2 Economic Context

2.1 Introduction

This chapter 'sets the scene' by providing broad commentary on the wider economic context in terms of recent all-island economic and demographic performance, current domestic and global challenges and the longer-term economic outlook. Specifically, the chapter covers the following:

- North-South and all-island demographic trends with international comparisons of total and working-age population growth and components of population change;
- North-South, all-island and international comparisons of recent and forecast economic growth and productivity (in terms of GDP per capita); and
- North-South, all-island and international comparisons for FDI, enterprise and innovation.

2.2 All-Island Facts

Over the course of the previous decade, both economies, North and South have performed strongly, particularly the South, and in doing so, have made impressive progress in many spheres including job creation and attracting FDI. Indeed, although both economies are in the midst of a slowdown – due to domestic and external economic factors – the medium-term outlook remains positive with continued economic transformation and movement 'up the value chain' suggesting sustained demand for high-end skills.

The analysis presented in this chapter highlights a range of key all-island facts:

- population on the Island has increased from 5.3m to 6.0m over the past decade (fuelled by net inward migration) and is forecast to reach 6.6m in 2016. Both North and South have become net inward migration economies in recent years;
- All-Island economic growth rates have ranged from 9 per cent during the 'Celtic Tiger' years to current real growth of 5-6 per cent (2007) as both economies enjoyed a long period of sustained economic growth;
- the size of the all-island economy, at \$280bn in nominal terms (2006), is similar to Denmark and larger than Finland. The South contributes 80 per cent to all-island GDP;
- All-Island economic growth is forecast to be below trend growth in 2008 and 2009 although it is expected to recover thereafter. Over the next decade, the all-island economy is expected to grow at approximately 3.0 per cent per annum. While this is lower than in the recent past, it is still one percentage point faster than forecast for the Eurozone economy. The gap in North-South growth rates is forecast to be lower over the next decade; and

■ productivity measured as GDP per head on the Island compares favourably with international comparators, well ahead of both the Eurozone and UK averages, at €37,000 per head (2006). Though there is a large North-South productivity gap. Purchasing power parity and net factor income adjustments would reduce the size of the gap.

2.3 Wider Economic Context

2.3.1 All-Island Recent Economic Performance

As shown later in the chapter, the all-island economy has been performing exceptionally well over the last decade, growing at an average rate of over 7 per cent (real market price GDP). This places the all-island economy well ahead of other industrialised economies such as the US, Australia, Germany and UK in rankings of economic growth. Only China of the comparators included has grown faster. Growth has been predominantly southern-led, not only in terms of the economy in the South being four times larger than the NI economy, but by the rate of economic growth in the South being double the rate of NI during the so-called 'Celtic tiger' years. Economic growth in the South has however slowed since the turn of the century with the gap in North-South economic growth rates declining.

2.3.2 Current Global and All-Island Economic Challenges

At global level and for the all-island economy there have been two key, but distinct macro developments which are the main sources of current economic difficulties. Firstly the credit crunch has led to a re-pricing of risk and reduction in available financing to businesses, home borrowers and consumers, which has had a knock on impact to the already fragile housing markets. This has hit the economy in the South particularly hard given the relatively large size of its construction sector and dependence on US economic performance where the credit crunch originated. Secondly continued rapid economic growth in 'commodity hungry' emerging economies such as China and India is pushing up world commodity prices, particularly oil. This is putting upward pressure on production costs and inflation, thereby reducing corporate profits and increasing the cost of living for households (with wage increases not sufficient to offset rising living costs).

These developments, along with challenges closer to home, are contributing to the current slowdown which is having a short-term impact on the scale and nature of skill demand.

2.3.3 All-Island Long-term Economic Outlook

A look further into the decade ahead by the ESRI however suggests that the economy in the South should recover quite quickly and return to growth rates above the EU average. The *Medium-Term Review 2008-2015* noted that the economy will rebound from the current below trend growth within 18 to 24 months and predicts growth of 5 per cent by 2010.



Moreover, the ESRI has forecast that the economy is heading towards a real economic growth rate averaging 3.75 per cent annually over the next decade. Therefore notwithstanding potential short-term falls in demand for a range of skills, the broad long-term forecast for skills demand, towards higher end skills, is likely to remain unchanged.

The prospects for Northern Ireland are not dissimilar and the extent of the short-term downturn is not expected to be as sharp, although some commentators are expecting a harder 'landing' than presented in this report. The medium-term NI growth forecast is predicted to be above the EU average and closer to long-term trends.

It is important to note that most long-term growth forecasts which show a rebound assume a fall in world oil prices, easing of inflationary pressures and easing of credit conditions. Needless to say if these improvements do not materialise, the global outlook could be quite different. In addition there is a risk that recent events could have longer-term impacts on FDI, for example in graduate 'hungry' hi-tech manufacturing and international financial services. If inward investment in these sectors was to take longer to recover, the all-island upward skills profile gradient of new employment growth may be less pronounced.

Key Demographic and Economic Trends and Forecasts 2.4

In order to set the context within which the demand for skills will be assessed later in this report, the remainder of this chapter provides an overview of recent economic performance for key macroeconomic indicators including population, output, entrepreneurship, innovation and FDI.

2.4.1 Population

The figures below show recent and expected future trends in population (based on assumptions of natural change and migration²). The trend over the past decade is one of consistent growth across the Island with population rising from 5.3m to 6.0m (Figure 2.1). Growth has been stronger in the South where population has grown by 1.6 per cent per annum on average compared to 0.5 per cent per annum in NI. Much of the growth in the South has occurred since the beginning of this decade, driven by sharp increases in migration – a factor that has only become a more significant driver of population growth in the North during the past two years.

The all-island population is expected to continue growing over the coming decade, reaching 6.6m by 2016 (Figure 2.1). Interestingly, growth in NI over the next decade is expected to be slightly faster (0.6 per cent pa) than in the previous decade while growth in the South is expected to be slightly slower (1.2 per cent pa, Table 2.1). Much of this growth will however depend on migration, which in turn depends on relative economic conditions. (Note Oxford Economics' population projections presented below in Figures 2.1-2.3 compare closely to official North-South projections from NISRA and CSO. For example, the Oxford Economics baseline projections for the South fall between the high and low fertility-migration scenario CSO projections, while the official NI population projections are only slightly higher due to assumed higher net migration).

2

Population forecasts presented are Oxford Economics forecasts and not official projections from CSO and NISBA. This is to ensure a consistent approach throughout as almost all other economic forecasts presented are sourced from Oxford Economics and population is one of the key driving factors for economic growth.

All-Island population growth is even more significant when placed in an international context. As Figure 2.4 shows, the Island taken as a whole grew faster than all other comparators, and three times faster than the Eurozone in per cent growth terms.



Figure 2.1: All-Island population trends and forecasts (absolute numbers)

Source: CSO, NISRA and Oxford Economics.







Source: CSO, NISRA and Oxford Economics.



Figure 2.3: All-Island population trends and forecasts (share of All-Island total)

Source: CSO, NISRA and Oxford Economics.



Figure 2.4: International comparison of recent population trends

Source: CSO, NISRA and Haver Analytics.

	1996-2006	2006-2016	Change pp
Australia	1.2%	1.0%	-0.2
Canada	1.0%	0.9%	-0.1
China	0.8%	0.6%	-0.2
Denmark	0.3%	0.2%	-0.2
Eurozone	0.4%	0.2%	-0.2
Finland	0.2%	0.2%	0.0
France	0.6%	0.4%	-0.2
Germany	0.1%	0.0%	-0.1
Italy	0.3%	0.0%	-0.2
Japan	0.2%	-0.1%	-0.3
UK	0.4%	0.7%	0.3
US	1.0%	0.9%	-0.2
Ireland	1.6%	1.2%	-0.4
Northern Ireland	0.5%	0.6%	0.1
All-Island	1.2%	1.0%	-0.2

Table 2.1: International cor	nparison of recent	population	trends and	forecasts

Source: CSO, NISRA, Haver Analytics and Oxford Economics.



2.4.2 Migration

Recent trends in migration have been a strong driver of population growth and have helped to alleviate skills shortages in key sectors, North and South. In addition, a recent report by the OECD noted that migrants to Ireland have tended to have higher qualifications than those already resident, thus raising the overall skills profile of the Island.

Net migration into the Island was 82,000 in 2006 (Figure 2.5), equivalent to 1.4 per cent of the all-island population (Figure 2.6). Net migration has been considerably higher in the recent past due to the accession of Eastern European counties into the EU and lower levels of emigration. This marks a significant turnaround from the early 1990s and before when the Island suffered net emigration of skills due to limited domestic job opportunities and the Troubles in the North.





Source: CSO and NISRA.

Note: At all-island level, North-South migration flows are effectively netted off by summing data of both jurisdictions. For example, an outflow from Ireland to NI (-ve) is recorded as a positive inflow in NI and both should in theory be equal as they are jointly based on the same CSO/NISRA source.



Figure 2.6: All-Island net migration trends (per cent of total population)

Source: CSO and NISRA.

Table 2.2: International comparison of recent net migration trends (annual average2001-2005 inclusive)

	Net migration (000's)	Net migration % total population
Australia	119	0.6%
Canada	208	0.7%
China	-380	0.0%
Denmark	8	0.1%
Finland	7	0.1%
France	148	0.2%
Germany	160	0.2%
Italy	377	0.7%
Japan	54	0.0%
UK	181	0.3%
US	1,299	0.4%
Ireland	38	1.0%
Northern Ireland	1	0.1%
All-Island	39	0.7%

Source: CSO, NISRA, Eurostat, World Bank and Oxford Economics.

	Net migration (000's)	Net migration % total population
Australia	159	0.8%
Canada	197	0.6%
Denmark	7	0.1%
Finland	11	0.2%
France	90	0.1%
Germany	24	0.0%
Italy	377	0.6%
Japan	0	0.0%
UK	178	0.3%
US	1,090	0.4%
Ireland	72	1.7%
Northern Ireland	10	0.6%
All-Island	82	1.4%

Table 2.3: International comparison of recent net migration trends (2006)

Source: CSO, NISRA, Eurostat, World Bank and Oxford Economics.

International comparisons of net migration are more meaningful when presented as a proportion of a country's total population. Net migration into the Island has been considerable in an international context (Table 2.3). Averaging 0.7 per cent of total population per annum for the five years to 2005, the Island is on a par with Canada and Italy and half a percentage point higher than the UK, Germany and France. The low share for NI brings down the overall all-island share. Looking at the latest year's data available (2006) across all comparators, none come close to the level of relative net migration into the Island.

2.4.3 Natural Increase

Birth rates have been reasonably steady over the last decade on the Island, at approximately 14 births per annum per 1,000 residents (Figure 2.7). There is a slight difference in birth rates for the North and the South with the South recording 2 more births per 1,000 people on average. Turning to death rates, these have been falling steadily since 1999 and are currently 7 per 1,000 people per annum across the Island (Figure 2.8).



Figure 2.7: All-Island birth rate trends

Source: CSO and NISRA.





Figure 2.8: All-Island death rate trends

Source: CSO and NISRA.



Figure 2.9: All-Island rate of natural increase trends

Source: CSO and NISRA.

	1996	2006	Change
Australia	13.9	12.9	-1.0
Canada	12.0	10.7	-1.3
China	17.0	11.9	-5.1
Denmark	12.9	12.0	-0.9
Finland	11.9	11.2	-0.6
France	12.6	12.8	0.2
Germany	9.9	8.2	-1.7
Italy	9.2	9.7	0.5
Japan	9.6	8.7	-0.9
UK	12.5	12.2	-0.3
US	14.8	14.1	-0.7
Ireland	14.0	15.2	1.2
Northern Ireland	14.7	13.4	-1.3
All-Island	14.2	14.6	0.4

Table 2.4: International comparison of recent birth rate trends (per 1,000 of total population)

Source: CSO, NISRA, World Bank and Oxford Economics.

	1996	2006	Change
Australia	7.0	6.5	-0.5
Canada	7.3	7.2	-0.1
China	6.6	6.5	-0.1
Denmark	11.6	10.2	-1.4
Finland	9.6	9.2	-0.4
France	9.2	8.5	-0.7
Germany	10.8	10.2	-0.6
Italy	9.5	9.3	-0.2
Japan	7.1	8.6	1.5
UK	10.9	9.7	-1.2
US	8.8	8.3	-0.5
Ireland	8.7	6.5	-2.3
Northern Ireland	9.2	8.3	-0.8
All-Island	8.9	7.0	-1.9

Table 2.5: International comparison of recent death rate trends (per 1,000 of total population)

Source: CSO, NISRA, World Bank and Oxford Economics.

	1996	2006	Change
Australia	6.9	6.4	-0.5
Canada	4.7	3.5	-1.2
China	10.4	5.4	-5.0
Denmark	1.3	1.8	0.5
Finland	2.3	2.1	-0.2
France	3.4	4.3	0.9
Germany	-0.9	-2.0	-1.1
Italy	-0.3	0.4	0.7
Japan	2.5	0.1	-2.4
UK	1.6	2.5	0.9
US	6.0	5.9	-0.1
Ireland	5.2	8.7	3.4
Northern Ireland	5.5	5.0	-0.5
All-Island	5.3	7.6	2.3

Table 2.6: International comparison of recent rate of natural increase trends (per 1,000 of total population)

Source: CSO, NISRA, World Bank and Oxford Economics.

Birth rates on the Island are high relative to the international comparator regions (Table 2.4). In addition, the Island has not experienced the downward trend in birth rates that has been recorded across most other international comparator countries. (Note however that birth rates had been falling in NI up until 2002.)

2.4.4 Age Structure

Working-age population on the Island has been increasing as a share of the total population (Figure 2.11), due mainly to the recent increases in migration (as migrants are, in the main, of working-age), and the young population age cohort progresses to working age. Working-age persons account for two-thirds of the all-island total population. There is however some difference between North and South with NI's working-age population accounting for 66 per cent of total population compared to 69 per cent in the South. This is based on the Eurostat definition of working-age population for both jurisdictions – male and female 15-64. The standard working-age definition for NI is typically male 16-64 and female 16-59 – for purposes of comparability the Eurostat definition is also used for NI.



Figure 2.10: All-Island working-age population trends

Source: CSO and NISRA.

Note: For North-South comparability, working-age definition for both jurisdictions is based on Eurostat definition – male and female 15-64. Northern Ireland working-age definition is typically male 16-64 and female 16-59.





Figure 2.11: All-Island working-age population trends (North-South share of total population)

Source: CSO and NISRA.

	0-24	25-44	45+
Australia	33%	29%	38%
Canada	31%	29%	39%
China	38%	34%	28%
Denmark	30%	28%	42%
Finland	30%	26%	44%
France	31%	28%	41%
Germany	26%	29%	45%
Italy	24%	31%	45%
Japan	25%	28%	47%
UK	31%	28%	41%
US	35%	28%	37%
Ireland	36%	31%	33%
Northern Ireland	35%	28%	37%
All-Island	36%	30%	34%

Table 2.7: International comparison of age structure (2005)

Source: CSO, NISRA and UN.

Note: 2006 data from the UN are not available for more recent comparison.

For all international comparator countries, with the exception of China, the proportion of people aged over 45 years is higher than for the Island economy (Table 2.7). The Island has one of the highest proportions of population aged 0-24, behind only China. This has important implications for the scale of replacement demand needs whereby workers retiring (and the skills they leave with) need to be replaced.

2.4.5 Output and Productivity

GDP³ on the Island, in nominal terms, was US\$279bn in 2006 with the southern economy considerably larger than the North's. Based on GDP and measured in common currency terms, the South's economy accounts for 80 per cent of total all-island GDP (Figure 2.14). Note gross national product (GNP) in the South which adjusts for net factor income from the rest of the world, is approximately 15 per cent less than GDP. This partly reflects the large outflow of expatriated profits from foreign-owned businesses located in the South. It is not possible to calculate GNP for NI as it does not have its own separate balance of payment accounts.

GDP has been growing across the Island for the last decade, although as Figure 2.13 shows, this growth has been at a declining rate. Growth on the Island has ranged from around 9 per cent in the mid to late 1990s to current levels of approximately 5 per cent. This growth has been predominantly led by growth in the South, with growth in the North peaking at around 4 per cent in the late 1990s compared to average recent growth in the South of over 6 per cent.



Figure 2.12: All-Island nominal GDP at market prices (€ billion)

Source: CSO, ONS Regional Accounts and Oxford Economics.

³ Estimates of GDP at market prices for NI are calculated by following Eurostat s approach of using population shares to pro rata the value of national indirect taxes minus subsidies across the 12 UK regions.







Source: CSO, ONS Regional Accounts and Oxford Economics.

Note: Economic growth rates are annual growth in constant market price GDP (Ireland) and constant basic price GVA (Northern Ireland) in home currency. All-Island growth is a weighted average of Ireland and NI growth. NI constant price series calculated by Oxford Economics using UK industry deflators. Forecasts are from Oxford Economics.



Figure 2.14: All-Island nominal GDP at market prices (North-South share of All-Island total)

Source: CSO, ONS Regional Accounts and Oxford Economics.

The Island economy is roughly equal in size to Denmark's economy and slightly larger than Finland's (Figure 2.15). Average growth rates between 1996 and 2006 were second only to China, reiterating the success of the all-island economy (Figure 2.16). Annual GDP growth in the South over the past decade was however more than twice the rate of growth in Northern Ireland (Table 2.8). Growth is expected to be lower in the coming decade with challenging economic conditions ahead in 2008 and 2009. In addition, growth across the Island is expected to be much more comparable over the decade ahead at between 2.7-3.0 per cent on average per annum.





Figure 2.15: International comparison of economic size (\$, nominal)



Figure 2.16: International comparison of recent economic growth rates (real, annual average 1996-2006)

Source: CSO, ONS Regional Accounts, Haver Analytics and Oxford Economics.

Source: CSO, ONS Regional Accounts, Oxford Economics and Haver Analytics.

	1996-2006	2006-2016	Change pp
Australia	3.5%	3.5%	0.0
Canada	3.5%	2.7%	-0.8
China	9.3%	9.2%	-0.1
Denmark	2.2%	2.0%	-0.2
Eurozone	2.2%	1.9%	-0.3
Finland	3.8%	2.7%	-1.1
France	2.3%	1.9%	-0.4
Germany	1.5%	1.6%	0.2
Italy	1.5%	1.1%	-0.3
Japan	1.1%	1.9%	0.8
UK	2.8%	2.6%	-0.3
US	3.1%	2.6%	-0.5
Ireland	7.3%	3.0%	-4.4
Northern Ireland	3.0%	2.7%	-0.3
All-Island	6.3%	2.9%	-3.4
Ireland GNP (ESRI)	-	4.0%	-

Table 2.8: International comparison of recent economic growth rates and forecasts

Source: CSO, ONS Regional Accounts, Oxford Economics and Haver Analytics.

Note: Economic growth rates are annual growth in constant market price GDP per head except for NI (constant basic price GVA per head) and in home currency. Forecasts from Oxford Economics. ESRI 10-year forecast calculated as an average of 2005-2010 and 2010-2015 forecasts presented in the May 2008 MTR.

Turning now to productivity in Figures 2.17-2.18, there are North-South differences in productivity growth rates and levels. GDP per head has been on a strong upward path over the past decade in the South, with real productivity growth averaging over 5 per cent per annum (Figure 2.19). This is twice the rate of NI, whose rate of productivity growth is more comparable to the UK and Canada. The strong growth in the South means that GDP per head for the all-island economy is only behind Denmark of the international comparator countries at close to \leq 40,000 (Figure 2.18). The difference in GDP per head between the North and South is approximately \leq 15,000 in 2006. Note this difference in common currency terms is dependent on the prevailing exchange rate at the time and would be lower if PPP and net factor income adjustments were made.





Figure 2.17: All-Island trends in GDP per head

Source: CSO, ONS Regional Accounts, NISRA and Oxford Economics.



Figure 2.18: International comparison of nominal GDP per head

Source: CSO, ONS Regional Accounts, NISRA, Oxford Economics and Haver Analytics.



Figure 2.19: International comparison of recent real GDP per head growth

Source: CSO, ONS Regional Accounts, NISRA, Oxford Economics and Haver Analytics.

Note: Growth rates are annual growth in constant market price GDP per head except for NI (constant basic price GVA per head) and in home currency.

	1996-2006	2006-2016	Change pp
Australia	2.4%	2.5%	0.2
Canada	2.5%	1.8%	-0.6
China	8.4%	8.6%	0.2
Denmark	1.8%	1.8%	0.0
Eurozone	1.8%	1.7%	-0.1
Finland	3.5%	2.5%	-1.0
France	1.8%	1.5%	-0.3
Germany	1.4%	1.6%	0.2
Italy	1.2%	1.1%	-0.1
Japan	0.9%	2.1%	1.1
UK	2.4%	1.9%	-0.5
US	2.1%	1.8%	-0.3
Ireland	5.7%	1.7%	-3.9
Northern Ireland	2.5%	2.1%	-0.4
All-Island	5.3%	1.8%	-3.6
Ireland GNP (ESRI)	-	2.5%	-

Table 2.9: International comparison of recent real GDP per head growth and forecasts

Source: CSO, ONS Regional Accounts, NISRA, Oxford Economics and Haver Analytics.

Note: Growth rates are annual growth in constant market price GDP per head except for NI (constant basic price GVA per head) and in home currency. Forecasts from Oxford Economics. ESRI 10-year forecast calculated as an average of 2005-2010 and 2010-2015 forecasts presented in the May 2008 MTR.

With its improving skills base, rate of corporation tax and infrastructure offering, the South has attracted high levels of FDI over the past decade. Relative to the choice of international comparators and measured as a share of GDP, Ireland has attracted the highest level of FDI with only Denmark coming close in relative terms (Table 2,10). This FDI has tended to be in high value added sectors such as pharmaceuticals, software and international financial services, which has contributed significantly to the South's productivity growth and increased demand for high level qualifications.

No comparable FDI data exists for NI as it does not have its own set of balance of payment accounts. Though for context only and bearing in mind that this figure cannot be compared to the annual average of US\$9bn below for Ireland, Invest NI's 2005/06 Annual Report highlights that "sponsors of the 14 new foreign direct investment (FDI) projects secured will invest nearly £155 million in the local economy". This suggests that FDI into NI is significantly below levels in the South.

	FDI inflows (US\$bn annual average, 1997-2006 inclusive)	FDI inflows % market price GDP in US\$ (2006)
Australia	9	1.2%
Canada	28	2.2%
China	53	2.0%
Denmark	9	3.3%
Finland	5	2.6%
France	48	2.1%
Germany	47	1.6%
Italy	15	0.8%
Japan	5	0.1%
UK	80	3.3%
US	157	1.2%
Ireland	9	3.9%
Northern Ireland	na	na
All-Island	na	na

Table 2.10: International comparison of FDI inflows

Source: UNCTAD, CSO and Haver Analytic.



2.4.6 Enterprise and Innovation

The Global Entrepreneurship Monitor (GEM) 2006 recognises the South as one of the most entrepreneurial countries in the EU but indicates that entrepreneurial activity is lower than world leaders such as the US. The GEM research also indicates a lower level of entrepreneurial activity in NI (Figure 2.20).

This suggested high level of entrepreneurial activity in Ireland is borne out by the large increase in VAT registered businesses in the South over the last decade (Figure 2.21) and the fact that registrations per annum are the equivalent of just over 10 per cent of total businesses (Figure 2.22). Note North-South VAT business registration data cannot be directly compared due to differences in VAT thresholds.



Figure 2.20: International comparison of early stage entrepreneurial activity

Note: All-Island total early stage entrepreneurial activity rate calculated as the weighted average of Ireland and NI rates using adult population shares.

Source: Global Enterprise Monitor (GEM).



Figure 2.21: All-Island VAT registered business stock

Source: Irish Revenue Commissioners, BERR, CSO, NISRA and, Oxford Economics.

Note: See Annex A which explains why North-South VAT registration data are not directly comparable due to differences in VAT thresholds.



Figure 2.22: All-Island VAT Registrations and De-Registrations as a percentage of total VAT registered business

Source: Irish Revenue Commissioners and BERR.

Note: See note for Figure 2.21.

Innovation is a vital ingredient in raising the productivity, competitiveness and growth potential of modern economies. Figure 2.23 and Table 2.11 present innovative activity in the South and North and place it in an international context.

The proportion of firms with innovative activities gives a measure of firms' propensity to engage in innovation activity and includes innovative initiatives that were incomplete or abandoned. The proportion of firms that are innovative active is marginally higher in NI than in the South (Figure 2.23).

Product and process innovators are firms that introduced significantly improved or new processes. The statistics show that the proportion of 'product and process innovator' firms is significantly higher in the South. In an international context, the South compares favourably, only lagging behind Germany in the three indicators while Northern Ireland is broadly comparable with the UK, France and Italy.

Source: Forfás 4th CIS and DETI Innovation Survey 2005.

	% enterprises with innovation activities	% enterprises with product innovations	% enterprises with process innovations
Denmark	44%	37%	26%
Finland	45%	35%	24%
France	41%	29%	21%
Germany	61%	42%	34%
Italy	36%	25%	26%
UK	36%	21%	17%
Ireland (2002-2004)	52%	38%	43%
Northern Ireland (2002-2004)	56%	21%	19%

Table 2.11: International comparison of innovation (1998-2000 unless stated)⁴

Source: Forfás 4th CIS, DETI Innovation Survey 2005 and DTI.

2.5 Summary

The key points to note on the all-island economy from this chapter can be summarised as:

- The global (and indeed all-island) economy is working its way through uncertain times with below trend growth (and possible recession) in 2008 and 2009. The medium term picture does however suggest a reasonably early return to robust growth though most economic forecasters are not predicting a return to 'tiger' rates in the South. The gap in North-South economic growth rates is forecast to be considerably less in the decade ahead.
- Population on the Island has increased from 5.3m to 6.0m over the past decade. This growth of 1.2 per cent per annum was three times faster than population growth in the Eurozone. Both North and South became net inward migration economies in recent years. Population is expected to continue growing over the next decade.
- The all-island economy has been growing strongly over the last decade, with economic growth rates ranging from 9 per cent during the 'Celtic tiger' years to current real growth of 5-6 per cent (2007). Growth over the next decade is expected to be lower than in the recent past at around 3.0 per cent per annum. While this is less than half the average annual growth of recent years, it is still one percentage point faster than forecast for the Eurozone economy.
- Productivity (GDP per head) on the Island compares favourably with international comparators, well ahead of both the Eurozone and UK averages at close to €40,000 per head. There is however a large North-South productivity gap.

⁴ Caveat: Survey response rates to the various innovation surveys across EU countries varied considerably. Results are based on responses from a sample of firms – the sample is chosen to be representative of the population as a whole, but there is still an element of uncertainty attached to the estimates not accounted for in the presentation. As a result, it is likely that perceived small differences in results between countries are not statistically significant. There are also some methodological differences across countries. Not all countries use an official business register to draw their sample and different methods are applied to treat missing values. Figures are weighted to be representative of the population of firms from which they were selected. Each firm's response is given an equal weight, and hence overall figures will be heavily influenced by SME responses.

Based on available evidence, the South has attracted significantly more FDI and according to the information presented, the South has higher levels of entrepreneurial activity and product and process innovation.

The analysis has also highlighted some key similarities and differences between the North and South economies. These are presented in the box below.

North-South similarities/differences in demography, economic growth, productivity, enterprise and innovation

North-South similarities	North-South differences
 Both have become net inward migration economies. 	 Population growth was one percentage point faster per annum in the South in the last decade.
Up until recently, both NI and the South enjoyed a long period of sustained unbroken	The South has a higher working-age population share.
 Population growth across both jurisdictions expected to continue. 	 Annual GDP growth in the South over the past decade was more than twice the rate of growth in Northern Ireland.
 Forecast GDP/GVA growth over the next decade is expected to be more similar in both jurisdictions at 3.0 per cent per annum in the South and 2.7 per cent in NI compared to the last decade. 	 Productivity (GDP per head) has recorded notably stronger growth in the South and having been at a similar level in the mid-1990s, productivity in the South is now 60 per cent higher than in NI (this however does not adjust for expatriated profits or differences in purchasing power which otherwise would be important adjustments). Entrepreneurship levels in the South are more than twice the rate in the North according to the
	 GEM survey. Based on available evidence, the South has attracted significantly more FDI and has higher levels of product and process innovation.