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# TAX SYSTEM AND REFORMS IN EUROPE: IRELAND

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# TAX SYSTEMS AND TAX REFORMS IN EUROPE: IRELAND

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#### Abstract

This paper aims at discussing the main features of Ireland's tax system, its recent reforms and those underway. It is part of a wider research on European taxation, carried on at this Department, under the direction of L. Bernardi and P. Profeta, and the supervision of V. Tanzi.

In paragraph 2 we give some quantitative information on the structure of the system and its development, stressing the fact that Ireland have now the lowest fiscal pressure in EU, mainly due to the low level of its social contributions. In paragraph 3 we explore the institutional features of the main taxes, direct and indirect. In particular the Income tax is characterized by some elemts of family taxation and by a strong individualization, in the sense that a lot of its elements, including the tax rates and the level of exemptions depend on some specific features of the taxpayers, such as marital status, number of dependent children and age. Concerning the Corporate tax, it must be notice that the system show in general very low statutory rates: in fact, even if the facilitated rate of 10 percent wiil be ruled out in the following years, the standard rate has been strongly reduced and for the year 2003 it will be the 12,5 percent. In paragraph 4 we evaluate the distribution of the fiscal burden. The functional classification and the implicit tax rates show that Ireland, compared to EU, have a low level of tax on labour, even if, accoding with the marginal tax wedge, the distortion on labour supply seems to remain high. Effective marginal and average rates are both low and are important elemets in justifing the good performance of Irish economy. Finally in paragraph 5 the main reforms carried out in the last decade are analysed. The measures taken to strengthen the incentive to work are positive valuated, even if other reforms in the same direction seem to be necessary. Concerning Corporate Tax, the phasing out of special regimes (under pressure from the EU) and the contemporaneous reduction of general corporate rate, also prove to be positive measures.

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# 1. Introduction, contents and main conclusions

The aim of this paper is to analyse the tax system in Ireland from an economic policy point of view. Due to the reform of the last decade, this small country is now characterized by an interesting combination of good economic growth and strong budgetary situation, along with a low fiscal pressure, in particular on corporations and labour.

In paragraph 2 we give some quantitative information on the taxes levied and on the evolution of the tax system between 1970 and 1999, comparing it with the EU average. Irish fiscal burden, measured as the ratio between taxes and GDP, shows in this period an "hump" path, increasing until the 1985 and then decreasing to the current value, that it is the lowest in Europe. To better understand this finding it's important to look at the composition of fiscal revenue, stressing the fact that, in comparison with the other EU counties, Ireland has a low fraction of GDP absorbed by social contributions, while the quota absorbed by taxes is almost the same in Ireland and in EU. Concerning the composition of taxes, direct and indirect taxes have the same importance. Among the first the major role is played by the income tax, even if during the last thirty years corporate tax has become also important while among the second VAT is the most relevant Fiscal receipts are strongly centralized, since the amount of them received by the local authorithies is far below the EU average.

Then, in paragraph 3, we analyse some institutional features of the Irish taxation system, focusing on the main taxes. One of the main features of the Income tax is the strong degree of individualization, in the sense that it is designed in order to take into account personal characteristics of the taxpayer, such as marital status, age, number of dependent children. This is true not only for tax relief and exemptions, but also for tax bands. Concerning tax relief it must be also noticed that the most of them are in form of tax credits, that is reduce the gross tax liabilty, rather than tax deductions. In this way the fiscal saving is equal for all the taxpayers. Tax rates are caractherized only by two values, a lower one of 20% an higher one of 42%. With regard to tax unit, some elements of family taxation are present.

Corporate tax, has been characterized for along time by a lot of special regimes, among wich the most important is the facilitated rate of 10%. Now this special rate is to be progressively phased out over the next years (until 2005 or 2010, depending on the specific activity carried out). However it must be noticed that at the same time, the standard rate has been reduced and it is 16 percent in 2002 and in the 2003 it will be 12,5 percent; thus the statutory rate on corporations remains very low. A separate tax is charged on Capital Gains, whose value is computed taking into account the inflation and on deposit interests. Dividends are charged at 20 percent, but the tax withheld can be used as a tax credit against the recipient's income tax liability. The main indirect taxes, like in other

EU countries, are Value Added tax (VAT) and Excise duties and do not present specific features. Taxes on (the transfer of) property are also present: Capital acquisition tax (CAT), Stump duties, and Rates. Concerning the latter it must be noticed that they are the only relevant kind of local taxes.

This institutional description represents the necessary background for analysis that will be carried out in sections 4 and 5. Paragraph 4 is devoted to the evaluation of the distribution of fiscal burden. Both functional classification and implicit tax rates show that the burden is first of all charged on labour, and then on consumption and other factors. Nevertheless, compared to other European countries, Ireland has a large amount of taxes on consumption and a not high level of taxes on labour. However, the marginal tax wedge shows a remarkable (even if declining during the '90s) distortion on labour supply: this disincentive effect of the tax system is one of the most relevant constraints to the further growth of the Irish economy. Regarding the effect of corporate taxation, it must be stressed its very low level, in accordance with the the statutory rate and the effective (marginal and average) rate. This can explain the facts that Ireland strongly attracts foreign investment. An important shortcomings is however represented by the discrimination between equity and debt, in favour of the latter, that is still present.

Finally in paragraph 5, we describe and examine the main reforms of the '90s, trying to give an evaluation of the system. Since the second half the '80s, Ireland has seen a considerable fiscal consolidation, achieved through expenditure cuts rather than a rise in taxes that has instead been reduced; at the same time the Irish economy has grown at a very fast pace. Despite this positive situation some important policy focus remains, such as binding labour constraints. On this point taxation plays an important role, owing to its distortion effect on labour supply; the reforms carried out are a move in the right direction, since they have tried to enhance work incentives, but probably further efforts are required. Concerning Corporate Tax, the phasing out of special regimes (under pressure from the EU) and the contemporaneous reduction of general corporate rate, also prove to be positive measures. Further reforms are still needed to eliminate fiscal discrimination between equity and debt finance and probably VAT would benefit, from an efficiency point of view, from more uniform rates, even if such a reform would increase distributive problems.

# 2. The structure of the system and its development from the '70

# 2.1 The current structure of the taxation system and of social security contributions

In 2001 the Irish General Government balance is in surplus for an amount equal to 1,4 percent of GDP (with a primary balance of 3 percent of GDP) and public debt has reached the level of 35,8 percent of GDP. This remarkable result is due to the dramatic changes in fiscal policy that took

place in the 1990s, and that have caused total expenditure and total receipts to achieve respectively the values of 33,4 percent and 34,8 percent of GDP. Concerning the composition of total expenditure, both collective consumption and gross fixed capital formation constitute 14 percent, while social transfers (in kind and monetary) represent 27 percent, interest payments 5 percent, subsidies 4 percent and other expenditures 37 percent. Total receipts can instead be divided into three items: taxes, social contributions, and other revenues whose percentage relative to total receipts are respectively 72 percent, 12 percent and 15 percent.

The main source of receipts by far are fiscal revenues (i.e. taxes plus social contributions), whose structure as a percentage of GDP is described in Table 1, for the years 1970-1999. In 1999 the total fiscal pressure, measured as the ratio between total fiscal revenue and GDP, was 33.5 percent. As we will see in more detail in paragraph 2.3, this value was the lowest in Europe, where average fiscal pressure amounted to 43.1 percent. Focusing on the composition of Irish fiscal burden, direct and indirect taxes were both 14.5 percent of GDP and social contributions 4,5 percent. In the composition of direct taxation, personal income tax is without a doubt the most important part. Corporate income taxation also plays an important, but quantitatively less considerable, role. Among indirect taxes, the main role is played by Value Added Tax (VAT), that represents 50.3 percent of indirect taxation. Another important category of indirect taxes is Excise duty, that amount to 32.4 percent of indirect taxation. Finally, social contributions are mainly paid by employers and by employees: the first finance 62.2 percent of social contributions and the latter 33.3 percent. The remaining is due from the self-employed, whose contributions represent 4.4 percent of social contributions. This composition of revenue has not remained the same over the last thirty years, but it is the result of changes, often of remarkable import, that we will examine in detail in the next paragraph.

Fiscal receipts in the Irish system are strongly centralized: 84 percent of them appoints to Central Government and only 3 percent to Local Government (the remaining fraction is absorbed by the Social security system and by EC Institutions).

# 2.2 The developments of the system from 1970 to 2000

The evolution of fiscal pressure shows a "hump" path: the fraction of GDP absorbed by fiscal revenues has increased since 1970, reaching its highest level in 1985; it then fell and it is now fixed at a value differing from that of 1970 by 1.9 percent of GDP. We will now examine the structural evolution of the fiscal system in more detail.

A first general feature is a slight reduction in the weight of taxation relative to total fiscal revenue. The ratio between social contributions and total fiscal revenue has increased from 8.9

<sup>&</sup>lt;sup>1</sup>Source for all the previous data: *Ireland-Stability Programme 2001* and elaborations.

percent in1970 to 13.4 percent in1999; conversely taxation has passed from 91.9 percent in1970 to 86.6 percent in1999. This change in the structure of the system is not due to a reduction in the fraction of GDP absorbed by direct taxation (which has shifted from 28.8 percent of GDP in 1970 to 29 percent of GDP in 1999), but to a sharp increase in the social contributions paid (whose value has shifted from 2.8 percent of GDP in 1970 to 4.5 percent of GDP in 1999). However the structural change described above took place for the most part in the first half of the 1970s, when the ratio between taxation and total revenue fell from 91.1 percent to 85.3 percent and social contributions rose from 8.9 percent to 14.7 percent. In following years the composition of the fiscal system remained substantially unchanged, but in the second half of the 1990s we note a decrease of almost 2 percent in the weight of social contributions relative to total revenue. Social contributions are also lower (as fraction of GDP absorbed and as percentage of total fiscal revenues) in Ireland than in the other European countries, as we will see in the next paragraph.

A second important feature concerns the evolution of the role of direct vs. indirect taxation. The relative importance of the first has strongly increased: in 1970 the ratio between direct taxation and total taxation amounted only to 29.7 percent and the ratio between indirect taxation and total taxation was 61.4 percent; in 1999 these two ratios are both 43.3 percent. The key period of this change is from the seventies to the first year of the nineties; from then the situation is mainlystable. This development is due to an increase (reduction) in the percentage of GDP absorbed by direct (indirect) taxation.

It is also important to explore the evolution of the composition of indirect and direct taxation. In the structure of direct taxes there is a trend towards the greater importance of corporate income taxation, whose share, relative to direct taxation, has increased from 13.8 percent in 1970 to 30.3 percent in1999; conversely personal income tax has reduced inimportance. The structure of indirect taxation has drastically changed from 1970 to 1999. In particular, the importance of VAT grew fast in the 1970s and 1980s: in 1975 it represented 27.1 percent of indirect tax and in 1985 43.5 percent; in the last twelve years the share of indirect taxes represented by VAT increased at a slower pace reaching the value of 50.3 percent in 1999. At the same time, excise duties have fallen progressively from 52.6 percent of indirect taxes in 1970 to 32.4 percent in 1999 (this path shows a "hump" in the second half of the seventies where the ratio between excise duties and indirect taxation reached 56 percent, that is the highest value for the last forty years). Even more remarkable is the decline in importance of the other indirect taxes.

**TAB. 1** Structure and development of fiscal revenues in Ireland and European average as a percentage of GDP, 1970-1999

|                      | 1970    |        | 19      | 75     | 19      | 80     | 19      | 85     | 19      | 90     | 1:      | 995    | 19      | 999    |
|----------------------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|
|                      | Ireland | Europe |
| Direct Taxes         | 9.4     | 8.9    | 10.3    | 11.9   | 12.7    | 12.7   | 14.5    | 13.1   | 13.9    | 13.2   | 13.9    | 13.3   | 14.5    | 14.5   |
| Personal income      | 7.0     | 5.5    | 8.8     | 8.9    | 10.9    | 9.3    | 12.3    | 9.0    | 11.1    | 8.9    | 10.2    | 9.6    | 9.3     | 9.9    |
| Corporation income   | 1.3     | 2.2    | 0.7     | 1.9    | 1.5     | 2.2    | 1.7     | 2.8    | 2.2     | 2.9    | 3.2     | 2.4    | 4.4     | 2.8    |
| Indirect taxes       | 19.4    | 13.0   | 17.0    | 12.2   | 16.8    | 13.2   | 18.4    | 13.0   | 16.2    | 13.0   | 14.8    | 13.6   | 14.5    | 14.6   |
| VAT                  | 0.0     | 5.1    | 4.6     | 5.7    | 5.0     | 6.6    | 8.0     | 6.1    | 7.2     | 6.6    | 7.1     | 6.9    | 7.3     | 7.3    |
| Excise duties        | 10.2    | 3.5    | 8.8     | 3.5    | 9.4     | 3.2    | 8.0     | 3.2    | 6.5     | 3.1    | 5.5     | 3.4    | 4.7     | 2.5    |
| TOTAL TAX REVENUE    | 28.8    | 21.9   | 27.3    | 24.1   | 29.5    | 25.9   | 32.9    | 26.1   | 30.1    | 26.2   | 28.7    | 26.9   | 29.0    | 29.1   |
| Social contributions | 2.8     | 11.7   | 4.7     | 12.8   | 5.2     | 13.4   | 6.0     | 13.8   | 5.5     | 13.7   | 5.1     | 15.0   | 4.5     | 14.0   |
| Employers            | 1.4     | 7.2    | 2.6     | 7.7    | 3.2     | 7.8    | 3.6     | 7.9    | 3.1     | 7.8    | 2.9     | 8.0    | 2.8     | 7.8    |
| Employees            | 1.3     | 3.5    | 2.1     | 3.8    | 2.0     | 4.3    | 2.4     | 4.5    | 2.1     | 4.5    | 1.9     | 5.1    | 1.5     | 4.5    |
| Self Employed        | 0.0     | 1.0    | 0.0     | 1.3    | 0.0     | 1.3    | 0.0     | 1.5    | 0.2     | 1.4    | 0.2     | 1.8    | 0.2     | 1.7    |
| TOTAL FISCAL REVENUE | 31.6    | 33.6   | 32.0    | 36.9   | 34.7    | 39.3   | 38.9    | 39.9   | 35.6    | 39.9   | 33.8    | 41.9   | 33.5    | 43.1   |
| Administrative level |         |        |         |        |         |        |         |        |         |        |         |        |         |        |
| Central Government   | 25.7    | 19.7   | 24.7    | 21.1   | 28.0    | 22.3   | 31.3    | 22.1   | 28.7    | 22.2   | 27.5    | 22.5   | 28.0    | 23.7   |
| Local Government     | 3.3     | 2.2    | 2.4     | 2.8    | 1.3     | 2.9    | 1.0     | 3.1    | 1.0     | 3.8    | 0.9     | 4.0    | 0.9     | 4.3    |

Sources: 1970-1995, Eurostat; New Cronos 2002 (data equalized with Eurostat).

Notes: Minor items are omitted.

Finally, concerning the sorting of fiscal revenues according to the level of government receiving them, we can observe a growing centralization of fiscal receipts, whose fraction pertaining to Central Government has increased by 9 percent.

# 2.3 A comparative view with the European average

The situation of Irish public finance is in general very good, even in comparative terms. As we have already seen in the previous paragraph, the General Government balance is in surplus, and this positive result will not change over the next years, even if a reduction in the surplus is forecast. Moreover Government debt is very low, especially if we consider that in the EU there are countries like Italy, Belgium and Greece that have ratios between public debt and GDP around 100 percent.

A similar situation characterizes the burden of taxation: Ireland has the lowest ratio between total taxation and GDP. This is due in particular to the relatively low quota of GDP absorbed by social contributions: this quota was 4.5 percent in Ireland in 1999 versus the 14 percent European Average. If we exclude social contributions we can see instead that the burden of taxation in Ireland is similar to the European average. In fact one of the main peculiarities of the Irish system (from a quantitative point of view) is the small role played by social contributions compared to other European countries. Social contributions in Ireland represents only 13.4 percent of total taxation, while the European average is 32.5 percent; conversely the share of total revenues due to taxation is 86.6 percent in Ireland and the European average 67.5 percent. However if we look at the composition of taxes, the Irish mix of direct and indirect revenue is similar to the European average: about 50 percent of taxes are indirect and the remaining 50 percent are direct.

The resources used for pension purposes in Ireland do not derive only from compulsory social contributions. In fact, besides the compulsory PAYG pillar, there exists a second pillar financed through voluntary contributions, while in other EMU countries where social contributions are higher these complementary pension schemes could be less developed. One of the most debated topics in Ireland over the last years has been the low coverage of pensions system, as revealed by a study of the Economic and Social Research Institute in 1995 and remarked upon by the National Pension Board in 1998. In order to try to solve this problem and enlarge the coverage of the second pillar, in 2002 the Government introduced personal retirement saving accounts (PRSA) (though the ageing problem is less worrying in Ireland than in other European countries, in 2001 the Government also introduced a funded component, the so called National Reserve Fund, in the first PAYG pillar).

# 3. Some quantitative and institutional features of main taxes

#### 3.1 The Personal Income tax-PIT

The income tax, as we have said above, is the main source of direct revenue in Ireland. The beneficiary is the State and it is payable by all (individuals and unincorporated bodies) residents (in general on their total income from all sources) and non-residents (for Irish source income). The basis of assessment is total income; deductions and exemptions can be applied. Total income includes pension, income earned as an employee together with benefits in kind given by the employer (there are some exemptions) and self-employed income .Losses which the self employed may incur in a year, can be set against total income in the same year and can also be carried forward without any limit of time but only used against profits arising from the same activity. The Self-employed can deduct all the expenses wholly and exclusively for the purpose of their business. More restrictive conditions are instead effective for employees, though they may have some allowances for expenses wholly, exclusively and *necessarily* required for their employment. Concerning financial activities, dividends are inserted in the tax base with a tax credit, since they are also subject to a withholding tax.. Interest on deposits and capital gains are subject to separate taxation (for more information see also the paragraphs on corporate tax and taxation of financial activities).

In computing taxable income, the taxpayer, in addition to the deductions quoted above, can claim some other relief: for example he can deduct, within certain limits, permanent health contributions and medical expenses; previously long-term unemployed persons enjoy other deductions. Moreover, in order to encourage the second pillar of the Irish pension system, a deduction on contributions to complementary pension schemes it is also granted, within certain limits. After recent reforms, the majority of tax relief is in the form of tax credits, as we will see later in this paragraph and in section 5, analysing the reforms carried out over these years.

Regarding the tax unit, a married couple can decide to be taxed as if they were single (the so called Assessment as a single person), or choose some forms of family taxation, i.e Joint assessment or Separate assestment. In Joint Assessment the incomes of the two spouses are treated as belonging to only one of them. In Separate Assessment the spouses are taxed separately, but allowances are given in such a way that the result, from a tax point of view, is equal to Joint Assesment. These feature is important, in order to understand the income bands to which applied the tax rates, as described in Table 2. Income bands are in fact individualized, as they depend on the status of the taxpayer: single (or treated as single by his own choice), with or without children, or married, taking into account if both the spouses work ( the standard rate is applied to unincorporated bodies).

TAB. 2 Tax Rates

| Status                                    | Tax<br>rates | Tax<br>band (in<br>Euro) |
|---|--------------|--------------------------|
| Single/widowed (without dependent         | 20%          | 0-28000                  |
| children)                                 | 42%          | 28000-                   |
|   | 20%          | 0-32000                  |
| Single/widowed (with dependent children)  | 42%          | 32000-                   |
|   | 20%          | 0-37000                  |
| Married couple (1 spouse with income)     | 42%          | 37000-                   |
|   | 20%          | 0-37000                  |
| Married couple (both spouses with income) | 42%          | 37.000-                  |

Notes: in the case of a married couple where both spouses have an income the threshold value of 37000 may be increased with the lower of: 1) the income of the second spouse 2) 19000 euro

The system of exemptions is quite complex, as summarized in Table 3, and it depends on individualized parameters too: the exemption limits change with marital status, with age, and with the number of dependent children.

**TAB. 3** Exemptions (in Euro)

|                  | Single | Married |
|------------------|--------|---------|
| Aged under 65    | 5210   | 10420   |
| Aged 65 and over | 13000  | 26000   |

Notes: exemption levels are increased: for the first and the second dependent child by 575 euro; for the later child by 830 euro

If total gross income is below these values, the taxpayer is exempted from income tax and no other tax relief is granted. If total gross income is higher than the exemption values, tax rates described in Table 2 generally apply, after some deductions; but if the gross income is only slightly above the values of Table 3, the so called marginal relief system can be called into operation under which the tax to be paid is given by 40 percent of the income in excess of exemption limits,. This system is applicable only when the benefits that the taxpayer can get are higher than that achievable under the tax rate system of Table 2.

In order to reach net tax liability once the gross tax is computed, , we must subtract some tax credits; among them, the most important are those linked to the specific status of the taxpayer. For example we have a basic personal tax credit (that is 1,520 Euro for singles and 3,0 Euro for couples), a tax credit for widowed persons and for widowed parents (in this case the tax credit changes with the number of years after bereavement), a tax credit for persons aged 65 or more, a tax credit for incapacitated children (that is 500 Euro per child), a tax credit for a dependent relative (that is 60 Euro per relative) and others. For the employees there are specific tax credits of 660 Euro. Until the tax year 2001, there was a tax credit for mortgage interests; but from 1 January 2002, this relief will be granted directly at source, the individuals will pay net mortgage interest, that is an interest from which tax relief has been deducted.

# 3.2 Corporation Tax

Corporate tax is payable on all profit (income plus capital gains) of every Irish company; non Irish companies are charged for the fraction of profit that is attributable to the branch located in Ireland. The most remarkable feature of Irish Corporation Tax concerns the system of tax rates on income, which has changed in recent years. There are three tax rates on income: the standard rate, the higher rate, and the facilitated rate.

The standard rate applies in general to trading income; for the year 2002 this rate is16 percent and from 2003 it will be 12,5 percent. However for small companies, that is companies with a trading income not exceeding 254,000 euro, the rate is 12,5 percent; a marginal relief system is used if the trading income is between 254,00 euro and 317,500 euro. This 12,5 percent rate also applies to some shipping activities. A higher rate of 25 percent is applied to other activities. This for example concerns foreign income (unless its source is an Irish trade), income from mining and petroleum and income from dealing in land (the sale of residential land is taxed at a rate of 20 percent). Finally there is a reduced rate of 10 percent, that has represented the main facilities given to manufacturing companies by the Irish taxation system for years. Under the pressure of the EU and the planned reduction of the standard rate, the 10 percent rate will be ruled out until 2005 or 2010, depending on the kind of activity carried out.

Capital gains are also charged under corporation tax, but with a different rate that is, with some exceptions, around 20 percent. In computing capital gains, inflation is taken into account using an indexing system.

Concerning the computation of trading income, it can be noted that in evaluating stocks only FIFO (first in, first out) or its approximation can be used, while the application of LIFO (last in, first out) is forbidden. Moreover only some specific provisions and reserves are deductible (for example reserves for specific bad debts). Capital allowances, that is fiscal depreciation, depend on

the kind of asset used: for machinery and plants there is, for example, an allowance of 20 percent. Trading losses can balance other income or gains in the current year, or can be carried back (against profit of any kind, in the preceding year) or carried forward (against trading income, without any limit of time). Finally dividends and distributions are charged, with a remarkable number of exemptions (such as exemption for dividends and distributions given to an Irish company), to a withholding tax with a rate of 20 percent; this withholding tax can then be used as a tax credit against the recipient's income tax liability, computed using the gross dividend.

# 3.3 Taxation of income from financial capital

Capital gains from the disposal of an asset made by an individual or by a company are in general charged at a tax rate of 20 percent. A capital gain is computed as the difference between the value of the sale and the value of the acquisition, where the second is defined taking into account inflation with an indexing device. The first 1,270 euro of capital gains is exempted from tax. Capital losses are generally deductible from gains and the excess can be carried forward.

Interests from Irish deposits are subject to a witholding tax (DIRT), deducted by financial institutions, whose rate is 20 percent if interests are payable annually or more frequently, and 23 percent if interests are payable less frequently. Other specific interests are also subject to withholding taxation. Finally, Special Saving Incentive Accounts (SSIAs) must be remembered. These are five yearsaving schemes (introduced on May 1 2001), in which the Government takes part, making an extra investment of 25 percent of the sum deposited monthly; the return, achieved at the end of the five years, is taxed at a rate of 23 percent.

#### 3.4 Value Added Tax--VAT And Excise Duties

Value Added Tax (VAT) represents the main indirect revenue on which the Government can rely. It is charged on the supply of goods and services in Ireland and on imports, provided that these activities are carried out by a taxable person, that is someone that supply goods/services or make imports above some minimum limits; exports are chargeable at 0 percent rate. The computation of VAT is made with the application of the tax-to-tax method, i.e. the tax liability is the difference between the sales VAT and the Purchase VAT.

Tax rates depend on the goods to which they apply; some relevant cases are listed below:

0 percent: exported goods, goods imported from outside the EU transferred to another EU State books, food and drink for human consumption, oral medicine, children's clothing and footwear, printed books and booklets

- 4.3 percent: greyhounds, horses, pigs
- 12.5 percent: newspapers, magazines, chocolate, biscuits, snacks, energy for heating and light
- 21 percent (the standard rate): applicable to other good and services

The main exemption are: human blood, milk and organs; goods supplied to members by a non-profit organization.

Finally, among indirect taxes, there exists a consistent number of excise duties, such as excise duty on hydrocarbons, on tobacco products, on ethyl alcohol, on wine, and on beer.

# 3.5 Capital Acquisition Tax, Stamp Duties and Rates

In Ireland there are three main kinds of tax on property: Capital acquisition tax (CAT) and Stamp Duties, and Rates. Capital acquisition tax (CAT) is levied on gift and inheritance, with a rate of 20 percent above the amount of the exemption (the exemption increases the closer the relationship is between the donator (the testor) and the recipient (heir) and goes from a minimum of 21,108 euro to a maximum of 422,148 euro). There are also many other partial or total exemptions, among which the most relevant is the transfer, in the form of gift or inheritance, from a married person to their spouse.

Stamp Duties are charged on certain documents, relative for example to transfer of property, transfer of stocks and marketable securities, mortgages and leases. The tax rate depends on the specific kind of deeds: for example, for residential property it ranges from 3 percent to 9 percent according to the value of the transfer and the status of the purchaser, while for the transfer of stocks it is 1 percent. Rates are taxes levied by local authorities to finance expenditure in excess of the transfers made to them by the State. The basis of assessment is represented by immovable property such as buildings, factories shops, railways, canals, mines, woods, right of fishery, right of easement over land and so on. Important exemptions are constituted by domestic property, farm buildings and land used for agriculture, horticulture, forestry and sport.

# 4. The fiscal burden

# 4.1 The distribution of taxation charge

In order to understand how revenues are distributed among economic activities and factors of production and the way in which the system discriminates between them, it's useful to analyse the so called functional classification of the fiscal receipts. Table 4 shows for the years between 1970 and 1997, the taxes levied on consumption, labour and capital as a percentage of GDP. Taxes on labour and capital are divided into subgroups.

Taxes on labour play a major role, since they absorb 14.4 percent of GDP (that is 42.4 percent of total fiscal revenues); taxes on consumption also represent a considerable fraction of GDP, 12.9 percent (that is 37.9 percent of total fiscal revenues), while this percentage is only of 6.7 percent (that is 19.7 percent of total fiscal revenues) for taxes on capital.

**TAB. 4** Structure of taxation according to the economic functions as a percentage of GDP

|                    | 1970 | 1975 | 1980 | 1985 | 1990 | 1995 | 1997 |
|--------------------|------|------|------|------|------|------|------|
| Consumption        | 16   | 14.4 | 14.8 | 16.7 | 14.4 | 13.2 | 12.9 |
| Labour             | 9.2  | 12.8 | 15.3 | 17.9 | 16.1 | 14.8 | 14.4 |
| Employed           | 8.4  | 11.8 | 14.4 | 16.3 | 14.6 | 13.3 | 12.9 |
| -paid by employers | 1.4  | 2.6  | 3.2  | 3.6  | 3.1  | 2.9  | 2.8  |
| -paid by employees | 7    | 9.2  | 10.8 | 12.7 | 11.4 | 10.4 | 10.1 |
| self employed      | 0.8  | 1.1  | 1.3  | 1.5  | 1.6  | 1.5  | 1.5  |
| Capital of which   | 6.4  | 4.8  | 4.7  | 4.4  | 5    | 5.8  | 6.7  |
| Real estate        | 3.5  | 2.6  | 1.2  | 1    | 0.9  | 0.8  | 1.1  |
| Real capital       | 0.4  | 0.3  | 0.1  | 0.3  | 0.3  | 0.3  | 0.2  |
| Monetary Capital   | 0    | 0    | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  |
| Total              | 31.6 | 32   | 34.7 | 38.9 | 35.6 | 33.8 | 34   |

Source: Eurostat, 2000. 1997 is the last data available

If we look at the evolution of this structure in the last thirty years the main change concerns the reallocation of taxation between consumption and labour. In 1970 taxes on consumption (that are fundamentally VAT and excise duties) were 16 percent of GDP while taxes on labour (i.e. Social contributions plus fraction of Income tax levied on labour income) amounted to 9.2 percent of GDP; that is, respectively 50.6 percent and 29.1 percent of total fiscal revenues. Thus, taxes on consumption have fallen progressively over the years, with the exception of 1985; however the reason for this temporary inversion of the trend can be found in the growth of the overall fiscal burden that increasedfrom 34.7 percent in 1980, to 38.9 percent in 1985 and then again to 35.5 percent in 1990. Instead Taxes on labour show a "hump" path with a maximum in 1985 for the reason just explained.

If we look at the composition of taxes on labour, the main feature concerns the importance of employees, who pay 70 percent of labour taxes, while the remaining is paid by employers (19.4 percent) and by the self-employed (10.4 percent). Observing the evolution of this composition, there has been no drastic structural change in the split between employers, employees and the self employed, though there was a slight reduction in the percentage of revenues levied on employees and an increase of those charged to the self-employed and employers.

Capital taxes in TAB 4 are heterogeneous and derive from the aggregation of taxes levied on many sources, such as real estate, real capital and monetary capital; they also include taxes on income and wealth of difficult allocation. Capital taxes play a small role and their percentage of GDP has been substantially stable from 6.4 percent in 1970 to 6.7 percent in 1997. Looking at the composition, the main trend is the reduction of real estate taxes as a percentage of GDP (from 3.4)

percent of GDP in 1970 to 1.1 percent in 1997) and the symmetric increase of taxes on unallocable income and wealth (from 2 percent of GDP in 1970 to 4.1 percent in 1997).

We can now examine implicit tax rates. They are indicators complementary to the functional classification described above, and they are useful to measure the fiscal burden charged on the inputs and the activity of an economy. Table 5 and Figure 1 show the evolution of the implicit tax rates on labour employed, consumption and other factors (i.e. on the net operating surplus of the economy plus consolidated government interest payments). According to these indicators, the burden of taxation is distributed first of all on labour employed (with an implicit tax rate of 29.8 percent in 1997) and then on consumption (with an implicit tax rate of 23.7 percent in 1997) and on other factors (with an implicit tax rate of 20.5 percent in 1997). Though the implicit tax rate in Ireland is below the European average, recent reforms have further reduced the burden of taxation on labour and will very likely continue to reduce it in the next years.

The distribution of the implicit tax rate has not always been the same; in 1970 the burden was mainly charged on other factors and consumption, while the implicit tax rate on labour employed was very low. In the following years the situation changed progressively. The implicit tax rate on labour employed has increased from 1970 to 1997 by 13.7 points, showing a "hump" path with a maximum value (31.3 percent) in 1993 and 1994. A slightly different pattern characterizes the implicit tax rate on consumption, that starts from a value of 21.1 in 1970, reaching the higher value of 25.1 percent in 1985, decreasing to 21 percent in 1993, and then increasing again to 23.7 percent in 1997. Finally, the evolution of implicit tax rates on other factors has a less regular movement, but on the whole it fell between 1970 and 1997 by 3.6 percent.

We will now briefly discuss the effect of personal income tax (PIT) on income distribution. In a comparative analysis of twelve Oecd countries (Wagstaff et al. 1999), the pre-tax income distribution in Ireland in 1987 was one of the most inequal in the EU, as showed by the Gini coefficient, whose value was 38.7 percent; this result doesn't change if we consider the post-tax income distribution, that shows a Gini coefficient of 34.18 percent. However, even if PIT can not greatly changethe inequality ranking of Ireland with respect to other countries, its distributive effects, measured by the difference of the Gini index on gross and net income were strong even in comparative terms and amounted to 0.0452 (this is the highest value among the twelve countries considered).

**TAB. 5** Implicit Tax Rates in Ireland and in Europe

|                 | 1970    |      | 1973    | 1975 1980 |         | 0 1985 |         |      | 1990    | )    | 1995    |      | 1997    |      |
|-----------------|---------|------|---------|-----------|---------|--------|---------|------|---------|------|---------|------|---------|------|
|                 | Ireland | EU   | Ireland | EU        | Ireland | EU     | Ireland | EU   | Ireland | EU   | Ireland | EU   | Ireland | EU   |
| Consumption     | 21.1    | 17.6 | 20.2    | 15.5      | 20.2    | 16.0   | 25.1    | 15.6 | 22.5    | 16.2 | 22.5    | 16.7 | 23.7    | 16.8 |
| Labour employed | 16.1    | 28.9 | 20.7    | 32.2      | 23.4    | 35.1   | 30.3    | 37.1 | 30.8    | 37.5 | 29.6    | 41.7 | 29.8    | 41.9 |
| Other factors   | 25.1    | 26.2 | 20.2    | 34.7      | 22.3    | 36.6   | 16.3    | 32.3 | 16.1    | 31.5 | 18.3    | 29.4 | 20.5    | 31.1 |



However notice that, though Wagstaff's paper dates from 1999, Irish data used refers to 1987. After that date the income tax changed. The tax rate structure, in 1987 was a step function with three different rates (35 percent, 48 percent, 58 percent), and now shows only two rates (20 percent and 42 percent). At first glance, this reform may have reduced the distributive effect of PIT, but a careful analysis should also take into account income bands and tax relief, using up to date data.

# 4.2 Tax wedges on labour and corporate taxation

The marginal tax wedge on labour provides a measure of the effect of taxation on the supply of labour. Though Ireland does not have a high level of taxes on labour (according to functional classification and to implicit tax rate), work incentives seem not to be very strong, since the marginal tax wedge is around 55 percent (Journard 2001).

The statutory rate on corporation is the lowest in EMU; though this is an important indicator, to better assess the effects of taxation on corporation, it's useful to analyse the so called effective rates, both marginal (EMR) and average (EAR). Ireland, considering average values between equity and debt, has the lowest EAR; EMR is also very low although Italy (that has a remarkably high EAR) do better with a negative EMR<sup>2</sup>. These results prove the importance of the statutory rate, that has more incidence on EAR than on EMR, in determining the location of business; in fact Ireland seems to attract foreign investments (especially from outside the EU) more than Italy. This confirms the thesis of Devereux and Griffith (1999) that US multinational firms, once having taken the decision of investing in the EU, decide the specific location with careful attention to the EAR. If we look at corporate funding, equity is discriminated relative to debt, since the effective rates of the former are higher than those of the later (Giannini and Mangiulli 2001).

Finally, another feature of Ireland is the relation between EMR, EAR and statutory rate in the case of equity finance. The most common relation in European countries shows an effective average rate growing with profitability up to the statutory rate, while in Ireland (and in other countries such as Great Britain and France) this relation is reversed, since the statutory rate is the lowest and EMR is higher than EAR; this is probably due to the higher level of real estate tax in Ireland with respect to other countries (Giannini and Mangiulli 2001).

# 4.3 A comparative view with the European average

In paragraph 2.3 we noted that the Irish overall fiscal burden, measured as the fraction of GDP absorbed by fiscal revenues, is the lowest in the EU. Now we make a more detailed comparison, using the economic indicators analysed above, in order to find possible differences between Ireland and the EU average in the distribution of this burden.

<sup>&</sup>lt;sup>2</sup> Source for data on effective rates: Giannini and Mangiulli (2001).

A prominent feature of Irish taxation seems to be the importance of taxes on consumption; according to functional classification, in 1997 taxes on consumption in Ireland were above the EU average by 1.5 percent of GDP and this finding is strengthened if we consider the implicit rate of 23.7 percent in Ireland versus the 16.8 percent of the EU average. On the contrary the burden charged on labour seems to be exceptionally low; considering functional classification taxes on labour in Ireland are below the EU average of 7.1 percent of GDP and the implicit rate is 29.8 percent for Ireland and 41.9 percent for the EU average. Nevertheless the Irish marginal tax wedge on labour is slightly above the European average (that is very high and far greater than the OECD average) and one of the main topics of debate in reforming the taxation system in Ireland concerns this problem and searching out its most pertinent solution. This apparent contadiction can be explained remarking that, concerning labour supply incentive, not only matter the amount of taxes but also the specific way in wich they are designed.

Taxes on capital are not so very dissimilar from the EU average if based on functional classification (they differ only by 0.8 percent of GDP). However this result changes remarkably if based on implicit rates: in 1997 the Irish value was 20.5 percent, while the EU average is 31.1 percent. In particular corporations receive a favourable treatment, due, as we said above, to the low statutory and effective rates.

Finally Ireland is one of the European countries with the lowest fraction of revenues destined to local government and has very reduced intermediate levels of government; for this reason we have decided to not discuss this topic in more detail.

# 5. Tax reforms in the '90s and those currently planned

#### 5.1 A quick glance at the budget and the general economic environment

In Ireland an impressive episode of fiscal consolidation took place from the second half of the eighties to the end of the nineties. This process can be divided into three phases (Lund, 2000). The first, until 1989, is characterized by a reduction of expenditure and of revenue both relative to GDP and in real terms. The second, from 1990 to 1995, represents a halt in fiscal consolidation. Revenue continued to decrease, while expenditure strongly increased: nevertheless the balance worsened only by 0.2 percent of GDP, due to reduced interest payments. Government balance started to improve again between 1996 and 1999 (the third phase of the restoration of public finance), achieving a surplus in 1997. This process has some similarity with that of the first phase, because it was carried out through a reduction in expenditure; but ultimately differs, since, in real terms, expenditure was increased. On the whole, the balance has shifted from a deficit above 8 percent in

1987, to a surplus above 2 percent in 1999, and public debt has also fallen in the same period from a value above 110 percent to 49.3 percent.

This improvement in public finance has been accompanied by an outstanding performance of the Irish economy; in particular between 1994 and 1999 the growth rate was always above 7 percent with a peak of 11.1 percent in 1995 and of 10.4 percent in 1998. Causal relations between such high growth rates and fiscal consolidation, has been widely explored, but a unique position does not emerge (Bernasconi, 2000).

It could be thought that fiscal consolidation has caused high economic performance. Alesina and Ardagna (1998), for example stress the fact that fiscal consolidation has been carried out through a reduction of expenditure rather than a rise in taxation and think that this "composition effect" is the reason why consolidation has caused the high performance of the Irish economy. Though based on different arguments, the interpretation of Giavazzi and Pagano (1996) also underlines the important role that the restoration of public finance played in Ireland's positive economic performance.

Nevertheless other explanations single out the international economic situation as the key element for Irish growth and the competitive advantage that characterizes a small economy such as Ireland. Even if the composition effect and other non Keynesian effects of fiscal policy may have played a role, it's probably growth itself, driven by factors other than improvement in public balance, that has allowed the achievement of this exceptional restoration of public finance.

With regard to the current situation, although Government balance has slightly worsened between 2000 and 2002, shifting from 4.5 percent of GDP in 2000 to 0.7 percent in 2002 (estimated value), the good performance that Irish public finance has achieved in the last decade seems to be sound and stable. Public debt, with a value of 35.8 percent of GDP in 2001 is low, particularly compared to other EMU countries like Italy. GDP growth has slowed down from 11.5 percent in 2000 to an estimated 3.9 percent in 2002, but it would average the remarkable level of 5 percent over the whole period 2002-2004; unemployment seems to be stable below 5 percent (it has dropped from 11.9 percent in 1996).

However there are some further points of policy attention, upon which the future performance of the Irish economy would seem to depend. The most important problem is probably represented by the supply constraints on infrastructure and especially on labour (a problem typical of a full-employment economy). These constraints should be relaxed not only in order to avoid inflationist pressure (Irish inflation in 2002 is estimated at around 4 percent, a value not high but above the standard in the EMU) but above all to not threaten growth. In fact an increase in labour force has been an important element in the Irish growth of last decade, but it is now expected to slow down:

the reasons concern just the small unemployment rate achieved, and also a reduction in population growth and in migration. This explains, as we will see in more detail in the next paragraph, why one of key point in reforming the tax system is the reduction in the distortion on labour supply.

# 5.2 Tax reforms in the '90s

Concerning income tax, the attempt to improve labour market performance has represented the main motivation for reforms during the last decade. In line with this goal tax rates were reduced in their number and level (in 1987 there were three tax rates: 35 percent, 48 percent and 58 percent while in 2002 there were two rates: 20 percent and 40 percent), the tax band was widened (also to avoid fiscal drag), and the exemption level has been raised. In particular the reduction of taxpayers belonging to the higher band can be noted and the increase of those exempt to income tax according to the 2001budget, as showed in Table 6 (in wich taxpayers exempt, and subject marginal relief system, standard band and higher band are showed).

**TAB. 6** Distribution of Income Tax Payers by Tax Band

| Tax Year  | ax Year Exempt Cases |         | Margina | l Band  | Standare | d Band  | Higher Band |         |  |
|-----------|----------------------|---------|---------|---------|----------|---------|-------------|---------|--|
|           | No.                  | percent | No.     | percent | No.      | percent | No.         | percent |  |
| 1997/1998 | 380,000              | 25.5    | 108,000 | 7.25    | 580,000  | 38.75   | 424,000     | 28.5    |  |
| 1998/1999 | 394,000              | 25      | 82,000  | 5.25    | 643,000  | 40.5    | 463,000     | 29.25   |  |
| 1999/2000 | 474,000              | 28.5    | 25,000  | 1.5     | 655,000  | 39.25   | 510,000     | 30.75   |  |
| 2000/2001 | 535,000              | 29.5    | 7,000   | 0.5     | 718,000  | 41      | 509,000     | 29      |  |
| 2001/2002 | 668,000              | 37.75   | 4,500   | 0.25    | 695,000  | 39      | 402,000     | 23      |  |

Source: Ireland-Stability Programme 2000

In the last years another reform has concerned the substitution of tax deductions- that reduce the tax base- with tax credits- that instead directly reduce tax liability (the introduction of the tax credit system has been preceded by a standardization of tax deductions). This reform has been intentionally made leaving "the position of higher-rate tax payers generally unchanged" and improving "the position of those at the standard rate", with the goal of making the fiscal saving equal for all tax payers; in fact the saving from a deduction, unlike that of a tax credit, depends on the individual marginal tax rate (and so on the individual income).

Also Corporate tax has been remarkably reformed, with the goal to make taxation friendly to corporations in order not to damage growth and to attract foreign investors. According to these objectives, the standard tax rate has been reduced from 43 percent in 1991 to 16 percent in 2002, with the objective of a further reduction to 12.5 percent in 2003. On the other side in 1998 Ireland has committed itself, under the pressure from the European Union, to phase out the facilitated tax

rate that since then had characterized Irish Corporate tax. Following this agreement the reduced rate for small business, introduced in 1996, is set at 12.5 percent in 2002 and will then be unified with the standard rate in 2003. Finally the rate of 10 percent applied to manufacturing will be eliminated until 31 December 2005 for activities carried out in the area of the Shannon airport and the International Finance Service Centre (IFSC) in Dublin, and until 2010 for other manufacturing activity

#### 5.3 Priorities for future tax reforms

In the last years, there has been some progress towards a reduction of distortion on labour. Nevertheless, at the end of the nineties the problem of low incentives to work still remains, as we have already said in section 4, where we show that the marginal tax wedge on labour is high even in comparative terms (Journard, 2001). In particular, as in other European countries, distortion is higher for individuals with low income and education (Koliadina, 1999).

However the measures taken in the 2001 budget analysed in the preceding paragraph, seem to go in the right direction: the simultaneous reduction of the standard tax rate and the increase in the number of taxpayers exempt from tax, can be interpreted as a positive measure for incentives of low income individuals. The reduction of the higher tax rate and the taxpayers subject to it is a measure enhancing the reward from work. The policy towards social contributions is also inspired by the attempt to further increase the performance of the labour market, since the already low social contributions rates have been reduced from 1996 by more than 1 percent on average, both for employer and employees<sup>3</sup>

Another important key point of the reforms previously analysed concerns the standardization of corporate tax regimes. According to EU prescriptions, the phasing out of the special regimes, that characterized Ireland all through the '90s, is positive and valuable. However this elimination has been accompanied by a general reduction of the corporate rate, that as we said above, will be 12.5percent in 2003 for all companies. Therefore, the attempt of the EU to reduce fiscal competition by phasing out special regimes, seems to have caused an extension of the competition from some activities and geographical areas to the entire system of corporate taxation.

It is also important to remark that, from 2003, no reduced rate for small companies will be in force. This measure should prevent the "threshold effect", that can discourage the growth of firms, and represents a problem in many EU countries (Journard, 2001). On the other side, it should be stressed that special regimes for small companies could be a useful way of compensating them for the disadvantages they have, relative to larger firms, in obtaining access to the credit market

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<sup>&</sup>lt;sup>3</sup> Nevertheless, even if an analysis of the social welfare system is beyond the scope of this paper, we must stress that in evaluating social contributions, not only the disincentive effect on labour matters.

A major shortcoming of the current system, concerning corporate financing, is the discrimination between equity and debt finance, analysed in paragraph 4. The elimination of the negative fiscal treatment of equity finance would be an important measure to strengthen the financial structure of the firms and would especially benefit new, small and more innovative companies, that are more likely to use equity because they have problems borrowing funds (Joumard, 2001).

Another controversial argument, common to many EU countries, concerns the reform of VAT (Journard, 2000). During the first half of the '90s, a slight standardizations of the rates was achieved, with the decrease of the higher rate and the increase of the middle rate. On the ground of efficiency further standardization seems to be required; nevertheless, the elimination of privileged rates on some goods could cause equity problems (IMF, 2001)

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