value per business at three times the size of the nearest sector (Distribution). One explanation for this finding is that businesses in the Production group are comprised, in comparison to business in the other groups, of a higher proportion of larger businesses.

The sectoral results above have focused broadly on 2021. As rehearsed earlier, these results need interpreted in relation to the context at the time and Figure 4 shows that the results for 2021 are not entirely typical of the patterns seen for previous years.



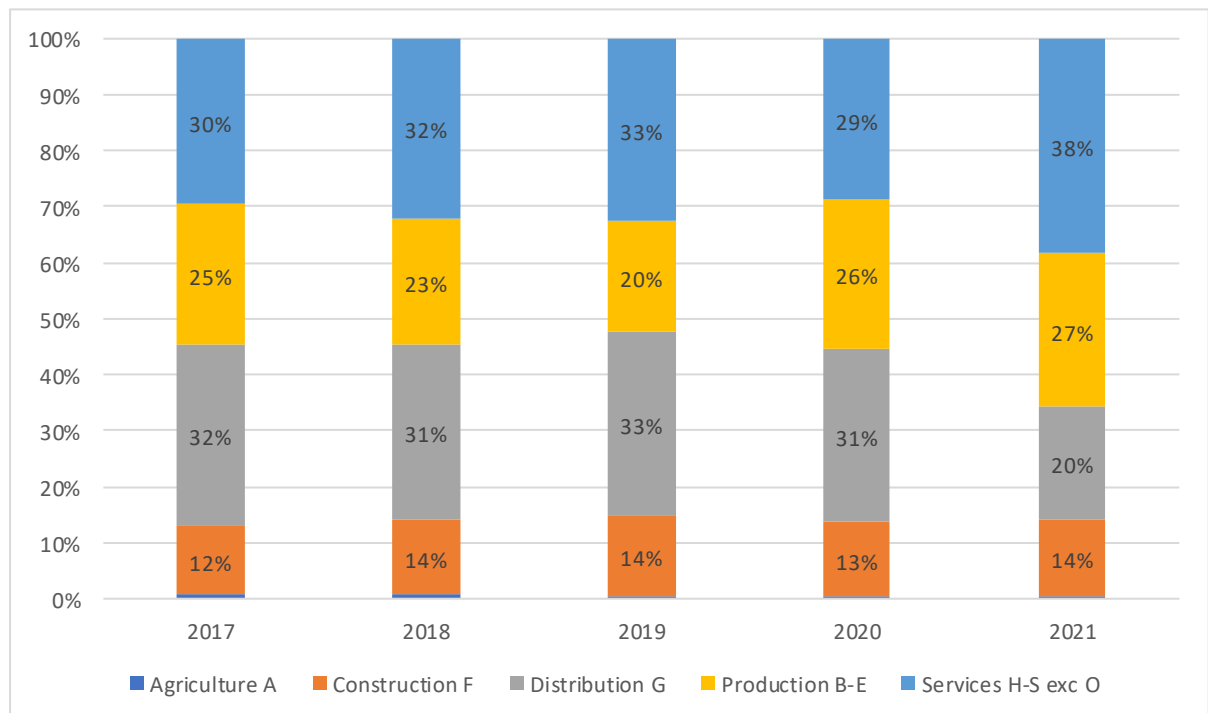
**Figure 4: Pre-Tax Profitability Value by SIC Group 2017-2021 (£bn)**



The value of pre-tax profitability in 2021 for the Services and Production groups, were elevated compared to the previous four years as was that of Construction. The level of pre-tax profitability for Distribution, by contrast, contracted in 2021 compared to the previous two years and was at the level last seen in 2017.

Figure 5 provides the annual percentage share of total profitability accounted for by each SIC group between 2017 and 2021.

**Figure 5: Proportion of Total Profitability by SIC Group 2017 – 2021**



Between 2017 and 2020, the Distribution and Services groups each accounted for around one third of total pre-tax profitability. The change in 2021 was comprised of both a large increase in the profitability value of Services and a decrease in profitability value for Distribution. The share of pre-tax profitability for Construction has been more consistent over time, making up between 12% to 14% of total profitability, while Agriculture's contribution has always been less significant at around 1%.

All groups achieved their highest values of profitability in 2021, with the exception of Distribution. In 2021, the value of GVA for Distribution is the highest seen between 2017 and 2021 at £6.9bn. However, a substantial increase in Capital Expenditure in 2021 for Distribution, possibly due to changes in tax advantages for Capital Expenditure during Covid-19, caused the value of pre-tax profitability to drop to £2.62bn, equal to 2017 values. As noted previously, Net Capital Expenditure levels can be volatile over time particularly at more disaggregated levels. The large increase in Net Capital Expenditure in 2021 for Distribution, although affecting 2021 profitability, may be due to upgrades or purchases that will have a positive effect on revenue in future years. That could also mean lower Net Capital Expenditure in future years.

The Services group has the highest value of pre-tax profitability in 2021 at £5.05bn and the largest rise in profitability value, increasing 79% from the value for 2020. This change in profitability was driven by a large increase in revenue from £13.83bn in 2020 to £16.09bn in 2021, while the value of purchases remained similar to previous years. Negative Capital Expenditure (income generated through the disposal of assets) also contributed to a larger level of pre-tax profitability for this year. However, if the assets disposed of were revenue generating, this could potentially lead to lower revenue in future years.

The Production group has seen a general upward trend in pre-tax profitability from £2.03bn in 2017 to £3.62bn in 2021. Construction saw a rise from £1.01bn profitability in 2017 to £1.82bn in 2021, with only a small fall in profitability in 2020. This fall in 2020 was caused by minor fluctuations in the underpinning elements (GVA, Net Capital Expenditure and Salaries and Wages) rather than being attributable to changes to a single element.

Agriculture had its highest profitability value in 2021 at £0.07bn following fluctuations in the previous years. While Agriculture profitability is at its highest in 2021, the main element affecting this group is Net Capital Expenditure, which was both negative (in reality, revenue generated through disposal of assets) and substantial in this group for this year. As with Services, this larger value of Net Capital Expenditure may affect future capital expenditures and revenues.

**Table 5: Pre-Tax Profitability Share of GVA by SIC Group 2017 - 2021**

ONS Group	2017	2018	2019	2020	2021
<b>Agriculture A</b>	66%	70%	68%	62%	94%
<b>Construction F</b>	42%	46%	49%	46%	53%
<b>Distribution G</b>	52%	50%	52%	51%	38%
<b>Production B-E</b>	37%	37%	34%	40%	48%
<b>Services H-S exc K &amp; O</b>	32%	35%	37%	32%	47%

As rehearsed earlier, due to the different operating models of businesses within each SIC group, it is not appropriate, nor insightful, to compare the pre-tax profitability share of GVA across SIC groups. Rather, the pre-tax profitability share of GVA is a measure more suitable for monitoring the

performance of a group of like businesses over time and to understand the drivers of the outcomes seen.

At a whole economy level, pre-tax profitability as a share of GVA fluctuated between 39% and 42% during 2017 to 2020 with a subsequent increase to 46% in 2021. Table 5 shows that this relative stability in whole economy pre-tax profitability as a share of GVA was also seen within each of the SIC groups. While pre-tax profitability as a share of GVA in Agriculture was broadly stable between 2017 and 2019 with a dip in 2020, the monetary values associated with this sector and the number of businesses involved are the lowest of the five SIC groups. The large rise in profitability share of GVA for Agriculture in 2021 is partly due to recovery from a dip in 2020 and a negative Net Capital Expenditure figure in 2021 (additional revenue generated through the disposal of assets), where the value of capital assets disposed of was greater than the value of capital purchases. This comparatively small level of additional revenue resulted in the scale of changes seen in what is the smallest SIC group both in terms of numbers of businesses and the financial values associated.

Distribution consistently had pre-tax profitability shares of GVA of between 50% and 52% before 2021, when decreased profitability values for Distribution set against the highest GVA value experienced by that sector, led to a large decrease in percentage share of GVA to 38%. Distribution was the only sector where the pre-tax profitability share of GVA fell in 2021.

### **Pre-Tax Profitability at Individual SIC level**

The previous analyses had concentrated on businesses categorised into 5 distinct groups based on their Standard Industrial Classification. To explore the profitability measures developed further, they were analysed at individual SIC level. Table 6 shows the values of the various elements that make up profitability for each individual SIC sector for 2021.

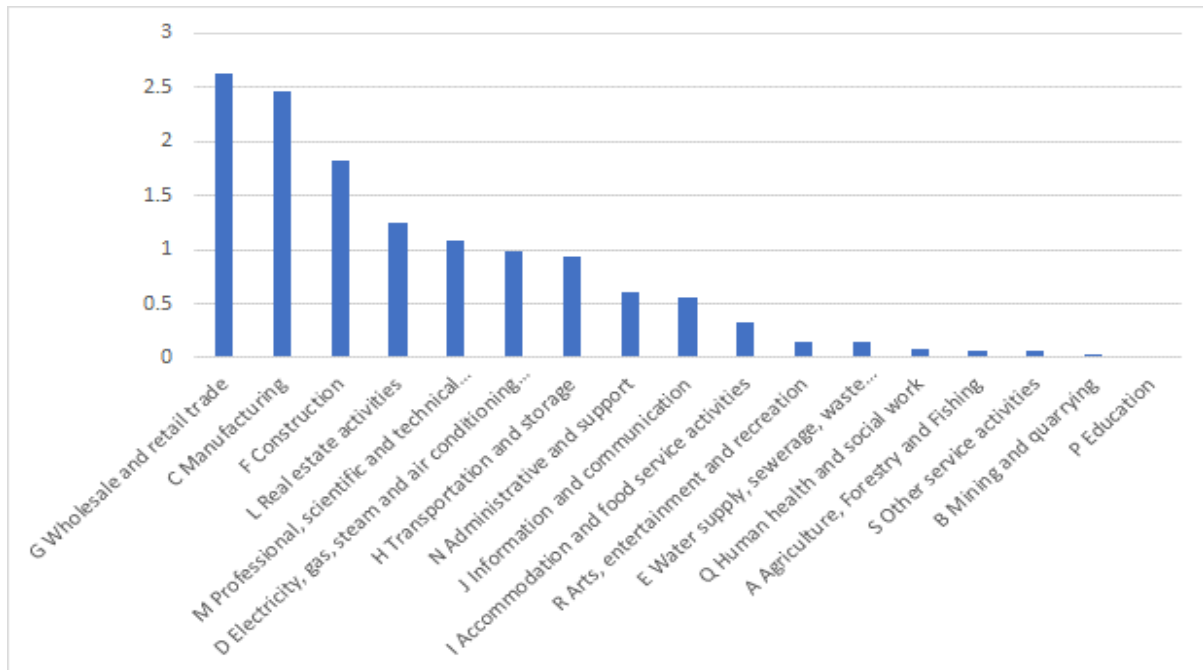
**Table 6: Elements of Profitability by Individual SIC 2021 (£bn)**

SIC	Revenue	Purchases	GVA	Salaries and Wages	Net Capital Expenditure	Pre Tax Profitability
<b>A Agriculture, Forestry and Fishing</b>	0.15	0.07	0.07	0.02	-0.01	0.07
<b>B Mining and quarrying</b>	0.54	0.37	0.17	0.09	0.05	0.03
<b>C Manufacturing</b>	16.52	10.89	5.80	2.89	0.45	2.46
<b>D Electricity, gas, steam and air conditioning supply</b>	2.40	1.15	1.25	0.13	0.14	0.98
<b>E Water supply, sewerage, waste management and remediation activities</b>	0.64	0.38	0.27	0.09	0.03	0.14
<b>F Construction</b>	9.48	6.09	3.41	1.35	0.24	1.82
<b>G Wholesale and retail trade</b>	29.61	23.03	6.86	2.51	1.72	2.62
<b>H Transportation and storage</b>	3.54	1.74	1.80	0.77	0.11	0.93
<b>I Accommodation and food service activities</b>	1.83	0.84	0.99	0.55	0.11	0.33
<b>J Information and communication</b>	2.44	0.60	1.84	1.21	0.08	0.55
<b>L Real estate activities</b>	0.75	0.18	0.60	0.17	-0.81	1.24
<b>M Professional, scientific and technical activities</b>	3.29	0.88	2.44	1.28	0.08	1.09
<b>N Administrative and support</b>	2.48	0.72	1.77	1.10	0.07	0.61
<b>P Education</b>	0.08	0.02	0.06	0.04	0.00	0.02
<b>Q Human health and social work</b>	0.93	0.19	0.74	0.64	0.03	0.08
<b>R Arts, entertainment and recreation</b>	0.53	0.23	0.29	0.11	0.03	0.15
<b>S Other service activities</b>	0.21	0.07	0.14	0.07	0.00	0.06

In terms of the various elements of profitability and the values involved, the three sectors that were consistently ranked highest included: Wholesale and Retail; Manufacturing; and Construction.

That broad picture was also seen in relation to the levels of pre-tax profitability at individual SIC (Figure 6).

**Figure 6: Pre-Tax Profitability by Individual SIC 2021 (£bn)**



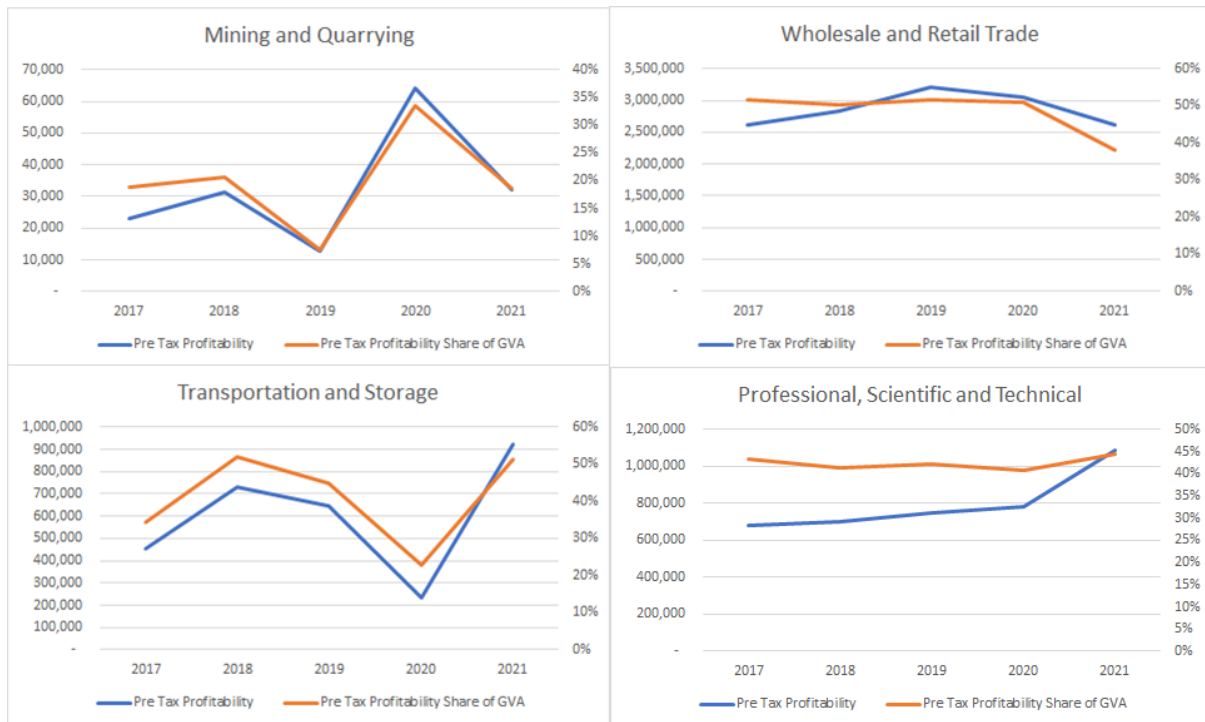
In monetary terms, Wholesale and Retail trade had the highest value of pre-tax profitability in 2021 at £2.62bn, accounting for 20% of all profitability in that year. This was closely followed by Manufacturing at £2.46bn (19% of all profitability) and Construction at £1.82bn (14% of all profitability).

The analysis above indicated the potential for the measures of pre-tax profitability developed to be explored at finer levels of disaggregation. Inevitably however, at these lower levels of disaggregation, the impacts of episodic and relatively significant changes in the underpinning elements that together comprise profitability, can introduce more volatility within the time series of individual SIC sectors.

To illustrate this degree of volatility, Figure 7 provides the values of pre-tax profitability and the pre-tax profitability share of GVA for the Mining and Quarrying B, Wholesale and Retail G, Transportation and Storage H, Real Estate Activities L and Professional, Scientific and Technical M sectors between 2017 and 2021. Over the period, each sector demonstrates unique patterns to the outcomes of both measures of pre-tax profitability underlining the need to understand the drivers of change specific to each group and their outcomes over time.

Revenue in the Mining and Quarrying B sector broadly increased from £370m in 2017 to £542m in 2021 albeit with a period of stagnation between 2019 and 2020. Over the period, there were smaller levels of increases in salaries and wages (£66m to £92m) with slightly lower wages and salaries in 2020 compared to 2019 and 2021. Purchases however increased from £244m to £365m over the period though dipping in 2020. Net capital expenditure dipped in 2020 compared to 2019 and 2021. The pre-tax profitability outcomes for Mining and Quarrying in 2019 and 2020 are therefore the combination of changes to all the elements underpinning profitability.

**Figure 7: Pre-Tax Profitability Values and Pre-Tax Profitability as a Share of GVA by Selected SIC sectors 2017 - 2021**



For Wholesale and Retail G, revenue increased over the period from £24.5bn in 2017 to £30bn in 2021 with a dip in 2020 compared to 2019 and 2020. Salaries and wages increased over the period from £2.2bn to £2.5bn with purchases increasing from £20bn in 2017 to £23bn in 2021. The main change for Wholesale and Retail was a large increase in net capital expenditure in 2021 to £1.7bn (£362m in 2020 and £412m in 2019) which accounted for most of the decline in profitability seen in Wholesale and Retail in 2021.

For Transportation and Storage H, the main driver of the dip in pre-tax profitability seen in 2020, and not unexpectedly, was a drop in revenue to £2.8bn compared to £3.1bn in 2019 and £3.5bn in 2021 reflecting the impacts of Covid on the sector in 2020.

For the Professional, Scientific and Technical M sector, the increase in pre-tax profitability seen in 2021, was driven by increased revenue in 2021 of £3.3bn compared to £2.9bn in a drop in purchases in 2021 to £878m compared £946m in 2020 offset by marginal increases in salaries and wages and net capital expenditure.

Taken in the round, the approach developed here in utilising the Northern Ireland Annual Business Inquiry survey data to produce estimates of pre-tax profitability, indicates that they may have utility when used appropriately for monitoring business performance, business outcomes and the drivers of change to those outcomes over time.

## Annex 1: Standard Industrial Classifications (SIC) and Grouped SIC

Standard Industrial Classification	Grouped Classification
A Agriculture, Forestry and Fishing	Agriculture A
F Construction	Construction F
G Wholesale and retail trade, repair of motor vehicles and motorcycles	Distribution G
B Mining and quarrying	Production B-E
C Manufacturing	
D Electricity, gas, steam and air conditioning supply	
E Water supply, sewerage, waste management and remediation activities	
H Transportation and storage	
I Accommodation and food service activities	Services H-S excluding K & O
J Information and communication	
K Financial and insurance activities	
L Real estate activities	
M Professional, scientific and technical activities	
N Administrative and support service activities	
P Education	
Q Human health and social work activities	
R Arts, entertainment and recreation	
S Other Services	