

Table 1 Seasonally adjusted indices for the non-financial traded services sector¹**Base Year: 2010=100**

Period	Total Non-Financial Traded Services NACE 45-63, 68-96			
	Index	% change on previous period	Annual % change	
2009	102.4			
2010	99.9		-2.4	
2011	103.2		3.3	
2011	3rd quarter	103.1	-0.4	2.2
	4th quarter	105.0	1.8	4.8
2012	1st quarter	104.7	-0.3	3.6
	2nd quarter	106.0	1.2	2.3
	3rd quarter	105.0	-1.0	1.8
2011	May	105.5	3.5	9.3
	June	103.4	-2.0	2.2
	July	101.1	-2.2	-0.1
	August	103.8	2.6	4.2
	September	104.5	0.7	2.5
	October	102.9	-1.6	3.3
	November	105.0	2.1	5.1
	December	107.1	2.0	5.8
2012	January	103.9	-3.0	2.2
	February	104.8	0.9	4.8
	March	105.5	0.7	3.8
	April	105.3	-0.2	3.3
	May	107.0	1.7	1.5
	June	105.7	-1.2	2.2
	July	105.0	-0.7	3.8
	August	106.0	1.0	2.1
	September	104.0	-1.9	-0.5
	October	106.5	2.5	3.5
	November ²	106.4	-0.1	1.3

¹ Based on Seasonal Patterns up to November 2012² Provisional Value Indices based on early returns from respondents

Table 2(a) Seasonally adjusted indices by sector¹

		Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles ³			Wholesale trade ⁴		
		NACE 45 -47			NACE 46		
Period		Index	% change		Index	% change	
			on previous period	Annual % change		on previous period	Annual % change
2009		95.6			90.3		
2010		99.9		4.6	99.9		10.5
2011		107.2		7.3	114.2		14.3
2011	3rd quarter	107.7	2.1	6.7	115.8	4.7	14.4
	4th quarter	110.5	2.6	7.7	120.1	3.7	13.6
2012	1st quarter	110.8	0.3	5.5	122.0	1.5	10.6
	2nd quarter	110.1	-0.7	4.3	120.8	-0.9	9.3
	3rd quarter	108.4	-1.5	0.7	116.5	-3.6	0.7
2011	May	106.7	2.3	7.7	113.6	4.9	16.1
	June	105.6	-1.0	3.6	109.8	-3.3	6.2
	July	104.6	-0.9	3.6	109.9	0.1	7.8
	August	108.7	3.9	9.4	117.6	7.0	20.5
	September	109.7	0.9	7.3	119.8	1.8	15.3
	October	110.4	0.7	9.1	120.8	0.9	18.1
	November	111.0	0.5	7.1	120.4	-0.4	12.1
	December	110.1	-0.8	7.1	119.1	-1.0	10.8
2012	January	110.2	0.1	5.2	120.9	1.5	10.7
	February	110.7	0.4	4.5	122.6	1.4	9.6
	March	111.5	0.8	6.7	122.3	-0.2	11.5
	April	110.2	-1.2	5.7	120.0	-1.9	10.9
	May	111.6	1.3	4.6	123.0	2.5	8.3
	June	108.5	-2.7	2.7	119.4	-2.9	8.8
	July	109.0	0.5	4.2	118.7	-0.6	7.9
	August	109.2	0.2	0.4	118.0	-0.6	0.3
	September	107.0	-2.0	-2.5	112.9	-4.3	-5.7
	October	110.3	3.1	-0.1	117.4	3.9	-2.9
	November ³	109.5	-0.8	-1.4	117.5	0.1	-2.4

¹ Based on Seasonal Patterns up to November 2012² Retail sales and Motor figures are published in detail in the Retail Sales Index³ Provisional Value Indices based on early returns from respondents⁴ Wholesale trade is a sub-component of Wholesale and retail trade; repair of motor vehicles and motorcycles

Table 2(b) Seasonally adjusted indices by sector¹

Base Year: 2010=100

Period	Accommodation and Food Service Activities			Accommodation			Food and Beverage Service Activities ²			
	NACE 55-56			NACE 55			NACE 561, 562			
	Index	% change		Index	% change		Index	% change		
		on previous period	Annual % change		on previous period	Annual % change		on previous period	Annual % change	
2009	111.8			113.2			108.4			
2010	100.1		-10.5	100.1		-11.6	100.0		-7.8	
2011	101.3		1.2	105.1		5.0	102.8		2.8	
2011	3rd quarter	101.8	-0.3	1.7	108.3	1.5	9.7	101.8	0.1	-1.2
	4th quarter	101.9	0.1	3.6	101.2	-6.5	1.0	109.7	7.8	11.9
2012	1st quarter	100.3	-1.6	0.9	99.8	-1.4	-4.2	108.8	-0.8	11.2
	2nd quarter	103.6	3.3	1.4	108.0	8.1	1.2	109.4	0.6	7.6
	3rd quarter	105.0	1.4	3.2	109.8	1.7	1.4	111.1	1.5	9.2
2011	May	100.5	-4.3	1.1	105.7	-2.6	7.5	100.5	-3.6	1.7
	June	100.9	0.5	-0.2	106.0	0.2	6.0	100.3	-0.1	-1.6
	July	104.3	3.4	3.2	113.8	7.5	13.8	101.0	0.7	-3.9
	August	99.8	-4.3	0.8	105.3	-7.5	8.8	100.8	-0.2	-0.9
	September	101.2	1.3	1.1	105.8	0.4	6.4	103.6	2.7	1.3
	October	100.8	-0.3	-0.9	101.0	-4.5	-2.6	107.4	3.7	7.1
	November	102.0	1.2	5.0	102.2	1.2	5.3	108.5	1.0	10.1
	December	102.8	0.7	6.9	100.4	-1.8	0.7	113.3	4.5	18.9
2012	January	100.3	-2.5	1.2	94.9	-5.5	-9.2	109.9	-3.0	15.3
	February	98.3	-2.0	-0.9	97.4	2.6	-7.0	108.3	-1.5	10.9
	March	102.2	4.0	2.6	107.2	10.1	3.7	108.2	-0.1	7.6
	April	100.9	-1.3	-3.9	103.0	-3.9	-5.1	104.5	-3.3	0.3
	May	103.1	2.2	2.7	109.4	6.2	3.5	109.7	4.9	9.1
	June	106.7	3.5	5.8	111.5	1.9	5.2	114.1	4.1	13.7
	July	101.6	-4.8	-2.7	105.9	-5.0	-7.0	108.5	-5.0	7.4
	August	106.1	4.5	6.3	111.9	5.7	6.2	112.2	3.5	11.3
	September	107.4	1.2	6.2	111.6	-0.3	5.5	112.7	0.4	8.8
	October	103.6	-3.6	2.7	108.3	-3.0	7.2	110.5	-2.0	2.9
	November ³	105.9	2.2	3.8	110.5	2.0	8.0	111.2	0.6	2.5

¹ Based on Seasonal Patterns up to November 2012

² NACE 563 relates to Bars, and is published separately in the Retail Sales Index

³ Provisional Value Indices based on early returns from respondents

Table 2(c) Seasonally adjusted indices by sector¹

		Professional, Scientific and Technical Activities			Administrative and Support Service Activities ²		
		NACE 64-75			NACE 77-82		
Period		Index	% change		Index	% change	
			on previous period	Annual % change		on previous period	Annual % change
2009		119.2			97.2		
2010		100.2		-15.9	99.9		2.8
2011		101.1		1.0	92.7		-7.2
2011	3rd quarter	99.9	-5.0	-0.7	90.6	-1.2	-8.9
	4th quarter	99.0	-0.9	1.4	91.9	1.4	-3.9
2012	1st quarter	92.1	-6.9	-8.4	94.5	2.8	-2.0
	2nd quarter	92.8	0.7	-11.8	100.1	6.0	9.1
	3rd quarter	86.7	-6.5	-13.2	102.0	1.9	12.6
2011	May	114.6	15.4	21.0	91.4	-2.6	-1.6
	June	101.7	-11.3	1.6	90.0	-1.5	-9.5
	July	101.7	0.0	13.0	86.9	-3.4	-15.3
	August	97.9	-3.7	-5.6	89.2	2.6	-9.2
	September	100.0	2.2	-7.4	95.8	7.3	-1.8
	October	94.3	-5.7	-4.6	88.9	-7.2	-5.7
	November	98.1	4.0	-2.1	91.0	2.4	-3.2
	December	104.5	6.5	11.4	95.9	5.4	-2.8
2012	January	92.5	-11.5	-10.8	90.7	-5.5	-6.4
	February	90.3	-2.3	-9.8	94.9	4.7	-0.4
	March	93.5	3.5	-4.5	97.9	3.1	0.9
	April	92.2	-1.4	-7.2	98.5	0.7	5.0
	May	94.0	2.0	-18.0	102.6	4.2	12.3
	June	92.2	-2.0	-9.3	99.1	-3.4	10.2
	July	88.4	-4.1	-13.1	106.8	7.8	22.9
	August	85.7	-3.1	-12.5	101.8	-4.7	14.1
	September	86.2	0.6	-13.9	97.5	-4.2	1.8
	October	90.8	5.4	-3.8	104.4	7.0	17.5
	November ³	89.6	-1.3	-8.7	102.5	-1.8	12.6

¹ Based on Seasonal Patterns up to November 2012

² NACE 7735 is excluded

³ Provisional Value Indices based on early returns from respondents

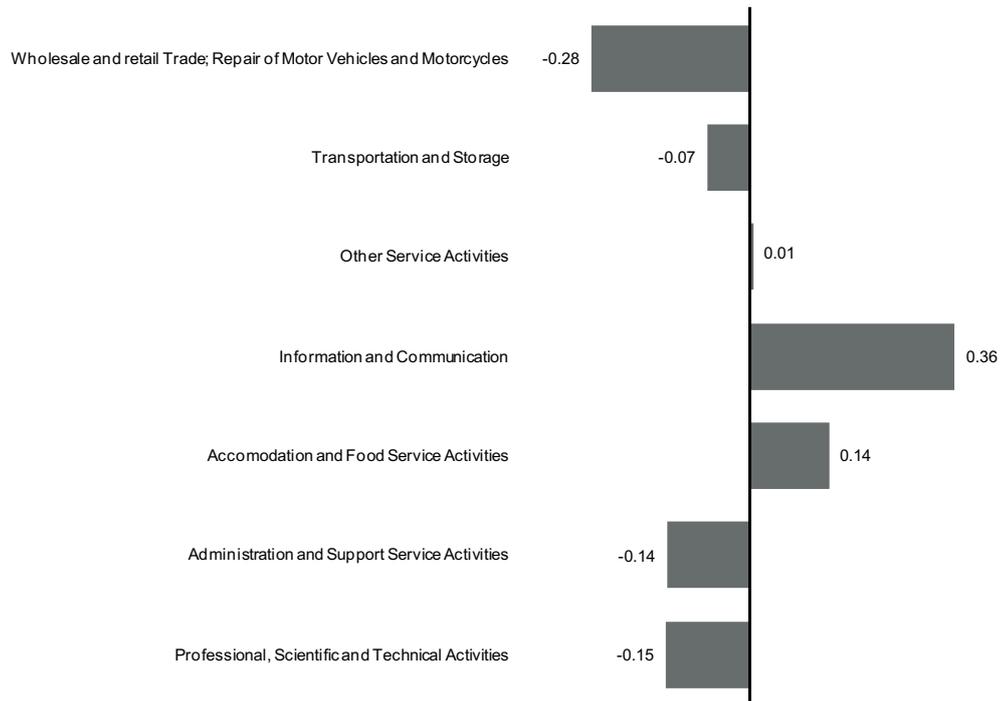
Table 2(d) Seasonally adjusted indices by sector¹
Base Year: 2010=100

Period	Transportation and Storage			Information and Communication			Other Service Activities			
	NACE 49-53			NACE 58-63			NACE 68, 92-93, 95-96			
	Index	% change		Index	% change		Index	% change		
		on previous period	Annual % change		on previous period	Annual % change		on previous period	Annual % change	
2009	112.1			93.4			121.0			
2010	100.2		-10.6	99.5		6.6	99.8		-17.5	
2011	103.8		3.6	103.1		3.6	100.5		0.7	
2011	3rd quarter	104.4	0.4	5.4	103.1	-1.0	0.3	100.8	-3.4	0.1
	4th quarter	101.9	-2.4	2.5	107.8	4.5	4.8	102.4	1.6	12.2
2012	1st quarter	102.3	0.4	-2.3	109.1	1.3	11.8	103.6	1.1	9.4
	2nd quarter	110.0	7.5	5.8	110.9	1.6	6.5	95.5	-7.8	-8.4
	3rd quarter	112.8	2.6	8.1	110.3	-0.6	6.9	93.9	-1.7	-6.9
2011	May	104.6	1.4	4.1	105.6	5.0	15.1	103.6	-2.4	2.9
	June	104.1	-0.5	9.5	106.2	0.5	2.4	103.2	-0.4	0.7
	July	104.9	0.8	4.5	97.3	-8.3	-8.3	104.7	1.5	-2.7
	August	103.5	-1.3	3.6	107.2	10.2	9.4	99.0	-5.4	-0.5
	September	104.7	1.2	8.2	104.8	-2.3	0.6	98.7	-0.4	3.8
	October	102.2	-2.4	2.8	103.2	-1.5	4.5	100.0	1.3	0.3
	November	99.9	-2.3	-1.6	108.9	5.5	10.0	102.0	2.0	14.0
	December	103.6	3.8	6.6	111.2	2.1	0.5	105.3	3.2	24.3
2012	January	99.8	-3.7	-4.9	108.4	-2.5	9.2	103.5	-1.7	15.0
	February	102.5	2.7	-2.9	110.3	1.7	19.7	106.6	3.0	13.3
	March	104.7	2.1	0.9	108.7	-1.5	7.2	100.6	-5.7	0.6
	April	111.3	6.3	7.8	108.5	-0.2	7.8	96.3	-4.2	-9.2
	May	108.2	-2.8	3.4	112.7	3.9	6.7	94.8	-1.6	-8.5
	June	110.4	2.1	6.0	111.5	-1.1	5.0	95.3	0.5	-7.6
	July	112.5	1.9	7.2	108.3	-2.8	11.4	92.4	-3.0	-11.7
	August	113.1	0.5	9.2	113.5	4.8	5.9	94.7	2.4	-4.4
	September	112.9	-0.1	7.8	108.9	-4.0	4.0	94.5	-0.2	-4.2
	October	109.7	-2.8	7.3	112.1	2.9	8.6	97.1	2.7	-2.9
	November ³	109.0	-0.7	9.1	113.7	1.4	4.5	97.2	0.2	-4.7

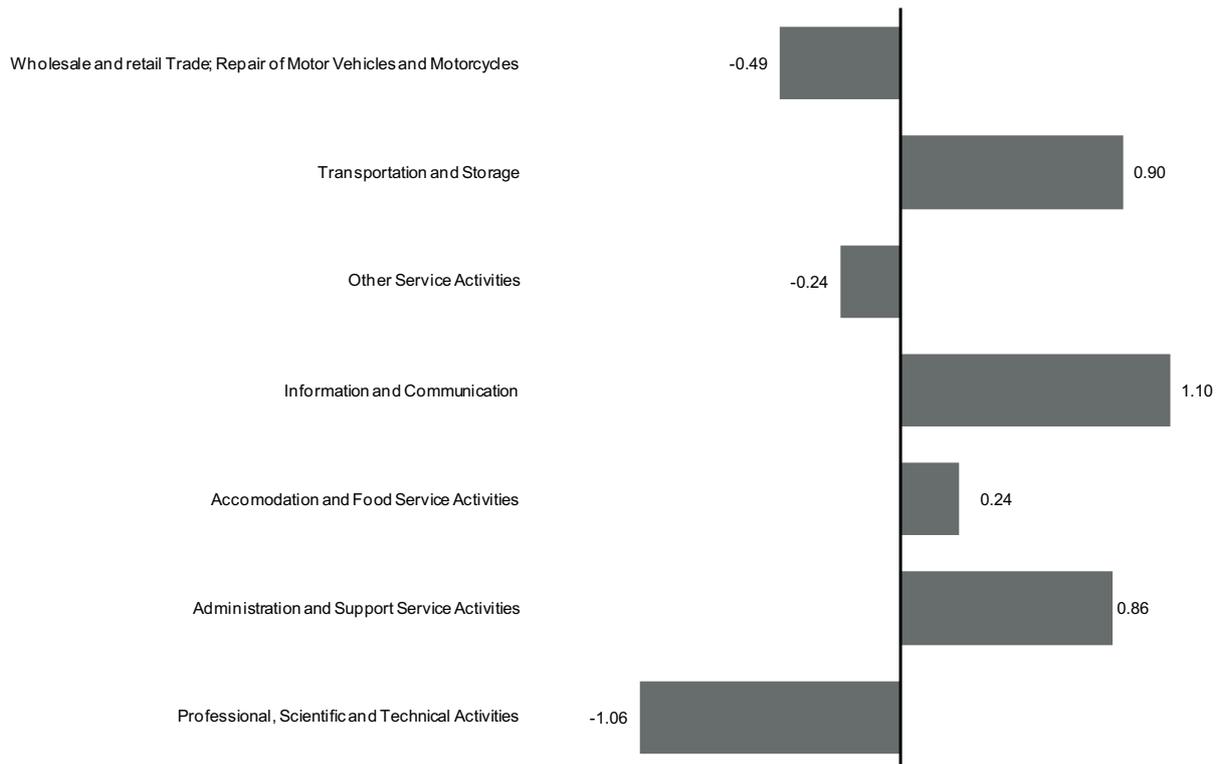
¹ Based on Seasonal Patterns up to November 2012

² Provisional Value Indices based on early returns from respondents

**Contributions to MSI Seasonally Adjusted Monthly Services Index
Month on Month Change of -0.1% - November 2012**



**Contributions to MSI Seasonally Adjusted Monthly Services Index
Year on Year Change of 1.3% - November 2012**



Background Notes

Introduction The monthly services value index (MSI) monitors trends in output at current prices of enterprises in the non-financial traded services sector. This is the first step in the development of a Services Production Index that measures gross value added changes at constant prices, i.e. a volume index.

Sample covered The sample size is approximately 2,100 enterprises. The sample comprises a census of all enterprises with an annual turnover value of more than €20.0M or enterprises with more than 100 persons engaged. The remainder of the target population is stratified using 2-digit Statistical Classification of Economic Activities in the European Community, i.e. NACE Rev. 2 classifications. Each of these 2-digit NACE sectors are further subdivided into strata based on turnover. A simple random sample is then drawn from each stratum. Retail and Motor Trade figures are taken from the separate Retail Sales Index sample of approximately 1,400 enterprises.

The response rates for the provisional results are typically 49% in terms of the enterprises surveyed which represents 70% of the value of total turnover. The corresponding figures for the final results are 59% and 88% respectively. These response rates are based on averages for the 6 month period ending March 2012.

Methodology The business activity classifications used in this Statistical release are based on the Statistical Classification of Economic Activities in the European Community i.e. NACE Rev. 2. For further information on the NACE Rev. 2 classification of services activity, visit the CSO website: <http://www.cso.ie/px/u/NACECoder/NACEItems/searchnace.asp>.

The index system is structured on the non-financial traded services sector covered in the 2010 Annual Services Inquiry (ASI). This non-financial traded services sector is further broken down as follows:

- Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles (NACE 45-47)
 - Wholesale Trade (NACE 46)
 - Motors (NACE 45) and Retail Trade (NACE 47) are published separately in the Retail Sales release
- Transport and Storage (NACE 49-53)
- Accommodation and Food Activities (NACE 55,56)
 - Accommodation (NACE 55)
 - Food Services Activities (NACE 561, 562)
 - Bars (NACE 563) is currently published separately in the Retail Sales release
- Information and Communication (NACE 58-63)
- Professional, Scientific and Technical Activities (NACE 69-75)
- Administrative and Support Service Activities (NACE 77-83)
 - NACE 7735 – Aircraft leasing is excluded.
- Other Business Services
 - NACE 68 Real estate activities
 - NACE 92 Gambling and betting activities
 - NACE 93 Sports activities and amusements and recreation activities
 - NACE 95 Repair of computers and personal and household goods
 - NACE 96 Other personal service activities

To compile the MSI, each of the above published NACE sectors is separated into three distinct cells based on the constituent enterprises' reported gross value added (GVA) for 2010. Using data taken from the 2010 ASI, GVA baseweights are then calculated for each of these cells and the baseweights are updated each month using a matched sample approach.

An enterprise's monthly GVA value is calculated as follows; respondents report their monthly turnover figures which are transformed into estimated GVA figures by applying a firm specific

factor based on an individual respondent's 2010 ASI return. The factor is calculated for each firm by simply dividing their estimated GVA by reported turnover. If an enterprise was not on the ASI sample then the relevant cell mean GVA/turnover ratio, calculated from the 2010 ASI, is applied. The reason for this change in methodology is to reduce the disproportionate impact that some enterprises (which report large turnover figures but have a relatively small GVA) can have on the overall series.

Seasonal Adjustment

Seasonal adjustment for each of the sectors is conducted using a direct seasonal adjustment approach. However, the overall MSI is estimated using the indirect approach, i.e. the MSI is derived by adding the weighted seasonally adjusted sub-components. The main reason for adopting the indirect approach for the MSI is to attribute the monthly and annual changes in the MSI to each of its sub-components. Seasonal adjustment models are developed for each series based on unadjusted data spanning from January 2009 to the current period. These models are reviewed on an annual basis; however seasonal factors are updated each month.

The seasonal adjustment of the MSI is conducted using the X-13ARIMA-SEATS software produced, distributed and maintained by the U.S. Census Bureau. The ARIMA option in X-13ARIMA-SEATS is used to forecast and backcast the series in order to have sufficient data to run the seasonal adjustment, as currently we have less than 5 years of data. Due to the lack of a sufficiently long series the series are not adjusted for Easter and Trading effects. The seasonal estimates do, however, take into account other factors that may impact on the quality of the seasonal adjustment, i.e. outliers, temporary changes and level shifts.

For additional information on the use of X-13ARIMA-SEATS see (Findley, D.F., B.C. Monsell, W.R. Bell, M.C. Otto, and B. Chen (1998), "New Capabilities and Methods of the X-12-Arima Seasonal Adjustment Program", *Journal of Business & Economic Statistics*, 16, pp. 127-177.) and <http://www.census.gov/srd/www/x13as/>.

Rebase 2010 – Changes

The main reasons for differences in the new rebased and updated MSI series in comparison with the MSI (base year 2009 =100) are as follows:

- New cell baseweights were taken from the ASI 2010.
- A new cell structure/breakdown has been adopted for each sector. Each enterprise is placed in a particular cell based on the following criteria:
 - Cell 3 If annual GVA is greater than €80,000,000
 - Cell 2 If annual GVA is between €2,500,000 and €80,000,000
 - Cell 1 If annual GVA is less than €2,500,000
- The new baseweights are now updated each month using changes to respondents' monthly estimated GVA as opposed to changes in respondents' reported turnover.
- To keep with the classifications adopted by ASI 2010 a number of NACE sectors have been excluded from the updated MSI, i.e.
 - NACE 66 – Activities auxiliary to financial services and insurance activities
 - NACE 90 – Creative, arts and entertainment activities
 - NACE 91 – Libraries, archives, museums and other cultural activities
- NACE 77 - Rental and leasing activities are no longer in Other Business Activities. NACE 77 is now included Administrative and Support Service Activities.
- The inclusion of new and revised micro data.