



**An Roinn Gnó,
Fiontar agus Nuálaíochta**
Department of Business,
Enterprise and Innovation

Annual Business Survey of Economic Impact 2016

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Surveys Unit

dbei.gov.ie

Table of Contents

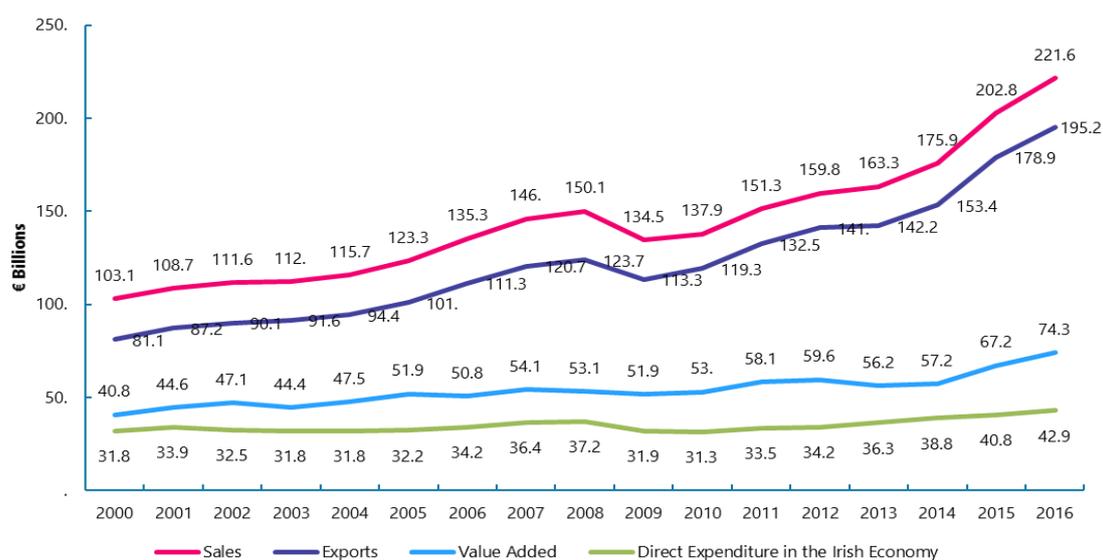
Executive Summary	4
E.1 Key Business Indicators for all Agency Client Companies (current prices), 2000-2016	4
E.2 Summary Table of Key Business Indicators (current prices), 2016	5
E.3 Export Intensity of Irish and Foreign-owned Companies, 2000-2016	5
E.4 Direct Expenditure in the Irish Economy (DEIE) by Ownership, 2000-2016	6
E.5 All firms, year-on-year % change, Payroll, Irish Materials and Irish Services, 2000-2016	6
E.8 Key Business Indicators for Irish-Owned Companies, 2000-2016 (current prices)	8
E.9 Direct Expenditure in the Irish Economy for Irish-owned clients companies 2000-2016	10
E.10 Key Business Indicators for Foreign-Owned Companies, 2000-2016 (current prices)	10
E.11 Direct Expenditure in the Irish Economy by Foreign-owned companies 2000-2016	11
Chapter 1: Introduction	12
1.1 Background	12
1.2 Methodology	12
1.3 Detailed aggregated results, 2000-2016	13
1.4 Management and Use of Data	14
Chapter 2: Key Business Indicators for Irish-owned Agency Client Companies	15
2.1 Sales - Irish-owned Client Companies, 2000-2016	15
2.2 Sales & Sales Growth by sector - Irish-owned Client Companies	16
2.3 Changing Composition of Sales and Employment in Irish-owned Client Companies, 2000 and 2016	17
2.4 Exports in Irish-owned Client Companies, 2000-2016	18
2.5 Exports by Sector in Irish-owned Companies, 2000, 2008, 2015 and 2016	19
2.6 Exports as a % of Total Sales in Irish-owned Companies, 2000-2016	21
2.7 Value Added in Irish-Owned Companies, 2000-2016	22
2.8 Payroll for Irish-owned Companies, 2000 and 2016	23
2.9 Materials-Services Purchased by Irish-Owned Companies, 2016	24
2.10 Irish-Sourced Materials as a Share of Total Material Purchased, 2000-2016	25
2.11 Irish-Sourced Services as a Share of All Service Purchased, 2000-2016	26
2.12 Total Direct Expenditure in the Irish Economy by Irish-Owned Companies, 2000-2016	28
2.13 Total Direct Expenditure in the Irish Economy as a % of Sales in Irish-Owned Companies, 2000-2016	29
2.14 Formal Structured Training in Irish-owned Companies, 2000-2016	31
Chapter 3: Key Business Indicators for Foreign Owned Agency Clients	33
3.1 Sales - Foreign-owned Client Companies, 2000-2016	33
3.2 Sales & Sales Growth by sector - Foreign-owned Companies	34

3.3	Changing Composition of Sales and Employment in Foreign-owned Client Companies 2000 and 2016	35
		35
3.4	Exports in Foreign-owned Client Companies, 2000-2016	37
3.5	Exports by Sector in Foreign-owned Companies, 2000, 2008, 2015 and 2016	38
3.6	Exports as a % of Total Sales in Foreign-owned Companies, 2000-2016	39
3.9	Materials & Services Purchased by Foreign-Owned Companies, 2016	43
3.10	Irish-Sourced Materials as a Share of All Materials Purchased by Foreign-Owned Client Companies, 2000-2016	44
		44
3.11	Irish-Sourced Services as a Share of All Services Purchased by Foreign-Owned Companies, 2000-2016	45
		45
3.12	Total Direct Expenditure in the Irish Economy by Foreign-Owned Companies, 2000-2016	47
		47
3.13	Total Direct Expenditure in the Irish Economy as a % of Sales in Foreign-Owned Companies, 2000-2016	48
		48
3.14	Formal Structured Training in Foreign-owned Companies, 2000-2016	49
		49
	Appendix 1: NACE Codes Used in Report	50
	Appendix 2: Schedule of Services Industries	51
	Appendix 3: Sample Questionnaire	52
	Appendix 2: Schedule of Services Industries	42
	Appendix 3: Sample Questionnaire	43

Executive Summary

The Annual Business Survey of Economic Impact is a survey of approximately 4200 client companies of Enterprise Ireland, IDA Ireland and Údarás na Gaeltachta employing ten or more employees in Ireland¹ and comprises the Manufacturing and Information, Communication and Other Internationally Traded Services (see Appendix 2) sectors. All data is in current prices.

E.1 Key Business Indicators for all Agency Client Companies (current prices), 2000-2016



This graph gives the sales, exports, value added and direct expenditure in the Irish economy figures for all Agency client companies from the first survey in 2000 to the latest results for 2016.

Agency client companies reported a rise in sales and exports in 2016 over the previous year. This continues a substantial upward trend in results following the downturn in the economy in 2009.

- Total sales amounted to €221.6 billion in 2016 which represents an increase of 9.3% in current prices on the previous year's figure of €202.8 billion.
- Total exports in 2016 amounted to €195.2 billion, an increase of 9.1% on the previous year of €178.9 billion.
- Value added (sales less materials and services costs) has also increased over this time-series and in 2016 amounted to €74.3 billion.
- Direct Expenditure in the Irish Economy (Payroll, Irish Materials, Irish Services) has increased over 2015 by 5.3% to €42.9 billion in 2016.

¹ The population of the ABSEI survey also includes a small number of High-Potential Start-Up (HPSU) companies with employment of less than 10 where there is an expectation that their employment will exceed 10 in the following survey.

E.2 Summary Table of Key Business Indicators (current prices), 2016

	2016 (€bn)			Share of Total 2016		
	Foreign-owned	Irish-Owned	All	Foreign-owned	Irish-Owned	All
Sales	182.9	38.8	221.7	82%	18%	100%
Exports	175.5	19.8	195.3	90%	10%	100%
Value Added	59.6	14.7	74.3	80%	20%	100%
Direct Expenditure	20	22.9	42.9	47%	53%	100%

This table shows sales, exports, value added and direct expenditure for 2016 by ownership.

- Total sales for agency-assisted companies in 2016 amounted to €221.6 billion.
 - Foreign-owned companies account for €182.9 billion, an increase of 9.8% over the previous year. This represents 82% of total sales by Agency clients in 2016.
 - Total sales for Irish-owned firms increased by 7.2% between 2015 and 2016, amounting to €38.8 billion or 18% of total sales.
- Total exports for agency clients amounted to €195.2 billion in 2016, a 9.1% increase over 2015 exports.
- Value added was €74.3 billion in 2016 with 80% of this value being generated in foreign owned firms.
- Irish and foreign owned clients have approximately the same level of direct expenditure in the Irish economy at €20.0 billion by foreign and €22.9 billion by Irish-owned client companies.

E.3 Export Intensity of Irish and Foreign-owned Companies, 2000-2016

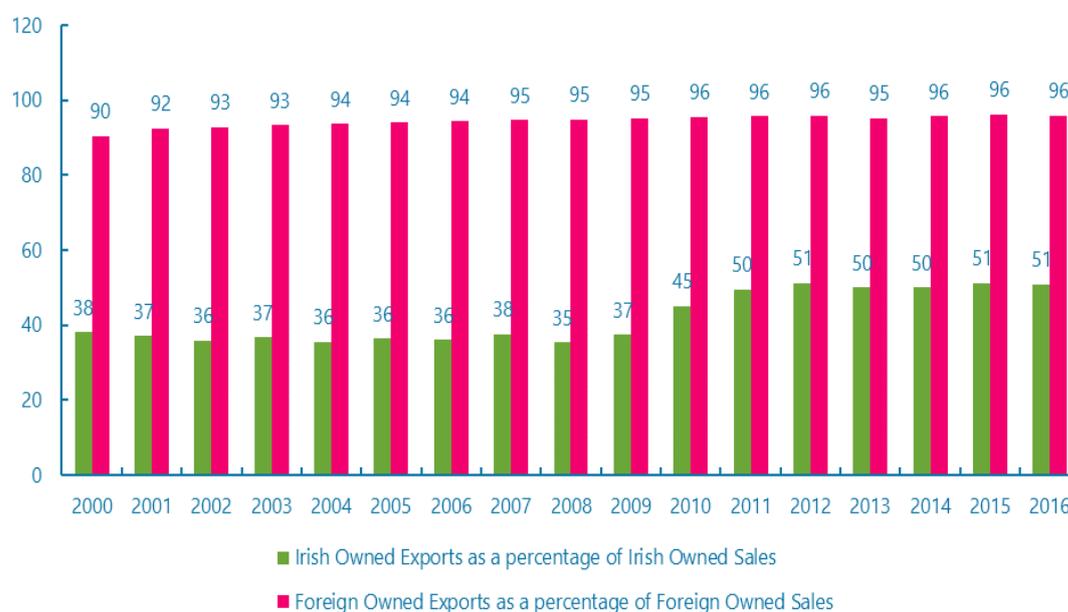
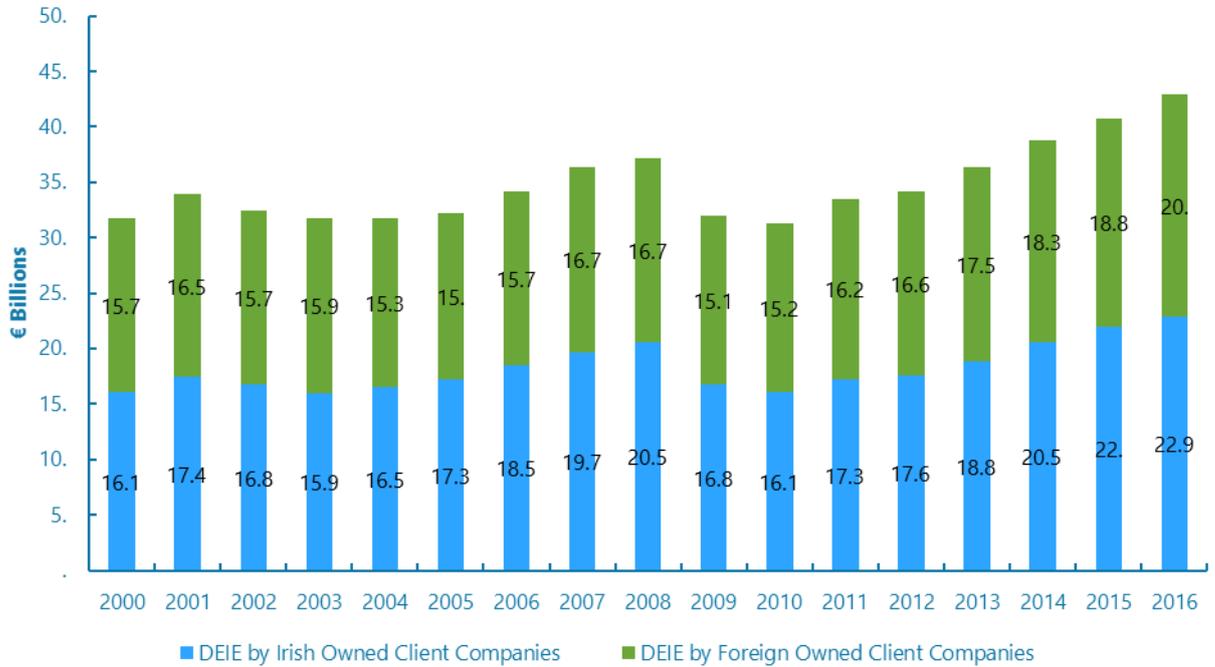


Figure E.3 above illustrates the export intensity (exports as a percentage of total sales) of Irish-owned and foreign-owned firms over the period 2000 to 2016.

- Irish-owned firms have increased their export intensity from 38% in 2000 to their highest level of intensity in 2016 of 51%.

- The vast majority of products and services produced by foreign-owned firms are destined for export, with an export intensity of 96% in 2016.

E.4 Direct Expenditure in the Irish Economy (DEIE) by Ownership, 2000-2016



In 2016, Direct Expenditure in the Irish Economy (DEIE) by agency-assisted firms amounted to €42.9 billion and is the highest level of direct expenditure in the seventeen years of this time-series.

Irish owned client companies spent approximately €22.9 billion in the Irish economy in terms of payroll and purchases of Irish materials and Irish services. Foreign owned clients spent €20.0 billion. Direct Expenditure has been increasing each year since 2010.

E.5 All firms, year-on-year % change, Payroll, Irish Materials and Irish Services, 2000-2016



In 2016, there was an increase in payroll and purchases of Irish services over the 2015 figures, while purchases of Irish materials was relatively flat. There was an increase in the purchases of Irish services of 8.2% and of payroll payments of 7.2%.

E.6 Direct Expenditure % of GNP² in Irish/foreign-owned companies, 2000, 2008 and 2016

	Irish			Foreign		
	2000	2008	2016	2000	2008	2016
All Sectors	17.3%	12.8%	10.1%	16.9%	10.4%	8.8%
Manufacturing & Other Industry	15.3%	10.8%	8.0%	12.0%	7.1%	5.0%
Infor., Comm. & Other Services	2.0%	1.9%	2.1%	4.8%	3.2%	3.8%

	Irish			Foreign		
	2000	2008	2016	2000	2008	2016
All Sectors	17.3%	12.8%	10.1%	16.9%	10.4%	8.8%
Manufacturing & Other Industry	15.3%	10.8%	8.0%	12.0%	7.1%	5.0%
Infor., Comm. & Other Services	2.0%	1.9%	2.1%	4.8%	3.2%	3.8%

- In 2016, the Direct Expenditure (payroll and purchases of Irish materials & services) of Irish-owned firms in the Irish economy amounted to 10.1% of Ireland's Gross National Product (GNP). In 2000, this figure was 17.3% and 12.8% in 2008.
 - Direct Expenditure of the Irish-owned Manufacturing sectors as a percentage of GNP reduced from 15.3% to 10.8% between 2000 and 2008 and decreased further in 2016 to 8.0%. The Services sectors have increased their share from 2.0% in 2000 to 2.1% in 2016.
- Direct Expenditure by foreign-owned firms as a percentage of GNP stands at 8.8% in 2016 down from 16.9% in 2000.
 - Direct Expenditure as a percentage of GNP in the foreign-owned Information, Communication & Internationally-Traded Services sectors moved from 4.8% in 2000 to 3.8% in 2016. The manufacturing sectors have also decreased their share from 12.0% in 2000 to 5.0% in 2016.

E.7 Value Added % of GNP in Irish/foreign-owned companies, 2000, 2008 and 2016

	Irish			Foreign		
	2000	2008	2016	2000	2008	2016
All	7.4%	7.1%	6.5%	36.4%	25.8%	26.3%

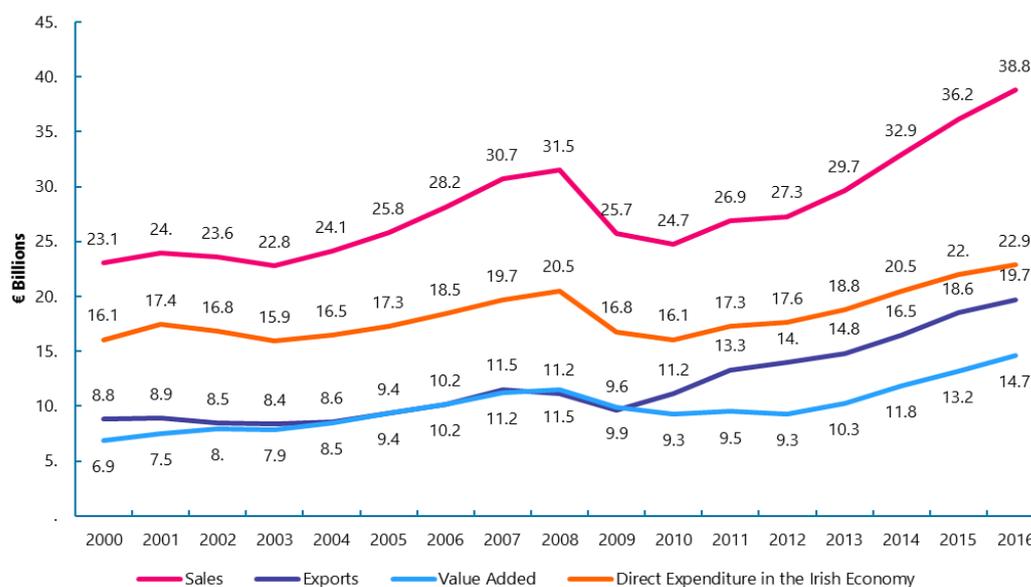
² Gross National Product (GNP) at current market prices: 2000 = €93.1bn / 2008 = €160.9bn / 2015 = €202.6bn Source: CSO, StatBank: T05 Expenditure on Gross National Income at Current Market Prices: 88. Gross national product at current market prices [The 2015 GNP figure incorporated a significant increase in capital assets compared with previous years – see www.CSO.ie for more information).

Manufacturing & Other Industry	5.2%	4.7%	3.7%	25.9%	17.3%	15.7%
Infor., Comm. & Other Services	2.2%	2.4%	2.7%	10.5%	8.5%	10.6%

	Irish			Foreign		
	2000	2008	2016	2000	2008	2016
All	7.4%	7.1%	6.5%	36.4%	25.8%	26.3%
Manufacturing & Other Industry	5.2%	4.7%	3.7%	25.9%	17.3%	15.7%
Infor., Comm. & Other Services	2.2%	2.4%	2.7%	10.5%	8.5%	10.6%

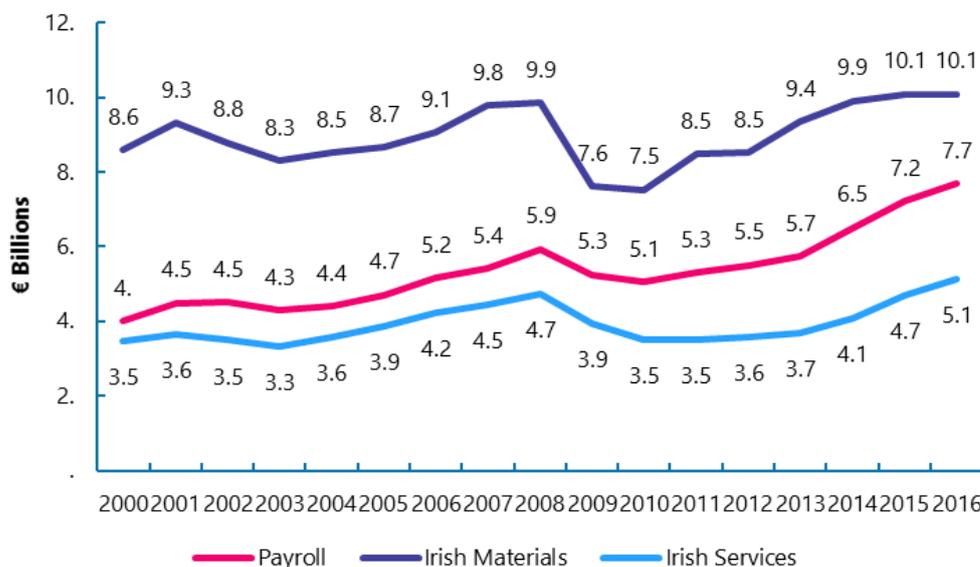
- Value added (sales less the cost of materials and services) in Irish owned companies has dropped as a percentage of GNP in 2016 to 6.5% from 7.4% in 2000.
 - While the manufacturing sectors have seen value added decrease between 2000 and 2016 from 5.2% to 3.7%, the services sectors have increased their percentage share of GNP from 2.2% in 2000 to 2.7% in 2016.
- For foreign-owned companies, value added as a percentage of GNP decreased from 36.4% in 2000 to 25.8% in 2008 and increased to 26.3% in 2016.
 - The Services sectors have increased value added from their 2000 level of 10.5% of GNP to 10.6% of GNP in 2016.
 - The Manufacturing sectors have decreased value added as a percentage of GNP from 25.9% in 2000 to 15.7% in 2016.

E.8 Key Business Indicators for Irish-Owned Companies, 2000-2016 (current prices)



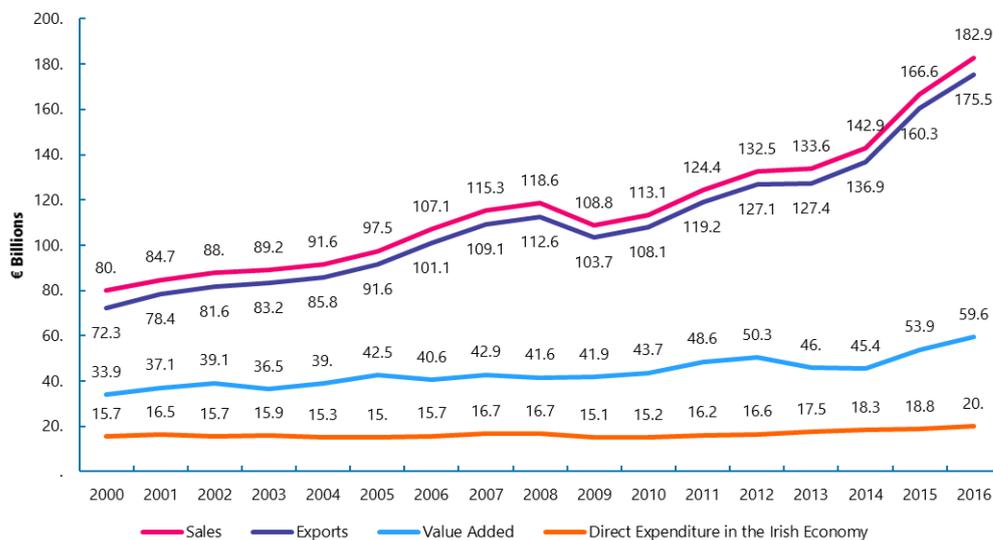
- Sales by Irish owned firms in 2016 showed an increase of 7.2% on the previous year. Total sales stood at €38.8 billion in 2016. Exports were also significantly up for Irish firms in 2016 over 2015 with growth of 5.9% and amounted to €19.7 billion in 2016.
- Value added and direct expenditure have also continued their upward trend with direct expenditure reaching €22.9 billion and value added €14.7 billion in 2016.

E.9 Direct Expenditure in the Irish Economy for Irish-owned clients companies 2000-2016



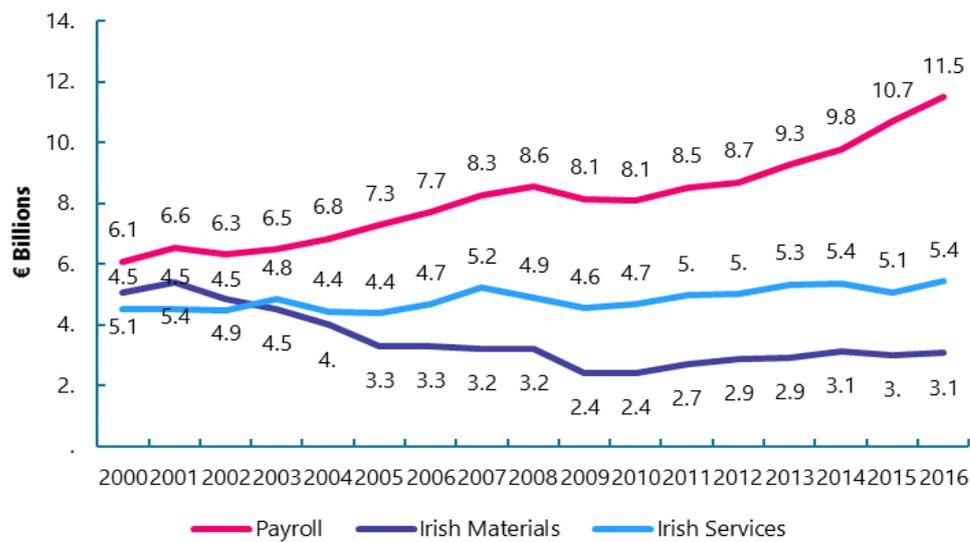
- Irish-owned firms spent €22.9 billion in 2016 in the Irish economy with the largest proportion of this expenditure being on Irish materials. The breakdown of expenditure in 2016 was €7.7 billion on payroll, €10.1 billion on Irish raw materials and €5.1 billion on Irish services.

E.10 Key Business Indicators for Foreign-Owned Companies, 2000-2016 (current prices)



- Overall sales by foreign-owned companies have increased by 9.8% and exports by 9.5% in 2016 over 2015 to €182.9 billion and €175.5 billion respectively. On a per annum basis between 2000 and 2016, sales increased by 5.3% and exports by 5.7%.
- Value added increased by 10.5% between 2015 and 2016 to €59.6 billion. Direct expenditure reached €20.0 billion in 2016, a 6.4% increase over the previous year.

E.11 Direct Expenditure in the Irish Economy by Foreign-owned companies 2000-2016



- Foreign firms spend less on Irish materials and more on payroll and services than Irish firms. In 2016, direct expenditure by foreign firms amounted to €20.0 billion, comprising €11.5 billion on payroll, €3.1 billion on materials and €5.4 billion on services purchased in Ireland.

Chapter 1: Introduction

1.1 Background

This report presents the findings of the Annual Business Survey of Economic Impact for 2016.

This is a survey of the client companies of Enterprise Ireland, IDA Ireland and Údarás na Gaeltachta. Data is presented by company ownership i.e. Irish or foreign. All IDA Ireland clients are foreign owned while Enterprise Ireland and Údarás na Gaeltachta have both Irish and foreign owned client companies.

The report provides aggregated estimates for all Irish-owned and foreign-owned client firms across a range of variables and provides an overview of the evolution of manufacturing and services sectors for the past seventeen years (2000-2016 inclusive). All data is presented in current prices.

1.2 Methodology

- The population comprises all agency client firms in manufacturing and services sectors in Ireland with 10 or more employees. A schedule of the services industries that are eligible for assistance under the Industrial Development Acts are listed in Appendix 2. Also included in the population are a small number of High-Potential Start-Up (HPSU) companies where there is an expectation that their employment will exceed 10 in the following surveys.
- Approximately 4,200 client companies in total were surveyed. To allow for non-responses aggregated results are developed by sector using a combined weighting and imputation system³.
- Fieldwork was carried out throughout 2016.
- All figures in this report are in nominal values (current prices).
- Compound Annual Growth Rate (CAGR). Throughout this report the percentage change between 2000-2008 and 2000-2016 is calculated using the compound annual growth rate (CAGR). The CAGR is used to calculate a constant rate of change over the time period.
- Rounding - figures in this report are rounded to assist the reader. While the figures are easier to comprehend, some figure and percentages will not add-up to the total.

Data Revisions

- Each year revisions are made to the historical time-series data based on the latest available validated information from client companies.
- These revisions result in changes to the time-series, impacting on previously published ABSEI results.

³ Weightings are used to account for non-respondents and are based on NACE sector, ownership, size and region. Imputations are made where a large company has not responded and are usually based on their responses to previous surveys.

1.3 Detailed aggregated results, 2000-2016

Aggregated data from the Annual Business Survey is available for the period 2000-2016. These results are available in excel format on the Department of Business, Enterprise and Innovation (DBEI) website. To access these excel files please go to publications section on the DBEI website at: <https://dbei.gov.ie/en/Publications/>

The files contain the following indicators:

Sales & Exports	
1	Total Sales of Goods Produced and Services Provided
2	Total Employment
3	Total Sales per Person Employed
4	Total Exports
5	Total Exports as a percentage of Total Sales
Payroll	
6	Total Payroll
7	Total Payroll Costs per Person Employed
Materials Costs	
8	Total Materials Costs
9	Total Cost of Materials Produced in Ireland
10	Irish-produced Materials as a Percentage of all Materials
Services Costs	
11	Total Cost of all Services
12	Total Cost of Services Sourced in Ireland
13	Irish-sourced Services as a Percentage of all Services
Total Value Added	
14	Total Value Added (Sales-(Total Materials Cost + Total Services Cost))
15	Total Value Added per person employed
16	Total Payroll as a percentage of Value Added
Training Costs	
17	Total Cost of all formal, structured training
18	Cost of all Structured, Formal Training as a percentage of payroll
Direct Expenditure	
19	Direct Expenditure in the Irish Economy (Payroll + Irish Materials + Irish Services)

Results are broken down by:

- Ownership (All, Irish, foreign)
- NACE Rev2 sector (2 digit) – See Appendix 1 for more details.

All monetary amounts are provided in current prices.

1.4 Management and Use of Data

An inter-agency group, chaired by the Strategic Policy Division (SPD) in the Department of Business, Enterprise and Innovation (DBEI), comprised of representatives from each of the participating agencies, manages the implementation of this survey. The group decides on issues of methodology, coverage and questionnaire content.

The survey is used extensively by DBEI for the purposes of evidence-based policy making and by the participating agencies for a number of purposes, some of which are listed below:

- Each of the participating agencies obtains aggregated information relating to its own client base, and this information is used to assess the achievement of internal goals and targets.
- The firm-level data compiled in the survey is used by each of the agencies, and by DBEI, to add to its knowledge of individual companies, and also to feed into many policy/sectoral studies where information is required on different groups of companies.

For further information on this survey please contact:

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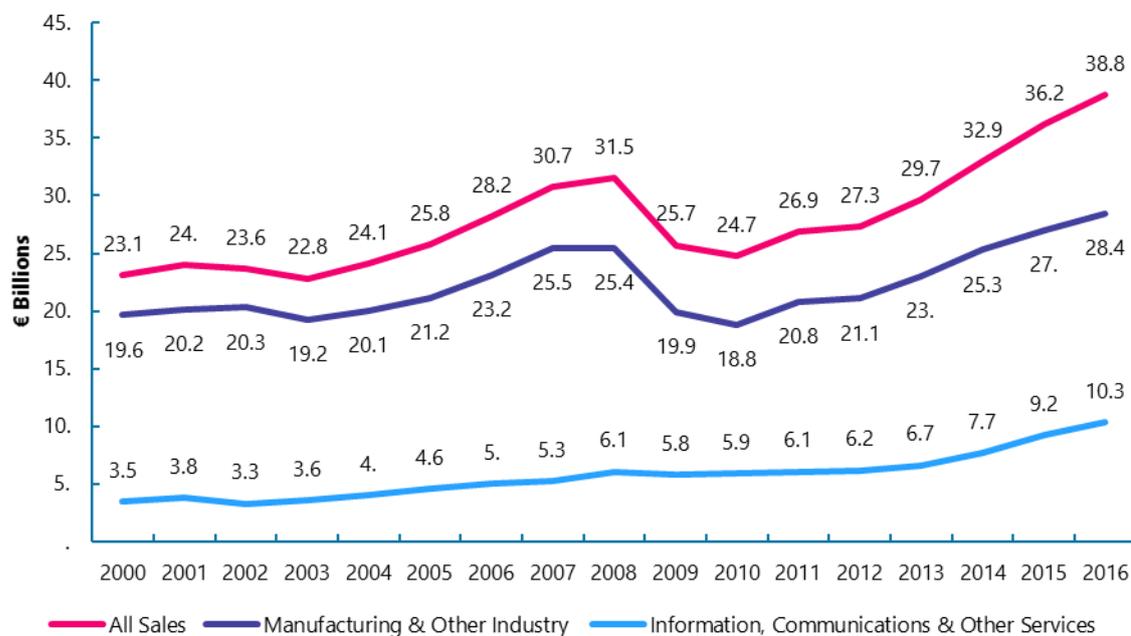
Tel: (01) 631 2856

Acknowledgement

The Department of Jobs, Enterprise and Innovation would like to thank the many respondents to this survey who have taken the time to gather information and return the data for this key area of Government policy.

Chapter 2: Key Business Indicators for Irish-owned Agency Client Companies

2.1 Sales - Irish-owned Client Companies, 2000-2016



This graph shows the total level of sales achieved by Irish-owned companies during the seventeen years of this survey and is broken down by major sector – manufacturing and services (see Appendix 2 for a list of the specific service sectors).

The top line on this graph tracks the growth in the sales up to 2008 and the subsequent decline in sales reaching a low in 2010. In each of the subsequent years, Irish-owned companies have increased their sales:

- Total sales in 2016, stood at €38.8 billion for all manufacturing and services companies and is the highest level of sales recorded over the course of this survey. This represents a 7.2% increase over the 2015 figure of €36.2 billion at current prices.
- In the manufacturing sector, sales reached a peak of €25.5 billion in 2007 but then dropped to €18.8 billion in 2010. Sales in manufacturing companies have recovered in each of the past six years and in 2016 sales amounted to €28.4 billion at current prices.
- Sales in the services sectors have been increasing steadily over the last seventeen years and amounted to €10.3 billion in 2016. These sales represent a per annum increase of 7.1% over the 2000 sales figure of €3.5 billion.

2.2 Sales & Sales Growth by sector - Irish-owned Client Companies

	2000	2008	2015	2016	Per Annum Change 2000-16	Per Annum Change 2008-16	Per Annum Change 2015-16
	€m	€m	€m	€m	%	%	%
Total All Sectors	23,082	31,499	36,185	38,781	3.3%	2.6%	7.2%
Manufacturing & Other Industry	19,629	25,417	26,963	28,434	2.3%	1.4%	5.5%
Food & Drink	9,583	10,959	13,548	13,603	2.2%	2.7%	0.4%
Traditional Manufacturing	6,424	7,468	7,798	8,235	1.6%	1.2%	5.6%
Modern Manufacturing	1,102	951	1,364	1,549	2.2%	6.3%	13.6%
Energy, Water, Waste, Construction	2,520	6,039	4,253	5,048	4.4%	-2.2%	18.7%
Infor., Comm. & Other Services	3,453	6,082	9,222	10,347	7.1%	6.9%	12.2%
Information, Comm. & Computer	1,453	1,700	3,036	3,299	5.3%	8.6%	8.7%
Bus., Financial & Other Services	2,000	4,382	6,186	7,048	8.2%	6.1%	13.9%

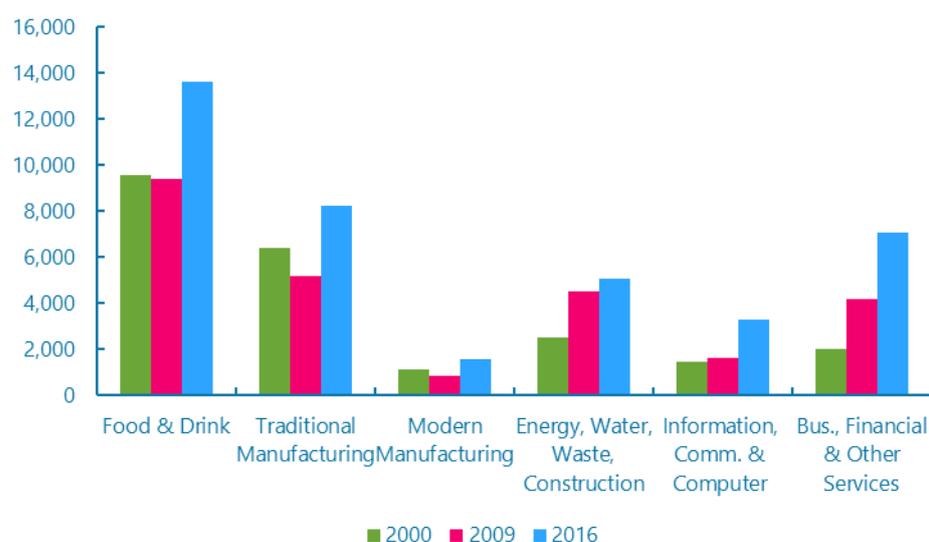
Total sales of Irish-owned manufacturing and service companies amounted to €38.8 billion in 2016 representing an 7.2% increase over the previous year's figures. There was an increase in sales of 5.5% and 12.2% between 2015 and 2016 in the Manufacturing and Services sectors.

The largest sector for Irish-owned clients is the Food & Drink sector with sales of €13.6 billion in 2016 – an increase of 0.4% over 2015 and of 2.2% per annum increase over the 2000 figure of €9.6bn.

Traditional Manufacturing saw an increase in sales of 5.6% over 2015 with sales of €8.2 billion. There has been a per annum increase of 1.6% over the 2000 figure of €6.4 billion.

Information, Communications & Other Services grew 12.2% over 2015 and had a per annum increase of 7.5% from the 2000 figure. The Business & Financial & Other sector increased sales to €7.1 billion in 2016 from €2.0 billion in 2000, an annualised increase of 8.2%.

Sales by sector - Irish-owned Client Companies



2.3 Changing Composition of Sales and Employment in Irish-owned Client Companies, 2000 and 2016

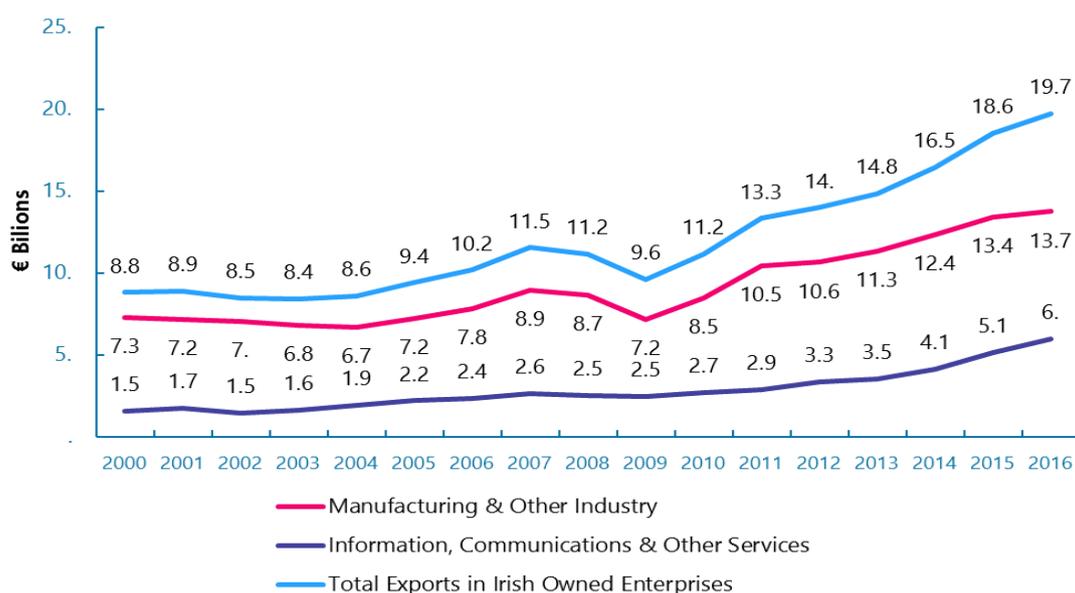
	Sales		Employment[1]	
	2000	2016	2000	2016
Manufacturing & Other Industry	85.0%	72.7%	100.0%	65.6%
Food & Drink	41.5%	35.1%	29.4%	25.3%
Traditional Manufacturing	27.8%	21.2%	42.5%	26.6%
Modern Manufacturing	4.8%	4.0%	4.9%	4.4%
Energy, Water, Waste, Construction	10.9%	13.0%	4.5%	9.3%
Information, Communications & Other Services	15.0%	26.7%	18.7%	34.4%
Information, Communications & Computer	6.3%	8.5%	9.4%	13.1%
Business, Financial & Other Services	8.7%	18.2%	9.3%	21.3%

This table provides an overview of sales and employment across a number of broad industry groups to illustrate the changing composition of Irish-owned industry between 2000 and 2016.

- The majority of Irish-owned companies operate in the Manufacturing sector, though the share of total sales accounted for by manufacturing has dropped from 85.0% in 2000 to 72.7% in 2016. The Food & Drink sector dropped its share of sales over this period from 41.5% of total Irish-owned sales to 35.1%. The Traditional Manufacturing sector accounted for 21.2% of total sales in 2016 down from 27.8% in 2000.

- The share of sales accounted for by Information, Communication and Other Services has increased from 15.0% in 2000 to 26.7% in 2016, highlighting the increasing importance of these sectors. Within this the Business, Financial and Other Services sector increased its share of sales from 8.7% to 18.2% over the period 2000-2016.
- While the Food & Drink sector accounted for 35.1% of the sales in Irish-owned industry in 2016, it accounts for 26.6% of the employment. Traditional Manufacturing has witnessed its share of employment drop from 42.5% in 2000 to 26.6% in 2016 while the Energy, Water, Waste & Construction sectors have increases their employment from 4.5% to 9.3%.
- Overall, the Information, Communication and Other Services sector continues to see its share of Irish-owned employment rise significantly from 18.7% in 2000 to 34.4% in 2016.

2.4 Exports in Irish-owned Client Companies, 2000-2016



This graph shows the level of exports by agency-assisted Irish-owned companies during the seventeen years of this survey and shows the upward trend in the level of exports since 2009 and amounted to €19.7 billion in 2016.

Exports from the Irish-owned Manufacturing sectors in 2016 amounted to €13.7 billion, which represented 70% of all exports in that year. Service exports at €5.1 billion in same year represent 30% of total exports.

- Total exports in 2016 stood at €19.7 billion for all Manufacturing and Services companies and is the highest level of exports recorded over the course of this survey. This represents a 5.2% per annum change over the 2000 figure of €8.8 billion.
- In the Manufacturing sector, exports have increased steadily since a low in 2009 of €7.2 billion and amounted to €13.7 billion in 2016. This represents a 4.1% per annum increase on the 2000 figure of €7.3 billion and a 9.8% average per annum increase over the low point figure in 2009 of €7.2 billion. Exports in the Manufacturing sectors increased by 2.4% in 2016 over 2015.
- The value of exports in the Services sector amounted to €1.5 billion in 2000 and has consistently grown in the intervening years to €6.0 billion by 2016. This represents a per

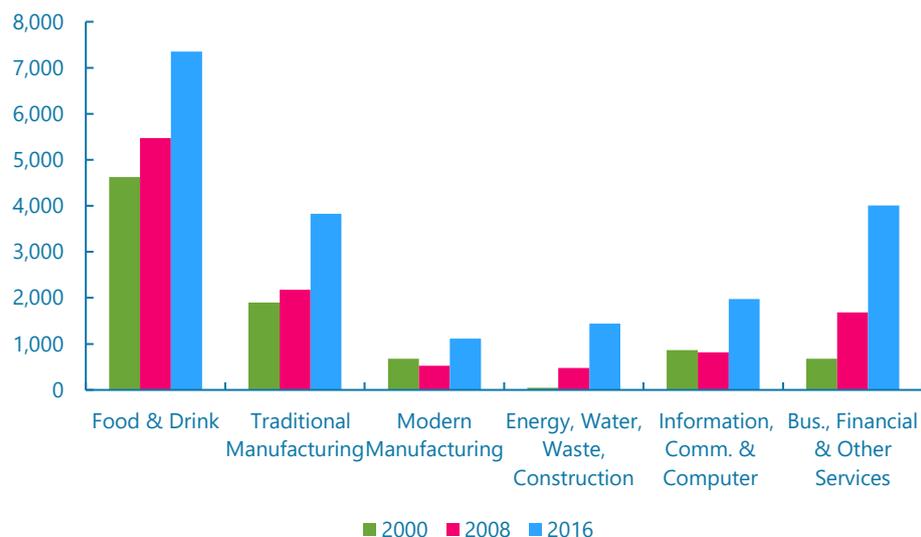
annum change of 8.8% between the 2000 and 2016 export figures. Services exports rose by 16.6% between 2015 and 2016.

2.5 Exports by Sector in Irish-owned Companies, 2000, 2008, 2015 and 2016

	2000	2008	2015	2016	Per Annum Change 2000-16	Per Annum Change 2008-16	Per Annum Change 2015-16
	€m	€m	€m	€m	%	%	%
Total - All Sectors	8,801	11,151	18,553	19,727	5.2%	7.4%	6.3%
Manufacturing & Other Industry	7,256	8,655	13,420	13,741	4.1%	5.9%	2.4%
Food & Drink	4,628	5,473	7,313	7,353	2.9%	3.8%	0.5%
Traditional Manufacturing	1,902	2,180	3,705	3,827	4.5%	7.3%	3.3%
Modern Manufacturing	680	523	961	1,116	3.1%	10.0%	16.2%
Energy, Water, Waste, Construction	46	480	1,441	1,444	24.0%	14.8%	0.2%
Infor., Comm. & Other Services	1,545	2,496	5,133	5,986	8.8%	11.6%	16.6%
Information, Comm. & Computer	866	815	1,719	1,975	5.3%	11.7%	14.9%
Bus., Financial & Other Services	680	1,681	3,414	4,012	11.7%	11.5%	17.5%

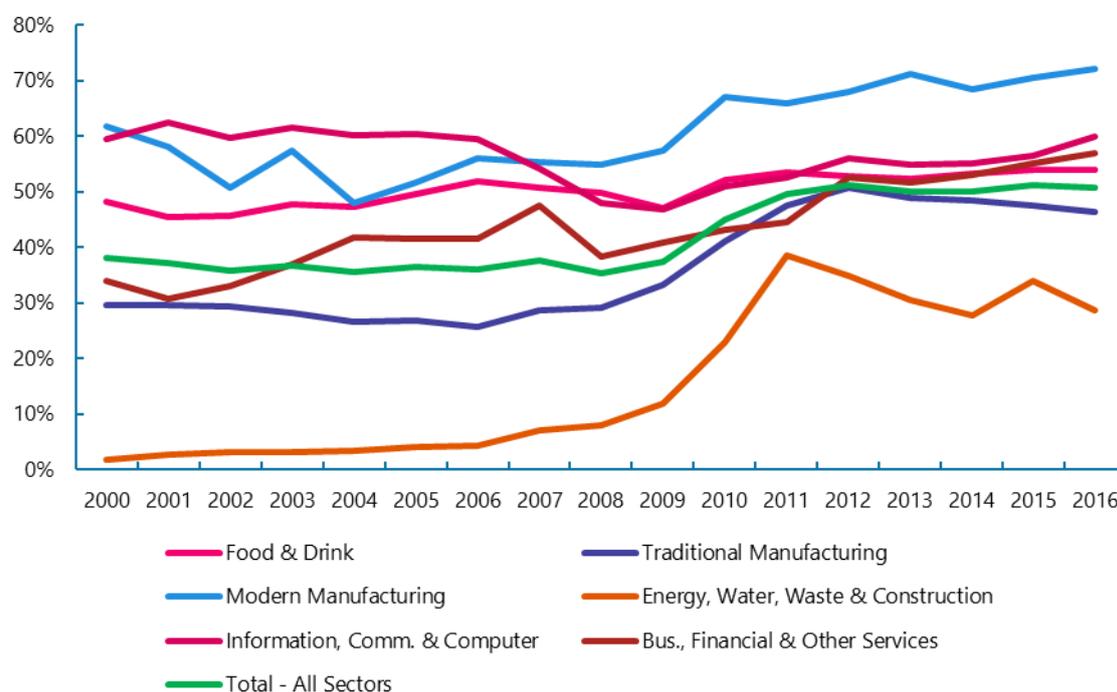
This table provides an overview of the export performance within the Irish-owned client companies in Manufacturing and Information, Communications and Other Services sectors.

Exports by Sector in Irish-owned Companies, 2000, 2008, 2016



- The Food & Drink sector accounted for 37.3% of all exports of Irish-owned client firms in 2016. This sector has increased exports from €4.6bn in 2000 to €7.4bn in 2016, a per annum increase of 2.9% in current prices.
- Exports in Traditional Manufacturing increased by 3.3% in 2016 over 2015 to €3.8 billion.
- Modern Manufacturing reported an increase of 16.2% to €1.1 billion in 2016 over the 2015 figure.
- The Energy, Water, Waste & Construction sectors showed no change at €1.4 billion in 2016.
- The Business, Financial and Other Services sectors exports have shown strong growth at 11.7% per annum since 2000 and exports in this sector amounted to €4.0 billion in 2016.
- Exports of Information, Communication & Computer services among Irish-owned firms show a per annum growth of 5.3% since 2000 to stand at €2.0 billion in 2016.

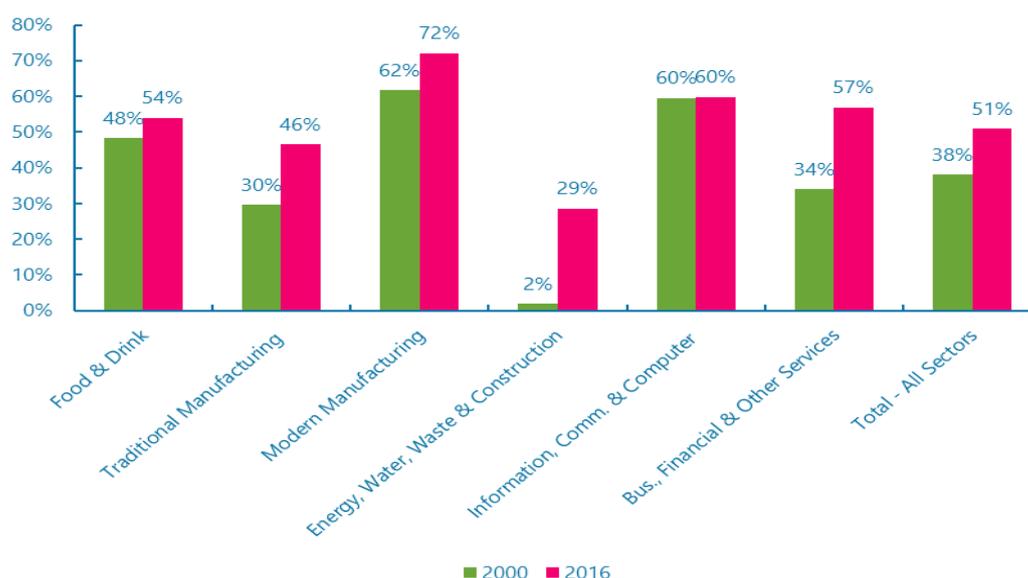
2.6 Exports as a % of Total Sales in Irish-owned Companies, 2000–2016



Linking the data on sales and exports allows us to make an assessment in relation to the export intensity of Irish-owned industry (i.e. exports as a percentage of sales). Overall, there has been a high degree of convergence as regards the level of export intensity with the overall average for all sectors standing at approximately 50% in the last six years.

The above graph shows that the total export intensity of Irish-owned industry has increased from 38% in 2000 to 51% in 2016 and highlights the growing importance to Irish businesses of export markets.

Exports as a % of Total Sales in Irish-owned Companies, 2000 and 2016



This chart compares the export intensity of Irish-owned industry by sector for 2000 and 2016.

- The Food & Drink sector accounted for 37.3% of all export sales by Irish-owned companies in 2016 and has an export intensity of 54% in 2016 which is an increase on its 2000 intensity ratio of 48%.
- The sectors with the highest export intensity at 72% in 2016 are in Modern Manufacturing (Chemicals, Medical Devices and Computer, Electronic & Optical Products)
- The Information, Communication and Computer sectors are next with 60% of all sales being exported in 2016, the same level as it was in 2000.

2.7 Value Added in Irish-Owned Companies, 2000-2016

	Total Value Added			Value Added as % of Sales		Value Added per Person Employed		
	2000	2016	Per Annum Change 2000-16	2000	2016	2000	2016	Per Annum Change 2000-16
	€m	€m	%	%	%	€k	€k	%
Total - All Sectors	6,892	14,667	4.8%	29.9%	37.8%	48.1	89.6	4.0%
Manufacturing & Other Industry	4,862	8,481	3.5%	24.8%	29.8%	41.8	79.0	4.1%
Food & Drink	1,497	2,833	4.1%	15.6%	20.8%	35.5	68.4	4.2%
Traditional Manufacturing	2,330	3,226	2.1%	36.3%	39.2%	38.3	74.2	4.2%
Modern Manufacturing	319	524	3.2%	28.9%	33.9%	45.4	72.2	3.0%
Energy, Water, Waste, Construction	716	1,897	6.3%	28.4%	37.6%	111.6	124.7	0.7%
Info./Comm./ Other Services	2,031	6,186	7.2%	58.8%	59.8%	75.8	109.9	2.4%
Information, Comm. & Computer	811	2,031	5.9%	55.8%	61.6%	60.1	95.0	2.9%
Business, Fin. & Other Services	1,220	4,155	8.0%	61.0%	59.0%	91.7	119.1	1.6%

Value added is calculated as the total sales of a firm less the cost of materials and services purchased. As a result, it provides a measure of the specific contribution of firms/sectors in terms of economic activity.

- The total value added of Irish-owned Manufacturing and Information, Communication and Other Services is estimated at €14.7 billion in 2016. Total value added is estimated to have grown by 4.0% per annum in nominal terms over the period 2000-2016.
- Across all Irish-owned Manufacturing and Information, Communication and Other Services sectors, value added as a percentage of sales has increased from 29.9% in 2000 to 37.8% in 2016.
- Overall, value added per person employed in Manufacturing and Information, Communication and Other Services is estimated at €89,638 in 2016, an increase of 4.0% per annum in nominal terms since 2000.

Calculation – Value Added

Value Added is calculated as: Sales - Cost of all Materials + Services purchased

2.8 Payroll for Irish-owned Companies, 2000 and 2016

	Total Payroll			Payroll per Employee		
	2000	2016	Per annum change	2000	2016	Per annum change 2000-16
			2000-16			
	€m	€m	%	€k	€k	%
Total - All Sectors	4011	7693	4.2%	28.0	47.016	3.3%
Manufacturing & Other Industry	3110	4747	2.7%	26.7	44.216	3.2%
Food & Drink	1107	1650	2.5%	26.3	39.848	2.6%
Traditional Manufacturing	1463	1900	1.6%	24.1	43.698	3.8%
Modern Manufacturing	199	358	3.8%	28.3	49.331	3.5%
Energy, Water, Waste, Construction	341	839	5.8%	53.1	55.150	0.2%
Info./ Comm./Other Services	902	2946	7.7%	33.7	52.358	2.8%
Information, Comm./ Computer	550	1278	5.4%	40.8	59.772	2.4%
Business, Financial & Other Services	352	1668	10.2%	26.4	47.816	3.8%

This table shows that the total amount paid by Irish-owned Manufacturing and Information, Communication and Other Services on payroll (including taxes etc.) was approximately €7,7 billion in 2016.

- Total payroll has increased at a rate of 4.2% per annum over the period 2000-2016. Payroll in the Manufacturing sector and the Information, Communication and Other Services sector increased from €4.0 billion in 2000 to €7.7 billion in 2015.
- Manufacturing and Other Industry firms account for 62% (€4.7 billion) of total payroll and Information, Communication and Other Internationally Traded Services firms account for the remaining 38% (€2.9 billion) in 2016.

Payroll per employee in Irish-owned Manufacturing and Information, Communication and Other Services sectors averaged at €47,016 in 2016, representing an increase of 2.4% per annum over the period 2000 to 2016.

- In the Manufacturing sector, payroll per employee increased from €26,726 in 2000 to €44,216 in 2016. This is a per annum increase of 3.2%.
- In the Information, Communication and Other Services sectors, payroll per employee increased by 2.8% going from €33,658 in 2000 to €52,358 in 2016.
- The highest average payroll per employee figure in 2016, was €59,772 in the Information, Communications and Computer sector.

Definition - Payroll

Payroll Wages, salaries, pensions and other payroll costs for employees within the Republic of Ireland (includes all bonuses, PRSI, other taxes and levies but excludes redundancy payments and agency staff costs).

2.9 Materials-Services Purchased by Irish-Owned Companies, 2016

	Materials Purchased 2016			Services Purchased 2016		
	Total Materials	Irish Materials	Irish as % Total	Total Services	Irish Services	Irish as % Total
	€m	€m	%	€m	€m	%
Total - All Sectors	16,537	10,093	61.0%	7,577	5,128	67.7%
Manufacturing & Other Industry	15,218	9,568	62.9%	4,735	3,736	78.9%
Food & Drink	9,360	7,095	75.8%	1,410	1,193	84.6%
Traditional Manufacturing	4,156	1,632	39.3%	1,168	934	80.0%
Modern Manufacturing	813	160	19.7%	212	146	69.1%
Energy, Water, Waste, Construction	1,135	704	62.0%	2,015	1,503	74.6%
Information, Comm. & Other Services	1,319	525	39.8%	2,842	1,392	49.0%
Information, Comm. & Computer	480	174	36.2%	788	473	60.0%
Business, Financial & Other Services	839	351	41.9%	2,054	919	44.7%

	Materials Purchased 2016			Services Purchased 2016		
	Total Materials	Irish Materials	Irish as % Total	Total Services	Irish Services	Irish as % Total
	€m	€m	%	€m	€m	%
Total - All Sectors	16,537	10,093	61.0%	7,577	5,128	67.7%
Manufacturing & Other Industry	15,218	9,568	62.9%	4,735	3,736	78.9%
Food & Drink	9,360	7,095	75.8%	1,410	1,193	84.6%
Traditional Manufacturing	4,156	1,632	39.3%	1,168	934	80.0%
Modern Manufacturing	813	160	19.7%	212	146	69.1%
Energy, Water, Waste, Construction	1,135	704	62.0%	2,015	1,503	74.6%
Information, Comm. & Other Services	1,319	525	39.8%	2,842	1,392	49.0%
Information, Comm. & Computer	480	174	36.2%	788	473	60.0%
Business, Financial & Other Services	839	351	41.9%	2,054	919	44.7%

Total raw materials purchases amounted to approximately €16.5 billion in 2016, of which €10.1 billion (61%) was sourced in Ireland.

- Within the Food and Drink sector, Irish raw materials at €7.1 billion accounted for 75.8% of the total materials spend in that sector. Of all the Irish raw materials purchases by Irish-owned firms, the majority or 70.3% related to the Food and Drink sector in 2016.
- Within the Traditional Manufacturing sectors, 39.3% of materials were sourced in Ireland in 2016, amounting to over €1.6 billion in value. For Modern Manufacturing, 19.7% of total materials purchases were Irish materials, amounting to €160 million.
- In the Energy, Water, Waste & Construction sectors 62.0% of all materials were bought in Ireland in 2015.

In addition to raw materials, Irish-owned Manufacturing and Information, Communication and Other Services firms spent a further €7.6 billion on services in 2016, with 67.7%, or €5.1 billion sourced in Ireland.

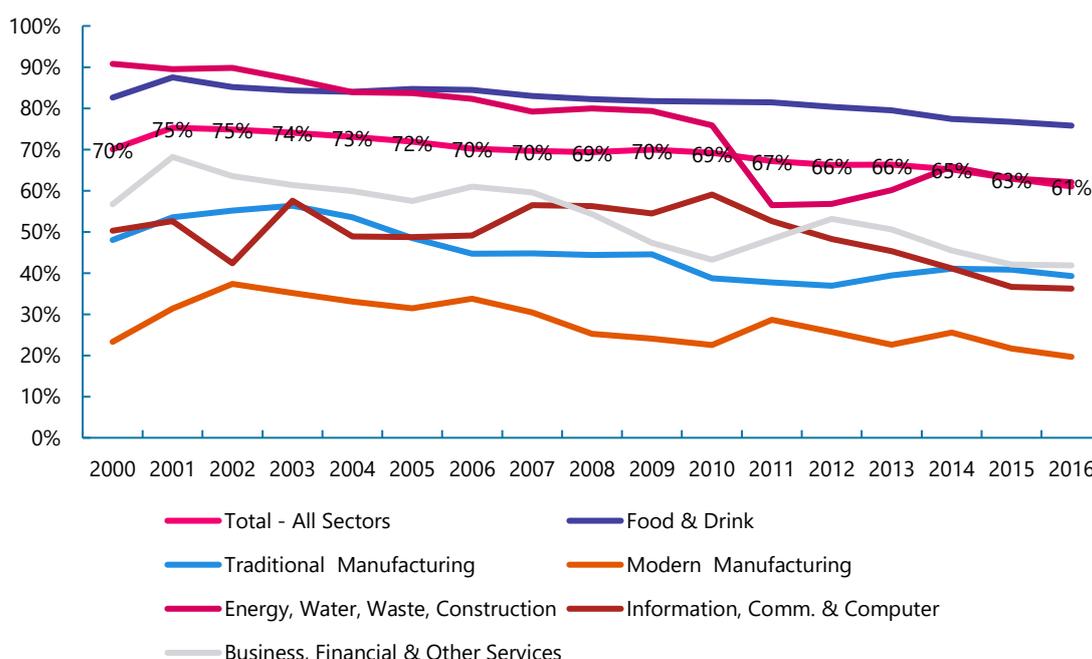
- The proportion of Irish services purchased by Irish-owned manufacturing and firms, ranges from 49.0% for Information, Communication and Other Services firms to 78.9% for Manufacturing & Other Industry firms.

Overall, the €10.1 billion of materials purchased in Ireland in 2016 continue to significantly outweigh the services purchased in Ireland which stand at €5.1 billion.

Definition - Services

The cost of all bought-in services e.g. agency fees, advertising, transport, fuel, power, repairs, telephone, postage, stationery, computing services, professional fees etc. Also included are royalty payments.

2.10 Irish-Sourced Materials as a Share of Total Material Purchased, 2000-2016

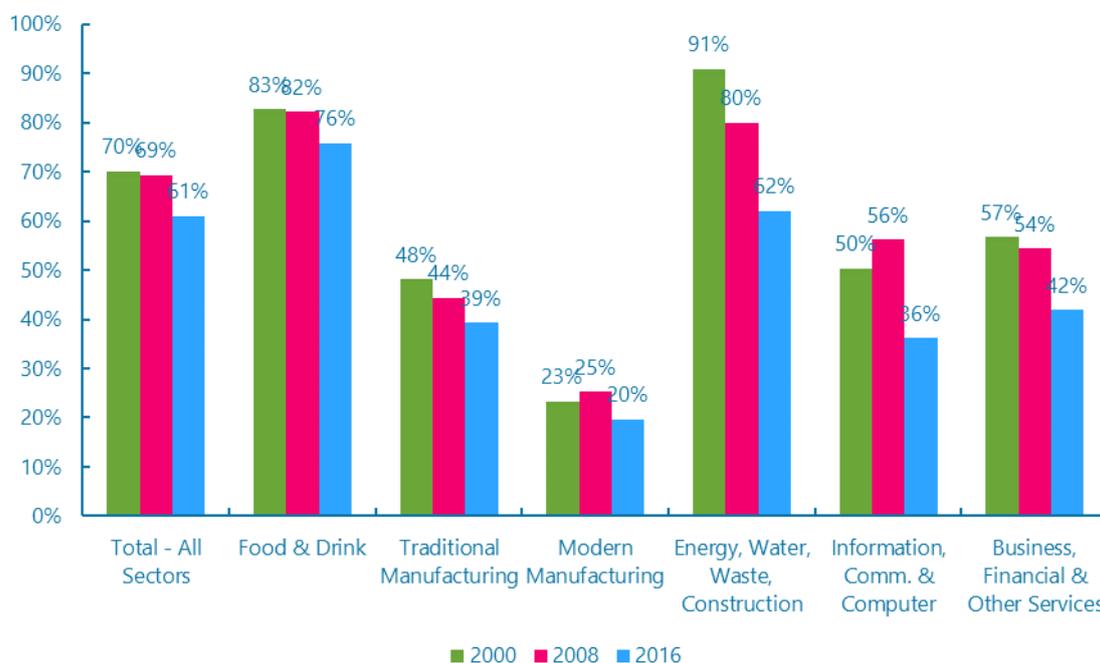


This graph maps out the share of total materials sourced in Ireland by Irish-owned Manufacturing and Services firms. In 2016, 61% of all materials purchased were sourced in Ireland compared with 70% in 2000. The 2016 returns showed a decrease of 2% over the 2015 figures.

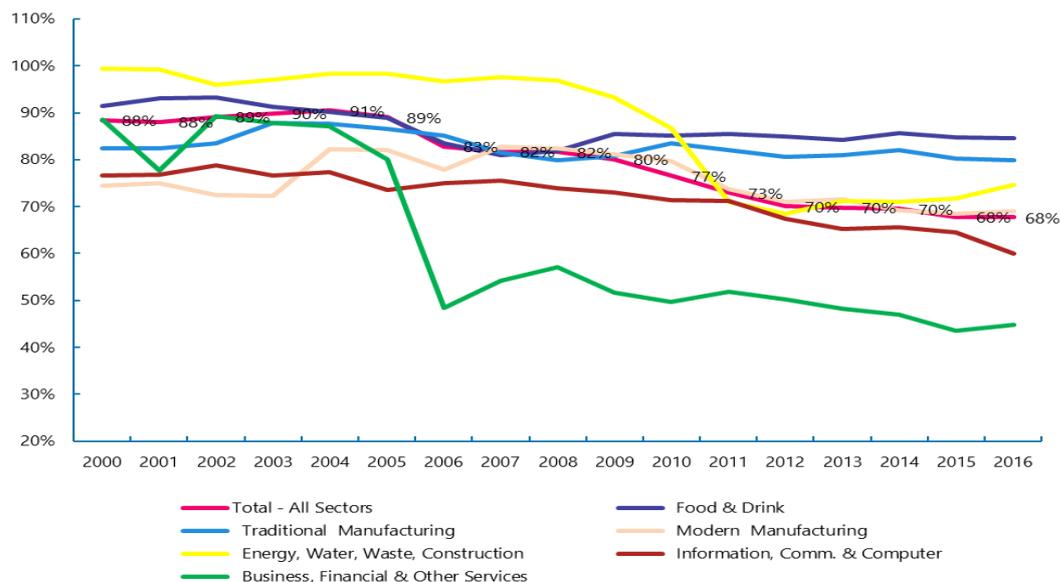
The bar chart below sets out the position by sector for 2000, 2008 and 2016:

- The Food & Drink sector purchased the majority or 76% of its materials in Ireland in 2016. This represents a decline from the 2000 and 2008 figures of 83% and 82%. (Absolute value was €7,095m).
- There has also been a decline in the percentage of materials sourced in Ireland by the Energy, Waste, Water & Construction sectors, in 2000 the figure was 91%, but in 2016 the percentage of Irish sourced materials was 62% (Absolute value was €704m).
- In 2016, the Traditional Manufacturing sector share of Irish-sourced materials stood at 48% in 2000 and has decreased since and its purchases of Irish-sourced materials now represent 39% of total materials outlay in 2016. (Absolute value was €1.6 billion).
- The total value of Irish materials purchased by the services sectors amounted to €525m in 2016 approximately 40% of their total spend on materials.

Irish-Sourced Materials as a Share of Total Material Purchased, 2000, 2008, 2016



2.11 Irish-Sourced Services as a Share of All Service Purchased, 2000-2016



This graph shows the share of total services sourced in Ireland by Irish-owned Manufacturing and Services firms. At 68%, the majority of services' purchases were sourced in Ireland in 2016 though this represents a decline from 88% from 2000.

The bar-chart below shows that purchases of Irish services ranged between 45% in the Business, Finance & Other Services sector to 85% in the Food and Drink sectors in 2016. Since 2000, the percentage of services purchased in Ireland has decreased across most sectors.

The Food and Drink sector's share of Irish services purchases has decreased from 91% in 2000 to 83% in 2015 (Absolute value was €1.2 billion).

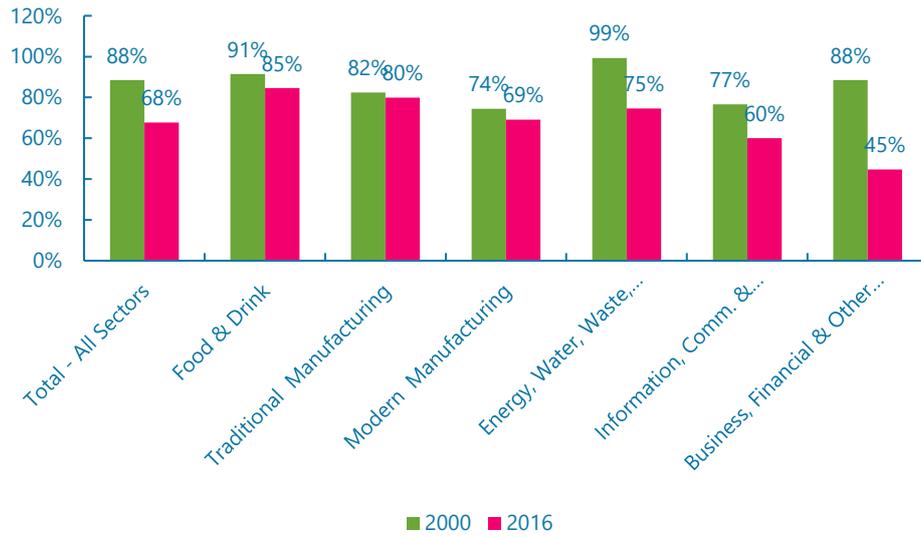
Traditional Manufacturing has maintained its share of Irish services purchases at approximately 82% through 2000, 2008 and 2015 (Absolute value was €934 million).

The Modern Manufacturing sector's share of services sourced in Ireland dropped from 74% in 2000 to 69% in 2016 (Absolute value was €146 million).

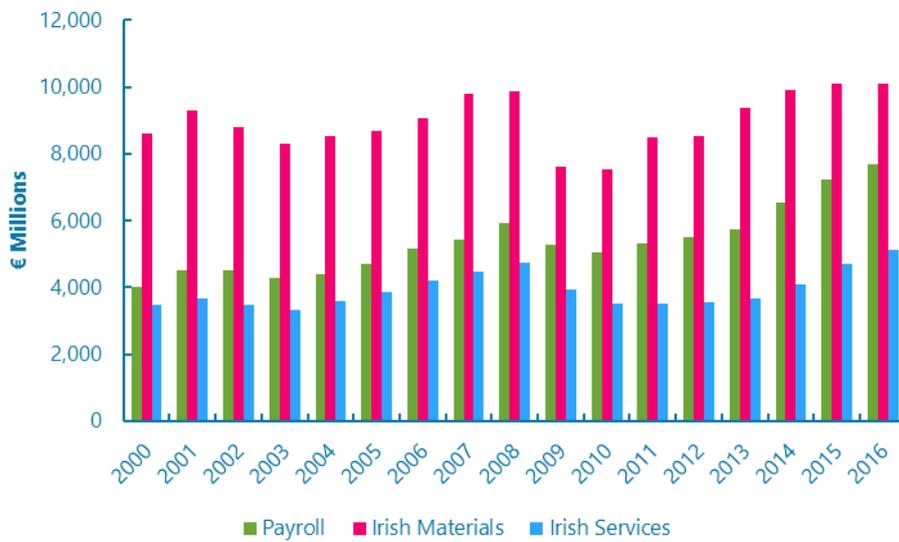
The Information, Communications and Computer sector's share of services purchases sourced in Ireland fell from 77% in 2000 to 60% in 2016 (Absolute value was €473 million). The Business, Financial and Other Services sector sourced 45% of their services requirements in Ireland in 2016, down from 88% in 2000. (Absolute value was €1.1 billion).

The Energy, Water, Waste & Construction sectors sourced 75% of their services in Ireland at a value of €1.5 billion.

Irish-Sourced Services as a Share of All Service Purchased, 2000 and 2016



2.12 Total Direct Expenditure in the Irish Economy by Irish-Owned Companies, 2000-2016



This chart summarises the total expenditure in the domestic economy by Irish-owned manufacturing and services firms throughout the period 2000-2016.

- In total, Irish-owned firms spent €22.9 billion in the domestic economy in 2016, comprising of:
 - €7.7 billion on payroll,
 - €10.1 billion on Irish raw materials,
 - €5.1 billion on Irish services.

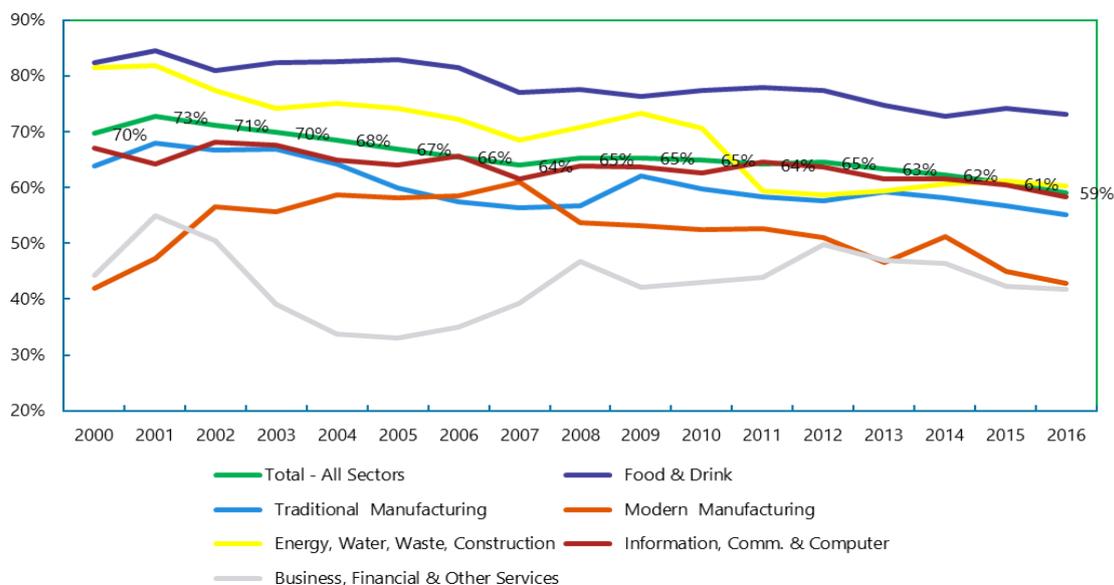
This represents an annual increase in 2016 of 4.1% over 2015 returns.

- Direct expenditure has increased from €16.1 billion in 2000 and shows an overall nominal increase of 2.2% per annum between 2000 and 2016. Over the period 2000 to 2016:
 - The largest increase was in payroll at 4.2% per annum.
 - Expenditure on materials sourced in Ireland has increased by 1.0% per annum.
 - Expenditure on services sourced in Ireland has increased by 2.5% per annum.
- The composition of direct expenditure has changed over this series. In 2000 payroll made up 25%, Irish materials were 53% and Irish services were 22% of total Irish economy expenditure. In 2016, these shares have changed, with payroll now making up 34%, Irish materials accounting for 44% and Irish services accounting for 22% of total expenditure in the Irish economy.

Calculation – Direct Expenditure in the Irish Economy (DEIE)

DEIE is calculated as the sum of: (Payroll + Irish Services + Irish Materials)

2.13 Total Direct Expenditure in the Irish Economy as a % of Sales in Irish-Owned Companies, 2000-2016



This chart shows the trend in direct expenditure in the economy as a percentage of sales for all Irish-owned firms and for the broad aggregated sectors.

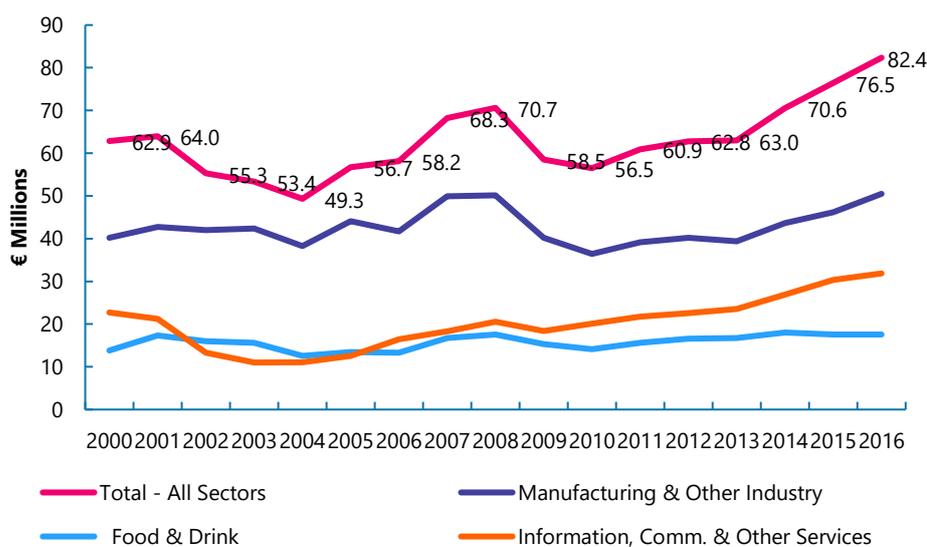
Total direct expenditure as a percentage of sales stood at 70% in 2000. By 2008 this percentage had reduced to 65% and in 2016 stands at 59%.

- The Food and Drink sector maintained the highest share of direct expenditure as a percentage of sales at 73% in 2016 down from 82% in 2000.
- The Energy Water, Waste and Construction sector also saw a fall-off on this metric from 82% in 2000 to 60% in 2016.
- In percentage terms direct expenditure in the Information, Communications and Computer Services sector stood at 67% of sales in 2000 and decreased to 58% in 2016.
- All other sectors have seen a fall in their direct expenditure in the Irish economy as a percentage of sales.

Total Direct Expenditure in the Irish Economy as a % of Sales in Irish-Owned Companies



2.14 Formal Structured Training in Irish-owned Companies, 2000-2016



Total expenditure on training amounted to €82.4 million in 2016. This is the sixth year of growth in the amount Irish-owned companies spent on formal structured training.

- The manufacturing and other sectors spent €50.5 million on training in 2016, accounting for 61% of total training expenditure.
- Expenditure on training in the services sectors also increased in 2016 to €31.9 million.

The sector with the largest spend on training is the Food & Drink sector.

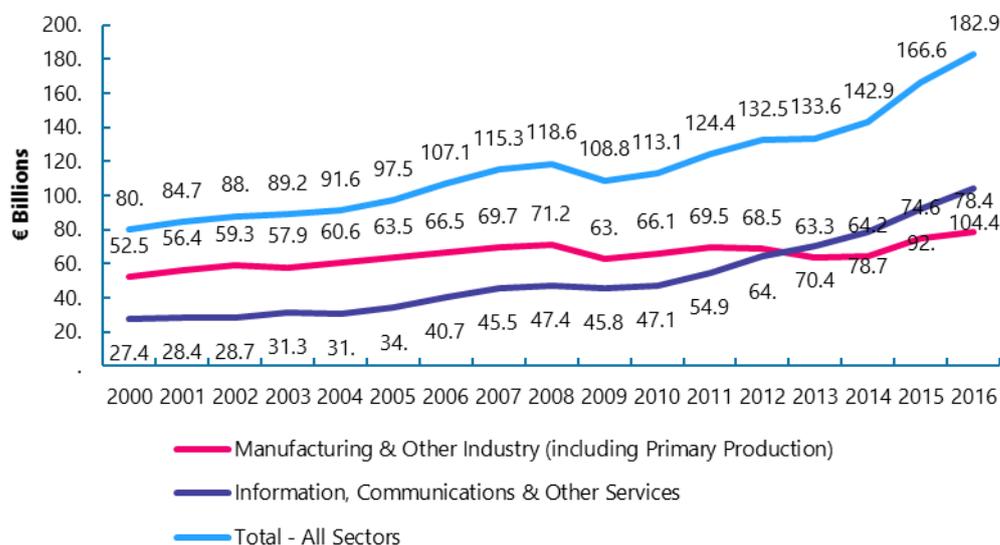
- The Food & Drink sector spent €17.5 million on training in 2016 which represents 21% of all training expenditure by all Irish-owned client companies.

Definition of Training

Expenditure on formal, structured training to management and staff (in-house or off-site)

Chapter 3: Key Business Indicators for Foreign-owned Agency Clients

3.1 Sales - Foreign-owned Client Companies, 2000-2016



Total sales of foreign-owned agency assisted companies increased by 9.8% per annum in nominal terms over 2015, amounting to €182.9 billion in 2016.

- Manufacturing and Other Industry sectors accounted for €78.4 billion of total sales, equating to 43% of all sales in foreign-owned companies.
 - Sales in the Manufacturing sectors increased by 5% in 2016 over the previous year.
 - The per annum average increase over the seventeen years from 2000-2016 for Manufacturing sectors is 2.5%. Sales have fluctuated since 2008 but the last three years saw a substantial recovery in the value of total sales.
- For the first time in 2013, sales in the Internationally-traded Services⁴ sectors exceeded those of the Manufacturing sectors and this trend has continued.
 - Internationally-traded Services sales have steadily increased from €27.5 billion in 2000 to €104.4 billion in 2016. This is a per annum average increase of 8.7% over that seventeen-year period.
 - The 2016 sales figure of €104.4 billion represents an increase of 13.5% over the 2015 sales figure of €92.0 billion.

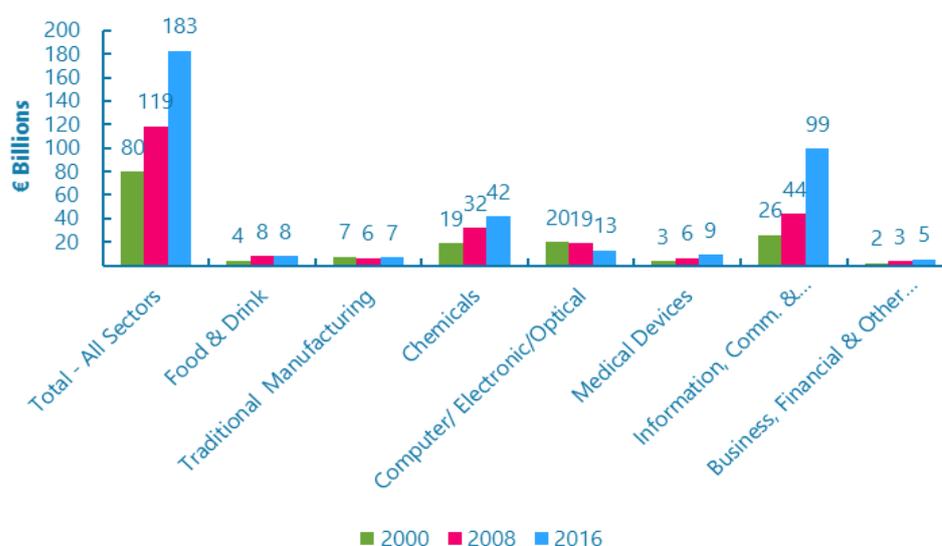
⁴ Agency client companies in the International Financial Services sector are not included in this survey. For a full list of the services sectors see Appendix 2

3.2 Sales & Sales Growth by sector - Foreign-owned Companies

	2000	2008	2015	2016	Per Annum Change 2000-16	Per Annum Change 2008-16	Per Annum Change 2015-16
	€m	€m	€m	€m	%	%	%
Total - All Sectors	79,980	118,616	166,611	182,865	5.3%	6.7%	9.8%
Manufacturing & Other Industry	52,532	71,201	74,638	78,431	2.5%	2.8%	5.1%
Food & Drink	4,175	7,913	7,871	7,908	4.1%	1.9%	0.5%
Traditional Manufacturing	7,102	6,117	6,524	6,872	-0.2%	6.5%	5.3%
Chemicals	18,658	32,021	39,365	41,714	5.2%	1.8%	6.0%
Computer/Electronic/Optical	19,630	18,776	12,101	12,904	-2.6%	4.5%	6.6%
Medical Devices	3,298	6,338	8,737	8,995	6.5%	3.5%	2.9%
Infor., Comm. & Other Services	27,448	47,415	91,973	104,433	8.7%	10.9%	13.5%
Infor., Comm. & Computer	25,698	44,065	87,895	99,390	8.8%	11.3%	13.1%
Bus., Financial & Other	1,750	3,349	4,078	5,043	6.8%	4.4%	23.7%

Sales in the internationally traded services sectors of foreign-owned client companies now exceed those of the Manufacturing sectors.

Sales by sector - Foreign-owned Companies, 2000, 2008, 2016



Between 2000 and 2016, the Information, Communications and Computer Services sector, recorded a per annum growth of 8.8% and at €99.4 billion represented 54% of total sales by foreign-owned client firms in 2016.

- The Chemicals sector accounted for 23% of total sales in 2016. Sales in the sector totalled €41.7 billion in 2016, a per annum increase of 5.2% over the 2000 sales figure of €18.7 billion.
- The Computer, Electronic and Optical Products sector reported sales of €12.9 billion in 2016, a 6.6% increase over the 2015 figure of €12.1 billion. This is a sector that has seen a per annum decrease of 2.6% since 2000.

3.3 Changing Composition of Sales and Employment in Foreign-owned Client Companies 2000 and 2016

	Sales		Employment ⁵	
	2000	2016	2000	2016
Manufacturing & Other Industry	65.7%	42.9%	73.4%	52.1%
Food & Drink	5.2%	4.3%	6.3%	4.1%
Traditional Manufacturing	8.9%	3.8%	27.8%	11.0%

⁵ Employment shares in this table are calculated on the basis of data from the ABSEI and are not directly comparable with the results of the DBEI 'Annual Employment Survey'. The DBEI Annual Employment Survey is a census of employment in all agency-assisted companies as at 31st October. The ABSEI is based on a survey of agency-assisted companies with 10+ employees and is undertaken in the first two quarters of the year.

Chemicals	23.3%	22.8%	13.4%	12.7%
Computer, Electronic & Optical Products	24.5%	7.1%	19.0%	8.5%
Medical Devices	4.1%	4.9%	9.2%	15.8%
Information, Comm. & Other Services	34.3%	57.1%	26.6%	47.9%
Information, Comm. & Computer	32.1%	54.4%	24.2%	37.4%
Business, Financial & Other Services	2.2%	2.8%	2.4%	10.5%

This table traces the evolution of the foreign-owned Manufacturing and Information, Communication and Other Internationally Traded Services base over the period 2000 to 2016.

In terms of sales, the relative importance of manufacturing activity has decreased, accounting for 42.9% of all sales in 2016, down from 65.7% in 2000. The Information, Communication & Other Services now accounts for 57.1% of sales, up from 34.3% in 2000.

In 2016, the following two sectors made up 77.2% of total sales of foreign-owned companies:

- Information, Communication and Computer Services sector (54.4%)
- Chemicals sector (22.8%)

In terms of employment, a different pattern emerges, with Manufacturing being the dominant employer with 52.1% of employment in 2016.

- The Medical Devices sector has 15.1% of employment, up from 9.2% in 2000.
- The Chemicals sector is the next most significant in terms of employment with 12.7% which is a decrease on the 2000 figure of 13.4%.

In Internationally-traded Services:

- The Information, Communications and Computer Services sector has the highest share of total employment, at 37.4% in 2016, up from 24.2% in 2000.

3.4 Exports in Foreign-owned Client Companies, 2000-2016



The above graph provides information relating to exports by foreign-owned client companies in Ireland.

The 2016 export sales figure of foreign-owned companies in Ireland at €175.5 billion equates to 96% of the total reported sales by these firms.

In 2013, the value of exports in the Services sectors outstripped those of the Manufacturing sectors for the first time.

- Exports in the Services sectors increased by 13.1% in 2016 over the 2015 figure of €88.2 billion and with the exception of 2009 have recorded increases in every year since 2004.
 - The Information, Communications and Computer Services sector accounted for 54.6% of all export sales in 2016 at €96.0 billion.
 - This important sector has seen an annual average increase of 9.0% in the seventeen-year period between 2000 and 2016.
- The Manufacturing sectors accounted for 43.2% of all exports in foreign-owned companies in Ireland in 2016 and amounted to €75.7 billion.
 - Manufacturing exports increased by 5% in the last year over the 2015 export sales figure of €72.2 billion.
 - The average annualised increase in Manufacturing exports since 2000 is 3.0% from a base of €47.0 billion in current prices, with notable decreases in 2009, 2012 and 2013 before recovering in 2014, 2015 and 2016.

3.5 Exports by Sector in Foreign-owned Companies, 2000, 2008, 2015 and 2016

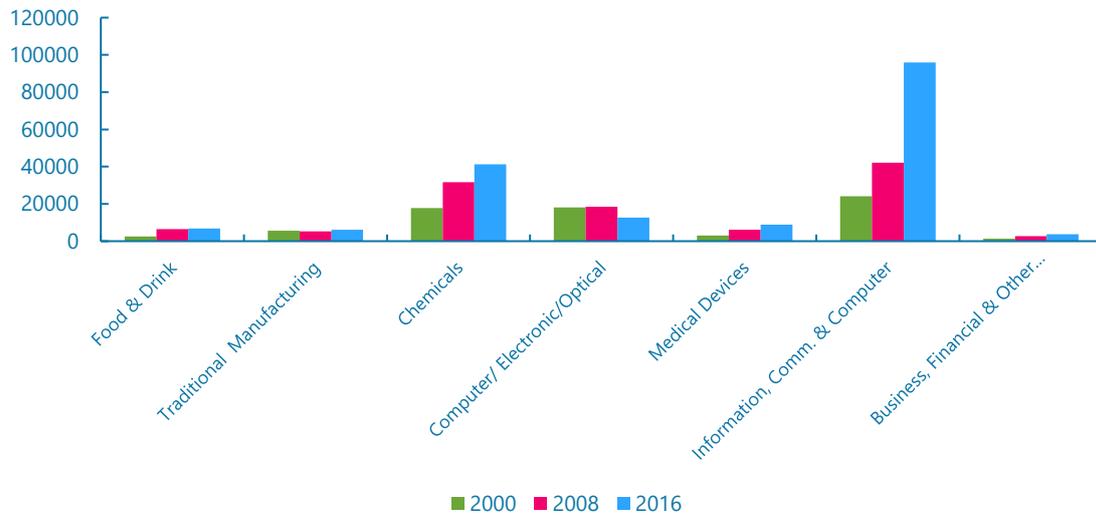
	2000	2008	2015	2016	Per Annum Change 2000-16	Per Annum Change 2008-16	Per Annum Change 2015-16
	€m	€m	€m	€m	%	%	%
Total All Sectors	72,331	112,598	160,349	175,508	5.7%	5.7%	9.5%
Manufacturing & Other Industry	46,973	67,869	72,165	75,742	3.0%	1.4%	5.0%
Food & Drink	2,606	6,389	6,864	6,877	6.3%	0.9%	0.2%
Traditional Manufacturing	5,663	5,198	5,910	6,050	0.4%	1.9%	2.4%
Chemicals	17,860	31,596	38,851	41,220	5.4%	3.4%	6.1%
Computer, Electronic & Optical	18,170	18,481	11,883	12,680	-2.2%	-4.6%	6.7%
Medical Devices	2,963	6,205	8,616	8,878	7.1%	4.6%	3.0%
Infor., Comm. & Other Services	25,358	44,729	88,184	99,766	8.9%	10.5%	13.1%
Infor., Comm. & Computer	24,048	42,090	85,170	95,967	9.0%	10.9%	12.7%
Bus., Financial & Other Services	1,310	2,640	3,014	3,799	6.9%	4.7%	26.0%

The Information, Communications & Computer services sector had the largest level of exports in 2016 at €96.0 billion. This is an increase of 12.7% over 2015 and an 9.0% annual increase in nominal terms since 2000 when exports stood at €24.0 billion.

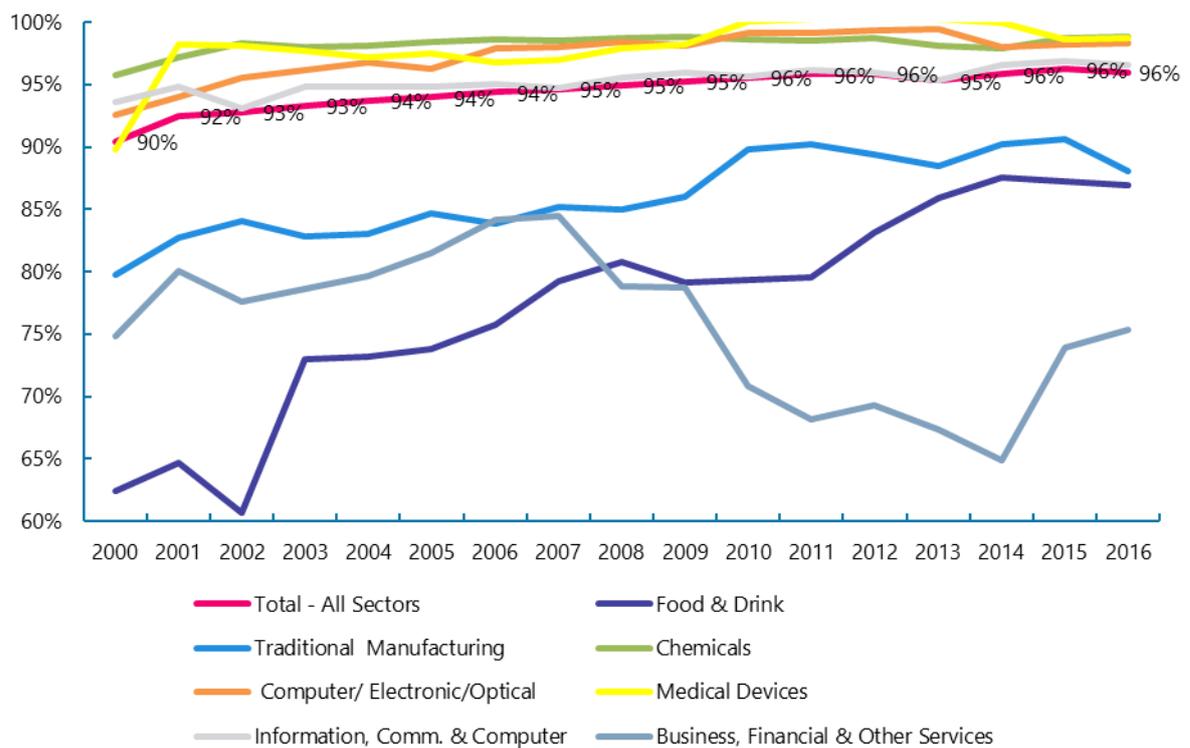
Exports in the Chemicals sector were also significant in 2016 at €41.2 billion an increase of 6.1% over 2015 and an averaged increase of 5.4% since 2000.

The third significant sector the Computer, Electronic & Optical sector also had a good year in 2016 with a 6.7% increase over 2015 with exports of €12.7 billion. This sector's exports experienced an average annual decrease of 2.2% between 2000 and 2016.

Exports by Sector in Foreign-owned Companies, 2000, 2008, and 2016

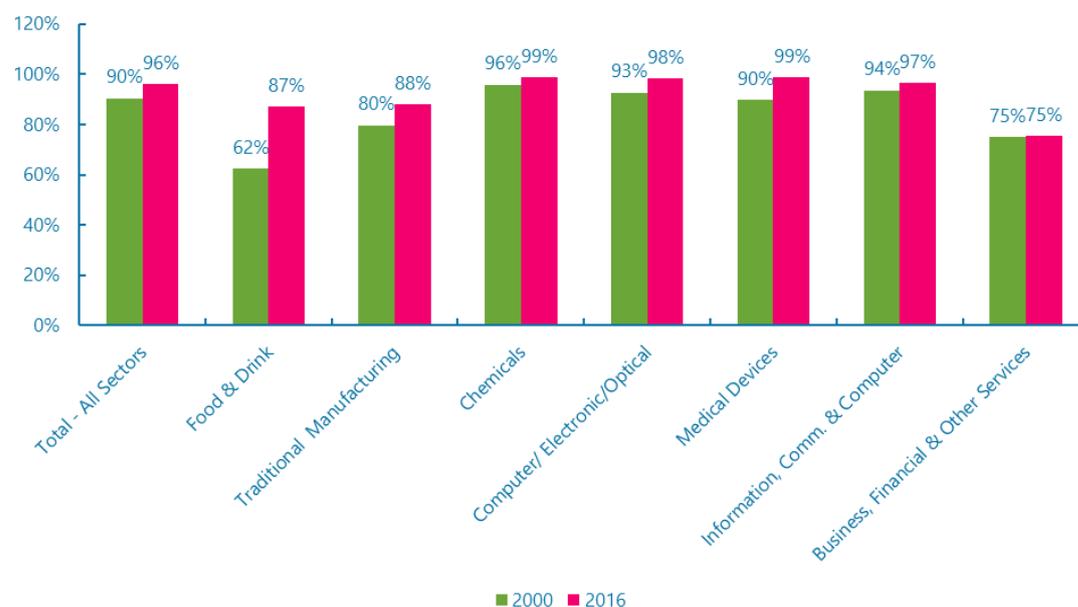


3.6 Exports as a % of Total Sales in Foreign-owned Companies, 2000-2016



- The total export intensity of foreign-owned industry has increased from 90% in 2000 to 96% in 2016.
- All sectors have increased their export intensity since 2000 with the exception of the Business, Financial & Other Services sector, which returned to its 2000 level of 75% in 2016.

Exports as a % of Total Sales in Foreign-owned Companies, 2000, 2016



- The foreign-owned high-tech manufacturing sectors of: Chemicals, Computer, Electronic & Optical Products and Medical Devices produce goods almost exclusively for export with approximately 99% of all sales being exported.
- The Information, Communication and Computer Services sector exported 97% of their services in 2016, up from 94% in 2000.
- The Food & Drink sector, with an 87% share of sales for export in 2016, increased its proportion of exports from 62% in 2000.
- Similarly, the Traditional Manufacturing sector has increased its proportion of sales for export, from 80% in 2000 to 88% in 2016.

3.7 Value Added in Foreign-Owned Companies, 2000-2016

	Total Value Added			Value Added as % Sales		Value Added per Person Employed		
	2000	2016	Per Annum Change 2000-16	2000	2016	2000	2016	Per Annum Change 2000-15
	€m	€m	%	%	%	€k	€k	%
Total - All Sectors	33,897	59,590	3.6%	42.4%	32.6%	202.4	376.1	3.9%
Manu./ Other Industry	24,130	35,536	2.4%	45.9%	45.3%	196.3	430.7	5.0%
Food & Drink	1,935	3,952	4.6%	46.3%	50.0%	183.3	608.8	7.8%
Traditional Manu.	2,434	2,464	0.1%	34.3%	35.9%	52.3	141.9	6.4%
Chemicals	10,502	17,166	3.1%	56.3%	41.2%	469.6	854.1	3.8%
Computer, Electronic & Optical	7,464	7,980	0.4%	38.0%	61.8%	234.5	591.8	6.0%
Medical Devices	1,858	3,966	4.9%	56.3%	44.1%	120.3	158.2	1.7%
Inform./ Comm. & Other Services	9,766	24,054	5.8%	35.6%	23.0%	219.3	316.9	2.3%
Information/ Comm. & Computer	8,486	20,906	5.8%	33.0%	21.0%	209.4	352.6	3.3%
Business, Fin. & Other Services	1,280	3,148	5.8%	73.2%	62.4%	319.5	189.4	-3.2%

The total value added of foreign-owned Manufacturing and Information, Communication and Other Internationally Traded Services is estimated at €59.6 billion in 2016.

Although total value added grew at a rate of 3.6% per annum in nominal terms over the period 2000-2016, there are differences at sectoral level. There was growth of 5.8% per annum in value added in the Information, Communication and Other Internationally Traded Services sectors over this period.

Across all foreign-owned sectors, value added as a percentage of sales has dropped from 42.4% in 2000 to 32.6% in 2016.

Overall, value added per person employed in Manufacturing and Information, Communication and Other Internationally Traded Services is estimated at €367,136 in 2016, an increase of 3.9% per annum in nominal terms since 2000.

Calculation – Value Added

Value Added is calculated as: (Sales - Cost of all Materials + Services purchased)

3.8 Payroll for Foreign-owned Companies, 2000 and 2016

	Total Payroll			Payroll per Employee		
	2000	2016	Per annum change 2000-16	2000	2016	Per annum change 2000-16
	€m	€m	€m	€k	€k	%
Total - All Sectors	6,089	11496	4.05%	36.4	72.563	4.41%
Manufacturing & Other Industry	4,307	5870	1.95%	35.0	71.142	4.53%
Food & Drink	438.736	512	0.97%	41.6	78.821	4.08%
Traditional Manufacturing	1,360	1009	-1.85%	29.2	58.123	4.40%
Chemicals	946.527	1822	4.18%	42.3	90.665	4.88%
Computer Electronic Optical	1,201	1020	-1.02%	37.7	75.632	4.44%
Medical Devices	435.335	1506	8.06%	28.2	60.056	4.84%
Info./ Comm./Other Services	1,781	5626	7.45%	40.0	74.108	3.93%
Information, Comm. & Computer	1,598	4413	6.56%	39.4	74.422	4.05%
Business, Financial & Other	183.887	1213	12.51%	45.9	72.987	2.94%

The total payroll bill of foreign-owned firms amounted to €11.5 billion in 2016 with manufacturing accounting for €5.9 billion (51.1%) and services contributing the balance of €5.6 billion (48.9%).

Total payroll per person employed averaged €72,563 in 2016, representing an increase of 4.4% per annum in nominal terms over the period 2000-2016.

Payroll per employee in the Information, Communication and Other Internationally Traded Services sector and the Manufacturing sectors averaged €74,108 and €71,142 respectively in 2016.

The Chemicals sector had the highest average payroll per capita of all sectors in 2016 at €90,665.

Definition - Payroll

Payroll Wages, salaries, pensions and other payroll costs for employees within the Republic of Ireland (includes all bonuses, PRSI, other taxes and levies but excludes redundancy payments and agency staff costs).

3.9 Materials & Services Purchased by Foreign-Owned Companies, 2016

	Materials Purchased 2016			Services Purchased 2016		
	Total Materials	Irish Materials	Irish as % of Total	Total Services	Irish Services	Irish as % of Total
	€m	€m	%	€m	€m	%
Total - All Sectors	25,888	3,060	11.8%	97,386	5,081	5.2%
Manufacturing & Other Industry	18,630	2,561	13.7%	24,264	2,837	11.7%
Food & Drink	1,737	776	44.7%	2,219	631	28.4%
Traditional Manufacturing	3,463	470	13.6%	945	382	40.4%
Chemicals	8,495	533	6.3%	16,053	1,148	7.2%
Computer/Electronic/Optical Prod.	2,607	231	8.9%	2,317	304	13.1%
Medical Devices	2,329	551	23.7%	2,700	372	13.8%
Infor./Comm. & Other Services	7,258	499	6.9%	73,122	2,244	3.1%
Information, Comm. & Computer	6,979	486	7.0%	71,505	1,934	2.7%
Business/Financial & Other Services	278	13	4.6%	1,616	309	19.1%

In overall terms, foreign-owned industry spent €25.9 billion on materials, of which €3.1 billion or 11.8% relates to materials sourced in Ireland (either by indigenous suppliers or other foreign-owned multinationals in the country).

- The largest proportion of Irish-sourced materials is found in the Food & Drink sector where 44.7% of all materials purchased were sourced in Ireland. In monetary terms, this amounted to €776 million spent in Ireland in 2016.
- The Medical Devices sector sourced 23.7% of their materials in Ireland.

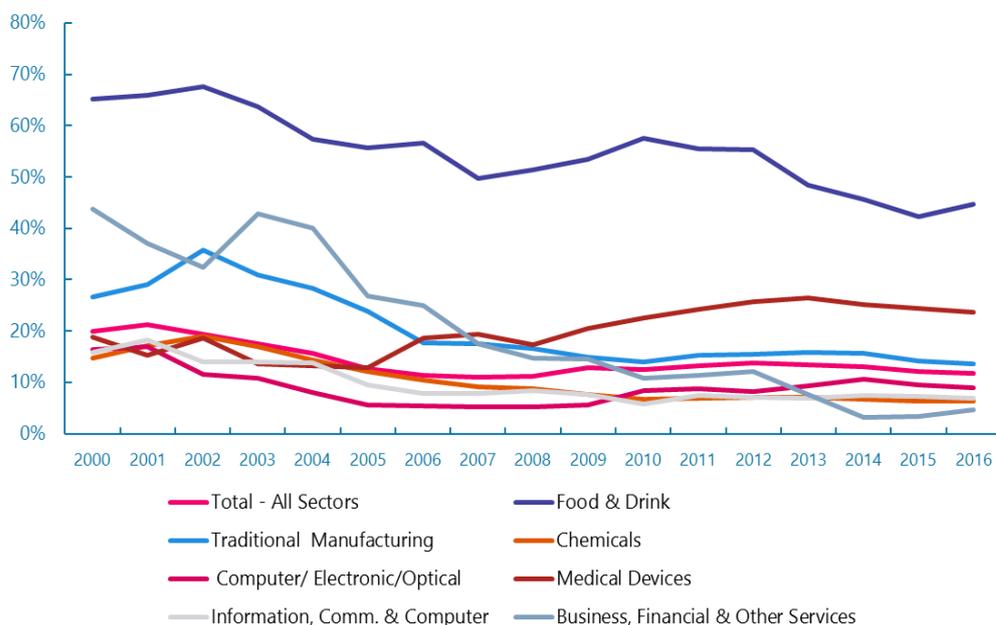
Foreign-owned industries spend, on services sourced in Ireland, amounted to €5.1 billion in 2016 or 5.2% of total services. The total spend on services amounted to €97.4 billion - it should be noted that this figure includes royalty payments.

- The services sector with the highest spend on Irish services was the Information, Communication and Computer sector which spent €1.9 billion or 2.7% out of a total spend of €71.5 billion on services in 2016.
- Traditional Manufacturing had the highest proportion on Irish-sourced services at 40.4% of its total spend.

Definition - Services

The cost of all bought-in services e.g. agency fees, advertising, transport, fuel, power, repairs, telephone, postage, stationery, computing services, professional fees etc. Also included are royalty payments.

3.10 Irish-Sourced Materials as a Share of All Materials Purchased by Foreign-Owned Client Companies, 2000-2016



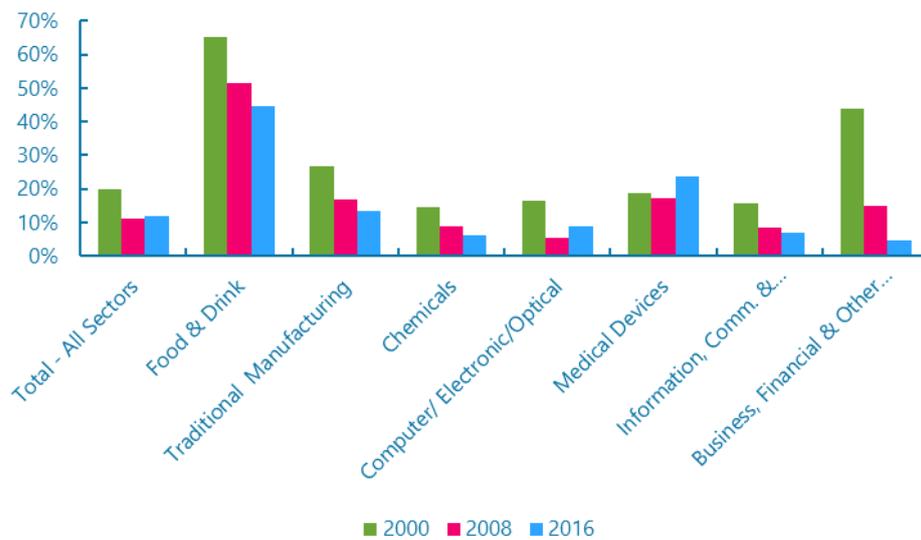
This graph depicts trends in the share of materials purchased by foreign-owned companies that were sourced in Ireland. The trend in the share of materials purchased in Ireland was in decline for all sectors between 2000 and 2006. The percentage of materials purchased in Ireland was at its lowest level in 2006 and 2007 at 11% and stands at 12% in 2016.

The sector with the largest share of materials purchased in Ireland is the Food & Drink sector with 45%, though this share has dropped from 51% in 2008 and 65% in 2000. (Absolute value €776m).

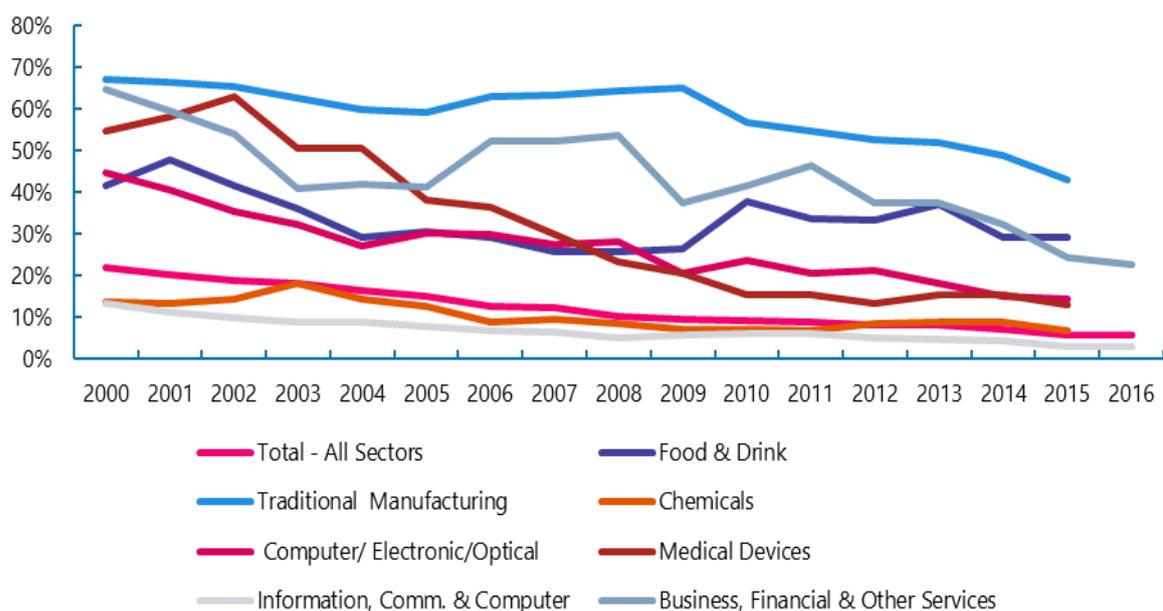
The Traditional Manufacturing sectors share of Irish materials has decreased steadily over the period of this time-series from 27% in 2000 to 14% in 2016. (Absolute value €470m).

The one sector that has increased their share of Irish materials between 2000 and 2016 are the Medical Devices going from 19% to 24% (Absolute value was €551m).

Irish-Sourced Materials as a Share of All Materials Purchased by Foreign-Owned Client Companies



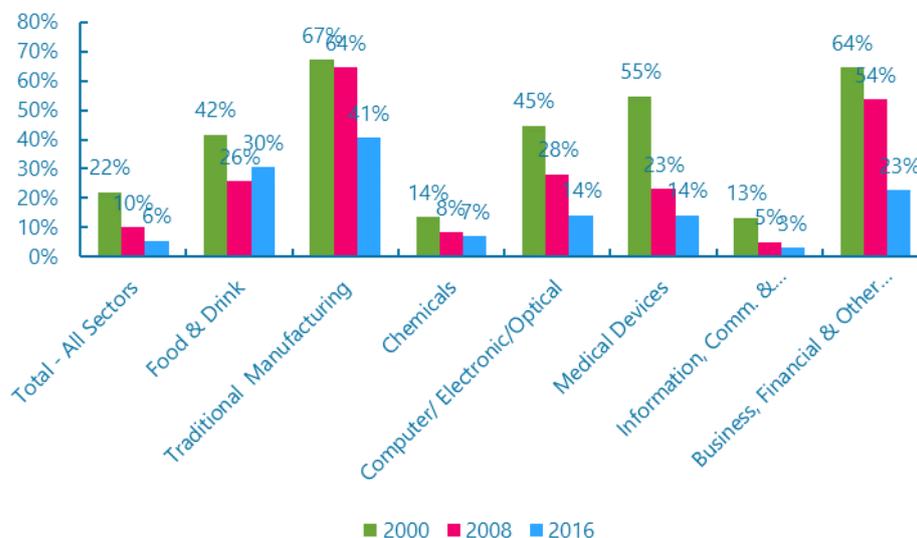
3.11 Irish-Sourced Services as a Share of All Services Purchased by Foreign-Owned Companies, 2000-2016



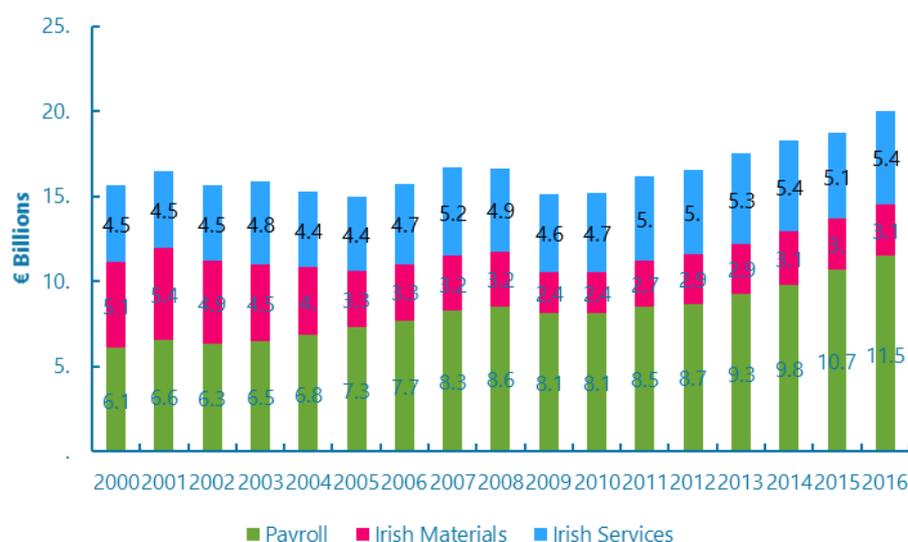
This graph shows the share of total services sourced in Ireland by foreign-owned Manufacturing and Services firms. In 2000, 22% of all services purchased by foreign-owned firms were sourced in Ireland - this figure has declined to 6% in 2016.

- Traditional Manufacturing dropped its share of Irish service purchases from 67% in 2000 to 41% in 2016 but remains the highest performing sector as regards Irish-sourced services. (Absolute value was €383 million).
- The Medical Devices sector's share of services sourced in Ireland dropped from 55% in 2000 to 14% in 2016. (Absolute value was €387 million).
- The Computer, Electronic and Optical Products sector has also decreased its share of Irish services purchases from 45% in 2000 to 14% in 2016. (Absolute value €330 million).
- The Information, Communications and Computer Services sector's share of service purchases sourced in Ireland fell from 13% in 2000 to 3% in 2016. (Absolute value €2.2 billion).
- The only sector to increase its share of Irish sourced services since 2008 was the Food & Drink sector which moved from 26% in 2008 to 30% in 2016 though this is a decline on the 2000 figure of 42%. (Absolute value €676 million).
- The percentage of Irish services purchased by the Chemical sector dropped from 14% in 2000 to 7% in 2016. (Absolute value €1.1 billion).

Irish-Sourced Services as a Share of All Services Purchased by Foreign-Owned Companies, 2000, 2008, 2016



3.12 Total Direct Expenditure in the Irish Economy by Foreign-Owned Companies, 2000-2016



This chart provides trend information on the three components that make up total direct expenditure by foreign-owned companies in the Irish economy.

Direct expenditure by foreign firms in the Irish economy amounted to €20.0 billion in 2016, comprising €11.5 billion on payroll, €3.1 billion on materials produced in Ireland and €5.5 billion on services purchased in Ireland.

- Direct expenditure by foreign-owned firms was up 6.7% in 2016 from €18.8 billion in 2014.
- Direct expenditure has increased from €15.7 billion in 2000 and shows an overall nominal increase of 1.5% per annum between 2000 and 2016.
- Over the period 2000 to 2016:
 - Payroll has increased by 4.1% per annum;
 - Expenditure on materials sourced in Ireland has decreased by 3.1% per annum;
 - Expenditure on services sourced in Ireland has increased by 1.2% per annum.

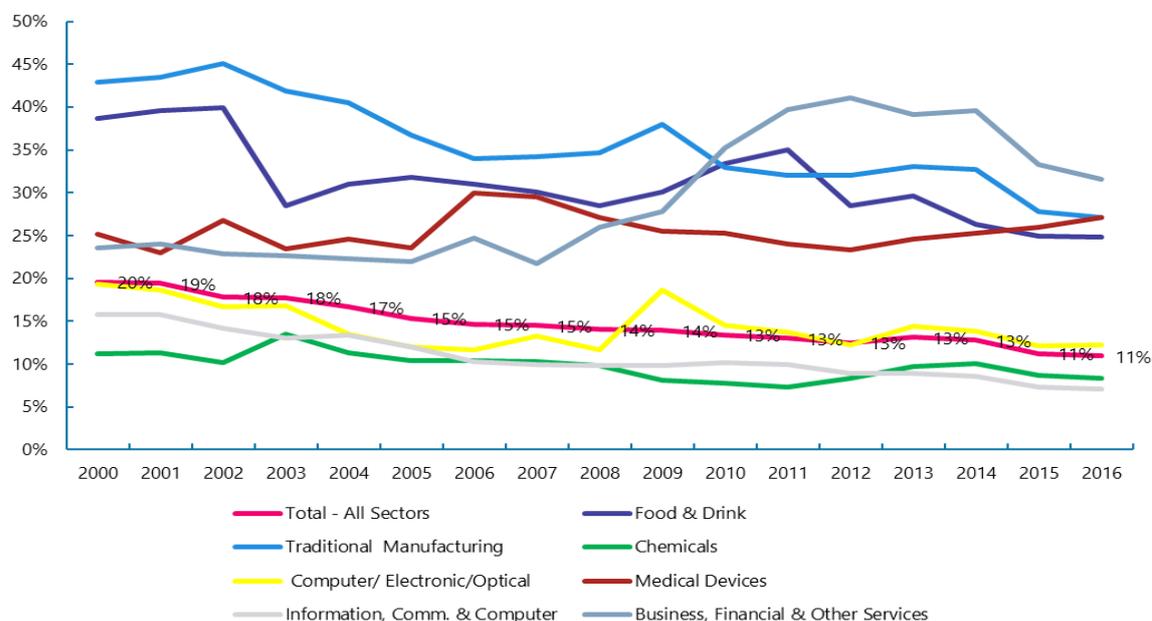
The composition of direct expenditure by foreign companies has also changed since 2000:

- In 2000 payroll made up 39%, Irish materials 32% and Irish services 29% of total Irish economy expenditure;
- In 2016, payroll accounts for 57% of total expenditure in the Irish economy, with Irish materials and Irish services accounting for 15% and 27% respectively.

Calculation – Direct Expenditure in the Irish Economy (DEIE)

DEIE is calculated as the sum of: Payroll + Irish Services + Irish Materials

3.13 Total Direct Expenditure in the Irish Economy as a % of Sales in Foreign-Owned Companies, 2000-2016



This graph provides trend information on direct expenditure (payroll, Irish materials, and Irish services) by foreign-owned firms in the Irish economy as a percentage of sales over the period 2000-2015.

For all sectors combined, the results show that direct expenditure in the Irish economy as a percentage of sales has decreased from 20% in 2000 to 11% in 2016.

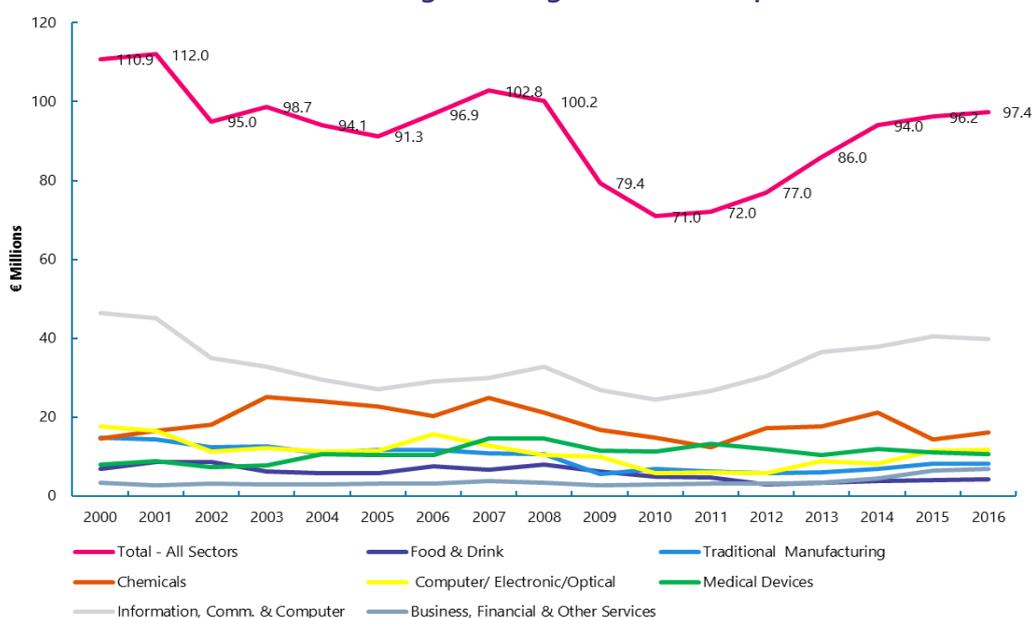
Only one sector has gone against this aggregate trend - Business, Financial and Other Services have increased their percentage from 24% in 2000 to 32% in 2016 (Value €1,519m)

The Information, Communication and Computer Services Sector decreased its Direct Expenditure as a percentage of sales from 16% in 2000 to 7% in 2016. In absolute terms this is the sector with the greatest direct expenditure in the Irish economy with a spend of €7.1 billion in 2016 accounting for 35% of total direct expenditure by foreign firms in the economy in 2016.

The next highest contributor in absolute terms is the Chemicals sector with a total expenditure of €3.5 billion in 2016. This represents 8% of sales in that sector in 2015 and is only slightly lower than 2000 when direct expenditure stood at 11% of sales.

Direct Expenditure in Traditional Manufacturing has fallen from 43% in 2000 to 27% in 2016. In absolute terms total expenditure stood at €1.9 billion in 2016.

3.14 Formal Structured Training in Foreign-owned Companies, 2000-2016



Total expenditure on structured, formal training in foreign-owned companies in 2016 amounted to €97.4 million. Expenditure on training has increased for the last five years from a low of €71.0 million in 2010.

Spending on training has not recovered to the rates reported in the early years of this survey when total funding for training reached €112.0 million in 2001.

- The Manufacturing sectors spent €50.6 million or 52% of total expenditure on structured training in foreign-owned companies, broadly equivalent to its share of payroll expenditure of 51%.
 - Within Manufacturing, the chemicals sector is responsible for 31.8% of this expenditure in 2016 at €16.1 million.
- The Services sectors spend on training in 2016 was €46.8 million.
 - The Computer Programming sector spends most on training within Services with €25.6 million in 2016 or 54.8% of total services spend in that year.

Appendix 1: NACE Codes Used in Report

The classification of economic activity used in the Annual Business Survey of Economic Impact is the European industrial activity classification NACE Rev.2⁶. (Nomenclature statistique des Activités économiques dans la Communauté Européenne)

To highlight broad trends in the report, sectors have been amalgamated into smaller groups⁷.

Irish-owned client companies (Chapter 2) have been grouped by:

Manufacturing and Other Industry

Food/Drink & Primary Production:

- Food & Drink (10-12); agriculture, fishing forestry, mining & quarrying (1-9)

Traditional Manufacturing:

- textiles, clothing, footwear & leather (13-15); wood & wood products (16); paper & printing (17-18), rubber & plastics (22), non-metallic minerals (23), basic & fabricated metal products (24-25), electrical equipment (27), machinery & equipment (28), transport equipment (29-30) and other miscellaneous manufacturing (31-33).

Modern Manufacturing:

- chemicals (19-21), computer, electronic & optical products (26), medical devices (33)

Energy, Water, Waste & Construction

- energy, water, waste & construction (35-43)

Information, Communication & Other Internationally Traded Services (see Appendix 2)

Information, Communication & Computer:

- Publishing, broadcasting & telecommunications (58-61), computer programming (62-6201), consultancy & related facilities (62-6202) and other IT and computer services (6203-63).

Business, Financial & Other Services:

- Financial services (64-66) and business, education & other services (45-56)(68-96)

Foreign-owned client companies (Chapter 3) have been grouped by:

The same groupings are used as with Irish-owned companies, with the exception of Modern Manufacturing where each of the sectors are shown separately i.e. chemicals, computer, electronic & optical products and medical devices

⁶ NACE Rev 2 – For more detail on NACE codes go to the Central Statistics Office web-site:

<http://www.cso.ie/px/u/NACECoder/NACEItems/searchnace.asp>

⁷ Please note that the ABSEI tracks only Agency client companies' performance and is not meant to be a snapshot of the national economy. In some instances, when analysing sectorial performance, there will be a wide disparity between national (e.g. Central Statistics Office) sectoral data and ABSEI sectoral data because the agency cohort of companies may represent a small proportion of the national sector - the Financial Services sector is an example of this.

Appendix 2: Schedule of Services Industries

S.I. No. 81/2010 - Industrial Development (Service Industries) Order 2010⁸.

This Order sets out those service industries that are eligible for assistance under the Industrial Development Acts, 1986 to 2009:

S.I. No. 81/2010 - Industrial Development (Service Industries) Order 2010
Software development
Data processing and electronic commerce;
Technical and consulting services;
Commercial laboratory services;
Administrative/service centres, co-ordination and headquarters services;
Research and development services;
Media, multimedia and recording services;
Entertainment and leisure services;
Training services;
Publishing services;
International financial services;
Healthcare services;
Construction related services;
Environmental services;
Supply chain management and logistics management services;
Commercial international standards bodies;
Technology test centres;
Prototype laboratory services;
Intellectual property services;
Group procurement;
Shipping services;
Education services.

⁸ <http://www.irishstatutebook.ie/eli/2010/si/81/made/en/print>

Appendix 3: Sample Questionnaire

Company name:

Annual Business Report 15/16



An Roinn Post, Fiontar agus Nuálaíochta
Department of Jobs, Enterprise and Innovation

Company address:

All responses to this survey are received on an agreed understanding of confidentiality and commercial sensitivity consistent with our obligations under Irish law. All results will be published in a form that will not identify individual businesses and information. The information is combined with survey information from other state agencies to support DJEI's Business Information System (BIS).

COMPANY	
CRO Number:	
Person completing form and Job Title:	
E-mail Address and Telephone Number:	
Please provide the NACE classification of your business and briefly describe the nature of your operations in the Republic of Ireland, including all products/services:	
SALES AND EXPORTS	

Q1 - Please record in thousands of Euro the total value of your Sales & Exports for each year :

If using accounting year (rather than calendar year) provide date of year-end

	Actual 2014 (€000's)	Actual 2015 (€000's)	Forecast 2016 (€000's)
EXPORT SALES			
Q1a1) MANUFACTURED GOODS	€ <input type="text"/>	€ <input type="text"/>	€ <input type="text"/>
Q1a2) SERVICES	€ <input type="text"/>	€ <input type="text"/>	€ <input type="text"/>

Sales of manufactured goods produced and services provided by your enterprise for the Export market, i.e. the value excluding excise duties and VAT. For an overseas contract you should include only the value which was returned to Ireland, and exclude the value of materials or labour cost etc. which arose abroad. Distribution sales should be excluded and provided in Q1g below.

DOMESTIC SALES

Q1b1) MANUFACTURED GOODS	€ <input type="text"/>	€ <input type="text"/>	€ <input type="text"/>
Q1b2) SERVICES	€ <input type="text"/>	€ <input type="text"/>	€ <input type="text"/>

Sales of manufactured goods produced and services provided by your enterprise for the Domestic (Republic of Ireland) market, i.e. the value excluding excise duties and VAT. Distribution sales should be excluded and provided in Q1f below. For a service-type activity such as a call centre, please include the fee income earned by the Republic of Ireland operation rather than the value of all the transactions handled by the call centre.

Q1c) TOTAL SALES i.e. (Q1a + Q1b)	€ <input type="text"/>	€ <input type="text"/>	€ <input type="text"/>
Total sales of manufactured goods and services produced by your enterprise (Q1a + Q1b).			

Q1d - INTER-COMPANY SALES	<input type="text"/> %	<input type="text"/> %	<input type="text"/> %
---------------------------	------------------------	------------------------	------------------------

Of the total turnover in Q1c above, please state the proportion (best estimate) invoiced to other affiliates or business units of your parent company.

Q1e - GLOBAL SALES	<input type="text"/> %	<input type="text"/> %	<input type="text"/> %
--------------------	------------------------	------------------------	------------------------

What proportion of your parent company's global sales does your Irish business represent? (i.e. total Irish sales as outlined in Q1c divided by your parent company's reported turnover).

Q1f - DISTRIBUTION SALES	€ <input type="text"/>	€ <input type="text"/>	€ <input type="text"/>
--------------------------	------------------------	------------------------	------------------------

In addition to the goods produced and services provided by your own enterprise (Q1c) please record the value of goods resold without further processing (i.e. distribution sales or sales of other companies' products).

EMPLOYMENT

Q3a - COMPANY STAFF

Company employees working in the Republic of Ireland @ 31st December. Normally these employees are paid through the company payroll.

	Actual 2014	Actual 2015	Forecast 2016
TOTAL COMPANY STAFF	<input type="text"/>	<input type="text"/>	<input type="text"/>
Q3c - GLOBAL EMPLOYMENT	<input type="text"/>	<input type="text"/>	<input type="text"/>

If your company is a subsidiary or part of a larger group with a manufacturing and/or other facility outside the Republic of Ireland, please indicate the number of full-time employees in your global operation (including Irish entity) @ 31st December.

CURRENT EXPENDITURE

	Actual 2014 (€000's)	Actual 2015 (€000's)
Q4 - PAYROLL	€ <input type="text"/>	€ <input type="text"/>
Wages, salaries, pensions and other payroll costs for employees within the Republic of Ireland [include all bonuses, PRSI, other taxes and levies but exclude redundancy payments and agency staff payroll costs].		
Please record costs associated with total sales excluding cost of distribution sales (Q1g) .		
Q5a - MATERIALS	€ <input type="text"/>	€ <input type="text"/>
Cost of materials and components used directly in the production of goods and services [exclude goods purchased for re-distribution only or any capital expenditure].		
Q5b - MATERIALS SOURCED IN IRELAND (%)	<input type="text"/> %	<input type="text"/> %
Estimated proportion of materials and components in Q5a produced in Republic of Ireland.		
Q6a - SERVICES not including Royalties	€ <input type="text"/>	€ <input type="text"/>
Cost of all bought-in services, e.g. agency fees, advertising, transport, fuel, power, repairs, telephone, postage, stationery, computing services, professional fees etc.		
Q6b - SERVICES SOURCED IN IRELAND not including Royalties (%)	<input type="text"/> %	<input type="text"/> %
Estimated proportion of services in Q6a sourced in Republic of Ireland.		
Q6c - ENERGY	€ <input type="text"/>	€ <input type="text"/>
Cost within Q6a accounted for by fuel and power, e.g. electricity, gas, oil, etc.		
Q7a - ROYALTIES not to be included in Q6a-Services above	€ <input type="text"/>	€ <input type="text"/>
Estimated value of royalty payments, i.e. include international payments of franchising fees and the royalties paid for the use of registered trademarks, use of intangible, non-produced, non-financial assets and proprietary rights (such as patents, copyrights and industrial processes and designs) and with the use, through licensing agreements, of produced originals or prototypes (such as manuscripts, and cinematographic works and sound recordings).		
Q8 - ALL OTHER EXPENSE ITEMS	€ <input type="text"/>	€ <input type="text"/>
Sum of all other expense items appearing in Profit and Loss Account of your Republic of Ireland operation (e.g. rent, leasing costs, interest payments, depreciation and foreign exchange costs etc).		

TRAINING

Please estimate your organisation's expenditure on **formal, structured training** to management and staff (in-house and off-site).

	Actual 2014	Actual 2015
Q9 - TRAINING	€ <input type="text"/>	€ <input type="text"/>
Cost of all formal structured training, in-house and external (excluding salary of those being trained, on-the-job training costs and apprentice training).		

