

Annual Competitiveness Report 2006

Volume 2:

Ireland's Competitiveness Challenge



National
Competitiveness
Council



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Foreword by An Taoiseach



The continued strong performance of the Irish economy over the past year has been outstanding. We are still maintaining an enviable fiscal position, virtually full employment, and rising living standards. Ireland's international competitiveness has played a crucial role in building this success and remains of underlying importance. Competitiveness will be enhanced by well-designed social policies and services, making Ireland an attractive place in which to live and supporting higher participation in employment. Economic and social progress are inherently interlinked, and associated policies should complement and reinforce each other.

In order to maintain and enhance competitiveness in the context of a higher cost economy, a greater focus on the conditions necessary to support sustainable productivity growth is essential. Only through maintaining and renewing our strong enterprise base can we continue to enjoy real improvements in living standards and quality of life. We need to continue managing our public finances responsibly, and ensuring adequate investment in those areas which will strengthen our capacity for long term growth. Significant further advances will be made under the upcoming National Development Plan (2007-2013).

Of course a focus on sustainable productivity growth also demands attention to the adjustments associated with embracing progressively higher value economic activities, and to the supporting policies and arrangements that are necessary to this end. The level of economic and social progress that we have experienced since 1987 has been possible only through the proactive engagement of key stakeholders in society, including the crucial role of employers and employees in creating a labour market that is sufficiently flexible and responsive to change. This approach can continue to serve us well into the future, as we deepen our commitment to developing human talent and creativity, embracing further technological change and performance improvements in the workplace. One of the clearer lessons of our recent history is the value of a shared assessment of changing challenges and opportunities, supported by a constructive, participatory and problem-solving approach to managing change.

The National Competitiveness Council provides valuable advice to the Government on issues related to competitiveness, and is well positioned to contribute to our understanding of a rapidly changing global environment. I would like on behalf of my colleagues in Government to thank the Council for its important work. I am pleased to introduce Ireland's *Competitiveness Challenge*, 2006.

A handwritten signature in black ink, which appears to read 'Bertie Ahern'. The signature is fluid and cursive.

Bertie Ahern, T.D.
Taoiseach

Chairman's Preface



The competitiveness challenges facing the Irish economy arise primarily from our success. The rapid growth of the Irish economy has raised our living standards to a point where they have now converged with the EU-15 average, a position that was beyond the expectations of many people as recently as the early 1990s. Unemployment has virtually been eliminated. Internationally, Ireland is regarded as one of the world's most notable economic success stories. We now have access to the resources needed to strengthen the foundations for sustaining economic and social progress. Improving our competitiveness is essential to further prosperity. In turn, higher productivity is critical to achieving this objective.

Benchmarking Ireland's Performance notes that Ireland's economic performance remains strong.¹ The underlying source of this growth has shifted from exports towards construction activity and consumer demand and our current account with the rest of the world has gone into deficit. In a small regional economy like Ireland, economic prosperity ultimately depends on our ability to sell goods and services abroad. Worryingly, our productivity growth rates, which were among the highest in the OECD, have slowed, while growth in domestic demand is being financed by high levels of personal borrowing.

The NCC believes that the crucial challenge facing Ireland is to now put policies in place that will develop the conditions necessary to stimulate productivity growth and regain international market share in the coming years. This central policy objective extends beyond the workplace. Social and infrastructural policies are also important. Improving the quality, effectiveness and ease of access to services in areas such as education, health, childcare and transport are important productivity strategies.

In *Ireland's Competitiveness Challenge*, the NCC calls for policy action in ten key areas. As a priority, the Council recommends policy actions in the following three areas:

- Cost competitiveness remains critical to the Irish economy. In recent years, we have lost international price competitiveness because of domestic price inflation and exchange rate movements. Coordinated actions to restore Ireland's cost competitiveness are critical across a range of policy areas including fiscal policy, infrastructure and land use planning. The development of truly pro-competitive market places and regulations in utilities and other domestically trading sectors is vital. We are recommending that the Government require formal and published responses within a set time period from Government Departments to Competition Authority recommendations for the removal of restrictions to competition.
- The development of a knowledge intensive workforce is a key long term source of competitive advantage. Ireland has made substantial progress in this area in recent years, with significant increases in investment and improved outcomes in education and research and development. Further steps are required to establish a pre-primary system in Ireland, to develop cross-departmental strategies to maintain our momentum in improving secondary school completion rates and to make lifelong learning a reality. This is particularly important for the 38 percent of the working age population that do not have an upper secondary school qualification. Continued reforms and additional funds are also essential if Ireland's higher education system is to rank among the best in the world in teaching, learning, research and development.

1 This is the annual benchmarking report published by the National Competitiveness Council and is available at www.competitiveness.ie.

- A competitively priced and secure supply of energy is a vital ingredient for competitiveness. Recent developments in the global oil market and in the understanding of climate change have prompted many countries to consider new strategies in energy for the 21st century. The forthcoming White Paper on Energy is an opportunity to set out policies for dealing with the structure of the energy market in a way that enhances competitiveness. We need a determined plan to reduce the growing electricity price differential between Ireland and the EU. We recommend that NDP funds be used to support national security of supply of electricity. In the longer term, climate change remains a key environmental and competitiveness concern.

In the past, Ireland proved that it had the capabilities and ambition to successfully address formidable challenges. With the resources now available to us, we can invest for the future.

I would like to thank all of the members of the National Competitiveness Council and the senior advisers from Government departments for their valuable contributions and assistance in producing this report. I would also like to thank Forfás, which provides us with first class research and secretariat support.

Don Thornhill

Chairman, National Competitiveness Council

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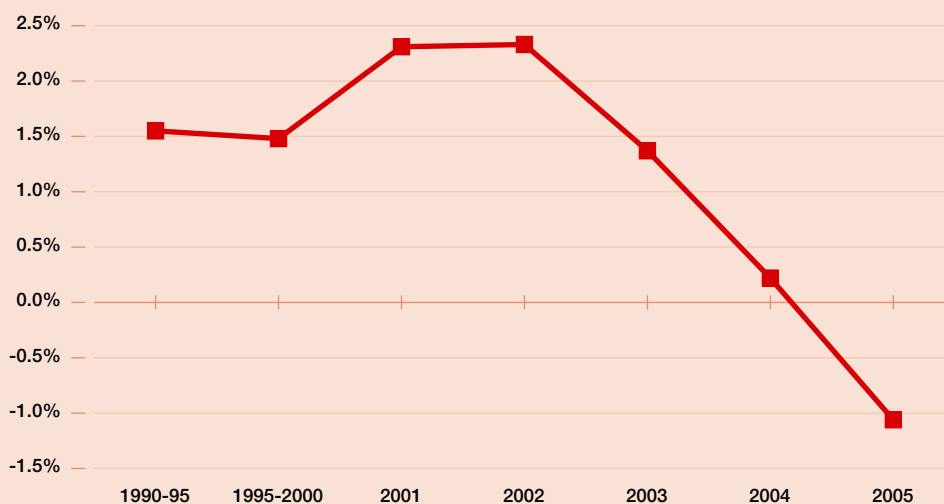
1. Introduction and Background

The Irish economy has grown exceptionally quickly during the past decade. Per capita incomes in Ireland have now converged with the EU-15 and OECD averages. This performance, together with the near elimination of unemployment and related improvements in quality of life, have made Ireland one of the world's most celebrated economic success stories of recent years. Economic success has provided unprecedented resources for increased investment in a range of areas including education and research, healthcare, infrastructure and public transport.

Between 1994 and 2001, rapid economic growth was set in motion by high levels of foreign direct investment and technology transfer. Multinational companies were attracted to Ireland by our EU membership and long term pro-enterprise policies in education, taxation, exchange rates, trade and industrial relations. Fast export growth from these companies, a growing cohort of successful indigenous exporters and an expanding tourism sector saw a rapid increase in Ireland's global market share of world trade. This FDI and export boom had a positive knock-on effect across the economy, stimulating increased household and government spending and rapid, broadly based economic growth.

The Irish economy continues to grow strongly, with GNP increasing by an estimated 6.2% in 2006.² The underlying reason for this expansion, however, has shifted from export-led growth in the late 1990s to a growth pattern that is now driven by domestic consumption and investment in property and construction (Figure 1). Ireland's market share of world trade peaked in 2003, and the current account of Ireland's balance of payments has shifted from a surplus to a significant deficit.³ Irish residents are now spending more than they earn, financed by borrowing from abroad.

Figure 1: Contribution of Growth in Net Exports to Economic Growth, 1990-2005



Source: Central Statistics Office

Strong economic growth over the past decade has strained Ireland's infrastructure and, coupled with Ireland's extraordinary success in attracting workers from abroad, has placed strong pressures on the housing and construction sectors. Given increased demand for housing and public infrastructure, higher expenditure on infrastructure and housing are to be expected, particularly as the cost of borrowing remains relatively low. However, our dependence on construction for growth and employment creates

² Quarterly Economic Commentary, Winter 2006, ERSI.

³ The current account of Ireland's balance of payments with the rest of the world has shifted from a surplus in 1999 to a deficit of €4 billion in 2005 (3 percent of GNP), and is forecast to deteriorate to €8.8 billion in 2007 (5 percent of GNP). *Quarterly Bulletin* 3, 2006, Central Bank of Ireland.

risks. Construction alone accounted for one quarter of GNP and over one third of total Irish economic growth in 2005. There is also concern that construction activity is crowding out exporting sectors, as it pushes up the costs of scarce labour, land and other inputs.⁴

As Ireland's per capita housing stock converges with the EU average (by 2010 at current growth rates), private sector residential construction will ease off. Even assuming greater public investment in infrastructure, the share of construction in total employment will over time fall back and the momentum to the economy from construction is likely to ease off. When the current construction boom runs its course, export-led growth will be key to financing our debts and allowing us to improve our living standards.

In this regard, it is critical that Ireland continues to have a base of internationally trading firms that can compete successfully on world markets and match international competition in home markets. Actions are required now to support Ireland's future international competitiveness. The sustained economic growth of the past decade puts us in an enviable position to continue to make the necessary investments to enhance our competitiveness. It is only through sustained international competitiveness that we can continue to have the required resources to achieve our national economic and social development objectives.

The global economy has also changed dramatically in recent years. Global developments have magnified the opportunities and threats facing Ireland and have reinforced the need for a process of continuous improvement in Ireland's international competitiveness. Section 2 of this report briefly examines developments in the global economy and their implications for Ireland. Section 3 outlines a range of policy areas that require attention in order to ensure that Ireland strengthens its international competitiveness.

4 *Ex ante Evaluation of the Investment Priorities for the National Development Plan 2007-2013*, ESRI, October 2006

2. Global Developments and the Challenges for Ireland

Globalisation, the movement of capital, goods and services, people and technology and ideas across national borders, is not a new phenomenon. But the scale and pace of the changes now taking place is unprecedented. Political reform, trade liberalisation and greatly improved international transportation and telecommunications are all intensifying mutual interdependence in the world economy, which now includes China and India, the world's most populous countries. Both countries have grown rapidly since the 1980s and are expected to report outstandingly high GDP growth in 2006 of 9.7 percent and 7.5 percent respectively.⁵

As a small outward oriented economy, Ireland is well placed to continue to benefit from global developments. These changes are reshaping the economic environment for all firms. They present Ireland and Irish firms with a range of competitive challenges:

- **Investment:** Many parts of China, India, South East Asia and the ten new EU member states now compete for the types of mobile manufacturing and services investments that drove Ireland's economic growth. Internal changes in many lower wage economies, including rising skill levels, greater economic and political stability and increasing openness to trade and investment, are enhancing their competitiveness.
- **Trade:** The geography of world trade is also changing. Previously, developed countries typically bought raw materials and basic goods from developing countries and turned these into higher value products. There is now a growing presence of medium to high end manufacturing and services activities in developing countries once regarded as too underdeveloped for these activities. This competition has put downward pressure on prices, particularly for manufactured goods, and has reinforced the pressures for structural change in the Irish economy.
- **Migration:** Mobility of people is increasingly becoming an integral component of the global economy, with countries and companies looking beyond their borders for personnel to improve their competitiveness. Ireland has benefited greatly from the increased mobility of skilled people. Our rate of inward migration is more than twice the EU and US averages. In addition to the significant challenge of up-skilling existing workers in Ireland, the challenge for us now is to ensure that we effectively integrate our skilled immigrants into the workforce and particularly into occupations commensurate with their skills levels. We must also ensure that our immigrants integrate into Irish society. The growth in our population, from both natural increases and immigration, also places increased pressure on public infrastructure and social services, and creates uncertainty in assessing future labour market developments.
- **Technology/Ideas:** As with production processes and other service activities, R&D can increasingly be carried out over a number of different locations, with particular activities being located where they can be performed most efficiently and where the skills and expertise reside. High costs in developed countries, the relative scarcity of science and technology skills, and the globalisation of manufacturing production are encouraging MNCs to look beyond traditional locations. China's total spending on R&D climbed from \$21 billion in 1996 to an estimated \$136 billion in 2006, and in absolute terms, is now behind only that of the USA (\$330 billion), having already overtaken Japan and the EU. Knowledge intensive activities will no longer be the preserve of developed economies. However, there are also greater opportunities for firms in Ireland to exploit ideas and technologies developed elsewhere in the world.

5 OECD Economic Outlook, No. 79, 2006

The shift from protectionism to a policy of economic openness over recent decades has provided the platform for Ireland's catch-up to European living standards. It also provides the foundation for future growth. However, the Irish economy is of course exposed to risks arising in the global economy. To date, Ireland has shared in the growth of major non-eurozone economies (in particular the US and UK), while capturing the benefits of being a member of the eurozone. While the short term prospects for the world economy remain broadly positive, there is considerable uncertainty about medium term prospects, primarily due to concerns over the size and sustainability of US trade and budget deficits. It is unlikely the global environment will be as favourable to Ireland's particular circumstances over the coming decade as it has been in the past. Key international economic risks include a slowdown in key non-eurozone economies and weaker demand, further appreciation of the euro, increasing eurozone interest rates and volatility in Irish and international house prices. High and growing Irish debt levels mean that Ireland is particularly vulnerable to the latter two threats.

Just as in other high income countries, we will have to learn to adapt to a world that is now far more competitive and inter-connected than it has ever been. Competition will be based not just around cost, but also around productivity, quality, innovation and speed to market.

In addition to far greater international competition and higher exposure to global risks, Ireland faces a range of other challenges and opportunities in the years ahead:

- **European Union:** Ireland's relationship with the EU is critical to our future competitiveness. A range of EU policies directly influence our economic and social development. Ireland's interests lie in ensuring a pro-active approach to the implementation of the Lisbon agenda, and supporting the further development of the internal EU market (e.g., implementation of the agreed services directive) and the EU itself.
- **Taxation:** Our corporation tax regime has been important in stimulating enterprise and attracting mobile foreign investment. However, competition is growing as standard corporation tax rates have been falling in both EU and non-EU countries. In addition, a number of European developments (for example, the proposal to create a common consolidated corporate tax base and recent European Court of Justice rulings on tax) have the potential to reduce autonomy on issues of tax policy over time and thus reduce our competitive advantage in this area. Ireland and a number of other EU member states continue to oppose initiatives that may result in tax harmonisation. Given growing competition and developments at an EU level, we must continue to broaden our sources of sustainable competitive advantage.
- **All-Island economy:** The development of an all-island economy represents an opportunity to enhance competitiveness and our shared standard of living. The recent *Comprehensive Study on the All-Island Economy* outlines a range of actions designed to realise mutual benefits, arising from the existence of greater economies of scale (e.g., in the energy market), the development of a larger and more competitive market for consumers, and deeper pools of knowledge and skills, particularly in border areas.
- **Energy:** A competitively priced and secure supply of energy is a vital ingredient for competitiveness. Recent developments in the global oil market and in the study of climate change have resulted in many countries contemplating a new strategy for energy for the 21st century. As a small island economy with limited indigenous energy reserves, such as hydro power, our energy consumption has grown in carbon intensity. We have exacerbated this dependence by adopting patterns of transportation, spatial development and electricity generation that are fossil fuel and carbon intensive.

3. Key Policy Areas

Sections 1 and 2 have described how Ireland has grown in recent years, through a process of export-led growth and more recently through domestic consumption and construction. They also describe how the global economy is now changing with increasing competition for trade, investment, talent and technology/ideas. Ongoing global economic transformation will bring additional opportunities and threats. Table 1 provides an assessment of our current strengths and weaknesses, based on the indicators in *Benchmarking Ireland's Performance*, Volume One of the Annual Competitiveness Report 2006.⁶

Table 1: Ireland's Strengths and Weaknesses

Strengths	Weaknesses
<ul style="list-style-type: none"> ▪ Existing base of high performing firms and a growing internationally trading services sector ▪ Business friendly operating environment ▪ Membership of the EU and the only English speaking member of Euro zone ▪ An adaptable labour force ▪ An expanding labour force, reflecting both natural demographic growth and immigration ▪ Competitive personal and corporate tax rates ▪ An international reputation for flexibility and responsiveness ▪ A culture of openness – to trade, investment, ideas and people 	<ul style="list-style-type: none"> ▪ Increasing cost base, particularly for property, utilities (energy, waste disposal, etc.) and locally traded services ▪ Weak productivity growth in locally trading, mainly services sectors ▪ Congested transport infrastructure and under-developed ICT infrastructure ▪ A small domestic market ▪ Limited management expertise in innovation and international sales and marketing ▪ Underdeveloped national scientific research system ▪ Vulnerability to global demand swings and exchange rate volatility ▪ High dependency on imported fossil fuels

Table 1 demonstrates that Ireland's economy has key strengths, enabling it to respond to the challenges and opportunities of globalisation. But serious weaknesses also exist. Therefore, the *status quo* alone will not be enough to sustain economic growth and restore export competitiveness in a changing world. The current sense of domestically generated economic buoyancy creates a risk of political and business complacency to the challenges being faced by many of our exporters and by those competing in home markets.

Ireland's political leaders, social partners and enterprise base have responded to the opportunities and challenges identified by developing, in *Towards 2016*, a shared vision for Ireland of a "dynamic, internationalised and participatory society and economy, with a strong commitment to social justice, where economic development is environmentally sustainable and internationally competitive".⁷ Ireland's international competitiveness is central to delivering this vision. Under this vision, our international competitiveness needs to be supported by a business environment and broader socio-political climate that encourages high levels of investment in enterprise, public infrastructure, skills and knowledge, and that provides the appropriate incentives and flexibility for economic actors to respond to change.

⁶ The report can be found at <http://www.competitiveness.ie>.

⁷ *Towards 2016* Partnership Agreement, [http://www.taoiseach.gov.ie/attached_files/Pdf files/Towards2016PartnershipAgreement.pdf](http://www.taoiseach.gov.ie/attached_files/Pdf%20files/Towards2016PartnershipAgreement.pdf).

To realise this vision of enhancing Ireland's competitive advantage in a changing world economy, the NCC has identified ten priority areas. They are addressed under the following headings:

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Interpretation of the Tables in Section Three:

- In interpreting the ranking for each indicator, a low ranking indicates a healthy competitiveness position, while a high ranking implies an uncompetitive position, i.e. 1st is best.
- The OECD is the preferred comparator group. However, in some cases, rankings are provided relative to the EU or to a group of countries, depending on data availability.
- Changes in rankings refer to the change in Ireland's position since 2000. (↑) refers to an improvement in Ireland's competitive position (e.g. ↑4 means an improvement of four places in Ireland's ranking), (–) to no change, (↓) to a worsening in Ireland's ranking and (new) means that time series data are not available.
- Where comparisons to output are made, GNP figures are used for Ireland.
- For more details on Ireland's performance over time and relative to other countries, see *Benchmarking Ireland's Performance*, Volume 1 of the Annual Competitiveness Report 2006, which is online at www.competitiveness.ie.

3.1 Labour Force

The growth of the Irish economy since 1994 has been supported by unprecedented growth in the Irish labour force. Natural population growth, significant increases in female participation, a reduction in unemployment and net immigration have led to an almost doubling of the labour force since 1994 to over two million people. Access to a highly skilled and adaptable labour force is a key source of continued competitive advantage.

Evidence from *Benchmarking Ireland's Performance*

Indicator	Year	Group	Ranking
Unemployment	2006	OECD:	2 (↑7)
Participation Rates	2004	OECD:	21 (↓1)
Persons of Working Age per Dependent ⁸	2004	OECD:	3 (↑6)
Stock of Foreign Labour	2004	OECD:	5 (↑5)
Life Long Learning for 25-64 yr olds	2005	EU-15:	10 (↓3)

1 = best; ↑ = improvement; ↓ = disimprovement

Evidence from *Benchmarking Ireland's Performance* illustrates that the labour force remains a key strength of the Irish economy. In particular, Ireland has become one of most open economies to foreign workers, particularly since the accession of ten new member states to the EU. The high educational status of current migrants has led to an improvement in average knowledge and skills levels in the labour force. However, their skills are being underutilised. Finally, in terms of retraining, the continued decline of manufacturing and the likely decline of employment in the construction sector as demand abates will pose considerable challenges.⁹

Policy Directions

To support the continued availability of a well qualified workforce, the NCC suggests three priority policy areas need to be addressed: participation, training and attracting skills from abroad.

- **Participation Rates:** Policies to maintain and increase participation rates in the labour force require a focus on a number of specific socio-economic groups, in particular the participation of women in the labour force. The NCC believes that further reforms of Ireland's labour tax system are required, in addition to improved facilities for childcare, more targeted re-training and more initiatives to promote work life balance. In particular, the marginal (labour) tax rates on second earners should continue to be reduced and the incentives and enabling structures for lone parents to participate in the labour force should be improved.
- **Upskilling through Training:** Policy efforts aimed at improving the quality of the labour force are essential. The NCC recommends that additional training targeted at workers with lower levels of educational attainment should be a priority and that greater use should also be made of industry-led networks to support lifelong learning. The NCC also supports the development of greater incentives for individuals to participate in and educational institutions to develop services for part time education. Increased use of ICT in distance education together with "blended learning" offers new possibilities and potential for part time education and training.¹⁰

8 A low dependency ratio makes it easier for society to support economic dependents.

9 These challenges are further exacerbated in rural areas, where agriculture is in decline.

10 "Blended learning" occurs where a mix of ICT, face-to-face tuition and peer group work are used as learning strategies.

- **Attracting Skills from Abroad:** Migrants with advanced science and engineering skills, a track record of entrepreneurial success or with company and/or country-specific knowledge can enhance competitiveness and living standards for all. As global competition for talent increases, a number of actions are needed to enable Ireland to compete for skilled migrants and to enable them (and existing migrants) to realise their potential. Firstly, efficient and effective immigration procedures are essential. The NCC welcomes the Employment Permits Act 2006 and supports the establishment of a family-friendly green card immigration system, as soon as possible. It is also important that the proposed Immigration and Protection of Residents Act supports an environment that is attractive to skilled labour from abroad. Secondly, the process for the full recognition of migrant's qualifications should be accelerated (NQAI) and a programme to improve awareness of EU and non-EU qualifications among employers should support this process. Finally, developing the English language capabilities of migrants should be a priority.

3.2 Public Income and Expenditure

In an increasingly globalised world, where physical and human capital enjoys greater international mobility, efficiency in the provision of public services and the structure of the taxation system are important determinants of a country's competitiveness. The state provides key services (e.g. law and order, national defence, public administration, education and healthcare) that are essential in a modern society. These services are fundamental elements of any economy's national competitiveness. To provide these key services, governments require income and therefore an income-generating taxation system. The structure of the taxation system also affects national competitiveness. For any given level of taxation, OECD research suggests that higher direct taxation as opposed to indirect taxation weakens economic growth and competitiveness.¹¹

Evidence from *Benchmarking Ireland's Performance and Overview of Ireland's Productivity Performance*

Indicator	Year	Group	Ranking
Total Tax Wedge on Average Earnings	2005	OECD:	2 (↑4)
Top Standard Tax Rate on Corporate Income	2006	EU-25:	2 (new)
Corporation Tax Receipts, % of GDP	2003	OECD:	6 (-)
Composite Score for provision of education services	2003	Of 21:	5 (new)
Composite Score for provision of health services	2003	Of 21:	10 (new)

1 = best; ↑ = improvement; ↓ = disimprovement

Benchmarking Ireland's Performance indicates that Irish corporation and personal tax rates remain low relative to other countries but that indirect taxes are higher. Notwithstanding Ireland's generally low tax rates, total tax revenues raised by the State as a percentage of GNP increased from 34.8 percent in 2002 to 36.5 percent in 2005, just below the OECD average, driven primarily by increased yield from property-related taxes. In relation to the provision of key public services, research in the NCC's *Overview of Ireland's Productivity Performance 1980-2005* suggest that Irish public services compare well to those in other countries.¹² However, across all OECD economies, public sector productivity levels and growth rates remain low by economy wide measures.

Policy Directions

The NCC recommends the following policy directions as priorities.

- **The Sustainability of Ireland's Tax Regime:** To ensure the sustainability of the tax regime, the NCC recommends that:
 - The Government should continue to shift tax incentives away from investments in property;
 - The Government should broaden the revenue base that finances public spending but not as a means of increasing the overall yield from taxation. This should include the measured introduction of new taxes (e.g. taxes on property stocks rather than property transactions, congestion charges and polluter pays environmental taxes) to replace tax revenues from other sources;

11 *The Sources of Economic Growth in OECD Countries*, OECD, 2003. However, it should be noted that high indirect tax rates weaken the relative cost competitiveness of the tourism sector.

12 Based on data from 'Public Sector Performance', Dutch Social and Cultural Planning Office, 2004.

- Where state bodies provide services directly to firms and households, in principle, these services should be funded from user charges rather than general government funds. It is important that these charges are transparent, applied fairly and relate to the economic costs of providing the service in an efficient manner.
- **Public Sector Efficiency:** In relation to public expenditure, the NCC believes that significant efficiency gains remain to be made in the provision of public services. As an ageing population and a society with higher expectations place increasing demands on the public sector, it is critical that there is a continuous drive to promote efficiency.
 - The NCC welcomes plans for Government Departments to produce annual statements on their objectives and outputs. Cross-departmental strategies, such as sustaining national competitiveness and improving completion rates in secondary level education, should also be developed;
 - The next benchmarking round should be fully evidence-based and transparent in its analysis, and should continue to incentivise public sector efficiency;
 - Better control over current expenditure is required. International evidence suggests that stronger top-down budgeting systems lead to greater focus on key priorities and control over total budgets, particularly when public funds are not constrained;
 - Further steps are required to measure public sector productivity, by undertaking cross-country benchmarking studies of publicly provided services as well as comparative studies on the provision of corporate services common to both public and private sectors to find means of efficiency improvements.
 - The process of moving public services offices and services from Dublin to locations throughout the country needs careful management. Care should be taken to ensure that the efficiency of the public services is not reduced. It is also important that the policy roles of the civil service and public agencies are strengthened and not weakened through dispersion.

3.3 Social Capital

Social capital refers to the value of connections between people and/or organisations in a society. Networks, based on shared norms or values that facilitate cooperation, can have many positive economic effects such as:

- promoting the efficient functioning of markets, as social capital reduces transactions costs and improves information flow;
- reducing the need for extensive rules, contracts, litigation and bureaucracy, as interactions can be based on trust; and,
- improving social inclusion and social mobility.

However, social capital can also have negative implications for competitiveness, if high levels of consensus stifle debate, risk-taking and openness to new ideas and change.

Evidence from *The World Values Survey* and *The Corruption Perceptions Index*

Indicator	Year	Group	Ranking
Trust in Political Institutions	2000	Of 12:	3(↑4)
Trust in Social Institutions	2000	Of 12:	6(↓3)
Perceived Corruption Levels	2006	OECD:	17 (↓1)
Membership of Local Civil Society Organisations	2000	Of 12:	7(↑1)
Membership of Other Civil Society Organisations	2000	Of 12:	8(↑4)
A Member of at least One Civil Society Organisation	2000	Of 11:	6(↓3)

1 = best; ↑ = improvement; ↓ = disimprovement

Given its subjective nature, levels and changes in social capital are difficult to measure. However, the World Values Survey shows that Irish people exhibit relatively high levels of trust in political institutions compared with other countries, although perceptions of corruption are higher than the OECD average. Contrary to popular belief, there has been an increase in the average rate of participation in community-based civil society organisations and in recreation and sporting activities.¹³

Policy directions

Considering the influence of Government policy on social capital more systematically could make a significant difference to the achievement of various policy objectives. The NCC welcomes the new partnership agreement *Towards 2016* as a vehicle for sustained agreement and cooperation between the social partners. Social partnership is an important example of the benefits of high levels of trust and agreement in policy making. In addition, from a competitiveness perspective, the following broad areas are relevant:

- As quality of life issues such as work life balance and average commute times affect social capital, urban and transport planning should be designed to promote social capital. The development of higher density housing nearer to places of work and integrated public transport systems would reduce commuting time and thus facilitate involvement in civil society organisations;

13 World Values Survey (1980 - 2000)

- The migration of a large non-national population to Ireland in recent years has made a significant contribution to Ireland's economy and cultural diversity. In addition to a migration policy (who gets in to the country), Ireland also needs a more developed integration policy (how we can ensure that immigrant groups do not become marginalised). The NCC welcomes the provisions of *Towards 2016* in relation to integration policy and advocates the completion of the Government strategy in this area;
- Trust between businesses and citizens is a key pillar of social capital. Building on the work of various bodies, the potential to develop a national hallmark of corporate social responsibility, which would be awarded to firms adhering to an agreed set of principles, should be explored.
- Volunteering and active citizenship directly boost levels of social capital, while also allowing participants to develop a wide range of skills useful in a personal and business context. The NCC welcomes the establishment of the Taskforce on Active Citizenship and looks forward to the taskforce's recommendations. The NCC believes that action is required to improve policy coordination and access to information. Furthermore, additional financial resources and simplified funding mechanisms may be needed.

3.4 Education System

From an economic perspective, the education system has been instrumental in equipping the Irish workforce with the technical and business skills necessary for recent economic growth.¹⁴ While the outcomes from education are improving and significant investments are now being made, Ireland's education system lags behind leading countries in some important respects. A world class education system can enable Ireland to succeed in the face of intensifying global competition, and increase prosperity and living standards. Achieving a 'best in the world' status for education over the next decade should be an overarching objective of public policy.

Evidence from *Benchmarking Ireland's Performance*

Indicator	Year	Group	Ranking
Participation of 4 yr olds in Education	2004	EU-15:	14 (-)
Computers per Student	2003	OECD:	20 (↑1)
Literacy of 15 yr olds:	2003	Reading	OECD: 6 (↓1)
		Mathematical	OECD: 16 (↓1)
		Scientific	OECD: 13 (↓4)
Expenditure per student, 3rd level	2002	OECD:	11 (↓2)

1 = best; ↑ = improvement; ↓ = disimprovement

An important weakness in Ireland's education system, as identified in *Benchmarking Ireland's Performance*, is the lack of a developed pre-primary education system. At both primary and secondary level, while educational attainment in Ireland is relatively high, a relatively high number of students still leave without basic qualifications and the NCC are concerned with mathematical and scientific literacy levels.¹⁵ At third and fourth level, public policy should aim to ensure that within the next decade, Irish higher education institutions are recognised as being among the best in the world. The current position of these institutions in international benchmarks indicates that this is a formidable but achievable challenge. Irish educational institutions will increasingly have to compete internationally to attract the best talent (teachers and students) from Ireland and the rest of the world. All of this is happening in an environment where the skill and knowledge requirements of the economy and society are changing.

Policy Directions

A national education policy framework with ambitious targets for outcomes (participation and quality) and a process of continuing structural change is needed. Sustained investment will also be required to address these challenges. The NCC recommends four policy areas for specific attention:

- Pre-primary Education:** Research shows that early childhood development is a key determinant of subsequent performance and motivation at all levels of education. Investment at this stage is comparatively more successful at addressing educational disadvantage than later interventions.¹⁶ While developing pre-primary education was identified as a key policy objective in a Government White Paper in 1999, the National Economic and Social Forum (NESF) reports that little progress has been made. The NCC strongly supports the provision of ring-fenced funding for the development of pre-primary education, required for facilities and teacher training, targeted initially in areas of greatest socio-economic and educational disadvantage.

14 This section addresses only the economic aspects of education policy. The Council recognises of course the important implications of investment in education for other vital areas of policy, for enhancing life chances and for the social, ethical and spiritual development of individuals.

15 In 2005, almost 14 percent of the population aged 20 to 24 do not have at least an upper secondary education.

16 *Efficiency and Equity in European Education and Training*, European Union, 2006.

- **Secondary School Participation:** While Ireland performs relatively well in second level completion rates, our performance lags behind leading countries. The NCC believes that the success of future efforts to increase completion rates will require greater cross-departmental coordination and sharing of responsibility, as the issue of educational disadvantage spans a wide number of government departments including the Departments of Social and Family Affairs and Health and Children as well as Education and Science.
- **Skills for the Knowledge Economy:** The supply of people with high levels of maths, science and ICT skills is crucial to the success of Ireland's strategy to facilitate the development of knowledge-intensive sectors and to enable Irish people to live and work in a knowledge society. Interventions are required throughout the education system to address Ireland's current unexceptional performance in these areas. Improved teaching strategies and learning outcomes in maths, chemistry, physics and biology should be a priority. The NCC also recommends further initiatives to improve ICT equipment in schools.¹⁷ For the benefits to be realised, ICT needs to be fully integrated into the teaching process. Reform of the curriculum and teacher training are essential.
- **Higher Education:** Building on progress to date, the NCC recommends that a national policy framework be developed for the sector. This should clearly identify outcomes to be achieved for the sector over the next decade together with a commitment to provide the resources required to enable Irish institutions to become world class in key areas. Adequate funding is essential to developing and sustaining excellence and in this context the *2005 Competitiveness Challenge* recommended the reintroduction of third level fees as a means to achieve a step change in funding. The NCC recognises the political challenges in reintroducing fees. It does not expect immediate action in this area, particularly against the background of a strong public finances. Nonetheless, the equity and economic arguments for the reintroduction of undergraduate fees in some form remain persuasive. A policy approach that included the graduated introduction of fees within the undergraduate cycle as well as a comprehensive student loan system and targeted grants would address many of the arguments against the reintroduction of fees.

¹⁷ The Northern Ireland C2K initiative which operates under the auspice of the Department for Education may provide a role model for Ireland for public and private partnerships devoting resources efficiently to the rollout of ICT infrastructure to schools.

3.5 Innovation, Research and Development

Innovation refers to the introduction of a new good, service or process to a market. Research and development refers to the investment in or generation of these goods, services, processes, or ideas. By better satisfying consumer demands, innovation and R&D can bring about increased revenue for firms, higher productivity and ultimately better standards of living.

Evidence from Benchmarking Ireland's Performance

Indicator	Year	Group	Ranking
Gross Domestic Expenditure on R&D	2004	OECD :	19 (–)
Business Expenditure on R&D	2004	OECD :	17 (–)
Higher Education Expenditure on R&D	2004	OECD :	16 (↑7)
Total Researchers per 1000 in Total Employment	2004	OECD :	16 (↑2)
PhD Graduation rate, 25-34 cohort	2002	EU-15:	11 (↓2)

1 = best; ↑ = improvement; ↓ = disimprovement

Progress in innovation and research and development can be measured in terms of input (e.g. funds invested) and output indicators (e.g. people, patents, new products). Among OECD countries, Ireland has been a late starter in investing in research and innovation. Nonetheless, investment in R&D, particularly by Government, is growing strongly.¹⁸ In terms of R&D outputs, Ireland's performance remains below average, with the numbers of PhD students, scientific publications and patent applications at less than half of those in leading countries such as Switzerland, Finland and the Netherlands.

The NCC welcomes the Government's Strategy for Science, Technology and Innovation, 2006-2013 (SSTI). It sets out a range of initiatives and the required funding to support the development of excellence in the research base, to promote increased business research and innovation, and to create the conditions to support the conversion of new knowledge into new products, processes and services.

Policy Directions

In the context of the Government's demonstrated commitment to investing in research, the NCC makes the following recommendations:

- Capacity to deliver the SSTI:** Delivering the SSTI and consistently increasing the levels and scale of R&D in both higher education and business will require a significant increase in the numbers of researchers in strategic areas. Given the small size of Ireland, attracting excellent PhD students and researchers from abroad will be an important contributory strategy to meeting demand. The availability of permanent family-friendly visas as well as the provision of opportunities for graduate students and their families to pursue careers in Ireland are essential. Continued efforts are also required to develop the structures (e.g. graduate schools), processes, and skills that allow researchers to move easily between academia and industry.

¹⁸ Total Irish R&D spending increased from 1.35 percent of GNP in 2002 to 1.55 percent of GNP in 2004 (OECD average of 2.24 percent and the EU wide Lisbon target of 3 percent in 2010). In addition to strong growth rates in business R&D, business investment as a percentage of economic activity has risen to an estimated 1.05 percent of GNP in 2006. However, a small number of foreign-owned companies dominate Irish business investment in R&D.

- **Capturing the return from R&D investments:** As large amounts of capital are to be invested in public R&D, it is important that we are clear on the strategic areas for investment and that milestones and targets are set that are results focused. R&D priority setting, review and evaluation functions should be resourced adequately for this task. Furthermore, the NCC recommends that regular assessments of progress in relation to the SSTI and adjustment strategies be submitted to the Cabinet Sub-Committee on Science, Technology and Innovation.
- **Services Innovation Policy:** The role of science in innovation needs to be complemented by a better understanding of the diverse sources of innovation that sustain our economy and society. As science and innovation become more international, openness to international collaboration and an ability to combine advances in basic science with insights from other disciplines, such as psychology, finance, social sciences, the humanities and law, will become more important. Given that our economic growth is increasingly being driven by services activities, such as finance, health, logistics and tourism, a services research and innovation policy should be developed.
- **Innovative Government Services:** The SSTI highlights the role that Government can play directly as a practitioner of research in the areas of agriculture/food, health, the environment, marine and energy. While this is welcome, other key public services provided by the State should also be open to innovation, both technological and non-technological. These services include the provision of education and public administration, where large numbers of people are employed. It is vital that all Government Departments, as well as suppliers to the Government, are engaged in Ireland's innovation agenda.

3.6 Productivity of Irish-based Firms

All economies depend on the performance of their enterprise base to sustain and improve their standard of living.¹⁹ Internationally trading firms employ almost 300,000 people, about 15 percent of the total workforce, and spend over €34 billion in the domestic economy. Domestically trading firms account for the bulk of employment in Ireland. As suppliers of inputs to existing exporters, domestically trading firms underpin the competitiveness of all exporters in Ireland. There also needs to be a growing cohort of Irish-owned firms sufficiently well developed to expand through trade and/or investment into other markets. Therefore, the productivity of indigenous industry is pivotal to Ireland's national competitiveness.

Evidence from Overview of Ireland's Productivity Performance

Indicator	Year	Ireland	USA
Average productivity levels (GDP per hr worked)	2003	39.90	36.28
Average productivity growth	2004/2005	1.4%	2.4%
Sector	Year	Ireland	USA
Modern Manufacturing (€ per hr)	2003	121.59	53.33
Traditional Manufacturing (€ per hr)	2003	31.80	36.64
Tradable Services (€ per hr)	2003	57.24	43.46
Non-Tradable Services (€ per hr)	2003	32.42	35.78

Overall, Ireland's productivity performance since 1990 has been very strong. However, Ireland's productivity growth had a narrow base. About half of the growth in per-hour productivity between 1990 and 2003 came from modern manufacturing and tradable services sectors. Furthermore, national productivity growth has slowed considerably, from an average of five percent between 1995 and 2003 to 1.4 percent in 2004/2005. If productivity continues to grow slowly, it will not be possible to sustain the level of wage increases experienced in recent years without a further loss of cost competitiveness.

Policy Directions

Productivity growth is critical to growing living standards and the competitiveness of Irish exporters. In addition to economy wide actions outlined elsewhere in this report (e.g. education and infrastructure), policy measures in the following areas are essential to productivity growth at the firm level:

- Management Development:** While management development is ultimately the responsibility of individual firms and there is no shortage of training providers, engagement by Irish SMEs is low. The NCC recommends that a range of measures to stimulate demand for management development be implemented, including the promotion of sector-specific business-led networks, and the development of user-friendly and freely available toolkits that enable SMEs to diagnose their specific needs in relation to management development.
- Use of ICT:** Higher levels of ICT usage, particularly by American SMEs, have been identified as one of the main factors explaining the USA's higher productivity growth compared to the EU. While Ireland has a very strong ICT-producing sector, our ICT-consumption/application is much weaker. The NCC welcomes the ICT voucher scheme, launched in November 2006. To take full advantage of the benefits of ICT investment, however, complementary investment is necessary, in particular in staff training. Further initiatives to encourage staff training in ICT should be explored and the Government should promote the take-up and development of best practice in ICT by further developing its electronic public procurement portal and assisting SMEs in identifying their ICT requirements.

¹⁹ As increasing productivity through greater economic specialisation remains the key to improving living standards, small open economies must achieve this specialisation through exporting. Therefore, internationally trading firms play a pivotal role in sustaining and improving living standards in the Irish economy, one of the most open in the world.

3.7 Regulatory Environment

The effectiveness and quality of regulation and the institutions that enforce them are major determinants of a country's prosperity. Regulation imposes requirements and obligations on firms to ensure that social, health and safety, environmental and economic policy goals are achieved. Well-designed and efficiently enforced business regulation helps achieve those policy goals without imposing unnecessary administrative costs on firms or significant hidden costs, whereby the ability of firms to adapt to changing economic conditions, technologies and consumer preferences is weakened.

Evidence from *Benchmarking Ireland's Performance*

Indicator	Year	Group	Ranking
Level of Regulation	2005	OECD:	4 (↑1)
Labour Market Regulations	2006	OECD:	12 (↓3)
Product Market Regulation	2003	OECD:	5 (↑2)
Hours per year for filing corporation tax	2005	OECD:	3 (new)
Administrative Costs	2005	EU-25:	5 (new)
Cost of Starting a Business	2005	OECD:	14 (new)

1 = best; ↑ = improvement; ↓ = disimprovement

The regulatory environment has played a key role in the development of Ireland's international competitiveness. According to *Benchmarking Ireland's Performance*, the level of general regulation in Ireland is perceived as being relatively low. Ireland also continues to be one of the most open economies in the world to international trade and investment. However, Ireland's advantages in these areas are increasingly coming under pressure as many countries are recognising that the development of an efficient regulatory environment is an effective way of boosting competitiveness. In November 2006, the European Commission proposed that the EU agree to reduce administrative costs by 25% at both EU and member state level by 2012. They estimate that administrative costs in Ireland are approximately 2.4% of GDP (3.5% of EU GDP) and that a 25% reduction in these would boost Ireland's GDP by almost 1%.²⁰ The Small Business Forum highlights that that among Irish SMEs administrative regulations are one of the largest barriers to growth.²¹

Policy Directions

The large potential benefits and costs of regulation show how it could be a source of continuing competitive advantage for the Irish economy. The NCC looks forward to the report of the Business Regulation Forum and the work of the Better Regulation Group. The NCC believes that the guiding principle underpinning Ireland's regulatory environment should be to minimise costs without jeopardising regulatory goals.²² It suggests policy directions in two areas:

- Existing Regulations:** The NCC suggests that regulatory indicators need be developed and published to better measure the cumulative costs of key regulations on firms. A number of countries are piloting variants of the 'Dutch Standard Cost model'. The potential exists to develop an approach to reducing administrative burdens that meets Ireland's needs. Developing a better understanding of the costs of existing regulations would provide an agenda for regulatory reform

20 *Measuring Administrative Costs and Reducing Administrative Burdens in the European Union*, European Commission, 2006, http://ec.europa.eu/enterprise/regulation/better_regulation/docs/en_691.pdf

21 *Regulating the Small Business Sector*, Indecon Economic Consultants, http://www.smallbusinessforum.ie/webopt/sbf_indecon_background_report_webopt.pdf

22 A distinction is made between three different types of cost of regulation: administrative costs (e.g. hours spent filling out forms), financial costs (e.g. cost of a licence to provide a particular service) and compliance costs (e.g. new machinery bought to meet new EU safety regulations).

and simplification, enabling the achievement of policy objectives while minimising costs to the economy. This may include the removal of unnecessary regulations, the consolidation of existing acts (e.g. various labour acts) or the rationalisation of overlapping or inconsistent regulations. In addition, potential exists to directly reduce administrative costs by reviewing onerous requirements, introducing exemptions for SMEs where appropriate and using a risk-based approach to the enforcement of regulations. Potential also exists to minimise duplication, through the development of better-engineered, inter-departmental processes and IT systems, such as an integrated Single Window electronic portal for exporters/importers. Section 3.9 sets out recommendations with respect to pro-competitive regulation.

- **New Regulations:** While new regulation may seem administratively easier and less expensive for government than other forms of intervention (e.g. taxation or expenditure), it can often have higher and hidden costs for wider society. One example of the potential cost to society of new regulation is its impact on competition and innovation. New regulations should be examined to establish that it does not limit the number or range of suppliers or their incentive or ability to compete. Given concerns over the rate of progress, the NCC welcomes the *Towards 2016* provisions for annual RIA reports by government departments and the proposed review of the RIA process in 2007. The RIA process should underpin Government efforts to ensure that new regulations do not add unnecessary costs.

3.8 Infrastructure

The strong growth of the economy in the last ten years combined with decades of low investment in physical infrastructure prior to 2000 has led to a serious infrastructure deficit compared to other OECD economies. World class physical infrastructure is necessary for Ireland's continued national competitiveness as well as directly contributing to improved quality of life.

Evidence from *Benchmarking Ireland's Performance*

Indicator	Year	Group	Ranking
Overall Infrastructure Quality	2005	OECD:	22 (↑3)
Public Capital Stock	2004	Of 21:	17 (new)
Government Capital Investment (% of GDP)	2005	EU-15:	2 (↓1)
Total Housing Stock	2004	EU-15:	14 (↑1)
Housing Completions	2004	EU-15:	1 (-)

1 = best; ↑ = improvement; ↓ = disimprovement

Evidence from *Benchmarking Ireland's Performance* illustrates that we still has ground to make up before we achieve a world class infrastructure. Ireland performs poorly across a range of infrastructure areas including energy, waste and broadband. On the positive side, significant increases in public investment under the 2000-2006 NDP have begun Ireland's process of catch-up, with government investment among the highest in the EU.

Policy Directions

- **NDP Expenditure Priorities:** The 2007-2013 National Development Plan provides an opportunity to put in place the necessary infrastructure to sustain and develop our international competitiveness. Building on the issues highlighted in its submission on the NDP and this report, the NCC highlights five spending areas as priorities:²³
 - As set out in section 3.5, the NCC supports the Strategy for Science, Technology, and Innovation 2006-2013 and recommends that further incentives to encourage R&D investment in private firms should be supported;
 - While further investment and reform is required at all levels of the education system, the NCC advocates the particular importance of additional investment in pre-primary education;
 - Further investment to connect the Irish energy market to Northern Ireland, the UK, and Continental Europe should be accelerated with Exchequer funding under the NDP, given their national importance to achieving energy security of supply;
 - The availability of high quality broadband remains an issue. Trends in leading counties such as Japan, Korea and Sweden suggest that two-way broadband speeds and capacity in Ireland will need to increase dramatically. The NCC believes that the next NDP should continue to fund targeted telecommunications infrastructure to address competitiveness concerns, until the regulatory environment is further developed to promote high levels of private sector investment in next generation broadband infrastructure and services.
 - With respect to waste infrastructure, if the next NDP relies significantly on private sector investment, regulatory reform will be required to improve incentives for investment in waste infrastructure. Alternatively, government funding will be required.

23 The submission can be found at http://www.forfas.ie/ncc/reports/ncc_ndp_submission/index.html

- **Selection of Projects:** Given the huge financial resources now available, it is crucial that the process through which spending is allocated leads to the selection of projects that yield the highest return; even a marginal improvement in the allocation of public capital spending will yield sizeable economic benefits. It is important to ensure that projects that offer the highest combined economic and social return are prioritised, both within and across Government departments. Secondly, greater transparency is required. The evaluation and appraisal of proposed projects by individual government departments and their agencies should have a common methodology and they should be published so that it is possible to assess their quality on an on-going basis.
- **National Spatial Strategy:** The NCC believes that the NDP should be designed to make a reality of the National Spatial Strategy, with a special fund for gateway development. As spatial planning has implications for growth and development on both sides of the border, the NCC supports the linking of the NSS with the Regional Development Strategy of Northern Ireland.
- **Public Private Partnerships:** PPPs offer opportunities to improve implementation and control costs by making the best use of the capabilities of the private sector.

3.9 Costs of Doing Business

Countries with higher per capita income have on average higher price levels and thus higher input costs for business. Where this is due to higher productivity, this is not a threat to national competitiveness. Where costs are higher due to supply-side restrictions, caused by factors such as weak competition, weak regulation and poor infrastructure, this is a direct threat to national competitiveness, given Ireland's dependence on foreign direct investment.

Evidence from *Benchmarking Ireland's Performance*

Indicator	Year	Group	Ranking
Price Level	2004	EU-15:	14 (↓3)
Inflation	2004-2006 average	EU-15:	11 (↑4)
Labour Cost Growth Rate	2000-2005	EU-15:	13 (new)
% change in Trade-Weighted Exchange Rate	2000-2006	OECD:	24

1 = best; ↑ = improvement; ↓ = disimprovement

Between 2000 and 2006, Ireland experienced a significant loss of international price competitiveness. This was caused by a combination of higher price inflation in Ireland and an appreciation of the euro. Prices and pay costs continue to rise at a faster rate than in most other EU countries. A range of non-pay firm costs are relatively high, particularly for property, utilities (e.g. electricity, waste) and locally traded services (e.g. IT services, accountancy and legal fees).

Price developments continue to challenge our competitiveness. A continued decline in the value of the dollar or sterling against the euro would further weaken Ireland's international price competitiveness.²⁴ In addition, a range of low cost countries from Eastern Europe and Asia are increasingly competing with Ireland and other developed countries for trade and investment opportunities.

Policy Directions

Concerted policy actions are required in a number of key areas to control increases in Ireland's cost base:

- Fiscal policy:** The potential impact on wage and cost inflation should be considered when increases in public spending are proposed. Additionally, care is required when entering into large-scale and long-term expenditure commitments at what may be the peak of the revenue cycle.
- Infrastructure:** Sustained investment in infrastructure is essential. However, care must be taken not to create circumstances where construction sector activity crowds out internationally trading companies. The selection of new NDP projects should be prioritised based on clear economic and social cost-benefit analysis and timed in line with overall demand levels in the construction sector. Projects also need to have the scale to be attractive to international consortia in order to avoid creating or intensifying capacity constraints in the construction sector.

²⁴ The dollar experienced a ten percent decline against the euro over the first eleven months of 2006.

- **Pro-competitive Regulation:** Continued efforts are required to develop a regulatory system that is strongly oriented towards consumer interests rather than producer interests. Market entry by new firms and firm rivalry promotes price competition, improves quality and service, and encourages innovation.²⁵ Regulations that restrict competition across a wide range of sectors, particularly utilities and locally services, should be repealed aggressively. We recommend that the Government require formal and published responses within a set time period from Government Departments to Competition Authority recommendations for removal of restrictions to competition.
- **Land Planning:** Many areas of the Irish economy have been liberalised, including trade, capital flows and migration, and these developments have driven economic growth and progress. Sustained growth and progress in turn requires a strategically focused and responsive planning system. This would ensure that an effective supply of development land and development permits is available to meet business and household demand, in a way that avoids contributing excessively to price inflation. In recent years, increases in the price of development land and houses have impacted negatively on Ireland's competitiveness, on wage inflation and in attracting skilled labour. For the future, a more strategically focused spatial planning system, together with advanced investment in the provision of infrastructure must be put in place to anticipate future development needs in a way that achieves economic, social and environmental policy objectives.

25 *The Sources of Economic Growth in OECD Countries*, OECD, 2003.

3.10 Energy

Promoting energy production and consumption patterns that are environmentally sustainable, economically competitive and secure is a challenge that has moved to the top of the political agenda across the globe and is central to any discussion of national competitiveness.

Evidence from
*Benchmarking Ireland's Performance and
Baseline Assessment of Ireland's Oil Dependence*²⁶

Indicator	Year	Group	Ranking
Oil Consumption per capita	2004	EU-25:	23 (-)
Oil Vulnerability Index	2005	Of 19:	16 (-)
Carbon Dioxide Emissions per capita	2003	OECD:	21 (↑1)
Proportion of Energy from Renewable Resources	2004	EU-15:	13 (↓1)
Market share of Largest Electricity Generator	2004	EU-15:	11 (↑2)
Indicator	Year	Ireland	EU-15
Cost per 100 Kwh	2006	€10.11	€8.66
Average annual increase in cost per 100 Kwh	1996-2006	5.1%	1.85%

1 = best; ↑ = improvement; ↓ = disimprovement

The price of electricity in Ireland has gone from 15 percent below the EU-15 average in 1996 to 13 percent above in 2006. Inflation in electricity costs in Ireland averaged 5.1 percent per year over the decade to 2006, significantly higher than in the EU (1.85 percent). Seventy percent of the differential in electricity costs between Ireland and other EU countries is due to the profile of Ireland's fuel mix, 30 percent due to inefficiencies in the Irish market.²⁷ From a security of supply perspective, 90% of our energy is imported. Ireland is also heavily dependent on fossil fuels for its energy generation with limited use of renewable resources and no nuclear. The margin between electricity generation and peak demand is also very narrow in Ireland. Due to the economy's dependence on fossil fuels, Ireland also emits more carbon than most OECD countries, on a per capita basis, with transport in particular a source of continuing increasing emissions.²⁸

The NCC welcomes the publication of the Green Paper on Energy, *Towards a Sustainable Energy Future for Ireland*. We look forward to the publication of a White Paper that sets out strong, ambitious goals and policies for energy security, prices and sustainability.

Policy Directions

The NCC recommends the following key policy priorities to improve competitiveness.

- **Supply of affordable energy:** Underinvestment in infrastructure, rapid increases in demand and the failure to attract sufficient new entrants to the market have led to capacity constraints and concerns over the ability of the Irish energy market to cater for further economic expansion and to provide competitively priced energy.

²⁶ Available from <http://www.forfas.ie>

²⁷ *Review of the Electricity Sector in Ireland*, Deloitte and Touche.

²⁸ *Transport and Environment 2005: Facing a Dilemma*, European Environment Agency, March 2006. The report highlighted that Ireland's transport emissions, excluding aviation and maritime, increased 130 percent from 1990 to 2003.

- **Market structure:** The Green Paper on Energy does not make specific comment on how to adequately address competitiveness concerns on the structure of the energy market. While the NCC does not recommend any specific approaches given the complexity of the issues involved, the options and issues set out by Deloitte and others should be considered in detail in the context of the upcoming White Paper on Energy.²⁹
- **Transmission infrastructure:** The complete separation of electricity generation and transmission is essential to promoting competition and investment from new entrants.
- **Prices:** Electricity price inflation in Ireland comprises both controllable (e.g. efficiency of the Irish electricity sector) and uncontrollable factors (e.g. international costs of oil/ gas, etc). Increases in uncontrollable factors should be passed on to consumers in a fair and transparent manner. In terms of controllable costs, which account for 30 percent of the difference from EU costs, the regulator should rigorously promote efficiency as a way to help reduce costs.
- **Security of supply:** Further investment to connect the Irish market to Northern Ireland, the UK and Continental Europe should be accelerated with Exchequer funding under the NDP. NDP funding should also be used to increase storage capacity given our heavy dependence on imported fuels. Both of these are essential strategic investments on issues of national importance.
- **Environmental Sustainability:** One of the most pressing issues facing policymakers around the world is global warming. It is projected that Ireland's carbon emissions will be well above our target for the 2008-2012 Kyoto commitment period. As noted, we are more dependent on fossil fuels for our energy requirements than almost every other European country. To achieve Ireland's Kyoto targets, the NCC recommends that:
 - **Energy efficiency:** Efficiency initiatives in energy production and use, that simultaneously reduce carbon emissions and industrial and household energy costs, should be further supported. The potential is substantial.
 - **Renewable energy:** Ireland should continue to promote investment and research into renewable energy resources (e.g. wind, tidal, biomass). These initiatives also have the potential to benefit the rural economy, while reducing its environmental footprint.
 - **Transport:** Further efforts are required to promote public transport and integrate land and transport planning. The transport sector is the primary source of Ireland's increasing carbon emissions.

²⁹ Recent papers from Helm, Valeri and others highlight the particular complexities facing the Irish market, given its small size, relatively low levels of interconnection and fuel mix.

NCC Publications

	Publication Date
Annual Competitiveness Report, 1998	March 1998
The Competitiveness Challenge Summary Statement	March 1998
Statement on Telecommunications: A Key Factor in Electronic Commerce and Competitiveness	November 1998
Statement on Skills	December 1998
Annual Competitiveness Report, 1999	May 1999
Report on Costs	June 1999
Statement on Social Partnership	September 1999
Proposals on Transport Infrastructure, the Planning Process and Public Transport	March 2000
The Competitiveness Challenge	May 2000
Annual Competitiveness Report, 2000	May 2000
Statement on Telecommunications, e-Business and the Information Society	July 2000
Statement on Regulatory Reform	July 2000
Statement on Labour Supply and Skills	September 2000
The Competitiveness Challenge, 2001	December 2001
Annual Competitiveness Report, 2001	December 2001
The Competitiveness Challenge, 2002	November 2002
Annual Competitiveness Report, 2002	November 2002
Statement on Inflation	May 2003
The Competitiveness Challenge, 2003	November 2003
Annual Competitiveness Report, 2003	November 2003
Statement on Prices and Costs	September 2004
The Competitiveness Challenge, 2004	October 2004
Annual Competitiveness Report, 2004	October 2004
Annual Competitiveness Report, 2005	September 2005
The Competitiveness Challenge, 2005	November 2005
Benchmarking Ireland's Performance, Vol.1 Annual Competitiveness Report, 2006	October 2006
Overview of Ireland's Productivity Performance, 1980-2005	October 2006
Statement on the Costs of Doing Business in Ireland	October 2006