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**Can In-work Benefits Improve Social Inclusion
in the Southern European Countries?**

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Can In-work Benefits Improve Social Inclusion in the Southern European Countries?

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Abstract

This paper analyses the effects of implementing a family based and an individual in-work benefit in the Southern European countries using EUROMOD, the EU-wide tax-benefit microsimulation model. In-work benefits are means-tested cash transfers given to individuals, through the tax system, conditional on their employment status. They are intended to enhance the incentives to accept work and redistribute resources to low income groups.

The family based in-work benefits seem to be more redistributive, in particular in Italy and Portugal, but the presence of extended families does not allow such policies to be well targeted on the very poorest, especially in Spain. Individual policies lead to better incentives to work than family based in-work benefits, in particular for Spanish and Italian women in couples whose labour market participation is far below the European average.

JEL: H53, I32, I38

Keywords: in-work benefits, fiscal microsimulation, poverty, women participation

1. Introduction

In the last decade, interest in in-work benefits has grown in most European countries. In-work benefits provide cash transfers through the tax system to individuals with low earnings. They belong to the family of “make work pay” policies (OECD, 2003) since they are conditional on the employment status of the recipient. In-work benefits aim to enhance the incentives to accept work by increasing the financial value of the work and to redistribute resources to low income groups through transfers (Pearson and Scarpetta, 2000; Blundell, 2006). Saez (2002) shows that in-work benefits may configure as optimal income transfers when the individual choice is whether or not to work rather than varying the number of hours worked. In this case, Saez shows that in-work benefits are more efficient than guaranteed income support schemes. Evidence demonstrates that in-work benefits cannot solve the problem of high inactivity rates and in-work poverty. On the one hand, they are cost-effective as a redistributive instrument when in-work poverty is high. On the other hand, they may cause a reduction in the number of hours worked if an individual decides to work fewer hours to be eligible to the benefit. However, recent studies confirm that the overall employment effect is still positive (Immervoll and Pearson, 2009). Statutory minimum wages are a complementary instrument to in-work benefits in order to increase the financial gain from employment for those on low-paid job. However, in-work benefits have the advantage that they can be conditional on a minimum number of hours worked per week and they do not increase the labour cost for the employers (Burkhauser et al., 1996). Employment effects, as well as distributional effects, also make in-work benefits particularly favoured in the political agenda of countries traditionally not characterised by generous social assistance programmes.

Half of the OECD countries have in-work benefits in the form of either family or individual based schemes (see Immervoll and Pearson (2009) for a recent review). Family based in-work benefits are well established in Anglo-Saxon countries. The Family Income Supplement was introduced in the UK in 1971 and has been modified several times since then, with the introduction of the Working Family Tax Credit (1999) and, most recently, the Working Tax Credit (Brewer, 2003). The US, Ireland and New Zealand have also introduced family based in-work benefit schemes. Other countries, such as Australia, Canada, Belgium and France, have implemented individual in-work benefits, targeting individual family members rather than the family as a whole. See section 3 for a detailed description of the structure of both types of in-work benefits.

The two different types of in-work benefits share common objectives. First, they aim to enhance employment participation, through additional financial incentive to work. Second, they favour redistribution of financial resources to low income groups, who very often are those at the margin of the labour market. Individual in-work benefits tend to emphasize the work-incentive aspects and are recommended from a purely employment point of view (OECD, 2003). Family based policies may discourage the labour market participation of the second earner due to income effect: in a couple the additional employment income would lead the family to lose the eligibility of receiving the benefit. This scenario has been confirmed by ex ante and ex post evaluations of the reforms of the British in-work benefits (Brewer et al., 2006; Francesconi and Van der Klaauw, 2007) and may be crucial in those countries where non-employment is concentrated among wives. On the other hand, individual policies may be less well targeted on poor households, due to individuals with low earnings receiving the benefit irrespective of partner's earnings and other family's non-labour income. This type of support to members of non-poor households with little if any personal earnings might be particularly common in countries where extended families are more common.

The increasing role played by the in-work benefits in the Anglo-Saxon welfare systems and their extension to continental European countries, with positive evidence of redistributive effects and social inclusion of low skilled workers, should encourage other countries to study the feasibility of implementing such policies. In particular, these policies may be one of the pillars of redesigned welfare systems of the Southern European countries (Boeri and Perotti, 2001; Owens, 2006). As explained in Section 2, Greece, Italy, Portugal and Spain, as well as geographical location and cultural stereotypes, share common features in their welfare systems. A reduction in the poverty rates (the highest in Europe) and an increase in the women labour participation rate (much lower than in other countries) are two important policy issues currently under debate in the Southern European countries (OECD, 2006). However, the potential role of in-work benefits as part of a redesigned welfare system has not been analysed yet.

This paper aims at filling this gap, analysing the effects of implementing two different types of in-work benefits in Greece, Italy, Portugal and Spain. The analyses are based on EUROMOD, the multi-country European-wide tax-benefit model, and the baseline scenario refers to the 2003 tax-benefit system. The first in-work benefit is a family based policy using the British Working Tax Credit as an exemplar (Brewer, 2003). The second in-work benefit is

an individual scheme implemented as a low wage subsidy conditional on working at least 16 hours per week (Phelps, 1994). In order to compare the two in-work benefits, both policies are simulated to have the same budget cost within each country. Previous studies show that the effects of new in-work benefits depend heavily on the structure of the benefit and its interaction with the national framework. In fact, in-work benefits tend to increase the gap between incomes of individuals in and out of work (Bargain and Orsini, 2006; Bertola, 2000; Haan and Myck, 2007). Tax-benefit rules, income and wages distribution and household composition in the considered countries, make the comparison between a family based in-work benefit and an individual in-work benefit particularly relevant.

2. Economic and institutional framework

A long standing issue in the debate about welfare typologies is whether or not Greece, Italy, Portugal and Spain form a separate welfare regime. In his seminal work Esping-Andersen (1990) did not systematically include the Mediterranean countries, considering only Italy along with other conservative regimes. Since then the “Latin Rim” countries (Leibfried, 1992) have become the subject of a lively debate. On the one hand, Katrougalos (1996) supports the idea of considering the Southern European countries as underdeveloped cases of the conservative regime. Esping-Andersen (1999) is hesitant to add new typologies to his original three. On the other hand, other scholars have pointed out common characteristics which make the Southern European countries a separate cluster. To some extent these countries share lack of minimum social assistance (Leibfried, 1992), fragmented income maintenance schemes, universalistic health systems, low state penetration and diffusion of clientelism (Ferrera, 1996), low level of public expenditures with a predominance of contribution-financing (Bonoli, 1997) and the prominent family role as an informal but effective social safety net (Naldini, 2003).

Such a debate (Arts and Gelissen, 2002) has favoured a greater knowledge of the challenging issues related to the welfare provision in the Southern European countries. In particular Ferrera (1996) highlighted the peculiarities of the Southern model of welfare, focussing on the characteristics of the income maintenance system which are still valid although some significant innovations have been carried out (Ferrera 2005). The income maintenance system is still a fragmented and corporatist one, providing hyper-protection to some individuals (namely those receiving pensions based on occupational status in particular in Greece and Italy) and very low, if any, support for others (namely pensioners without enough

contributory history, uninsured unemployed, first-time job seekers, and families with children without sufficient earnings).

Although there was growth in total social spending in the 1990's, in 2003 the level of general social protection as a share of Gross Domestic Product ranges from 20% in Spain, 23% in Greece and Portugal to 25% in Italy compared with an EU-15 average of 27%. Moreover, in Greece, Italy and Spain, the percentage of transfer recipients is much lower than the European average, showing that fewer individuals rely to a greater extent on social transfers, and in particular pensions. The composition of cash benefits expenditure reveals such an unbalance between the public support given to pensioners and other vulnerable groups of the population. The old age pensions in Portugal and Spain absorb approximately 45% of the total expenditure in line with the European average, while more than 50% is devoted to pensions in Greece and more than 60% in Italy, at the expense of support for families with children, unemployment and social assistance benefits.

The rather limited level of public support through the tax-benefit system for the working age population can be illustrated using the example of a stylised one-earner couple with two children aged respectively 9 and 7 years old. Figure 1 reports the budget constraint chart for such a family in Greece (dotted-dashed line), Italy (solid line), Portugal (dotted line) and Spain (long dashed line). The disposable income is reported in the vertical axis, corresponding to different levels of gross earnings (at an assumed hourly wage rate equal to €5) reported on the horizontal axis. The 45° degreeline represents the situation pre-taxes and pre-benefits: a disposable income above such a line indicates net public support while an income below such a line indicates that taxes and social contributions exceed benefits. The assumption behind the chart is that the individuals are not entitled to receive any unemployment benefits, prefiguring the long term situation when the potential unemployment benefits are exhausted.¹ As it is clear from Figure 1, Portugal is the only country with a national rights-based minimum guaranteed income scheme (i.e. Social Insertion Income), guarantying a minimum support to families in need if they accept to be involved in a social integration plan, which may include, among else, vocational training, return to school, access to health services and integration into the labour market. While most of the Spanish Autonomous Communities operate minimum income schemes (in some cases of limited coverage and subject to budget constraints and hence not included in Figure 1), Greece and

¹ In all four countries the duration of unemployment benefits is limited, mostly depending on the age of the claimant (Italy and Portugal) or contributory history (Greece and Spain).

Italy (with the exception of a few initiatives by regional and local authorities) are characterised by the absence of any generalised income support schemes.²

< FIGURE 1 around here >

Families with children receive public support through both benefits and tax concessions but the overall level per child is quite low, between 5% and 8% of the national per capita disposable income, the lowest among the EU-15 countries (Figari et al., 2007). In particular, the support through the tax system, more pronounced than in other European countries, exclude by design the poor families as most of the tax concessions are non-refundable (with the exception of a refundable tax credit introduced in Greece in 2002).

Benefits conditional on employment status exist in Italy and Spain but are limited and only targeted on specific categories of people. The Italian family allowances are paid when at least one individual works as an employee or temporary worker and are subject to income composition. The amount of this transfer is means-tested at the family level and related to the number of family members. Since 2003 Spanish working mothers receive a refundable tax credit up to the limit of social contributions paid, until the child is one year old.

On the revenue side, social insurance contributions are levied on an individual basis. They are deductible from income tax and are applied with a proportional tax rate (in some cases depending on occupation and industry and subject to minimum and maximum limits). The income tax schedule is progressive in all four countries. Greece, Italy and Spain (where family units may file joint tax returns) operate an individual based tax system, while Portugal imposes a mandatory joint taxation for couples using the splitting method.

Poverty and inequality rates are among the highest in the EU-15: in 2003, the share of people at risk of poverty ranges from 19% in Italy to 21% in Portugal against an EU-15 average of 17%. Income inequality is even more spread, with Gini indices ranging from 0.31 (Spain) to 0.38 (Portugal) against an EU-15 average of 0.30.

In Greece, Portugal and Spain employed individuals are entitled to receive at least a statutory minimum wage rate, while in Italy a minimum wage is set through collective bargaining agreements and only in some industrial sectors. However, a large share of the employed population (from 10% in Italy to 13% in Greece and Portugal) belongs to poor households, proving that earnings alone are less effective in securing individuals against the risk of

² In addition limited Housing Benefits are provided in the form of rent subsidies (Greece, Italy), means-tested housing benefits (Portugal, some regions in Spain), non refundable tax credit on mortgage loan interests and/or housing expenses (all countries).

poverty compared to the average level in the European countries. In the Southern European countries in-work poverty is correlated to the presence of dependents, older age, low earnings in particular among those working part-time, low level of human capital accumulation, and lone parenthood (Bardone and Guio, 2005).

The underdevelopment of social services related to the care of children and the increasing needs of care for the elderly make the role of the family even more important as social safety net, with implications for human capital accumulation and labour market participation of women. The Southern European countries are far from the European average in terms of female education attainment and far from the Lisbon targets in terms of female labour market participation (i.e. 57% by 2005). In 2003, the percentage of low-educated women ranges from 46% in Greece to 75% in Portugal against an average level in the EU-15 of fewer than 40%. Moreover, with the exception of Portugal, the employment rate of women is much lower than elsewhere: in Greece, Italy and Spain fewer than 50% of women aged between 25 and 64 years are employed with even lower employment rates for those who are low educated.

< TABLE 1 around here >

Such employment rates refer to both women in couples and lone mothers. However, in the Southern European countries, lone mothers, whose number has increased over the last decade, are more likely to work than women in couples due to the absence of relevant social protection schemes.

Given such an economic and institutional framework, it is clear that the Southern European countries show a number of common features that can make in-work benefits particularly well tailored as part of a reformed welfare system. In particular the absence of income support schemes (with the exception of Portugal) makes those with a low paid job and consequently potential recipients of in-work benefits, more at risk of poverty. This enhances the potential role of in-work benefits in promoting social inclusion and in supporting the income of those at the bottom of the income distribution.

3. Simulation: model, data and approach

This paper uses EUROMOD, the multi-country European-wide tax-benefit model covering 19 European Union Member States. EUROMOD is a static microsimulation model which covers monetary incomes. It combines information on relevant policy rules with detailed and

representative data on individual and household circumstances drawn from national household income surveys. EUROMOD simulates most direct taxes and cash benefits except those based on contributory history as this information is not available from input datasets. Instruments not included in the simulation are taken from the data. One of the main aims of EUROMOD is to maximise comparability while maintaining transparency about real differences across countries (Sutherland, 2007). EUROMOD outputs have been validated and tested at micro (i.e. case-by-case validation) and macro level, comparing the aggregate indicators and distributive statistics with external sources and national microsimulation models, and they have been used in many applications.³

The baseline scenario of the analysis reported in this paper refers to the 2003 tax-benefit system. The Greek data comes from the Household Budget Survey (2004) which contains information on 6,555 households and 17,386 individuals. The Portuguese and the Spanish data are from the European Community Household Panel (respectively 2001 and 2000 waves). The Portuguese data includes information on 4,588 households and 13,237 individuals. The Spanish sample contains information on 5,048 households and 14,787 individuals. The Italian data comes from the first wave of the new European Union Survey on Income and Living Conditions (EU-SILC 2004) which contains information on 24,270 households and 60,847 individuals. In case of Portugal and Spain, monetary values are updated to the reference year (i.e. 2003) while demographic and labour information are kept constant.⁴

The recent developments of the in-work benefits in the UK suggest a separate structure for the in-work benefits and the benefits for families with children (Brewer, 2003). In 2003 the Working Families Tax Credit was subsumed within a new Child Tax Credit and the Working Tax Credit. The Working Tax Credit is the first in-work benefit for childless people in the UK. The decision to separate the two tax credits has been originated by two aims. First, to simplify the public support for families with children for whom, in addition to the universal child benefit, the Child Tax Credit represents a means-tested benefit merging together several previously existing benefits targeted to children. Second, to make employment financially more attractive for those on low incomes even if without children, otherwise excluded from

³ For more detailed information and documentation see the EUROMOD web site at <http://www.iser.essex.ac.uk/research/euromod>

⁴ Self-employed workers are included in the samples but they are not potential recipients of the simulated in-work benefits due to limitations of the data in recording the number of hours worked as self-employed.

this kind of support. Recent studies show the major difficulties faced by low income families even without children: in the US they represent 20% of actual recipients of in-work benefits although the amounts of the benefits are lower than the average due to their family composition and incomes (Eissa and Hoynes, 2008).

Although a joint reform considering both in-work benefits and new ways to support families with children, through both universal and means-tested benefits, would represent a policy option to guarantee targeting objectives and sustainable costs (Matsaganis et al., 2006), the main interest of this paper is to compare the effects of a family based and an individual in-work benefit (the latter by design not affected by the structure of the family), without modifying the support the families currently receive for the presence of children.

I simulate the family based in-work benefit using the UK Working Tax Credit as an exemplar (Brewer, 2003). The main eligibility condition for the Working Tax Credit is that at least one person in the family works 16 or more hours per week (30 or more if there are no children).⁵ The amount of the tax credit depends on family gross income⁶ and it varies according to the composition of the family. Above the given thresholds the tax credit is tapered out at the rate of 37%. The withdrawal rate has been reduced over the years to such a level in order to reduce the disincentives to work.

In the analysis, the ratios between the thresholds of eligibility and the maximum amounts of the benefit are the same as in the UK. I determine the value of such parameters through iterative simulations in order to simulate a benefit which costs, in each country, 0.34% of contemporary Gross Domestic Product, the same percentage as it was in the UK in 2003 (HM Revenue and Customs, 2005). This amount does not necessarily correspond to what it would be necessary to spend in order to achieve specific national goals in terms of redistribution of income and incentive effects. However, it represents a common benchmark that makes cross country comparisons possible.⁷ Given this constraint imposed on the cost of the new policy, the parameters of the family based in-work benefit depend on the number of families satisfying the eligibility conditions both in terms of number of hours worked per week and

⁵ The assessment unit for the family in-work benefit is defined, as in the UK, as the family composed by each single adult or couple and their children aged below 16 years or below 19 if in full time education and not married.

⁶ Gross income includes all main sources of market income and pensions with the exception of children's earnings.

⁷ The final net cost of the in-work benefits is slightly less than 0.34% of the Gross Domestic Product and equal to €464 million in Portugal, €533 million in Greece, €2,591 million in Spain and €4,066 million in Italy. This is due to a slight reduction of the overall cost of the existing income-tested benefits (i.e. Family allowances in Italy, Child benefit in Portugal and Spain) which now include the new in-work benefits as part of their means.

their income. In Portugal, for example, where 79% of households have at least one individual working 16 hours per week compared with 71% in Spain, 66% in Italy and 64% in Greece, we can expect larger shares of households receiving the family based in-work benefit. Moreover, the larger the number of households the lower the expected average amount of the benefit.

Figure 2 and Table 2 show the structure of the family based in-work benefit with the relevant parameters for each country. Families with annual gross income up to a minimum threshold are entitled to receive the full amount of the benefit if at least one member of the family satisfies the working hours requirements. The maximum amount of the benefit varies if the beneficiary is a single person without children, a lone parent or a couple working part-time or full-time. Incomes above the minimum threshold reduce the benefit at the rate of 37%, and the maximum gross income thresholds at which the benefit exhausts vary according to the family composition.

<FIGURE 2 and TABLE 2 around here>

I simulate the individual in-work benefit as a wage subsidy (Phelps, 1994) for all individuals working 16 or more hours per week. The work requirement implies that beneficiaries of this policy are individuals characterized by low hourly wages and not simply by low earnings so that creates an incentive for working poor people to work at least part-time. Its structure is depicted in Figure 3 and the relevant parameters are shown in Table 3. I calibrate the phase-in rate of the benefit in order to obtain the same cost as each country's family based in-work benefit. The calibrated rate represents the benefit each individual receives as an additional percentage of the earnings and depends on the number of potentially eligible individuals, who are those working at least 16 hours per week with earnings below the threshold at which the benefit exhaust (14% of individuals in Portugal, 9% in Spain, and 8% in Greece and Italy). The gross earning threshold corresponding to the maximum amount of the benefit is set equal to the fifteenth percentile of the earnings distribution. Earnings above such a threshold reduce the entitlement at the rate of 37% up to the gross earning threshold at which the benefit exhausts.

<FIGURE 3 and TABLE 3 around here>

Three assumptions underlie the simulations. First, the new in-work benefits simulated in the Southern European countries are not revenue neutral. The assumption is that part of the cost

would be covered by an increase in the tax revenue related to the additional employment created by the in-work benefits. Moreover each country would cover the remaining cost through specific actions (i.e. reduction in other public expenditures, increase in capital or indirect taxation, etc.). Second, all the administrative burden and procedures involved in such schemes are ignored. However, the British experience reveals the relevance of both the timing and the structure of the payment system. Moreover, the difficulties related to the expensive administration of the benefits are one of the most convincing arguments against the schemes in countries where they are in place. Third, the individuals receive the full amount of the in-work benefits without any reduction in the gross wage. On the one hand, this requires procedures to prevent employers decreasing the gross wage to a level lower than before the introduction of the in-work benefits. On the other hand, the introduction of a binding minimum wage in countries where it does not exist yet (e.g. Italy) and in-work benefits could be a joint step. This occurred in the UK where the minimum wage came into force in April 1999 before the introduction of the Working Families' Tax Credit.

4. Is there a trade off between the redistributive and the incentive effects?

The share of households who receive the family based in-work benefit ranges from 10% in Italy, 11% in Greece, 15% in Spain to 17% in Portugal. The households receiving the individual in-work benefit are more in all countries: 18% in Italy and Greece, 23% in Spain and 33% in Portugal. The main reason for the differences is that due to the earnings thresholds, two low earning individuals may be able to receive the individual in-work benefit separately but not the family benefit. Moreover other incomes in addition to earnings (e.g. capital incomes, pensions, private transfers) are taken into account into the means of family based in-work benefit preventing some families from receiving it. Given the assessment of the eligibility conditions at individual level, more than one person receiving the individual in-work benefit may belong to the same household: this happens for 13% of households receiving the benefit in Italy, 19% in Spain, 20% in Greece and 29% in Portugal.

As expected, the average benefit amount depends on the pro capita Gross Domestic Product of the country and, given the constraints imposed on the total cost, on the number of households receiving the benefit. The countries which show larger shares of recipients tend to report less generous average benefit amount. Italy, which has the lowest percentage of beneficiaries, present the most generous benefit amount, both considering the family based in-work benefit (€1,900 per year) and the individual in-work benefit (€850 per year). At the

other extreme, the average amounts of the benefits in Portugal are approximately €800 per year for the family-based in-work benefit and €360 per year for the individual benefits. In Greece (Spain) the average family based in-work benefit is around €1,100 (€1,500) and the individual €600 (€780) per year.

This is the first lesson learned from a cross-country perspective: given the same structure of the in-work benefits, the participation rates and the level of income of the potential eligible people drive the final results in a substantial way. In Portugal, where a larger share of households have at least one individual working more than 16 hours per week with relative low earnings, more resources would be necessary in order to give substantial amounts of benefits to those who are entitled to receive them. This confirms the risk that these policies might have too many beneficiaries when the wages are not dispersed enough (Boeri et al., 2000).

4.1. Redistributive effects

Table 4 shows that the reduction in poverty is much more evident when the poverty line is set as 40% of median equivalent income rather than as 60%, in particular when analysing the family based in-work benefit. This is particularly true in the case of Portugal (with a 20% reduction of poverty rate) and Italy (with an 11% reduction of poverty rate). It contrasts with the situation experienced in other countries where individuals at the bottom of the income distribution rely on pensions and social assistance schemes more than on their earnings and in-work benefits (Bargain and Orsini, 2006). In the Southern European countries a policy oriented to the working poor, as with the case of in-work benefits, is also a means to support a significant part of the poorest individuals.

With the exception of Spain, the contribution of family based in-work benefits to reduce the share of people at risk of poverty is larger than that of individual in-work benefits. This is due to the larger generosity of family based in-work benefits. Moreover they are means-tested at family level and hence more likely to be better targeted on the poorest families. Recipients of individual in-work benefits may belong to non-poor households, reducing the overall redistributive effects of the policy.

<TABLE 4 around here>

However, in countries characterized by a large share of multigenerational households (10% of the total in Spain, 9% in Portugal, 6% in Greece and 4% in Italy) the redistributive effects

of means-tested policies are not clear a priori. On the one hand, the presence of more than one family within the same household does not allow family based in-work benefits to be targeted on the very poorest households. This may happen when a family entitled to receive the family based in-work benefit belongs to a well-off household due to the presence, for example, of grandparents with their own income sources. On the other hand, it is likely that in some households (3% in Italy, 4% in Greece and Spain and 9% in Portugal) there is more than one person receiving the individual in-work benefit enhancing its redistributive effect. As a consequence, households at the top of the income distribution may receive family based in-work benefit and it may happen, as in Spain, that individual in-work benefit is more redistributive than family based in-work benefit.

Table 5 shows the distribution of gainers, defined as those households whose disposable income increases by at least 5%. After family in-work benefits, gainers are concentrated among the first (Portugal) and the second (Greece, Italy) quintile groups, with the exception of Spain where gainers are spread over the income distribution. In all countries but Spain, family based in-work benefits lead to a larger share of gainers at the bottom of the income distribution than individual in-work benefits which have a bigger impact on the households in the middle of the income distribution.

<TABLE 5 around here>

In all countries, the households at the bottom of the income distribution experience the largest increase in their income (around 4% in Italy and Portugal, 3% in Greece and 2% in Spain for the households in the first quintile group) after the family based in-work benefits, with a decreasing variation along the income distribution. After individual in-work benefits, the increase in income is more spread with more equal variations for the households in the first three quintile groups. This is particularly true in Spain where the individual in-work benefit leads to a larger income variation in the middle part of the income distribution than after the family based in-work benefit.

4.2 Economic incentives

In order to evaluate the extent to which in-work benefits enhance the payoff to take a paid job, I consider how the incentives to work change if a woman decided not to work or to work respectively part-time (20 hours per week) or full-time (40 hours per week). I look at the incentive to work faced by women aged between 18 and 65 years, lone mothers and women

in couples separately. As a measure of incentive, given each of the three potential work alternatives of the woman, I consider the percentage change in household disposable income after the introduction of the simulated in-work benefits relative to the baseline system. Being assessed at the household level, such a measure takes into account any variation in the income of the household. On the one hand, an increase in the household disposable income when the woman is out of work represents a disincentive for the woman to work. The new benefits received by other members of her household make the household as a whole better off than in the baseline system. On the other hand, an increase in household income when the woman decides to work captures the positive contribution of the new benefits to the well being of the household, increasing the incentives for the woman to work relative to the baseline system.

The assumption when the woman is out of work is that she does not qualify for unemployment benefits but the household as a whole may receive any other existing income based transfers. I predict a potential wage for all women using a Heckman selection-corrected wage equation, on the basis of the current hourly wage received by those in employment.⁸

As shown in Table 6, individual in-work benefits are slightly better targeted to encourage women in couples to work than family based in-work benefits. On the one hand, in all countries, when the woman is out of work, the percentage change in household disposable income is larger after the family based in-work benefits (2.6% in Italy and Portugal) than after the individual in-work benefits (0.7% in Italy and 0.8% in Portugal), showing the disincentive effects embodied in the benefits assessed at the family level: other members of the family receiving the in-work benefit make the household as a whole better off than in the baseline system when the woman decides to stay out of work. The percentage change in income is larger when the woman is out of work than when she works with the exception of Greece: on average, the disincentive effect is higher than the incentive effect. On the other hand, when the woman works, the percentage change in household disposable income is always larger after the individual in-work benefits, in particular when the woman works part-time (in Spain 6.1% versus 0.7%, in Italy 5.8% versus 1.3%). The incentives to work full-time are still higher after the individual benefits but they are generally less pronounced: fewer women working 40 hours per week are entitled to receive the individual benefit and when

⁸ The coefficients of the outcome equation (with education levels and age as regressors) and the participation equation (with marital status, age of the youngest child and other household income as further restrictions) are in the expected direction. Results are available on request from the author.

they work full-time it is more likely that the family income is too high to be eligible for the family in-work benefit.

The above pattern of the incentive effects faced by women in couples, is confirmed when looking at the shares of households who experience a substantial increase in their income (i.e. larger than 5%) in the different scenarios (Table 7). More women in couples face disincentive effects after the family in-work benefit than after the individual benefit in particular in Portugal (16% versus 6%) and Italy (12% versus 5%). However, the disincentive effects embodied in the family based in-work benefits always involve a small minority of the households. When the woman works part-time, the differences between family and individual in-work benefits are remarkable, in particular in Italy and Spain where the individual in-work benefits provide a substantial increase in income for the majority of households (56% in Spain and 53% in Italy). This is due to the presence in the same household of more than one recipient of the individual in-work benefit and the relative generosity of its amount. As expected, when the woman works full-time is more likely to lose the entitlement to both the family based and the individual in-work benefits: as a consequence, fewer households experience an increase of at least 5% in their income after both types of benefits.

For lone mothers the results are partly different since, as expected, both the family based and the individual in-work benefits provide stronger incentives to work than for women in couples. This is true when considering both the variation in disposable income and the shares of lone mothers affected by a substantial increase in their income.

Lone mothers are likely to be entitled to both types of benefits. However, the family based benefits are much more generous and this ends up with higher incentive effects: the average increase in income, when she works part-time is around 31% in Greece after the family based benefit compared with an increase of 10% after the individual one. In all countries the majority of lone mothers face a substantial increase in their income (more than 80% of them in Greece and Portugal, 75% in Italy and 57% in Spain) after the family based in-work benefits. However, in Italy and Spain more lone mothers experience an increase in their household income after the individual benefit due to the presence of children working at low wage and receiving the individual benefit. At the same time the possession of other incomes rather than earnings exhausts the family based benefit. As already noted for women in couples, the incentive to work part time is larger than that to work full time also for the lone mothers. However, they also experience a relevant increase in the household income even if

they decide to work 40 hours per week (12% in Greece and 9% in Portugal after the family based in-work benefit).

The disincentive effects embodied in the family based in-work benefits are lower than for women in couples as fewer individuals, in the same family, are eligible to receive the benefits when the mother is out of work. However, the presence of children eligible to receive the individual in-work benefits makes the disincentive effects more pronounced after the individual policies.

<TABLE 6 and 7 around here>

These results confirm the positive incentive effects of the in-work benefits, in particular for lone mothers after the family based in-work benefits, as also assessed in the UK (Brewer et al., 2006). Moreover, it seems that the disincentive effects faced by the secondary earners in a couple after the family based in-work benefits, although larger than after the individual benefits, involve only a minority of households (from 6% in Spain to 16% in Portugal). This is a partially different response to these kind of policies compared with that obtained from an ex-ante evaluation of the same policies in other countries characterized by a relatively high female labour market participation. In Germany, for example, the disincentive effects for women in couples have been considered one of the main obstacles in importing the British model of in-work benefit (Haan and Myck, 2007).

The analysis of the economic incentives does not take into account any demand side constraints, which are likely to be particularly relevant in a period of economic downturn. However, even if the labour market does not absorb the potential additional labour supply of individuals entitled to the benefits, in-work benefits may play an important role as a cushion to negative income shocks when one of the partners loses the job, enhancing their redistributive effects towards low income households.

5. Conclusions

The increasing role played by the in-work benefits in the Anglo-Saxon welfare systems, with positive evidence of redistributive effects and social inclusion of low skilled workers, should encourage other countries to evaluate the feasibility of implementing such policies. Taking into account the institutional framework conditions and making use of microsimulation techniques in a cross-country comparative view, in this paper I have considered the implementation of two forms of in-work benefits in the Southern European countries. The first is a family based in-work benefit, which borrows the structure of the UK Working Tax

Credit. The second is an individual in-work benefit in the form of a low wage subsidy. The simulation implies the same resources as a share of national Gross Domestic Product in each country as in the UK. Socio-economic conditions and labour market characteristics of the Southern European countries make the comparison between the two types of in-work benefits particularly relevant.

In a cross-country perspective it emerges that, given the same structure of the in-work benefits, the combined effect of family composition, family income and individual earnings, drive the final results in a substantial way. On the one hand, in countries characterized by relatively high employment rates and wages highly concentrated at the bottom of the wage distribution, such as Portugal, in-work benefits might have too many beneficiaries providing less generous support. On the other hand, where both income and wages are relatively more dispersed, as in Italy, fewer individuals may receive a more generous amount. Moreover in countries characterized by the presence of extended families, such as Spain, in-work benefits cannot be narrowly targeted.

Although the redistributive effects of the in-work benefits are modest, and they cannot be considered as a primary tool in poverty reduction, in the Southern European countries they are a means to support the working poor who are among the poorest people. This contrasts with the situation experienced in other countries where individuals at the bottom of the income distribution rely on pensions and social assistance schemes more than on their earnings. In general, family based in-work benefits seem to be more redistributive. However, the presence of extended families does not allow for such policies to be well targeted on the very poorest. Individual policies lead to better incentives to work than family based in-work benefits, in particular for women in couples whose labour market participation is far below the European average. However, the disincentive effects embodied in the family based in-work benefits always involve a small minority of the households. Therefore, the expected trade-off between the redistributive and the incentive effects of the two types of in-work benefits is rather weak and more limited than what is found in countries with higher female labour market participation. Finally, differences across countries provide insights into the importance of looking closely at the institutional framework, family and household characteristics and labour market participation.

The analyses confirm that in-work benefits might be one of the pillars of a redesigned welfare system in the Southern European countries in order to enhance the economic position of the working poor and to increase female labour market participation, in particular of women in couples. The positive incentive effects faced by lone mothers should also be considered with attention given the increasing number of lone mothers in the Southern European countries and their high risk of poverty. However, in-work benefits should be part of a more comprehensive reform including a new consideration of the family role in the care for both the elderly and children (Daly and Lewis 2000). Financial support for those living in low income families and more availability of institutionalized places should be seen as complements, in order to allow women to find jobs not only more financially attractive, but also reconcilable with caring responsibilities.

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Tables

Table 1 Social Indicators (2003)

	<i>Proportion of poor individuals^a</i>	<i>Proportion of employed individuals who are poor^b</i>	<i>GINI index</i>	<i>Proportion of low educated women^c</i>	<i>Female employment rate^d</i>	
					<i>All women</i>	<i>Low educated women</i>
	%	%		%	%	%
Greece	20	13	0.33	45.7	50.0	38.8
Italy	19	10	0.33	57.3	47.1	31.5
Portugal	21	13	0.38	75.4	67.8	63.0
Spain	20	11	0.31	54.2	50.1	36.4
EU - 15	17	8	0.30	38.7	60.3	44.3

Notes: ^a Proportion of individuals with equivalent income (using the OECD modified equivalence scale) below 60% of the median. ^b Proportion of employed individuals with equivalent income (using the OECD modified equivalence scale) below 60% of the median. ^c Proportion of the female population aged 25 to 64 having completed at most lower secondary education. ^d Number of women aged 25 to 64 in employment (and with at most lower secondary education) divided by the total number of women of the same age group. Source: Eurostat website (<http://ec.europa.eu/eurostat>).

Table 2 Parameters defining the family based in-work benefit scheme

	<i>Maximum benefit amount</i>			<i>up to which the maximum benefit is paid</i>	<i>Gross income thresholds at which the benefit exhausts</i>		
	<i>Single working full time</i>	<i>Lone parents and couples working part time</i>	<i>Lone parents and couples working full time</i>		<i>Single working full time</i>	<i>Lone parents and couples working part time</i>	<i>Lone parents and couples working full time</i>
	Greece	2,045	2,884		3,475	4,824	10,351
Italy	3,008	4,243	5,112	7,097	15,228	18,563	20,914
Portugal	1,394	1,966	2,369	3,289	7,057	8,603	9,692
Spain	1,530	2,158	2,600	3,609	7,745	9,441	10,636

Notes: values in € per year. Source: Author's calculations based on EUROMOD.

Table 3 Parameters defining the individual in-work benefit scheme

	<i>Phase in rate (%)</i>	<i>Maximum benefit amount</i>	<i>Gross earnings thresholds</i>	
			<i>corresponding to maximum benefit</i>	<i>at which the benefit exhausts</i>
Greece	14.6	1,096	7,508	10,471
Italy	16.2	1,563	9,647	13,868
Portugal	13.0	680	5,236	7,073
Spain	20.9	1,502	7,189	11,249

Notes: values in € per year. Source: Author's calculations based on EUROMOD.

Table 4 Proportion of poor individuals (%), by policy regime

	<i>Baseline system 2003</i>	<i>Family based in-work benefit</i>	<i>Individual in-work benefit</i>
<i>Poverty line equal to 40% of median equivalised income</i>			
Greece	8.50	7.88	8.16
Italy	7.28	6.53	6.94
Portugal	4.90	3.94	4.53
Spain	5.92	5.64	5.59
<i>Poverty line equal to 60% of median equivalised income</i>			
Greece	19.56	18.21	18.94
Italy	17.66	16.09	17.07
Portugal	20.89	19.71	20.17
Spain	19.17	18.89	18.28

Notes: Proportion of individuals with equivalent income (using the OECD modified equivalence scale) respectively below 40% and 60% of the median. The proportions of poor individuals after the introduction of the in-work benefits are based on the same poverty line as in the baseline system in order to disregard changes in median income due to the introduction of the new benefits. Source: Author's calculations based on EUROMOD.

Table 5 Percentage of gainers, by quintile group

	<i>Income quintile groups</i>					
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>All</i>
<i>Family based in-work benefit</i>						
Greece	1.69	2.39	1.49	0.85	0.11	6.54
Italy	2.13	2.98	1.05	0.43	0.09	6.69
Portugal	4.53	2.66	1.85	0.13	0.08	9.25
Spain	1.44	1.34	1.21	1.57	1.27	6.82
<i>Individual in-work benefit</i>						
Greece	1.34	1.92	1.80	0.98	0.08	6.12
Italy	2.59	2.17	1.56	0.71	0.11	7.14
Portugal	2.15	2.89	1.79	0.40	0.00	7.23
Spain	2.47	2.62	1.46	1.36	0.12	8.04

Gainers are households whose disposable income has increased by at least 5%. Source: Author's calculations based on EUROMOD.

Table 6 Percentage change in household disposable income relative to baseline system, by partnership status and work alternative

	<i>Women in couples</i>			<i>Lone mothers</i>		
	<i>Out of work</i>	<i>Part time</i>	<i>Full time</i>	<i>Out of work</i>	<i>Part time</i>	<i>Full time</i>
<i>Family based in-work benefit</i>						
Greece	2.5	3.0	2.3	0.8	31.2	12.3
Italy	2.6	1.3	0.7	0.4	16.3	4.6
Portugal	2.6	1.6	0.8	0.5	22.9	9.3
Spain	1.3	0.7	0.8	0.6	8.5	0.9
<i>Individual in-work benefit</i>						
Greece	1.3	5.1	3.9	1.0	10.4	4.7
Italy	0.7	5.8	1.0	0.5	9.5	1.0
Portugal	0.8	4.2	1.5	1.3	7.4	3.4
Spain	0.8	6.1	1.7	0.9	9.6	2.5

Notes: percentage variations between household disposable income pre and after the introduction of the in-work benefits in the three different work alternatives. Women aged 18 - 65 years old. Lone mothers are women with at least one child younger than 18 years and without partner. Source: Author's calculations based on EUROMOD.

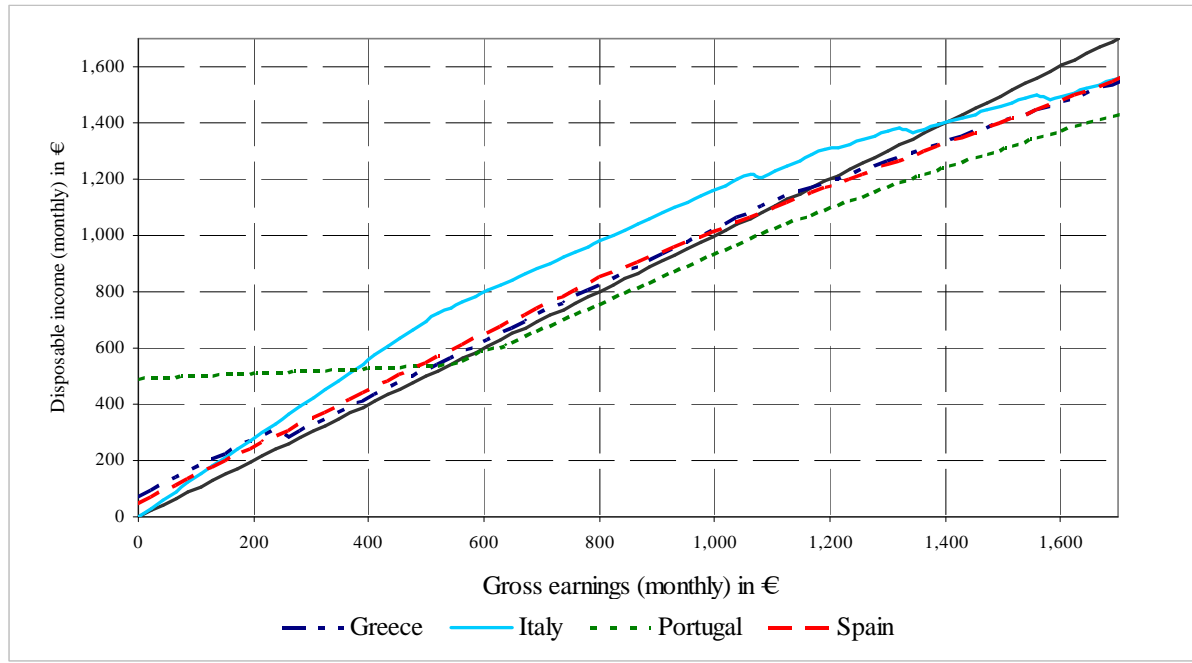
Table 7 Percentage of households with change in disposable income relative to baseline system larger than 5%, by partnership status and work alternative

	<i>Women in couples</i>			<i>Lone mothers</i>		
	<i>Out of work</i>	<i>Part time</i>	<i>Full time</i>	<i>Out of work</i>	<i>Part time</i>	<i>Full time</i>
<i>Family based in-work benefit</i>						
Greece	9.5	8.5	7.9	4.6	84.1	60.5
Italy	11.7	7.9	4.4	1.2	75.0	32.5
Portugal	16.3	9.5	6.2	2.8	82.4	63.3
Spain	6.2	4.1	4.2	4.2	56.9	7.6
<i>Individual in-work benefit</i>						
Greece	4.8	37.7	34.7	6.5	89.1	30.7
Italy	5.4	53.3	5.8	3.1	80.6	7.3
Portugal	5.6	28.8	7.7	12.0	79.6	25.4
Spain	5.6	55.9	10.1	6.6	75.3	22.9

Notes: percentage of households with variation between household disposable income pre and after the introduction of the new benefits in the three different work alternatives larger than 5%. Women aged 18 - 65 years old. Lone mothers are women with at least one child younger than 18 years and without partner. Source: Author's calculations based on EUROMOD.

Figures

Figure 1 Budget constraint for a one-earner couple with two children (9 and 7 years old) in 2003, by country



Notes: Gross earnings are derived assuming hourly wage equal to €5. Regional Minimum Income schemes (in Italy and Spain) have not been included in this chart. Source: Author's calculations based on EUROMOD.

Figure 2. Structure of family based in-work benefit, by family type

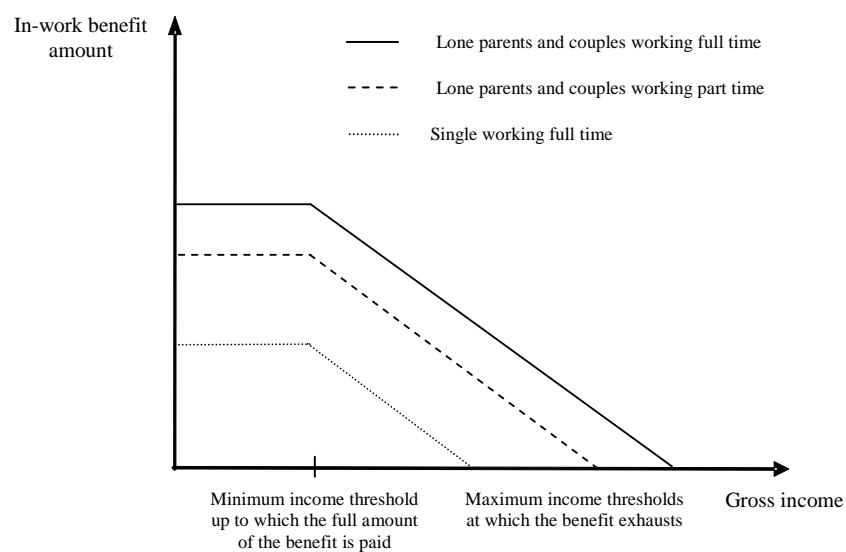


Figure 3. Structure of individual in-work benefit

