

(Annual Business Inquiry)

NI Non-Financial Business Economy Background information

Date: 29 July 2022

Theme: Business and energy

Geographical Area: Northern Ireland

Introduction and Context

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 further below.

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. 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>

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 2020 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 2020 data. Consequently, although 2008 and 2009 figures are included in this report, users should exercise caution when making comparisons.

Survey reference period

For survey reference period 2020, businesses were asked to make returns for the calendar year 2020. Where this was not possible, returns for business years ending between 6 April 2020 and 5 April 2021 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 2020 NIABI.

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 2020. This improvement should also be borne in mind when interpreting annual trends.

To maximise survey precision, the Neyman allocation approach to sampling is 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 is 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 are 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.

Standard Industrial Classification and the coverage of the NIABI

NIABI results are classified according to the [UK Standard Industrial Classification of Economic Activities \(SIC\) system](#), abbreviated as UK SIC, is a five-digit classification providing the framework for collecting and presenting a large range of statistical data according to economic activity. 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 UK SIC 2007 sections covered by the NIABI are as follows:

Section	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.

Data collection, validation and calculation of NIABI results

Approximately 10,000 forms were issued from the NISRA Economic and Labour Market Statistics Branch in March 2021 and the returned forms were subjected to a range of validation and congruency checks. The 2020 response rate was 59%.

Data validation is 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 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.

Also, to better meet user needs, and in consultation with ONS Methodology Consultancy Service, NISRA produces our 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 published 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

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 (aGVA)

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 calculation applied to derive aGVA is noted below.

The calculation used in the NIABI is

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

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.

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 2019 and were released in May 2021 and can be found at the link below.

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

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 2020.
 - 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.

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>

Other sources of information

The latest UK national and regional estimates from the Annual Business Survey 2020 can be found at:

<https://www.ons.gov.uk/businessindustryandtrade/business/businessservices/bulletins/nonfinancialbusinessconomyukandregionalannualbusinesssurvey/2020results>

The latest DfE Economic Commentary (Spring 2022) 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>

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 (ABS), UK Regional Accounts and the UK National Accounts
- 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. Data is provided to ONS for inclusion in the UK ABS which in turn feeds into the UK Regional Accounts and UK National Accounts.
- Within Northern Ireland the ABI data is a key input dataset for the [NI Supply-Use Tables](#) produced by NISRA (which in turn form the input to a variety of economic research and modelling projects), the Department of Agriculture, Environment and Rural Affairs (DAERA) use ABI data as input to their annual [Northern Ireland Food and Drinks Processing Sector report](#) and the Department for the Economy (DFE) use the ABI data to inform a range of research projects and internal analyses.
- Outside government the data is used by a variety of different private sector and academic analysts to assist economic analysis.

For a more comprehensive explanation of customers' use of the NIABI please find the "summary of the usage of the NIABI" document at the link below:

<https://www.nisra.gov.uk/publications>

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).

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 local unit results for the Northern Ireland ABI industries (2020). These 2020 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 2019 have been revised throughout this publication.

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>

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>