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EDITORIAL

John Morley and Terry Ward are concerned here with the distribution of income and its redistribution in the EU-15. The extent of redistribution is unquestionably one of the criteria of a social democracy, though we still need to be able to measure it, allowing for the fact that monetary transfers leave out of account differences in access to public and social services as well as their quality. The European Union has established surveys which enable the income of households and individuals to be compared across countries which often show up differences in the courses followed by the national models. If social Europe still remains to be established, it is to be hoped that this work will feature actively in the essential debate on the project.

THEORETICAL NOTE

Taxes, benefits and the distribution of incomes

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In recent years, policy-makers across the EU have increasingly focused on curbing both public expenditure and taxes, in the apparent belief that this is the best way to create the conditions for sustained economic growth. Social transfers have been a particular target. Although there is some policy concern about the possible social implications of this, it tends to be centred on problems of poverty, in the sense of individuals or families with incomes below a given level, and those at risk of social exclusion. The wider issue of how equally or unequally income is distributed in our societies is rarely addressed, and the causes and potential remedies poorly understood.

In this context, relatively little data are readily available about the overall effect of taxes and transfers on the distribution of income in different EU Member States. The debate about tax levels and the scale of social transfers tends to take place without much appreciation of how they serve to redistribute income between different sections of the community. And when the incidence of taxes is discussed or analysed, it is almost invariably done without reference to the incidence of transfers.

A major reason is the difficulty of obtaining relevant data, particularly data which are comparable across EU countries. While the European Community Household Panel (ECHP) survey enable comparisons of benefits to be made, it is much more difficult to do the same in respect of taxes because people are not generally aware of the amount of tax they actually pay out of their gross incomes.

This asymmetry regarding the availability of data on taxes and benefits can lead to misleading indications

and policy conclusions. For example, the *Social situation in the European Union* report, published each year by the European Commission, contains comparisons across countries of both the level of expenditure on social transfers relative to GDP and the proportion of people whose income falls below the poverty line before transfers, which is then related to the situation after transfers to indicate the effects of policy in this regard. But both comparison are misleading because they fail to take account of taxes and social contributions.

In the first case, omitting taxes (and contributions) from the comparison means that the figures give a misleading impression of the *net* amount transferred by government to benefit recipients (and their true funding implications) because countries vary in the extent to which social transfers are subject to tax and recipients subject to contributions. In the second case, the comparison is based on income levels before transfers are received, but after taxes and contributions have been levied to finance them – a bastard concept which has no equivalent in reality. It is presented as an indicator of the effect of transfers in reducing the proportion of households with low incomes, but, it tells us little or nothing about the extent of redistribution to those at the bottom of the income scale, or the efficiency of the social security system more generally, since it ignores the incidence of taxes, particularly the extent to which these are, or are not, levied on those with low incomes.

Outline of analysis

The analysis presented here examines the extent of redistribution of income in different EU countries taking account of the combined effects of taxes and social

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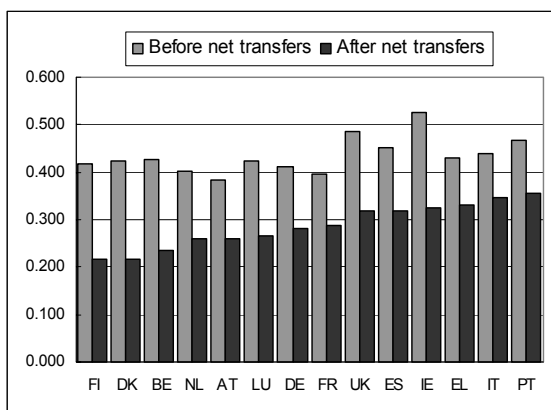
contributions, on the one hand, and social transfers, on the other. The distribution of income between households is 'individualised' by assuming that the income of a household is divided equally between its members, though each person is weighted to allow for the savings involved when people live together. (Adjusted OECD weights are used for this purpose, which means attaching a weight of 1 to the first person living in a household, 0.5 to the second person and 0.3 to each child.)

The analysis is based on the EUROMOD household income simulation model, developed over the past 8 years or so by a team from different EU countries.¹ The model covers all EU-15 Member States (i.e. excluding the new countries entering in 2004) and incorporates household survey data on social transfers and other income received. (The survey used in each country is the one regarded as the most reliable, which is the ECHP in about half the cases.) It also incorporates equations representing the features of the system of taxes on income and social contributions in each country. This enables estimates of the amount paid by each household – and, therefore, implicitly by each person – to be calculated. In this way it allows the incidence of social transfers and taxes, and the extent of redistribution, to be examined simultaneously. The data relate to the late 1990s but this is likely to be reasonably representative of the current situation given the slowness with which changes in taxes and transfers, as well as the distribution of earnings, tend to occur.

The distribution of original income

The dispersion of original income between households, i.e. before taxes and benefits are taken into account, is similar across most EU-15 countries (Graph 1). The gini coefficient (which measures the extent to which this distribution of income diverges from equality, with 1 being the extreme value when a single individual has all the income) varies between 0.40 and 0.45 for 11 of the 15 Member States, with France at the bottom and Spain at the top. Original income is most *evenly* distributed across households in Austria (the gini coefficient is just over 0.38) and most *unevenly* distributed in Ireland (0.53) followed by the UK (0.49) and Portugal (0.47).

Graph 1 - Gini coefficients before and after transfers and taxes



Such differences reflect the different economic and social systems across the EU-15. The UK and Ireland, with their relatively elitist education systems and most market-oriented labour markets have the most unequal distributions of original income, whereas the 'continental' countries – ie Germany, France and so on – with more managed or regulated labour market systems and a relatively high level of access to education tend to have a lower dispersion.

The Nordic countries, with their equally high level of access to education and high level of social consensus, have a slightly wider distribution. The southern countries, with their less well educated work forces and with their more segmented systems, divided between a highly regulated sector, in which workers enjoy a high level of protection, and a less well regulated sector with a great many very small enterprises and with a significant proportion of economic activity – and employment – taking place 'in the black' have a less equal distribution than others, Ireland and the UK apart.

Differences in the dispersion of original income also reflect variations in the structure of households, and the circumstances of those not in work, and not earning. The more these live in households with people who do have an independent source of income, as is mostly the case in the southern Member States, the less the dispersion of income other things being equal. The more they live alone or in households with no-one in work, as is the case to a significant extent in the UK and Finland, in particular, the more dispersed income tends to be. In consequence, household structure is a factor offsetting the dispersion of earnings in the southern Member States and one reinforcing it in the UK.

The extent of redistribution of income

The distribution of income *after* taxes and transfers is less similar between countries than the distribution *before* taxes and transfers, with no systematic relationship between the two. In other words, the tax and transfer system in place in different countries seems to determine the degree of dispersion of disposable income much more than the distribution of original income produced by labour market forces.

The extent of the redistribution is greatest in the Nordic countries. In both Denmark and Finland, the net effect of taxes and transfers reduces the dispersion of income between households (as measured by the gini coefficient) by almost half. These countries accordingly have the most equal distributions of disposable income in the EU-15 even though the dispersion of original income is close to the average. (Complete data are not available for Sweden which is, therefore, excluded from the comparison.) The dispersion of disposable income is only slightly greater in Belgium, where the extent of redistribution is also relatively large.

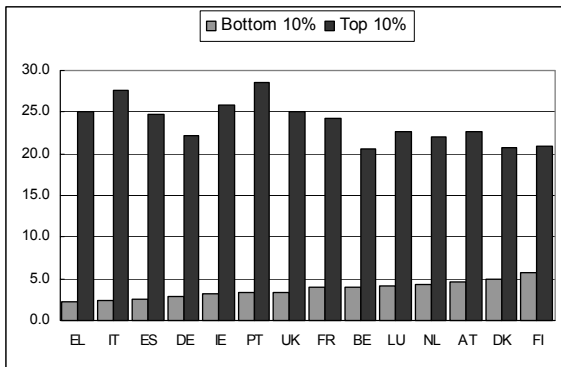
Redistribution is smallest in Greece, Italy and Portugal, where transfers, net of taxes, reduce the dispersion of income by only 20-25%, and these three countries have the most unequal distributions of disposable income in the EU-15. The extent of redistribution, however, is not much larger in France, where the fact that the dispersion of *disposable* income is around the EU-15 average owes more to the relatively even distribution of original income than it does to the effect of taxes and transfers. Indeed, the dispersion of disposable income in France is only slightly narrower than in the UK, where original income is much less evenly distributed. In the UK the extent of redistribution is on par with the Netherlands, much greater than in France, and

¹ The team is led by Holly Sutherland formerly at the University of Cambridge and now at the University of Essex

larger than in Germany or Austria. Redistribution is even greater in Ireland, where transfers, net of taxes, reduce the wide dispersion of original income by almost 40%, with a more equal distribution of disposable income than either Greece or Italy.

Despite redistribution, income remains widely dispersed in most EU Member States. For example, the top 10% of income recipients in the EU-15 have between 21% of total disposable income (in Belgium, Denmark and Finland) and 28-29% (in Italy and Portugal – Graph 2). By contrast, the bottom 10% of income recipients get under 5% of disposable income in all countries except Denmark and Finland, and only just over 2% in Greece and Italy. This means that, in the last two countries, the top 10% of recipients have over 11 times the disposable income of the bottom 10% and almost 10 times in Spain. In Denmark and Finland, in contrast, they receive only around 4 times. In between, differences vary from just over 8 times in Portugal, just under in Ireland and Germany reflecting the influence of the new Länder), to around 5 times in Austria and the three Benelux countries.

Graph 2 - Share of disposable income going to the top and bottom 10% of recipients



In Denmark and Finland, income is more evenly distributed at both the top and bottom ends than in other Member States while, in the southern Member States, it tends to be less so. In the other countries, however, there are differences in the extent of dispersion at the two ends of the scale, even between those with similar overall distributions. In Germany - because of the impact of low incomes in the new Länder - the bottom 10% of recipients have only 3% of total disposable income, which is less than in all countries apart from Greece, Spain and Italy, while, at the same time, the top 10% also have a relatively small share (22%).

Taxes and transfers as mechanisms for redistribution

Redistribution systems can be broadly divided between those based on social insurance principles - designed to provide protection for employees, with contributions being paid to give entitlement to benefit in the event of employees not being able to work or when they reached retirement age - and those developed on social welfare principles to provide income support for those in need. Whereas the second type of system is specifically designed to redistribute income between individuals or households according to need, the main purpose of the first type is to enable those in work to build up credits to provide a proportionate replacement

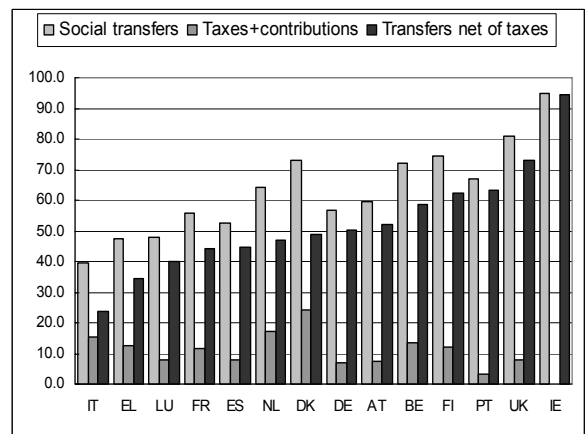
income when they are not earning.² Although the system contains a redistributive element - to the extent that some people have more recourse to the benefits it provides than others because they spend more time out of work - this is largely incidental to its main purpose.

In practice, the different national systems in place contain elements of both, though Germany, Austria, France and Belgium (as well as Luxembourg) have systems built on social insurance principles, the UK and Ireland, systems built on social welfare principles, with the Nordic countries, as well as the Netherlands, being closer to the latter and the southern Member States, where systems have been developed much more recently, somewhere in between.

Redistribution through social transfers

In the UK and Ireland redistribution is achieved to a large extent through social transfers, which tend to be concentrated on those at the bottom end of the income scale, with no other means of support. In these countries, means-testing is widely used to identify the people concerned - or, more accurately, to enable the people concerned to identify themselves and to claim their entitlement - and to bring their income up to a minimum level. On the same principle many low wage earners have their incomes topped up to a minimum level though tax credits, so off-setting the effects of allowing wages to be determined largely by market forces³. As a result, social transfers tend to make up almost all the disposable income of those at the bottom end of the scale (Graph 3). At the same time, those further up the income scale receive less in the way of transfers than in other Member States (Graph 4).

Graph 3 - Transfers and taxes as % of gross income of bottom 10% of income recipients



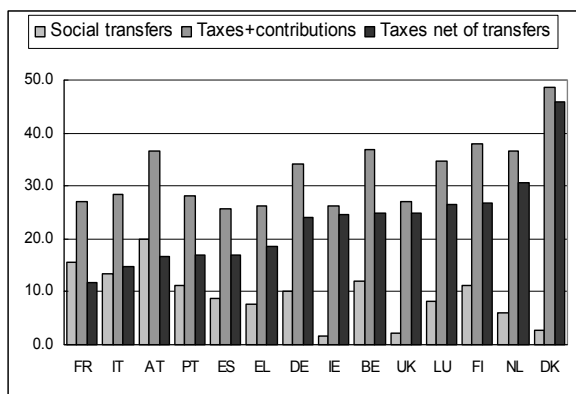
Outside the UK and Ireland, social transfers are more evenly distributed across the income range, reflecting their more universal nature and the insurance principles on which they are commonly based. Hence, while those at the bottom of the income scale still receive a much larger proportion of their income from transfers than those further up the scale, the difference is less marked than it is in the UK or Ireland. This is particu-

² The concept of 'social' insurance is to enable everyone in work to access the scheme on equal terms - ie to pay the same amount of premium for entitlement to the same amount of benefit irrespective of their personal characteristics.

³ There is a statutory minimum wage but set at a low level.

larly the case in the southern Member States where, in both Greece and Italy, the bottom 10% of income recipients obtain less than half their gross income from social transfers, and in Spain, where only slightly over a half do so. Indeed, in these three countries, as well as in Portugal, the *share* of total social transfers going to those at the bottom end of the scale is significantly less than the share going to the top 20%.

Graph 4 - Transfers and taxes as % of gross income of top 10% of income recipients



This is most marked in Italy, where only 12% of total transfers go to the bottom 20%, as against 29% going to the top 20%. In Portugal, the top 20% also receive 29% of total transfers as compared with 17% going to the bottom 20%, while in both Greece and Spain, the top 20% receive 20% or more of transfers as well, and the bottom 20%, less than 20% (in Greece, only 13%). This contrasts with the UK and Ireland, where around 30% of transfer payments go to the bottom 20% of net income recipients and only 6-7% to the top 20%.

The apparently perverse distribution of transfers in the southern Member States reflects the nature of their social security systems and the tendency for transfers and pensions to be related to earnings when in work. Social transfers, therefore, tend to reinforce the prevailing distribution of earnings rather than offset it. Hence people in these countries who live in households receiving a substantial proportion of their income from social transfers are not necessarily at the bottom end of the income scale and are also much more likely to be in households with at least one wage earner.

The distribution of transfers is similar in a number of the 'continental' countries in which social transfers are also linked to earnings. Indeed, in France and Austria, as in the southern Member States, the top 20% of net income recipients receive over 20% of total transfers and the bottom 20% less than 20%, with the difference between the two being almost as wide as in Italy. By contrast, in Denmark, 27% of total transfers go to the bottom 20% of net income recipients and only 9% to the top 20% - a difference almost as wide as in the UK. The Netherlands is closer to Denmark, in this respect, than to the continental countries.

Redistribution through taxes

France apart, the relatively even distribution of social transfers across households in the continental countries is counteracted by the tax system, which is why transfers cannot be considered in isolation from taxes. For example,, between 34% and 37% of the gross incomes of the top 10% of net income recipients in Germany, Austria, Belgium, the Netherlands and Luxembourg is taken in taxes and (social contributions).

In the southern Member States, as well as in France, however, the taxes and contributions paid by those at the top of the income scale are much less, taking only some 26-28% of the gross income of the top 10% of net income recipients. This is much the same as in the UK and Ireland, but in both cases transfers to high income households are very much lower. In Greece and Italy, on the other hand, while taxes are relatively low across the income scale, they also take a significant share of the income of the poorest households (13% in Greece, 16% in Italy).

In the Nordic Member States, taxes plus contributions are even higher than in continental countries, taking 38% of the gross income of the top 10% of recipients in Finland and almost 49% in Denmark. In addition, they take a larger proportion of income of those further down the income scale than is the case in most other countries. Redistribution in these countries is achieved, therefore, partly through the tax system and partly through the relative concentration of benefits on poorer households, particularly in Denmark.

The net effect of the tax and benefit system, as seen above, is to redistribute a larger share of income in the Nordic countries than in the rest of the EU-15. However, the extent of the redistribution is only slightly less in Ireland and the UK. Indeed, the scale of taxes, net of transfers, that are levied on the top income recipients in the UK and Ireland are much the same as in Belgium or Germany - countries that are widely regarded as having fiscal systems which penalise high income earners much more.

Whether work incentives are better protected in the UK and Ireland by relying less on taxes to redistribute income than on targeted benefits is open to question. While this can be argued in respect of the top end of the income scale, the use of means-testing to concentrate benefits on those most in need tends to damage incentives since benefits are typically reduced substantially or eliminated completely as a person finds a job or their earnings rise. As a result, those concerned are liable to find that their disposable income increases little, if at all. This is quite apart from the fact that targeted benefit schemes which rely on people claiming entitlement have often proved ineffective at reaching those most in need, as well as costly to administer.

An important qualification to the above analysis is that it only takes account of the redistributive effect of taxes on income and social contributions. In practice there has been a general shift, though to differing degrees across Member States, from taxes on incomes to taxes on expenditure. This has almost certainly reduced the extent of redistribution given that taxes on expenditure tend to be significantly less progressive than taxes on income. In consequence, leaving taxes on expenditure out of account is unlikely to affect the findings reported above significantly.

Concluding remarks

This analysis has focused on the overall redistributive effect of taxes and social transfers acting together in the different EU Member States. It shows that this varies markedly between countries reflecting to a large extent the national social security systems in place. Despite European integration and the pressure for convergence that this creates, national systems continue to differ and to reflect their historical roots, even though similar developments are evident across the EU (such as attempts to reduce public expenditure on pensions).

Such differences extend to access to public services and the quality of these which have been left out of account in the analysis. The results should be interpreted with this in mind since the availability of free or low cost social support services of different kinds – such as access to child care or care facilities for the elderly – can boost effective disposable income significantly. Taking account of such services would, therefore, add to the scale of redistribution in some countries (in the Nordic countries especially but also in Belgium and France) relative to others (the southern Member States, in particular).

There are, in addition, differences between EU countries in access to jobs and non-transfer income, which also varies across regions within countries⁴.

⁴These differences are examined in some detail in “*the State of Working Europe*” 2004, Etui, Brussels, 171 p., 2004. (site www.thestateofworkingeurope.org) on which the present article is based, along with other relevant issues, such as the way that employment and incomes are affected by economic growth and the influence of economic policy on this.

RECENT PUBLICATIONS

The following publications are signalled by the editors of *Issues in Regulation Theory* because of their relevance to the research program of the Regulation School.

Boyer R., Neffa J.C., coord., *La economía argentina y su crisis (1976-2001): visiones institucionalistas y regulacionistas*, Mino y Davila, Ciel-Piette, 2004 (sommaire sur <http://theorie-regulation.org>).

Boyer R., Dehove M., Plihon D., *Les crises financières*, rapport du Conseil d'Analyse Economique, La Documentation Française, Paris, 413 p., novembre 2004.

Degryse D. et Pochet P.(ed), *Bilan social de l'Union Européenne*, ISE, OSE & SALTSA, Bruxelles, 2004.

Dufour P., Boismenu G., Noël A., *L'aide au conditionnel*, PIE-Peter Lang Bruxelles et PUM Montréal, 248 p, 2003.

Ould-Ahmed P., « Sortir de l'alternative troc/monnaie : le cas de l'hystérésis du troc en Russie dans les années 90 », *Economie Appliquée*, tome LVII, pp. 7-42, 2004.

Tallard M., *Action publique et régulation de branche de la relation salariale*, L'Harmattan, collection Logiques Politiques, Paris, 246 p., 2004.

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