## Council Members

<table>
<thead>
<tr>
<th>Name</th>
<th>Position and/or Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Don Thornhill</td>
<td>Chairman</td>
</tr>
<tr>
<td>Mr Rory Ardagh</td>
<td>Director, Telecom Property Holdings Limited</td>
</tr>
<tr>
<td>Mr Brendan Butler</td>
<td>Director of Strategy, Trade, EU and International Affairs, IBEC</td>
</tr>
<tr>
<td>Mr Donal Byrne</td>
<td>Chairman, Cadbury Ireland Limited</td>
</tr>
<tr>
<td>Mr Shay Cody</td>
<td>Deputy General Secretary, IMPACT</td>
</tr>
<tr>
<td>Mr Martin Cronin</td>
<td>Chief Executive Officer, Forfás</td>
</tr>
<tr>
<td>Mr Pat Delaney</td>
<td>Director of Sectors and Regions, IBEC</td>
</tr>
<tr>
<td>Ms Annette Hughes</td>
<td>Economist, DKM Economic Consultants</td>
</tr>
<tr>
<td>Mr Seamus O’Morain</td>
<td>Assistant Secretary, Department of Enterprise, Trade and Employment</td>
</tr>
<tr>
<td>Mr William Prasifka</td>
<td>Chairperson, Competition Authority</td>
</tr>
<tr>
<td>Mr William Slattery</td>
<td>Chief Executive Officer, State Street International (Ireland)</td>
</tr>
<tr>
<td>Mr Paul Sweeney</td>
<td>Economic Adviser, Irish Congress of Trade Unions</td>
</tr>
<tr>
<td>Mr John Travers</td>
<td>Consultant and Former Chief Executive Officer, Forfás</td>
</tr>
<tr>
<td>Prof Ferdinand von Prondzynski</td>
<td>President, Dublin City University</td>
</tr>
</tbody>
</table>

## Council Advisers

<table>
<thead>
<tr>
<th>Name</th>
<th>Position and/or Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr Paul Bates</td>
<td>Assistant Secretary, Department of Arts, Sports and Tourism</td>
</tr>
<tr>
<td>Ms Ruth Carmody</td>
<td>Assistant Secretary, Department of Education and Science</td>
</tr>
<tr>
<td>Ms Mary Doyle</td>
<td>Assistant Secretary, Department of An Taoiseach</td>
</tr>
<tr>
<td>Mr Eamonn Molloy</td>
<td>Assistant Secretary, Department of Communications, Energy and Natural Resources</td>
</tr>
<tr>
<td>Ms Mary Moylan</td>
<td>Assistant Secretary, Department of Environment, Heritage, and Local Government</td>
</tr>
<tr>
<td>Mr John Murphy</td>
<td>Assistant Secretary, Department of Transport</td>
</tr>
<tr>
<td>Mr Liam Nellis</td>
<td>Chief Executive, InterTrade Ireland</td>
</tr>
<tr>
<td>Ms Ann Nolan</td>
<td>Assistant Secretary, Department of Finance</td>
</tr>
</tbody>
</table>

## Research & Secretariat

<table>
<thead>
<tr>
<th>Name</th>
<th>Position and/or Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms Olga Barry</td>
<td>Forfás</td>
</tr>
<tr>
<td>Mr Adrian Devitt</td>
<td>Wilton Park House, Wilton Place</td>
</tr>
<tr>
<td>Mr Declan Hughes</td>
<td>Dublin 2</td>
</tr>
<tr>
<td>Tel: 01 607 3000</td>
<td>Forfás</td>
</tr>
<tr>
<td>Fax 01 607 3030</td>
<td>Wilton Park House, Wilton Place</td>
</tr>
<tr>
<td>Email: <a href="mailto:ncc@forfas.ie">ncc@forfas.ie</a></td>
<td>Dublin 2</td>
</tr>
<tr>
<td>Web: <a href="http://www.competitiveness.ie">www.competitiveness.ie</a></td>
<td>Forfás</td>
</tr>
</tbody>
</table>
Chairman’s Preface

The National Competitiveness Council (NCC) reports to the Taoiseach on key competitiveness issues for the Irish economy and makes recommendations on policy actions required to enhance Ireland’s competitive position. In addition to the two-volume Annual Competitiveness Report, it also publishes statements on issues of relevance to Ireland’s competitiveness.

In recent years, there has been much debate about the concept of wellbeing - how to define and measure it, how wellbeing can be promoted by Government and others and whether the development of policies that promote competitiveness are at odds with policies that promote wellbeing. This paper suggests that there is a close and mutually dependent relationship between high levels of wellbeing and competitiveness. Strong international competitiveness creates the resources that enable material improvements in living standards and resources for investment in health, education, transport infrastructure and other areas that promote both individual wellbeing and national competitiveness.

An environment that supports high levels of wellbeing is also becoming an important driver of competitiveness as Ireland endeavours to attract and develop world-class companies here. It is notable that many of the characteristics that promote high levels of wellbeing such as strong personal relationships, high levels of social trust, high levels of participation in the education system and workforce, etc. also support competitiveness. It is likely that the value of these characteristics will grow as Ireland seeks to shift towards the production of knowledge intensive goods and services.

This paper reviews the literature on wellbeing from the perspective of national competitiveness. Clearly, there are a range of other important perspectives - social, cultural, regional, environmental and others. It is hoped that this paper can stimulate more debate in this important area. I would like to thank the Council members for their commitment to deepening our understanding of key components of Ireland’s competitiveness. I would also like to acknowledge the research and secretariat support work of the Forfás Executive in bringing material for the Council’s consideration.

Don Thornhill
Chairperson, National Competitiveness Council
# Table of Contents

Section 1: Introduction .................................................................................................................. 5

Section 2: Background .................................................................................................................. 6  
  2.1 What is Wellbeing? ............................................................................................................... 6  
  2.2 Traditional Measures of Standard of Living ................................................................. 6  
  2.3 The Limitations of GDP/ GNP in Measuring Wellbeing ........................................... 7

Section 3: Ireland’s Performance ............................................................................................... 8  
  3.1 Objective Measures of Wellbeing ................................................................................... 8  
  3.2 Subjective Measures of Wellbeing ............................................................................... 9  
  3.3 Limitations in the Measurement of Wellbeing ......................................................... 10

Section 4: Drivers of Wellbeing .............................................................................................. 10

Section 5: Relationship between Wellbeing and Competitiveness ....................................... 14  
  5.1 Competitiveness ........................................................................................................ 14  
  5.2 Wellbeing and Essential Conditions for Competitiveness .................................. 15  
  5.3 Wellbeing and Policy Inputs ...................................................................................... 16

Section 6: Conclusions ............................................................................................................. 19
Section 1: Introduction

The National Competitiveness Council (NCC) defines competitiveness as all those factors that influence the ability of firms in Ireland to compete in international markets in a way that provides Ireland’s people with the opportunity to improve their standards of living and quality of life. In this context, the Council’s Annual Competitiveness Report monitors and benchmarks three broad elements of sustainable growth, namely income (growth rates, levels and distribution), quality of life and environment sustainability. While the income and environmental sustainability elements of sustainable growth can be measured and benchmarked with relative ease, the concept and measurement of “quality of life” is more complex.

The NCC recognises that both nationally and internationally there is increasing focus on the multifaceted concept of wellbeing, which is generally described as incorporating aspects of living standards, quality of life, happiness and life satisfaction. The NCC is interested in exploring the relationship between competitiveness, sustainable growth and overall national wellbeing, and assessing how amenable the concept of wellbeing is to monitoring over time.

A high policy priority is currently accorded to improving economic and social wellbeing in national policy, most recently in the Social Partnership Agreement ‘Towards 2016’. This agreement adopts a lifecycle approach to placing the individual as the focal point for policy development and delivery at key stages in his/her life and to improving his/her quality of life and wellbeing at each stage, i.e., children, people of working age, older people and people with disabilities.

While the concept of wellbeing is becoming increasingly recognised as an important policy priority in Ireland and other developed economies, there is no generally accepted definition. However, there are a range of research initiatives underway internationally endeavouring to further refine and develop comparable measures of wellbeing, with much of the research focusing on how wellbeing and economic growth interact.

Internationally, the debate is focusing on whether increased economic growth has been accompanied by increases in wellbeing. Ireland’s recent economic performance is generally accepted as being exceptional with average incomes tripling since 1980 and the population has grown by 25 percent. The question arises as to how best changes in Irish levels of wellbeing over this period can be measured and whether national wellbeing increased commensurately with our recent economic growth.

This paper reviews traditional economic measures of standard of living (e.g., GDP/GNP per capita) and discusses the degree to which these monetary measures provide indications as to the overall levels of wellbeing. It then examines how wellbeing can be measured using a range of alternative objective and subjective indicators, and discusses Ireland’s current performance.
This is followed by a discussion of the drivers of wellbeing, and the relationship between competitiveness and wellbeing. A key goal of this paper is to explore how competitiveness and wellbeing interlink and can be mutually supportive. Finally, the paper draws a number of initial conclusions. We hope that this paper will encourage further debate and discussion in this emerging area.

Section 2: Background

2.1 What is Wellbeing?
While there is no clear definition of wellbeing, it is described generally as incorporating aspects of living standards, quality of life, and happiness and life satisfaction. The definition that is given to wellbeing depends on one’s perspectives and can depend on whether one is focussing on the individual or society or on objective or subjective issues. Material wellbeing is traditionally measured using Gross Domestic Product (GDP) and Gross National Product (GNP) statistics.

2.2 Traditional Measures of Standard of Living
Traditional economic indicators such as GDP and GNP measure national output and income respectively. GNP levels and growth rates are broadly agreed to be a better measure of national income and growth in Ireland as they exclude the profits and other payments remitted abroad by overseas multinational companies located in Ireland. GNP per capita figures are also readily available, giving a better indication of individuals’ standards of living. These monetary measures are available for almost all countries and are widely used as indicators of standards of living. In addition, derivations of these indicators are also available which refine these measures further - e.g., gross national disposable income (GNDI), or household consumption, etc.

Figure 1 highlights that Ireland’s GDP and GNP (i.e. material wellbeing) have increased significantly from 2000 to 2006. In 2006, Irish GNP per capita was above the EU-15 average, but despite strong growth in recent years, it has not yet converged with the OECD average. Figure 1 also illustrates a significant gap between GNP and GDP in Ireland.
2.3 The Limitations of GDP/ GNP in Measuring Wellbeing

Although GDP and GNP measures have traditionally been used to measure the standard of living of both society and the individual, it is accepted that there are limitations to using these as a way of measuring wellbeing. Standard of living, as calculated by GDP/GNP, includes income/expenditure from addressing negative externalities such as fighting crime, dealing with pollution, etc. It also includes expenditure, which has a positive effect on aspects of wellbeing such as life expectancy, educational attainment and social protection. GDP/ GNP measures also have weaknesses as broader measures of wellbeing as they exclude factors such as the quality of the environment, the sustainability of production and consumption patterns, the value of social capital, unpaid work (e.g. in the home), and concerns over issues such as security, crime and social cohesion.

However, while there are limitations with monetary measures of wellbeing, it is important to note the importance of income in the wellbeing of both society and the individual. Studies highlight that GDP/ GNP growth is strongly correlated with increases in other aspects of wellbeing such as increased life expectancy, reductions in infant mortality, environmental protection (once a certain point has been reached), democratisation and even indices of political liberty.
Section 3: Ireland’s Performance

In this section, we examine Ireland’s performance in terms of a number of additional non-monetary measures of wellbeing. The evidence suggests that Ireland performs well on a wide variety of wellbeing metrics - both objective and subjective measures. Finally, we discuss some of the limitations of these indicators.

3.1 Objective Measures of Wellbeing

Objective indicators that are used to measure the wellbeing of society include indicators on life expectancy, educational attainment, health outcomes, social cohesion and the incidence of poverty. These indicators are normally collected by national statistical agencies such as the Central Statistics Office. The United Nations and the European Union collate a series of national indicators to assess wellbeing and allow comparisons across countries.

The United Nations Human Development Index (HDI) looks beyond GDP to a broader definition of wellbeing. The HDI provides a composite measure of three key dimensions of human development; life expectancy, educational attainment and adjusted real income\(^7\). In the Human Development Report 2007, Ireland ranks fifth in the world. This is an improvement of 13 places since 2000 (see figure 2)\(^8\). The main improvement in Ireland’s performance was a result of an increase of the GDP and educational attainment components of the index.

![Figure 2: Ranking in the United Nations Human Development Index 2007](image)

*Source: UN Human Development Report 2006*

The European Union has also developed a range of Sustainable Development Indicators (SDI), which monitor progress on the economic, social and environmental dimensions of society.
Experiencing the economic dimension, Ireland does very well in terms of GDP per capita (2\textsuperscript{nd}), savings rate (1\textsuperscript{st}) and employment (8\textsuperscript{th}).

Concerning the social dimension, Ireland’s performance is weaker. Ireland's at-risk-of-poverty level of 20 percent is among the highest in the EU-25. The impact of Ireland’s recent economic success upon consistent poverty and at-risk-of-poverty is considered by Christopher Whelan and others in their essay, “Consistent Poverty and Economic Vulnerability”. Their research into this area concludes that both the levels and depth of deprivation in Ireland are more modest than has been suggested by some critics of the Irish experience of globalisation\textsuperscript{9}. Finally, Irish people have average life expectancy levels, average suicide rates and below average voter turnout rates than the EU-25.

From the environmental dimension, Irish people suffer less from noise and from other pollution than other countries in the EU-15. However, Irish emissions of greenhouse gases are 23 percent above the 1990 level, which is 10% over the agreed burden-sharing target.

\textbf{3.2 Subjective Measures of Wellbeing}

Wellbeing can also be measured using subjective indicators that are normally collected in surveys and questionnaires.

Since 1973, the European Commission’s Eurobarometer survey has monitored the evolution of public opinion in EU Member States. In the most recent Eurobarometer survey, Ireland performs well in terms of general satisfaction with life. In response to the question, “\textit{On the whole are you very satisfied, fairly satisfied, not very satisfied or not at all satisfied with the life you lead?}” Ninety per cent of Irish people responded that they were very or fairly satisfied. This ranks Ireland in seventh position out of the EU-27. The corresponding average EU satisfaction rating is 80 percent\textsuperscript{10}. Recent Irish research, commissioned by the Department of Health and Children, draws similar conclusions. Overall 90% of respondents described their quality of life as 'good' or 'very good'\textsuperscript{11}.

The European Foundation for Living and Working Conditions (Eurofound) has also undertaken a detailed study on wellbeing. They focus on three aspects of wellbeing namely, life satisfaction, happiness and a sense of belonging, with data drawn from their “First European Quality of Life Survey” which benchmarked 28 countries\textsuperscript{12}. Ireland performs very strongly. Of the 28 countries benchmarked, Irish people rank joint fourth for life satisfaction, joint second for happiness and fourth for social belonging. The Eurofound data gives some important insights as to how different Irish socio-economic groups perform. The results for Ireland show that 17.6 percent of the population regard themselves as being poor in terms of subjective wellbeing\textsuperscript{13}. Matching international findings, these scores are more widespread among the unemployed at 29.5 percent and among single parents at 20.9 percent\textsuperscript{14}. 
3.3 Limitations in the Measurement of Wellbeing

Measuring wellbeing is problematic and difficulties arise for both objective and subjective measures. Typically, with objective statistics, there are challenges with definitions, methodologies, collection methods and interpretation. The problems are exacerbated when collecting statistics across countries due to consistency and timeliness issues.

The general concerns above in relation to objective measures of wellbeing are also relevant for subjective measures of wellbeing. However, there are additional challenges with subjective measures as they are usually based on self-reported responses. Concerns arise as to whether or not the responses provide a true assessment of current circumstances, i.e., are respondents providing a view on how they are interpreting circumstances, rather than actual circumstances. There is also an issue as to whether it is possible to compare wellbeing (e.g., life satisfaction scores) between people or over time as a range of factors including cultural factors, the effect of language differences and psychological factors may distort responses.

Despite these concerns, in general both the objective and the subjective data are considered broadly reliable, even if they do have limitations. With respect to various subjective measures, research indicates that there is a high degree of consistency between different measures, even where differing methodologies are employed.

Section 4: Drivers of Wellbeing

Subjective wellbeing (how an individual views their own wellbeing) is influenced by a wide variety of factors. Van Hoorn classifies the determinants of subjective wellbeing into six broad categories and this framework is used here to analyse the drivers of wellbeing. The six factors are (I) personality factors; (II) contextual and situational factors; (III) demographic factors; (IV) institutional factors; (V) environmental conditions and (VI) economic factors. It is notable that a wide variety of factors influences wellbeing.

- There is evidence that personality traits have a strong influence on wellbeing and are a key driver of wellbeing. One theory is the “set-point” theory of happiness, which suggests that wellbeing is largely determined by personality, and that levels of happiness are stable over time. In addition, certain personality traits such as extroversion appear to lead to greater wellbeing. However, this is not to suggest that outside factors and policy cannot influence wellbeing.

- The contextual and situational factors faced by an individual affect their wellbeing. Many studies show that the quality and quantity of personal relationships are associated with high levels of wellbeing. In general, when individuals engage in social interactions and participate in society they have higher levels of wellbeing. Marriage is found to have a
positive impact on wellbeing. Conversely, divorce has been found to have a particularly negative impact on wellbeing.

- Demographic factors such as gender and age also have a role to play in determining wellbeing. Women generally report higher levels of wellbeing than men do. Some research also indicates that wellbeing has a U-shaped relationship with age; it is higher among young people, declines in middle age and increases again among older people.

- Institutional factors (e.g., democracy, rule of law etc.) are also found to be correlated with wellbeing. Political stability, democracy and government efficiency contribute to social capital. Two common measures of social capital that have a positive relationship with wellbeing are the level of generalised trust and the extent of social networks. Eurofound research indicates that the higher the quality of the political culture in a country, the more satisfied is its population. A particularly strong (negative) correlation also exists between wellbeing and the size of the shadow economy and corruption.

- Environmental conditions can affect wellbeing. There is some evidence that changes in climate affect wellbeing and there is an ongoing debate about whether global warming will have a positive or negative effect on wellbeing. In Ireland, research by COMHAR indicates that environmental factors, such as access to quality environmental and waste management services or proximity to the coastline, have a direct effect on life satisfaction, as has population density.

- The relationship between economic factors and wellbeing is complex. On an individual basis, the findings are relatively clear. People on lower incomes are more likely to feel dissatisfied, unhappy and alienated. The evidence suggests that as personal income increases, so too does wellbeing. High-earning individuals are more satisfied with their lives than those on lower incomes. However when those on higher incomes earn more, much of the increase in wellbeing comes from the status associated with earning more rather than the material gain.
The relationship between national income and wellbeing is less clear-cut. High reported levels of wellbeing are to be found in high-income countries. Figure 3 graphs the relationship between life satisfaction as measured by Eurofound for 2003 and GDP per capita as measured by Eurostat. The graph illustrates the generally accepted view that people in countries with higher incomes generally report higher levels of wellbeing.

![Figure 3: Life Satisfaction and GDP per Capita, 2003](image)

Source: Eurofound and Eurostat

However, it seems that once national prosperity has reached a certain level of income beyond hardship and the fulfilment of basic needs, the relationship between wellbeing and economic growth weakens significantly. This is commonly referred to as the ‘Easterlin paradox’.26

Figure 4 charts GDP per capita and life satisfaction in Ireland over the period 1980 to 2004. Despite a rapid increase in income, we can see that life satisfaction has changed very little, oscillating between 80 and 90 percent of respondents who say they are ‘very happy’ or ‘fairly happy’.27 However, it is notable that wellbeing levels were lower during the late 1980’s - a time when the economy was characterised by high levels of unemployment and outward migration.
It is often difficult to see an effect in international studies of happiness/life satisfaction for intuitively obvious drivers of increased wellbeing (e.g. increased income, better health, public expenditure on social services, or lower crime for individual countries, etc.). A number of reasons have been advanced to explain why the relationship between income and wellbeing becomes weaker as countries become wealthier. They include:

- People compare themselves to those around them. When people see others earning more, their own perceived wellbeing can be reduced. In simple terms, relative income between people has a more significant impact on wellbeing than absolute increases in income.
- The second reason may be that people’s expectations increase as they become wealthier. Therefore, as countries become much richer, people simply adjust their expectations of real living standards upwards, resulting in no measured improvements in reported wellbeing.
- The third issue relates to the difficulties of measuring wellbeing. Given the subjective nature of wellbeing, measurements of wellbeing may not be sophisticated enough. The weak relationship may reflect how the two variables are measured. GNP is an unbounded variable, can increase or decrease accordingly and can be measured in absolute terms. However, wellbeing is not measured the same way. Wellbeing or happiness is generally scored on a scale, for example from 0-10; therefore, happiness is measured as a relative figure and not an absolute figure.

Source: Eurobarometer and Eurostat
Section 5: Relationship between Wellbeing and Competitiveness

This section explores the relationship between wellbeing and competitiveness. This is analysed using the bottom two layers of the NCC’s competitiveness pyramid.

5.1 Competitiveness

The NCC pyramid is a framework for analysing competitiveness. At the apex of the pyramid is sustainable growth, which is the ultimate measure of success of competitiveness. The essential conditions for competitiveness are represented in the middle layer. The policy inputs are shown at the bottom layer. As the NCC has noted in its annual reports to Government, our competitiveness performance in the years to come will depend heavily on the decisions being made today in these key policy areas.

![The NCC Competitiveness Pyramid](Source: National Competitiveness Council)
5.2 Wellbeing and Essential Conditions for Competitiveness

In the middle layer of the NCC’s competitive pyramid stand four “essential conditions for competitiveness”. These are business performance; productivity; prices and costs; and, labour supply.

5.2.1 Business Performance

The performance of the business sector is critical to income growth and maintaining high employment levels in Ireland. Its strength is also essential to sustaining strong government finances and spending on public services. There is currently limited research linking business performance in terms of trade and investment to wellbeing. However, some studies find that openness to trade has a statistically significant positive effect on wellbeing, through its effects on national income and by increasing the variety of goods and services available to consumers. The Eurobarometer survey gives some insights into Irish attitudes towards openness to trade. In the most recent Eurobarometer on globalisation, Irish attitudes towards globalisation are broadly positive. Seventy one percent of Irish people are in favour of the development of globalization as a general concept versus an EU-15 average of 63 percent. In detail, 63 percent of Irish people view the economic impact of globalisation as an opportunity, while 33 percent see globalisation as a threat. This is below the EU average where 39 percent of EU-15 respondents view globalisation as a threat.

5.2.2 Productivity

In the long run, a country’s standard of living depends on its productivity performance. A number of researchers have examined the relationship between productivity and wellbeing. The evidence suggests that happier people are more productive. There is evidence also that happier people earn more. If increased income is a proxy for increased productivity, then it can also be inferred that happier people produce more.

A second question is whether higher productivity encourages wellbeing by enabling shorter working hours and more leisure time. Higher productivity should allow individuals work less overtime and spend more time in leisure related activities, whilst maintaining their absolute income. Hence, it should raise wellbeing. However, the importance of relative income in determining status might mean that individuals choose to maintain long working hours in an effort to uphold their status. The USA, with one of the highest levels of GDP per capita in the OECD, also works more hours per year than most other OECD countries. In Ireland, the number of hours worked per capita has fallen in recent years.

5.2.3 Prices and Costs

It is generally accepted in the literature that inflation has a negative effect on wellbeing as it affects households’ real disposable incomes and consumption. Specific studies find a negative correlation between inflation and wellbeing in both the USA and Europe. The Eurobarometer Social Reality survey finds that the cost of living is mentioned as an issue of concern by 35
percent of people across the EU. Inflation is the second most important issue of concern to people in the EU after unemployment, and is the third most important concern for Irish citizens, after health and crime.\(^{32}\)

### 5.2.4 Labour Supply

Given relatively high unemployment rates in many EU countries, it is not surprising that unemployment is the key concern for many Europeans. The effect of unemployment on wellbeing is one of the most intensively researched relationships. The integration of people, including older people, into society and working life is an important driver of wellbeing. Unemployed people are consistently found to report lower levels of wellbeing than those in work.\(^{33}\) Studies reveal that causation predominantly runs from unemployment to unhappiness, and that the drop in income accounts for only a small percentage of the psychological cost.\(^{34}\) This supports a continued strong policy focus on the creation of employment opportunities and structural reforms of labour markets.

In addition to the impact of personal unemployment, it is also possible that the economy-wide unemployment rate affects individual wellbeing, even amongst those who are employed. The impact appears to be driven predominately by the impact on job security.

The impact of working hours on wellbeing is not clear-cut. There are indications that work initially has positive effects on wellbeing, but over time, working more hours begins to be detrimental.\(^{35}\) The importance of policies relating to work-life balance should not be underestimated.

### 5.3 Wellbeing and Policy Inputs

At the base of the NCC competitiveness pyramid are the policy inputs, which are divided into three broad categories: business environment, physical infrastructure, and knowledge infrastructure. These components are considered in turn.

#### 5.3.1 Business Environment

Ireland’s business environment (e.g., taxation, regulation and competition, labour market regulations and finance) compares well on average to OECD counterparts. The taxation regime is favourable to corporations and workers, with for example Ireland having one of the lowest tax wedges in the EU, (the difference between gross and take-home pay), although consumers pay relatively high rates of VAT. Despite relatively low corporation tax rates, the tax take from corporations as a percentage of GNP is above the OECD average. In relation to competition legislation, perceived efficiency has weakened relative to other countries in recent years and competition remains weak in many sectors of the economy, including utilities and professional services. Labour market regulations are perceived to be increasing in Ireland, with the employment framework here considerably less flexible than in economies such as the UK and
Denmark. Overall, access to capital in Ireland is not perceived to be a barrier to enterprise in Ireland.

Limited research is available on the impact of many of these factors on wellbeing. However, an attractive business environment is a key requirement for creation of new employment opportunities - a key driver of wellbeing. As regards the regulation of the labour market, there is evidence that job security adds to wellbeing\textsuperscript{36}. Public sector employees typically report higher levels of wellbeing than private sector workers do. However, there is also evidence that the self-employed report higher levels of wellbeing than those who work for others\textsuperscript{37}.

Recent OECD research highlights that despite fears over globalisation, average job tenure has increased in most OECD countries since the early 1990s. The OECD also argue that the relationship between regulation and job security is weak and cite Scandinavian countries as an example of how flexible economies can be combined with low unemployment and high levels of social protection\textsuperscript{38}.

### 5.3.2 Physical Infrastructure

Under-investment in infrastructure in the 1980s combined with Ireland’s exceptional rates of economic and population growth since the 1990s has led to the emergence of a range of infrastructural deficits and bottlenecks in Ireland that we are now addressing. Across transport networks, energy, information and communication technology and housing, Ireland’s stock of infrastructure lags those of comparable countries elsewhere in the OECD. However, government investment in infrastructure is significantly higher in Ireland than in most developed economies.

Ireland’s housing stock has increased dramatically over the last decade, as have house prices, which has contributed in large measure to a more than a doubling of household borrowing between 2003 and 2007. The average Irish person was almost €35,000 in debt by 2007. People who own a home outright report higher levels of wellbeing than those with a mortgage or renting. It should be noted that the value of Irish housing stock (over €500 billion) significantly outweighs mortgage debt (€118.5 billion). However, a disproportionately large part of the debt is borne by recent entrants to the housing market.

The impact of the quality, capacity and efficiency of physical infrastructure and services on wellbeing is clear. The evidence of a detrimental impact from commuting is relatively strong. The worst effects arise from moderately long commutes. Commuting reduces the opportunities for activities beneficial to wellbeing such as relaxation and social interaction\textsuperscript{39}. Commuting also has negative impacts on the wellbeing of non-commuting family members and on environmental quality\textsuperscript{40}. There is evidence that the morning commute is the least pleasant of the day’s tasks\textsuperscript{41}.
Wellbeing is lowest for those living in social housing, other things being equal. As regards urbanisation and neighbourhood quality, there is a disparity in Ireland between Dublin and the regions. COMHAR studies find that the overcrowding and congestion affects of proximity to major transport routes are major causes of unhappiness in the Dublin region.

5.3.3 Knowledge Infrastructure

Open access and high levels of participation in education play a key role in determining individual life chances and wellbeing. Eurofound research indicates that unskilled and poorly educated workers are severely disadvantaged and report lower levels of wellbeing. Higher levels of education support individual wellbeing and competitiveness. Society’s average educational attainment can also influence wellbeing, as it is accepted that educational attainment is linked to pro-wellbeing activities such as voting and social participation.

Average educational attainment in Ireland has increased steadily in the last two decades with younger cohorts of the population now as well qualified as their OECD counterparts. While educational participation rates are generally strong, participation in pre-primary education in Ireland is well below the EU-15 average. Although participation rates in life long learning in Ireland have increased significantly in recent years, there is still a significant gap between Ireland and the leading countries.

While research explicitly linking investment and advances in technological infrastructure to wellbeing is limited, indirect benefits are visible in terms of an increase in the variety of goods and services available to individuals and in access to a wider range of health, education and other public services. There are significant positive productivity impacts from the wider deployment of ICTs. The OECD estimates that ICT deployment has contributed between 20 and 40 per cent of productivity growth in developed economies over the last decade, thereby enabling growth in incomes. Some possible negative impacts can also be identified for some forms of ICT, especially television as it can reduce the time available for social interaction.

However, Eurobarometer studies also highlight the importance of communications infrastructure in peoples’ daily lives. Eighty one percent of Irish people find mobile phones to be a ‘very’ or ‘fairly’ important part of their daily life, while the average for EU-25 is 69 percent. The result for fixed telephone lines is similar.
Section 6: Conclusions

In summary, wellbeing is a multifaceted concept, for which monetary factors (e.g. GNP per capita) are only one element. Monetary measures of economic and social progress will remain critical for any assessment of wellbeing and competitiveness but they need to be complemented with broader measures of wellbeing. There is also a complex and broadly mutually supportive relationship between competitiveness and wellbeing.

Based on available measures, Ireland generally performs well in terms of broad measures of wellbeing. The United Nations ranks Ireland fifth in its human development index. Eurobarometer and Eurofound surveys consistently indicate a high level of life satisfaction among the Irish population.

At the same time, EU indicators do point to weaknesses on certain environmental and social cohesion indicators. Eurofound data also indicates that specific socio-economic groups in Ireland are experiencing lower levels of wellbeing, namely the unemployed and single parents.

In terms of public policy responses, a number of researchers have advocated the need for policies focusing explicitly on wellbeing. This stems from a reasonable assessment that welfare is derived from a great deal more than access to material goods and services, but includes issues such as the environment and quality of public services, quality of one's personal relationships, feelings of common cause and shared experience with others, recreation and enjoyment of nature and good governance, etc. However, while society may support the concept of happiness, it may be difficult to measure the happiness of society, or to develop clear policies that will improve society's happiness. As highlighted in this paper, there are a number of reasons why perceived wellbeing levels have not increased significantly in Ireland and internationally despite obvious improvements in levels of income, quality of life, health, education, etc.

Notwithstanding this, policies that support higher incomes, competitiveness and sustainable growth can have positive impacts on broader wellbeing. The importance of the wellbeing of the individual and of communities as a focal point for economic and social progress is reflected in ‘Towards 2016’ which puts the perspective of the life stages of individuals in Ireland as the centrepiece of the future approach to policy development and delivery (the life cycle approach).

Section five of this paper sets out a range of potential areas where competitiveness and wellbeing can be mutually supportive. This section draws some initial conclusions from this work:

- The NCC believes that the relationship between competitiveness and wellbeing is becoming stronger and mutually supportive. An environment that supports high levels of wellbeing is
becoming an important driver of competitiveness as Ireland endeavours to attract and develop world-class companies and workers here. It is notable that many of the characteristics that promote high levels of wellbeing such as strong personal relationships, high levels of social trust, high levels of participation in the education system and workforce also support competitiveness. It is likely that the value of these characteristics will grow as Ireland seeks to shift towards the production of knowledge intensive goods and services;

- The government can influence wellbeing via policies that support competitiveness as the latter promotes higher incomes, employment and productivity levels. Continued national competitiveness can create the wealth to support further investments in education, health, the environment and other areas that support broader wellbeing;

- Inflation has a negative effect on wellbeing and competitiveness. High inflation rates can eat into real pay, while high pay increases to offset inflation can reduce international competitiveness. Low and stable inflation rates can support both wellbeing and competitiveness;

- There is evidence that happier people are more productive and therefore earn more. Given that there is a positive relationship between income and wellbeing, both wellbeing and competitiveness would be enhanced by policies that promote higher productivity;

- Policies aimed at enhancing employment opportunities, specifically by increasing the total employment rate and decreasing unemployment, are likely to have a strong beneficial impact on both wellbeing and competitiveness. Unemployment and economic inactivity are highly damaging for wellbeing. The removal of real or perceived barriers to older people who wish to remain in the workforce could also have benefits in terms of wellbeing and competitiveness.

- Given that people who are self-employed report higher levels of wellbeing, policies aimed at overcoming barriers to being self-employed and to encouraging entrepreneurship can promote competitiveness and wellbeing;

- Job insecurity has been found to reduce wellbeing and highlights the importance of active labour market policies together with a commitment to up-skilling more vulnerable workers as outlined in the National Skills Strategy. Similarly, in Denmark, a key element of labour market policy is the idea of protecting the employee, not the job and combines generous unemployment insurance with an active labour market policy. This is backed up by a high level of basic education, policies to promote lifelong learning, and the State’s refusal to subsidise unprofitable firms and sectors;

- There is strong evidence that the daily grind of commuting has a negative effect on wellbeing. By focussing on appropriate transport and sustainable spatial policies, it may be possible to reduce commuting times and improve wellbeing and competitiveness at the same time;

- Knowledge can foster improvements in wellbeing and competitiveness. Lack of access to education reduces life opportunities for the individual and at the same time, a lack of appropriate skills undermines competitiveness at firm level and at national level. Ensuring better access to education and training opportunities, especially among those from poorer
backgrounds and the unemployed, can raise both competitiveness and the wellbeing of society.

- Measuring wellbeing and the factors that contribute to wellbeing are fraught with difficulties. Potential exists to work with the OECD and other on these issues.

In summary, there is limited scope for policy intervention in some aspects of wellbeing, such as factors peculiar to and determined by an individual. However, individual wellbeing is enhanced by access to income and material resources and national wellbeing is enhanced or maintained by high levels of national income. Therefore, having an emphasis on policies that support sustainable economic growth and competitiveness can play an important role in maintaining and enhancing national and individual wellbeing.
Endnotes

2 To date the NCC has used internationally available measures that assess human development (income, health and education) and life satisfaction to benchmark quality of life.
3 Objective indicators use quantifiable data such as GDP per capita, life expectancy, educational attainment and crime rates as measures of wellbeing. Subjective indicators are based on the experiences of individuals and their opinions. This data is usually collected through surveys or interviews with individuals.
4 Derivations of these indicators are also available which refine these measures further - e.g., gross national disposable income (GNDI), etc.
5 In comparing standards of living between countries, economic statistics are converted into Purchasing Power Parity terms to eliminate differences in national price levels.
6 Ireland ranks fifth in the latest UN report. However, due to methodological changes, these results cannot be compared to results achieved over the 2000 - 2005 period.
9 SLÁN 2007 is the third in a series of lifestyle and behaviour studies of the Irish population. The study involved face-to-face interviews with 10,364 adults along with a sub-study on body size of 967 younger adults (18-44 years old) and a more detailed physical examination of 1,207 adults aged 45 and over.
11 That is, they report low life satisfaction and happiness scores and high alienation scores.
12 Eurofound, 2005.
16 Review of research on the influences on personal wellbeing and application to policy making, Dolan et al, 2006.
18 Van Hoorn, 2007
20 Eurofound, 2005.
21 Van Hoorn, 2007
22 COMHAR, 2006.
23 Eurofound, 2005.
24 It should be noted that a range of researcher (Veenhoven and Hagerty, Wolfers and Stevenson), have argued that the paradox does not hold and that increases in absolute income are closely linked to increased self-reported happiness.
25 The only significant decrease occurred between 1986 and 1989, which coincided with a period of slow economic growth in Ireland.
30 Special Eurobarometer; European Social Reality, European Commission, 2006.
31 Wellbeing in Panels, Clark, A and Oswald, A., 2002.
35 COMHAR, 2006.
38 Stress that doesn’t pay; The Commuting Paradox, Stutzer and Frey, 2005.
40 COMHAR, 2006.
41 COMHAR, 2006.
43 The reliability of subjective wellbeing measures, Krueger and Schkade, 2007.
44 Special Eurobarometer, Services of General Interest, European Commission, 2007.
## Previous NCC Publications

<table>
<thead>
<tr>
<th>Publication</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Competitiveness Challenge Summary Statement</td>
<td>March 1998</td>
</tr>
<tr>
<td>Statement on Telecommunications: A Key Factor in Electronic Commerce and Competitiveness</td>
<td>November 1998</td>
</tr>
<tr>
<td>Statement on Skills</td>
<td>December 1998</td>
</tr>
<tr>
<td>Annual Competitiveness Report, 1999</td>
<td>May 1999</td>
</tr>
<tr>
<td>Report on Costs</td>
<td>June 1999</td>
</tr>
<tr>
<td>Statement on Social Partnership</td>
<td>September 1999</td>
</tr>
<tr>
<td>Proposals on Transport Infrastructure, the Planning Process and Public Transport</td>
<td>March 2000</td>
</tr>
<tr>
<td>The Competitiveness Challenge</td>
<td>May 2000</td>
</tr>
<tr>
<td>Annual Competitiveness Report, 2000</td>
<td>May 2000</td>
</tr>
<tr>
<td>Statement on Regulatory Reform</td>
<td>July 2000</td>
</tr>
<tr>
<td>Statement on Labour Supply and Skills</td>
<td>September 2000</td>
</tr>
<tr>
<td>The Competitiveness Challenge, 2001</td>
<td>December 2001</td>
</tr>
<tr>
<td>Annual Competitiveness Report, 2001</td>
<td>December 2001</td>
</tr>
<tr>
<td>The Competitiveness Challenge, 2002</td>
<td>November 2002</td>
</tr>
<tr>
<td>Annual Competitiveness Report, 2002</td>
<td>November 2002</td>
</tr>
<tr>
<td>Statement on Inflation</td>
<td>May 2003</td>
</tr>
<tr>
<td>The Competitiveness Challenge, 2003</td>
<td>November 2003</td>
</tr>
<tr>
<td>Annual Competitiveness Report, 2003</td>
<td>November 2003</td>
</tr>
<tr>
<td>Statement on Prices and Costs</td>
<td>September 2004</td>
</tr>
<tr>
<td>The Competitiveness Challenge, 2004</td>
<td>October 2004</td>
</tr>
<tr>
<td>Annual Competitiveness Report, 2004</td>
<td>October 2004</td>
</tr>
<tr>
<td>The Competitiveness Challenge, 2005</td>
<td>September 2005</td>
</tr>
<tr>
<td>Annual Competitiveness Report, 2005</td>
<td>November 2005</td>
</tr>
<tr>
<td>Overview of Ireland’s Productivity Performance 1980-2005</td>
<td>October 2006</td>
</tr>
</tbody>
</table>