

Proposals for the Future Measurement of Survey based Estimates of Manufacturing Sales and Exports

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1.0 EXECUTIVE SUMMARY

i) The Northern Ireland Executive's Economic Strategy referred to the need to improve the measurement of Northern Ireland's exports beyond that of the manufacturing sector. NISRA subsequently published initial estimates of 'broad economy' sales and exports by industry sector in March 2015.

ii.) As a consequence, two separate sources of survey based trade data now exist for the manufacturing sector – the Manufacturing Sales and Exports Survey (MSES) and the manufacturing element of the Broad Economy Exports (BEE) measure. Both measures are sourced from the same data collected via the NI Annual Business Inquiry (NIABI) but each utilises a different methodology.

Iii.) The purpose of this paper is to seek user views on the options for manufacturing exports data outputs going forward as set out in Section 4. A proposed approach is also recommended. Users are presented with a comparison of the two existing data sources using MSES 2011 and 2012 revised data alongside the equivalent Broad Economy Exports revised data (manufacturing only), and are invited to provide their views to the Economic & Labour Market Statistics Branch, NISRA at <u>statistics@dfpni.gov.uk</u>.

2.0 INTRODUCTION

2.1 Background and Context

NISRA's Economic and Labour Market Statistics Branch published "Methodology Paper on the Production of Northern Ireland Broad Economy Exports Estimates with Experimental Estimates for 2011 and 2012" in March 2015 which set out to provide a single comprehensive measure of business exports and external sales (including to Great Britain) of both goods and services, aligning exports methodology with that used by the NIABI. The methodology paper is available at

https://www.detini.gov.uk/sites/default/files/publications/deti/broad-economy-exportsmethodology-paper-2011-and-2012.pdf.

However, the development of the BEE means that two separate sources of survey trade data now exist for the manufacturing sector – the MSES and BEE.

2.2 Manufacturing Sales and Exports Survey

The MSES is a well established National Statistic which is published annually in December. It contains a back series of data to 2003/04 and also includes disaggregation of results to country level and sic2. Information is presented in both current prices and real terms. The methodology, however, while fit for purpose, does not utilise more recent best practice developments in relation to weighting which have already been integrated within the Annual Business Inquiry and subsequent BEE results.

2.3 Broad Economy Exports

The BEE output is a relatively new source of information, commencing with data for 2011. This coincides with the boosting of the NIABI sample and also the introduction of additional questions relating to exports and imports. The initial BEE methodology paper presents information on broad destination and industry sector only, however this will be developed to reflect the detail of the MSES in future outputs. The BEE also utilises the same methodology as the NIABI which includes best practice refinements as recommended by the ONS including the use of additional weights and to enable the presentation of measures of relative variability as detailed below.

While both measures are thus sourced from the same survey returns, differences in methodology and analysis mean that differing estimates are created. These estimates, while largely consistent with each other, are nonetheless non-identical and this has the potential to create confusion for users.

The purpose of this paper is to:

- present estimates for 2011 and 2012 from both the MSES and BEE and outline the differences
- gather user views on discontinuing the MSES series and using the manufacturing estimates from the BEE as the future measure of trade in the manufacturing sector.

3.0 RESULTS

The impact of producing results using the NIABI methodology can be measured directly by comparing the published results for manufacturing exports from the MSES with the manufacturing exports estimated by the BEE.

Tables 1 to 5 below present sales and exports estimates for NI manufacturing companies for survey years 2011 and 2012, by comparing data from the 2011/12 MSES (revised) and 2012/13 MSES (revised) with manufacturing exports from the 2011 BEE (revised) and 2012 BEE (revised). The difference between the two measures is also presented along with BEE quality indicators. It should be noted that while the MSES and BEE reference financial year and calendar year depending on the output, these are still based on the same data – the different use of reference period simply reflects that the ABI allows for businesses to return data on a calendar or financial year basis.

Users are reminded that all BEE results remain experimental and are subject to future revision as the methodology is further refined during 2015/16.

3.1 Reporting Period

The BEE data presented in this publication are consistent with revised 2011 results published the by ABI on 11 December 2013 (https://www.detini.gov.uk/sites/default/files/publications/deti/niabi-2012-publicationrevised 2012 results published on ru.pdf) and the 10 December 2014 (https://www.detini.gov.uk/sites/default/files/publications/deti/niabi-2013-publicationfinal.pdf). The MSES data presented is consistent with the 2011 and 2012 data published on 3 December 2014 (https://www.detini.gov.uk/sites/default/files/publications/deti/ni-mses-2013-14.pdf).

3.2 Definitions

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

Internal Sales are defined as all sales to Northern Ireland only.

External Sales are defined as all sales outside Northern Ireland (including sales to Great Britain).

Exports are defined as all sales outside the United Kingdom.

The Rest of the EU (REU) is composed of the following countries: Germany; France; Belgium; Luxembourg; Netherlands; Italy; Denmark; Portugal; Spain; Greece; Austria; Sweden; Finland, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Bulgaria, Slovakia and Slovenia (Croatia joined the EU in July 2013 and hence is not included in this reporting period).

The Rest of World (ROW) refers to all destinations outside the EU.

3.3 Quality Indicators

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.

3.3.1 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 parameter estimate. 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.

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 tables below. For example the 2011 parameter estimate for manufacturing turnover is £16,582 million (Table 1a).

3.4 Results by Broad Destination

Overall, the two methodologies produce broadly similar estimates. In 2011, both the BEE and the MSES give a total sales figure rounding to ± 16.6 billion, with a difference of ± 48 million or 0.3%.

The greatest percentage difference between the two measures is in the level of ROI sales (6.9% or £88 million).

In 2012, the BEE gives a total sales figure of £16.8 billion compared to the MSES figure of £17.4 billion. This is a larger difference than that given in 2011 and reflects the different methodologies used when estimating responses for any large businesses who have failed to respond to the survey. The effect of this difference can be seen throughout the 2012 breakdowns that follow.

A key benefit of using the BEE to produce manufacturing trade data is that the results processing will align exactly with the NIABI and this will eliminate the possibility of differing estimates for common variables.

Table 1a. Comparison of Manufacturing Sales and Exports as measured by ManufacturingSales and Exports Survey (revised 2011) and Broad Economy Exports (revised 2011)Measure: Broad Destinations

	MSES /£m	BEE 95% Cl Lower	BEE /£m	BEE 95% Cl Upper	Coefficient of Variation	Difference (BEE - MSES) / £m	% difference
Turnover	16,630	16,379	16,582	16,785	0.6	-48	-0.3
NI Sales	3,743	3,629	3,759	3,890	1.8	17	0.4
GB Sales	7,397	7,176	7,279	7,382	0.7	-118	-1.6
ROI Sales	1,265	1,280	1,353	1,426	2.8	88	6.9
REU Sales	1,353	1,274	1,330	1,386	2.2	-23	-1.7
ROW Sales	2,872	2,795	2,860	2,926	1.2	-12	-0.4
External Sales	12,887	12,655	12,822	12,990	0.7	-65	-0.5
Exports	5,490	5,414	5,543	5,672	1.2	53	1.0

Table 1b. Comparison of Manufacturing Sales and Exports as measured by ManufacturingSales and Exports Survey (revised 2012) and Broad Economy Exports (revised 2012)Measure: Broad Destinations

	MSES /£m	BEE 95% Cl Lower	BEE /£m	BEE 95% Cl Upper	Coefficient of Variation	Difference (BEE - MSES) / £m	% difference
Turnover	17,354	16,612	16,833	17,053	0.7	-522	-3.0
NI Sales	3,758	3,502	3,647	3,792	2.0	-111	-3.0
GB Sales	7,975	7,572	7,688	7,803	0.8	-287	-3.6
ROI Sales	1,413	1,290	1,358	1,425	2.5	-55	-3.9
REU Sales	1,264	1,119	1,178	1,237	2.6	-86	-6.8
ROW Sales	2,944	2,896	2,962	3,028	1.1	18	0.6
External Sales	13,596	13,017	13,185	13,353	0.7	-411	-3.0
Exports	5,621	5,376	5,497	5,619	1.1	-124	-2.2

Tables 2 to 5 below compare results from the 2011/12 MSES (revised) and 2012/13 MSES (revised) with manufacturing exports from the 2011 BEE (revised) and 2012 BEE (revised) split by:

- 2 digit SIC (Tables 2a and 2b)
- country Rest of EU (Tables 3a and 3b)
- country Rest of World (Tables 4a and 4b)
- size band (Tables 5a and 5b)

As with the broad destination level data, the two methodologies produce broadly similar estimates.

As noted above, the effect of the different methodologies used when estimating responses for any large businesses who have failed to respond to the survey can be seen in some of the 2012 breakdowns that follow.

3.5 Results by 2 digit SIC

Tables 2a and 2b below present total manufacturing sales split by 2 digit SIC. Again, the two methodologies produce broadly similar estimates. In 2011, there is a 0.3% (£48m) difference between the MSES estimate of £16,630m and the BEE estimate of £16,582m. The 2012 MSES estimate of £17,354m is 3.0% (£522m) higher than the BEE estimate of £16,582m.

In 2011, 14 of the 20 MSES SIC level estimates fall within the confidence intervals produced by BEE. In 2012, 12 of the MSES estimates fall within BEE confidence intervals.

It is also worth noting that some of the larger percentage changes are based on relatively small estimates.

Table 2a. Comparison of Total Manufacturing Sales as measured by Manufacturing Sales and Exports Survey (revised 2011) and Broad Economy Exports (revised 2011) Measure: 2 digit SIC

	MSES /£m	BEE 95% Cl Lower	BEE /£m	BEE 95% Cl Upper	Coefficient of Variation	Difference (BEE - MSES) / £m	% difference
ALL MANU	16,630	16,379	16,582	16,785	0.6	-48	-0.3
10-12	8,579	8,413	8,550	8,688	0.8	-28	-0.3
13	195	164	177	191	3.9	-17	-8.8
14	178	95	123	150	11.5	-56	-31.2
15	*	*	*	*	*	*	*
16	301	293	323	353	4.8	22	7.5
17	213	216	225	234	2.0	12	5.5
18	154	137	153	170	5.5	-1	-0.7
19	*	*	*	*	*	*	*
20	312	228	249	269	4.2	-64	-20.4
21	274	261	270	278	1.6	-4	-1.6
22	824	727	769	812	2.8	-55	-6.6
23	453	438	476	515	4.1	23	5.1
24	88	71	115	158	19.3	26	29.8
25	817	761	839	918	4.8	22	2.7
26	557	521	581	640	5.2	24	4.2
27	933	931	956	982	1.4	24	2.5
28	1,093	1,031	1,067	1,104	1.8	-26	-2.4
29	381	391	408	425	2.1	27	7.1
30	880	790	861	932	4.2	-19	-2.2
31	214	183	217	251	7.9	3	1.6
32	108	84	123	162	16.3	15	13.7
33	51	45	68	91	17.3	17	34.2

* = Cells have been suppressed to protect confidentiality

Table 2b. Comparison of Total Manufacturing Sales as measured by Manufacturing Sales and Exports Survey (revised 2012) and Broad Economy Exports (revised 2012) Measure: 2 digit SIC

	MSES /£m	BEE 95% Cl Lower	BEE /£m	BEE 95% Cl Upper	Coefficient of Variation	Difference (BEE - MSES) / £m	% difference
ALL MANU	17,354	16,612	16,833	17,053	0.7	-522	-3.0
10-12	9,244	8,567	8,733	8,899	1.0	-511	-5.5
13	169	148	165	181	5.3	-5	-2.8
14	161	49	66	83	13.3	-95	-58.8
15	*	*	*	*	*	*	*
16	297	285	311	338	4.3	14	4.7
17	253	220	226	231	1.3	-28	-10.9
18	158	132	149	165	5.7	-10	-6.1
19	*	*	*	*	*	*	*
20	281	241	262	283	4.1	-19	-6.7
21	292	286	291	297	1.0	-1	-0.2
22	730	714	749	784	2.4	19	2.6
23	488	431	457	483	2.9	-30	-6.2
24	83	74	101	127	13.5	17	20.6
25	802	808	889	971	4.7	87	10.9
26	602	549	601	653	4.4	-1	-0.1
27	942	925	946	967	1.1	3	0.3
28	1,038	961	1,018	1,076	2.9	-20	-1.9
29	454	400	417	433	2.0	-38	-8.3
30	938	918	938	958	1.1	0	0.0
31	223	225	252	280	5.6	29	13.2
32	114	76	153	230	25.6	40	35.0
33	61	47	66	85	14.6	5	8.7

* = Cells have been suppressed to protect confidentiality

3.6 Results by Country – Rest of Europe

Tables 3a and 3b below present manufacturing sales to individual countries in the Rest of Europe. In 2011, only 3 of the 25 MSES REU country level estimates fall outside the confidence intervals produced by BEE. In 2012, 7 of the MSES estimates fall outside BEE confidence intervals.

It is also worth noting that some of the larger percentage changes are based on relatively small estimates.

Table 3a. Comparison of Manufacturing Sales and Exports as measured by ManufacturingSales and Exports Survey (revised 2011) and Broad Economy Exports (revised 2011)Measure: by country – Rest of EU

	MSES /£m	BEE 95% CI Lower	BEE /£m	BEE 95% CI Upper	Coefficient of Variation	Difference (BEE - MSES) / £m	% difference
REU Sales	1,353	1,274	1,330	1,386	2.2	-23	-1.7
Germany Sales	314	300	317	335	2.9	4	1.2
France Sales	279	273	284	295	1.9	5	1.8
Belgium Sales	104	96	108	119	5.5	4	3.6
Luxembourg Sales	0	0	0	0	0.1	0	-0.5
Netherlands Sales	139	108	122	136	5.9	-17	-12.2
Italy Sales	107	89	106	122	8.2	-1	-1.1
Denmark Sales	51	50	52	53	1.7	0	0.4
Portugal Sales	10	7	8	9	8.4	-2	-21.8
Spain Sales	85	79	87	94	4.4	1	1.7
Greece Sales	9	9	9	10	2.1	0	-0.7
Austria Sales	15	14	16	17	4.4	0	1.0
Sweden Sales	50	42	50	58	7.8	0	0.8
Finland Sales	25	22	26	30	8.2	1	2.9
Cyprus Sales	3	2	2	3	5.3	0	-13.8
Czech Republic Sales	21	18	20	22	4.9	-1	-4.6
Estonia Sales	2	1	1	2	6.6	0	-20.6
Hungary Sales	25	23	23	24	1.1	-2	-8.1
Latvia Sales	6	4	5	7	16.1	0	-4.4
Lithuania Sales	2	2	2	2	7.8	0	-9.2
Malta Sales	3	2	2	3	13.7	-1	-17.8
Poland Sales	66	54	66	77	9.1	-1	-0.9
Slovakia Sales	5	4	5	5	4.7	0	-6.3
Slovenia Sales	1	1	1	1	3.9	0	-11.0
Bulgaria Sales	3	2	3	3	11.4	-1	-22.6
Romania Sales	15	13	14	15	2.6	-1	-8.9

Table 3b. Comparison of Manufacturing Sales and Exports as measured by ManufacturingSales and Exports Survey (revised 2012) and Broad Economy Exports (revised 2012)Measure: by country – Rest of EU

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	MSES /£m	BEE 95% Lower	BEE /£m	BEE 95% Upper	Coefficient Variation	Difference (BEE - MSE: £m	% differenc
REU Sales	1,264	1,119	1,178	1,237	2.6	-86	-6.8
Germany Sales	346	340	377	414	5.0	31	9.0
France Sales	281	243	256	268	2.4	-25	-8.9
Belgium Sales	81	61	81	102	12.7	0	0.2
Luxembourg Sales	1	1	1	1	5.1	0	-0.3
Netherlands Sales	169	90	99	108	4.7	-70	-41.3
Italy Sales	82	66	77	88	7.4	-4	-5.3
Denmark Sales	38	37	39	41	2.5	0	1.0
Portugal Sales	12	11	11	11	2.1	-1	-9.2
Spain Sales	56	54	58	63	3.8	2	4.0
Greece Sales	5	5	5	6	2.7	0	-0.5
Austria Sales	24	23	24	25	2.7	0	-0.9
Sweden Sales	32	25	28	30	4.4	-5	-14.3
Finland Sales	23	17	20	22	5.9	-3	-13.5
Cyprus Sales	1	1	1	1	4.3	0	-20.1
Czech Republic Sales	18	18	19	21	3.0	2	9.7
Estonia Sales	3	2	3	3	6.9	0	-3.9
Hungary Sales	15	13	14	14	2.2	-1	-6.5
Latvia Sales	3	1	4	6	38.0	0	15.9
Lithuania Sales	5	4	5	5	3.1	-1	-11.4
Malta Sales	2	1	2	3	25.9	0	-3.3
Poland Sales	39	34	36	38	2.8	-3	-6.6
Slovakia Sales	4	3	4	5	10.0	0	-1.2
Slovenia Sales	2	2	2	2	5.0	0	-0.3
Bulgaria Sales	2	2	3	3	10.5	0	16.4
Romania Sales	9	8	9	10	5.9	0	1.2

3.7 Results by Country – Rest of World

Tables 4a and 4b below present manufacturing sales to individual countries in the Rest of the World. In 2011, there is a difference of £172 million when comparing the MSES estimate (£176 million) for the "Rest of World Other" category to the BEE estimate (£4 million). In MSES, this category is used in two ways:

- The ABI form offers almost 40 individual Rest of World country options. Where a business exports to country outside these options, they use the "Rest of World Other" option and provide details of both the country and the value of trade.
- In MSES results processing, where a return from an individual business does not sum correctly, (ie: there is a shortfall between total Rest of World sales and the sum of Rest of World destinations), the shortfall is added to the "Rest of World Other" category.

One of the improvements in using the BEE to produce trade data is that this second use of the catch-all is minimised as much as possible. If an apportionment of sales can be derived from previous returns for that business, this is used. If a previous apportionment cannot be calculated, the sales pattern in other similar businesses, if suitable, is used. In the absence of a better way to apportion the shortfall, the outstanding amount is attributed to the "Rest of World Other" category, as before.

Table 4a. Comparison of Manufacturing Sales and Exports as measured by ManufacturingSales and Exports Survey (revised 2011) and Broad Economy Exports (revised 2011)Measure: by country – Rest of World

	ES /£m	95% Cl er	/£m	95% Cl Ier	fficient of iation	erence E - MSES) /	ifference
	MSE	BEE Low	BEE	BEE Upp	Coe Vari	Diff (BEF £m	% di
ROW Sales	2,872	2,795	2,860	2,926	1.2	-12	-0.4
Switzerland Sales	715	711	717	723	0.4	1	0.2
Turkey Sales	39	33	34	36	1.8	-5	-11.9
Eastern Europe	3	1	4	7	37.1	1	27.9
Norway Sales	16	14	16	17	5.6	-1	-5.2
Russia Sales	63	60	62	64	1.8	-1	-2.2
Rest of Europe Other	6	16	17	18	2.9	12	210.9
Australia Sales	97	89	97	106	4.2	0	0.2
New Zealand Sales	8	5	7	8	10.6	-1	-16.9
Rest of World Other	176	4	4	4	1.5	-172	-97.6
North America Total	987	962	1,000	1,039	2.0	14	1.4
Central and South America Total	57	58	60	62	1.3	3	6.1
Middle East Total	220	231	245	259	2.9	26	11.8
Asia Total	417	385	412	439	3.4	-5	-1.2
Africa Total	68	179	184	189	1.3	116	170.0

Table 4b. Comparison of Manufacturing Sales and Exports as measured by ManufacturingSales and Exports Survey (revised 2012) and Broad Economy Exports (revised 2012)Measure: by country – Rest of World

	MSES /£m	BEE 95% Cl Lower	BEE /£m	BEE 95% Cl Upper	Coefficient of Variation	Difference (BEE - MSES) / £m	% difference
ROW Sales	2,944	2,896	2,962	3,028	1.1	18	0.6
Switzerland Sales	845	838	845	853	0.4	0	0.1
Turkey Sales	25	24	26	27	3.0	1	3.4
Eastern Europe	6	4	7	9	19.0	1	11.5
Norway Sales	30	24	29	34	9.1	-2	-5.1
Russia Sales	83	80	84	89	2.7	1	1.5
Europe Other	14	14	14	15	1.0	1	3.6
Australia Sales	123	117	123	130	2.5	0	0.1
New Zealand Sales	10	8	10	12	10.5	0	-0.6
Rest of World Other	15	9	10	10	2.4	-5	-32.6
North America Total	910	906	938	971	1.8	28	3.1
Central and South America Total	71	70	73	76	2.0	2	3.2
Middle East Total	229	207	225	243	4.1	-4	-1.9
Asia Total	410	378	402	427	3.1	-8	-1.9
Africa Total	173	170	175	180	1.6	2	1.2

3.8 Results by Size-band

Tables 5a and 5b below present manufacturing sales, external sales and exports split by employment size-band. In both 2011 and 2012, the estimates are broadly similar.

It is interesting to note that, as the level of size-band disaggregation increases, the estimates from MSES and BEE tend to drift apart slightly. This is as expected – businesses in the 250+ category are large businesses and these are generally treated in the same way in both surveys (fully enumerated with estimation for non-responders, where possible, and minimal weighting). Hence the estimates are very similar.

In the smaller size-bands, the results become more dependent upon the sampled portion of the survey and the effect of the differences in analysis and weighting of the sample element becomes more pronounced.

Table 5a. Comparison of Manufacturing Sales and Exports as measured by ManufacturingSales and Exports Survey (revised 2011) and Broad Economy Exports (revised 2011)Measure: Size-band

Size of business		MSES /£m	BEE 95% Cl Lower	BEE /£m	BEE 95% Cl Upper	Coefficient of Variation	Difference (BEE - MSES) / £m	% difference
	Turnover	16,630	16,379	16,582	16,785	0.6	-48	-0.3
All	External Sales	12,887	12,655	12,822	12,990	0.7	-65	-0.5
Manufacturing	Exports	5,490	5,414	5,543	5,672	1.2	53	1.0
0-49	Turnover	2,843	2,610	2,777	2,944	3.1	-66	-2.3
	External Sales	1,341	994	1,112	1,230	5.4	-229	-17.1
	Exports	765	601	679	757	5.9	-86	-11.3
	Turnover	3,644	3,761	3,905	4,049	1.9	261	7.2
50-249	External Sales	2,114	2,294	2,392	2,490	2.1	277	13.1
30-245	Exports	1,046	1,207	1,278	1,349	2.8	232	22.2
	Turnover	10,143	9,803	9,900	9,996	0.5	-244	-2.4
250+	External Sales	9,432	9,224	9,319	9,413	0.5	-113	-1.2
2301	Exports	3,678	3,504	3,586	3,667	1.2	-93	-2.5

Table 5b. Comparison of Manufacturing Sales and Exports as measured by ManufacturingSales and Exports Survey (revised 2012) and Broad Economy Exports (revised 2012)Measure: Size-band

Size of business		MSES /£m	BEE 95% CI Lower	BEE /£m	BEE 95% CI Upper	Coefficient of Variation	Difference (BEE - MSES) / £m	% difference
	Turnover	17,354	16,612	16,833	17,053	0.7	-522	-3.0
All	External Sales	13,596	13,017	13,185	13,353	0.7	-411	-3.0
Manufacturing	Exports	5,621	5,376	5,497	5,619	1.1	-124	-2.2
0.40	Turnover	3,051	2,602	2,760	2,918	2.9	-291	-9.5
	External Sales	1,332	985	1,097	1,210	5.2	-234	-17.6
0-45	Exports	785	601	666	732	5.0	-119	-15.2
	Turnover	4,147	3,959	4,091	4,222	1.6	-56	-1.3
50-249	External Sales	2,674	2,587	2,709	2,832	2.3	36	1.3
50-245	Exports	1,377	1,337	1,433	1,529	3.4	56	4.0
	Turnover	10,157	9,848	9,982	10,115	0.7	-175	-1.7
250+	External Sales	9,591	9,323	9,378	9,434	0.3	-212	-2.2
250+	Exports	3,459	3,353	3,399	3,444	0.7	-61	-1.8

4.0 OPTIONS FOR USERS

NISRA would like to gather user views on the proposal to discontinue the MSES series and to use manufacturing estimates from the BEE as the preferred option going forward. (option 2 below). If users are content NISRA would intend to publish a manufacturing sales report in December 2015 using the Broad Economy methodology. A full BEE analysis will then follow in early 2016.

4.1 Option 1: retain both MSES and BEE

Option 1 is to retain both MSES and BEE:

ADVANTAGES:

• MSES is a well established survey and the back-series would continue.

DISADVANTAGES:

- Two separate estimates for manufacturing trade would exist. In addition to these survey sources, HMRC data also provides further information on export and import of goods. As tables 1 to 5 above show, the survey estimates will be broadly consistent but will not be identical. This may create confusion for users as to which series to use; and
- Resource and timeliness implications of producing both series

4.2 Option 2: discontinue MSES and use BEE as the primary source of manufacturing trade data

Option 2 is to discontinue MSES and use BEE as the primary source of survey based manufacturing trade estimates:

ADVANTAGES:

- BEE estimates consistent with other NIABI outputs;
- A single survey based estimate for manufacturing trade will exist; and
- BEE manufacturing estimates produced on same basis as BEE estimates for other industry sectors, therefore comparable with rest of economy estimates.

DISADVANTAGES:

• The MSES back series will cease.

4.3 Option 3: use MSES as the primary source of manufacturing trade data and do not publish manufacturing data from BEE

Option 3 is to continue to use MSES as the primary source of manufacturing trade data. BEE would incorporate the sector but on a differing methodology.

ADVANTAGES:

• MSES back series would continue.

DISADVANTAGES:

- MSES estimate of manufacturing sales would not be consistent with other BEE estimates nor other ABI outputs;
- MSES does not have quality indicators for estimates of manufacturing trade (confidence intervals; coefficient of variation); and
- Resource implications of producing both series and therefore the detail that initial releases will be able to go into

4.4 User Feedback

Users are invited to provide comments regarding the options presented herein, and these can be provided to the Economic & Labour Market Statistics Branch, NISRA at <u>statistics@dfpni.gov.uk</u>.