



RSU092 Earnings and Employees Study 2011 Metadata

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1.0 Introduction

The Digital Economy Act (DEA) (2017) provides the legal gateway for the linking and sharing of datasets held by public authorities for research purposes across the UK. The introduction of the DEA provides NISRA with a legal framework to access the data required to create the Earnings and Employees Study (EES) for research purposes.

The <u>Census of Population and Housing (the Census)</u> collects information every 10 years about people and households in Northern Ireland. It is used by central and local government, health authorities and many other organisations to plan and provide future services. The <u>Annual Survey of Hours and</u> <u>Earnings (ASHE)</u> is a UK wide survey that provides data on hourly, weekly and annual earnings by gender, work patterns, industry and occupation, including public versus private sector pay comparisons.

The EES 2011 links together variables from the ASHE 2011 with variables from the Census 2011, and Capital Value data from the Land and Property Service. The dataset takes the form of one pre-linked table. The ASHE sample is comprised of 5,770 distinct ASHE records, approximately 1% of all employees in NI who were covered by Pay As You Earn (PAYE) schemes. These records are linked to 5,528 distinct Census records. The difference in the amount of distinct ASHE and distinct Census records is because several individuals within the dataset have more than one job.

The dataset is a standalone dataset and cannot be linked to other datasets. Additional variables cannot be added to the EES 2011 at this stage.

Access to the EES dataset is limited to researchers and research teams with <u>accredited researcher</u> <u>status</u> under the DEA and subject to approval by the UK Statistics Authority Research Accreditation Panel (RAP). Information on how to apply for approval is available <u>here</u>.

This metadata document details the available variables within the dataset and their aggregations. It also includes a summary of the linkage methodology and the role of the Trusted Third Party (TTP).

For more information on how this dataset was created please contact NISRA's Research Support Unit: rsu@nisra.gov.uk

2.0 Areas of Research Interest

The EES 2011 has the potential to identify factors influencing variation in median pay for specific groups in society who are acknowledged as being disadvantaged in terms of the labour market. This includes, but is not limited to, differences in pay for gender, religion and disability and insight into the reasons for disparity in earnings between native workers and migrants. Other areas that may impact on pay and are of interest to policy include: occupation analysis; public versus private jobs; graduates in the workplace; geographic factors both in terms of place of work and area of residence and skilled occupations.

3.0 Linkage Report

The role of Trusted Third Party (TTP) involves linking together datasets using limited personal information (e.g. name, date of birth and postcode) provided by data suppliers for the purpose of a

specific ADR NI project. TTP use these links to provide the Research Support Unit (RSU) team in NISRA with an anonymous index of IDs which link between the datasets involved. The role of RSU is to bring together the attribute data using this index into a research dataset. TTP never have access to the attribute data. The following section details the work TTP have carried out to link 2011 Census data to 2011 ASHE.

3.1 Data sources

DATASET 1	
DATA SUPPLIER:	Economic and Labour Market Statistics Branch
DESCRIPTION:	Annual Survey of Hours and Earnings (ASHE) - a UK wide business survey that provides estimates on hourly, weekly and annual earnings for employee jobs. The ASHE is a 1% sample taken from the HM Revenue and Customs Pay as You
	Earn System.
NUMBER OF RECORDS:	5,770 records for 2011
	5,528 individuals for 2011
PRE-MATCHING CHECKS	

- 1. The ASHE has a very high response rate and there are no imputed records in the data.
- 2. Individuals selected for ASHE 2011 were eligible for matching. This data was supplemented with 2012-2018 ASHE data for those individuals selected for 2011 only, in order to maximise the response rate.
- 3. Information available to the TTP for linkage purposes:
- Name information which includes surname, forename initial and mid-name initial,
- Home and work postcode,
- Sex and
- Date of birth.

DATASET 2	
DATA SUPPLIER: Census Office	
DESCRIPTION:	Extract from the 2011 Census (entire enumerated population aged 16 and over including those both economically active and economically inactive)
NUMBER OF RECORDS:	1,365,124
PRE-MATCHING CHECKS	

1. The data did not include those individuals who were imputed due to no response which accounted for 5% of the total population.

Match rates have not been adjusted for imputation as the data only included enumerated individuals.

- 2. All 1,365,124 records contained enough data to enable them to be available for linkage.
- 3. Information available to the TTP for linkage purposes :
- Name information which includes forename, mid-name and surname,
- Address information at the time of the Census,
- Sex and
- Date of birth.

3.2 Linkage method

TTP use a 'rules based' or deterministic linkage approach using Match-Keys. Match-Keys are created by putting together pieces of information to create unique keys that can be used for automated linking e.g.

Dataset 1

П	D	Forename	Surname	Sex	DOB	Postcode	Match-key 1: Forename,
							Surname, Sex, DOB, Postcode
1		John	Smith	М	01/01/1990	BT6 XXX	JOHNSMITHM01011990BT6XXX

Dataset 2

) For	ename	Surname	Sex	DOB	Postcode	Match-key 1: Forename,
							Surname, Sex, DOB, Postcode
2	Joh	n	Smith	М	01/01/1990	BT6 XXX	JOHNSMITHM01011990BT6XXX

TTP choose to accept a link between record 1 in dataset 1 and record 2 in dataset 2 because matchkey 1 is identical for both records. The variation in recording demographic information across datasets can occur in a number of different forms. A single match-key alone cannot resolve all of the differences that occur between data sources, hence the need for multiple Match-Keys. A series of Match-Keys have been developed, each of which is designed to resolve particular inconsistencies between match pairs. An example of a non-exact match-key is one constructed from the first two characters of an individual's forename and surname (Bi-grams), combined with their date of birth and postcode district. The strongest level of linking is exact linking, which links pairs of records that are identical on all linking fields. Typically, the Match-Keys are processed in a stepwise manner starting with the most exact match-key and working down to the last match-key.

3.3 Donor imputation

In order to produce a fully linked dataset, donor imputation work was carried out to link the remaining unmatched ASHE individuals to Census individuals with similar characteristics. This work followed the same deterministic linkage approach using Match-Keys as was used for the initial linkage. Match-Keys were created by putting together pieces of information to create unique keys that can be used for automated linking. Additional variables were provided for this work. The variables used to create the Match-Keys were:

- Occupation Code (coded using the 2010 Standard Occupational Classification System)
- Business Activity Code (coded using the UK Standard Industrial Classification of Economic Activities 2007 (SIC 2007))
- Gender
- Age
- Home Postcode
- Work Postcode

An iterative approach was used, beginning with matching on what were deemed to be tighter Match-Keys, and loosening the Match-Keys each time only accepting matches where there hasn't

already been a match through the tighter Match-Keys. Some example match-keys used for this process can be seen below:

Match-Key	Variables
1	3 digit SIC07, 4 digit SOC10, Gender, Age, Postcode Sector
2	2 digit SIC07, 4 digit SOC10, Gender, Age, Postcode Sector
3	3 digit SIC07, 4 digit SOC10, Gender, Age, Postcode District
4	2 digit SIC07, 4 digit SOC10, Gender, Age, Postcode District

This process resulted in individuals in the ASHE dataset being linked to a pool of potential donor records in the 2011 Census dataset. This pool of individuals had similar characteristics to those in the ASHE dataset. Once the unmatched ASHE records had been linked to a pool of potential donors within the Census data a random record was selected to be the match for that ASHE individual.

3.4 Resulting match

The resulting match was of high coverage and accuracy.

	Unadjusted match rate	Accuracy
ASHE 2011 to Census 2011	88.7%	100%

The research dataset contains a fully linked data set of 5,528 ASHE individuals or 5,770 ASHE records as a small number of individuals have more than one job.

4.0 Quality Assurance

Quality assurance practices were applied by the Research Support Unit (RSU) to the EES 2011 dataset to ensure the data was accurate, reliable, and representative. The quality assurance work also includes a statistical disclosure control assessment.

After the ASHE and Census files were linked the dataset was examined to ensure accuracy and reliability. For the ASHE variables in the EES 2011, RSU used the headline figures published in the ASHE 2011 Statistics Bulletin for comparison purposes. Similarly, for the Census variables in the EES 2011, RSU used the Census 2011 key statistics summary report, NINIS, and the Northern Ireland Longitudinal Study (NILS). Quality Assurance checks fell under the following headings:

4.1 Consistency within the data

RSU checked the data for anomalies, unexpected values, and issues with aggregations. Where issues were identified these were relayed to the data providers, and amended based on the advice received.

4.2 Consistency with published reports

RSU sought to replicate the <u>headline</u> statistics for hourly, weekly and annual earnings published in the ASHE 2011 Statistics Bulletin. Using STATA Version 17, the median and mean were calculated for each of the 11 headline figures using the appropriate filters and weights as detailed in the <u>ASHE</u> <u>Dataset Notes</u>. See notes to tables in Annex A for more information.

As the EES 2011 is comprised of the full ASHE dataset (a 1% of all employees in NI who were covered by Pay As You Earn (PAYE) schemes) any inconsistency with the published ASHE report was minor, and fully explicable by the presence of donor records, the software used for the calculations, and the application of weighting. As such, RSU noted that the Earnings and Employees dataset was both consistent with and representational of the ASHE sample (as per the <u>2011 ASHE Stats Bulletin</u> and revised statistics within the <u>2012 ASHE Stats Bulletin</u>). See Annex A for more information.

RSU employed a similar method to determine representativeness within the Census data. Using STATA version 17, unweighted frequency distributions were calculated for each of the Person and Household variables. To check for consistency with published Census 2011 data for the Person variables, RSU compared the EES figures with the <u>Census 2011 summary report</u> and tables published in NINIS. Bespoke frequencies were calculated based on a demographic profile that best matched that of the EES (economically active (excluding self-employed and unemployed) and aged 16-74 years (where available)). Some published categories were collapsed to match those in the EES variables. For the Household variables, RSU used the NILS Census 2011 data, sampling the household of NILS members who were both economically active (excluding self-employed and unemployed) and aged 16-74 years, with variable categories collapsed to match those in the EES. See notes to tables in Annex B for more information.

Once again, RSU noted that the linked dataset was consistent with and representational of the whole population. Where there were discrepancies between the Census 2011/NILS-Members 2011 and the Earnings and Employees sample distributions, this was due to bespoke aggregation of variables by Census or the unavailability of a published figures for a similar sample for comparison. See Annex B for more information.

RSU would be happy to provide researchers with the code used to produce the ASHE frequencies above should they wish to replicate the analysis.

4.3 Statistical Disclosure Control (SDC)

RSU worked with the data providers to ensure that the data provided was safe and that it could not be used to disclose small numbers. For instance, most Census variables were aggregated and topcoded prior to linkage. After linkage, the SDC Unit applied the standard methodology used within the RSU to scrutinise the EES 2011 further.

Where risk was deemed too high, then the SDC Unit recommended applying further disclosure control methods. Due to risks of identification attached to the Sic07 and Occ10 variables, the SDC Unit recommended that restrictions be placed upon the release of those variables. The 1 / 2 digit codes for Sic07 and Occ10 will be the default variables available. Detailed Sic07 and Occ10 codes will not be allowed in conjunction with LGD2014Home.

Additionally, the detailed Sic07_4_cat, Sic07_5_cat and Occ10_4_cat codes will not be available to those accessing EES data outside of the RSU secure room i.e. via the ONS SRS facility. A rules-based approach to SDC will be applied to the clearing of all EES outputs.

4.4 Weighting and donor records comparison

RSU ran frequencies and cross tabulations with and without weighting applied. All variations between these outputs were documented. Information can be provided to researchers (on request) on the impact that weighting has when using different statistical packages. Approximately 10% of the records were donor. No donor flag is included in the dataset and thus donor records will not be made known to the researchers or RSU.

5.0 Weight Variables

The use of weights within survey data is important to help ensure that the data is representative of the overall population. Users should note that the EES dataset includes weight variables, which have been calculated and used in the production of the ASHE published tables. When replicating the published ASHE figures it is important that the correct weight is used, the most frequently used weighting variable is 'calweight'. It is also important to include the correct filters. Below is an example of the use of weights and filters to calculate summary figures for weekly pay-gross using STATA code.

summarize gpay [aweight = calwght] if (adr==1 & lop==2 & age>15), detail.

For more information on weights and filters please refer to the ASHE dataset notes.

6.0 Metadata for ASHE

Table Name:	Earnings and Employees 2011	
Data Description:	onomic and Labour Market Statistics Branch (ELMS) is part of the SRA. The branch produces Business, Economic and Labour Market of Statistics in line with the Code of Practice for Official Statistics to ponitor the performance of the Northern Ireland Economy and Labou arket. The data in ELMS includes the Northern Ireland Annual Survey Hours and Earnings (ASHE) survey. ASHE provides information about e levels, distribution and make-up of earnings and hours paid for nployees by gender and work pattern (full-time and part-time) <u>ELMS</u> <u>itality report</u> .	
Source of the Data:	Economic and Labour Market Statistics Branch	
Number of Records:	5,770	
Currency of the Data:	Static: 2011 download	

Users are advised to consult the published <u>ASHE Dataset Notes</u> for an ASHE data dictionary and description of the variables.

Sex	Colag	Не	Stratum
Age_topcoded	Раур	Нехо	LGD2014Work
Ft	Bhr	Agp	LGD2014Home
Pt	Ovhrs	Anipay	
Adr	Thrs	Bikfilter	
Lop	Bpayinc	Ppfilter	
Sjd	Gpay	Tpen	
Djob	Gpox	Cosp	
Mjob	Оvрау	Pubpriv	

Section 6.1 shows the distribution of the categorical ASHE variables. Section 6.2 shows the median and mean values for the EES sample for the ASHE 2011 headline figures 1-11.

For the following variables that are not categorical, users should refer to the <u>ASHE Dataset Notes</u>.

Empsta	*Occ10_3_cat	Нрау	Alday
*Sic07_1_cat	*Occ10_4_cat	Bik	Calwght
*Sic07_2_cat	Врау	Penpay	Dweight
*Sic07_3_cat	Othpay	Ownpay	Gweight
*Sic07_4_cat	Ipayall	Compay	Lpcalwght
*Sic07_5_cat	Ipayin	Ownperc	Lpdweight
*Occ10_1_cat	Ѕррау	Comperc	Lpgweight
*Occ10_2_cat	Трау	Idbrnemp	

*Please note that while there are 5 Sic07 and 4 Occ10 variables in the dataset the 1 / 2 digit versions of these variables will be the default variables available to researchers.

6.1 ASHE Variables

Sex

- 1) Male
- 2) Female

Ma	le	Fema	le	Total
N	%	N %		Ν
2,651	45.9	3,119	54.1	5,770

Age_topcoded

Since the introduction of ASHE in 2004, age is as at the survey reference date in April. The dataset only contains people aged 16 and over at the survey reference date. This variable has been top-coded to age 67.

Ft (Full/part time marker)

1) Full time

2) Part time

Full time		Part	Total	
N	%	N %		N
3,731	64.7	2,039	35.3	5,770

Pt (Permanent/temporary marker)

1) Permanent

2) Temporary/casual

Perm	Permanent		Temporary		
N	%	N %		N	
5,228	90.6	542	9.4	5,770	

Adr (Adult rate marker)

1) Full adult rate

2) Trainee / junior rates

Full ad	Full adult rate		Trainee / junior rates		
Ν	%	N %		Ν	
5,691	98.6	79	1.4	5,770	

Lop (Loss of pay marker)

1) Earnings were affected by absence

2) Earnings were not affected by absence

	Earnings were affected by Earnings were not affected by absence absence			
N	%	Ν	%	N
506	8.8	5,264	91.2	5,770

Sjd (Same job marker)

1) Same job

2) Not same job

Same job		Not sa	Total	
N	%	N %		Ν
4,950	85.8	820	14.2	5,770

Djob (Double job marker)

0) One job

1) More than one job

One	One job		More than one job		
Ν	%	Ν	N		
5,300	91.9	470	8.1	5,770	

Mjob (Main job marker)

0) Not main job 1) Main job

Not main job		Maiı	Total	
N	%	Ν	Ν	
5,542	96.0	228	4.0	5,770

Note: Indicates the main job, but only for people with more than one job.

Colag (Collective agreement)

- 0) No collective agreement
- 1) National, sub-national or industry agreement
- 2) Organisational agreement
- 3) Workplace agreement

4) National or industry supplemented by a sub-national, organisational or workplace agreement.

No collective agreement		National, sub-national or industry agreement		Organisational agreement		Work agree		National or industry supplemented by a sub- national, organisational or workplace agreement		Total
N	%	N	%	N	%	Ν	%	N	%	Ν
2,762	47.9	1,463	25.4	785	13.6	469	8.1	291	5.0	5,770

Payp (Pay Period)

- 1) One week
- 2) Two weeks
- 3) Four weeks
- 4) Calendar month and Other

One	week	Two weeks		Four weeks		Calendar month and Other		Total
Ν	%	N	%	Ν	%	N	%	Ν
1,696	29.4	232	4.0	646	11.2	3,196	55.4	5,770

Bikfilter (Benefits in kind filter)

1) Yes

2) No

0) Missing

Y	es	No		Mis	sing	Total
N	%	Ν	%	Ν	%	Ν
313	5.4	5,457	94.6	0	0.0	5,770

Ppfilter (Pension provision filter)

1) Yes

2) No

Yes		Ν	0	Total	
N	%	Ν	%	N	
2,463	42.7	3,307	57.3	5,770	

Tpen (Type of pension scheme 2005-2012)

- 1) Defined benefit scheme
- 2) Defined contribution scheme
- 3) Group personal pension scheme
- 4) Stakeholder pension
- 0) No pension with employer

Defi ben sche	efit	Defi contril sche	bution	pers pen	Group ersonal Stakeholder ension pension cheme Provide Stakeholder with employer				Total	
N	%	N	%	Ν	%	Ν	%	N	%	N
1,792	31.1	239	4.1	281	4.9	151	2.6	3,307	57.3	5,770

Cosp (Contracted Out of State Second Pension)

- 1) Yes
- 2) No

0) Missing

Y	es	No		Mis	Missing	
N	%	N	%	N	%	N
1,731	30.0	732	12.7	3,307	57.3	5,770

Pubpriv (Public Private 1997-2013)

- 1) Public (legal status 4, 5 and 6)
- 2) Private (legal status 1, 2 and 3)
- 0) Unclassified (includes legal status 7)

Pul	blic	Priv	Private Uncla		ssified	Total	
N	%	N	%	Ν	%	N	
2,070	35.9	3,368	58.4	332	5.8	5,770	

Stratum (Relates to the way in which the data was collected)

1) Main despatch (employee in the same job between January (initial sample date) and April (survey reference date))

2) Employee changed job between January and April

3) New employee job between January and April

Main de	espatch	Employee changed job between January and April		New employee job between January and April		Total
N	%	Ν	%	Ν	%	Ν
5,667	98.2	14	0.2	89	1.5	5,770

LGD2014Work (Work NI Local government districts (2014)) *

LGD2014Work	N	%
N09000001	352	6.1
N0900002	598	10.4
N0900003	1,711	29.7
N0900004	284	4.9
N0900005	534	9.3
N0900006	277	4.8
N0900007	365	6.3
N0900008	390	6.8
N09000009	322	5.6
N09000010	381	6.6
N09000011	297	5.2
Missing	259	4.5
Total	5,770	

*Users should exercise caution in the use of this variable as it may be based on head office location.

LGD2014Home (Home NI Local government districts (2014))

LGD2014Home	Ν	%
N0900001	425	7.4
N0900002	671	11.6
N0900003	983	17.0
N09000004	394	6.8
N0900005	410	7.1
N0900006	304	5.3
N0900007	435	7.5
N0900008	440	7.6
N0900009	380	6.6
N09000010	501	8.7
N09000011	450	7.8
Missing	377	6.5
Total	5,770	

6.2 Median and mean values for the EES sample for the ASHE 2011 headline figures 1-11*

	Earnings and Employees Sample overall (weighted)			
Headline (NI) results for all employee jobs	Median	Mean		
Headline (NI). 1a Weekly pay - Gross (£)	354.6	423.2		
Headline (NI). 2a Weekly pay - Excluding overtime (£)	343.3	408.7		
Headline (NI). 3a Basic Pay – Including Other Pay (£)	329.8	397.5		
Headline (NI). 4a Overtime pay (£)	51.3	14.5		
Headline (NI). 5a Hourly pay - Gross (£)	9.9	12.8		
Headline (NI). 6a Hourly pay - Excluding overtime (£)	9.9	12.7		
Headline (NI). 7a Annual pay - Gross (£)	18,210.0	21,580.3		
Headline (NI). 8a Annual pay - Incentive (£)	942.0	603.2		
Headline (NI). 9a Paid hours worked - Total	37.0	33.2		
Headline (NI). 10a Paid hours worked - Basic	36.8	32.1		
Headline (NI). 11a Paid hours worked - Overtime	4.1	1.0		

*Source of headlines: <u>https://www.nisra.gov.uk/publications/ashe-headline-statistics-northern-ireland</u>

7.0 Metadata for CENSUS Person Variables 2011

Table Name:	Earnings and Employees Study 2011
Data Description:	These variables give statistical coded information from the 2011 Census. This table only includes the enumerated population. The Census Quality report can be viewed here <u>Census quality report</u>
Source of the Data:	2011 Census
Number of Records:	5,770
Currency of the Data:	Static: 2011 download

Variables:

MARSTATP1_AGG	NATIDNIP1_AGG	RELBTBUIP1_AGG	HEALTHP1_AGG
STUDENTP1	NATIDBP1_AGG	AGGMAINLANGP1	CARERP1
COBP1_5cat	NATIDIP1_AGG	IRISH2P1	HLQP1_AGG
CPRP1_AGG	NATIDOP1_AGG	ULSTER2P1	VOLWORKP1
MIGORIGP1_AGG	ETHP1_2WAY	DISABILITYP1	
PSSPRTP1_AGG	RELBTP1_AGG	HEACONP1	

7.1 Census Person Variables

MARSTATP1_AGG (Marital and Same Sex Civil Partnership Status)

1) Single (never married or in a same-sex civil partnership)

2) Married or in a same sex civil partnership

3) Separated (but still legally married or in a same-sex civil partnership)

4) Divorced or formerly in a same-sex civil partnership which is now legally dissolved

5) Widowed or surviving partner from a same-sex civil partnership

Single (neve or in a sam partnei	e sex civil	Married same se partne	ex civil	Separ (but lega marrie a sam civ partne	still ally d or in e sex <i>r</i> il	Divorc formal same civ partne which lega disso	ly in a e sex vil ership is now ally	a sam civ	iving er from ne-sex	Total
N	%	N	%	Ν	%	Ν	%	Ν	%	Ν
2,169	37.6	3,036	52.6	214	3.7	276	4.8	75	1.3	5,770

STUDENTP1 (Student Indicator)

- 1) Full-time student
- 2) Not a Full-time student

Full-ti stude	-	Not a Fu stude		Total
N	%	Ν	%	Ν
328	5.7	5,442	94.3	5,770

COBP1_5cat (Census 2011 - Country of Birth - Five Cat)

- 1) Northern Ireland
- 2) Republic of Ireland
- 3) Other UK
- 4) Other EU
- 5) Other

Northeri	n Ireland	Reput Irela		Other UK Other EU N %		Other UK Other EU Other		er	Total	
Ν	%	Ν	%	N %		N	%	N	%	Ν
5,011	86.8	110	1.9	263	4.6	248	4.3	138	2.4	5,770

CPRP1_AGG (Country of Previous Residence)

01) No (Have not resided in another country for 12 months or more)02) Yes (Have resided in another country for 12 months or more)

Nc)	Ye	Total	
N	N % N		N %	
4,976	86.2	794	13.8	5,770

MIGORIGP1_AGG (Country of Migrant Origin)

01) Northern Ireland

02) Other

	Northern Ireland		er	Total
N	%	N %		N
5,705	98.9	65	1.1	5,770

PSSPRTP1_AGG (Passports)

- 01) No passport
- 02) Ireland only
- 03) United Kingdom only
- 04) Other

No pa	ssport	Ireland	lonly		Kingdom nly	Oth	er	Total
N	%	Ν	%	Ν	%	N	%	Ν
410	7.1	1,189	20.6	3,789	65.7	382	6.6	5,770

NATIDNIP1_AGG (Northern Irish National Identity (NI))

0) No Northern Irish identity

1) Northern Irish identity (with or without any other identity)

	nern Irish ntity	Northern Irish identity (with or without any other identity)		Total
N	%	N %		Ν
4,075	70.6	1,695	1,695 29.4	

NATIDBP1_AGG (British National Identity)

0) No British identity

1) British identity (with or without any other identity)

No British	No British identity		identity without other itity)	Total
N	%	N %		Ν
2,937	2,937 50.9		49.1	5,770

NATIDIP1_AGG (Irish National Identity (NI))

0) No Irish identity

1) Irish identity (with or without any other identity)

No	No		Irish identity (with			
Irish ide	ntity	or without any other identity)		Total		
N	%	N %		N		
4,128	71.5	1,642 28.5		5,770		

NATIDOP1_AGG (Other National Identities*)

0) No other identity

1) Other identity (with or without at least one of English/Welsh/Scottish/Northern Irish/Irish/British)

No Other	identity	Other identity (with or without at least one of English/Welsh/Scottish/Northern Irish/Irish/British)		Total
N	%	Ν	Ν	
5,490	95.1	280	5,770	

* Question 15 of the 2011 Census Individual Questionnaire provided people with the option to describe their national identity. Individual tick boxes were available for

English/Welsh/Scottish/Northern Irish/Irish/British/. There was also an option for identities other than these 6, with a space for specification.

ETHP1_2WAY (Ethnicity)

- 01) White
- 02) Other

Wh	White Ot		her	Total
N	%	N %		N
5,671	98.3	99	1.7	5,770

RELBTP1_AGG (Current Religion)

- 01) Catholic
- 02) Protestant and other Christian (including Christian related)
- 03) Other religions
- 04) No religion

Cath	olic	Protes and ot Christ (incluo Christ relate	her ian ding ian	Otł relig		No relig	_	Total
N	%	N	%	N %		N	%	N
2,391	41.4	2,445	42.4	49 0.9 885 15.3		5,770		

RELBTBUIP1_AGG (Religion Brought Up In)

1) Catholic

- 2) Protestant and other Christian (including Christian related)
- 3) Other religions
- 4) No religion

Cath	nolic	Protesta other Ch (inclu Chris relat	nristian ding tian	Other religions No religion		Total		
Ν	%	Ν	%	Ν	%	Ν	%	Ν
2,601	45.1	2,859	49.6	51	0.9	259	4.5	5,770

AGGMAINLANGP1 (Aggregation of Main Language)

- 1) Main language is English
- 2) Main language is not English

Main lanį Engl		Main language is not English		Total
N	%	N %		N
5,500	95.3	270	4.7	5,770

IRISH2P1 (Irish Language Ability)

- 0) No ability in Irish
- 1) One or more ability in Irish

No abi	lity	One or m	ore ability	Total
in Iris	sh	in I	Total	
N	%	N	%	Ν
5,073	87.9	697	12.1	5,770

ULSTER2P1 (Ulster-Scots Language Ability)

0) No ability in Ulster-Scots

1) One or more ability in Ulster-Scots

No a	ibility	One o ab	Total	
in Ulst	er-Scots	in Ulst		
N	%	N	%	N
5,282	91.5	488	8.5	5,770

DISABILITYP1 (Disability)

1) Day-to-day activities limited a lot

2) Day-to-day activities limited a little

3) Day-to-day activities not limited

Day-to-day limited		Day-to-day limited a		-Day activi lim	Total	
N	%	N	%	Ν	%	Ν
101	1.8	275	4.8	5,394	93.5	5,770

HEACONP1 (Health Conditions Indicator)

0) Has no long-term health conditions

1) Has one or more long-term health conditions

terml	o long- nealth itions	Has on more le term he condit	Total	
N	%	Ν	%	Ν
4,678	81.1	1,092	18.9	5,770

HEALTHP1_AGG (Health)

01) Very good health

02) Good health

- 03) Fair health
- 04) Bad or very bad health

Very G	Very Good		Good		ir	Bad or	very bad	Total	
healt	:h	health		ealth health health		health		TOLAT	
Ν	%	Ν	%	Ν	%	Ν	%	Ν	
3,105	53.8	2,161	37.5	447	7.8	57	1.0	5,770	

CARERP1 (Care)

- 1) Provides no unpaid care
- 2) Provides 1 to 19 hours unpaid care a week
- 3) Provides 20 to 49 hours unpaid care a week
- 4) Provides 50 or more hours unpaid care a week

Provid unpaic			1 to 19 hrs re a week	Provides 20 to 49 hrs unpaid care a week		Provides 5 hrs unpa we	Total	
Ν	%	N	%	Ν	%	Ν	%	Ν
4,895	84.8	618	10.7	123	2.1	134	2.3	5,770

HLQP1_AGG (Highest Level of Qualifications (inclusive of those who stated UK equivalents))

01) No qualifications

02) Level 1 qualifications

- 03) Level 2 qualifications
- 04) Level 3 qualifications
- 05) Level 4 qualifications and above

06) Other qualifications (including apprenticeships)

No qualifica		Level qualifica		Leve qualifica			vel 3 cations	qualifica	Level 4 qualifications and above Other qualifications (including apprenticeships)		Total	
N	%	N	%	N	%	Ν	%	N	%	N	%	N
707	12.3	711	12.3	984	17.1	899	15.6	2,011	34.9	458	7.9	5,770

VOLWORKP1 (Voluntary Work)

1) Yes

2) No

Ye	S	N	Total		
Ν	%	Ν	%	N	
1,031	17.9	4,739	82.1	5,770	

8.0 Metadata for CENSUS Household Variables 2011

Table Name:	Earnings and Employees 2011
Data Description:	These variables give statistical coded household information from the 2011 Census. This table only includes households with the enumerated population.
Source of the Data:	2011 Census
Number of Records:	5,770
Currency of the Data:	Static: 2011 download

Variables:

SIZH1_TOPCODED	TENDH1_AGG	DPCH1_AGG	DEPHDH1
AHCH1_AGG	CARSNOH1_TOPCODED	CRSH1_TOPCODED	DEPHSH1
ADAPT2H1	ADTH1_TOPCODED	DEPEDH1	DEPTNH1

8.1 Census Household Variables

SIZH1_TOPCODED (Household Size)

- 01) 1 person in household
- 02) 2 people in household

03) 3 people in household

04) 4 people in household

05) 5 people in household

06) 6 or more people in household

	rson in sehold		ple in ehold	3 peop house		4 peop house			ople in sehold	peop	6 or more people in household	
Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν
497	8.6	1,380	23.9	1,308	22.7	1,442	25.0	785	13.6	358	6.2	5,770

AHCH1_AGG (Household Composition (Alternative Child and Adult Definitions))

- 01) One person household
- 02) Other household: One adult and one or more children
- 03) Other household: Two adults and no children
- 04) Other household: Two adults and one or more children
- 05) Other household: Three or more adults and one or more children
- 06) Other household: Three or more adults and no children

One pe house		househo adult an	her old: one d one or hildren	Oth house Two a and chilo	ehold: adults I no	Oth house Two a and or mo child	hold: dults ne or re	Oth house Three o adults one or child	hold: r more s and more	Oth house Thre more a and child	hold: e or adults no	Total
Ν	%	Ν	%	Ν	%	N	%	Ν	%	Ν	%	Ν
497	8.6	191	3.3	1,274	22.1	1,355	23.5	761	13.2	1,692	29.3	5,770

ADAPT2H1 (Adaption of Accommodation)

- 0) No adaptation to accommodation
- 1) Adapted accommodation

No adap to accomm)	Adapt accommo		Total
N	%	N	N %	
5,312	92.1	458	7.9	5,770

TENDH1_AGG (Tenure, Dwelling)

- 1) Owner occupied (including shared ownership)
- 2) Private rented
- 3) Social Rented

	Owner occupied (including shared ownership)		ented	Social	rented	Total	
Ν	%	Ν	%	Ν	%	N	
4,587	79.5	810	14.0	373	6.5	5,770	

CARSNOH1_TOPCODED (Number of Cars or Vans Available in Household)

0) No cars or vans available in household

- 1) 1 car or van available in household
- 2) 2 cars or vans available in household
- 3) 3 cars or vans available in household
- 4) 4 or more cars or vans available in household

No ca	irs or	1 car o	r van	2 cars	sor	3 cars	sor	4 or more			
va	ns	1 car or van available in household		vans		vans		cars or vans		Total	
availa	ble in			availab	ole in	available in		available in		10101	
house	ehold			household		household		household			
Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	
476	8.2	1,962	34.0	2,307	40.0	652	11.3	373	6.5	5,770	

ADTH1_TOPCODED (Number of Adults in Household)

1) One adult in household

2) Two adults in household

3) Three or more adults in household

	One adult in household		ults in hold	Three or adult house	Total	
Ν	%	N %		Ν	%	Ν
768	13.3	2,948	51.1	2,054	35.6	5,770

DPCH1_AGG (Household Dependent Children)

- 0) No dependent children in household
- 1) One dependent child in household
- 2) Two dependent children in household
- 3) Three or more dependent children in household

chil	pendent dren in Isehold	depe Chi	ne ndent Id in ehold	Two dep childr house	en in	Three o deper childr house	ident en in	Total
Ν	%	N	%	Ν	%	Ν	%	N
3,065	53.1	1,156	20.0	1,018	17.6	531	9.2	5,770

CRSH1_TOPCODED (Number of Carers in Household)

- 0) No unpaid carers
- 1) 1 unpaid carer
- 2) 2 unpaid carers
- 3) 3 or more unpaid carers

No un care	•	1 unpaid carer		2 unpaid carers		3 or mo ca	Total	
Ν	%	Ν	%	N	%	Ν	%	Ν
4,297	74.4	997	17.3	374	6.5	102	1.8	5,770

DEPEDH1 (Deprivation - Education)

- 0) Not deprived in education dimension
- 1) Deprived in education dimension

edu	Not deprived in education dimension		ved in ation nsion	Total
N	%	N %		N
4,982	86.3	788	13.7	5,770

DEPHDH1 (Deprivation – Health and Disability)

0) Not deprived in health and disability dimension

1) Deprived in health and disability dimension

health disab	Not deprived in health and disability dimension		in health ability nsion	Total	
N	%	N %		N	
4,376	75.8	1,394 24.2		5,770	

DEPHSH1 (Deprivation - Housing)

0) Not deprived in housing dimension

1) Deprived in housing dimension

hous	Not deprived in housing dimension		Deprived in housing dimension			
Ν	N % N %		N			
5,311	92.1	459	8.0	5,770		

DEPTNH1 (Deprivation - Tenure)

0) Not deprived in tenure dimension

1) Deprived in tenure dimension

Not dep tenure di		Deprived dime	Total	
Ν	%	N %		Ν
5,384	93.3	386	6.7	5,770

9.0 Metadata for PROPERTIES

Table Name:	Earnings and Employees 2011
Data Description:	This variable gives the coded information from Land and Property Services POINTER product and valuation lists, of which more information can be found at https://www.nidirect.gov.uk/articles/pointer . This table is based upon all properties listed in the latest available POINTER dataset linked to latest available LPS valuation list where possible. The capital values (£STG) are attached to the household record in 2011.
Source of the Data:	Land and Property Services (LPS)
Number of Records:	5,770

Currency of the Data: Based on DECEMBER 2016 LPS Data & MARCH 2018 POINTER Data.

Variable:

CV_NON_EX5

9.1 Properties Variable

CV_NON_EX5 (Capital Value-2005 Based)

- 1) <=100,000
- 2) >100,000 and <=150,000
- 3) >150,000 and <=200,000
- 4) >200,000 and <=300,000

5) >300,000

<=100	0,000		00 and 0,000		000 and 0,000		000 and 00,000	>300,000		Missing		Total
Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν
2,324	40.1	1,696	29.4	884	15.3	519	9.0	142	2.5	205	3.6	5,770

Annex A – ASHE comparisons

The following are a selection of tables that compare the <u>headline figures</u> of the ASHE variables within the Earnings and Employees linked dataset to the ASHE 2011 Statistics Bulletin. These tables provide evidence that the Earnings and Employees dataset is accurate and representative of the ASHE sample population.

Table 1: Comparison of the Headline figures for the overall sample from ASHE 2011 and the Earnings and Employees dataset (with and without ASHE weighting applied)

	ASHE-2011		Earnings and Sample wei			d Employees weighted **
	Median	Mean	Median	Mean	Median	Mean
1a. Weekly pay - Gross (£)	354.5	423.2	354.6	423.2	342.2	406.9
2a. Weekly pay - Excluding overtime (£)	343.1	408.7	343.3	408.7	329.8	392.8
3a. Basic Pay – Including other pay (£)	329.8	397.5	329.8	397.5	320.0	382.2
4a. Overtime pay (£)	51.3	14.5	51.3	14.5	50.4	14.1
5a. Hourly pay - Gross (£)	9.9	12.8	9.9	12.8	9.6	12.4
6a. Hourly pay - Excluding overtime (£)	9.9	12.7	9.9	12.7	9.5	12.3
7a. Annual pay –Gross (£)	18,208.0	21,580.0	18,210.0	21,580.3	17,523.5	20,753.5
8a. Annual pay - Incentive (£)	941.0	603.0	942.0	603.2	829.7	555.6
9a. Paid hours worked - Total	37.0	33.2	37.0	33.2	37.0	32.9
10a. Paid hours worked - Basic	36.8	32.1	36.8	32.1	36.5	31.9
11a. Paid hours	4.1	1.0	4.1	1.0	4.0	1.0

worked - Overtime			
overtime			

* Weight used = calwght.

**Filters applied: Adr (Adult rate marker) =1; Lop (Loss of pay marker) =2 and age >15.

Annex B – Census comparisons

The following are a selection of tables that compare the unweighted headline figures and proportions of the Census variables within the Earnings and Employees linked dataset to the Census 2011 summary report, NINIS, and the NILS. These tables provide evidence that the Earnings and Employees dataset is accurate and representative of the full sample population.

Note that percentages have been rounded to one decimal place and as a result may not sum to 100.

Table 2: MARSTATP1_AGG (Marital and Same Sex Civil Partnership Status)

	Single (never married or in a same sex civil partnership) (%)	Married or in a registered same sex civil partnership (%)	Separated (but still legally married or in a same sex civil partnership) (%)	Divorced or formally in a same sex civil partnership which is now legally dissolved (%)	Widowed or surviving partner from a same-sex civil partnership (%)
*Census 2011	41.3	49.0	3.9	4.8	1.0
Earnings and Employees	37.6	52.6	3.7	4.8	1.3

*Source Table CT0306NI: MARITAL OR CIVIL PARTNERSHIP STATUS BY ECONOMIC ACTIVITY (economically active (excluding self-employed and unemployed); aged 16-64)

Table 3: COBP1_5cat (Census 2011 - Country of Birth – Five Category)

	Northern Ireland (%)	Republic of Ireland (%)	Other UK (%)	Other EU (%)	Other (%)
*Census 2011	86.0	2.1	5.4	4.0	2.6
Earnings and Employees	86.8	1.9	4.6	4.3	2.4

*Source Table DC2606NI: ECONOMIC ACTIVITY BY COUNTRY OF BIRTH BY AGE BY SEX (economically active (excluding self-employed and unemployed); aged 16-74)

Table 4: ETHP1_2WAY (Ethnicity)

	White (%)	Other (%)
*Census 2011	98.2	1.8
Earnings and Employees	98.3	1.7

*Source Table DC2601NI: ECONOMIC ACTIVITY BY ETHNIC GROUP BY AGE BY SEX (economically active (excluding self-employed and unemployed); aged 16-74)

Table 5: RELBTBUIP1_AGG (Religion Brought Up In)

	Catholic (%)	Protestant and other Christian (including Christian related) (%)	other Christian (including Christian Other Religions (%)	
*Census 2011	44.1	49.9	0.9	5.1
Earnings and Employees	45.1	49.6	0.9	4.5

*Source Table DC2617NI: ECONOMIC ACTIVITY BY RELIGION OR RELIGION BROUGHT UP IN BY AGE BY SEX (economically active (excluding self-employed and unemployed); aged 16-74)

Table 6: DISABILITYP1 (Disability)

	Day-to-day activities limited a lot (%)	Day-to-day activities limited a little (%)	Day-to-day activities not limited (%)
*Census 2011	2.3	5.0	92.7
Earnings and Employees	1.8	4.8	93.5

* Source Table CT0309NI: ECONOMIC ACTIVITY BY LONG-TERM HEALTH PROBLEM OR DISABILITY (economically active (excluding self-employed and unemployed); aged 16-74)

Table 7: HEALTHP1_AGG (Health)

	Very good health (%)	Good health (%)	Fair health (%)	Bad or very bad health (%)
*Census 2011	52.4	38.2	8.3	1.2
Earnings and Employees	53.8	37.5	7.8	1.0

*Source Table DC3302NI: ECONOMIC ACTIVITY BY GENERAL HEALTH BY PROVISION OF UNPAID CARE BY SEX (economically active (excluding self-employed and unemployed); aged 16-74)

Table 8: CARERP1 (Care)

	Provides no unpaid care (%)	Provides 1 to 19 hrs unpaid care a week (%)	Provides 20 to 49 hrs unpaid care a week (%)	Provides 50 or more hrs unpaid care a week (%)
*Census 2011	85.1	10.4	2.3	2.3
Earnings and Employees	84.8	10.7	2.1	2.3

*Source Table CT0311NI: ECONOMIC ACTIVITY BY PROVISION OF UNPAID CARE (economically active (excluding self-employed and unemployed); aged 16-74)

Table 9: HLQP1_AGG (Highest Level of Qualification (inclusive of those who stated UK equivalents))

	No qualifications (%)	Level 1 qualifications (%)	Level 2 qualifications (%)	Level 3 qualifications (%)	Level 4 qualifications and above (%)	Other qualifications (including apprenticeships) (%)
Census 2011	14.7	12.9	16.7	15.5	31.0	9.3
Earnings and Employees	12.3	12.3	17.1	15.6	34.9	7.9

*Source Table LC6503NI: HIGHEST LEVEL OF QUALIFICATION BY ECONOMIC ACTIVITY BY AGE (economically active; aged 16-74)

Table 10: TENDH1_AGG (Tenure, Dwelling)

	Owner occupied (including shared ownership) (%)	Private rented (%)	Social rented (%)
NILS- Members 2011 ¹	79.1	13.7	7.2
Earnings and Employees	79.5	14.0	6.5

Table 11: CARSNOH1_TOPCODED (Number of Cars or Vans Available in Household)

	No cars or vans available in household (%)	1 car or van available in household (%)	2 cars or vans available in household (%)	3 cars or vans available in household (%)	4 or more cars or vans available in household (%)
NILS-Members 2011 ¹	9.0	32.8	39.9	12.0	6.2
Earnings and Employees	8.2	34.0	40.0	11.3	6.5

Table 12: ADTH1_TOPCODED (Number of Adults in Household)

	One adult in household (%)	Two adults in household (%)	Three or more adults in household (%)
NILS-Members 2011 ¹	13.3	50.5	36.2
Earnings and Employees	13.3	51.1	35.6

Table 13: DPCH1_AGG (Household Dependent Children)

	No dependent children in household (%)	One dependent child in household (%)	Two dependent children in household (%)	Three or more dependent children in household (%)
NILS-Members 2011 ¹	53.7	20.5	17.3	8.5
Earnings and Employees	53.1	20.0	17.6	9.2

To note discrepancies between the Census 2011/NILS-Members 2011 and the Earnings and Employees sample distributions are due to aggregation of variables or the unavailability of a similar sample for comparison.

¹ Source: NILS variable ECOP1 (Economic Activity) including '01' 'Economically active (excluding full-time students): In employment: Employee, part-time'; '02' 'Economically active (excluding full-time students): In employment: Employee, full-time'; '08' 'Economically active full-time students: In employment: Employee, part-time'; '09' 'Economically active full-time students: In employee, full-time'; and NILS members aged 16-74.