BUDGET PERSPECTIVES 2007

Tim Callan (ed.)

Alan Barrett, Kieran Coleman, Liam Delaney, Tony Fahey, Brenda Gannon, Ide Kearney, Yvonne McCarthy, Brian Nolan, John Walsh

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OPENING ADDRESS

Brendan Whelan

WELCOME

On behalf of the co-hosts, the Economic and Social Research Institute and the Foundation for Fiscal Studies, I would like to wish you all a warm welcome to this year's *Budget Perspectives* Conference. These conferences, which have been running since 1998, continue to attract a large attendance and have provided a very useful forum in which the context surrounding the budget can be analysed and debated. As usual, I should begin by reminding everyone that the views expressed are strictly those of the individual authors; neither the ESRI nor the FFS takes corporate or institutional positions in relation to any of the issues raised.

The Overall Economic Situation In the first presentation, Alan Barrett, Ide Kearney and Yvonne McCarthy will present the macroeconomic context for the Budget, drawing on the forecasts and analysis of the latest *Quarterly Economic Commentary.* They will show that the immediate prospects for the Irish economy continue to be positive, with growth in both 2006 and 2007 projected to remain around its long-run potential rate of about 5 per cent. As a result, expansion in employment is expected to continue and tax revenues to stay buoyant. The authors also highlight a number of serious threats and uncertainties, including the global imbalances in the world economy, which may unwind to Ireland's disadvantage, the heavy dependence of growth on domestic activity, especially in the construction sector, and the ongoing volatility of energy prices. However, on the whole the analysis suggests that the Minister will have some scope for flexibility in the Budget while staying within the bounds of fiscal prudence.

Disability and Disability Benefit Our second presentation, by Brendan Gannon of NUI Galway, will examine the growth of disability payments in Ireland. The key question she addresses is whether the extent of disability has actually increased or whether mis-reporting of disability has been spurred by increased generosity of, or accessibility to, disability payments. This question is important for a number of reasons, including for the assessment of efficiency in public expenditure and because of the distortions which may be introduced into incentives for labour market participation. The author sets Ireland in an international context, analyses the available evidence and draws conclusions for policy.

Child Poverty and Child Income

L he next paper, by Tim Callan, Kieran Coleman, Brian Nolan and John Walsh assesses the extent of child poverty in Ireland in an international context. They find that countries which have reduced child poverty to the lowest levels internationally tend to have a strong welfare state supporting the incomes of all citizens, adults and children. Analysis of a potential "second-tier" payment in the Irish context shows that it is possible to achieve some reductions in child poverty through targeted child income supports. However, the countries with the strongest focus on such targeted measures still have rates of child income poverty which remain quite high by international standards.

State Support for Horse Racing

In the final paper, Tony Fahey of the ESRI and Liam Delaney of UCD's Geary Institute examine the history and nature of state support for the horse-racing industry, which currently amounts to about €55 million per annum. They show that up to 2001 this support was wholly financed by a tax on off-course betting but that subsequent reductions in the rates of tax mean that it is now partly financed from general taxation. This pattern of state support for the horse-racing industry is due for re-consideration in 2008. The authors identify the background factors influencing the industry and examine the issues which such re-consideration will raise.

Final Comment

We have tried to plan the morning so that there will be time for a short period of discussion after each paper as well as a general panel session at the end. I hope that the now well established tradition of lively participation in these exchanges will continue.

DISABILITY BENEFIT: CONTROLLED OR UNDER-CONTROLLED?

Brenda Gannon*

1. Introduction

In recent decades, as many economies endeavoured to reduce the numbers unemployed there was a notable increase in the receipt of social welfare disability payments. While the case of the Netherlands is an outstanding example of this trend, Ireland, among other countries, is no exception - official statistics show a steady rise in the number of applicants and recipients for disability payments over the late 1990s. The credibility of some of these recipients has been questioned (Public Accounts Committee (PAC), 2006). The core question addressed in this paper is if in fact the incidence of true disability has increased, or has mis-reporting of disability been spurred on by a perception of generous and easily accessible disability payments? The paper will also address the incentives for older workers to mis-report - this is of particular policy relevance, given the changing demographics of our society and the increasing focus on alleviating labour supply deficiencies via the employment of older workers. Expenditure on illness and disability amounted to approximately 14 per cent of total social welfare spending in 2004, over 1 per cent of GDP, so evidence of overpayments of disability welfare has some small but important budgetary implications. In many countries expenditure on disability payments reflects the rate of disability – the crucial question is does this high expenditure lead to mis-reporting of disability? If so, reporting behaviour and greater control of disability payments is an important concern to policy makers.

One of the main reasons for mis-reporting is the influence of economic incentive. If individuals think they could receive generous disability payments while out of work, they may be inclined to report

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a disability. In times of high employment levels, this could possibly increase their chances of receiving social welfare. Within the economic literature, this is known as endogeneity of reported disability whereby individuals may mis-report the extent of a disability in order to rationalise labour force non-participation. If labour force groups behave in different ways depending on the financial incentives involved, this results in 'systematic differential reporting'. Two groups likely to report systematically different to the employed, are the disabled/ill and retired.

To examine the extent of mis-reporting of disability would require either an in-depth case study that monitors disability payment recipients, or a large scale econometric study that compares subjective reported disability to more objective measures of disability. Both of these methods have been used in the Netherlands and results indicate that there is a significant level of mis-reporting, and that this may be reduced by intensive monitoring of recipients. In the US and Spain, the main focus has been on comparing subjective and objective measures either by using administrative data or household survey data. Until recently in Ireland, there has been no research on the extent of mis-reporting. However, new evidence from a Public Accounts Committee report shows that there are in fact overpayments within the disability benefit schemes (2006). This small case study is supported by results from a more advanced econometric analysis that compares subjective and objective disability, (Gannon, 2006). The focus in this paper, therefore, is to review the results from these two studies and to discuss these in an international comparative context.

The structure of the remainder of this paper is as follows. Section 2 provides background data on disability prevalence and expenditure in the OECD, and potential reasons for mis-reporting in the context of the Irish labour market. Section 3 gives an overview of disability schemes in Ireland and the changing number of recipients over the years 1995-2004. Evidence on mis-reporting in Ireland is given in Section 4. Results from International studies are compared in Section 5. Implications for policy in Ireland are discussed in Section 6. Conclusions are presented in Section 7.

2. Background

2.1 PREVALENCE OF DISABILITY IN OECD COUNTRIES

International comparisons of disability benefit expenditure and recipients ideally require a standard definition of disability across countries. Before assessing the prevalence of disability in various countries, we must acknowledge the lack of a common measurement of disability, and the fact that a common definition of disability is not easily attainable. In recent years, the classification of disability has received much attention and focus has shifted from the medical model of disability towards the social model of disability (World Health Organisation, 1999). The traditional medical form perceived individuals with disabilities as having an impairment that did not allow them to partake in mainstream social activities. Such individuals were seen as inadequate and society did not accommodate them in ways to allow them to be actively included in daily societal activities. On the other hand, the social theory of disability stresses the discriminatory barriers in society whereby modifications should be made to include and accommodate the needs of all individuals. Disability is, therefore, an outcome of social attitudes/structures and the interaction between the person and environmental factors.

The OECD have well recognised the limitations in comparing disability rates between member countries, but have successfully presented an overview of disability prevalence in the 1990s (OECD, 2003). The OECD report used ECHP data from 1997 (see OECD, 2003, Table 3.1), so in this paper we will update this information using the most recently available ECHP data from 2001. The definition employed in the OECD report aimed to address the World Health Organisation classification of disability, i.e. functional limitation or disability caused by a chronic illness or long-term impairment. To this end, responses to the self-reported question from the ECHP served as a useful starting point in European comparisons of disability prevalence. All individual respondents to the survey, aged 16 years and over, were asked "do you have any chronic physical or mental health problem, illness or disability?" and if so, "are you hampered in your daily activities by this chronic physical or mental health problem, illness or disability?" Individuals had a choice of three responses to this question, (1) "yes, severely" (2) "yes, to some extent" or (3) "no, not at all". Table 1 presents the rate of disability for European countries, calculated from the responses severely or to some extent limited in daily activities. It presents rates for the age group 20-64 years to facilitate comparisons with other non-European countries, (see OECD, 2003). In over half of these countries, the rate of disability is greater than the European or OECD average. In particular, the rates in Sweden and the Netherlands are very high, compared to lower rates in more southern countries such as Spain or Portugal. The rate for Ireland is closer to the average. This table highlights the variation in disability rates across countries. Although, cross-country comparisons may be affected by survey design or definition of variables, we would not expect this to be a huge problem for the European countries in Table 1. Consequently, it leaves us to wonder if in fact differences across countries reflect variation in the disability welfare system.¹

¹ In some countries the older age profile may contribute somewhat to a higher disability rate. There is also evidence of over-reporting in both Sweden and the Netherlands, (see Johansson and Skedinger, (2005) and Kerfhofs and Lindeboom (1995; 2002)).

	%
Austria	11.8
Belgium	11.0
Canada	16.1
Denmark	19.1
France	16.4
Ireland	12.8
Italy	5.9
The Netherlands	21.0
Poland	14.5
Portugal	16.2
Spain	9.9
Sweden	21.5
UK	11.1
US	16.5
OECD	14.0
EU	15.5

Table 1: Prevalence of Disability, Age 20-64 Years

Source: ECHP 2001 except for Canada (1998/1999), Poland (2000), US (1999).

It is well documented that the prevalence of disability based on self-reporting may be biased and endogenous, that is individuals may mis-report the extent of their disability in order to rationalise labour force non-participation and receipt of disability benefits (Bound, 1991). Therefore, it is not surprising to note that expenditure on disability benefits is highest in those countries with the highest rates of disability. Table 2 shows that the variation in disability prevalence is similar to that of government expenditure on disability payments. For example, in the Netherlands expenditure amounted to 2.6 per cent of GDP in 1999, compared to the EU average of 1.5 per cent. The percentage of total public social expenditure was 19 per cent, whereas the EU average was 11 per cent. Their disability rate was also high, over 20 per cent in 2001. More recently, in Ireland, expenditure on illness and disability amounted to approximately 14 per cent of total social welfare spending in 2004, over 1 per cent of GDP. The corresponding disability rate was about 13 per cent. At the other extreme, disability expenditure in Italy was less than 1 per cent, and only 7 per cent of total social expenditure – the disability rate was approximately 6 per cent.

	% With Disability	% of GDP	% of Total Expenditure on Social Welfare
Austria	11.8	1.75	8
Belgium	11	1.06	7
Canada	16.1	0.67	7
Denmark	19.1	2.28	13
France	16.4	0.83	6
Ireland	12.8	1.2	14
Italy	5.9	0.95	7
The Netherlands	21	2.65	19
Poland	14.5	3.28	20
Portugal	16.2	1.03	8
Spain	9.9	1.24	12
Sweden	21.5	2.05	15
UK	11.1	1.27	6
US	16.5	0.71	10
OECD	14	1.5	11
EU	15.5	1.46	11

Table 2: Disability Prevalence and Expenditure on Disability

The expenditure figures mirror the extent of disability across countries – countries with high expenditure have higher levels of disability. The direction of causation of this relationship is of crucial relevance to policy makers – preferably the generosity of payments is not causing increased levels of disability reporting. Hence, in Section 4 we will probe further into this question, and focus in on disability reporting in Ireland. First though we look at potential theoretical reasons for mis-reporting.

2.2 POTENTIAL REASONS FOR MIS-REPORTING

The background to mis-reporting of disability and the relationship to labour market outcomes has been well documented in the literature. Bound (1991) and Lindeboom and Kerkhofs (2002) set out the main types of measurement error involved in estimating the effect of disability on labour force participation. First, there may be problems with the measurement of the disability variable and lack of comparability across individuals may lead to underestimates of the effect of disability (via classical measurement error). Second, economic (e.g. disability benefit) or psychological incentives may affect an individual's response to questions on disability, leading to systematic reporting errors by different groups of individuals within the self-reported measure of disability, i.e. differential measurement error.

Labour market conditions and the structure of the social welfare system could well influence the amount of systematic reporting behaviour. More specifically, labour force participation changed dramatically in Ireland during the 1990s. The numbers in employment increased dramatically, and by 2001 there was almost full employment, leaving an unemployment rate of 3.6 per cent. For those who were still out of work, the eligibility rules for receiving unemployment assistance became more stringent, whereby unemployed persons must have proved they were actively seeking work to ensure continued receipt of unemployment assistance. The replacement rate - the ratio of unemployment benefits to after-tax wage income - was reduced from a high of 77 per cent to 64 per cent in 1994, a level below the OECD average. The Irish welfare system traditionally provided "...more or less permanent support for the unemployed" with no maximum duration for unemployment assistance. In recent years, however, recipients in some age groups have been required to register in a public employment or training programme if they wish to continue to receive benefits after their first six months on the rolls (Tille and Yi, 2001).

During a cycle of full employment, individuals that do not wish to work may be required to seek an alternative explanation for their non-participation. Psychological and financial incentives may influence them to state that they are unable to work. Perhaps some individuals who do not want to work would claim to have a disability in order to (1) get disability social welfare assistance, or to (2) justify themselves for not working. The extent of these mis-reports could vary depending on whether the person is disabled/ill, unemployed or retired. Table 3 shows that there are differences in reported disability and associated limitations across labour force status categories in Ireland. At this stage we do not know if this is true disability or not, but none the less this provides a useful starting point to compare reported disability across labour force groups.

	Severe Restriction	Some Restriction	No Restriction	No Disability	N
Employed	0.61	4.6	3.3	91.5	19,889
Unemployed	1.59	9.18	2.75	86.5	2,069
Disabled/ill	33.1	52.6	4.94	9.35	1,134
Retired	9.47	23.08	8.28	59.17	845
Self employed	1.04	6.93	3.76	88.27	2,497
Other	2.02	9.52	4.22	84.25	14,132
All	2.33	8.61	3.84	85.22	40,566

Table 3: Labour Force Status by Restrictions in Daily Activities, 1995-2001, Age <65 Years

Source: Calculations using Living In Ireland data 1995-2001.

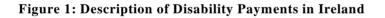
For those who are employed there is a high proportion reporting no restriction or disability, as expected. Although 5 per cent are restricted in some way, we would not expect to see that employed workers would mis-report (Kreider, 1999) as there seems little incentive for them do so. Unemployed individuals on the other hand may be more likely to report a disability and we will need to disentangle whether this is true disability or mis-reporting with a view to obtaining disability allowance in the future. This may be difficult to do - it could be that due to lack of information they are claiming unemployment assistance rather than disability allowance, or it may be that they prefer to state their labour force status as unemployed rather than disabled, to avoid any potential discrimination. The disabled/ill group have a large proportion that say they are restricted in daily activities, as expected. About 14 per cent say that they are not restricted or have no disability. This is slightly higher than the figure presented for the Netherlands in 1993, where 11 per cent of those aged 58-63 years and in the labour force group of disabled, report no restrictions. The corresponding figures for the age groups 53-57 years and 43-52 years are 8 and 6 per cent respectively (Kerkhofs and Lindeboom, 1995). The 9.5 per cent of the labour force group 'disabled/ill' with no disability may be explained by the fact that their disability may be short term - our definition of disability means long-term chronic illness or disability only.

Our hypothesis is that the disabled/ill group may over-report for financial and psychological reasons, but this could also be true for the retired group. Table 2 shows that almost one third report a limitation – we also hypothesise that this group over-reports their disability status. The next group are the self-employed and the expectation is that they have no incentive to mis-report – about 8 per cent of them are restricted in some way. Finally, the other group include all those on training schemes or not covered by the previous categories. While these groups are not the focus of the paper, it will be interesting to view their disability reporting behaviour.

This data clearly indicates different reporting behaviour by labour force groups, but the main question is whether this reflects true disability or whether economic incentives exist to influence differential reporting behaviour. The structure of disability schemes will most likely play a role in the reporting behaviour of the disabled/ill and retired groups. In the next section, therefore, we review some of these schemes. Furthermore, to understand why incentives may exist we will look at changes in participation on these schemes over the years.

3. Review of Disability Schemes in Ireland

isability schemes in Ireland are varied depending on whether or not the disability/illness is short term or long term, the extent of previous social insurance contributions and the cause of disability. Figure 1 illustrates a brief description. A report by the Department of Social and Family Affairs provides a more in-depth discussion of these payments and their historical context, (2003). To summarise disability payments may be categorised into short- and long-term payments, and entitlements also vary by previous social insurance contributions. The amounts received are comparable to unemployment assistance/benefit, so in that respect there is no incentive to prefer disability benefit. The incentive structure therefore lies in accessibility of these payments – if people think that disability payments are more readily available than unemployment payments, this may influence their disability reporting behaviour. Two main types of disability payments exist in Ireland – Disability Allowance is a weekly allowance paid to people with a disability who are aged 16 years or over and under age 66 years. The disability must be expected to last for at least one year and the allowance is subject to both a medical suitability and a means test. The Deciding Officer may refer an individual for a medical assessment. Disability Benefit is a payment made to insured people who are unable to work due to illness. For this payment, individuals must attend their own GP to get a medical certificate. They may be required to attend a further medical assessment within the department of Social Welfare, but this is at the discretion of the Deciding Officer.



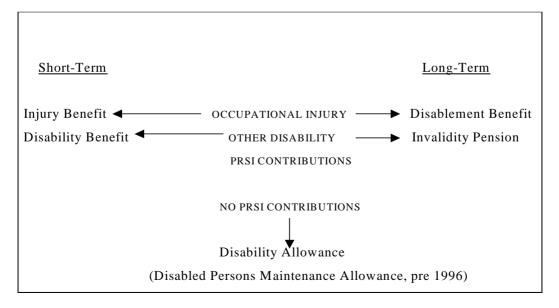
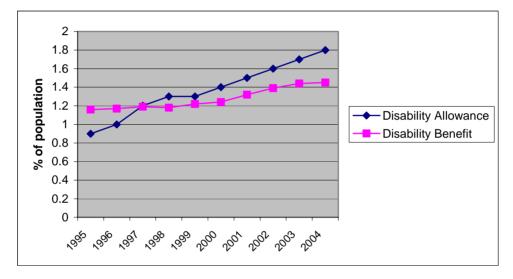


Figure 2 shows that the proportion of the population in receipt of the main disability payments increased between 1995 and 2000. This could be a reflection of improved access and information to social welfare payments for people with disabilities (this could include those who were previously employed but now are aware of their entitlements). On the other hand, it could be that there has been mis-reporting of disability status. The proportions receiving benefit fluctuate for all age groups indicating that it is not just because individuals are getting more disabilities as they get older, but that there are other reasons for the fluctuation in the proportions getting these payments.





Similar to the case of individuals who state their labour force status as unemployed, those who are near retirement age may also be prone to exaggerating their disability status, particularly if financial incentives exist. A pre-retirement allowance is available for individuals who have been unemployed for over a year and are aged 55 years and over. The number of people in receipt of this payment dropped from about 15,000 in 1994 to approximately 11,000 in 2004. For those who wish to 'retire' at an earlier age or were recently employed, social assistance is less available. Individuals must prove they are unable to find work, so in this case they may be more inclined to report a disability and apply for disability benefits. The health and retirement literature has focused on this issue for the US, UK and the Netherlands, but until recently there has been no comparable analysis for Ireland, possibly because of data limitations.

If there were changes in monitoring of payments or institutional arrangements over the years, we might expect reporting behaviour to change. For example, in 1996 the administration of disability allowance was transferred to the Department of Social Welfare. Table 4 presents some administrative figures to support our proposal

that individuals may have changed their reporting behaviour over the period. The number of cases referred for medical assessment increased from 6,423 in 1997 to 10,285 in the year 2000, and consequently the number of applicants deemed as unqualified or who did not attend medical examination increased over the years. This could be the result of increased surveillance on this social welfare payment. It could also suggest that individuals were claiming they had a disability in an attempt to receive the Disability Allowance. The increasing number of cases referred for examination but then not qualifying could support this view. Second, for Disability Benefit the number of cases referred for examination also increased dramatically from 54,226 in 1995 to 63,927 in 1998. Higher proportions were found capable of work after 1998 - ranging from 11.8 per cent in 1998 to over 15 per cent after 2000. This suggests that individuals may have been over-reporting their disability status.

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Disability Allowance										
Cases referred										
for examination	N/A	N/A	6,423	7,229	8,862	10,285	9,663	8,952	8,450	NA
Percentage										
Unqualified	N/A	N/A	28	32	30	28	31	31	32	NA
Percentage Non-										
attendance	N/A	N/A	25	26	27	33	32	30	27	NA
Disability Benefit										
Cases referred										
for examination	54,226	52,059	55,089	63,927	59,224	45,037	41,710	42,017	38,670	35,505
Percentage Capable of										
Work	14.8	12.8	13	11.8	12.5	15.6	15	14	16.6	16.3
Percentage Non-										
attendance	29	31.4	30.3	32.0	30.7	27.6	29.8	29.6	31.2	31.1
attendance		÷				-			31.2	31.1

Source: Statistical Information on Social Welfare Services, Department of Social, Community and Family Affairs.

These figures imply that it may be of interest to determine if changes over time were due to mis-reporting and if this was influenced by any administrative or institutional changes in the system. So the next section discusses the studies that reveal the extent of reporting errors in Ireland.

4. Evidence of Reporting Errors in Ireland Until recently in Ireland, there was no statistical evidence of overpayments of social welfare for disabilities. Two reviews have now been conducted and we discuss these in turn. The first is the Public Accounts Committee report, 2006. This report reviewed a pilot initiative of intensive monitoring of disability payments. The background to this evolved from a finding that lower back pain cases represented 17 per cent of all disability benefit claims in 2002. Resources were then redirected to a pilot initiative that gave priority in medical examinations for these cases. As a result, many cases were found to be capable of working and the success of this initiative suggested that early intervention may be necessary for other ailments. Only 154 of the original 1,532 claimants qualified for disability benefit due to lower back pain. In terms of medical assessment, this report recommended that reassessment should take place -16 claimants of disability allowance were reassessed in 2003 and all were found not qualified, but we should bear in mind that they may qualify for other illness benefits under the social welfare system. For example in 2005, approximately 950 people found capable of work did not go back to work but availed of other schemes. Of course, some may not have been successful in getting employment so this is an issue that needs to be addressed.

There are two plausible explanations for the large number found capable of working, (1) they may have been mis-reporting disability or (2) the large proportion found capable may be partially due to the backlog of medical examinations so that individuals have recovered by the time their medical examination took place. It is likely though that people found capable of working, then claimed other social welfare benefits – so even though overpayments had been made, the overall expenditure saving was minimal. None the less, the department of social welfare spends in excess of $\in 23$ million each year on fees to medical practitioners in respect of certificates and medical reports – whereas the total cost of medical assessment is about $\notin 3.6$ million per year – the Public Accounts Committee believed that if the department had a process of reviewing certificates by GPs, particularly against the opinion of the subsequent medical assessments, then money could be saved.

The second study is an econometric analysis of reporting behaviour between 1995 and 2001, (Gannon, 2006).² The main question asked in that paper was "...does reported disability status depend on your labour force status", i.e. was there state dependent reporting behaviour? The model employed in that paper compared subjective and objective measures of disability for each labour force status group, and any remaining effect of labour force status on reported disability (compared to the employed) was taken as evidence of state dependent mis-reporting. In other words, some financial incentives existed to influence individuals to report having a disability in order to rationalise their labour force status. In particular, the study found that compared to employed persons, misreporting was clearly visible for those whose labour force status was disabled/ill or retired.

The model is similar to that used by Kerfhofs and Lindeboom (1995). In their later paper (2002) however, they emphasised the

² Readers are referred to Gannon (2006) for a detailed account of the model.

importance of correcting for the fact that there may be unobserved individual characteristics such as previous investments in health or education that could influence labour force status and reported or true disability. Due to unobserved differences that exist between workers and disability recipients, they found that the extent of overreporting was less than previous. Similar to Lindeboom and Kerkhofs (2002), we allow for the influence of unobserved effects that may be correlated with the objective measure of disability and labour force status and find the same effect – the level of misreporting is smaller.

The results from this model are shown in Figure A1 and this compares the level of actual reported disability with predicted disability as if employed, for each labour force status group. This is described separately for each of the four levels of disability status. First, for the disabled/ill group under 30 per cent report having a severely limiting disability. When we predict how they would respond if they were employed, we find that only approximately 3 per cent would report this type of disability. But unobserved individual characteristics should be accounted for, so we then find that about 15 per cent of the disabled/ill group would report a severely limiting disability. In other words, half of the original group would not report this limitation if responding as if employed. About 55 per cent report some limitation, and this would reduce to about 20 per cent when compared to the employed. So if the disabled/ill group are over-reporting severe or some limitations, it must be that they under-report no limitations or no disability. Indeed, the remaining two graphs show that over 4 per cent actually reported no limitations, when in fact almost double that would report in that manner if employed. The main difference, however, is for reporting of no disability - only 10 per cent report having no disability, but this increases to over 50 per cent when we account for measurement error relative to the employed. This graph clearly indicates that the disabled/ill group report severe or some limitations and underreport having no disability.

Similar to the case of individuals who state their labour force status as disabled/ill or unemployed, those who are near retirement age may also be prone to over-reporting their disability status. The model finds that the early retired group are prone to mis-reporting their disability status. This is evident from Figure A1 that shows about 10 per cent report severe limitations and this reduces to under 5 per cent when compared to the employed. The extent of mis-reporting of some limitations is similar – approximately 20 per cent report this level of disability, but only about 10 per cent are found to report this if employed. It is interesting to note also that unobserved effects do not play a huge role in this mis-reporting – this is an important finding indicating that the retired group are an easier target group for the elimination of reporting errors. In other words the reason for mis-reporting is purely financial and observed. There is also a small element of mis-reporting of no limitations – about 1

per cent report this type of disability compared to about 0.6 per cent if employed. Initially, we see that 60 per cent of the retired group report no disability and this increases to about 80 per cent if reporting as employed.

In order to get some conclusive evidence on the extent of misreporting of disability in Ireland, we should compare these results to the first study reported by the Public Accounts Committee and administrative data presented earlier in Table 4. First, for disability allowance if all those found unqualified or did not attend their assessment were actually mis-reporting disability, then the econometric result is consistent with administrative data i.e. 50 per cent do not report correctly. None the less, it is likely that some proportion is not mis-reporting and had recovered during the waiting time for assessment, so the econometric estimate may be higher than the actual level of mis-reporting. Similarly, for disability benefit, 40-45 per cent were found capable of work or nonattendance. Conversely, the model predicts disability reporting compared to the employed, so if the employed were less likely to report a (true) disability, then the econometric estimate would actually be underestimated. As pointed out by Kerkhofs and Lindeboom (1995), in their model they do not need to determine who tells the truth - the overall aim is to get measure of disability that is cleansed of state-dependent reporting error. In this context, we must take into account other evidence in order to get a more absolute measure of mis-reporting, for example evidence of overpayments from the PAC report. Another reason that may lead us to suspect that the econometric figure is underestimated is that only approximately 10 per cent of those with back pain who were assessed were found incapable of working. There is still a question though if people with back pain are mis-reporting or not, but in Canada, Campoleiti (2006) found that more stringent screening of applications for disability insurance is associated with a decline in reports of back pain. While 90 per cent mis-reporting seems very high, an approximate level of 50 per cent seems more reasonable, but this would depend on the severity of the illness, length of waiting times for medical assessment and the type of illness involved. Finally, although some of the administrative data suggests that there may have been changes in reporting behaviour over time, the evidence from this study shows that there were only marginal changes in state dependent reporting between 1995 and 2001.

5. International Comparisons of Mis-reporting he findings from our study are quite similar to those found by Kerfhofs and Lindeboom (1995, 2002). In their 1995 paper they assess the magnitude of mis-reporting of self assessed health and find that about three-quarters of all individuals who state their labour force group as disabled/ill would not report bad or to some extent bad health, if they responded as employed. Although we measure mis-reporting of a slightly different variable, i.e. self reported limitations, we find that about the same proportion of the disabled/ill labour force group would not report a severe or to some extent limiting disability/chronic illness, if responding as if employed. When we introduce unobserved effects into the model and control for the fact that mis-reporting may be due to some unobserved individual characteristics such as previous investments in health or education, we find the same result as Lindeboom and Kerkhofs (2002). These results are even more comparable because they focus on work limiting disability in their 2002 paper. Both models find that approximately 60 per cent of the disabled group over-report having a severe or to some extent limiting disability. This reduces the proportions in similar magnitudes, so the differences in the prevalence of disability across countries remain the same. If we suspect that differences in disability rates across countries are due to the presence of different social security systems, then we would expect that in the Netherlands there should be more mis-reporting than in Ireland. However, we have only discussed the differences within the disabled/ill group and we would need exact figures of actual reported disability across each labour force group, to precisely calculate differences across countries in the overall rate of reported disability.

Our findings for the retired group are different to those from the Netherlands – we find that there is substantial mis-reporting among the retired. About one-fifth of those who report a disability would do so if they were employed. In the Netherlands, however, the level of reporting for the early retired group is quite similar to that of the employed. It is possible that differences in mis-reporting between the retired and disabled group arise in the Netherlands, because of different economic incentives for each group. Early retirement schemes were very popular in the 1980s and 1990s in the Netherlands as a means of encouraging people to leave the workforce to make room for a younger workforce. This means that older workers would not need to mis-report a disability in order to leave the workforce, as the direct retirement route was clearly possible. Given the changing demographics this is no longer necessary and the Dutch social partners have agreed that incentives for early retirement need to be reduced. Early retirement schemes are slowly being replaced by pre-pension arrangements shifting the burden of the cost from employers to the individual worker making the decision. Still, the OECD (2003) has reported that more needs to be done to reduce the incentives for early retirement. This may have implications for future mis-reporting of disability. In Ireland however, the incentives are similar for everyone up to age 66 years, so perhaps the retired group are simply a subset of the disabled/ill groups in terms of their reporting behaviour. Unless we analyse a harmonised dataset, we cannot precisely compare across different labour force groups, and even at that cultural and social norms will play a significant role in responses to similar questions. Kaptevn et al. (2004) found that for the same level of actual work disability, Dutch respondents have a lower response threshold in claiming disability than American respondents. Their evidence shows that especially in the more subjective health problems of pain and emotion, Americans use a tougher standard when assigning work disability status. Why these differences exist is another question, to some extent it may be due to differences in social welfare and/or social norms.

Once the evidence of mis-reporting is established, the next step in terms of policy is to try and reduce this reporting behaviour. In the Netherlands, this proved to be a difficult task and after many policy changes and pilot initiatives, the final outcome was to reduce the number of fraudulent disability insurance applications. In the Netherlands, around 10 per cent of the working age population were collecting benefits in the early 1990s. A major reform of the disability insurance scheme took place in 1993/1994 but there was no sustainable reduction in the numbers entering the scheme. Some of this may be attributed to a buoyant labour market whereby lower unemployment levels mean that individuals are more likely to aim for disability insurance schemes. In addition, they are less likely to loose their job when labour market conditions are good. More stringent measures were introduced in 2002 mainly because of institutional improvements³ and for the first time in seven years the total number of beneficiaries declined. Some of this decline may be cyclical (the Dutch economy was in a period of recession and inflow to unemployment insurance increased) but recent research shows that in fact intensified screening of sickness absence also reduces the number of disability insurance applications, (de Jong, Lindeboom and van der Klaauw (2006)). The current challenges facing the Netherlands now are to reassess the stock of existing beneficiaries, restrict full benefits to severe cases, and reduce access to partial benefits from people with mild disabilities that do not affect their daily functioning and work ability.

In Spain, Jiminez-Martin *et al.* (2006) found that individuals aged between 55 and 59 years had a probability of receiving a benefit without deserving it, that was significantly higher than the rest of the individuals. Their results confirm that disability benefits are being used as a way of exiting the labour force before retirement age. While they do not specifically analyse the award errors for people aged less than 55 years, it is likely that this may also be a problem in Spain. One of the main sources of income for disabled persons is disability benefits, approximately 35 per cent receive benefits compared to an EU average of about 20 per cent, (OECD, 2003). Jiminez-Martin *et al.* (2006) make some recommendations for more medical tests but recognise the expenditure involved. But as we saw earlier the costs are likely to only be a small fraction of the benefits

³ Stricter obligations on re-integration came into force in 2002 for employees on long-term sickness benefits. The five disability benefit agencies were merged reducing the influence of sector interests on the disability benefit authority. Penalties for firms became stronger.

(Netherlands). More recently, the Spanish Observatory of the Social Security System proposed reforms in the regulation of permanent disability benefits. These included approval of a list of occupational diseases and the exclusion of professions that are no longer suited to old-aged workers. In relation to this, they propose to modify retirement benefits by relaxing the restrictions on age for these professions.

In the US, Gruber (2000) notes that the level of disability insurance is 42 per cent of previous earnings on average and mostly non-taxable. The author fears that this could be subsidising early retirement of older workers who have no other reason for retiring. Nonetheless, a replacement rate of 42 per cent is guite low compared to the Netherlands, and this could be a contributing factor to the higher rates of disability in the Netherlands compared to the US. There is also evidence of mis-reporting of disability status among older workers, although there are conflicting results between earlier and more recent studies. Kreider (1999) found that nonworkers over-report work limitations. Their main focus was on the consequential econometric issues involved in labour force participation models, rather than the relationship between reporting and social security benefits for disabled people. Bound (1989) found that they were no dis-incentive effects of disability benefit - most people on disability insurance were found to be healthy and half of those who had been rejected for disability insurance were then found capable of work. This would suggest that in the US the level of benefits does not contribute to mis-reporting but more so that it is a favourable route towards retirement. Benitez et al. (2004) analysed the 45-64 year age group during the 1992-93 period and found that a person's evaluation of health is similar to Social Security Award evaluation. Given that expenditure on disability benefits in the US is quite low at less than 1 per cent of GDP, and the fact that the disability rate is quite low, we should not expect a high level of misreporting. Kreider (1999) and Benitez-Silva et al. (2004) give conflicting results but the earlier paper by Kreider only focuses on 1992/93 whereas Benitez-Silva et al., focus on data up to 1996 - it is possible that the different results are due to cyclical variation.

6. Implications for Policy in Ireland There is clearly evidence of mis-reporting of disability and overpayments of disability welfare in Ireland, so the next step is to find a strategy that will fix this problem. The question is what type of policy reform is needed and to what extent this should be monitored. Policy reform, in terms of eligibility conditions, does not seem to be enough according to evidence from the Netherlands. The same level of mis-reporting can be observed in Ireland even though there was not much reform. In Ireland, the disability schemes are targeted towards a diverse group depending on severity and duration of illness/disability and there was little reform in terms of disability policy during the period 1995-2001. Benefits increased in line with other social welfare payments and there were very few institutional changes.

In 1996 the payment of disability allowance was moved from the Department of Health to Social Community and Family Affairs. The purpose of this was to integrate income maintenance payments and to streamline the process for social welfare payments for the disabled more generally. The expectation was that this might reduce the level of potential overpayments within the system, nonetheless as we saw earlier the number of beneficiaries increased significantly but at the same time the level of mis-reporting only changed marginally. In 2003, a report from the Department of Social Community and Family Affairs reviewed expenditure on illness and disability schemes. One of their main recommendations was to improve the effectiveness and efficiency of the system by introducing a simpler one. But more recently, the PAC reported on the level of overpayments within the system. The PAC report recognised the level of work that has been done to eliminate overpayments in the social welfare system but recommended that the Department of Social Welfare should introduce further systems of integration with the Revenue Commissioners in order to streamline systems and reduce time taken to detect overpayments. There should also be greater liaison between GPs certificates and medical assessments from the Department. While the level of overpayments may then be reduced it is likely however that individuals no longer entitled to disability payments will seek payment from another social welfare scheme – thus it is important that policy also ensures that individuals are re-integrated in to the labour market once they are capable of working.

The implications from the more stringent measures in the Netherlands and the pilot initiative in Ireland are that this is a successful approach to reducing overpayments of disability welfare and ensuring that the appropriate people receive benefits. A costbenefit analysis by de Jong et al. (2006), shows that the costs of intensified screening are only a small fraction of the benefits. There is a strong case, therefore, for a similar cost-benefit analysis to be carried out in Ireland and additionally for a nationwide expansion of the pilot initiative. The lesson to be learned from the Netherlands is that reform of the schemes is not sufficient without effective monitoring. It is crucial, however, that reform does not affect those who are currently receiving disability payments if they are genuinely in need of assistance. An efficient monitoring system should appropriately distinguish between those in genuine need of social welfare and those who are mis-reporting or no longer incapable of work.

7. Conclusion

As disability prevalence increased in many OECD countries, this raised the question if in fact the incidence of true disability increased or was there an element of mis-reporting? It could be that financial

incentives existed to influence individuals to mis-report. This paper strived to answer this question using evidence from a recent Public Accounts Committee report and results from an econometric analysis of mis-reporting. The conclusion reached is that relative to the employed there was substantial mis-reporting in the late 1990s. Within the disabled/ill group almost 30 per cent had reported a severe disability, whereas this was reduced to approximately 15 per cent if individuals in this group would have responded as if employed. Similarly, the level of mis-reporting by the early retired group was reduced by half. These results are complemented by evidence from the PAC report that there was a substantial amount of overpayments in all social welfare in 2003, one-third of which were attributed to fraud. Some overpayments were due to the time lag in obtaining medical assessments, whereby some individuals had recovered and were then found capable of working. In this context, part of the econometric estimate may reflect mis-reporting due to this delay in medical assessment, rather than fraudulent misreporting.

These results are not unique to Ireland and this paper provided a comparative analysis with some other OECD countries. In terms of policy, the most effective strategy for reducing mis-reports is for careful monitoring of the disability benefit applicants. Evidence from the Netherlands suggests that this is a successful and inexpensive approach, and without effective monitoring, policy reform is not enough to reduce the number of overpayments of disability benefit. In an international context, these findings of overpayments are comparable to the Netherlands, Spain and the US. The resulting question is; what type of policy reform is required to address this problem of overpayments of disability welfare? For example, in the Netherlands, policy reform without efficient monitoring did not lead to a change in reporting behaviour. Eventually, when stricter obligations and penalties for firms were introduced, the number of beneficiaries declined. It is crucial the solution does not affect those in genuine need of disability benefits. The emphasis should, therefore, be on improved medical assessments with shorter waiting times and efficient monitoring. In terms of government expenditure, international research has shown that the cost of monitoring is only a small fraction of benefits.

The implications for Ireland are:

- A need for review of the medical assessment procedure in order to reduce waiting times, and to reduce expenditure on medical practitioners.
- Introduce further systems of integration between Department of Social Welfare and Revenue Commissioners in order to reduce time taken to detect overpayments.
- Cost-benefit analysis of intensified screening should be carried out.
- Effective monitoring of disability benefits is required, perhaps by making the pilot initiative a nationwide policy.

 Individuals found capable of work need to be re-integrated into the labour force, so as to reduce the number applying for other social welfare payments.

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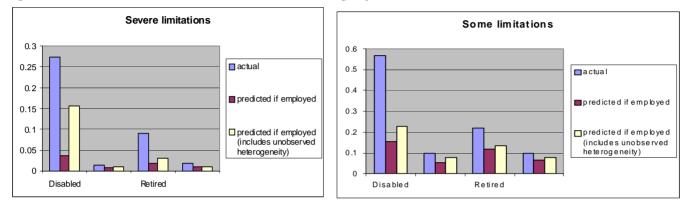
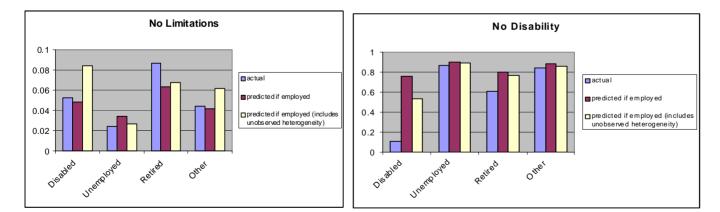


Figure A1 Actual v Predicted Probabilities –average of 1995-2001



CHILD POVERTY AND CHILD INCOME SUPPORTS: IRELAND IN COMPARATIVE PERSPECTIVE

Tim Callan, Kieran Coleman, Brian Nolan, John R. Walsh

1. Introduction

NESC's (2005) characterisation of the developmental welfare state emphasises three overlapping areas of welfare state activity: services, income supports and activist or innovative measures. In this paper we focus on the income support domain, especially as it relates to children.

There has been particular concern in Ireland, as in many other countries, about the effects of poverty on children. The impact of poverty during childhood, and especially in early childhood, may be especially difficult to reverse. For this reason, a key question is how policies can be made more effective in supporting the incomes of families with children. In order to explore this question we examine evidence on how child poverty rates vary across a wide range of countries and the role of policy differences in helping to explain these differences in outcomes for children. We then focus more closely on the Irish system of child-related income supports. We examine how it has evolved in recent years, and the impact of such changes on child poverty. The implications of introducing a "second tier" of income-tested child income support, replacing Child Dependant Additions and Family Income Supplement, are then examined. Such a change has been under consideration as part of the Ending Child Poverty Initiative under Sustaining Progress and remains on the agenda in the most recent partnership agreement, Towards 2016.

2. Child Poverty and Welfare Policies: Crosscountry Comparisons

2.1 CHILD POVERTY IN INTERNATIONAL PERSPECTIVE

The most comprehensive recent study of rates of child poverty in rich countries is reported in UNICEF (2005). Overall results for child income poverty (the risk of living in a household with an income below 50 per cent of median income per adult equivalent) are reported in Table 1. The lowest rates of child poverty were found in the Scandinavian countries, where the risk of income poverty was between 2 and 4 per cent. Almost all Continental European countries, along with some of the new member states, had child poverty rates of between 7 and 13 per cent. Ten countries had higher child poverty rates - the highest in the US and in Mexico, with the others at levels of between 14 and 17 per cent. It is striking that all of the English speaking countries had poverty rates well above the average. The six English speaking countries occupied six of the nine worst positions in terms of the prevalence of child poverty. Micklewright (2004) extends this analysis with further comparisons and finds that the English-speaking countries also perform poorly on other indicators of child welfare.

Country	Rate of Child Poverty (Relative Income Poverty, 50% of Median Equivalised Income)
Denmark	2.4
Finland	2.8
Norway	3.4
Sweden	4.2
Czech Republic	6.8
Switzerland	6.8
France	7.5
Belgium	7.7
Hungary	8.8
Luxembourg	9.1
Netherlands	9.8
Austria	10.2
Germany	10.2
Greece	12.4
Poland	12.7
Spain	13.3
Japan	14.3
Australia	14.7
Canada	14.9
UK	15.4
Portugal	15.6
Ireland	15.7
New Zealand	16.3
Italy	16.6
USA	21.9
Mexico	27.7 Id Paverty in Rich Countries 2005 Innocenti Report Card No. 6

Table 1: Rates of Income Poverty for Children in Rich Countries, Around 2000

Source: UNICEF (2005), Child Poverty in Rich Countries 2005, Innocenti Report Card No. 6.

Note: The poverty rates in Figure 1 refer to the following years: 2001 (Switzerland, France, Germany, New Zealand), 2000 (Denmark, Finland, Norway, Sweden, Czech Republic, Luxembourg, Japan, Australia, Canada, Portugal, Ireland, Italy, USA), 1999 (Hungary, Netherlands, Greece, Poland, UK), 1998 (Mexico), 1997 (Belgium, Austral) and 1995 (Spain).

More recent information on the incidence of child and overall poverty is available for EU countries. This is of particular relevance given the emphasis on trying to match EU best practice in social policy, as set out in the Lisbon strategy. Table 2 reports "at risk of poverty" measures for the total population and for children, for EU countries in 2004. The cut-off used is 60 per cent of median income per adult equivalent, one of the key "Laeken" indicators.

Table 2: At Risk of Poverty Rates for EU15 Countries, 2004

Equivalent)		
Country	Total Rate	Child Rate
Norway	11	8
Denmark	11	9
Finland	11	10
Sweden	11	11
Luxembourg	11	18
Netherlands	12	18
Austria	13	15
France	14	14
Belgium	15	17
Germany	16	20
UK	18	22
Italy	19	26
Greece	20	20
Spain	20	24
Ireland	21	22
Portugal	21	23
Unweighted average of EU15	16	18

(Cut-off point: 60 Per Cent of Median Income Per Adult Equivalent)

Note: Figures for Netherlands and for the UK are for 2003. *Source:* Eurostat web site, http://www.epp.eurostat.cec.int.

The Scandinavian countries had the lowest rates of overall income poverty, and rates of child poverty which were, if anything, somewhat lower (child poverty rates of 8 to 11 per cent). This makes them stand out from Continental European countries where the child poverty rates were between 14 and 20 per cent. The UK and Ireland had child poverty rates of 22 per cent, with higher rates of up to 26 per cent in a group of "southern" countries (Portugal, Spain and Italy).

For the most part, child poverty rates were close to overall poverty rates.¹ Norway, Denmark and Finland were the only countries with child poverty rates below the overall poverty rate. There were two countries, Luxembourg and the Netherlands, with low overall poverty rates but substantially higher child poverty rates.

¹ This is in line with Brady's (2004) finding that, for 18 rich Western countries, child poverty is very strongly correlated with overall poverty. Brady finds, on the other hand, that elderly poverty is only moderately correlated with overall poverty.

2.2 CHILD POVERTY AND CHILD INCOME SUPPORT POLICIES

The lowest rates of child poverty and of overall poverty shown in Table 2 are for the Nordic countries – Denmark, Finland and Sweden among the EU countries, and Norway. The logic of the "best practice" approach dictates that special attention should be paid to these countries in order to understand how they have achieved low rates of child and general poverty, and what lessons may be learned from their experience. This is all the more so because the child poverty outcomes for children achieved in theses countries represent "best practice" not just within the EU but in global terms. In seeking to "end child poverty" a closer look at the Scandinavian experience is clearly warranted.

We begin by considering how income support paid by the state in respect of children varies across countries: clearly this has the potential to affect child poverty outcomes. Child income supports can vary according to the age and number of the children concerned, and may also depend on whether one or two parents are present in the household, and on the labour force status and income of the parent(s). Bradshaw and Finch (2002) examine child income support packages for a wide range of family types and labour market/income situations. They choose a subset of these cases, giving greater weight to those occurring more commonly. While this does not provide a fully representative picture of families in any one country, this approach provides a standardised framework with which to assess the nature of the income support packages across countries. Key results are set out in Table 3.

Country	Value of Cash Child Income Supports as % of Average Wage	Country	Value of Child Income Support Package Including Housing and Non-cash Services as % of Average Wage
Austria	16.3	Austria	17.2
Luxembourg	14.2	Finland	13.9
IRELAND	13.2	France	10.9
Belgium	12.1	Luxembourg	10.2
UK	11.6	Sweden	10.2
France	10.4	Norway	9.7
Norway	9.6	Belgium	9
Germany	9	Germany	8.3
Finland	8.7	Denmark	7.7
USA	8.5	UK	7.5
Australia	7.6	Australia	6.7
Israel	7.3	IRELAND	5.3
Sweden	6.7	Israel	3.9
Portugal	6.6	Canada	2
Denmark	6.2	Italy	2
Canada	5.8	USA	1.6
New Zealand	5.2	New Zealand	-0.4
Japan	4.9	Spain	-1.1
Italy	4.8	Japan	-1.5
Spain	2.3	Portugal	-2
Greece	1.9	Greece	-5.6

Table 3: Ranking of the Child Support Package for 22 Countries, 2001

Source: Bradshaw and Finch (2002). Figures for Ireland incorporate revisions (http://www.york.ac.uk/inst/spru/research/summs/childben22.htm).

The package of cash income supports offered in Ireland, as of 2001, was among the most generous across countries. Ireland ranked third in terms of the value of the cash package of income supports for children – mainly child benefit and child dependant additions. The total value of the package, averaged over a wide range of family situations, was just over 13 per cent of the average industrial wage, compared with 15 per cent for the country with the most generous package. The value of the package in most countries – including the four Scandinavian countries – was between 5 and 10 per cent of the average wage.

The value of Ireland's overall child support package, taking into account housing benefits and provision of non-cash services such as subsidised childcare, was towards the lower end of the international spectrum in 2001. Increases in child benefit since then, and the introduction of the Early Childcare Subsidy will have boosted Ireland's overall child support package, and its position in the country rankings of child supports. Because this support is delivered through a cash mechanism, while other countries typically use noncash mechanisms for childcare, Ireland's position in the ranking of cash income supports will be further enhanced, while its low ranking in terms of directly provided services will remain unchanged.

It is striking that the four Scandinavian countries, which have the lowest child poverty rates, had child income support packages of between 6 and 10 per cent, in the middle of the international ranking. Thus, their exceptional performance in terms of reducing child poverty is *not* due to exceptionally high child income supports. Indeed, both Ireland and the UK have higher valued cash supports – but as we have seen, child poverty rates in Ireland and the UK are close to the highest in the EU, while those in the Scandinavian countries are among the lowest.

2.3 WELFARE REGIMES

How then have the Scandinavian countries managed to achieve such low rates of child poverty? A key factor in explaining this is that the income situation of children depends on the *total* income package received by their parents, not just on the elements which are related to the presence of children. The Scandinavian societies combine high employment rates with a welfare regime which gives high levels of payment to those on social protection. Table 4 below illustrates for Ireland, the UK and the four Scandinavian countries:²

a. the unemployment benefit paid to a single person as a proportion of the EU at risk of poverty threshold (60 per cent of median income per adult equivalent);

² While individual examples of this type might not be representative we know (e.g., from Callan and Nolan, 2004) that an analysis taking into account the full range of welfare recipients points in a similar direction. Callan and Nolan show that over half of the gap between the overall poverty rate in Ireland and that in Denmark can be accounted for by differences in welfare policies.

- b. the poverty threshold as a proportion of the average industrial wage; and
- c. unemployment benefit as a proportion of the average industrial wage.

	Unemployment Benefit as % of Poverty Threshold	Poverty Threshold as % of Average Wage of Production Worker	UB as % of Average Wage of Production Worker
Denmark	147	29	43
Finland	121	34	41
Sweden	89	37	33
Norway ¹	70	42	29
Ireland	65	39	26
UK	40	34	14

Table 4: Poverty Thresholds, Average Wages and Unemployment Benefits, 2004

Notes: 1. As UB is earnings related, and can be payable in respect of quite low levels of earnings, social assistance provides a higher floor - similar to the UB payable to an individual on half the average wage. The minimum wage in Ireland is just over half the average industrial wage.

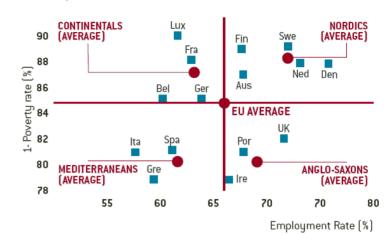
Source: Poverty threshold from Eurostat web site cited in Table 2. Wage for average production worker from OECD Taxing Wages 2003-2004. Unemployment benefit for a single person from OECD (2006) Benefits and Wages: OECD Indicators 2004 and associated online country files.

In Ireland, the rate of Unemployment Benefit in 2004 was about two-thirds of the at-risk-of-poverty threshold for a single person. For Sweden the ratio was almost 90 per cent, while the payment rates in Finland and Denmark were well above the at-risk-of-poverty threshold in those countries. In the UK, by contrast, the payment rate was 40 per cent of the at-risk-of-poverty threshold.

The poverty thresholds represent varying proportions of the average industrial wage across countries. Is this ratio particularly high in Ireland, causing particular labour market difficulties in paying a welfare rate which is high in relation to the at-risk-of-poverty threshold? The Irish rate is 39 per cent, higher than that in Denmark, Finland and the UK. It is also somewhat above the rate in Sweden (37 per cent) but below that in Norway (42 per cent).

Sapir (2005) provides a further perspective on the issue of whether the achievement of a low risk of poverty measure in the Scandinavian countries is at the expense of a trade-off between equity and efficiency. Figure 1, drawn from Sapir, plots the EU15 countries in terms of an equity goal (the probability of avoiding poverty, measured by 100 minus the percentage risk of poverty measure) and an efficiency goal (the employment rate, which takes into account not just unemployment but also labour market participation).

Sapir argues that this evidence indicates that the Scandinavian economies and welfare regimes are attaining both equity and efficiency goals. Ireland and the UK score well on the efficiency front, but not on the equity goal. The Continental economies, by contrast, score well on equity but not on efficiency; while the Mediterranean or southern EU countries, by and large, achieve neither efficiency nor equity.





Source: Sapir (2005).

3. Restructuring Child Income Supports: Policy Impacts, Policy Options

he clear message from these international comparisons is that, to date, the most effective policy regimes in countering both child poverty and general poverty have been those of the Scandinavian countries. Furthermore, the success in countering child poverty is not due to especially high child income support payments, but to the more general income support regime and to the extent to which the welfare state more broadly reconciles equity and efficiency goals and underpins a high employment rate. However, welfare state expenditures have to be financed. If Ireland, like other Englishspeaking countries, is unwilling to finance expenditure at the levels seen in Scandinavian countries, then the question arises as to what can be achieved with a more targeted approach to the reduction of child income poverty. In this section, therefore, we concentrate on the recent evolution of policy in Ireland and in other English speaking countries, which relates to the development of more targeted child income supports. It must be remembered, however, that these supports operate in an environment where child income poverty is substantially higher than in the Scandinavian countries.

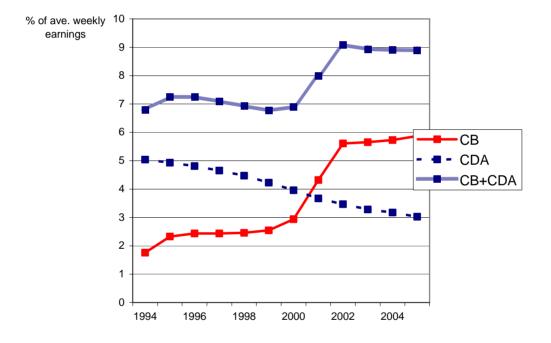
3.1 ASSESSING THE IMPACT ON CHILD POVERTY OF RECENT DEVELOPMENTS IN CHILD INCOME SUPPORT

There have been dramatic shifts in child income support over the past decade. Both the level of child income support and the way in which it is structured have changed radically in recent years. Since the mid-1990s, rates of payment for Child Dependant Additions (CDAs) – a payment received only by those in receipt of a weekly social welfare payment – have been frozen in nominal terms, while very substantial additional resources have been used to increase the rate of child benefit paid in respect of all children. The broad rationale for this approach involved a shift to child benefit as a form

of support which was neutral with respect to labour market status, and away from payments conditional on being out of work.

The outcome in terms of the balance between payment rates for CDAs and Child Benefit is illustrated in Figure 2. The rate of payment for Child Benefit rose from just under 2 per cent of the average industrial wage in 1994 to a level just under 6 per cent of that wage in 2005. While CDA payment rates remained constant in nominal terms, rising real and nominal wages meant that CDA rates declined as a proportion of the average industrial wage from about 5 per cent in 2000 to 3 per cent in 2005. The total income support package rose from 7 per cent of the average wage to 9 per cent, with the net increase concentrated in the period from 2000 to 2002.

Figure 2: Rates of Child Benefit and Child Dependant Addition as a Percentage of Average Earnings in Manufacturing, 1994 to 2005



Budget 2006 introduced a further innovation in the form of the Early Childcare Subsidy. This is a cash support, allowing the parent or parents to choose whether to use the money to help purchase paid childcare or to use it as a financial support for a parent to undertake the care.

The head count measure of children living in a household "at risk of poverty" (i.e., below 60 per cent of median income) was close to 24 per cent in 2000, as measured by the Living in Ireland Survey. Latest estimates, based on the new Survey of Income and Living Conditions (SILC) conducted by the Central Statistics Office (CSO), are just above 21 per cent. But this fall of 2¹/₂ percentage points represents the impact of *all* changes over the period (as well as any effect from the change in data source). It includes the influence not only of policy changes, but also of all developments in the economy and society over the period – for example, changes in labour market participation, or in the incidence of different family types. Within the policy domain, it includes the impact of all policies, not just those relating to child income support.

Identifying the impact of changes in child income support policies on the risk of income poverty facing children requires an alternative approach. We need to hold constant the population, and all policies other than child income support. We do this using a microsimulation model – *SWITCH*, the ESRI tax benefit model. The impact of child income support policy changes between 2000 and 2006 is measured by constructing a counterfactual policy for 2006 in which child income supports are simply indexed in line with earnings from their 2000 levels. We can then simulate the impact of the child income support policy changes on the 2006 population.

This analysis suggests that changes in child income supports (including the sharp increase in Child Benefit in 2001/2 and the Early Childcare Supplement in 2006) led to a reduction of 4.2 percentage points in the incidence of child income poverty (using the 60 per cent median cut-off). This represents a fall of one-fifth in the head count measure. The "poverty gap" measure which takes account of the depth of income poverty for those experiencing it falls rather more, by about one-third, because it also takes into account those who are brought closer to but not above the poverty threshold.

3.2 RECENT INTERNATIONAL POLICY DEVELOPMENTS

Policy developments designed to improve in-work incomes relative to out-of-work benefits ("making work pay") have attracted considerable attention in OECD countries.³ The long experience of the US and the UK in this field, and the fact that much of the evidence on the employment and labour supply effects of making work pay policies centres on US and UK experience has made policy developments in these countries of particular interest. A key feature in both countries is an in-work benefit, paid through the income tax system – Earned Income Tax Credit in the US, and (after several structural changes and renamings) the combination of Child Tax Credit and Working Tax Credit in the UK.

While the development and refinement of these schemes has been closely followed, it should be borne in mind that these are still two of the countries with the highest rates of child income poverty. By contrast, Finland achieves low rates of child and adult poverty with a system that provides generous support through social insurance; a child benefit rate which is somewhat lower than Ireland's; and no income-tested child income support.

³ For a review of "policy transfer" in the welfare area, with a particular focus on "making work pay", see Banks *et al.* (2005).

A brief summary of how the policies evolved on either side of the Atlantic may be useful, before considering some of the analysis. In the US, the Earned Income Tax Credit (EITC), initially introduced in 1975, has been substantially expanded and revised since then. EITC is a refundable tax credit, typically paid annually in arrears, and administered by the US tax authorities. The level of the credit rises initially with the level of earned income (at a rate of about 35 per cent of earnings), then is capped at a maximum level, and is then withdrawn in gradual fashion or "phased out" (at a rate of about 15 to 20 per cent). While the level of the credit, and its aggregate cost, was initially quite low, EITC now forms a substantial part of the overall income support programme (costing almost as much as Food Stamps and Temporary Assistance to Needy Families).

In the UK, Family Credit was introduced in 1988 (replacing Family Income Supplement) has also been expanded and revised in later years. The current system involves a Child Tax Credit (CTC) and a Working Tax Credit (WTC). The child tax credit comprises two elements:

- a per-family element (UK£10.45 per week in 2003-4); and
- a per-child element (About UK£28 per week in 2003-4).

Families with annual gross incomes below £13,230 are entitled to the full credit. Entitlements are then reduced by 37 per cent of income above this level until the family is left with just the perfamily element. Incomes above £50,000 per annum reduce entitlement to the per family element by 6.7p in the pound until entitlement is exhausted.

The Working Tax Credit operates in parallel. Key parameters include:

- withdrawal of benefit at a rate of 37 per cent, for incomes exceeding £5,000;
- benefits are exhausted for a lone parent or couple working full-time at an income of just under £15,000 per annum, or £13,230 if working less than 30 hours per week).

As with EITC, payment of WTC and CTC is now paid through the income tax system and operates on an annual basis. Three recent reports have detailed problems arising from "overpayment" of benefit, in some cases despite recipients' best efforts to rectify the situation. (Parliamentary Ombudsman, 2005; Citizens Advice, 2005, House of Commons Treasury Committee. 2005).

One of the aims of the UK approach has been to "make work pay" for parents with low earnings capacity, and thereby increase labour market participation and long-term attachment to the labour market. Brewer *et al.* (2005) estimated that by 2002, the Working Family Tax Credit scheme had increased the labour supply of lone mothers by around 5 percentage points, with the labour supply of mothers in couples being reduced by 0.6 percentage points, and the labour supply of fathers in couples raised by about 0.8 percentage points. Blundell and Hoynes (2001) compared the US and UK experiences. In the US, a large proportion of the dramatic rise in participation among low educated single parents in the 1990s has been attributed to the increased generosity of the EITC. But estimates suggest that the impact of apparently similar reforms has been smaller in the UK. Blundell and Hoynes argue that four factors help to account for these differences:

- (a) the impact of interactions with other means-tested benefits in the UK;
- (b) the importance of workless couples with children in the UK, making up almost 50 per cent of recipients;
- (c) the level of income support given to non-working parents; and;
- (d) the strength of the economic upturn in the US during the 1990s.

Bargain and Orsini (2006) explore the possible introduction of an in-work benefit along the lines of the UK's Working Tax Credit (WTC) to three European countries: France, Germany and Finland. One key feature is that there are substantial increases in marginal effective tax rates for individuals in low to middle income households. Bargain and Orsini's labour supply analysis finds that positive effects on the labour supply of lone parents are outweighed by withdrawals from the labour force for some married women, a reversal of the balance in the UK case. These results indicate the need for careful analysis of such proposals in the context of the national labour market and initial situation.

3.3 POLICY ISSUES

There are particular reasons for the special focus on child poverty. One major concern is that the effects of poverty on children are at a vulnerable, formative stage. Poverty may therefore have more longlasting and damaging effects than on adults, who may be more resilient and escape from poverty with more limited after-effects. There are, however, both ethical and practical objections to the consolidation of these concerns into an income support structure strongly tilted towards the elimination of child poverty at the expense of general poverty. For example, if the poverty line for a single adult were €200 per week, and the child addition to the income poverty line were €66, a "neutral" structure could set welfare payment rates to be €200 for a single adult and €66 per child. But if this could not be afforded, one interpretation of an emphasis on child poverty could result in a payment of, say, €150 for a single adult, €116 for a first child and €66 for other children. This would mean that families with children were brought up to the poverty line income, whereas single adults would remain below the poverty line.

On the ethical side, one difficulty with such an approach is that many of the adults currently experiencing poverty may themselves have suffered poverty as children, with consequent damage to their later life chances. On the practical side, a structure which guaranteed an income above the poverty line for all children, but not for adults, would mean that poor childless adults would face a situation in which having a child would be a guaranteed route out of income poverty. The extent to which this would affect fertility decisions is unclear, but it seems undesirable to face poor individuals with such incentives. A further objection might be that no country seems to have achieved a low rate of child poverty while having a high rate of poverty in the adult population. Given these considerations, we do not pursue the theoretical possibility of a income support structure strongly biased towards the elimination of child poverty rather than general poverty when examining policy options.

The main child income support instruments at present include Child Benefit, Early Childcare Supplement, and Increases for Child Dependants (formerly called Child Dependant Additions). We consider two possible additions to this structure: an increased, taxable child benefit and a child benefit supplement. A refundable tax credit in respect of children would be equivalent, in real terms, to the current (untaxed) child benefit. It would involve a different delivery mechanism but delivery of child benefit is not thought to be problematic. For these reasons, a refundable tax credit for children is not considered further here.

3.3.1 An Increased, Taxable Child Benefit

One way of achieving greater "targeting" with child benefit would be to increase it while making the payment taxable. This would give a full payment to those with lowest incomes, a payment reduced by 20 per cent for those on the standard rate of tax, and reduced by 42 per cent for those on the top rate of tax. This option was debated during the 1990s, and would have had much to recommend it. At a time when the basic child benefit payment was being increased so rapidly, all those with children would have seen their Child Benefit increase despite its being made taxable, but there would have been larger net increases for those on lower incomes. This approach was not adopted, instead universal child benefit was increased but without making it taxable (while CDAs were frozen as we have seen). The taxable status of child benefit could have been changed more readily at the same time as substantial increases in payment levels were introduced. In the absence of substantial further increases in child benefit, making the payment taxable would require the "clawing back" of some of the net benefit for high earners. Making the payment taxable would also affect marginal tax rates and how they change as those with children move into the tax net or from the standard to the higher tax band. None the less, it remains a way of introducing some element of targeting to the payment without affecting its essential structure and the way it is paid.

3.3.2 A Child Benefit Supplement

A paper prepared for the Tax Strategy Group (Department of Social and Family Affairs, 2004) indicated that "...it has been agreed under the 'Ending Child Poverty' special initiative in *Sustaining Progress* to examine the possibility of combining FIS and CDAs into one payment which might be paid to low income families irrespective of their employment status." This idea – a child-related benefit which would depend on income but not on labour market status – is currently being explored by the NESC as part of the social partnership process. Key factors here include the desire to have an income-tested supplement, so as to maximise the impact on child poverty for a given level of resources; a seamless transition between child income support when out of work and when in employment, in order to facilitate those wishing to take up employment; and the low rate of take-up of Family Income Supplement (FIS), the existing in-work benefit for families with children.

What might such a payment look like? One possibility is that it could take the form of "...a tapered, employment-neutral Child Benefit Supplement".⁴ This is the form of unification which is examined here. Other possible designs are not excluded, but the non-categorical, income-tested Child Benefit Supplement provides a clear starting point and benchmark against which other options can be compared.

Here we sketch what such a supplement (CBS) might look like, its likely cost and its potential impact on the risk of income poverty, on financial incentives to take up employment, Our analysis is based on *SWITCH*, the tax benefit model, which contains all the relevant information and can, therefore, calculate each family's entitlement accurately. Implicit in the analysis is that each family has the same income for each week of the year. Difficulties arising from problems of administration and take-up of such a benefit are discussed later.

There are three key parameters to be set in such a Child Benefit Supplement:

- the weekly or monthly rate of payment for CBS;
- the income level up to which a full payment is made;
- the rate of withdrawal (taper, "phase-out") applied to the benefit as income rises above that limit.

We set the level of the Supplement at a rate which bridges the gap between current child income supports and the "...child addition to the at risk of poverty threshold". Thus, the new structure, incorporating CBS, gives a child-related payment which is sufficient to cover child-related expenses (30 per cent of the at risk of poverty threshold of 60 per cent of median income). In cash terms, we estimate that a rate of CBS of €33 per week would be needed to bridge this gap – approximately double the rate of the most common child dependant addition rate. All child dependant addition rates are set to zero, as the logic of the approach is that these are replaced by the CBS.

The situation with respect to replacement of FIS is not so straightforward. A key feature of FIS is that it can provide a very high level of support for those in employment at low incomes – even if there is only one child in the family. The level of *additional*

⁴ The quote is from Combat Poverty Agency (2005), which treats the unification of CDAs and FIS as quite distinct from the Child Benefit Supplement option. Our approach is to analyse the Child Benefit Supplement as one form of unification of CDAs and FIS

support in respect of second and higher order children ranges between about €12 and €20 per week, similar to the level of support provided by Child Dependant Additions. It is not possible for a fixed, per-child payment such as a Child Benefit Supplement to replicate this structure; and even the addition of a "per family" element to the CBS (equivalent to a higher rate for the first child in the family) would not fully replicate the structure of support provided by FIS.

This point was recognised in the analysis of the Tax and Welfare Working Group in its 1996 report. The approach adopted there was to allow for a "residual" FIS scheme to provide this form of income support. The success of a Child Benefit Supplement or other such scheme in "migrating" low income working families off FIS could then be gauged by the reduction in the numbers of FIS recipients and FIS expenditure. Some of the schemes examined by the working group resulted in the "residual" FIS scheme becoming very small; but, depending on the design of the scheme and the levels of payment, FIS could remain a significant feature of the overall package. Where any given package lies on this continuum is a matter for empirical investigation, using the simulation techniques employed here.⁵

A CBS set at €33 per week, with an income limit of about €500 per week and a withdrawal rate of 20 per cent is found to have the following "cash" or first-round impact (i.e., before any adjustments to behaviour, which may be induced by changes in the budget constraints caused by the policy change). First, such a policy change is estimated to cost more than €450 million per annum – equivalent to the cost of a 20 per cent rise in universal Child Benefit. The direct impact of the introduction of a CBS on this scale is estimated as reducing child income poverty (at 60 per cent of median income) by almost 4½ percentage points. Expenditure on FIS would be reduced by about one-third, leaving a substantial residual FIS scheme in place.

How is this improvement in poverty reduction impact achieved? One key difference with respect to the existing structure is that it is assumed that the new Child Benefit Supplement is paid to all those who qualify, and only to those who qualify. Thus, it is assumed that the Child Benefit Supplement does not experience the problems with take-up which have dogged the Family Income Supplement scheme On the other hand, there is also an implicit assumption that the new benefit will be given only to those who are entitled to

⁵ The Child Benefit Supplement examined here is designed primarily to replace Child Dependant Additions. It will also replace some element of FIS payments, with the exact extent depending on the parameters of the scheme. An example using round numbers may help to clarify. If the FIS income limit for a one child family were €400 per week, and the family's income was €300 per week, then the FIS entitlement would be €60 per week. Now suppose a Child Benefit Supplement of €20 per week is introduced. The FIS entitlement falls to €48 per week, a reduction of €12 per week, or 60 per cent of the amount of the Child Benefit Supplement.

receive it. The UK experience with tax credits suggests that this is not easily achieved. The House of Commons Treasury Committee (2006) noted that about one-third of all tax credit awards were overpaid, at an average cost per case of about $UK_{f,1},000$.

A useful point of comparison can be provided by examining what the existing income support structure would achieve, if perfect take-up of benefit could be guaranteed. Our analysis finds moving from low take up to full take up of FIS would lead to a 3 percentage point reduction in the key "at risk of poverty" indicator. Thus, while CBS involves more than just changes in take-up, a key element of its impact in poverty reduction comes from the assumed full take-up. Achieving full take-up, and avoiding overpayments and reclaiming of payment, as in the UK experience, would be vital to the success of the scheme.

4. Conclusion

here are strong links between child income poverty and the overall "at risk of poverty". In particular, the countries with the best record on the reduction of child poverty – the Scandinavian countries – also tend to have the lowest rates of overall poverty. The "best practice" approach to improving EU performance in this area suggests close attention should be given to the policies and structures of the best-performing countries. The logic of the approach is therefore that other countries should compare their approaches with those of the Scandinavian countries – which are the best performers in this regard not only in Europe but in global terms.

By contrast, much of the debate on child poverty has focused on restructuring income-tested income support for families with children, with attention centering on recent initiatives in Englishspeaking countries. While some reductions in poverty have been achieved by these initiatives, it is clear that rates of child income poverty in the English speaking countries remain well above those in most European countries, and well above Scandinavian levels.

This approach is associated with a tendency to view child poverty as a problem to be dealt with, in the main, through child income support. The problem with this is that children are not poor on their own – they have a parent or parents living in poverty with them. So avoidance of poverty requires that parents have adequate incomes too. As Sutherland (2005) puts it:

One feature of the "successful" countries in Europe is that relatively large parts of their benefit systems are not childcontingent but nevertheless succeed in keeping children as well as adults out of poverty. Sutherland (2005, p.32)

Tackling child income poverty requires a strategy that takes a broad view of welfare income supports, and "activist" measures to increase participation in employment. Solutions lie not with welfare alone, or employment alone, but a combination of both.

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STATE FINANCIAL SUPPORT FOR HORSE RACING IN IRELAND

Tony Fahey and Liam Delaney

1. Introduction

he Horse and Greyhound Racing Fund, set up under the Horse and Greyhound Racing Act 2001, provides a substantial scheme of state support for the horse and greyhound racing industries in Ireland. Between 2001 and 2006, €396 million of public funds has been provided to these industries, divided in the ratio of 80 per cent (€317 million) to horse racing and 20 per cent (€79 million) to greyhound racing. The government is committed to continuing funding at a similar level up to 2008. No decisions in regard to the Fund have been made for the period after 2008, and the questions of whether, at what levels and through what means state funding for these industries should continue after 2008 will soon need to be addressed by policy makers.

This paper focuses on the larger of the two strands of subsidy supported by the Fund, that provided to horse racing, and identifies some of the issues that need to be considered in thinking about its future post 2008. By some measures, the level of state support for horse racing is generous: the amount provided in 2005 - €54.68million – was the equivalent of €38 for each of the 1.43 million attendances at race meetings. Averaged over race meetings rather than attendances, the subsidy was €179,000 per meeting. Based on Indecon's (2004) estimates of employment in horse racing, the annual subsidy is the equivalent of about €7,100 per job in the sector.¹ This funding is separate from and additional to the tax subsidy to horse breeding provided by the stallion fees income tax exemption scheme introduced in 1969. The latter scheme is often

¹ "For the horse racing, training and betting sectors, it is estimated that the numbers of persons employed as jockeys, trainers and stable yard staff equals 3,375 persons. There is an estimated 1,600 persons employed (including part-time employment) at race meetings and in the running and maintenance of racecourses. This excludes indirect employment in ancilliary services which is estimated to be 2,700" (Indecon, 2004, p. ii). Direct and indirect full-time and part-time employment in the sector thus amounts to 7,675 persons, according to this estimate.

credited with turning Ireland into a world leader in the breeding and export of thoroughbred horses (Indecon, 2004).² While breeding and racing are parts of a single thoroughbred horse industry, the racing component is sufficiently distinct in structure and in regard to the supports it receives from the state for it to be treated as analytically distinct from the other components. That is the approach that we adopt here.

In examining this issue, our objective is not to provide a detailed technical assessment of the impact of or justification for public subsidy to horse racing. Rather, in the context of the forthcoming decisions that will need to be made regarding the future of the Horse and Greyhound Racing Fund, the objective is to outline the background to and major features of the Fund and open up some of the questions that need to be examined in considering what should happen after 2008. Many of the issues that arise in relation to supports for horse racing from the Fund could apply equally to greyhound racing and could be dealt with in similar terms. However, greyhound racing is sufficiently different in scale, in the level of subsidy it receives and in its social and economic significance for it to warrant separate treatment, and so we do not deal with it here.

2. The Issues

L he issues that arise in relation to state subsidy for horse racing under the Horse and Greyhound Racing Fund concern not only the expenditure side - the amount of subsidy provided and what it is spent on – but also the revenue side, that is, the manner in which the subsidy is financed. In fact, in some respects questions about the revenue side could be said to be central, for reasons that reflect features of the horse racing industry that are not present in the same way in other areas of commercial activity (other than greyhound racing) in which the state might intervene. This is so because horse racing, like greyhound racing, is faced with a distinctive free rider problem (no pun intended). Its most valuable commercial product is the colourful and attractive outlet it provides for gambling. In contrast with other sports, most people who go to race meetings or watch races on television do not do so simply out of interest in the sport or to support individual participants but because they like to back horses and see if their horses win. In Ireland in 2005, the total gambling market has been estimated to be worth almost €2.6 billion, consisting of €2.3 billion in off-course betting (which includes betting on horse racing and many other activities) and €0.28 billion in on-course betting (Horse Racing Ireland, 2005). While it is not known how much of the total gambling market was accounted for by betting on horse racing, it is likely to have been the single most important sector.

² Tax incentive schemes for horse racing in Ireland include the direct tax exemption for stallion fees and reduced VAT rates in a number of aspects of equine care.

The problem for the racing industry is that in countries such as Ireland and Britain with a relatively free market in betting,³ much gambling is run by bookmakers and betting companies that are independent of the producers of racing and can use their product without having to provide a return to the racing industry. This problem arises most clearly in the case of off-course betting, where most gambling takes place, since such activity is to a large degree structurally separate from the production of racing (and is further complicated by growing presence of gambling on activities other than horse racing – see further below). The problem of extracting a return for the racing industry extends to some degree also to oncourse betting since the charges that racecourses can impose on oncourse gambling are constrained by the competitive disadvantages that could result in comparison to off-course betting. One of the key roles that the racing industry in countries with free markets in betting calls upon the state to carry out is to devise and enforce means to overcome this free rider problem. The objective is to make gambling on racing (both oncourse and off-course) yield a return to the suppliers of racing and thus help sustain the commercial viability of the racing industry. This demand typically arises in the context of broader fiscal policy where gambling is often looked to as a source of tax revenue, whether in the form of expenditure taxes on betting or company taxes on bookmaking firms, and where both the racing and gambling industries seek to minimise these burdens.

A further important contextual issue is that, while horse racing has traditionally been one of the most popular outlets for gambling, the gambling industry is itself becoming more diverse, particularly with the rise of internet gambling and the growing role of gambling on other sports (such as soccer) and on internet poker, on-line slot machines and virtual racing (on the situation in Britain, with comparisons to Australia and the United States, see Paton et al., 2002). One effect of these new forms of gambling has been to cause the gambling market to mushroom, though often by means that yet lack a clear regulatory or fiscal framework. They also give rise to a new level of competition between traditional and novel gambling outlets, between domestic and off-shore gambling, and between large gambling multiples and local bookmakers. These competitive pressures have to be taken into account in considering fiscal policy on gambling in Ireland, since the imposition of taxes or charges on any one form of gambling could in theory cause a flight to other forms of gambling or to gambling providers outside of Irish tax jurisdiction. It must be emphasised that we have no information on precisely how sensitive the Irish gambling market is to such pressures or what difference the growing availability of internet

³ In many of the continental EU countries, gambling is a state monopoly or is permitted in the private sector only under tight restrictions. Gambling legislation in a number of these countries is currently under investigation by the European Commission because of possible conflict with EU rules on the free movement of services across state borders.

gambling makes in this regard. Nevertheless, it is evident that one of the key questions for future policy on state support for horse racing concerns the sensitivity of the gambling consumer to tax-related costs of gambling and his or her behavioural responses to different forms and levels of taxation on the various outlets for gambling in Ireland. There is a more general question about the stance that public policy should adopt in regard to gambling. At present, policy on horse racing is committed to expansion of the gambling market, and public funds provided to the horse racing industry support that goal. However, gambling has social costs and these have to be taken into account in deciding whether present policy needs to be assessed in the light of broader social concerns about gambling. In Ireland as in Britain, there has been relatively little controversy on this aspect of gambling (in contrast, for example, to the United States, where religiously-based objections to gambling have often exercised some influence on policy - Paton et al., 2002).

A further issue that lies in the background to the role of gambling in horse racing is that horse racing is expensive to mount and is at a particular disadvantage in this regard compared to the newer electronic forms of gambling where production costs can be very low. While the purchase, export and import, training and racing of thoroughbreds on behalf of (mainly wealthy) owners is an important element of the commercial viability of the overall thoroughbred industry, that element on its own, in the absence of revenues from betting, would not be enough to sustain the horse racing sector of the industry, at least not at the level found in Ireland at present. At the same time, horse racing has positive social and economic externalities that give it a value independent of its role in gambling: as we consider further below, it is a significant element of the rural economy in many parts of Ireland, it plays some role in the tourism market, it is an important entertainment outlet for Irish people, and many would regard it as an important social and cultural element of Irish life. To say that it has a value in these areas, however, is not to imply that the positive externalities in question warrant state support or would fail to be provided to an adequate level in the absence of state funding. Therefore, arguments concerning the social or economic value of horse racing do not automatically provide a justification for current state subsidy for the industry.

3. Horse Racing Pre-2001 Horse racing has long been a significant industry and an important part of sporting and entertainment life in Ireland. However, by the mid-1990s, although horse breeding was thriving, there were concerns that the racing side of the industry was in some difficulty. Revenues at racecourses were felt to be insufficient to cover operating costs and provide a surplus for necessary investment in racecourse grounds and facilities, betting and broadcasting technology, and activities needed to attract greater attendances. This viewpoint was set out in the strategic plan for the period 1997-2001 drawn up in 1996 by the Irish Horseracing Authority (IHA), the

statutory body that, along with the Irish Turf Club, was then responsible for the administration and development of horse racing (IHA, 1996). Ireland had a large number of racecourses for a country of its size (25, compared to 58 in England) but according to the IHA many of these were in a poor condition and were operating at the margins of profitability. Prize money for races was also said to be low. An international study quoted by the IHA estimated that share of the cost of keeping and training racehorses covered by prize-money was lower in Ireland (at 20 per cent) than in any other major racing nation (the corresponding proportion in the UK was also low, at 21 per cent, but it was higher in other countries, e.g. 35 per cent in Australia, 47 per cent in the USA, and 143 per cent in Hong Kong – IHA, 1996, p. 15). A key problem identified by the IHA was that the Irish racing industry had no mechanism for generating revenue from off-course betting, a situation that it claimed was unique in the international racing world. Instead, it received the proceeds of a 5 per cent levy imposed on on-course betting, which amounted to IR£3.7 million in 1996. Tote betting, a major source of revenue for racing in many countries, was also said to be inefficiently run and produced too little of a surplus to make a worthwhile financial contribution to the industry. The IHA received an annual government grant which in 1996 amounted to IRf,7 million and which was used primarily as a contribution to prize money. However, the IHA pointed out that government taxation on off-course betting (which then stood at 10 per cent) yielded revenue to the state that was about five times greater than the state's grants to the industry (IHA, 1996, p. 14).

As the 1990s progressed, government support for horse racing steadily increased and by 1998 a new and more generous funding regime was promised, subject to organisational reform of the industry and coupled with a lightening of the tax burden on betting. The key organisational reform that was sought was the creation of a single governing body that would unite the functions of the IHA and the Turf Club. The government abolished the on-course betting levy of 5 per cent in 1999 and increased the state grant to the IHA to compensate for the resulting loss of revenue. It also reduced the off-course betting tax from 10 per cent to 5 per cent. At the same time, it imposed an 0.3 per cent levy on bookmaker turnover and a fixed contribution of IRf 2,000 per bookmaker as a revenue source for the IHA (IHA Annual Report, 1999, p. 9). By 2000, the state grant to the IHA had increased to IR £18 million and state-backed revenue to the IHA levied from bookmakers amounted to IRf4.4 million, which meant that state-backed funding to the industry had more than doubled since 1995.

4. Post-2001

L he enactment of the Horse and Greyhound Racing Act, 2001 completed the transition to a new funding and regulatory regime. The unified governing body that had been sought for horse racing as part of the process of reform came to pass through the setting up of Horse Racing Ireland under this legislation. Equally important was

both the more generous level and the guaranteed multi-annual nature of the new state funding arrangement, which as already indicated encompassed greyhound as well as horse racing. For Horse Racing Ireland, the state grant received in 2002 under this new legislation amounted to \notin 47 million, a very large increase on previous funding levels. In 2004, the arrangement was extended up to 2008, on the same basis as that set out in the original proposal. The biggest use to which the state grant to HRI is put is as a contribution to prize money. In 2005, the HRI contribution to prize money for horse racing was \notin 29.9 million, which represented 58 per cent of the total prize fund for horse racing and was the equivalent of 55 per cent of the state grant to HRI in that year. (Horse Racing Ireland, 2005, p. 49).

The Horse and Greyhound Racing Fund as originally set up was a direct response by the state to a demand from the Irish racing industry that it be allotted a share of the proceeds of gambling (for a statement of the racing industry's case in this regard, see the Strategic Plan of the Irish Horseracing Authority published in 1996 - IHA, 1996). The grants to the industry that the Fund provided for were initially intended to be financed primarily by a tax on betting, which at the outset took the form of the 5 per cent excise on offcourse betting already in place when the legislation was introduced. No attempt was made to distinguish between off-course betting on horse or dog racing and other types of gambling that occurred with off-course bookmakers. The annual value of the Fund was fixed at the level equivalent to the revenue from the excise on off-course betting for the year 2000, adjusted in subsequent years for inflation as measured by the consumer price index. Measures to increase the yield to racing from on-course betting were also taken at the same time, particularly in regard to modernisation of the Tote.⁴ However, the legislation of 2001 went a crucial step further, in that it also made provision for top-up financing from general Exchequer sources to be provided to the Horse and Greyhound Racing Fund should the betting levy prove to be an insufficient funding source on its own. This top-up provision was subsequently brought very much into play, as the levy on off-course betting was reduced to 2 per cent in 2002 and to 1 per cent in 2006. This meant in effect that the horse and greyhound racing industries were insulated from the consequences of any fall in revenue from the excise on off-course betting, irrespective of whether that fall occurred either because of a decline in the level of off-course betting (for whatever reason) or a reduction in the rate of excise levied on betting.

The table below shows the expenditure from the Horse and Greyhound Fund since 2001 and the balance between the excise on

⁴ Details of the current Tote system are available at www.tote.ie. The Tote operates on-course and on-line betting on a pooled principle whereby dividends paid out depend on the distribution of bets placed rather than a price fixed in advance. Tote Ireland is a subsidiary of Horse Racing Ireland and, as such, contributes to the revenue generated by HRI for the support of horse racing.

off-course betting and general Exchequer subvention as income sources for the Fund. For the first two years, the excise on its own provided the full income, as had been originally expected. In fact, the excise income exceeded the Fund's requirement (it amounted to €68.06 million in 2002, up from €58.89 million in 2001) and the balance was treated as general Exchequer revenue. With the reduction in the excise rate from 5 per cent to 2 per cent in 2002, excise income fell to 75 per cent of the Fund's requirement in 2003 and to 57 per cent in 2004. Exchequer subventions of €16.24 million and €28.49 million were provided in those years. Rapid growth in gambling caused the excise income to rise in 2005, and it is likely to rise further in 2006, though perhaps not quite enough to amount to 100 per cent of the Fund's requirement. However, the further reduction in the betting excise rate to 1 per cent in 2006 will cause the excise income to the Fund to fall again in 2007, so that the Exchequer subvention will become quite large again until current government commitments to the Fund terminate in 2008.

Fund Year	2001	2002	2003	2004 €million	2005	2006	Total
Fund Expenditure	58.89	68.06	64.19	66.91	68.35	70.06	396.46
Horse racing	47.12	54.45	51.35	53.53	54.68	56.05	317.18
Greyhound racing	11.77	13.61	12.84m	13.38	13.67	14.01	79.28
Excise Income*	58.89	68.06	47.95	38.42	45.55	n.a.	
Exchequer Income**	Nil	Nil	16.24	28.49m	22.80	n.a.	
% provided by Excise	100%	100%	75%	57%	67%	n.a.	

* Excise duty on off-course betting from previous year.

** Balance provided from general Exchequer.

Source: Department of Arts, Sport and Tourism.

The outcome by 2006, therefore, was that the original function of the Horse and Greyhound Racing Fund as a means to capture some of the return from off-course gambling for the racing industry had declined in significance and had been supplemented with a new and largely unheralded function as a channel of direct state aid to the industry. At the same time, the level of taxes and levies on gambling had been sharply reduced. The 10 per cent excise on off-course betting, which went into general state revenue, and 5 per cent levy on on-course betting imposed for the benefit of the racing industry which had existed in 1995 were replaced in 2006 with a 1 per cent excise on off-course betting, which was ear-marked for the Horse and Greyhound Racing Fund, and zero taxes or levies on on-course betting. The tax burden on betting had thus become extremely light by 2006. The racing and gambling industries had been a net contributor to state finances in 1995 - state revenue from gambling exceeded the value of state grants to racing fivefold, as the IHA pointed out at that time (IHA, 1996, p. 14). Today, the racing and gambling industries combined are a net drain on public finances, since as just outlined the sole state revenue stream from these sources - the excise on off-course betting - is insufficient to meet the state's commitment to the Horse and Greyhound Racing Fund.

5. Industry Performance

While it is not possible in the present paper to isolate the contribution of increased state funding to the development of the horse racing industry over the past decade, it is possible to trace the broad outlines of the industry's development. There are currently 27 horse racing tracks in Ireland (including 2 in Northern Ireland), the same number as in 1995.⁵ This compares to 58 tracks in Britain. Indecon (2004, p. 68) estimated that employment in horse racing in 2003 amounted to 5,000 direct and 2,700 indirect jobs. On-course and off-course betting provided 4,200 jobs, many of which were casual or part-time in nature.

The numbers of fixtures and levels of attendance at race meeting have increased in recent years, doubtlessly in part because of increased state funding. The number of fixtures rose from 258 in 1996 to 303 in 2003 (Indecon 2004, p. 55), with the 2005 annual report of HRI showing 313 fixtures. Attendances at race meetings rose from 1.1 million in 1996 to 1.4 million in 2003. Total betting doubled between 1997 and 2003, with a particularly sharp rise (232 per cent) in off-course betting, which amounted to almost \notin 2 billion in 2003 (Indecon 2004).

6. Policy Context

Up until 2001, state regulation and support for the horse racing industry came under the umbrella of the Department of Agriculture but then was transferred to the Department of Arts, Sport and Tourism, where it was administered under a sports heading. In evaluating to rationale for state support for industry, either or both of these policy contexts could be considered as relevant. This complicates the task of analysing the policy case for state funding for the industry.

Looking first at the sports policy, it is clear that in this context state funding for horse racing appears both lavish in extent and weak in justification. The total sports budget of the Department of Arts, Sports and Tourism in 2005 was approximately €190 million, of which over one-third (€68 million) was accounted for by expenditure from the Horse and Greyhound Racing Fund (of this, the €54.7 million provided to horse racing accounted for 29 per cent of the Department's total sports budget). This is in a context where the Department provides financial assistance to over 60 sporting bodies, the current element of which (excluding the Horse and Greyhound Racing Fund) is administered through the Irish Sports Council and the capital element directly by the Department. *Current funding for horse racing on its own exceeded the total budget of Irish Sports Council and thus exceeded the current funding for all of the 60-plus sports budget*.

⁵ The tracks are Killarney, Tralee, Listowel, Cork, Tramore, Clonmel, Tipperary, Thurles, Limerick, Tramore, Wexford, Gowran Park, Curragh, Punchestown, Naas, Galway, Ballinrobe, Leopardstown, Punchestown, Naas, Kilbeggen, Fairyhouse, Bellewstown, Laytown, Navan, Roscommon, Sligo, Dundalk, Down Royal and Downpatrick.

combined that it deals with. The distribution of the capital budget was more balanced in that it was distributed widely across sports bodies and the capital element of the funds provided to horse racing were not disproportionately large.

The impression of imbalance from a sports policy perspective in the extent of funding provided to horse racing is added to when one considers that horse racing makes only a limited contribution to the objectives of sports policy. These objectives relate to a number of socially valuable outcomes, including in particular the promotion of physical activity in the population and support for volunteering and other community activity centred on sports clubs (Delaney and Fahey, 2005). Public support and following for teams or individuals competing in local, national and international events are also important dimensions of social life and a major basis for the formation and expression of collective identity in modern societies. While horse racing undoubtedly has strong social aspects, its makes little or no contribution either to physical activity or volunteerism in sport. It thus is not entirely irrelevant to the concerns of sports policy but nevertheless cannot claim the kind of centrality for those concerns that would justify the especially generous level of sports funding it receives.

State support for horse and greyhound racing was originally a function of the Department of Agriculture and reflects the relevance of these industries to the rural economy. Its role in generating domestic and foreign tourism business through race meetings is one mechanism by which that contribution can be made. Direct employment in the industry is another. As already mentioned, approximately 7,600 people (including part-time staff) are employed in horse racing and ancillary industries in Ireland. On these grounds, an argument might be made for the support of horse racing as a form of support for rural employment and economic activity, though here again some justification (for example, in relation to market failure) would need to be provided to make such an argument stand up.

However, a number of factors reduces the efficiency of horse racing as a vehicle for rural development. Race meetings are sporadic even in the largest venues. Furthermore, much employment in the industry is low skilled and has little scope for the kind of productivity enhancement that increases prosperity. Even within the industry, there is some acceptance that the economic rationale for financing 27 racecourses through the country may be suspect:

A number of Irish racecourses which were previously located in rural areas are now on the outskirts of large towns and consequently their land has become significantly more valuable. On strictly commercial lines there is a case for a reduction in the number of racecourses and it is likely that economic forces will dictate this in some cases (Horse Racing Ireland, 2003).

7. Conclusions

Horse racing receives significant public funding in Ireland, amounting to the equivalent of €38 per person attending a horse race meeting in 2005. This paper has sought to identify and highlight a number of issues that need to be considered in deciding the future of this funding after current government commitments to the industry run out in 2008. (Public funding is also provided on a similar basis to greyhound racing, but the level of funding and the issues that arise in connection with greyhound racing are sufficiently different to warrant separate treatment and are not dealt with here.) Horse racing has a social, economic and cultural place in Irish life that can be pointed in justifying a positive policy stance towards the industry. It is not self-evident, however, that such a policy stance should extend to the provision of public funding nor, if public funding is justified, does it dictate the level of support that is required nor the means through which it should be provided.

The case for state financial support for horse racing has most often been made in connection with the distinctive free rider problem facing the industry: it has difficulty extracting a return from its most important commercial product, namely the opportunities it provides for gambling. The primary beneficiary from this product is the betting rather than the racing industry, a pattern that arises particularly in the case of off-course betting where most gambling on horse racing takes place (although much off-course betting now goes beyond horse racing, or even dog racing, in view of the growth in betting on other sports and on a wide range of internet gambling activities). The present system of state funding for horse racing was originally interpreted as a state-backed means to secure a return from off-course betting, since it was initially intended to be financed by means of an excise duty on off-course betting and for a time was in fact fully financed from that source. However, the excise on betting has been reduced over recent years, to the point where it no longer is sufficient to fund state financial support for the racing industry and has to be supplemented by general Exchequer funding. The reduction in excise on off-course betting has occurred mainly because competition from internet gambling has made it increasingly difficult to tax all forms of gambling and thus enables gambling to escape the reach not only of the racing industry but also of the state.

Thus state funding for horse racing in Ireland now goes beyond the role of securing a benefit from gambling for the industry as it includes subvention from general taxation. This intensifies the questions that arise about the justification for state funding, particularly at the high levels that have been in place in recent years. These doubts arise, for example, in the context of wider sports policy, where other claims on state funding could equally be made (e.g. in connection with the facilities deficit that exists for children's sport – see Fahey *et al.*, 2005), apart from other priorities for state expenditure that might arise outside the sports arena. At a minimum, future policy in this area will have to assess carefully the public benefit that is served by state support for horse racing and the priority it should be accorded in public expenditure decisions. Two other more general issues need also to be considered as part of this assessment. First, public policy should take greater account of the role of horse racing in promoting gambling and in the possible social costs of gambling that may arise as a result. Second, in many countries, gambling is a significant part of the public revenue base, either through taxation on gambling or the returns of state monopolies on gambling. Apart from Lotto revenue, gambling in Ireland makes little contribution in that context and the question should be considered as to whether this should continue in the future, even in view of the rise of internet gambling and the difficulties that poses for collecting tax revenue from gambling.

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