TASC

Discussion Paper

December 2010

An Initial Discussion of Public Expenditure: Rationales and Constraints

Tom McDonnell & Daragh McCarthy

TASC discussion papers are intended as a contribution to debate. They are not refereed. Readers are invited to submit comments to the author.

An Initial Discussion of Public Expenditure:

Rationales and Constraints

Tom McDonnell & Daragh McCarthy

TASC Discussion Paper, December 2010

Preface

The current crisis engulfing Ireland has generated an unprecedented level of interest in the budgetary process and on how we choose as a society to tax and spend. To coincide with the budget and as a response to this increasing interest in public expenditure, TASC will be generating an ongoing series of resources to 'explain' public spending in Ireland. The first outputs in this series are a pair of discussion papers as well as an online tool.

The interactive online tool provides detailed information showing where we as a society are spending our resources. It is not only possible to disaggregate spending by functional type - e.g. education and health - but also to see how much money goes to very specific areas. The tool will be updated regularly, and will show the changes to the various spending areas as a result of the budgetary decisions taken on December 7th and on future dates.

The first discussion paper examines the rationales for, and the constraints on, public spending. The key point that emerges is that the level and type of public spending are ultimately political choices subject to the parameters allowed by prevailing resource constraints. This is particularly resonant in light of the ongoing debates surrounding the EU/IMF 'bailout' of Ireland.

The second discussion paper focuses on the composition of public spending in Ireland. There is a body of evidence that suggests that the composition of spending may be more important for economic growth than the overall level, although there does appear to be evidence that a positive association exists between income equality and levels of public spending. However, the nature of the association is uncertain and will be investigated in a future discussion paper. The composition of public spending remained very consistent between 1995 and 2008. Eight of the ten functional areas of spending remained in consistent proportions throughout the period.

The discussion papers are not meant to be the last word on public spending and are designed to invite suggestions and criticisms from readers. The authors invite all suggestions and criticisms as part of TASC's ongoing mission to improve the quality of publically available information. All suggestions will be responded to and taken into consideration in developing future iterations of the outputs. Future discussion papers, including more technical papers, will be released in 2011.

Paula Clancy
Director
TASC

For information, please contact:
Tom McDonnell
Policy Analyst
tmcdonnell@tascnet.ie
01 6169050

Section 1: Introduction

Introduction

1. The current economic crisis has fuelled a debate about the appropriate level of public spending in Ireland. Public spending, and the revenue raising measures required to support this public spending, should be informed by a set of guiding principles decided by wider society. Examples of these guiding principles include equitable distribution; the protection of the most vulnerable; sustainability; and long-run growth.
2. Public spending measures can be seen as justified if they efficiently promote the attainment of these goals. In some cases there may be tensions between two or more of these goals. This discussion paper looks at some of the rationales for, and the constraints on, public spending in Ireland
3. There are numerous benefits to public spending: Examples of benefits include: (a) the provision of merit goods[1] such as education and health; (b) the elimination of market failures through the subsidy or direct provision of public goods, for example national defence and basic research; (c) reducing inequality through redistribution measures; (d) providing a social safety net and a minimum standard of income and (e) even stabilising the economy during times of recession.
4. However, there are also numerous costs and constraints associated with public spending. Examples of these costs and constraints in Ireland include: (a) the upper bound on taxation; (b) disincentives to productive activity caused by taxation; (c) market distortions, including the deadweight losses caused by taxation; (d) administration costs and general inefficiencies of government; (e) political constraints resulting from Ireland's participation in the Euro zone; (f) the future costs of servicing debt-interest payments and (g) the willingness of lenders to provide credit for borrowing. In addition to these costs and constraints, political decision-

1 Merit goods are commodities, for example basic education, which it is normatively judged that individuals should have on the basis of need, rather than on the individual's ability or willingness to pay.

making often results in outcomes that conflict with the actual preferences of the general public[2] (Buchanan and Tullock, 1962; Suiter, 2007).

5. The level of public spending will be particularly constrained in the next four to five years by the conditions imposed under the forthcoming €85 billion loan facility agreement with the IMF and the European Union. The fiscal conditions imposed on public spending will be in the order of a €10 billion reduction by the end of 2014. The Government's National Recovery Plan (Department of finance, 2010c) contains details of these reductions.
6. Out of a group of twenty-seven OECD countries for which data was available for the period 1995 to 2008, Ireland maintained the third lowest average level of public spending as a proportion of GDP, at 35.5 per cent (OECD, 2010b). If we opt to use proportion of Gross National Income (GNI)[3] instead of proportion of GDP as the appropriate public spending comparator for Ireland, then we find that Ireland had the eight lowest level of public spending over this time period at 40.9 per cent (20th out of 27). By comparison the median level of public spending in the OECD over this time period was 44.6 per cent of GDP.
7. However, Ireland's unemployment rate rose dramatically from just 4.7 per cent in second quarter 2007 to almost 14 per cent (CSO, 2010a) in second quarter 2010. This rise in unemployment triggered a large scale increase in social protection spending through the automatic stabilizer[4] mechanism. These increased costs combined with the collapse in GDP, have raised the level of public spending in Ireland as a proportion of GDP to 49 per cent in 2009 (IMF, 2010). By contrast, the advanced country average was 44.0 per cent (IMF, 2010).
8. At the same time, Government revenue has collapsed from its pre 2008 levels, and this collapse, coupled with the rise in public spending, has resulted in a double digit fiscal deficit in 2009. Reducing the annual deficit to a sustainable level is unavoidable

2 In the Irish context this is symbolised by the notion of public representatives being able to 'get' something, for example a swimming pool, for the representative's local constituency. In a broader sense, what is happening is that advocacy or special interest groups are exerting influence on the political process and the goals of these groups may well not be in the larger public interest.

3 GNI is equal to Gross National Product (GNP) plus EU subsidies less EU taxes. Unlike the vast majority of other European countries the disparity between GNI and GDP exceeds 10 per cent of GDP. This is because Irish GDP is inflated by the large amount of repatriated profits leaving the country. For this reason it is safer to use both measures when comparing the data for Irish indicators to that of International indicators.

4 Automatic stabilizers are triggers that act as negative feedback loops on GDP. They work to dampen fluctuations in the economic cycle and are automatically activated without government intervention. Unemployment benefit is an example of an automatic stabilizer.

in the long-term. However, this sustainability can be achieved either at low levels of public spending and taxation, or at high levels of public spending and taxation. Consequently, the manner in which this sustainability is achieved is fundamentally a political question.

9. Thus there is a need to locate the public spending debate within a larger debate on the overall fiscal framework and the type of society we wish to live in.
10. The level and composition of public spending should be analysed in an integrated manner within expenditure programmes; within State bodies and within functional areas of Government so as to maximise the accomplishment of public goals given the prevailing resource constraints.

Section 2: Government Spending

Public Expenditure

11. The OECD's System of National Accounts (1993) defines the general government sector as consisting of "the totality of institutional units which, in addition to fulfilling their political responsibilities and their role of economic regulation, produce non-market services (possibly goods) for individual or collective consumption and redistribute income and wealth". Central government expenditure as measured by the United Nations (2010) is expenditure on government consumption plus cash transfers and subsidies plus outlays for investment.
12. Two of the most fundamental philosophical and political questions faced by all autonomous societies are those relating to (a) the appropriate role of the state and (b) the optimal level of expenditure by the state. At the very minimum, government spending needs to be of a sufficient size to maintain the basic functioning and security of the state, however, beyond this minimum level of spending there will inevitably be disagreement about what the society's goals should be, and about whether government spending is the most appropriate way of achieving these goals.
13. Self interest will certainly inform the individual's preferences. Delaney and O' Toole (2005), in a study on the preferences of Irish householders, found that lower income adults were overall more in favour of government expenditure than those on higher

incomes. More specifically, they found that those on higher incomes were markedly less in favour of social welfare expenditure. The authors suggest that this may be because social welfare is primarily utilised by low-income households. They note that higher income earners were much less hostile to education spending: education spending is, of course, utilised more by high income households, particularly in the case of third and fourth level education.

14. Government expenditure in advanced countries typically accounts for between 30 per cent and 60 per cent of GDP. Table 1 compiles the OECD's data on government expenditure levels for 1995 to 2008 and it shows that out of 27 OECD countries Ireland averaged the third lowest level of public spending as a proportion of GDP[5] (eight lowest if we use GNI for Ireland), over the period 1995 to 2008.

5 Public spending figures do not include the cost of tax expenditures. There is a school of thought that argues that tax expenditures are in fact a form of public spending. This issue is discussed more fully in a series of forthcoming TASC discussion papers.

Table 1: Total Government Expenditure as a Proportion of GDP[6]

14 Year Average (1995-2008)

Rank	Country	14 Year Average (%)
1	Sweden	57.3
2	Denmark	54.7
3	France	53.0
4	Austria	52.2
5	Finland	51.7
6	Belgium	50.3
7	Hungary	49.9
8	Italy	48.9
9	Germany	47.5
10	Netherlands	47.0
11	Norway	45.3
12	Greece	45.2
13	Portugal	44.7
14	Czech Republic	44.6
15	Slovak Republic	43.5
16	Poland	43.5
17	Iceland	42.6
18	Canada	42.6
19	United Kingdom	42.1
(20)	**Ireland (GNI)**	**40.9**
20	Spain	40.1
21	Luxembourg	39.8
22	New Zealand	38.6
23	Japan	38.0
24	United States	35.9
25	**Ireland (GDP)**	**35.5**
26	Korea	26.0
27	Mexico	18.9

Source: Author's calculations derived from OECD Stat Extracts 2010, http://stats.oecd.org/index.aspx?DatasetCode=SNA and CSO National Income and Expenditure (2010b), 2002-2010: http://www.cso.ie/releasespublications/pr_nataccarchive2002.htm

6 Data not available for Greece (1995-1999); Poland (1995-2001); Iceland (1995-1996 and 2008); Canada (2007 and 2008); New Zealand (1995-2002 and 2006-2008); Japan (1995 and 2008); Korea (1995-1999).

15. The comparatively low level of public spending in Ireland during the so called Celtic Tiger era was in part attributable to the relatively low rates of unemployment and in part attributable to the relatively small proportion of pensioners in the population. These factors combined to lower the pressure for public spending on social transfers. Other factors that contributed to Ireland's low level of public spending during this period were Ireland's increasingly low levels of debt-interest payments as a share of GDP,[7] Ireland's very low spending on defence (Lane, 2008) and a stated political ideology motivated to transform Ireland into a United States style low tax and low spend economy (DETE, 2000).
16. The economic and banking crisis that first erupted in 2007-2008 precipitated a massive surge in the level of government spending as a proportion of GDP. The primary underlying causes of this surge in the public spending ratio are the increase in the unemployment rate from just 4.5 per cent in 2007 to almost 14 per cent in 2010 and, of course, the collapse in GDP itself.
17. Table 2 shows the IMF (2010) projections for average public expenditure over the seven year period spanning 2009 to 2015 for 26 OECD countries. If the IMF forecasts are borne out, it will mean that, when comparing the pre-crisis (1995-2008) levels of public spending to the crisis and (hopefully) post-crisis (2009-2015) levels of public spending, Ireland will have experienced a larger percentage point increase (10.8 per cent) in its public spending ratio than any other OECD country. The next highest increase is for Mexico at 6 per cent. This should be seen as a function of, amongst other things, the severity of the collapse in economic output in Ireland.
18. In total, 16 of the 26 countries are projected to see an increase in their long-run public spending ratio. In GDP terms, Ireland is expected to move to the middle of the pack at 46 per cent of GDP. If we use GNI figures to represent Ireland's economic output then government expenditure is projected to average 55.7 per cent of economic output. This would be the highest level in the OECD[8].

[7] Part of the reason Ireland's debt-interest repayments shrunk as a proportion of GDP was that Ireland had historically high levels of growth over the period in question. In effect, because the denominator (GDP) was growing the overall proportion (Debt/GDP) was declining.

[8] The IMF estimates predate the Government's National Recovery Plan. Consequently, the actual level of public spending in Ireland may be substantially lower.

Table 2: IMF Estimate of Government Expenditure as a Proportion of GDP

Forecast 7 Year Average (2009-2015)

Rank	Country	7 Year Average (%)	Percentage Point Change from the 1995-2008 Average
(1)	**Ireland (GNI)**[9]	**55.7**	**+14.8**
1=	Denmark	54.6	-0.1
1=	France	54.6	+1.6
3	Belgium	53.6	+3.3
4	Sweden	52.7	-4.6
5	Austria	51.7	-0.5
6	Italy	49.9	+1.0
7	Finland	49.8	-1.9
8	Netherlands	49.6	+2.6
9	Hungary	48.2	-1.7
10	Portugal	46.7	+2.0
11	Greece	46.6	+1.4
12	**Ireland (GDP)**[10]	**46.3**	**+10.8**
13	Czech Republic	46.0	+1.4
14	Poland	45.5	+2.0
15	Norway	45.0	-0.3
16	Germany	44.9	-2.6
17=	United Kingdom	44.0	+1.9
17=	Spain	44.0	+3.9
19	Iceland	42.9	+0.3
20	United States	41.1	+5.2
21	Canada	41.0	-1.6
22	Japan	39.7	+1.7
23	Slovak Republic	36.6	-6.9
24	New Zealand	33.3	-5.3
25	Mexico	24.9	+6.0
26	Korea	21.9	+3.0

Source: IMF. Fiscal Monitor, November, 2010, No figures given for Luxembourg. Statistical table 5

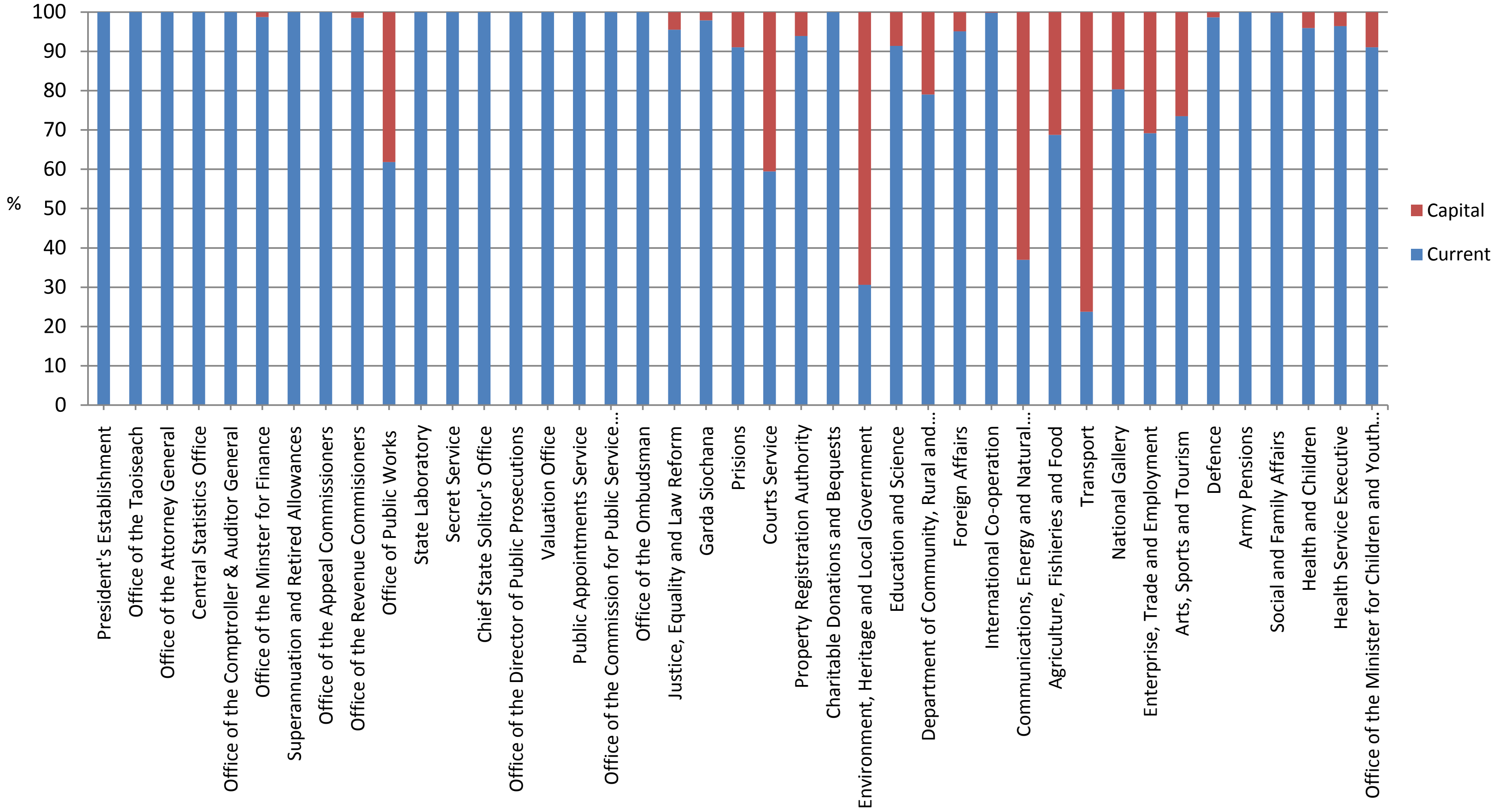
9 The GNI figure is based on the assumption that GNI stays at the 2009 rate of 83.1 per cent of GDP.

10 Figures for Ireland are based on average for 2009 and 2011, 2012, 2013, 2014 and 2015. The IMF figure for 2010 is distorted by the once-off cost of the bank bailout.

Disaggregating Public Expenditure

19. The estimates for public service 2010 (Dept. of Finance, 2010a) indicate that net government capital expenditure in Ireland will be €6billion in 2010, the bulk of which is spending on roads and social housing. The Department of Finance's (2010a) estimated figure for net current expenditure in 2010 is €40.32billion. Total net government expenditure is therefore forecast to be €46.32billion in 2010. The estimate for gross government expenditure (i.e., before appropriations-in-aid are considered) was €61.18billion in the estimates of public service
20. Figure 1 shows the breakdown of public spending into its capital and current components for each of the 41 spending votes. Current spending takes up over 80 per cent of total spending for 33 of the 41 votes and over 50 per cent of total spending for 38 of the 41 votes. The three exceptions are transport; environment, heritage and local government and communications, energy and natural resources.

Figure 1: Breakdown of Voted Public Spending into Capital and Current Components, 2010.



Source: Department of Finance (2010, p28) Revised Book of Estimates for Public Services 2010. Dublin: Sun Alliance House.

21. Table 3 shows the estimated figures for gross current expenditure in 2010 divided by functional type. As the table shows, social welfare (38.4 per cent), education (14.9 per cent) and health (26.9 per cent) make up the vast bulk (80 per cent) of gross current public spending.

Table 3: Functional Classification of Gross Current Expenditure in 2010

(Expressed in millions of Euro)

Service	Estimate	Service	Estimate
Social Welfare	21,033	Legal, etc.	480
Health	14,753	Prisons	366
Education	8,168	Housing	361
Industry and Labour	1,589	Subsidies[11]	289
Garda	1,474	Tourism	195
Agriculture	1,341	Fisheries and Forestry	140
Defence	949	Other	3,610

Source: Department of Finance (2010) Revised Estimates for Public Services 2010. Dublin: Sun Alliance House.

22. An alternative way of breaking down public spending is to break it down into pay and pension's components, and non-pay components. This breakdown is shown in Table 4. Public sector pay takes up 26 per cent of public spending with pensions taking up a further 12 per cent.

11 These subsidies are for various social services.

Table 4: Breakdown of Gross Voted Public Spending in 2010

(Expressed as percentage of overall public spending)

Category	Percentage of Spending
Working Age Social exp.	27
Public Sector Pay	26
Programme exp.	24
Investment	11
Social Welfare Pensions	7
Pensions	5

Source: Ahearne, A. (2010) Presentation given by the Minister for Finance's Special Advisor to the Irish Taxation Institute, 19 November 2010.

Financing Public Expenditure

23. Although public expenditure programmes can provide many social and economic benefits, these programmes must be financed from Government revenue. In the long run, the overall level of public spending is constrained by the amount of revenue that the state can raise. In most developed economies the vast majority of this revenue is generated from taxes. However alongside taxes there are other possible sources of revenue. These include:

    A) Social security contributions
    B) The sale of State assets,
    C) The sale of goods and services,
    D) Income from investments,
    E) Royalties on national resources,
    F) International grants (e.g., European Union grants),
    G) The issuance of public debt in the form of Government bonds or gilts,
    H) Increasing the level of money emissions (e.g., printing more money or quantitative easing).

24. In extreme circumstances, for example under conditions of possible sovereign bankruptcy (default), the state might have to appeal for international aid to fund its public spending through a bridging loan from either a foreign state or from an international lending organisation such as the International Monetary Fund. On November 28 2010, Ireland agreed to an assistance package with the IMF, the EU and the ECB to finance its banking debts and sovereign borrowing requirements.

Section 3: Rationales for Spending

Achieving the Goals of Society

25. The standard justification for government intervention, as Lane (2008) puts it, is the accomplishment of some policy objective leading to an improvement in national welfare. Public expenditure is ultimately justified only if its outcomes are consistent with society's overall goals.
26. The efficiency of government is another important factor in achieving policy objectives. Government efficiency has been found to be strongly associated with positive economic performance (Barro and Sala-i-Martin, 1995). To maximise Government efficiency, all tax and spending measures should automatically be subject to regular review to ensure that the measure is the most appropriate means of achieving society's objectives.

Redistribution and Poverty Reduction

27. Public spending is justified on distributional or equality grounds, and also on social protection grounds because the distribution of wealth, income and other resources is associated with a catalogue of factors over which the individual has no control. Direct social transfers such as social welfare payments and disability payments are the most overt examples of spending policies designed to guarantee a basic level of income and to reduce poverty. However, poverty reduction programmes need not necessarily take the form of direct payments and can also come in the form of general expenditures such as the maintaining or subsidising a universal health service, or in the form of capital expenditures such as building of social housing.
28. Of particular importance is the concept of the merit good. This is a type of good which the government wishes to be consumed in at least a minimal quantity by all consumers (Miles, Myles and Preston, 2003). Basic health care and education are two examples of merit goods.

Economic Stability

29. At the macroeconomic level, public expenditure contributes to current effective demand, and during periods of stagnation, can be effective as a stimulus to the economy (Keynes, 1997; Krugman, 2008). An increase in public expenditure has an immediate impact on GDP and this can generate a positive feedback loop in terms of employment, consumption and income. In effect, through public expenditure the state can exert a coordinated impulse on the economy (Piana, 2001), which can be used to stabilise the economy.
30. The stabilisation of effective demand entails using counter-cyclical fiscal policies to smooth out the natural fluctuations in the business (economic) cycle. Counter-cyclical fiscal policy consists of temporarily increasing public spending during periods characterised by weak economic performance and by persistently high unemployment, and then gradually reducing this spending as the economy strengthens. This gradual reduction in spending is done to prevent the crowding out of private investment, to minimise the long term level of debt-interest repayments as a proportion of GDP, and to build up a 'rainy day fund' capable of counteracting the impacts of future negative shocks to the economy..
31. The policy implication is that during periods of strong economic growth, public spending should be maintained at a lower level than the level of incoming revenues.

Market Failure: Market Power

32. Public expenditure should seek to prioritise those programmes that provide the largest public welfare benefits relative to what the private sector can do. Some of the largest net benefits from public expenditure will occur where market failures are found to exist (Brown and Jackson, 1986; Miles, et al., 2003). The traditional market failure is where there is an inadequate level of competition (Brown and Jackson, 1986; Miles et al., 2003; Lane, 2008) in the market. This will occur in situations where there is a dominant market player, and will be commonplace in markets for natural monopolies like water; electricity or other infrastructure networks. A monopolist can restrict output to raise price above the marginal cost of production. This leads to an economically-inefficient, deadweight loss.

33. The existence of a market failure is not by itself a sufficient justification for public spending. It is first necessary to understand the specific cause of the market failure. This requires an analysis of the determinants of supply and demand in the market in question and in many cases, the analysis will show that it may be possible to rectify the market failure through the application of regulatory measures, for example, ordering and enforcing the breakup of a monopolist or dominant market player.
34. In certain other cases, regulation will be insufficient to rectify the market failure, and it may be necessary for the state to provide the good itself. For example, certain markets are characterised by economies of scale[12] (Silvestre, 1987) or network externalities[13] (Liebowitz and Margolis, 1995) that can make competition imperfect or nonexistent. In these cases, state provision of the good in question may be appropriate.

Market Failure: Public Goods and Externalities

35. The provision of a public good is the classic example of a market failure where public expenditure is appropriate. Public goods are characterised by what economic theory calls positive externalities. Positive externalities are defined as the uncompensated benefits to a third party that arise from an economic activity (Lane, 2008). Where there are net positive externalities associated with an activity, there will be an under-provision of that particular economic activity from the perspective of social optimality.
36. Public goods are characterised by positive externalities because they are (a) non-rivalrous in usage, which means that one person using the good does not prevent a second person using it, and (b) non-excludable, which means that it is difficult to prevent a third party from using the good.
37. To illustrate this, consider the market for the production of knowledge. Not all of the benefits gained from the discovery of a piece of knowledge (the public good) will be captured by the discoverer (the producer of the good). Knowledge isn't consumed

12 Economies of scale refer to the presence of efficiency gains (reductions in unit cost) in a production process as the usage level of inputs increases. If substantial economies of scale are present then the most efficient market structure may be one containing just a single economic actor.

13 A network externality can be defined as a change in the benefit, or surplus, that an economic actor derives from a good when the number of other actors consuming the same kind of good changes. The classic example of a network good is the telephone.

once it has been used, and once knowledge has been disclosed it becomes increasingly impossible to exclude others from using that knowledge. In other words, there will be positive externalities (uncompensated benefits) associated with the production of knowledge.

38. However, the classic rational private actor of economics textbooks will only consider his or her own benefits when deciding whether to invest resources in knowledge production. As the benefits to the rational actor will be lower than the benefits accruing to society as a whole, some proportion of private actors will choose not to invest in knowledge production. Consequently, there will be an underproduction of new knowledge by the private sector, at least when considered from the perspective of the wellbeing of society. A market failure is the end result. This market failure creates a rationale for public intervention, and in some cases public expenditure, in the production of knowledge.

Section 4: Constraints on Spending

Constraints on Spending

39. There is a natural upper bound on the sustainable level of taxation because once you pass a particular, often unknown, threshold point in the overall tax level; the amount of tax revenue will start to decline. This upper bound will be some undetermined point between 0 per cent and 100 per cent of GDP, and will vary from tax to tax. This in turn serves to create an upper bound on the sustainable level of public spending. International competition between States caused by the mobility of world capital and skilled labour creates further limits on taxation, with knock-on effects for public expenditure possibilities.
40. The demographic structure of the population places constraints on the level of public spending. For example, tax revenue primarily comes from people in the 18-65 year age range and those countries that have a relatively large proportion of people aged 18-65 may be better able to raise revenue and are, consequently, better able to support high levels of expenditure. On the other hand, if there is a relatively large cohort of young people in the population, more resources will have to be channelled

into education which will constrain spending in other areas. Similarly, if there is a relatively large cohort of older people in the population, increased spending on health and on pension benefits will constrain alternative spending programmes.

41. Ireland is nominally constrained in its public spending by the rules of the Stability and Growth Pact (Brunila, Buti and Franco, 2001) that come as part of Ireland's participation in European Monetary Union (EMU). The Stability and Growth Pact (SGP) is an agreement between the 16 members of the European Union that are part of the Eurozone. The SGP rules were originally adopted in 1997 as a safeguard to ensure the stability of the Economic and Monetary Union by maintaining and enforcing fiscal discipline amongst its members. Euro zone members are required to run an annual budget deficit no higher than 3 per cent of GDP (except under certain conditions) and to maintain the gross national debt at a level below 60 per cent of GDP. Sanctions can be imposed on members that break these rules.
42. In practice the SGP has had limited impact, and many countries, including the largest Euro zone members, France and Germany, have repeatedly broken the rules and escaped unpunished. Despite this lack of enforcement, the SGP rules do act as a political constraint on Ireland's fiscal policy. Ireland has committed to reducing its general government balance to 3 per cent by 2015 as part of the agreement reached with the IMF and the EU on the 28th November 2010. The Government has published a four year plan to reach this target (Department of Finance, 2010c). Annual public spending is to be reduced by a total of €10 billion by the end of 2014. Current expenditure is projected to be €7 billion lower and capital expenditure €3 billion lower.
43. The forthcoming IMF/EU deal looks set to copper fasten these reductions in public spending. Under the terms of the misnamed 'bailout' deal the Government will have to meet performance targets showing its success in achieving spending reductions by agreed amounts per quarter. If it fails to achieve these targets then the rate of spending cuts will have to be accelerated.
44. Table 5 shows general government gross debt for Ireland and for a selection of other advanced economies. As the table shows, Ireland's level of gross debt as a proportion of GDP has increased dramatically, albeit from a low base. The increase in

the level of gross debt will constrain future public spending on public service programmes because an increasingly large share of public revenue will have to be committed to debt-interest servicing. Countries with higher debt ratios are also likely to have to pay higher risk premiums reflecting the increased probability of that country defaulting on its sovereign debt. As Ireland's debt and deficit ratios continued to spiral out of control in late 2010, the risk premiums on Irish sovereign debt became unsustainable and this was one of the factors leading to Ireland's removal from the markets and into the IMF rescue fund.

45. Ireland's fiscal position was quite positive by international standards as recently as 2007 and at that time the ratio of gross public debt as a fraction of GDP was just 29.2 per cent (Madden, 2008). This was a ratio that compared very favourably to that of the total euro area (66.9 per cent). The IMF (2010) forecasts that Ireland's level of gross debt in 2010 will be 99.4 per cent of GDP and 113.9 per cent in 2015. The Department of Finance (2010b) is forecasting that the general gross debt will fall to 101 per cent based on the Government's announced €15 billion fiscal consolidation package.

Table 5: General Government Gross Debt
(Per Cent of GDP)

	2000	**2005**	**2010**	**2015**
France	57.3	66.4	84.2	88.3
Germany	59.7	68.0	75.3	75.6
United Kingdom	40.9	42.1	76.7	83.9
United States	54.8	61.6	92.7	110.7
Ireland	**37.8**	**27.3**	**99.4**	**113.9**
Averages				
Advanced Economy	66.7	74.7	97.4	108.2
G-20	58.6	63.1	76.1	81.4

Source: IMF. Fiscal Monitors, May 2010 (Statistical table 6) and November, 2010 (Statistical table 7).

46. Table 6 shows past and projected general government balances. If these trends come to pass, the level of gross debt, and the resulting debt-interest payments, will increasingly impinge on the government's ability to provide adequate public

services. It is not sustainable to run highly negative government balances in the long run[14]. Madden (2008) points to the golden rule of fiscal policy which states that over the entire fiscal cycle government borrowing should not exceed government capital formation. Ireland's public finances are clearly not on a sustainable path and this has implications for future public spending and for future levels of taxation. The Government published its four year recovery plan in late November 2010 (Department of Finance, 2010c) in an attempt to bring order to the public finances, and less than a week later it became apparent that Ireland was going to accept an IMF/EU bailout package which will ensure that Ireland will be committed to reducing its public spending levels between now and 2015.

Table 6: General Government Balance
(Per Cent of GDP)

	2000	2005	2009	2010	2011	2012	2013	2014	2015
France	-1.5	-3.0	-7.6	-8.0	-6.0	-4.7	-3.8	-3.0	-2.2
Germany	1.3	-3.3	-3.1	-4.5	-3.7	-3.0	-2.4	-1.8	-1.4
UK	1.3	-3.3	-10.3	-10.2	-8.1	-6.4	-4.7	-3.4	-2.4
US	1.6	-3.2	-12.9	-11.1	-9.7	-6.7	-5.7	-5.9	-6.5
Ireland[15]	**4.8**	**1.6**	**-14.6**	**-31.9**	**-11.8**	**-9.3**	**-8.1**	**-6.8**	**-5.8**
Averages									
Adv. Econ	0.1	-2.9	-8.9	-8.1	-6.8	-5.1	-4.3	-4.1	-4.1
G-20	-1.3	-2.0	-7.6	-6.8	-5.6	-4.3	-3.7	-3.5	-3.4

Source: IMF. Fiscal Monitors, May 14, 2010: Statistical table 1 and November 2010: Statistical table 1.

Comparative Spending

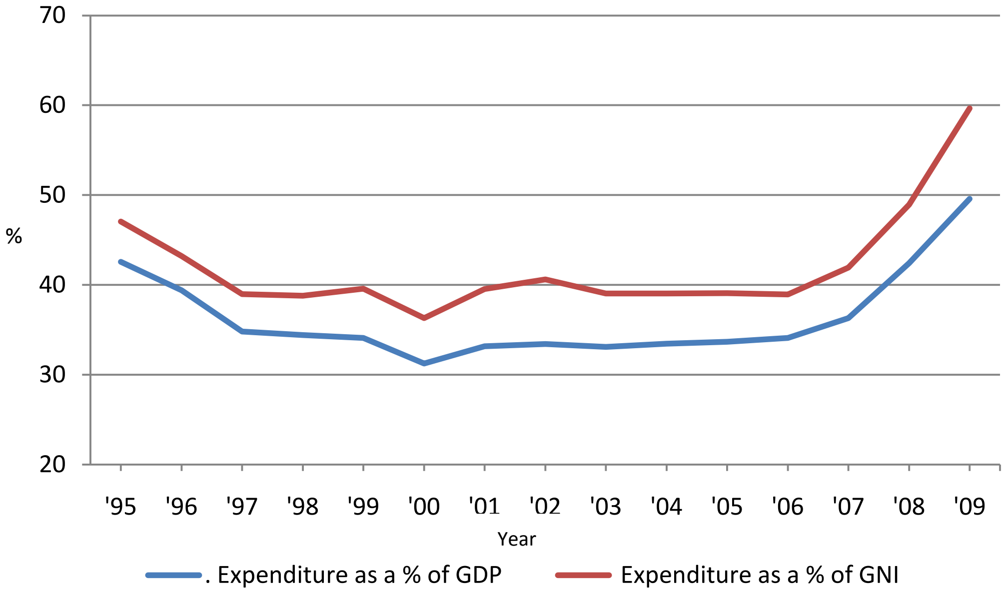
47. Figure 2 shows that public spending as a proportion of GDP and GNI declined steadily from the mid 1990s until 2000, at which point it stabilised around 34 per cent of GDP for the following seven years. The public spending ratio started to increase rapidly after 2007 with the collapse in economic output and rise in the unemployment rate.

14 To be sustainable the long run level of nominal growth must exceed the long-run growth in the stock of national debt.

15 The Department of Finance's four year plan (DOF, 2010c) forecasts a much more optimistic path for the general government deficit, with the deficit being reduced to 3 per cent by 2014.

Figure 2: Total Government Expenditure in Ireland, 1995-2009.

(Per Cent of GDP)



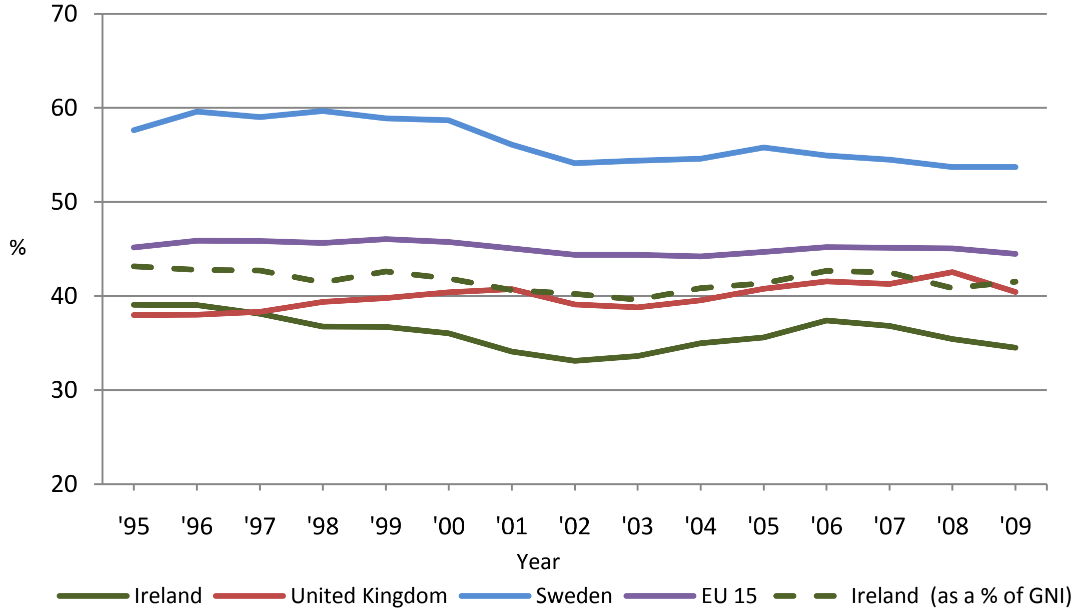
Source: Eurostat. (2010c). Government revenue, expenditure and main aggregates, (Available at: http://appsso.eurostat.ec.europa.eu/nui/show.do) (Accessed 23 November 2010).

48. Figure 3 compares the level of revenue collected in Ireland from 1995 to 2008 with the level of revenue collected in the EU15. Government revenue in Ireland is approximately 10 percentage points lower than the EU 15 average. Sweden has the highest level of receipts, averaging around 57 per cent a year. By contrast, Ireland's total tax receipts as a proportion of GDP averaged just 34 per cent (the figure for GNI is 39.2 per cent).

49. Finally, figure 4 compares the aggregate level of public expenditure in Ireland to that of the EU 15 as a whole and also to a selection of individual EU countries. In the decade and a half preceding the financial crisis, Ireland maintained a level of spending well below that of the EU 15. The spike in spending in 2008, coinciding with the start of the crisis, can clearly be seen.

Figure 3: Comparison of Total General Government Revenue

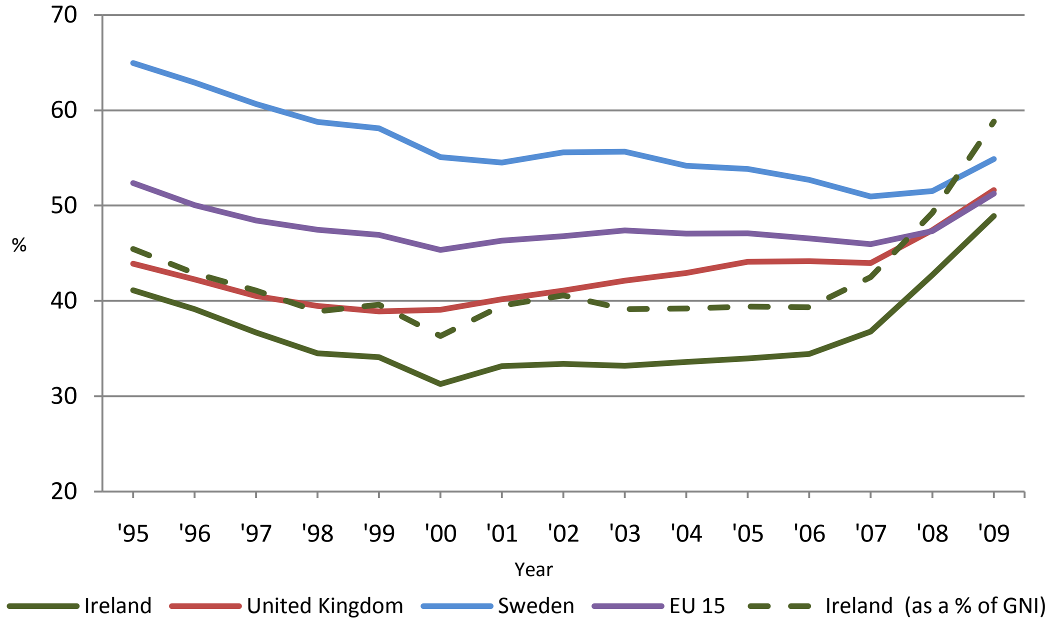
(Per Cent of GDP)



Source: Eurostat. (2010d). Government revenue, expenditure and main aggregates [Online]. (Available at: http://appsso.eurostat.ec.europa.eu/nui/show.do) [Accessed 23 November 2010].

Figure 4: Comparison of Total General Government Spending

(Per Cent of GDP)



Source: Eurostat. (2010e). Government revenue, expenditure and main aggregates. [Online]. Available at: http://epp.eurostat.ec.europa.eu/portal/page/portal/government_finance_statistics/introduction [Accessed on 23 November 2010].

Section 5: Conclusions

Conclusion

50. The answer to the question 'what is the appropriate level of government spending?' will ultimately depend on the type of society we wish to live in. There is a wide range of public spending ratios in advanced countries: at one extreme public spending in Sweden approaches almost 60 per cent of GDP, whereas at the other extreme, pre-crisis public spending in Mexico was below 20 per cent of GDP.
51. The sustainable level of spending depends on the level of revenue being collected and the sustainability of that revenue stream. In other words, the level of spending is a political choice.
52. Of course Government spending is not homogeneous and different types of government expenditure will generate different outcomes. Specific spending measures cannot be considered in isolation. Accomplishing desired policy objectives requires careful consideration of the appropriate mix of spending programmes and revenue raising measures. This implies that the composition of spending should be analysed in an integrated manner.
53. This integrated analysis should also be undertaken both within individual expenditure programmes, for example, the funding of universities, and within sectors, for example, the funding of education as a whole. The implication is that the merits of the individual spending programme should not be considered in isolation but should be considered within the context of the overall framework of economic and social policy and with reference to existing resource constraints.

REFERENCES

Ahearne, A. (2010). Presentation to Irish Taxation Institute, 19 November 2010

Barro, R. and Sala-i-Martin, X. (1995). *Economic Growth*. MIT Press: Cambridge, Massachusetts.

Brown, C.V. and P.M. Jackson. (1986). *Public Sector Economics* (3rd edition). Basil Blackwell: Oxford.

Brunila, A., Buti, M. and D. Franco (2001). *The Stability and Growth Pact*. Palgrave.

Buchanan, J. M. and G. Tullock (1962). *The Calculus of Consent*. University of Michigan Press: Ann Arbor.

Central Statistics Office (2010a). *Quarterly National Household Survey: Quarter 2 2010*. (available at: http://www.cso.ie/releasespublications/documents/labour_market/current/qnhs.pdf).

Central Statistics Office (2010b). *National Income and Expenditure, (Various Editions: 2002-2010)*: (available at: http://www.cso.ie/releasespublications/pr_nataccarchive2002.htm).

Delaney, L. and F. O'Toole (2005). *Decomposing Demand for Public Expenditure in Ireland*. UCD Geary Institute Discussion Paper Series

Department of Enterprise, Trade and Employment. (2000). Remarks by Tánaiste, Mary Harney at a Meeting of the American Bar Association in the Law Society of Ireland, Blackhall Place, Dublin on 21st July 2000 (available at: http://www.entemp.ie/press/2000/210700.htm).

Department of Finance. (2010a). *Revised Estimates for Public Expenditure 2010*. Government Publications: Dublin.

Department of Finance. (2010b). Information Note on the Economic and Budgetary Outlook 2011-2014, 4th November 2010 (available at: http://www.finance.gov.ie/documents/publications/guidelines/infor2010.pdf).

Department of Finance. (2010c). National Recovery Plan 2011-2014, 23rd November 2010 (available at: http://www.budget.gov.ie/The%20National%20Recovery%20Plan%202011-2014.pdf).

Eurostat Annual Government Finance Statistics. (2010). *Government revenue, expenditure and main aggregates* (available at: http://appsso.eurostat.ec.europa.eu/nui/show.do).

International Monetary Fund. (2010). *World Economic and Financial Surveys: Fiscal Exit: From Strategy to Implementation* (available at: http://www.imf.org/external/pubs/ft/fm/2010/fm1002.pdf), IMF. Fiscal Monitor, November, 2010

Keynes, J. K. (1997). *The General Theory of Employment, Interest and Money*. Prometheus Books: New York.

Krugman, P. (2008). *The Return of Depression Economics and the Crisis of 2008*. Penguin Books: London.

Lane, P. (2008). *Role of Government: Rationale, Levels and Size*. Chapter 3 in O'Hagan, J. and Newman, C. (eds.): The Economy of Ireland: National and Sectoral Policy Issues. Gill & MacMillan: Dublin.

Liebowitz, S. J. and Margolis, S. E. (1995). Are network externalities a new source of market failure? *Research in Law and Economics* (**17)**: pp 1-22.

Madden, D. (2008). *Taxation, Debt and the Public Finances*. Chapter 4 in O'Hagan, J. and Newman, C. (eds.): The Economy of Ireland: National and Sectoral Policy Issues. Gill & MacMillan: Dublin.

Miles, D., Myles, G. and Preston, I. (2003). *The Economics of Public Spending*. Oxford University Press: Oxford.

OECD. (1993). *The System of National Accounts, 1993: Glossary*, (available at: http://www.oecd.org/dataoecd/38/18/2674296.pdf), OECD, Paris.

OECD. (2010a). *OECD.Stat Extracts* (available at: http://stats.oecd.org/index.aspx?DatasetCode=SNA_Table11).

OECD. (2010b). *OECD Stat Extracts: Gross Domestic Product* (available at http://stats.oecd.org/index.aspx (accessed on 13 May 2010).

OECD. (2010c). *OECD Stat Extracts: Government expenditure by function* (available at http://stats.oecd.org/index.aspx (accessed on 13 May 2010).

Piana, V. (2001). *Public Expenditure* (available at: http://www.economicswebinstitute.org/glossary/pubexp.htm), Economics Web Institute.

Pradhan, S. (1996), Evaluating Public Spending: A Framework for Public Expenditure Reviews. *World Bank Discussion Papers No. 323*. World Bank Publications.

Silvestre, J. (1987). *Economies and Diseconomies of Scale* in Eatwell, J., Milgate, M. and Newman P. (eds.): The New Palgrave: A Dictionary of Economics, Volume. 2, pp. 80–84.

Suiter, J. (2007). Constituency Sports Grants as Pork Barrel Politics, Paper Presented to the PSAI Conference, October 2007.

United Nations. (2010). *Classification of the Functions of Government* (available at: http://unstats.un.org/unsd/cr/registry/regcst.asp?CL=4, United Nations Statistical Division – Classifications Registry.