

Purchases by Businesses in Northern Ireland

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Summary

This paper explores the nature and characteristics of businesses that reported Purchases Expenditure between 2017 and 2020¹ as captured by the Northern Ireland Annual Business Inquiry (NIABI)². We are particularly interested in investigating how purchases spending varies by business type and size.

This project is one of a trio of projects exploring data collected by the NIABI in relation to Capital Expenditure, Subsidies received by businesses, and types of Purchases made by businesses as input pressures.

Purchases refers to business' expenditure on energy and water, goods and materials and services that are used up or transformed by the business activity.

Extensive guidance in the NIABI survey advises businesses completing the survey on what purchases values to include or exclude under the broad categories of goods and materials, energy and water, and services.

The information supplied helps identify the purchasing patterns of businesses to inform UK Government policy. The information also contributes to the UK National Accounts and UK gross domestic product (GDP) estimates.

The main findings show that:

- Purchases increased steadily from £43.9bn in 2017 to £46.6bn in 2019 but dropped by around 7% to £43.4bn in 2020. Despite the effects of Covid 19, purchases in 2020 were on a par with 2017 levels.
- While the value of Total Purchases varied year on year, they remained equal to around two-thirds of Turnover in each year.
- Goods and Materials purchases accounted for the largest share of Turnover at 49%.

¹ Data used in this analysis was the Provisional 2020 data, which is revised when publishing the 2021 ABI figures

² For further information on the NIABI see: [Annual Business Inquiry | Northern Ireland Statistics and Research Agency \(nisra.gov.uk\)](https://www.nisra.gov.uk/annual-business-inquiry)

- Of all purchases in the four-year period, almost three quarters of spend was on Goods and Materials. Services accounted for around 20% of purchases each year. Energy and Water costs only accounted for around 4% of purchases spending, although this has been increasing year on year from 2017.
- Across the four years, around three fifths of Goods and Materials purchased were for resale without further processing and around two fifths for Intermediate Consumption.
- 73% of all Goods and Materials purchases made for resale without further processing in 2020 were made from outside Northern Ireland. The figure for Goods and Materials for further processing was 61% sourced from outside Northern Ireland.
- In 2020, Wholesale Trade and Retail Trade were the Sectors with the largest purchases spend contributing to 46% of the total purchases in the year with a value of £20 billion. Manufacturing was the next highest at £9.9bn, or 23% of all purchases.
- Large 250+ businesses accounted for almost two fifths (37%) of Total Purchases in the 2017 to 2020 period.
- Over the 2017 to 2020 period, Exporters have had higher Total Purchases compared to non-Exporters reaching 59% of total purchases by 2020. External Sellers also have higher levels of purchases than non-External Sellers, with 65% of total business purchases accounted for by External Sellers in 2020.

Introduction

The Northern Ireland '10x Economy – an economic vision' strategy 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 and to deliver a ten times better economy intended to provide inclusive benefits for both people and place.

An area of business income which has yet to be analysed in detail is expenditure on purchases as declared on the Northern Ireland Annual Business Inquiry (NIABI) survey questionnaire. Purchases refers to businesses' expenditure on energy, services, goods, and materials that are used up or transformed by the business activity. The number, type and value of items purchased will vary significantly across

different sizes of business and for each particular industrial sector that the business operates in.

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. The 2020 NIABI sampled approximately 10,000 businesses in Northern Ireland from a population of approximately 56,000 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, or by contacting the company for clarification where appropriate. For non-returns above a selected employment threshold, data are imputed using a methodology which takes account of previous returned data and the performance of other similar businesses. This information is 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.

The survey question relating to purchases has never previously been explored in detail and part of this project was to explore the underpinning data in terms of its robustness and quality. The NIABI survey collects expenditure data on Employment Costs and purchases data on Goods and Materials, Energy, Water and Services. Each of the four purchases types is collected as a subcategory under question 7 on the NIABI form.

This paper focuses on the reporting of purchases spend as detailed by the businesses who complete the NIABI survey.

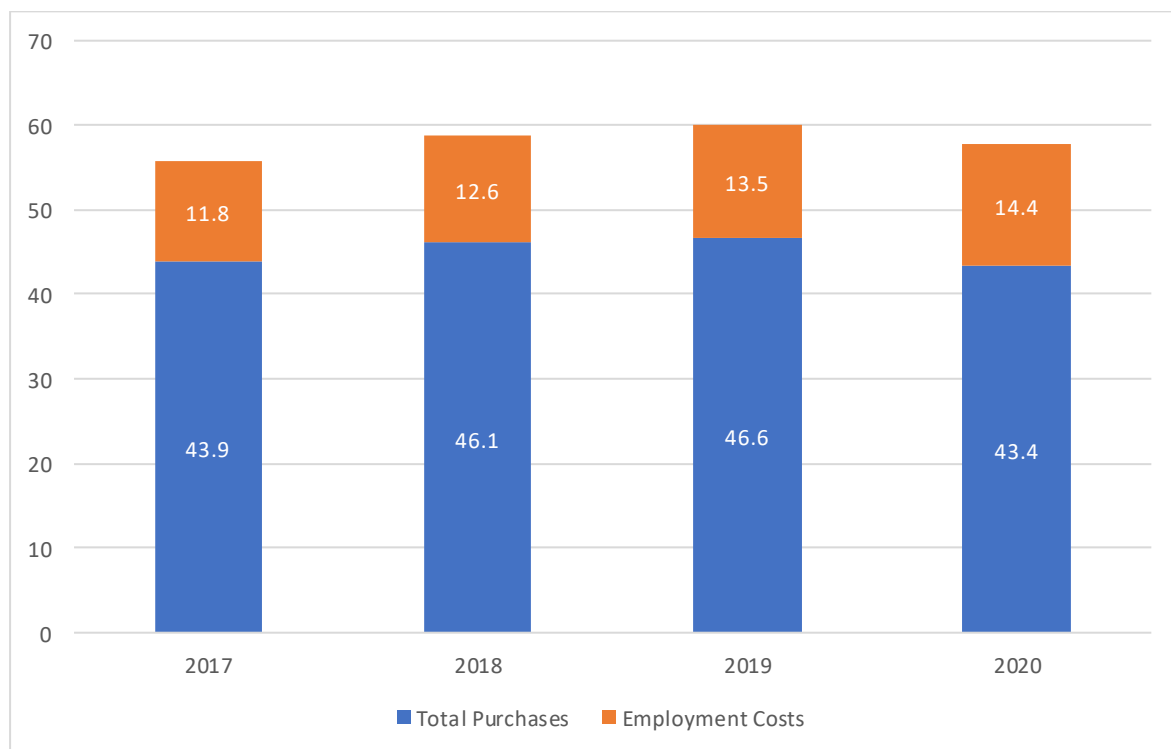
For this paper, analyses were undertaken using the NIABI data for 2017 to 2020.

Results

Total Purchases, Employment Costs and Turnover

While this paper is focussed on purchases, for wider business context, Figure 1 shows the value of costs to businesses in Northern Ireland from 2017 to 2020 consisting of Total Purchases and Employment Costs. Total Purchases includes goods, materials, energy, water and services as reported by businesses on their NIABI survey returns.

Figure 1: Northern Ireland Costs to Businesses 2017 - 2020 (£ Billion)



In the three years between 2017 and 2019, the total value of Purchases and Employment Costs gradually increased year on year to £46.6bn Total Purchases by 2019 with Employment Costs increasing to £13.5bn. For these three years, the corresponding share of Total Purchases as a percentage of total costs to businesses remained steady at around 78%, with Employment Costs at 22%. 2020 saw the rising Employment Costs trend continue to £14.4bn while Total purchases fell by over £3bn to £43.4bn. In percentage terms, this meant a small shift to 75% of total costs being on Total Purchases and 25% on Employment Costs.

The total value of Purchases increased by 5.0% from £43.9bn in 2017 to £46.1bn in 2018, by 1.1% to £46.6bn in 2019 and fell substantially by 7.0% to £43.4bn in 2020.

This reduction in Purchases spend in 2020 is likely to be an effect from Covid related restrictions of the economy from the second quarter of 2020 onwards. However, despite this large decrease in 2020 compared to 2019 and 2018, the 2020 purchases total remains on a par with 2017 levels.

Table 1: Total Purchases compared to Turnover 2017 – 2020 (£ Billion)

Year	Total Purchases	Turnover	Purchases as a % of turnover
2017	43.9	66.1	66%
2018	46.1	68.8	67%
2019	46.6	71.3	65%
2020	43.4	67.1	65%

Table 1 shows that even though the absolute values of Purchases change year on year, Turnover follows the same pattern, which in turn gives a very stable trend of purchases accounting for around two thirds of Turnover.

Total Purchases by Type

Figure 2: Total Purchases 2017 to 2020: Goods & Materials, Energy & Water and Services (£ Billion)

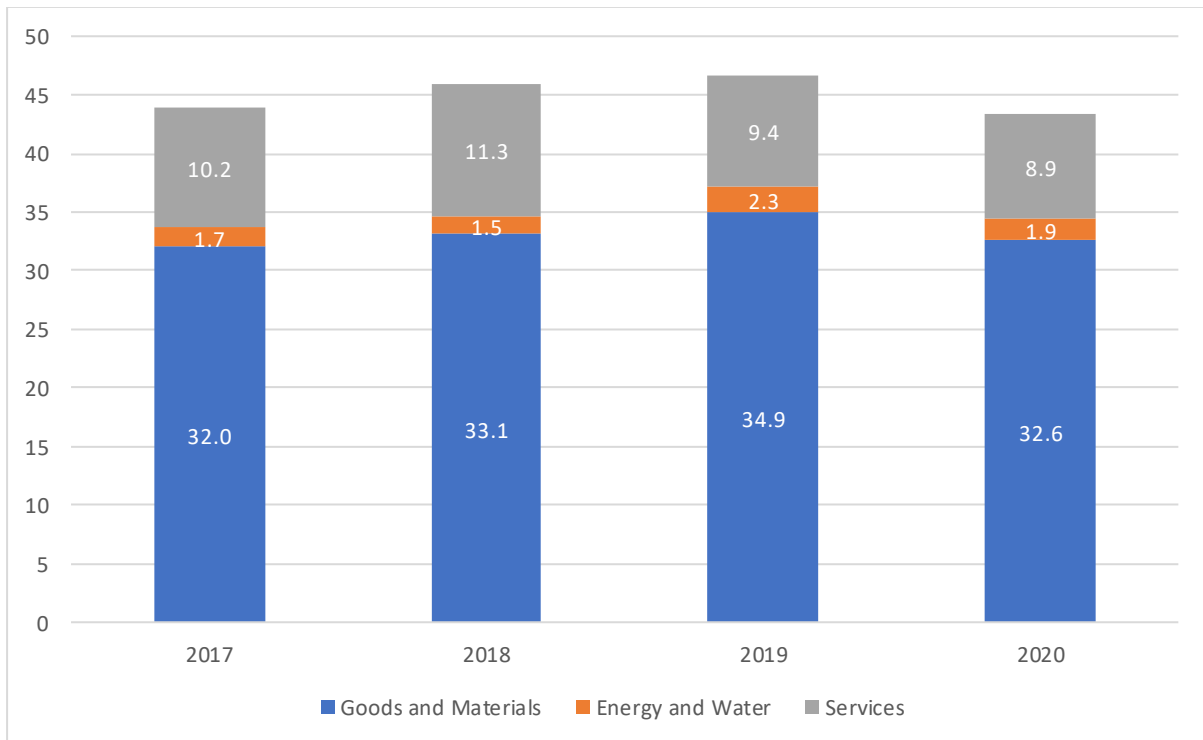


Figure 2 shows the Total Purchases spend in Northern Ireland from 2017 to 2020 broken down by purchases of Goods and Materials, Energy and Water, and Services.

Goods and Materials consistently have the highest purchase values, rising from £32.0bn in 2017 to a peak of £34.9bn in 2019, then falling to £32.6bn in 2020.

Services purchases have been on a downward trend since their highest levels of £11.3bn in 2018, falling to £8.9bn in 2020.

Overall, purchases are dominated by Goods and Materials, with around three quarters of all purchases in this category in each year. Next is Services, which contributes to between 20% and 25% of purchases each year. Energy and Water costs only contribute around 4% of purchases spending, although this peaked at 5% in 2019. Within Energy and Water, water costs are negligible at around 0.1% of spending each year, so energy cost pressures in future years (2021 onwards) are likely to have a significant direct effect on this category and an indirect effect on expenditure on goods and services.

Total Purchases by Type as a Share of Turnover

Figure 3: Total Purchases 2017 to 2020 by Type as a Percentage of Turnover

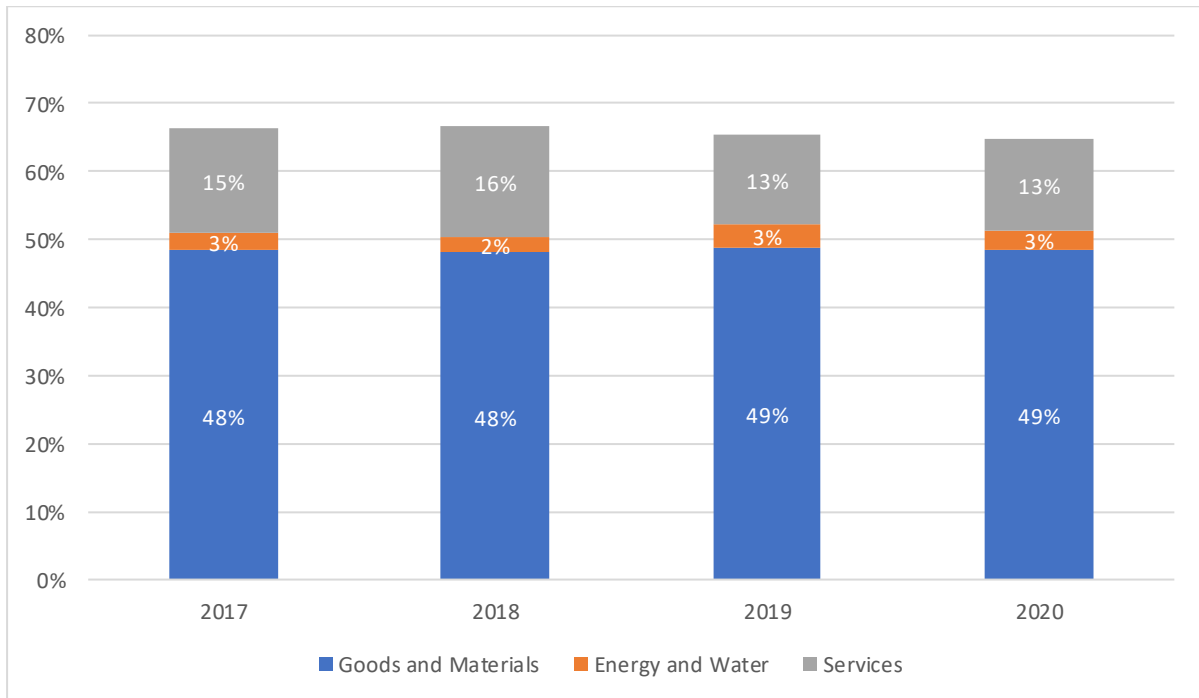


Figure 3 shows that although there are fluctuations in the different purchase types across the four years, this does not translate to significant differences when compared to shares of Turnover. Goods and Materials have settled at nearly half (49%) of Turnover, followed by Services at 13% and Energy and Water at 3% in 2020.

Types of Goods and Materials Purchased

Figure 4: Total Purchases 2017 to 2020: Goods & Materials bought for Further Processing and Resale (£ Billion)

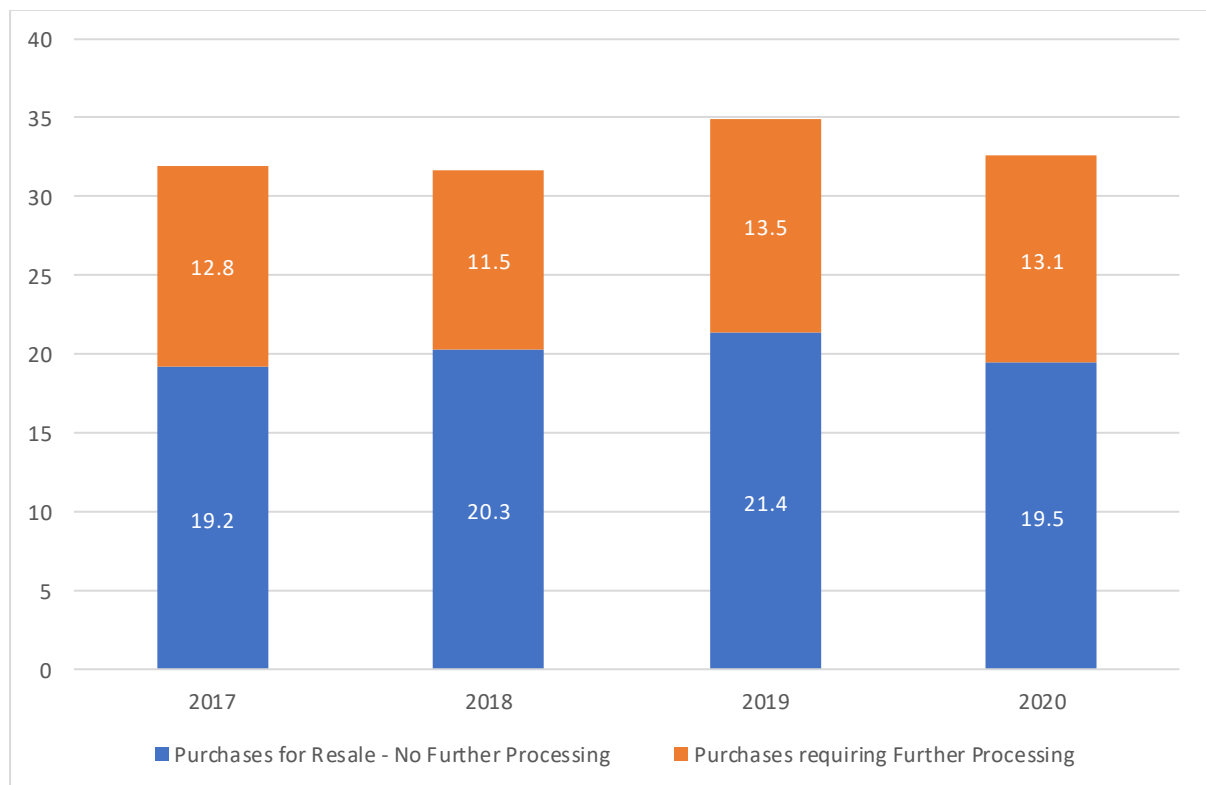


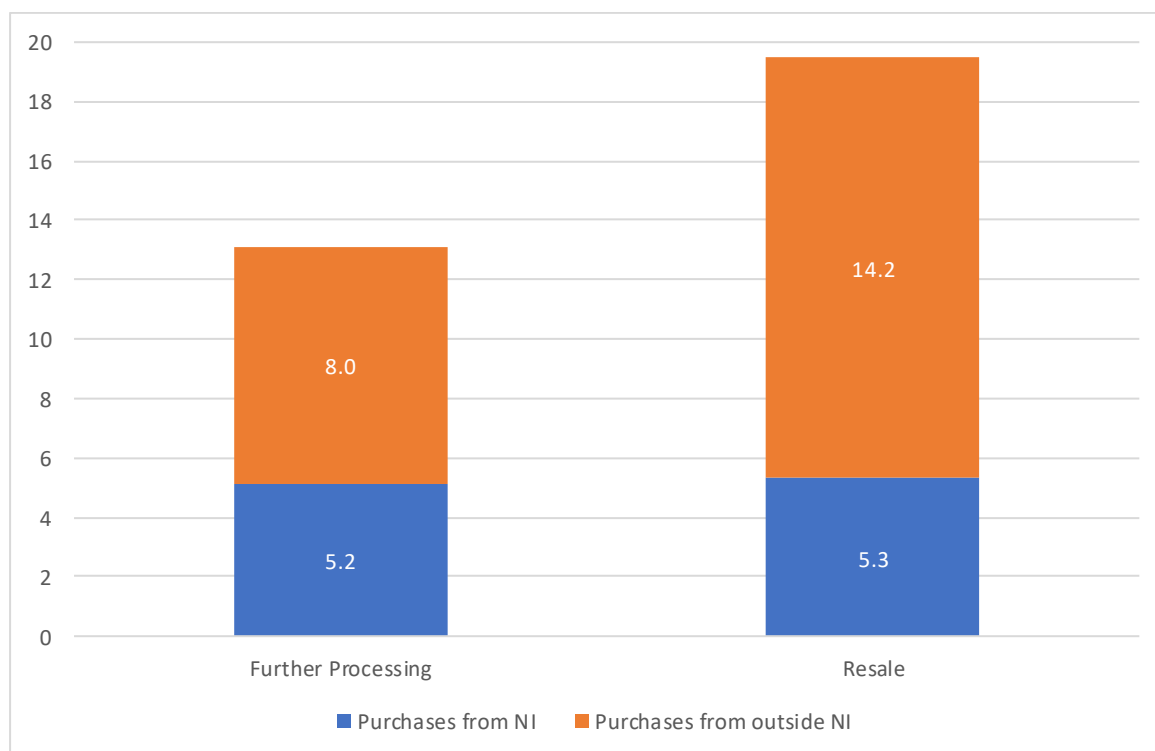
Figure 4 shows the Total Purchases of Goods and Materials in Northern Ireland from 2017 to 2020 broken down by goods and materials that were bought for resale without further processing and those that were bought for further processing. The latter is referred to as Intermediate Consumption.

Though the value of each varies slightly year on year, the share of each is stable at around three fifths (60%) of Goods and Materials purchased for resale without further processing and around two fifths (40%) for Intermediate Consumption.

Figure 5 highlights where goods were purchased from in 2020. £8bn, or 61% of Goods and Materials for Further Processing were purchased from outside NI, with the remaining £5.2bn (39%) being purchased from NI.

While the value of Resale Purchases sourced from NI are similar to those for Further Processing at £5.3bn, this represents a much lower share of the purchases of goods and materials for resale from within NI at 27% (compared to 40% for Goods and Materials bought for further processing). The majority of purchases of Goods and Materials for Resale were sourced from outside NI at £14.2bn, or 73%.

Figure 5: Goods & Materials bought for Further Processing and Resale by purchase origin 2020 (£ billion)



Type of Services Purchased

Table 2 shows that, on average over the four year period, Total Purchases of Services amount to just under £10 billion per annum. The trend has seen Total Purchases of Services peaking in 2018 at £10.4bn, but decreasing year on year thereafter, with £9.4bn spent in 2019 and £8.9bn spent in 2020.

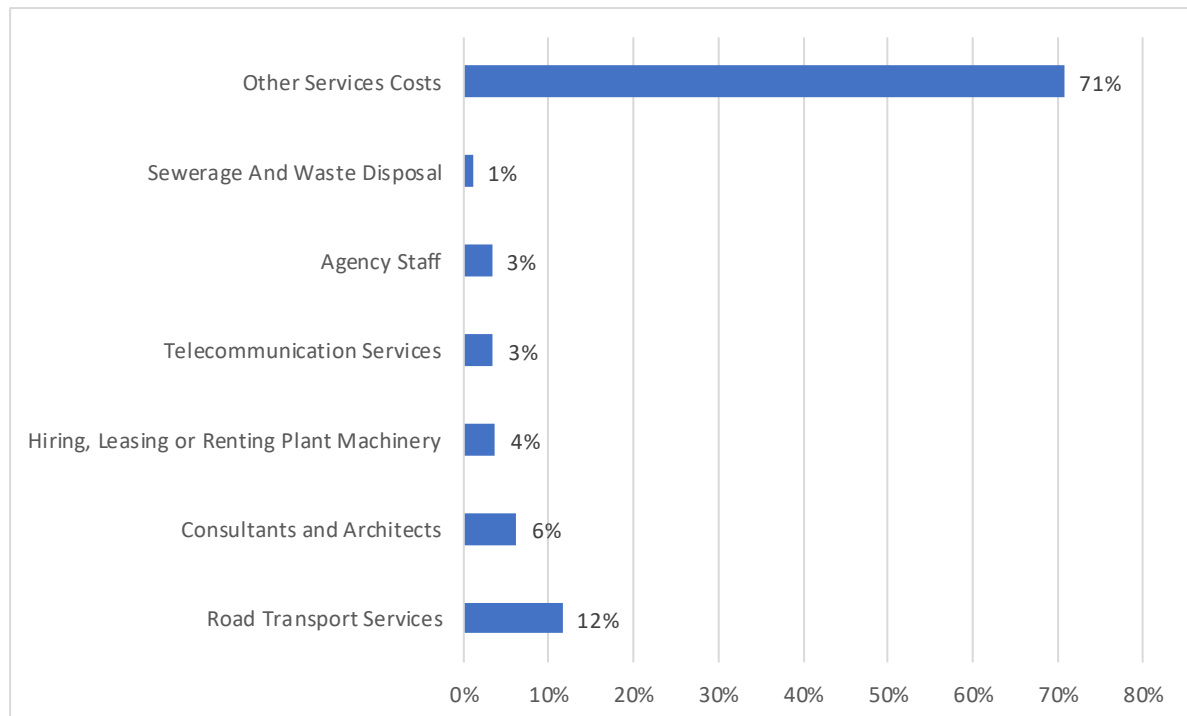
Table 2: Total purchases of services by type (£ billion)

	2017	2018	2019	2020
Road Transport Services	0.8	0.9	1.1	1.0
Consultants and Architects	0.7	0.8	0.7	0.6
Hiring, Leasing or Renting Plant Machinery	0.4	0.4	0.4	0.3
Telecommunication Services	0.2	0.2	0.3	0.3
Agency Staff	0.3	0.6	0.3	0.3
Sewerage And Waste Disposal	0.1	0.1	0.1	0.1
Other Services Costs³	7.7	7.5	6.5	6.3
Total Purchases of Services	10.2	10.4	9.4	8.9

³ Examples of other services costs includes rent, insurances, payments to subcontractors, advertising and marketing, sales of services purchased and then sold on to a customer without actually changing the service sold, amounts payable for sea, air and rail freight on goods transported.

With all other categories having similar values year on year, 'Other Services Costs' has the most variation dropping from £7.7bn in 2017 to £6.3bn in 2020, and is therefore largely responsible for changes in the Total Purchases of Services figures over time.

Figure 6: Total Purchases of Services 2020 (£ Billion)



Focussing on the 2020 year, Figure 6 shows that Other Services Costs make up 71% of Total Purchases of Services, followed by Road Transport Services at 12% and Consultants and Architects at 6%. 2020 is comparable to previous years, where the proportions follow a similar pattern.

Total Purchases by Standard Industrial Classification (SIC)

Table 3: Total purchases from 2017 to 2020 by Industrial Sector (£ Billion)

SIC	2017-2019 Average	2020 Total Purchases
A Agriculture, Forestry and Fishing	0.1 (0%)	0.1 (0%)
B Mining and quarrying	0.3 (1%)	0.3 (1%)
C Manufacturing	10.7 (23%)	9.9 (23%)
D Electricity, gas, steam and air conditioning supply	1.9 (4%)	1.5 (4%)
E Water supply, sewerage, waste management and remediation activities	0.4 (1%)	0.4 (1%)
F Construction	4.7 (10%)	4.8 (11%)
G Wholesale and retail trade, repair of motor vehicles and motorcycles	20.3 (44%)	20.0 (46%)
H Transportation and storage	1.7 (4%)	2.1 (5%)
I Accommodation and food service activities	0.9 (2%)	0.7 (2%)
J Information and communication	0.8 (2%)	0.5 (1%)
L Real estate activities	0.4 (1%)	0.3 (1%)
M Professional, scientific and technical activities	0.9 (2%)	1.0 (2%)
N Administrative and support service activities	1.0 (2%)	0.7 (2%)
P Education	0.2 (0%)	0.2 (0%)
Q Human health and social work activities	0.4 (1%)	0.4 (1%)
R Arts, entertainment and recreation	0.7 (2%)	0.3 (1%)
S Other service activities	0.2 (0%)	0.1 (0%)
Total	45.6	43.4

When examined by Standard Industrial Sector (SIC), Sector G Wholesale and Retail consistently has the largest share of Total Purchases, with a 2020 value of 46%, followed by C Manufacturing at 23% and F Construction at 11%. The Purchases values by SIC in 2020 are compared to the average for the years 2017 to 2019.

In terms of purchases value, most sectors either maintained the same level or experienced a drop in purchases from the 2017-2019 average to 2020, with the exception of F Construction, H Transportation and Storage and M Professional, Scientific and Technical sectors where there was a small increase. Nevertheless, the respective shares of Total Purchases accounted for by each sector in 2020 compared to the 2017-2019 average was broadly consistent.

Figure 7: Total Purchases in 2020 by Broad Standard Industrial Classification Sector (£ Billion)

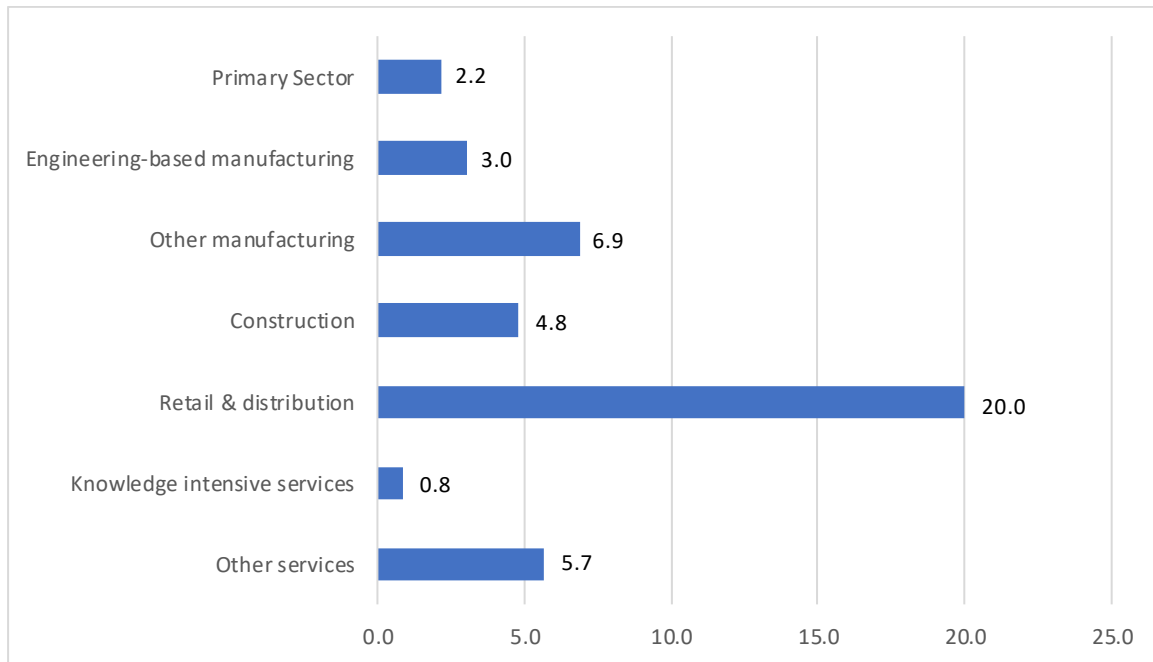


Figure 7 shows the Total Purchases spend in Northern Ireland in 2020 by Broad Industrial Sector.

As with the Industrial Sector analysis above, the top spending Broad Sector is Retail and Distribution with £20bn, almost half (46%) of the entire purchases spend in 2020. Other Manufacturing is next with £6.9bn, or 16% and Construction accounted for £4.8bn, or 11%.

The breakdown of Manufacturing into Engineering based and Other shows £3bn, or 30% of all Manufacturing purchases is Engineering based, while Other Manufacturing at £6.9bn makes up the remaining 70% of this Sector.

Table 4: Types of Purchases from 2017 to 2020 by Standard Industrial Classification (SIC) Sector (£ Million)

Category	Goods and Materials		Energy and Water		Services	
	2017-2019 Av	2020	2017-2019 Av	2020	2017-2019 Av	2020
A Agriculture, Forestry and Fishing	22	26	20	34	47	27
B Mining and quarrying	151	129	33	56	87	85
C Manufacturing	8,899	8,336	306	450	1,453	1,155
D Electricity, gas, steam and air conditioning supply	1,191	547	228	191	491	795
E Water supply, sewerage, waste management and remediation activities	218	168	75	61	157	138
F Construction	2,007	2,781	102	74	2,617	1,942
G Wholesale and retail trade, repair of motor vehicles and motorcycles	18,576	18,480	418	220	1,272	1,261
H Transportation and storage	410	681	380	494	960	933
I Accommodation and food service activities	637	516	79	66	205	163
J Information and communication	131	108	47	27	594	389
L Real estate activities	133	69	20	21	246	248
M Professional, scientific and technical activities	248	249	33	30	608	711
N Administrative and support service activities	365	221	37	25	575	440
P Education	60	3	20	14	108	174
Q Human health and social work activities	74	83	42	39	259	259
R Arts, entertainment and recreation	168	149	22	34	560	128
S Other service activities	55	52	31	22	73	65
TOTAL	33,345	32,598	1,893	1,860	10,313	8,912

As shown in Table 4, values across many of the individual industrial sectors have remained steady across the purchases types, with 2020 values close to the 2017-2019 average. Sector D Electricity, gas, steam and air conditioning saw the largest decrease in Goods and Materials purchases, dropping from £1.2bn to £0.5bn, followed by C Manufacturing which fell from £8.9bn to £8.3bn.

Sector F Construction had the largest increase in Goods and Materials purchases in 2020, increasing from £2.0bn to £2.8bn, whilst having a similar decrease in Services purchases from £2.6bn to £1.9bn.

Sector R Arts, entertainment and recreation had a significant fall in Services purchases, where the 2020 figure dropped to £0.1bn from a 2017-2019 average of £0.6bn. This sector was one of the sectors hardest hit by the Coronavirus pandemic, where many businesses would have been faced with the highest level of restrictions.

Sector H Transportation and Storage had the highest value of purchases in the Energy and Water category, rising to £494m from the 2017-2019 average of £380m. The value for C Manufacturing was £450m, up from the 2017-2019 average of £306m. Sector G Wholesale and Retail had the largest fall in Energy and Water purchases, falling from £418m to £220m.

Total Purchases by Business Size

Figure 8: Total Purchases by Business Size 2017 - 2020 (£ Billion)

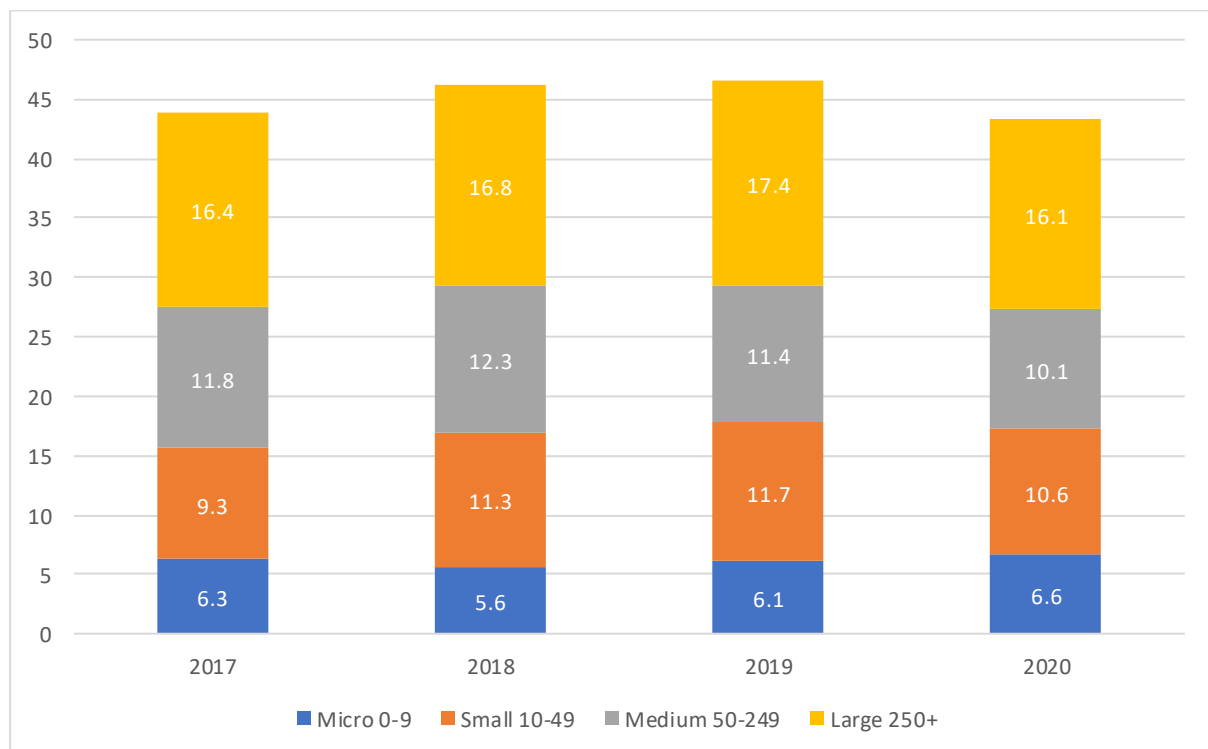


Figure 8 shows the value of Total Purchases in Northern Ireland from 2017 to 2020 broken down by business size in terms of the number of employees.

The purchases of Micro 0-9 businesses tend to be quite stable over time, with between £5.6 and £6.6bn of purchases. Changes to the overall totals are more driven by the changes in the Small, Medium and Large business purchases, particularly in 2020 where purchases in each of these business size groups dropped by more than £1bn each compared to 2019.

In percentage terms, Micro 0-9 businesses made up around 7% of total purchases during 2017 to 2020. On average, Small 10-49 and Medium 50-249 sized business constituted around a quarter of the purchases for all businesses during 2017 to

2020, while Large 250+ businesses accounted for over a third (37%) of Total Purchases in the same period.

Figure 9: Types of Purchases in 2020 by Business Size

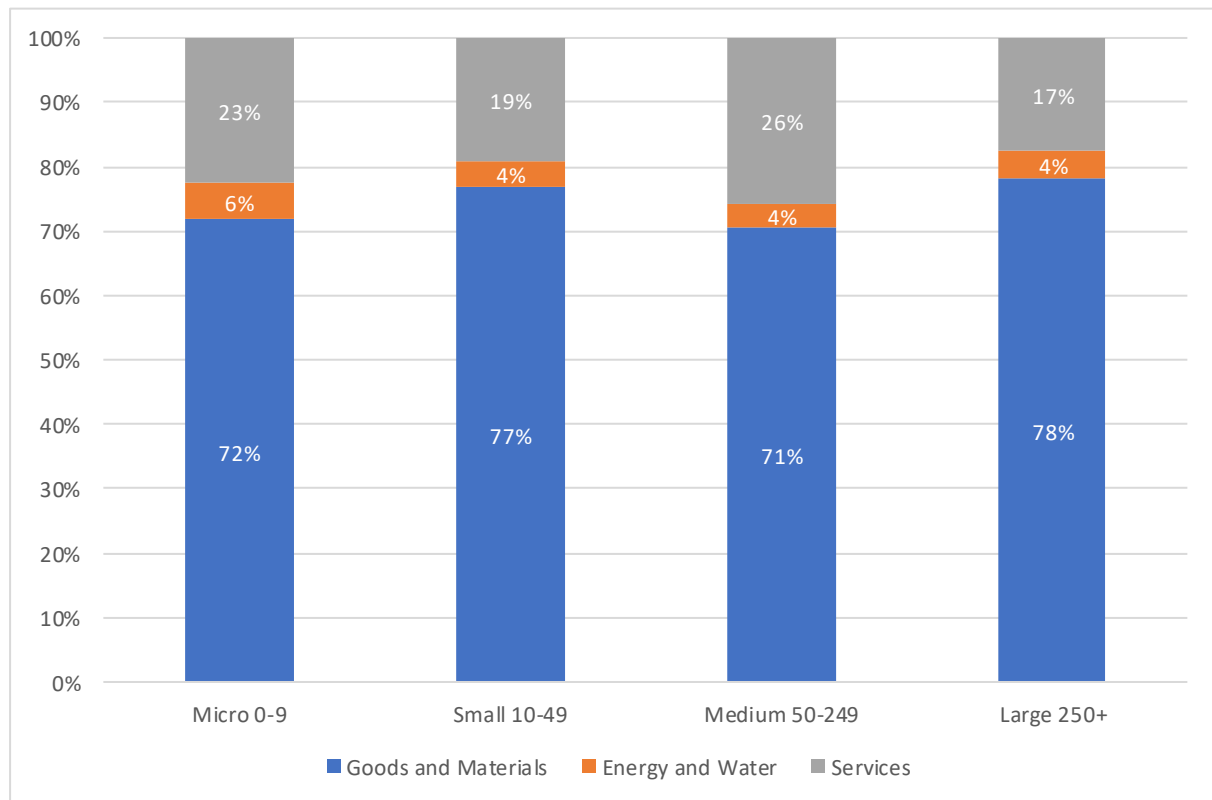


Figure 9 shows the share of Types of Purchases (Goods and Materials, Energy and Water and Services) in 2020 by Business Size.

Goods and Materials make up the majority of all purchases in 2020, for all business sizes at between 71% and 78% of all purchases.

After Goods and Materials, Services are the next highest value purchases for businesses, with between 17% (Large) and 26% (Medium) of all purchases being spent on Services.

The share of purchases accounted for by Energy and Water are consistent across each of the business sizes at between 4% and 6% of all purchases for each business size group.

Table 5 details the breakdown of the value of purchase type by business size. All business sizes have seen a reduction in spend across all purchases types from 2019 to 2020, with the exception of the Micro 0-9 group which has had an increase from

£4.0bn to £4.7bn for Goods and Materials, and the Large 250+ group where purchases of Energy and Water increased from £0.5bn to £0.7bn in the same timeframe.

Table 5: Total purchases by Business Size (£ billion) 2017-2020

Business Size	Year	Goods and Materials	Energy and Water	Services	Total Purchases
Micro 0-9	2017	4.2	0.3	1.8	6.3
	2018	3.7	0.3	1.6	5.6
	2019	4.0	0.7	1.5	6.1
	2020	4.7	0.4	1.5	6.6
Small 10-49	2017	7.1	0.3	2.0	9.3
	2018	8.4	0.4	2.6	11.3
	2019	9.0	0.5	2.2	11.7
	2020	8.2	0.4	2.0	10.6
Medium 50-249	2017	8.5	0.5	2.9	11.8
	2018	8.6	0.5	3.2	12.3
	2019	8.0	0.6	2.8	11.4
	2020	7.1	0.4	2.6	10.1
Large 250+	2017	12.3	0.6	3.6	16.4
	2018	12.4	0.5	3.9	16.8
	2019	13.9	0.5	2.9	17.4
	2020	12.6	0.7	2.8	16.1

Total Purchases by Sales Status

Figure 10: Total Purchases from 2017 to 2020 by Exporter⁴ / Non-Exporter status (£ Billion)

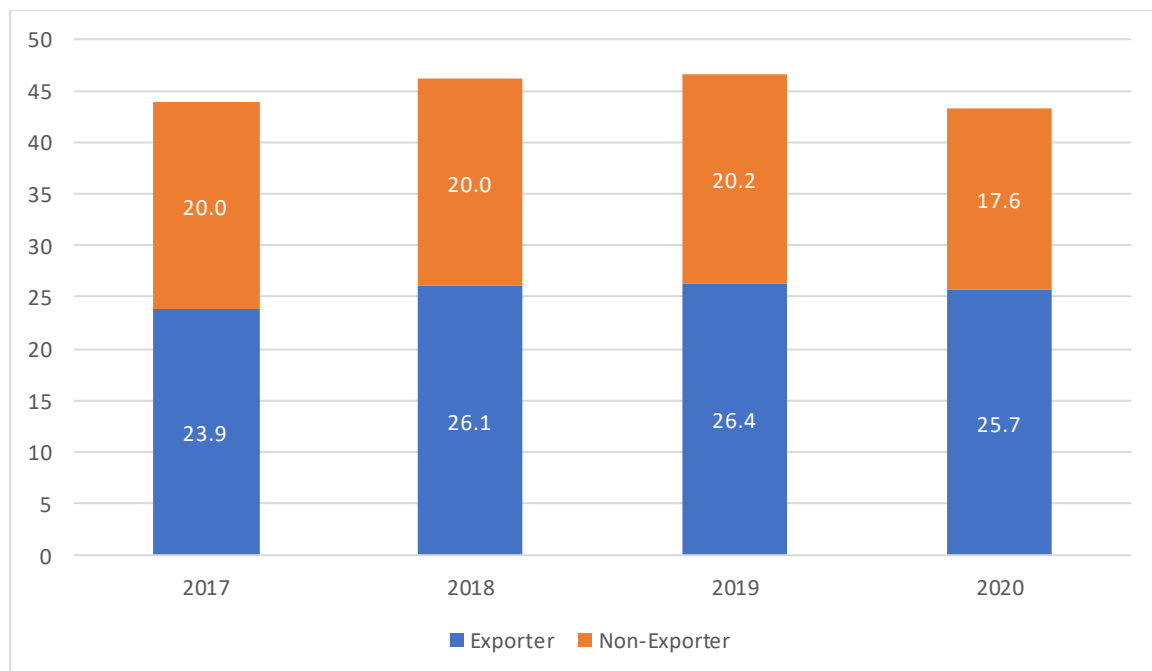


Figure 10 shows the Exporter and Non-Exporter split of Total Purchases spend in Northern Ireland over 2017 to 2020.

Businesses who are Exporters have always had a higher level of purchases expenditure, peaking at £26.4bn in 2019. Non-Exporters followed the same pattern, rising each year until a peak in 2019 of £20.2bn. Both Exporters and Non-Exporters saw a drop in their 2020 purchase levels, likely due to Covid related closures and economic slowdown, with Exporters experiencing a 3% drop in purchases and Non-Exporters dropping by 15%.

Over the 2017 to 2020 period, Exporters have had higher Total Purchases compared to non-Exporters. This is also an increasing trend with Exporters accounting for 55% (£23.9bn) of the Total Purchases in 2017, rising to 59% (£25.7bn) in 2020.

⁴ An Exporter is a business that has sales outside the United Kingdom, that is sales to Ireland, the Rest of the European Union and the Rest of the World. Non-Exporters only sell in the UK.

Figure 11: Total Purchases by Type from 2017 to 2020 by Exporter / Non-Exporter (£ Billion)

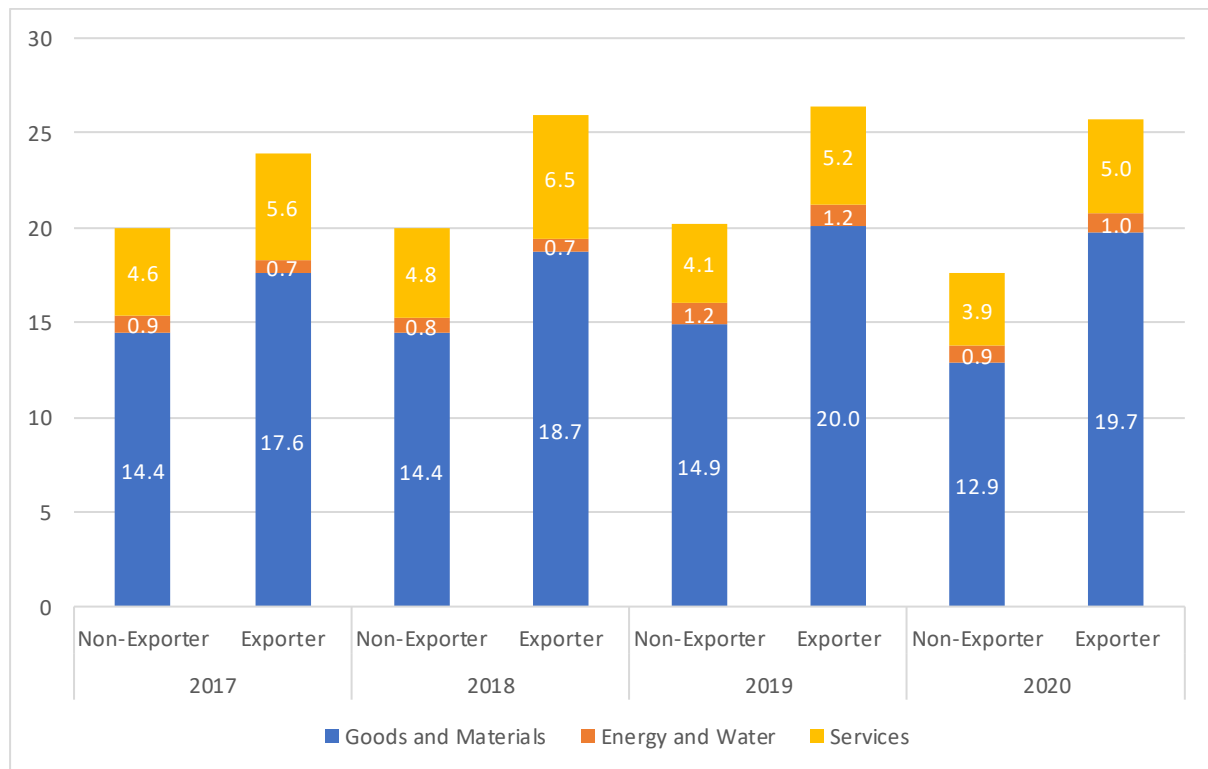


Figure 11 shows the Exporter and Non-Exporter split of Total Purchases spend in Northern Ireland over 2017 to 2020 broken down by Goods and Materials, Energy and Water, and Services.

Exporters' purchases saw very little difference in 2019 and 2020 values across all purchase types, with each category falling by between £0.2bn and £0.3bn. Non-Exporters however saw a £2bn drop in Goods and Materials purchases from £14.9bn to £12.9bn, with the other purchase types falling by marginal amounts.

Within the Exporter total purchases, around three quarters constitute Goods & Materials spend, between a fifth and a quarter for Services, and just 4% for Energy and Water over the four year period. The Non-Exporter average over the same period is very similar, with 73% of purchases being on Goods and Materials, 22% on Services and 5% on Energy and Water.

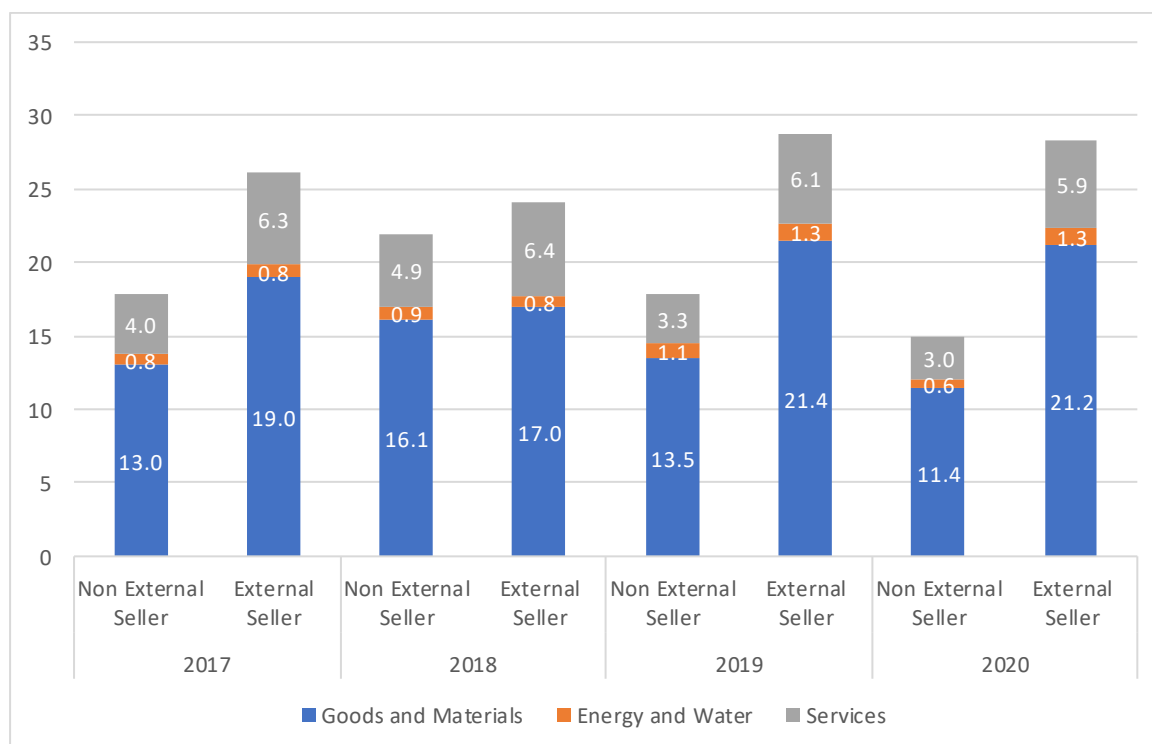
Figure 12: Total Purchases from 2017 to 2020 by External Seller⁵ / Non-External Seller (£ Billion)



The value of total purchases accounted for by Non-External Sellers as shown in Figure 12 has been gradually decreasing since a peak of £21.9bn in 2018, falling to £15.0bn in 2020 which represents 35% of total purchases. External Sellers had their lowest purchases value in 2018 at £24.2bn, rising to £28.8bn in 2019 and maintaining a similar level of £28.4bn in 2020. The 2020 total purchases value for External Sellers, represents 65% of all purchases, the highest share during the four years 2017 to 2020.

⁵ An External Seller is a business that has External Sales which are comprised of those sales made outside Northern Ireland, that is, sales to Great Britain, Ireland, the Rest of the European Union and the Rest of the World. A Non External seller only sells within Northern Ireland.

Figure 13: Total Purchases by Type from 2017 to 2020 by External Seller / Non-External Seller (£ Billion)



The pattern of purchases by type for External Sellers and Non-External Sellers is similar to that of Exporters and Non-Exporters, where all categories experience small decreases in purchases between 2019 and 2020, apart from the purchases of Goods and Materials by Non-External Sellers which decreased by £2.1bn from £13.5bn to £11.4bn.

Total Purchases by Legal Status

Table 6: Total Purchases from 2017 to 2020 by Legal Status (£ Billion)

Year	Company	Sole Proprietor	Partnership	Public corp, nationalised body or Central Government	Non-profit body or mutual assoc.	Total
2017	40.4	1.0	1.3	0.6	0.6	43.9
2018	42.4	0.9	1.2	0.9	0.6	46.1
2019	43.0	0.7	1.3	0.9	0.7	46.6
2020	39.7	0.9	1.4	0.8	0.6	43.4

Table 6 details the Total Purchases in Northern Ireland over 2017 to 2020 broken down by the Legal Status of each business.

The rises and falls in Total Purchases have been driven by the changes within businesses in the 'Company' Legal Status, which peaked at £43bn in 2019, falling back below 2017 levels to £39.7bn in 2020. Companies make up around 60% of all businesses included in the survey, so any change which disproportionately affects this Legal Status group of businesses will be reflected in total purchases values.

The purchases of the remaining Legal Statuses groups were relatively stable, with 2020 values of £1.4bn of purchases by Partnerships, £0.9bn by Sole Proprietors, £0.8bn by Public Corporations and Central Government, and £0.6bn by Non-profit bodies.

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