

Chapter 6



27,60	66,00
15,65	34,50
6,50f	14,30
14,40f	31,75
46,45A	102,35
8,95	19,70
8,80	19,40
15,75f	34,70
14,45	31,85
5,00	11,00
17,75f	39,10
6,30f	13,90
40,40	89,00
15,70	34,60
26,50	58,40
10,20	22,45

ECONOMY

INTRODUCTION

The Republic of Ireland economy has been one of the fastest growing economies in the developed world in recent times. In recent decades the economy in the Republic of Ireland has been transformed from being agrarian and traditional manufacturing based to one increasingly based on the services sectors.

Northern Ireland has traditionally had an industrial economy, most notably in shipbuilding and textiles, but most heavy industry in recent times has been replaced by services. During the Troubles, there was relatively little foreign investment in Northern Ireland. However, since the signing of the Good Friday (Belfast) Agreement, external and indigenous investment in the Northern Ireland economy has been increasing.

In the Republic of Ireland the Department of Enterprise, Trade and Employment has responsibility for the implementation of policy in the areas of enterprise; innovation; growth; quality work and learning; making markets and regulation work better; business delivery; modernisation and customer focus. Numerous agencies operate under the guidance of the department, including Enterprise Ireland, the Competition Authority, the National Consumer Agency and the National Standards Authority of Ireland.

In Northern Ireland the Department of Enterprise, Trade and Investment (DETI) is responsible for economic policy development, energy, tourism, mineral development and the Companies Registry. It also has a role in ensuring the provision of the infrastructure for a modern economy. DETI has four agencies, established as non-departmental public bodies (NDPBs), to assist in strategy implementation, namely Invest Northern Ireland (Invest NI), the Northern Ireland Tourist Board (NITB), the Health and Safety Executive for Northern Ireland (HSENI) and the General Consumer Council for Northern Ireland (GCCNI).

The two economies on the island of Ireland face similar challenges arising from the increasing pace and intensity of global competition. Both governments have agreed that cooperation across a range of areas, including infrastructure and innovation and enterprise development, can benefit everyone.

InterTradeIreland plays a unique role in helping the two governments improve economic conditions. The organisation undertakes research, supports networks, and develops and delivers programmes to help companies both North and South. It is one of the six cross-border bodies established under the Good Friday (Belfast) Agreement.

Table 6.1 Gross Value Added (GVA) and GVA per person at current prices*Units as indicated*

	Republic of Ireland		Northern Ireland	
	GVA (€ millions)	GVA per person (€)	GVA (£ millions)	GVA per person (£)
1996	53,179	14,666	15,496	9,325
1997	61,156	16,690	16,412	9,820
1998	70,451	19,025	17,526	10,446
1999	80,895	21,620	18,377	10,945
2000	93,065	24,559	19,210	11,415
2001	105,421	27,402	20,150	11,928
2002	117,374	29,964	21,164	12,474
2003	125,327	31,498	22,466	13,195
2004	132,319	32,721	23,933	13,993
2005	142,486	34,494	25,017	14,508
2006	152,574	35,986	26,429	15,175

Sources Republic of Ireland: National Income and Expenditure, Census of Population Ireland, CSO
 Northern Ireland: Regional Gross Value Added, ONS

In the last ten years Gross Value Added in the Republic of Ireland has risen by over 186 per cent, with Gross Value Added per person rising by over 145 per cent to the current level of €35,986. In the corresponding time Northern Ireland has seen its Gross Value Added rise by almost 71 per cent. Gross Value Added per person in Northern Ireland in 2006 stood at £15,175, a rise of almost 63 per cent over the last ten years.

Table 6.2 Gross Value Added per person - nominal growth*Indices*

Year	Republic of Ireland	Northern Ireland
1996 (base)	100	100
1997	114	105
1998	130	112
1999	147	117
2000	167	122
2001	187	128
2002	204	134
2003	215	142
2004	223	150
2005	235	156
2006	245	163

Sources Republic of Ireland: National Income and Expenditure, Census of Population Ireland, CSO
 Northern Ireland: Regional Gross Value Added, ONS

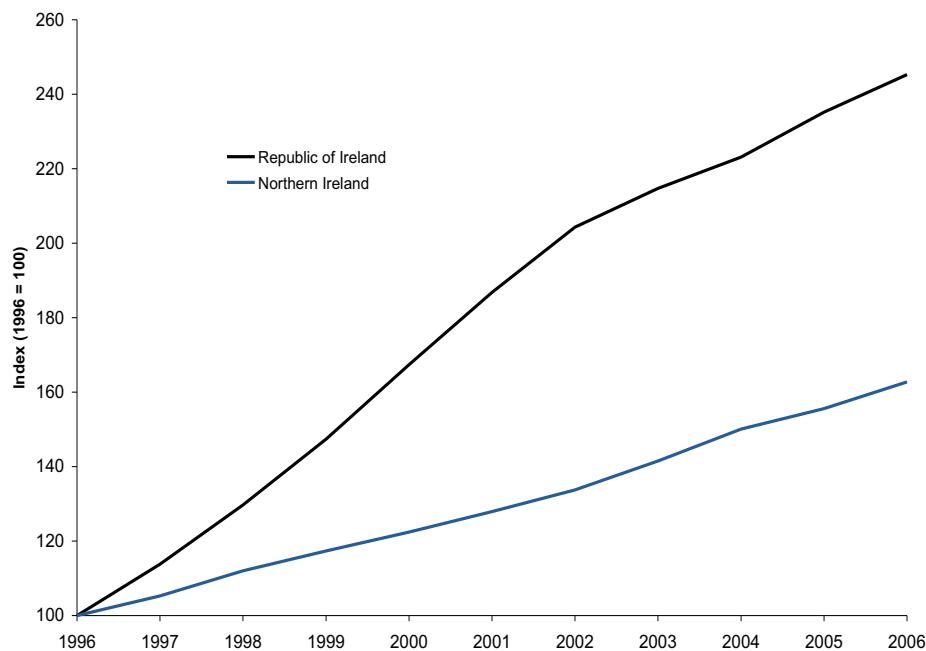
Figure 6.1 Gross Value Added per person - nominal growth, 1996-2006

Table 6.3 (a) Turnover, Gross Value Added and employment costs for selected broad industrial sectors in the Republic of Ireland, 2001-2005

	<i>Units as indicated</i>					
	Turnover (€ millions)	Gross Value Added (€ millions)	Employment costs (€ millions)	Purchases (€ millions)	Net capital expenditure (less disposals) (€ millions)	Employment levels (thousands)
Mining and quarrying						
2001	1,214	464	241	755	182	5.5
2002	1,195	410	239	784	178	5.5
2003	1,264	463	272	819	144	5.6
2004	1,360	513	286	864	126	5.8
2005	1,652	664	284	1,024	153	5.8
Manufacturing						
2001	101,694	33,845	8,123	67,834	3,857	247.2
2002	103,598	37,803	8,336	65,869	3,691	236.7
2003	104,829	35,979	8,587	65,265	2,174	227.1
2004	107,305	35,752	8,646	67,793	2,974	218.0
2005	113,000	35,494	9,011	77,757	3,726	214.2
Electricity, Gas and Water Supply						
2001	2,812	1,405	564	1,671	445	10.0
2002	2,973	1,629	610	1,719	1,029	10.0
2003	3,216	2,077	642	1,743	1,017	9.6
2004	3,708	2,797	676	1,888	1,378	9.7
2005	4,713	2,600	658	2,993	1,258	9.0
Construction^{1,2}						
2001	7,612	2,746	1,766	5,237	149	46.4
2002	8,849	3,145	2,168	5,796	183	51.7
2003	10,308	4,094	2,514	6,738	184	56.6
2004	12,242	5,351	3,084	7,672	323	63.6
2005	14,569	5,823	3,514	9,617	464	66.7
Services^{1,2}						
2001	102,242	24,981	14,253	77,301	4,209	526.0
2002	114,544	30,163	14,605	84,933	3,364	587.0
2003	125,622	33,927	16,473	92,053	3,664	627.8
2004	143,234	41,858	19,004	103,422	5,826	653.7
2005	167,562	45,871	18,961	122,038	5,545	655.1

Source Republic of Ireland: Central Statistics Office, Census of Industrial Production

¹Enterprises with 20 or more persons engaged.

²Total purchases include payments to subcontractors.

6

ECONOMY

Table 6.3 (b) Turnover, Gross Value Added and employment costs for selected broad industrial sectors in Northern Ireland, 2001-2005

	<i>Units as indicated</i>					
	Turnover (£ millions)	Gross Value Added (£ millions)	Employment costs (£ millions)	Purchases (£ millions)	Net capital expenditure (less disposals) (£ millions)	Employment levels (thousands)
Mining and quarrying						
2001	221	75	33	139	17	1.8
2002	224	70	40	151	21	2.0
2003	269	77	43	194	24	2.0
2004	249	78	43	159	12	2.0
2005	242	82	40	155	23	1.9
Manufacturing						
2001	13,635	3,880	1,902	6,690	433	99.8
2002	13,100	3,612	1,868	6,304	367	97.9
2003	13,287	3,670	1,896	6,522	323	92.0
2004	13,653	3,776	1,943	6,854	375	91.4
2005	14,116	3,786	1,973	7,363	414	89.2
Electricity, Gas and Water Supply						
2001	976	661	87	415	241	2.3
2002	1,080	369	113	783	85	3.0
2003	1,059	392	131	765	291	3.2
2004	1,222	417	118	890	131	2.8
2005	1,354	455	105	979	117	2.8
Construction						
2001	3,995	1,315	616	2,879	184	40.7
2002	4,315	1,486	695	3,152	167	40.4
2003	4,348	1,487	722	3,029	136	42.3
2004	4,660	1,600	772	3,170	204	41.1
2005	5,474	1,996	785	3,842	246	46.1
Services						
2001	22,252	6,540	3,549	15,947	1,755	315.7
2002	22,730	6,923	3,886	16,376	973	328.4
2003	23,667	7,059	3,936	16,829	946	323.1
2004	25,802	7,725	4,370	18,568	1,108	335.2
2005	27,376	8,224	4,493	19,654	1,555	347.3

Source Northern Ireland: Annual Business Inquiry, DETI

The construction sectors, in both Northern Ireland and the Republic of Ireland, have shown the greatest increase in Gross Value Added (GVA) in the five years, 2001-2005. The increase in GVA for the construction sector stood at 112 per cent in the Republic of Ireland and 52 per cent in Northern Ireland. In the period 2001 to 2005 total turnover, across all sectors, increased by 40 per cent in the Republic of Ireland and increased by 18 per cent in Northern Ireland.

In the period 2001 to 2005, employment in manufacturing fell in both the Republic of Ireland and Northern Ireland. The Republic of Ireland had a 13 per cent decrease in manufacturing employment levels while Northern Ireland recorded an 11 per cent fall over the same period.

Table 6.4 VAT registrations

	<i>Numbers</i>					
	2001	2002	2003	2004	2005	2006
Republic of Ireland						
New registrations	25,472	25,014	28,501	31,937	35,842	39,827
De-registrations	16,722	16,976	10,143	19,965	17,952	23,144
Total VAT registered enterprises	204,032	212,070	224,118	236,090	253,980	270,663
Northern Ireland						
New registrations	3,550	3,590	3,845	4,200	4,450	4,445
De-registrations	2,790	2,480	2,795	3,100	3,355	3,865
Total VAT registered enterprises	58,675	59,435	60,545	61,600	62,695	63,790

Sources Republic of Ireland: Office of the Revenue Commissioners
Northern Ireland: Small Business Service Survey, BERR

The total number of VAT registered enterprises in the Republic of Ireland and Northern Ireland has grown over the period 2001 to 2006. While Northern Ireland has had an increase of almost nine per cent in the period, the Republic of Ireland has had a 33 per cent rise in total registered enterprises.

Table 6.5 Foreign-owned enterprises

	Numbers	
	Republic of Ireland	Northern Ireland
	Number of businesses	Number of businesses
Manufacturing		
2001	647	164
2002	643	171
2003	607	156
2004	550	155
2005	531	193
Construction¹		
2001	..	23
2002	..	27
2003	..	31
2004	21	34
2005	20	24
Services¹		
2001	445	409
2002	532	425
2003	586	434
2004	562	487
2005	588	492

Sources Republic of Ireland: Census of Industrial Production, Annual Services Inquiry, Census of Building and Construction, CSO
 Northern Ireland: Inter Departmental Business Register, DETI

¹Includes data only for enterprises with 20 or more employees.

The Republic of Ireland has seen the number of foreign owned manufacturing enterprises fall by 18 per cent in the five years to 2005. In the corresponding period, the number of foreign owned enterprises in Northern Ireland has fluctuated up and down with the 2005 level showing an 18 per cent increase on that reported in 2001.

Compared with the Republic of Ireland, Northern Ireland has a relatively high number of foreign owned enterprises in the services sector. However, in the five years to 2005 the Republic of Ireland experienced an increase of 32 per cent in foreign owned services enterprises while the growth in Northern Ireland was somewhat lower at 20 per cent.

Table 6.6 Gross disposable household income (GDHI) at current prices

	Republic of Ireland	Northern Ireland ¹
	GDHI per person (€)	GDHI per person (£)
2001	..	9,819
2002	17,084	10,176
2003	17,794	10,668
2004	18,442	11,086
2005	20,051	11,564

Sources Republic of Ireland: Institutional Sector Accounts, Census of Population Ireland, CSO
Northern Ireland: Regional Household Income, ONS

¹Household income covers the income received by households and non-profit institutions serving households.

In the period 2002 to 2005 both Northern Ireland and the Republic of Ireland have shown steady growth in gross disposable income at current prices. In this period Northern Ireland saw an increase of 14 per cent, while the Republic of Ireland experienced an increase of 17 per cent.

Table 6.7 Business expenditure on research & development¹ as percentage of Gross Value Added

Year	Republic of Ireland	Percentages
		Northern Ireland
2001	0.85	0.74
2002	0.84	0.71
2003	0.86	0.52
2004	0.87	0.48
2005	0.93	0.54
2006	..	0.55

Sources Republic of Ireland: Research and Development Statistics in Ireland, Forfás
Northern Ireland: Research & Development Survey, DETI; ONS

¹R&D refers to business intramural expenditure.

Table 6.8 Use of ICT by businesses for placing and receiving orders¹*Percentages*

Year	Republic of Ireland		Northern Ireland	
	Manufacturing	Construction	Manufacturing	Construction
2002	39	28
2003	53	33	39	31
2004	63	39	37	25
2005	67	56	43	24
2006	68	44

Sources Republic of Ireland: e-Commerce and ICT Survey, CSO
 Northern Ireland: Annual Business Inquiry, DETI

¹Businesses with 10 or more employees (20 or more for Construction) that used the internet, EDI or any other electronic network (excluding e-mail) to place orders or receive orders for goods or services.

There has been a general increase in the use of ICT, for placing and receiving orders, by manufacturing businesses in the Republic of Ireland over the period 2003 to 2006.

In Northern Ireland however, while the manufacturing sector is making greater use of ICT to conduct business, the construction sector has been reducing their take up of ICT to facilitate trade.

Table 6.9 Seasonally adjusted value of internal manufacturing trade between the Republic of Ireland and Northern Ireland¹

	Manufacturing trade South to North	Manufacturing trade North to South	€ millions Total
1992	221	134	355
1993	143	98	241
1994	164	121	285
1995	193	156	349
1996	217	193	410
1997	241	201	441
1998	327	226	553
1999	312	234	547
2000	375	244	619
2001	356	282	639
2002	368	234	602
2003	288	214	501
2004	273	233	506
2005	274	232	505
2006	303	264	568
2007	324	262	585

Source Intertrade Ireland

¹Figures refer to Quarter 1 data of respective year.

Manufacturing trade between Northern Ireland and the Republic of Ireland has always been an important aspect of business on the island of Ireland. Trade, in both directions, has increased significantly between 1992 and 2007, with a 47 per cent increase from the Republic of Ireland to Northern Ireland, and a 96 per cent increase from Northern Ireland to the Republic of Ireland. Overall trade in both directions increased by 65 per cent in the fifteen years to 2007.

6

ECONOMY

Table 6.10 (a) Manufacturing exports as a percentage of Gross Value Added in the Republic of Ireland

Year	<i>Percentages</i>
2001	76.5
2002	71.4
2003	58.3
2004	56.7
2005	53.9

Source Republic of Ireland: Trade Statistics, CSO

Table 6.10 (b) Manufacturing exports as a percentage of Gross Value Added in Northern Ireland

Year	<i>Percentages</i>
2001	19.2
2002	16.1
2003	18.5
2004	19.0
2005	19.3

Source Northern Ireland: Regional Competitiveness, DTI

Table 6.11 Percentage of firms, by employee size, engaged in innovative activity

Year	10-49 employees	50-249 employees	250+ employees	<i>Percentages</i>
Republic of Ireland				
2002-2004	47	65	75	52
Northern Ireland¹				
2002-2004	44	51	74	46

Sources Republic of Ireland: Community Innovation Survey (CIS), Forfás
Northern Ireland: Community Innovation survey (CIS), DETI

¹ For UK definition of innovative activity please see technical notes.

In both areas, around three quarters of firms with 250 or more employees were engaged in innovative activity. The proportion of firms engaging in such activity was generally higher in the Republic of Ireland than in Northern Ireland.

Table 6.12 EU Gross Domestic Product (GDP)

	2000	2001	2002	2003	2004
EU 27	9,175,444	9,554,088	9,912,884	10,079,553	10,579,842
Austria	210,392	215,878	220,841	226,175	236,149
Belgium	251,741	258,883	267,652	274,726	289,690
Bulgaria	13,704	15,250	16,623	17,767	19,875
Cyprus	10,079	10,801	11,170	11,785	12,728
Czech Republic	61,495	69,045	80,004	80,924	88,262
Denmark	173,598	179,226	184,744	188,500	197,070
Estonia	6,103	6,916	7,757	8,693	9,582
Finland	132,272	139,868	143,974	145,938	152,345
France	1,441,373	1,497,187	1,548,559	1,594,814	1,660,189
Germany	2,062,500	2,113,160	2,143,180	2,163,800	2,211,200
Greece	137,929	147,467	157,586	171,258	185,225
Hungary	52,025	59,512	70,714	74,682	82,322
Republic of Ireland	104,620	116,939	130,215	139,414	148,502
Italy	1,191,057 ^p	1,248,648	1,295,226	1,335,354	1,390,539
Latvia	8,496	9,320	9,911	9,978	11,176
Lithuania	12,360	13,562	15,023	16,452	18,126
Luxembourg	22,001	22,572	23,992	25,726	27,439
Malta	4,221	4,301	4,489	4,421	4,488
Netherlands	417,960	447,731	465,214	476,945	491,184
Poland	185,714	212,294	209,617	191,644	204,237
Portugal	122,270	129,308	135,434	138,582	144,128
Romania	40,346	44,904	48,442	52,613	60,842
Slovenia	22,017	23,520	25,955	29,465	34,023
Slovakia	21,125	22,423	24,134	25,328	26,739
Spain	630,263	680,678	729,206	782,929	841,042
Sweden	266,422	251,340	264,244	275,657	287,689
United Kingdom	1,573,359	1,613,355	1,678,980	1,615,984	1,745,051
Northern Ireland	36,645	37,437	38,740	37,293	40,494

Source Eurostat

6

ECONOMY

**Table 6.13 EU Gross Domestic Product and Purchasing Power Parities (PPS) per inhabitant
Percentage of the EU average**

	2000	2001	2002	2003	2004
EU 27	100	100	100	100	100
Austria	133.5	127.3	127.6	128.8	128.9
Belgium	126.2	123.7	125.3	123.2	121.0
Bulgaria	27.9	29.3	31.1	32.6	33.8
Cyprus	89.0	91.1	89.5	89.1	90.5
Czech Republic	68.6	70.4	70.6	73.6	75.3
Denmark	131.9	128.1	128.7	124.4	125.9
Estonia	44.7	46.2	50.0	54.5	56.7
Finland	117.6	116.0	115.5	113.3	116.6
France	115.6	115.9	116.2	112.1	110.3
Germany	118.8	116.9	115.5	116.8	116.6
Greece	84.3	87.4	91.0	92.2	93.9
Hungary	56.2	59.0	61.6	63.4	63.3
Republic of Ireland	131.0	132.8	138.3	140.8	141.8
Italy	117.1 ^p	118.1	112.2	111.0	106.8
Latvia	36.8	38.8	41.3	43.4	45.8
Lithuania	39.4	41.5	44.1	49.1	50.5
Luxembourg	244.3	234.6	240.8	247.2	253.2
Malta	83.8	78.1	79.7	78.6	76.8
Netherlands	134.6	134.0	133.7	129.7	129.5
Poland	48.4	47.7	48.4	49.0	50.7
Portugal	78.2	77.5	77.2	76.9 ^b	74.8
Romania	25.9	27.6	29.4	31.4	34.1
Slovenia	50.2	52.4	54.2	55.6	57.2
Slovakia	78.8	78.8	81.1	82.3	85.3
Spain	97.6	98.3	100.7	101.2	101.2
Sweden	127.0	121.7	121.4	123.0	125.0
United Kingdom	117.2	117.9	118.7	119.8	122.1
Northern Ireland	95.1	95.7	95.8	96.7	99.1

Source Eurostat

Technical Notes

Tables 6.1 and 6.2

Under the European System of Accounts 1995 (ESA95), the term Gross Value Added (GVA) is used to denote estimates that were previously known as Gross Domestic Product (GDP) at basic prices. Under ESA95, the term GDP denotes GVA plus taxes (less subsidies) on products, that is, at market prices.

Table 6.3 (b)

Northern Ireland figures are provided from the Northern Ireland Annual Business Inquiry (NIABI), Department of Enterprise Trade and Investment.

Data for 2000-2002 are on SIC 1992 basis, data for 2003 and after are on SIC 2003 basis. In 2001 coverage was increased to include Group 01.4 (agricultural and animal husbandry service activities, except veterinary activities) and Group 01.5 (hunting, trapping and game propagation including related service activities). 02 (forestry, logging and related service activities) and 05 (fishing) are also included. The data excludes local authority and central government bodies in 8511/2, 8511/3, 8514, 8520, 8531/2 and 8532/2, as well as Public Sector Hospitals in NHS trusts (8511/1), medical and dental practices (8512 and 8513) and Charitable Social activities (8531/1 and 8532/1).

Table 6.3 (a)

Republic of Ireland figures are taken from the Census of Industrial Production (CIP), the Census of Building and Construction (CBC) and the Annual Services Inquiry (ASI). The CIP covers manufacturing industry (NACE 15-37), mining and quarrying (NACE 10-14), together with electricity, gas and water supply (NACE 40). The CBC covers building and construction (NACE 45.1 and 45.2). The ASI covers retail and wholesale (NACE 50-52), hotels and restaurants (NACE 55), transport, storage and communication (NACE 60-64), real estate, renting and business services (NACE 70-74) and other selected traded services activity (NACE 92-93). The CIP covers only those industrial enterprises with 3 or more employees. The CBC covers only those enterprises with 20 or more employees.

Table 6.4

Northern Ireland

- 1 VAT registrations and de-registrations are the best official guide to the pattern of business start-ups and closures. They are an indicator of the level of entrepreneurship and of the health of the business population. As such they are used widely in regional and local economic planning.
- 2 These figures do not, however, give the complete picture of start-up and closure activity in the economy. Some VAT exempt sectors and businesses operating below the threshold for VAT registration are not covered. At the start of 2006, the VAT threshold was an annual turnover of £60,000, and 1.9 million of the estimated 4.5 million enterprises in the UK were VAT-registered.
- 3 However, some businesses do voluntarily register for VAT even though their turnover is below the threshold. Data for 2006 shows that around a fifth of all registrations have turnover below the VAT threshold.
- 4 To make the figures as comparable as possible over time, a number of adjustments are made. The registration figures for recent years are increased slightly to allow for the small number of registrations that take more than a few months to be reported. Similarly, the de-registration figures are decreased

slightly to take account of dormant businesses which were classed as de-registered, but that have subsequently been found to be active again.

- 5 The source of these figures is the Inter-Departmental Business Register (IDBR). It contains records of all businesses registered for VAT. The IDBR is administered by the Office for National Statistics (ONS), which publishes information on the stock of VAT registered businesses in UK Business: Activity, Size and Location. The Business Enterprise and Regulatory Reform (BERR) and ONS publications complement each other, although adjustments and minor differences in coverage mean that they contain slightly different estimates of the registered business population. The BERR estimates are also subject to revision.

Republic of Ireland data are published by The Revenue Commissioners. Persons supplying taxable goods or services within the State in the course or furtherance of business are required to register and account for tax if their turnover is in excess of certain limits. Persons whose turnover does not exceed the appropriate limit may register or not as they choose.

Table 6.5

The market information company Dun and Bradstreet, annually supply the Office for National Statistics (ONS) with information on foreign owned businesses operating in the United Kingdom. This information is then loaded onto the IDBR. Statistics Research Branch, DETI, supplement this with information from two sources: Invest Northern Ireland's list of client companies and a list of publicly traded US companies with subsidiaries, affiliates or branch offices employing more than 10 people in Northern Ireland, published by the Investor Responsibility Research Centre, Washington DC (The IRRC is an independent, non-profit making research firm founded in 1972). The data used is based on these combined sources.

Republic of Ireland

Republic of Ireland data are sourced from the Annual Services Inquiry (ASI), the Census of Industrial Production (CIP) and the Census of Building and Construction (CBC). Data for all sectors only includes enterprises with 20 or more employees.

Table 6.6

Data for Northern Ireland is taken from the latest Regional Household Income First Release published by the Office for National Statistics on 27 March 2007.

The household sector covers people living in traditional households as well as those living in institutions, such as retirement homes and prisons. The sector also includes sole trader enterprises and non-profit institutions serving households, for example, charities and most universities.

Household income represents the amount of money available to households less taxes, National Insurance and pension contributions and interest paid.

The headline gross disposable household income has been calculated using a five-period moving average.

The 2005 figures were issued as provisional.

Table 6.7

In Northern Ireland, Research & Development (R&D) is defined as creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and in the use of this stock of knowledge to devise new applications. The guiding line to distinguish research and technological development activity (R&D) from non-research activity is the presence or absence of an appreciable element of novelty or innovation. If the activity departs from routine and breaks new ground it should be included; if it follows an established pattern it should be excluded.

Republic of Ireland data are taken from the Business Expenditure on Research and Development (BERD) survey conducted by Forfás using the OECD Frastcati Manual definitions and guidelines. The survey covers 16 sectors: Software/Computer related, Electrical/Electronic equipment, Pharmaceuticals, Instruments, Food/Drink & Tobacco, Machinery & Equipment, Chemicals, Rubber & Plastics, Non-Metallic Minerals, Basic & Fabricated Metals, Wood Products, Transport, Textiles/Clothing & Leather, Other Manufacturing, Paper/Print & Publishing and Uncategorised.

In the Republic of Ireland, Research and Development (R&D) is defined as creative work undertaken on a systematic basis in order to create new or improved products, processes, services or other applications. R&D is distinguishable from other activities by the presence of an appreciable element of novelty and by the resolution of problems and uncertainties using scientific or technological means. Routine activities, such as routine software development, routine monitoring/analysis or pre-production preparation, where there is no appreciable novelty or problem resolution, are not considered to be R&D.

Table 6.8

Northern Ireland figures are sourced from the Northern Ireland Annual Business Inquiry (NIABI), Department of Enterprise Trade and Investment.

They have been obtained by combining answers to two questions on whether businesses use the internet, EDI or any other electronic network (excluding E-mail) to place orders or receive orders for goods or services. In order to maintain some comparability with the ROI, figures for the Manufacturing sector relate to businesses with 10 or more employees and for the Construction sector relate to businesses with 20 or more employees.

Figures for Services industries are not included, due in differences in coverage for the two respective sources.

Data for 2000-2002 are on SIC 1992 basis, data for 2003 and after are on SIC 2003 basis. In 2001 coverage was increased to include Group 01.4 (Agricultural and animal husbandry service activities, except veterinary activities) and Group 01.5 (Hunting, trapping and game propagation including related service activities). 02 (forestry, logging and related service activities) and 05 (fishing) are also included. The data excludes local authority and central government bodies in 8511/2, 8511/3, 8514, 8520, 8531/2 and 8532/2, as well as Public Sector Hospitals in NHS trusts (8511/1), medical and dental practices (8512 and 8513) and Charitable Social activities (8531/1 and 8532/1).

Republic of Ireland figures are taken from the e-Commerce Enterprise Survey. The survey covers manufacturing industry (NACE 15-17), building and construction (NACE 45), retail and wholesale (NACE 50-52), hotels and restaurants (NACE 55), transport, storage and communication (NACE 60-64), real

estate, renting and business services (NACE 70-74) and other selected traded services activity (NACE 92-93). This survey is restricted to enterprises with 10 or more employees for the manufacturing and services sectors and 20 or more for the Building and Construction sectors.

Tables 6.10 (a) and (b)

Northern Ireland figures for the value of exports of goods as a percentage of headline regional GVA are produced by The Department for Business Enterprise & Regulatory Reform (BERR) in the Regional Competitiveness and State of the Regions Report. Data has been sourced from the July 2006 publication. UK figures include trade and GVA that cannot be allocated to regions. The headline regional GVA series has been calculated using a five-point moving average. Estimates of workplace based GVA allocate income to the region in which commuters work. 2004 regional GVA estimates adjusted for 2004/05 change in UK GVA at basic prices is used.

Republic of Ireland figures are taken from the 'Monthly Trade Statistics Book' which covers exports of goods and services by industrial origin which separately identifies industrial exports.

The import content of manufactured products varies and this may partly explain the large differences in the proportion of exports to GVA shown in the table for the Republic of Ireland and Northern Ireland. The larger the import content of the products exported, the higher the proportions in this table.

Table 6.11

The UK definition of innovation activity was based on whether enterprises were engaged in any of the following:

- 1 Introduction of new or significantly improved products (goods and/or services) or processes;
- 2 Innovation projects not yet complete or abandoned; or
- 3 Expenditure in areas such as internal research & development, training, acquisition of external knowledge or machinery and equipment linked to innovation activities.

Republic of Ireland figures are taken from the Forfás Community Innovation Survey (CIS) which measures both product and process innovation. The survey covers the following sectors: NACE 10-14 (Mining and Quarrying); NACE 15-37 (Manufacturing); NACE 40-41 (Electricity, Gas and Water); NACE 51 (Wholesale Trade); NACE 60-64 (Transport, Storage and Communication); NACE 65-67 (Financial Services); NACE 72 (Software Consultancy and Supply); NACE 74.2 (Engineering and Technical Consultancy) and NACE 74.3 (Technical Testing and Analysis). The survey only covers those enterprises with 10 or more employees.