

(Annual Business Inquiry)

# NI Non-Financial Business Economy 2017 Provisional Reporting Unit Results

Date: 21 November 2018

Geographical Area: Northern Ireland

Theme: Business and energy

Frequency: Annual

## Key Points

- In 2017, the income generated by non-financial businesses in Northern Ireland (NI), less the cost of goods and services used to create this income, was estimated to be £22.0 billion. This amount represents the approximate Gross Value Added (aGVA) at basic prices of the NI non-financial business economy, excluding farming and financial services.
- The NI non-financial business economy, as measured by the Northern Ireland Annual Business Inquiry (NIABI), recorded an increase of £126 million (0.6%) in aGVA from 2016 to 2017.
- The key driver of aGVA growth was in the NI non-financial services sector which increased by £388 million (4.9%) between 2016 and 2017. The majority of aGVA growth in this sector is attributable to the administrative and support services section which increased by £211 million (18.1%).
- Retail and wholesale trade within the distribution sector recorded aGVA growth of £102 million (2.1%) and the construction sector grew by £29 million (1.3%).
- The only sector to record a decline in aGVA growth was the production sector, decreasing by £420 million (-6.4%) from £6.55 billion to £6.13 billion. The majority of the aGVA decrease in this sector was attributable to the manufacturing section which saw a decrease of £384 million (-7.3%), mainly driven by a substantial decline in the food, beverages and tobacco sub sector.
- Turnover in the NI non-financial business economy as a whole decreased by £1.1 billion (-1.7%) over the year and purchases of goods, materials, energy, water and services increased by £1.4 billion (3.2%).

## **National Statistics**

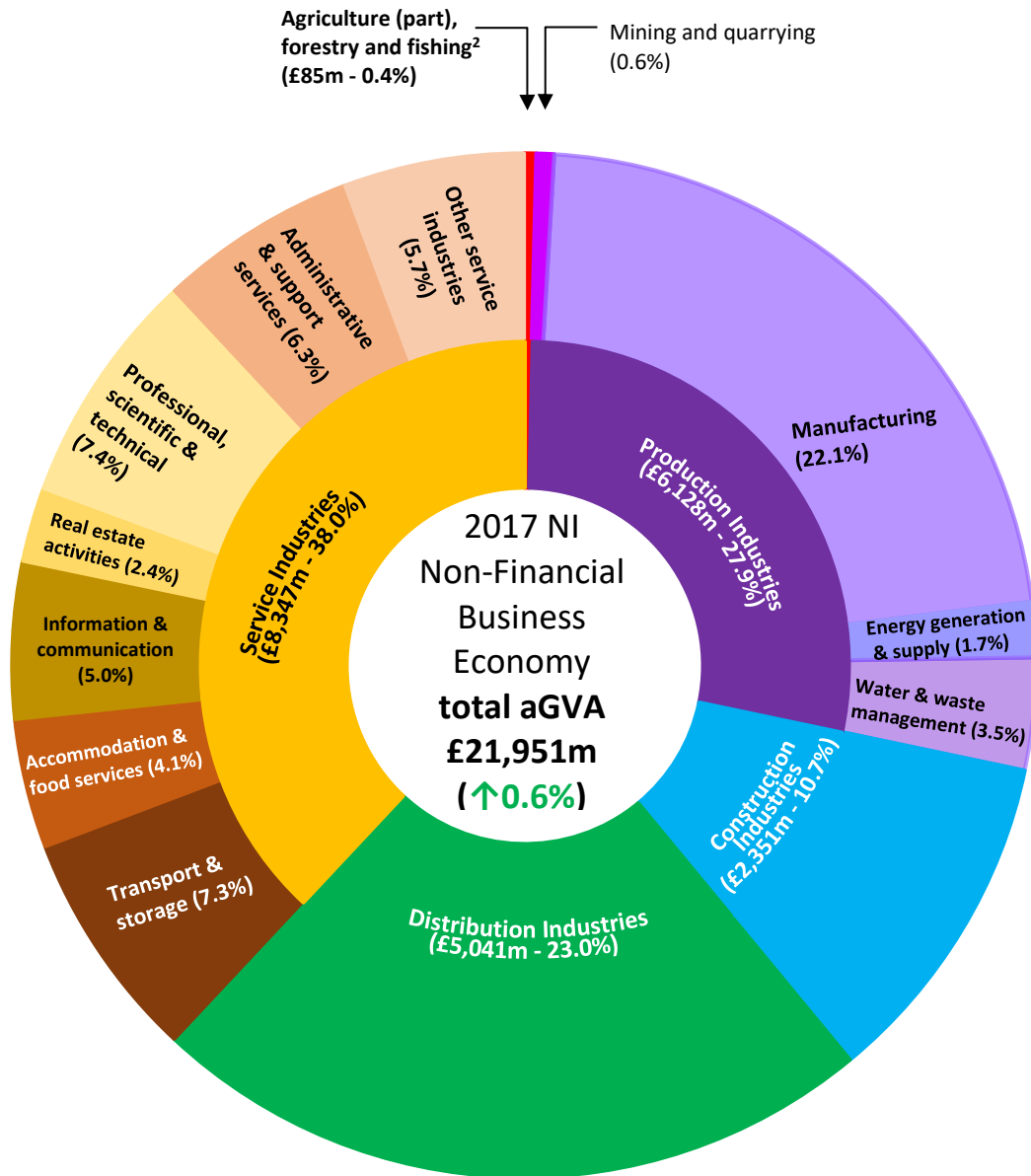
The United Kingdom Statistics Authority has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics.

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.

All official statistics should comply with all aspects of the Code of Practice for Official Statistics. They are awarded National Statistics status following an assessment by the Authority's regulatory arm. The Authority considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

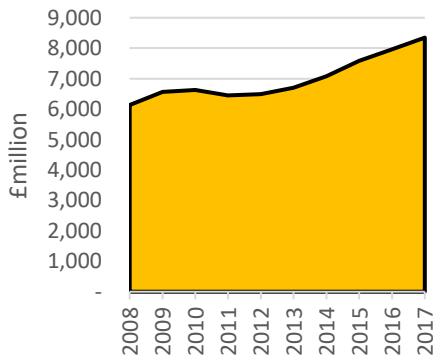
It is a producer's responsibility to maintain compliance with the standards expected of National Statistics. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with the Authority promptly. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored.

Figure 1: aGVA 2017 and trends by broad industry 2008-2017 for NI NFBE<sup>1</sup>



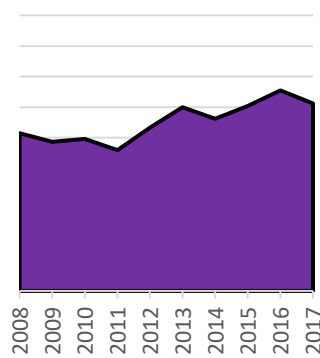
**Service Industries**

4.9% growth 2016-2017 ↑



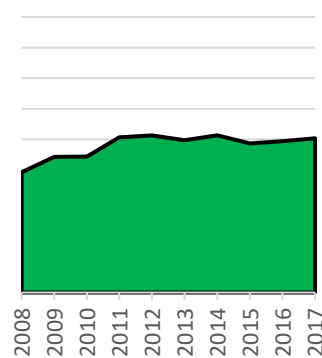
**Production Industries**

-6.4% decrease 2016-2017 ↓



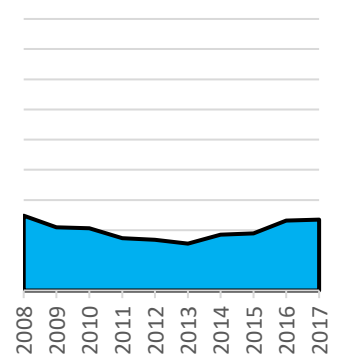
**Distribution Industries**

2.1% growth 2016-2017 ↑



**Construction Industries**

1.3% growth 2016-2017 ↑



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<sup>1</sup> NI NFBE is the abbreviation for NI Non-Financial Business Economy

<sup>2</sup> Agriculture (part) covers only hunting, forestry, fishing and the support activities to agriculture and excludes crop and animal production.

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# 1 Introduction and Context

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This release contains 2017 provisional and 2016 revised reporting unit<sup>3</sup> results from the Northern Ireland Annual Business Inquiry (NIABI). The NIABI is a key resource for measuring the size, performance and structure of the Northern Ireland non-financial business economy. It is a survey of businesses covering the Production, Construction, Distribution and Service industries and covers roughly two thirds of the total NI economy. Public sector bodies are excluded from the survey. Further information on survey coverage is contained in the background notes.

## **Key variables**

The published estimates include the total value of sales and work completed by businesses (turnover); the value of the purchase of goods, materials and services and approximate Gross Value Added (aGVA) at basic prices. These estimates are further disaggregated at industry level, providing users with an insight into the size and evolution of the overall Non-financial business economy from 2008 to 2017 as well as a measure of the contribution made by different industry sectors. The financial estimates are collected and presented as monetary values. All financial data are reported at current prices (effect of price changes included).

## **Interpretation**

The Non-financial business economy is constantly changing, as businesses merge, are taken over, or change the main focus of their activity. These changes can result in the industry classification of a business changing over time. In industries where movements are common, or where large businesses are involved, these changes can themselves cause large changes in the NIABI estimates. This should be taken into consideration when changes over time are being considered.

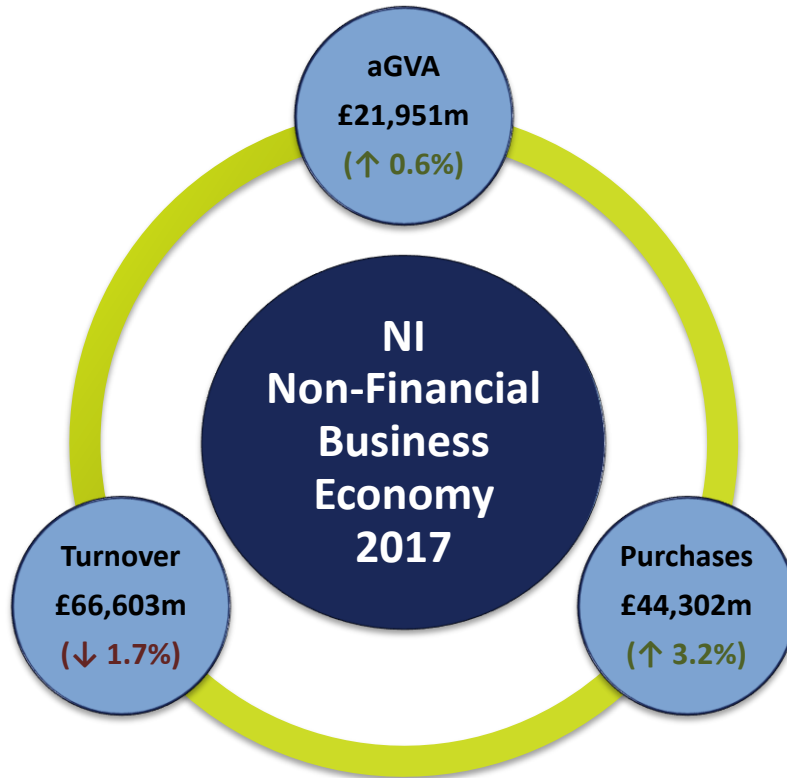
## **Quality indicators**

When interpreting NIABI results, users are advised to refer to the quality indicators known as coefficient of variation provided with the estimates in the tables. These indicate that some results have quite large margins of statistical error associated with them. Users should exercise caution when interpreting the annual changes associated with such results. Users should also be aware that methodological improvements governing the treatment of business closures were introduced for the 2011 report. These improvements have been implemented for 2010 to 2017 data. Consequently, although 2008 and 2009 figures are included in this report, users should exercise caution when making comparisons.

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<sup>3</sup> See part (vi) of background notes for definitions and further information.

## 2 Summary and Commentary



Income

minus

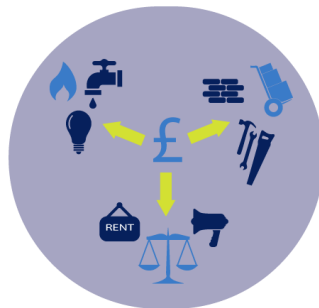
Expenditure

equals

aGVA



-



=



Income includes turnover, insurance claims, work in progress, changes in stock and subsidies

Expenditure includes purchases of goods, materials, energy, water and services and total taxes and levies paid

aGVA is a measure of the income generated by businesses less their expenditure

### NI Annual Business Inquiry 2017 Figures

£73,765 million

-

£51,814 million

=

£21,951 million

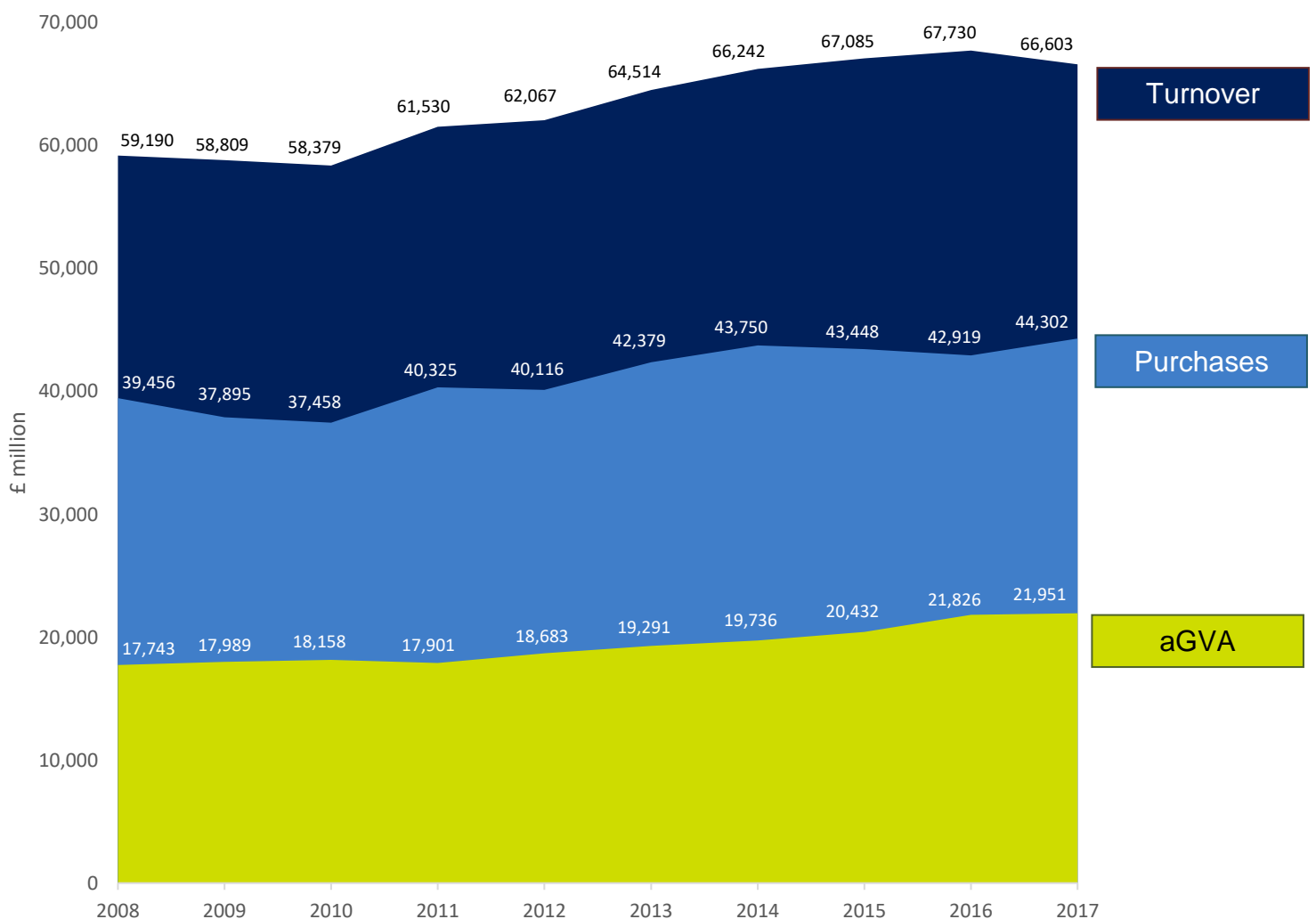
## Turnover, purchases and approximate Gross Value Added (aGVA)

Turnover in the NI non-financial business economy declined for the first time since 2010, falling 1.7% to £66,603 million in 2017. This was mainly caused by a substantial fall in turnover in the manufacturing sub sector of food, beverages and tobacco.

The value of purchases of goods, materials, energy, water and services grew by 3.2% from £42,919 million in 2016 to £44,302 million in 2017. This is the first increase in costs since 2014.

The provisional results of the 2017 NIABI and revised results from the 2016 NIABI show that the turnover generated by businesses in Northern Ireland (NI), less the cost of goods and services used to create this income, was estimated to be £21,951 million in 2017. This is an increase of 0.6% from 2016 and represents the aGVA of the NI non-financial business economy (see section (iv) for full details of industry coverage).

**Figure 2: Trends in Turnover, Purchases and aGVA 2008 – 2017 (NI NFBE)**



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## Employment (taken from Business Register and Employment Survey 2017)

<https://www.nisra.gov.uk/statistics/annual-employee-jobs-surveys/business-register-and-employment-survey>

The number of private sector jobs in Northern Ireland was just over 554,000 in September 2017. This was an increase of 2.6% over the year. Please note that BRES excludes the following: agriculture (but includes animal husbandry service activities and hunting, trapping and game propagation), the self employed, HM Armed Forces, private domestic servants, homeworkers and trainees with a contract of employment (non-employed status).

### Comparison to UK

Results for the NI non-financial business economy show a slower pace of growth for aGVA than the UK overall from 2016 to 2017. UK aGVA recorded an increase of 5.6% compared to 0.6% in NI between 2016 and 2017. Comparing turnover, the UK grew by 10.0% compared to a 1.7% decrease for NI. The value of purchases in NI increased by 3.2% year on year compared to a larger increase of 12.8% for the UK.

Looking at the longer trend from 2012 to 2017, UK turnover has increased by 15.4%, purchases by 9.1% and aGVA by 34.5%. In comparison, NI turnover has increased by 7.3%, purchases by 10.4% and aGVA by 17.5%.

The composition of the NI non-financial business economy differs in certain key ways from the UK. In 2017 for the UK as a whole, services accounted for 56.7% of the economy while in NI they accounted for 38.0%. The production sector, which consists of mining and quarrying, manufacturing, electricity generation and supply and water and waste management, accounted for 27.9% of the NI non-financial business economy while in the UK they accounted for 18.8%.

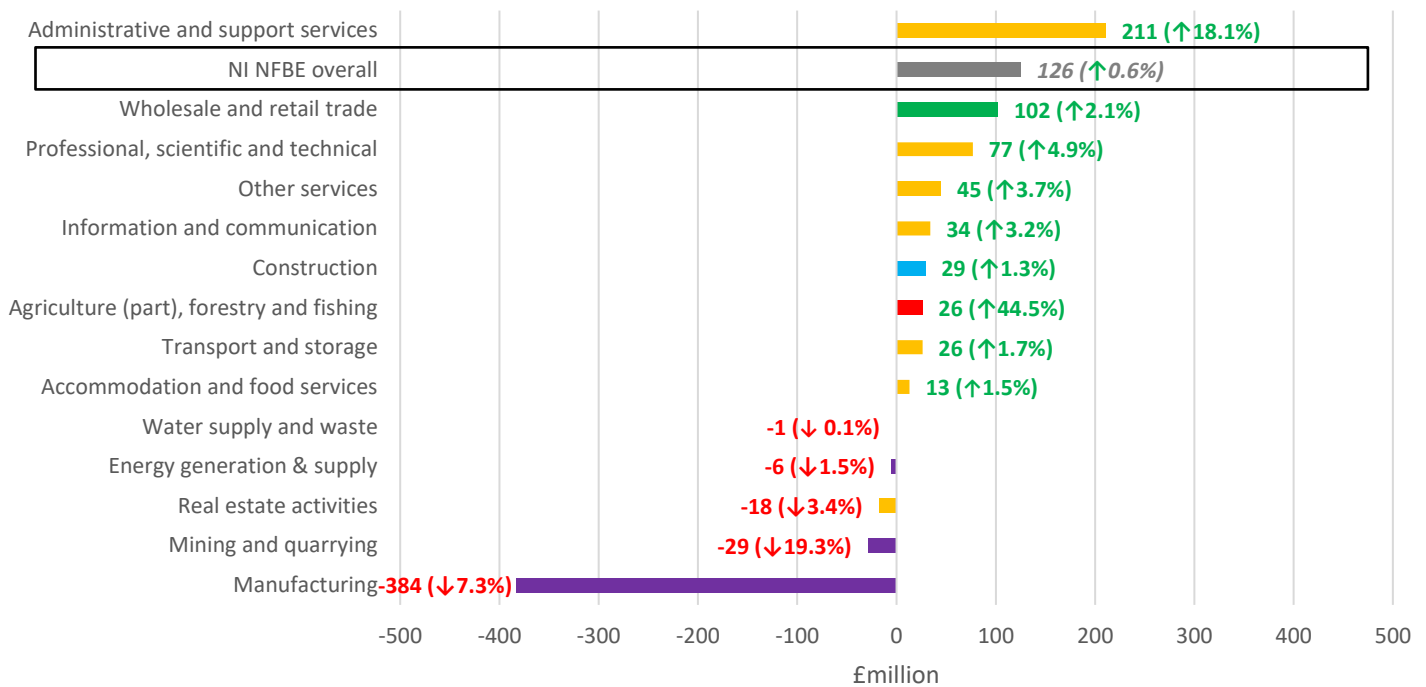


## aGVA by Industrial Section

Looking by industrial section rather than broad industrial sector, administrative and support services was the largest individual contributor to overall aGVA growth in the NI non-financial business economy; increasing by £211 million (18.1%) between 2016 and 2017. The wholesale and retail trade section also exhibited strong aGVA growth between 2016 and 2017, increasing by £102 million (2.1%).

Manufacturing saw a large decrease in aGVA of £384 million (-7.3%), driven by a substantial decline in the food, beverages and tobacco sub sector between 2016 and 2017. However the rest of manufacturing overall, excluding the food, beverages and tobacco sub sector, increased between 2016 and 2017.

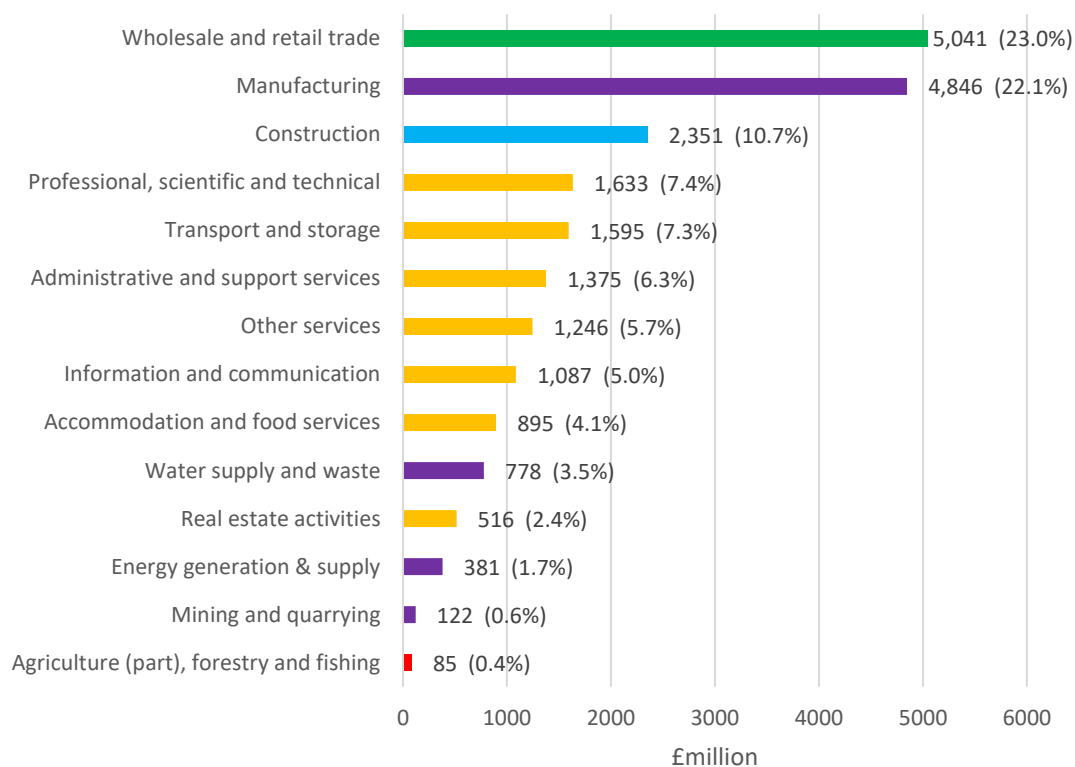
**Figure 3: Change in aGVA by industrial section 2016 – 2017 (NI NFBE)**



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Together, the wholesale and retail trade section and manufacturing account for almost half of total aGVA in the NI non-financial business economy. Wholesale and retail trade is now the largest industrial section by aGVA, accounting for £5,041 million (23.0%) of total aGVA in the NI non-financial business economy. This is followed by manufacturing, which was the largest in 2016, accounting for £4,846 million (22.1%) of aGVA.

**Figure 4: aGVA by industrial section 2017 (NI NFBE)**



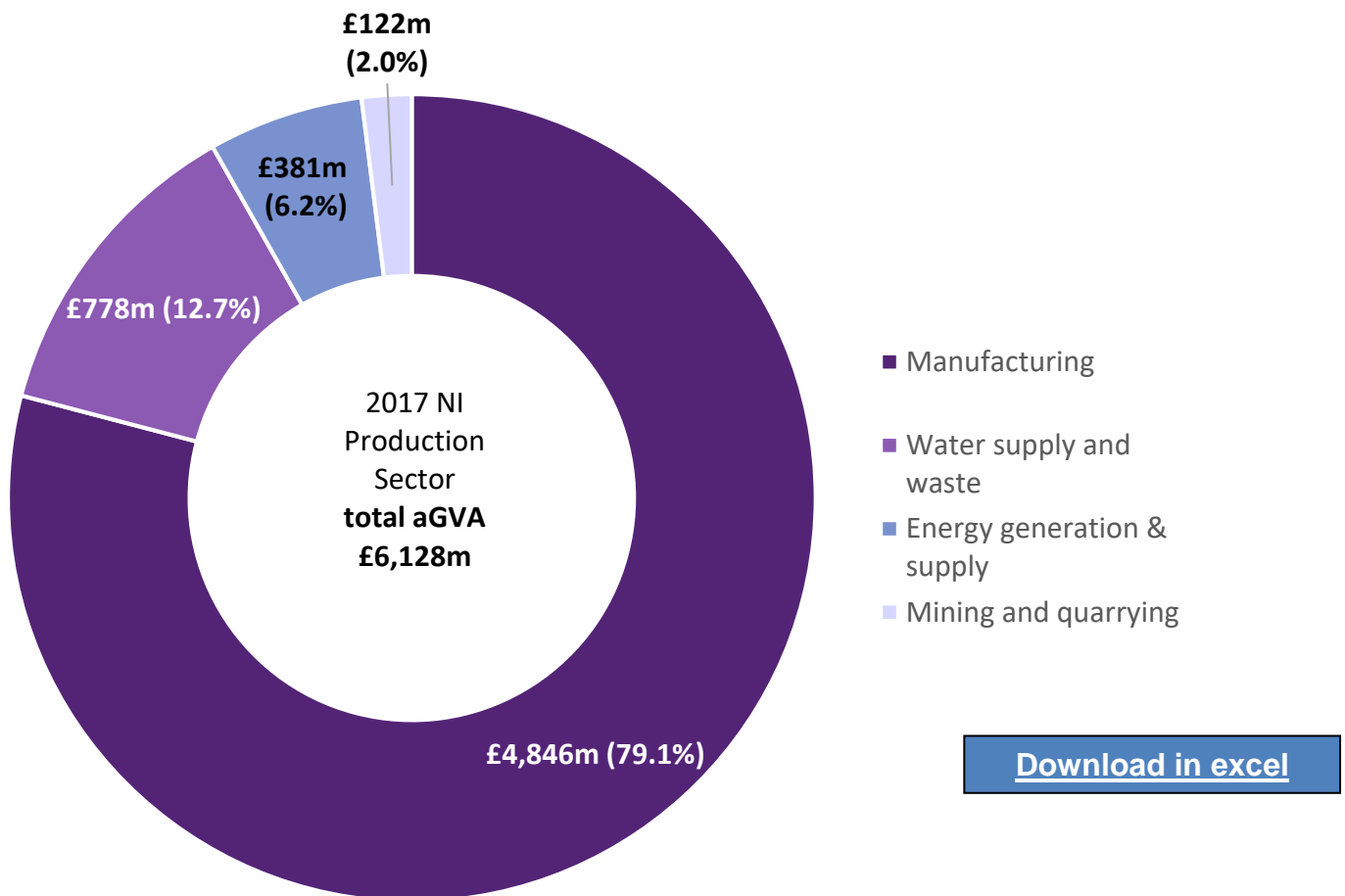
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## Production Industries (Sections B-E)<sup>4</sup>

Sections B through E have been grouped to reflect the structure of the Northern Ireland production industries, these include: mining and quarrying (B); manufacturing (C); electricity, steam and air conditioning supply (D) and water supply, sewerage, waste management and remediation activities (E).

The production sector, which accounts for 27.9% of aGVA in the NI non-financial business economy, recorded a decrease of £420m (-6.4%) in aGVA between 2016 and 2017. Turnover in the sector showed a significant decline of £2,317m (-10.9%) over the period in question, whilst purchases increased by £829m (7.3%). The decrease in aGVA and turnover were largely driven by a substantial decline in the manufacturing sub sector of food, beverages and tobacco.

Figure 5: NI Production Sector: aGVA by industrial section 2017



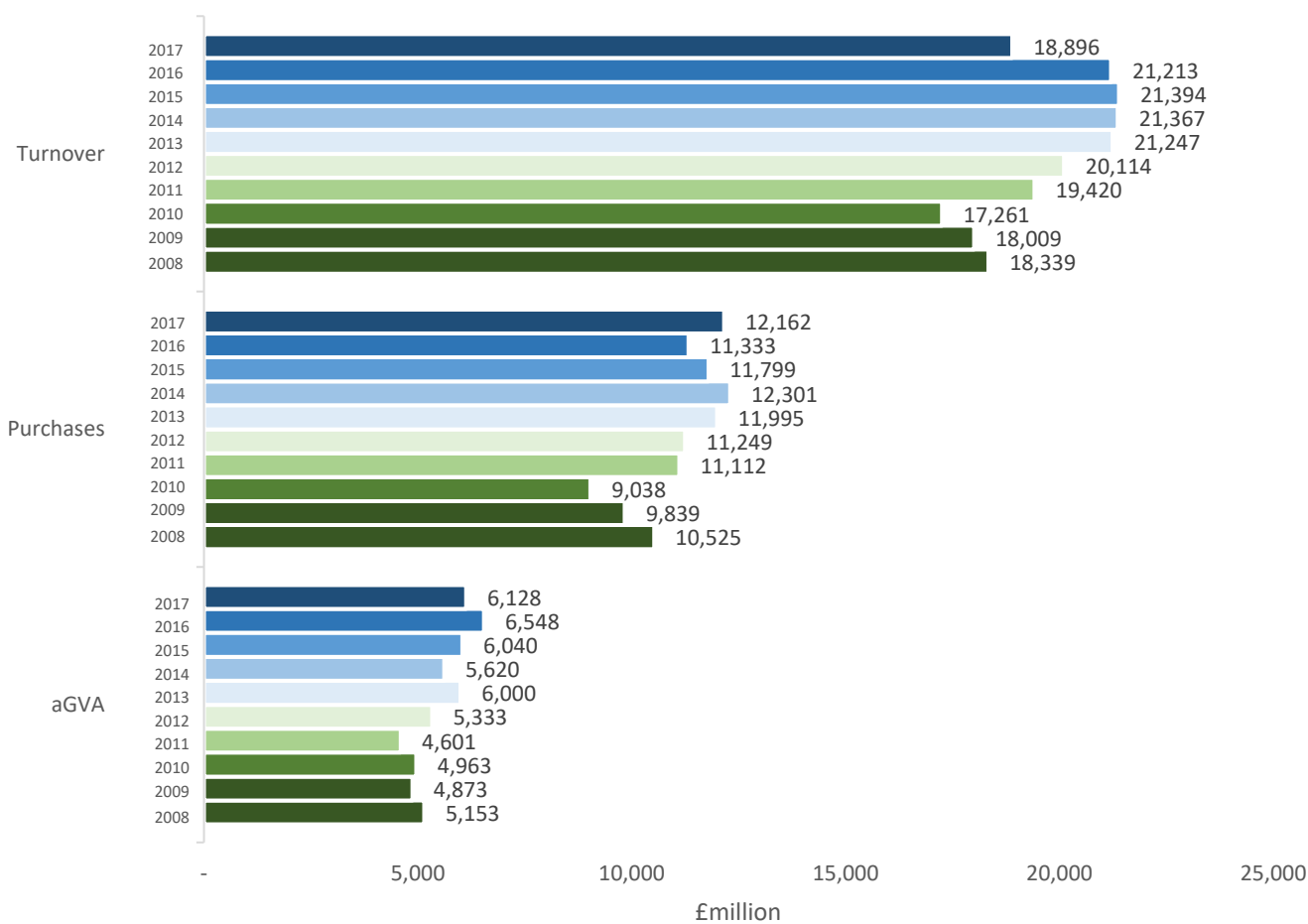
The manufacturing section accounts for approximately four fifths (79.1%) of total production sector aGVA and as a consequence changes in production tend to reflect movements in manufacturing. aGVA in the manufacturing section decreased by £384 million (-7.3%) from 2016 to 2017 and accounted for approximately 91% of the decline in the production sector overall.

<sup>4</sup> Sections are based on SIC 2007 classifications - see part (iv) of background notes for further information

The mining and quarrying section also declined in aGVA, decreasing by £29 million (-19.3%) between 2016 and 2017. This was primarily driven by the combination of a £16 million (-4.1%) fall in turnover and an increase in the value of purchases of goods, materials, energy and services of £13 million (5.5%).

The energy generation and supply section saw a relatively small decrease in aGVA of £6 million (-1.5%) from 2016 to 2017, while the water supply and waste section remained relatively flat in the year to 2017, decreasing by £1 million (-0.1%).

**Figure 6: Trends in the Production Sector: Turnover, Purchases and aGVA 2008 – 2017**



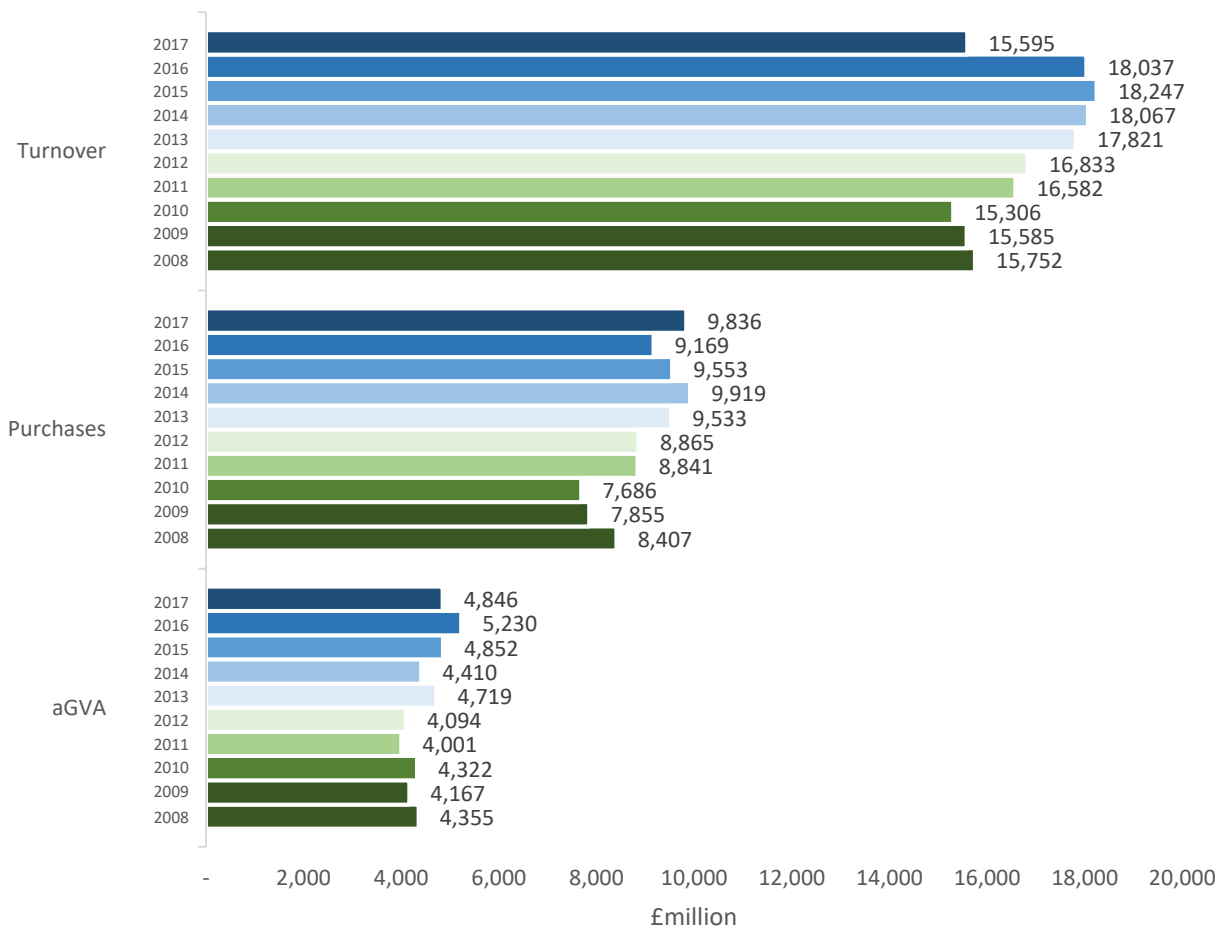
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## Manufacturing

Manufacturing is the largest component industry in the production sector, and accounts for 22.1% of total aGVA in the non-financial business economy. aGVA in the manufacturing section showed a decrease of £384 million (-7.3%) between 2016 and 2017. This was primarily due to a combination of a significant decrease in turnover of £2,442 million (-13.5%) and increase in the value of purchases of £667 million (7.3%).

The food, beverages and tobacco sub sector was the main driver of the decline in aGVA from 2016 to 2017. The rest of manufacturing overall, excluding this sub sector, increased in aGVA year on year.

**Figure 7: Trends in the Manufacturing Sector: Turnover, Purchases and aGVA 2008 – 2017**



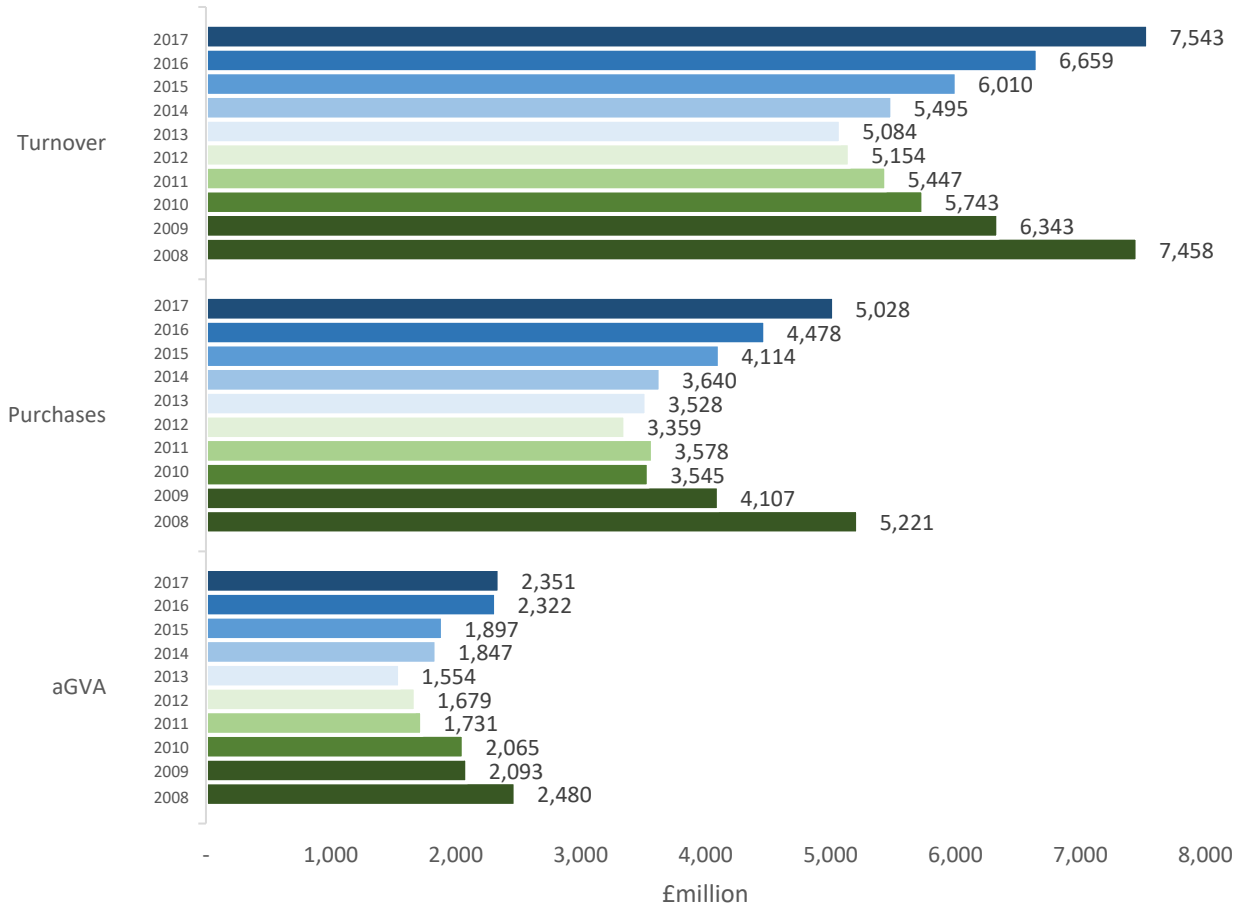
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## Construction Industries (Section F)

The construction industries cover the entire Northern Ireland construction sector and include: construction of buildings, civil engineering and specialised construction activities (e.g. demolition and site preparation, electrical, plumbing and other construction installation activities, etc).

The construction sector has grown for the last four consecutive years. Between 2016 and 2017 turnover increased by 13.3%, growing from £6,659 million to £7,543 million. Purchases increased by 12.3% over the year from £4,478 million to £5,028 million, while aGVA increased by 1.3% from £2,322 million to £2,351 million over the period in question.

**Figure 8: Trends in the Construction Sector: Turnover, Purchases and aGVA 2008 – 2017**



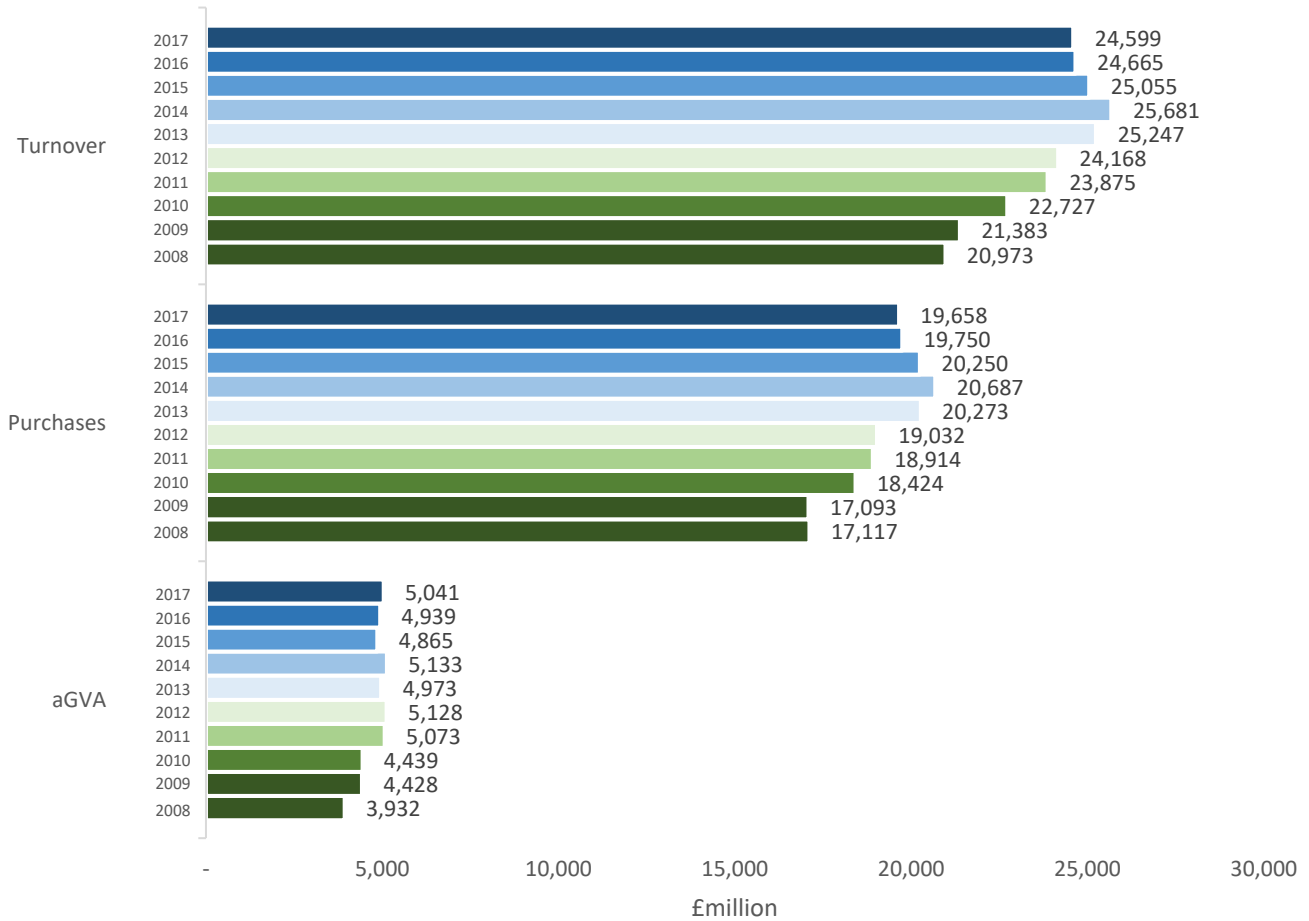
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## Distribution Industries (Section G)

The distribution industries consist of companies engaged in wholesale and retail trade and cover the entire Northern Ireland wholesale and retail sector.

Wholesale and retail trade showed a second consecutive year of aGVA growth increasing by £102 million (2.1%) year on year. This was largely due to a relatively small decline in turnover of £67 million (-0.3%) but a slightly greater decline in purchases of £92 million (-0.5%).

**Figure 9: Trends in the Distribution Sector: Turnover, Purchases and aGVA 2008 – 2017**



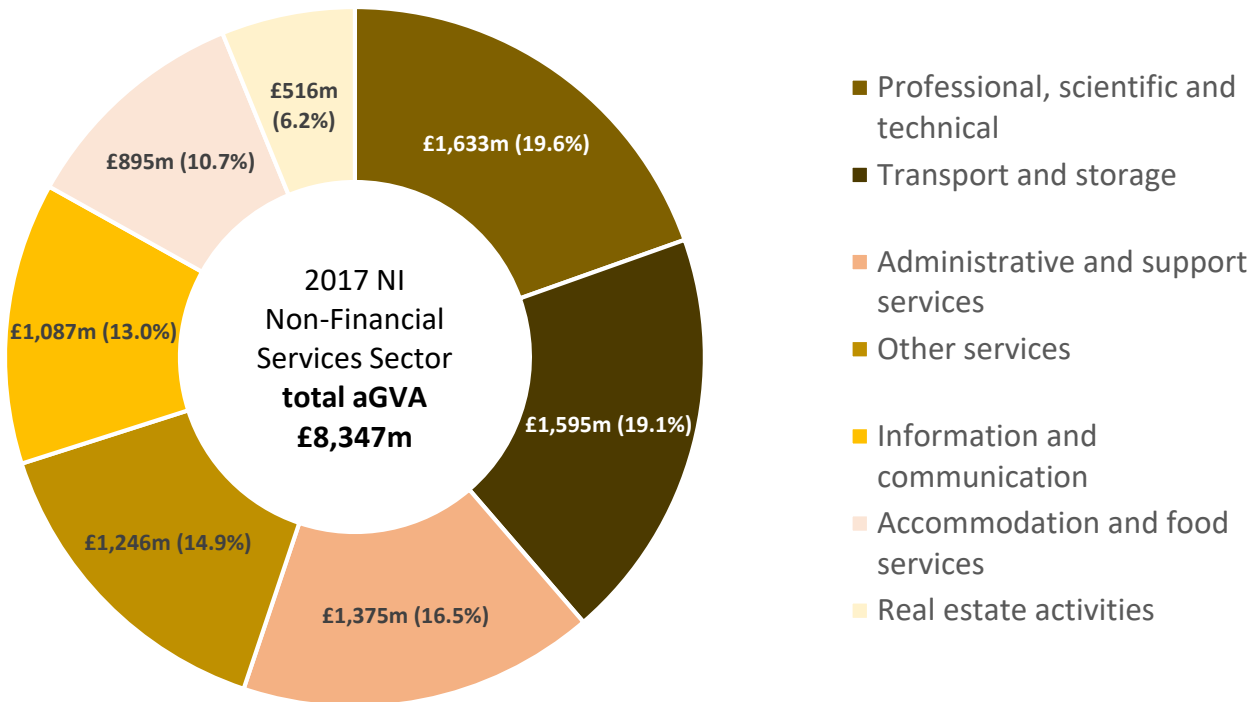
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## Non-Financial Services Industries (Section H–S)

The non-financial services sector is composed of transport and storage (H); accommodation and food service activities (I); information and communication (J); real estate activities (L); professional scientific and technical activities (M); administrative and support service activities (N); and other service activities (n.b. other services are sections that are grouped to avoid disclosure of returns; P-S). Section K, Financial and Insurance Activities, is excluded.

Representing the majority (38.0%) of aGVA in the NI non-financial business economy, even small movements in the services sector can have a pronounced effect on overall trends. Between 2016 and 2017 aGVA increased by 4.9% to £8,347 million.

Figure 10: NI Non-financial Services Industries: aGVA 2017

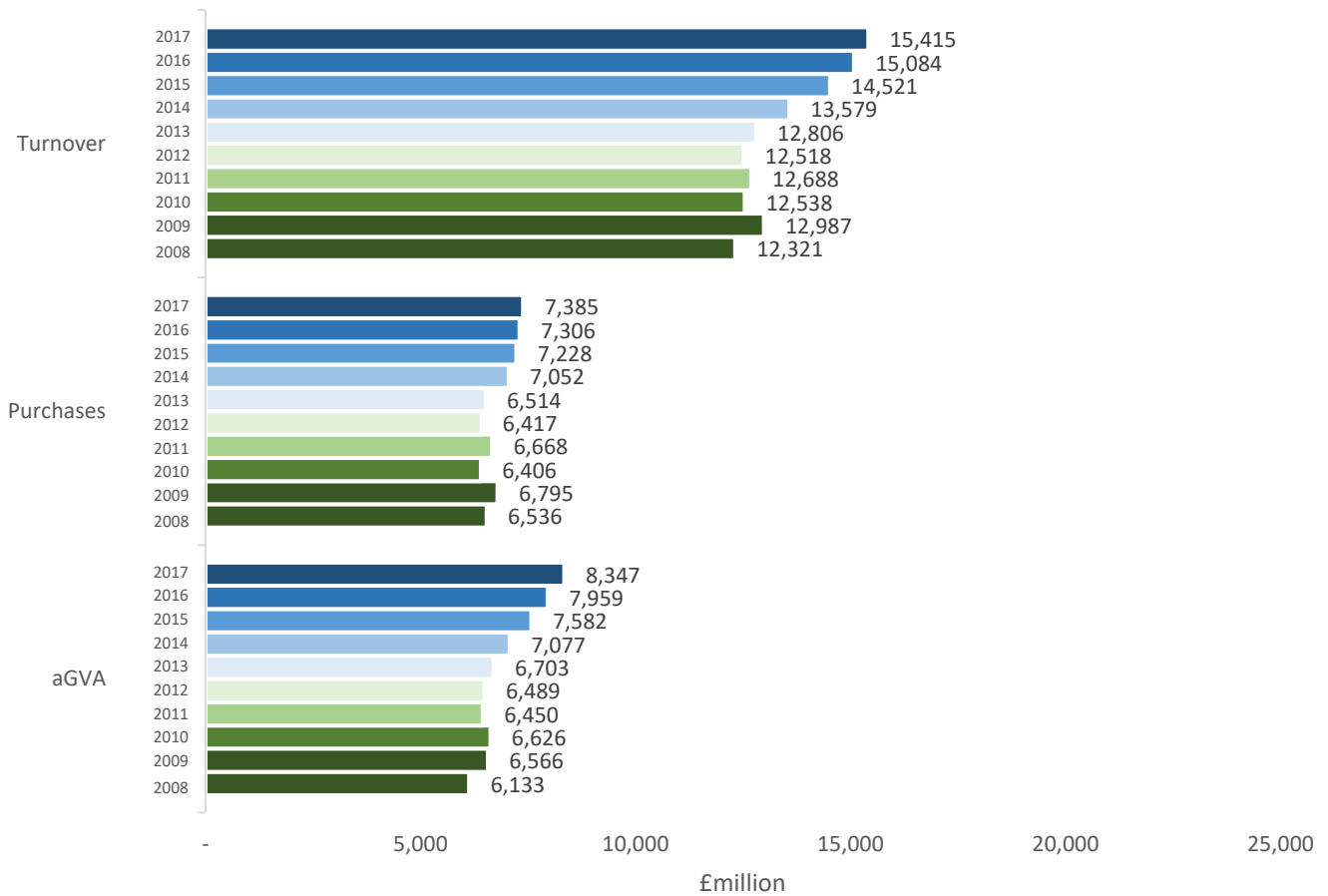


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Turnover grew for the fifth consecutive year by 2.2% (£331 million) to £15,415 million. Purchases of goods and services recorded a slight increase of 1.1% (£79 million) to £7,385 million.

**Figure 11: Trends in Services Industries: Turnover, Purchases and aGVA 2008 – 2017**

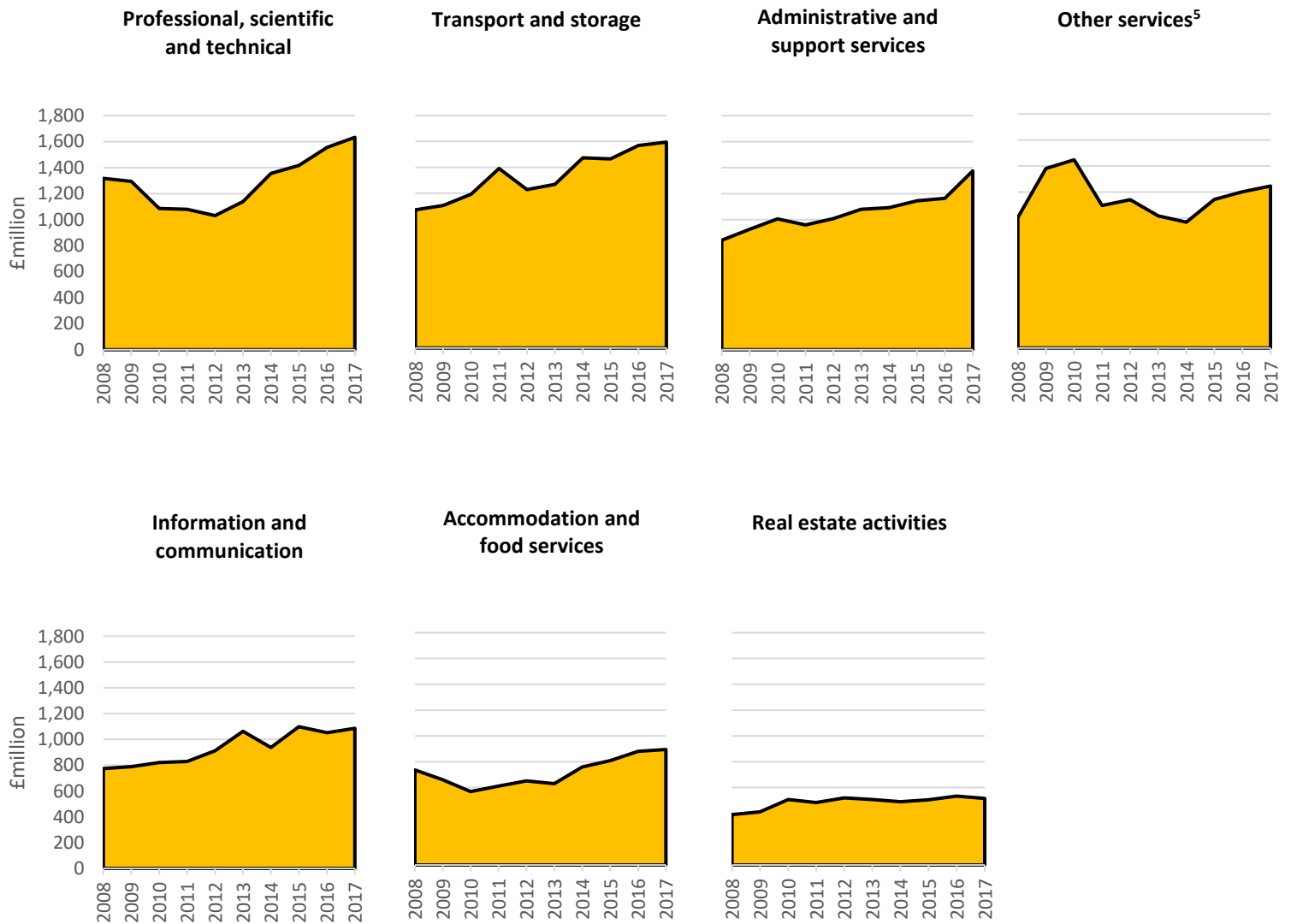


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Within the services industries sector, the professional, scientific & technical section and the transportation & storage section are the largest component industries in the NI non-financial services sector, each accounting for approximately 20% of the total aGVA in the sector.

The largest contributor to the increase in the services industries' aGVA was the administrative and support services section, which grew by 18.1% (£211 million) from £1,165 million in 2016 to £1,375 million in 2017. Another major contributor to growth was the professional, scientific and technical section increasing by £77 million (4.9%) year on year. Real estate activities was the only services section to record a decline between 2016 and 2017, falling by £18 million (-3.4%).

**Figure 12: Trends in the Service Industries: aGVA by sector 2008 - 2017**



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<sup>5</sup> Other services includes: education (excluding public education); Human health and social work activities (excluding public health and social work); Arts, entertainment and recreation and Other service activities. The Insurance & re-insurance industries were included for the 2009 and 2010 results; following a decision by the ONS these have been excluded from the 2011 results onwards.

### 3 Results by Industry

	CV ≤ 5%
	5% < CV ≤ 10%
	10% < CV ≤ 20%
	CV > 20%

Table 1: NIABI results by industry, 2016 and 2017

	Standard Industrial Classification	Description	Turnover (£million)	Approximate Gross Value Added (aGVA) (£million)	Purchases (£million)
2016	A – S	Agriculture, fishing, production, construction, distribution and services	67,730	21,826	42,919
2017			66,603	21,951	44,302
%change			↓ 1.7%	↑ 0.6%	↑ 3.2%
2016	A (part)	Agriculture, forestry and fishing	109	59	53
2017			151	85	69
%change			↑ 38.2%	↑ 44.5%	↑ 28.8%
2016	B – E	Production Industries	21,213	6,548	11,333
2017			18,896	6,128	12,162
%change			↓ 10.9%	↓ 6.4%	↑ 7.3%
2016	B	Mining and quarrying	387	151	234
2017			372	122	247
%change			↓ 4.1%	↓ 19.3%	↑ 5.5%
2016	C	Manufacturing	18,037	5,230	9,169
2017			15,595	4,846	9,836
%change			↓ 13.5%	↓ 7.3%	↑ 7.3%
2016	D	Electricity, gas, steam and air conditioning supply	1,906	387	1,523
2017			2,031	381	1,657
%change			↑ 6.6%	↓ 1.5%	↑ 8.7%
2016	E	Water supply, sewerage, waste management and remediation activities	883	779	407
2017			898	778	423
%change			↑ 1.7%	↓ 0.1%	↑ 4.0%
2016	F	Construction	6,659	2,322	4,478
2017			7,543	2,351	5,028
%change			↑ 13.3%	↑ 1.3%	↑ 12.3%

Table 1 (continued): NIABI results by industry, 2016 and 2017

	Standard Industrial Classification	Description	Turnover (£million)	Approximate Gross Value Added (aGVA) (£million)	Purchases (£million)
2016	G – S	Distribution and service industries	39,749	12,897	27,055
2017			40,013	13,387	27,043
%change			↑ 0.7%	↑ 3.8%	0.0%
2016	G	Wholesale and retail trade; repair of motor vehicles and motor cycles	24,665	4,939	19,750
2017			24,599	5,041	19,658
%change			↓ 0.3%	↑ 2.1%	↓ 0.5%
2016	H - S	Other service Industries	15,084	7,959	7,306
2017			15,415	8,347	7,385
%change			↑ 2.2%	↑ 4.9%	↑ 1.1%
2016	H	Transport and storage	3,190	1,569	1,677
2017			3,098	1,595	1,666
%change			↓ 2.9%	↑ 1.7%	↓ 0.6%
2016	I	Accommodation and food service activities	1,750	882	866
2017			1,871	895	975
%change			↑ 6.9%	↑ 1.5%	↑ 12.7%
2016	J	Information and communication	1,970	1,053	942
2017			1,920	1,087	891
%change			↓ 2.6%	↑ 3.2%	↓ 5.4%
2016	L	Real estate activities	857	534	333
2017			891	516	366
%change			↑ 4.0%	↓ 3.4%	↑ 9.8%
2016	M	Professional, scientific and technical activities	2,564	1,556	1,050
2017			2,465	1,633	911
%change			↓ 3.9%	↑ 4.9%	↓ 13.3%

**Table 1 (continued): NIABI results by industry, 2016 and 2017**

	Standard Industrial Classification	Description	Turnover (£million)	Approximate Gross Value Added (aGVA) (£million)	Purchases (£million)
2016	N	Administrative and support service activities	1,983	1,165	831
2017			2,262	1,375	881
%change			↑ 14.0%	↑ 18.1%	↑ 6.1%
2016	P - S	Others	2,769	1,201	1,607
2017			2,908	1,246	1,695
%change			↑ 5.0%	↑ 3.7%	↑ 5.5%

**Coefficient of Variation**

The coefficient of variation (cv) measures the variability of the values in the table above by expressing the standard error as a percentage of the estimated value. Unlike confidence intervals, which measure variability by providing the range of values between which the mean value for a predetermined percentage of all possible samples would fall, the coefficient of variation expresses variability as an easily comparable percentage. As the coefficient of variation is not measured in any specific unit, it facilitates comparison between surveys measuring different underlying variables. A larger coefficient of variation implies a larger variability.

$$Coefficient\ of\ Variation = \frac{Standard\ Error}{|Parameter\ Estimate|}$$

Standard Error: In statistics, sample estimates such as means and medians deviate from the actual population mean and median; and this deviation is the standard error. Standard error is a statistical term that measures the accuracy with which a sample represents a population and is essentially an indicator of the reliability of the estimate.

Parameter Estimate: The parameter estimate refers to the individual value for each of the variables in the table above. For example the 2017 parameter estimate for turnover in Section A is £151 million.

## 4 Background Notes

### (i) About the Northern Ireland Annual Business Inquiry

The Northern Ireland Annual Business Inquiry (NIABI) collects both financial and employment information from businesses and other establishments and covers about two thirds of the economy. This includes the production, construction, distribution and service industries in Northern Ireland but excludes public sector activity for the most part. The coverage of the survey is detailed at section (iv) below.

The 2017 NIABI sampled approximately 9,300 businesses in Northern Ireland from a population of approximately 54,000 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. The NIABI is reliant on the IDBR receiving accurate and timely updates and providing a true reflection of the Northern Ireland business population. Businesses not registered for either Pay As You Earn or VAT are excluded from the frame. Additional information about the IDBR and the characteristics of the businesses covered by the IDBR is available at the link:

<https://www.nisra.gov.uk/statistics/business-statistics/inter-departmental-business-register>

### (ii) Survey reference period

For survey reference period 2017, businesses were asked to make returns for the calendar year 2017. Where this was not possible, returns for business years ending between 6 April 2017 and 5 April 2018 were accepted. Similar procedures operated in previous years.

Returns covering fewer than twelve months were accepted for businesses which had started or ceased trading during the year. Estimates were made for those firms providing returns for more than six months while firms providing less than six months were treated as closures in the results process. These only accounted for a small proportion of all business returns in 2017 NIABI.

### (iii) NIABI sample

Following user feedback and consultation with the Statistics Advisory Committee and the NISRA official statistics user group, the NIABI sample size was boosted from approximately 5,000 in the 2010 survey reference year to approximately 9,000 in 2011. This has resulted in improvements to the precision of the estimates, as indicated by the quality indicators for 2017. This improvement should also be borne in mind when interpreting annual trends.

To maximise survey precision, the Neyman allocation approach to sampling was utilised. Neyman allocation is a sample allocation method that may be used with stratified samples. The purpose of the method is to maximize survey precision, given a fixed sample size. The survey universe was stratified by 2 digit SIC code and employee size band, and all businesses with 50+ employees, or 20+ employees and more than one local unit (see section (vi) for full definition) were fully enumerated. The current NIABI sample design includes all Manufacturing businesses with 6 or more employees and those with a turnover of £10 million or larger. Businesses falling below the threshold of complete enumeration are selected on a stratified random basis. In addition, certain companies of special interest to policymakers and government agencies (for example, certain Invest NI clients) are added to the sample.

### (iv) Standard Industrial Classification and the coverage of the NIABI

NIABI results are classified according to the Standard Industrial Classification of Economic Activities (SIC) system. The UK is required by European legislation to have a system of

classification consistent with the European Union's Industrial classification system. A review of the system was completed in 2007 and implemented in 2008. UK SIC 2007 is divided into 21 sections, each denoted by a single letter from A to U. Below this, further levels of detail are provided at division (denoted by 2 digits), groups (three digits), classes (four digits) and subclasses (five digits).

The SIC 2007 sections covered by the NIABI are as follows:

Section letter	Section description	Sector
A	Agriculture (support activities), forestry and fishing	Agriculture
B	Mining and quarrying	Production
C	Manufacturing	Production
D	Electricity, gas, steam and air conditioning supply	Production
E	Water supply, sewerage, waste management and remediation activities	Production
F	Construction	Construction
G	Wholesale and retail trade; repair of motor vehicles and motor cycles	Distribution
H	Transport and storage	Services
I	Accommodation and food service activities	Services
J	Information and communication	Services
L	Real estate activities	Services
M	Professional, scientific and technical activities	Services
N	Administrative and support service activities	Services
P	Education (excludes local authority and central government bodies)	Services
Q	Human health and social work activities (excludes local authority and central government, and medical and dental practice activities (group 86.2))	Services
R	Arts, entertainment and recreation	Services
S	Other service activities	Services

Following a decision by the Office for National Statistics to discontinue the publication of figures covering Insurance & Re-insurance industries due to ongoing volatility of the estimates, this NIABI publication also excludes estimates for this series. The other main areas that are *excluded* are Public Administration and Defence (section O) while Agriculture, Forestry and Fishing (section A) excludes farming (groups 01.1, 01.2, 01.3, 01.4 and 01.5). Local authority and central Government bodies in Education (section P) and Human Health and Social Work Activities (section Q) have also been excluded from this publication, as has 86.2 (Medical and Dental Practice Activities) within section Q.

## (v) Data collection, validation and calculation of NIABI results

Slightly more than 9,300 forms were issued from the NISRA Economic and Labour Market Statistics Branch in March 2018 and the returned forms were subjected to a range of validation and congruency checks. The 2017 response rate was 63%.

Data validation was carried out on the returned forms ensuring internal consistency within the form, checking data fell within expected limits or 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.

Please note that the information presented throughout this bulletin is based on reporting unit information, and is therefore not directly comparable with earlier NIABI bulletins which are based on local unit information. Reporting and local unit definitions can be found in part vi below.

Also, to better meet user needs, and in consultation with ONS Methodology Consultancy Service, NISRA produced these results using Statistics Canada's Generalized Estimation System. This allows the production of estimates with an associated measure of their quality. For more detail of the estimation methodology please consult:

<https://www.nisra.gov.uk/publications/abi-quality-improvement-fund-project>

Users are advised to take into account the quality indicators associated with the estimates when considering the significance of annual changes. These indicate that some results have quite large margins of statistical error associated with them. Users should exercise caution when interpreting the annual changes associated with such results.

Ongoing development of the methodology will be informed by user feedback, both in terms of the usefulness and reliability of the estimates and their comparability with other sources. Any comments should be sent to [abihelpline@finance-ni.gov.uk](mailto:abihelpline@finance-ni.gov.uk)

## (vi) Definitions

### *Reporting and Local Units*

An enterprise *reporting unit* reports for all the *local units* within the enterprise (for example, the reporting unit for a large supermarket chain will respond with aggregate figures incorporating all its Northern Ireland shops). A *local unit* is an individual site (factory, shop, office, etc.) at which an enterprise conducts its business. For example, a supermarket chain may have shops in Newtownards, Bangor, Limavady, etc, these are local units.

*Approximate Gross Value Added at Basic prices* represents the income generated by businesses, out of which is paid wages and salaries, the cost of capital investment and financial charges before arriving at a figure for profit. It includes taxes on production (e.g. business rates), net of subsidies but excludes subsidies and taxes on products (e.g. VAT and excise duty). This is an output-based measure of aGVA. All published aGVA is given at basic prices. The calculations applied to derive aGVA are noted below.

The calculations used in the NIABI are:

- aGVA AT MARKET PRICES: Total turnover + insurance claims + change in stocks + own account capital expenditure + Computer software programs and databases : developed by own staff for business use – total purchases



- aGVA AT FACTOR COST: aGVA at market prices + subsidies – total taxes + customs & excise drawback
- aGVA AT BASIC PRICES: aGVA at factor cost + business rates + vehicle excise duty

(Please note that aGVA at basic prices is the only published aGVA from the NIABI.)

*Turnover* is defined as total sales and work done. This is calculated by adding to the value of sales of goods produced, goods purchased and resold without further processing, work done and industrial and non-industrial services rendered.

*Purchases* represent the value of all goods, materials and services purchased during the year.

#### **(vii) NIABI “Approximate Gross Value Added” and “Regional Gross Value Added”**

The financial information from the NIABI provides a measure of approximate GVA, which is ultimately used to contribute to the picture of the whole economy to be built up for National Accounts purposes at the United Kingdom level. When regional economic accounts are subsequently derived, the resulting measure of Regional Gross Value Added (GVA) is a much broader based measure relating to the whole economy in a region, taking into account information from a series of economic and labour market surveys. The results of the NIABI only comprise one element of the regional economic account figures, and a number of adjustments are made in line with National Accounts methodologies before estimates of Regional GVA are produced. ONS’ most recent Regional GVA estimates for Northern Ireland at industry level relate to 2017 and are scheduled for release in December 2018.

<https://www.ons.gov.uk/economy/grossvalueaddedgva/datasets/regionalgrossvalueaddedincomapproach>

#### **(viii) Comparability with statistics from other sources**

The NIABI is conducted by the Northern Ireland Statistics & Research Agency and while the survey process is similar to that for Great Britain, it is not identical. ONS receive data from NISRA in August and January of each survey year. These data are processed with the Great Britain data to produce UK-wide and regional estimates. NISRA separately process the Northern Ireland data to produce their own regional estimates. These differ from the ONS estimates for a number of reasons:

- Calculation of the weights used to estimate figures for the total population:
  - Calculation of the design or a-weights: The ONS National System computes the design weights for all UK data using the sample design of the GB sample. The NI sample design is quite different from that used by the ONS. The design weights calculated by the ONS system for NI units can therefore differ from those calculated by the NI system. The ONS adopted the use of NI design weights during 2017.
  - Calculation of the g-weights: The ONS National System computes two sets of g-weights: one based on IDBR turnover and another based on IDBR employment. The latter is used for employment costs, whereas the former is used for all the other variables. The Regional System computes g-weights based on local unit employment. In the NI methodology there is no distinction between national and regional weights: estimates at all levels are based on the same weights, with the g-weights computed with respect to local unit register employment but using a different calibration method to that used in the ONS regional system.
- Regional apportionment: ONS collects all ABS data at reporting unit (RU) level; the regional system apportions RU returns between local units using factors obtained from models. The NIABI no longer collects employment data at local unit level but uses local unit employment data from the Business Register Employment Survey; data of other variables are collected at RU level and then apportioned between the local units. When NI data are processed in the ONS system, new

apportioned local unit values, based on the ONS methodology, are obtained and used to produce estimates.

- The NIABI does not collect data for all the variables in the GB questionnaire; in the ONS system, values are derived for the missing variables using a model, and these values contribute towards the estimation of some derived variables.

#### **(ix) Comparability with other NISRA ELMSB publications**

Within the relevant sectors the turnover figures provided by the NIABI are the most up to date available from ELMSB statistical publications, and ultimately contribute to updating the Inter-Departmental Business Register (IDBR). However for a more comprehensive measure of turnover within the NI economy users are recommended to refer to the IDBR. The IDBR contains information on all businesses in the UK which are VAT registered or operate a PAYE scheme; consequently the IDBR provides a more complete picture of the Northern Ireland business population. The IDBR can be accessed through the NISRA website at <https://www.nisra.gov.uk/statistics/inter-departmental-business-register/idbr-background-information>

#### **(x) Other sources of information**

The latest UK national estimates from the Annual Business Survey 2017 can be found at <https://www.ons.gov.uk/businessindustryandtrade/business/businessservices/bulletins/uknonfinancialbusinesseconomy/2017provisionalresults> while ONS' regional estimates from the Annual Business Survey 2016 are available at <https://www.ons.gov.uk/businessindustryandtrade/business/businessservices/datasets/uknonfinancialbusinesseconomyannualbusinesssurveyregionalresultssectionsas>

The latest DfE Economic Commentary (Autumn 2018) provides an overview of the state of the Northern Ireland economy, setting it in a global context. This can be found at

<https://www.economy-ni.gov.uk/publications/dfe-economic-commentary>

Estimates of the changes in employment and employee jobs are provided by the Labour Force Survey (LFS), Quarterly Employment Survey (QES) and Business Register and Employment Survey (BRES). As dedicated employment surveys, the LFS, QES and BRES provide more frequent and accurate measures of the change in employment. By utilising internationally recognised definitions the LFS provides employment figures consistent with international standards. The LFS, QES and BRES can be found at the links below:

Labour Force Survey

<https://www.nisra.gov.uk/statistics/labour-market-and-social-welfare/labour-force-survey>

Quarterly Employment Survey

<https://www.nisra.gov.uk/statistics/labour-market-and-social-welfare/quarterly-employment-survey>

Business Register and Employment Survey

<https://www.nisra.gov.uk/statistics/annual-employee-jobs-surveys/business-register-and-employmentsurvey>

Information relating to NI sales and exports is available from the Broad Economy Sales and Exports Statistics. This is an experimental annual measure of local businesses' sales to markets outside NI. These statistics can be accessed at <https://www.nisra.gov.uk/statistics/business-statistics/broad-economy-sales-and-exports-statistics>

Further information on the output of Manufacturing, along with Electricity, Gas, Water and Mining & Quarrying industries is available from the Northern Ireland Index of Production (<https://www.nisra.gov.uk/statistics/economic-output-statistics/index-production>) while the Northern Ireland Index of Services (<https://www.nisra.gov.uk/statistics/economic-output-statistics/index-services>) provides a general measure of changes in the output of the private sector service industries in Northern Ireland.

The Construction Output Statistics published in the Northern Ireland Construction Bulletin are intended to provide a general measure of quarterly changes in the volume and value of construction output in Northern Ireland. These statistics can be accessed at <https://www.nisra.gov.uk/statistics/economic-output-statistics/construction-output-statistics>

The Composite Economic Index provides a weighted measure of output by broad industry sector and employee jobs in the public sector to provide an overall measure of change in the Northern Ireland economic activity <https://www.nisra.gov.uk/statistics/economic-output-statistics/ni-composite-economic-index>

#### **(xi) Uses of the NIABI**

- The central structure and periodicity of the NIABI is driven by the legal requirements to provide data for the UK Annual Business Survey, UK National Accounts and European Structural Business Statistics (SBS)
- Additionally the NIABI is used by the Government as a means of monitoring the progress of economic policy and to help set and measure economic targets.
- Outside government the data is used by a variety of different private sector and academic analysts to assist with industrial and investment decisions.

For a more comprehensive explanation of customers' use of the NIABI please follow the link below:

<https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/summary-of-usage-of-the-niabi.pdf>

#### **(xii) User feedback**

Development of the NIABI is designed to meet the needs of data users as identified during statistical user group meetings. Enhancements to the survey including an increase in sample size have been driven by feedback received through these consultations. Minutes of the meetings are available using the link below:

<https://www.nisra.gov.uk/statistics/nisra-economic-and-labour-market-statistics-elms/statistical-protocols-and-compliance>

#### **(xiii) Quality reporting**

A summary quality report for the NIABI can be found at

<https://www.nisra.gov.uk/publications/usage-methods-and-quality-and-revisions-policy-abi>

This report describes in detail the quality of the statistics presented in this publication (in terms of relevance, accuracy, timeliness and punctuality, accessibility and clarity, coherence and comparability, trade-offs between output quality components, assessment of user needs and perceptions, performance, cost and respondent burden and confidentiality, transparency and security).

#### (xiv) Status of figures in current bulletin

It is normal practice to revise the data from the previous year based on ongoing data validation and clarification of responses from individual businesses. This bulletin contains detailed provisional reporting unit results for the Northern Ireland ABI industries (2017). These 2017 provisional figures will be subject to revision to take account of additional information. The NIABI revisions policy can be accessed at <https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/niabi-revisions-policy.pdf>

In line with this and with the NIABI revisions policy, provisional NIABI estimates for 2016 have been revised throughout this publication. The table below provides details of revisions to 2016 data.

**Table 2: Size of revisions to previously published 2016 data**

	Provisional 2016 (£)	Revised 2016 (£)	% change
<b>Turnover</b>	68,881	67,730	↓ 1.7%
<b>Purchases</b>	44,280	42,919	↓ 3.1%
<b>aGVA</b>	21,540	21,826	↑ 1.3%

Turnover, purchases and aGVA values are reported in £million unless otherwise specified. NIABI reporting unit results are published in November, while local unit results are published the following summer. The Economic and Labour Market Statistics Branch statistics publication schedule is available at <https://www.nisra.gov.uk/statistics/nisra-economic-and-labour-market-statistics-elms/about-nisra-elms> The list of people given pre-release access to this publication is available at: <https://www.nisra.gov.uk/statistics/nisra-economic-and-labour-market-statistics-elms/statistical-protocols-and-compliance>

#### (xv) Disclosure

The NIABI is conducted under the Statistics of Trade and Employment (Northern Ireland) Order 1988 and great care is taken to avoid disclosing information about individual enterprises (in line with the stipulations in Article 7 of the Order). Figures which would be likely to disclose particulars relating to an enterprise are not published (i.e. they are suppressed) unless prior written consent for their publication has been obtained directly from the business. The Northern Ireland Statistics & Research Agency Economic & Labour Market Statistics confidentiality statement can be accessed at the following link: <https://www.nisra.gov.uk/publications/dof-confidentiality-statement>

#### For further information

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