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Taxes and benefits at the bottom of the wage scale: Making work pay for whom? With what consequences?

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1. Introduction

In 1997, the OECD published a report titled *Making work pay* (OECD 1997) which was the first in a series of publications dedicated to a systematic cross-country comparison of financial disincentives to take up paid work ('unemployment trap') or to increase working hours in order to escape poverty ('poverty trap'). The aim to identify and remove barriers to employment due to poorly integrated tax and benefit systems and to 'make work pay' (mwp) not only guided the OECD publications but also featured prominently in tax and benefit reforms that took place in many OECD countries during the last 15 years. For instance, a recent overview of making work pay policies finds that more than half of all OECD countries now operate employment conditional cash payments or 'in-work benefits' of some kind (Immervoll/Pearson 2009).

Despite their apparently uniform rationale, however, the level and scope of making work pay policies differ substantially. This is not least due to a basic dilemma between the distributional (combating poverty) and labour market (combating unemployment) objectives pursued through tax and benefit policies, as the OECD noted already in its first report: "Benefits need to be high enough to ensure income is adequate, but this may mean that taking a job brings little or no extra money" (OECD 1997: 79). Moreover, while some measures might increase the incentives to work for one target group they might lower incentives for others, as these measures are embedded in and interact with other elements of the tax and benefit system. Hence, the multiple objectives and the dilemmas and trade-offs to be considered when designing making work pay policies gives reason to take stock after more than a decade of making work pay policies. The aim of the chapter is twofold:

- Firstly, it seeks to assess if the policy reforms of the recent past have indeed reached those who were at the focus of the making work pay agenda, i.e. "people with low potential wages, particularly if they have children" (OECD 1997: 7). To what extent are today's tax and benefit systems adjusted to contribute to the dual objective of combating poverty and increasing incentives to work for this group? Have governments managed to implement measures which serve both ends – 'dual-use measures', so to speak – or have low financial incentives empirically remained a necessary evil for low poverty rates?
- The second aim is to put these results in the broader context of the labour market trends and policies that accompanied the implementation of making work pay policies, as these impact both on the costs and effects of financial incentives: The incidence of unemployment related benefit payments, wage levels, employment participation rates and household

concentration of unemployment may not only be affected by mwp policies but are by themselves factors that determine the size and structure of the potential target group of making work pay policies and therefore can contribute to explain the national varieties of making work pay policies and tax and benefit systems.

The focus of the paper is on couple households with children. This is for two reasons: Firstly, it is particularly households with children that have the highest risks of being working poor and facing low financial incentives to work. Empirical studies for example show that the overlap between low pay and poverty is strongest for low paid male 'household heads' with dependent children, i.e. their poverty rate is the highest, which is attributed among other things to the fact that in many countries low-paid household heads are more likely to have a non working spouse than household heads with higher earnings (Nolan/Marx 2000: 110). In reverse, the OECD argues that growing proportions of two-earner couples among low-income household tend to reduce poverty rates and hence that an increase of two-earner couples is one important antidote to poverty (OECD 2008: 304ff.). This observation strengthens the case for labour market policy reforms that have recently occurred or are currently being implemented in a number of OECD countries, aiming at higher employment participation rates of mothers through a mix of tighter job search obligations, child care support and training measures. Secondly, and partly undermining these attempts, it is precisely couple households (with and without children) that are affected by one of the trade-offs in the design of making work pay policies: While in-work benefits can lower tax rates in the phase-in range, and hence for the first earner, they increase the tax rates for those in the phase-out range (if the benefit is familialised), and hence are likely to affect the second earner in the household. Hence, while couple households with dependent children might be, due to a potential second earner, the group whose poverty rate could be most strongly reduced through make work pay policies, they seem at the same time also the most difficult to target by tax and benefit measures.

The chapter sets out with a brief overview and discussion about the making work pay policies of recent years and of the tradeoffs involved in designing these policies. A second section reviews how governments have managed these tradeoffs and compares how far work pays at the bottom of the wage scale in European Countries. A third section presents the context of this debate and a final section looks at how these tradeoffs translate in terms of in-work poverty among EU countries.

2. Make work pay reforms: objectives, tools, trade-offs

Throughout Europe, social and labour market policy reforms were frequently targeted particularly at low-income groups, and benefits in particular have been at the focus of a series of reforms during the last decade. Besides cuts in levels and duration of out-of-work benefits, in-work benefits or 'negative taxes' topping up earnings from low paid jobs have become quite standard elements in almost all tax and benefit systems in European countries, although they might not necessarily be called 'in-work benefits'. The prototype of the in-work benefit is the 'Earned Income Tax Credit' (EITC) in the U.S.A. that was introduced as early as the 1970s, but whose scope and amount was strongly extended under the Clinton Administration in the 1990s. At the same time the United Kingdom strongly increased its own in-work benefit ('Working Tax Credit' – WTC) as part of a broader program aimed at reducing both in work and out-of work poverty. Sweden (2007) as well as France (2000) have also introduced their own in-work benefits during the last decade, although they are much less generous, amounting to a maximum of 3% (FR) and 6% (SE) of the average wage compared to 11% (USA) and

12% (UK) of the average wage (for couples with children).¹ In Germany, the new basic allowance for job seekers issued from the merger of the systems of unemployment and social assistance in 2005 includes an earnings disregard (the first 100 € per month, + 10-20% of earnings above this level), which can be considered as a functional equivalent to in-work benefits. Another kind of making work pay policy is exemption from tax and social security contributions for low-paid jobs. Both in Germany and in the UK exemptions from taxes and social security contributions exist for jobs paid below a certain earnings threshold and these exemptions have been extended during the term of the New Labour / social-democratic governments in both countries a few years ago (Germany: currently 400 € per month, UK: £ 110 per week).

These different measures can all have the same effect and contribute to increase the incentives to take up low paid work. Moreover, the effect of one make work pay policy will depend on its interaction with the other tax-benefit instruments (social assistance scheme, housing and family benefits). Therefore, in a comparative perspective make work pay policies cannot be analyzed independently of the entire tax-benefit system: this justifies an analysis of the budget constraints that result from the *interaction* of taxes and benefits rather than each instrument independently. There are, however, a number of trade-offs and dilemmas to be considered. The two most important ones have already been mentioned and will be discussed in more detail here (for a more complete overview see Immervoll/Pearson 2009)

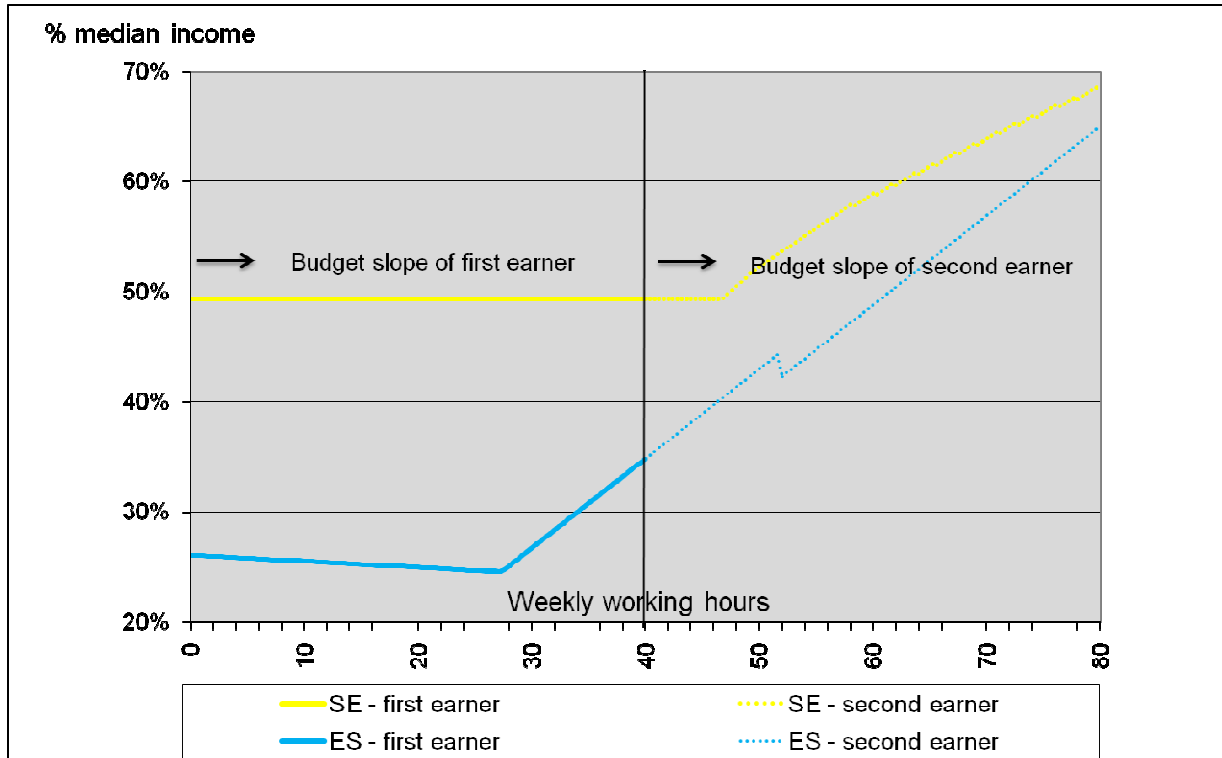
Dilemma between redistributive and employment goals

There is a fundamental dilemma in the tax-benefit system between a redistributive and an employment goal. Figure 1 will help to understand this dilemma. It shows for Sweden and Spain the net income of couple households (as a % of median income) depending on their wages (as a % of average wages), assuming that both primary and secondary earner receive an hourly wage corresponding to 40% of the average wage. In economic terms, the curves are a representation of the budget constraint of households. We see for example that in Sweden, a household with a full time wage equivalent to 40% of AW has a net disposable income equivalent to about 50% of median income. The slope of the curves represent how much it pays for households to work more and have higher earnings (inversely, it represents the effective marginal taxation created by the tax-benefit system) : the flatter the curve, the less it pays to work and earn more (the greater effective marginal taxation is said to be) ; the steeper, the more it pays. In sections where the curve is horizontal (as with Sweden for low working hours), higher earnings don't generate higher disposable income (marginal taxation of earnings is then equal to 100%). The slope illustrates well the dilemma between the distributional goal and the incentive goal of tax-benefit systems: the flatter the curve, the less incentive there is to work, but the more the tax-benefit system will reduce inequalities between high-earners and lower earners. A steeper curve will bring higher incentives but will reduce inequalities to a lesser extent. The figure shows that Spain is characterized by a very steep curve for levels of wages between 30 and 80 hours per week: inequality is very high for households at these two levels and increasing one's working hours between these levels pays a lot. This is due in part to a very low net income in households who earn no wages: by construction, the lower out-of work benefits are, the easier it is to create an incentive to work. On the other hand, in Sweden, the first earner has relatively low incentives to work. There is no easy way around this dilemma: financial incentives to earn more and redistribution are contradictory by nature.

¹ Source: OECD overview on in-work benefits, <http://www.oecd.org/dataoecd/33/62/42681201.xls>

Figure 1 : Net incomes of households with a low earnings potential, Sweden and Spain, 2007

Individuals working in a low-paid job, earning 40% of the average wage on an hourly basis, not entitled to unemployment benefit or unemployment assistance (where relevant,) but entitled to Social Assistance

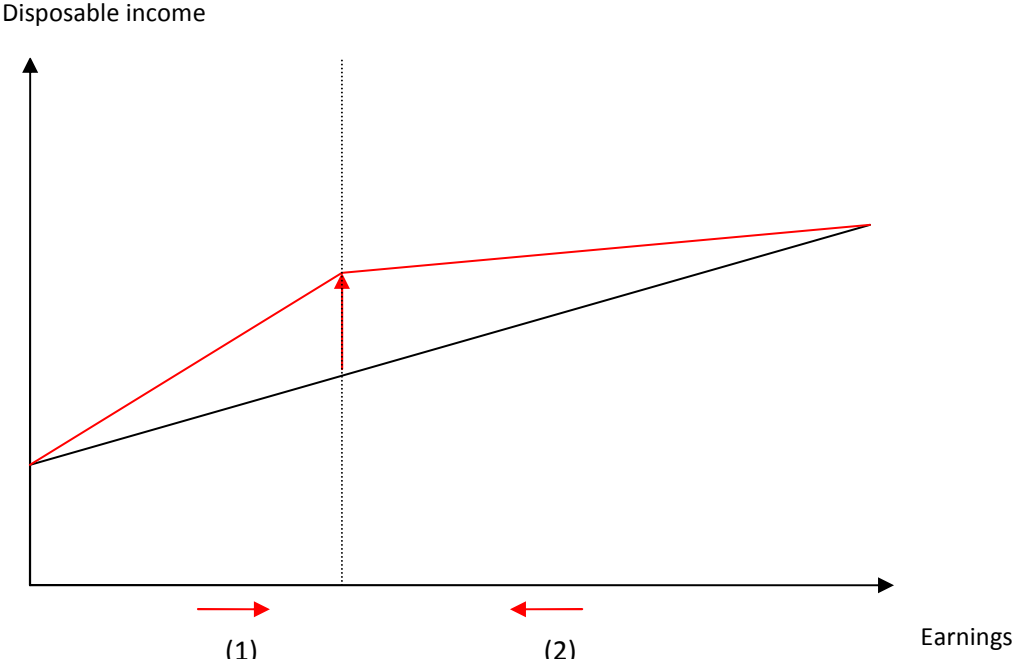


Source: OECD tax/benefit model, own calculations (for the methodology see box 1 below)

What does the literature on optimal taxation teach us about the tradeoff between redistribution and incentives and the optimal shape of the budget constraint (level of out-of-work benefits and effective marginal taxation rates at different levels of earnings)? The choice of parameters is essentially political: the greater weight is put on the redistributive objective, the higher the level of social assistance and marginal taxation rates should be ; on the other hand, the greater weight is put on incentives and employment levels, the lower the level of social assistance and marginal taxation rates should be. Mirrlees (1971) introduced an economic approach to this question. Figure 2 helps to understand this theoretical approach. In this figure, a theoretical budget constraint is modified by introducing an in-work benefit. Consequently, income is higher for everybody but incentives to work more hours are increased for low-earnings individuals and decreased for higher earnings individuals (for whom the slope of the budget constraint is reduced). This has two effects: it increases labour supply of low earnings individuals (1) and decreases labour supply for higher earnings individuals (2). Mirrlees shows that the optimal shape of the budget constraint depends on social preferences, the distribution of productivity of workers, and labour supply elasticities (the sensitivity of people's labour supply decisions to changes in incentives to work). A first conclusion of the model is that *the fewer the low productive workers and the lower labour supply elasticities are, the higher social assistance and marginal tax rates should be.*

Furthermore, Saez (2001) shows that effective marginal tax rates should be highest where the density of workers is low compared to the number of workers with higher earnings: effective marginal tax rates should be high where they don't affect as many people. This is usually true at the bottom of the distribution of earnings: it is then considered optimal to apply very high marginal tax rates at the very bottom of the distribution of earnings. A common conclusion of the standard model for social preferences that favor redistribution is that decreasing marginal tax rates are usually considered optimal over low level of earnings. Over the entire distribution of earnings, the optimal taxation is generally considered to be U-shaped: marginal tax rates are high at the bottom of the earnings distribution, decrease with earnings, are lowest around the median where density is highest, and then increase for higher earnings. Saez (2002) refines the model with two kinds of elasticities (participation elasticity and elasticity at the intensive margin) and gives a theoretical justification to in-work benefits programs which typically introduce decreasing marginal tax rates particularly at the bottom of the wage scale (as illustrated in figure 2). The *participation elasticity* represents the responsiveness of the decision to participate in the labour markets when financial incentives change whereas *elasticity at the intensive margin* represents the responsiveness in terms of the number of hours worked. In a model with high participation elasticities, low marginal tax rates at the bottom of the earnings distribution can be optimal as low productive workers increase their labour supply more than higher productivity workers decrease theirs: in-work benefits can then reduce both inequalities and efficiency loss. In this framework, the higher participation elasticities are compared to elasticities at the intensive margins, the lower the marginal tax rates at the bottom of the earnings distribution should be. Hence, high participation elasticities legitimate in-work benefits programs. In fact, empirical studies show that participation elasticities are greater than intensive elasticities, which could empirically justify in-work benefits.

Figure 2: Stylized Budget Constraint with an introduction of a typical in-work benefit



However, the model developed by Saez concerns individuals and in-work benefits are often familialized. Conclusions about optimal taxation change when we consider the household level.

Making work pay - for him or for her?

A second dilemma of making work pay policies was already mentioned above: While in-work benefits are designed to encourage entry or return to employment by lone-parents and first earners in households where no-one works, they also run the risk of producing an adverse effect with regard to the labour supply of the second earner (Fagan / Hebson 2005). The reason is that in-work benefits, as all benefits, reduce the financial pressure on households to gain additional income and thereby can work as an incentive to reduce working hours. For couples, this will impact the second earner's financial gains to work as her (or his) earnings will move the household income into the phasing-out zone where the marginal effective tax rates are additionally increased by a withdrawal of the in-work benefit. Other elements of the tax and benefit system may work in the same way and add to relatively high tax rates of second earners in low-income households. This kind of "negative jointness" – defined as a situation where the tax rate of one person depends negatively on the earnings of the spouse, hence is higher for spouses of low-wage workers than for those with higher partner incomes – has increasingly attracted attention in the recent literature on optimal taxation (Immervoll et al. 2009, Kleven/Kreiner/Saez 2009). As second earners are assumed to have a more elastic labour supply than the primary earner this effect is expected to impact negatively particularly on the labour supply of the spouse. In an optimal taxation framework, it is usually suboptimal to increase marginal tax rates where labour elasticities are highest. Since labour supply elasticities for first earners are lower than those of second earners and single earners have lower earnings than dual earners, marginal tax rates should be decreasing: they should be lower for second earners than for first earners.

Immervoll et al. conclude from their evaluation of the tax-transfer treatment of couples in European Countries that the "effective taxation of secondary earners relative to primary earners is too high given the empirical evidence on participation elasticities" and recommend to "shift some of the tax burden from two-earner couples to one-earner and/or zero-earner couples" (Immervoll et al. 2009: 30). By contrast, as a result of a simulated implementation of a working tax credit in Finland, France and Germany in the style of the British WFTC, *Bargain and Orsini* find that although participation of married women would decline in all three countries, the large proportion of single women among poor households in France and Germany would be induced to work. They therefore conclude: "As a result, this reform cannot be rejected if indeed social inclusion now means encouraging employment of the poorest, even at the price of creating disincentives for second-earners in couples." (Bargain/Orsini 2006). Hence, raising work incentives for women in couples may conflict with the inclusion of other parts of the (working or non-working) poor.

The negative impact of in-work benefits can at least be somewhat attenuated when eligibility requirements are individually based (OECD 2003: 119f.). In the UK, the introduction of an earnings disregard for the second earner (the first 2500 £ per year) in the Working Tax Credit (WTC) was a response to this problem and corresponded to claims of feminist associations (Fagan/Hebson 2005: 58ff). In Germany as well, the individualised earnings disregard in the new basic allowance for job seekers implies stronger incentives for two-earner households than for one-earner households, although this is not an issue in the recurrent public debate on the scope of the earnings disregards². On the other hand, individualisation of benefits may conflict with restricted public budgets and the

² In a two-earner household with both spouses earning €400 the earnings disregard amounts to 2x €160= €320, whereas in a one-earner household with €800 gross earnings the disregard amounts to only €240.

goal to direct in-work-benefits closely to low-income households, particularly if the in-work benefit or earnings disregard tops up relatively generous levels of minimum income. Alternatively, the in-work-benefits can be made conditional on a minimum of working hours, as in the case of UK (16 hours/week for families with children) or on a minimum of earnings, as in the case of France (EUR 3 695 in 2007), in order to prevent individuals from settling for short part-time jobs.

3. How far does work pay at the bottom of the wage scale? A cross-country comparison

We start by assessing what priorities national governments chose when reforming their tax and benefit systems, how they handled the trade-offs mentioned above and if and how, as a result, work ‘pays off’ at the bottom of the wage scale for couples with children. To be more precise: how do tax and benefit systems perform in terms of the *employment goal* (= how much of the additional gross earnings are taxed away when one or both spouses take up a job) and in terms of the *redistribution goal* (=how much earnings are needed in order to cross the poverty threshold?). These questions are assessed by comparing the results of these reforms with the help of the OECD tax/benefit models (see box 1 for the methodology)

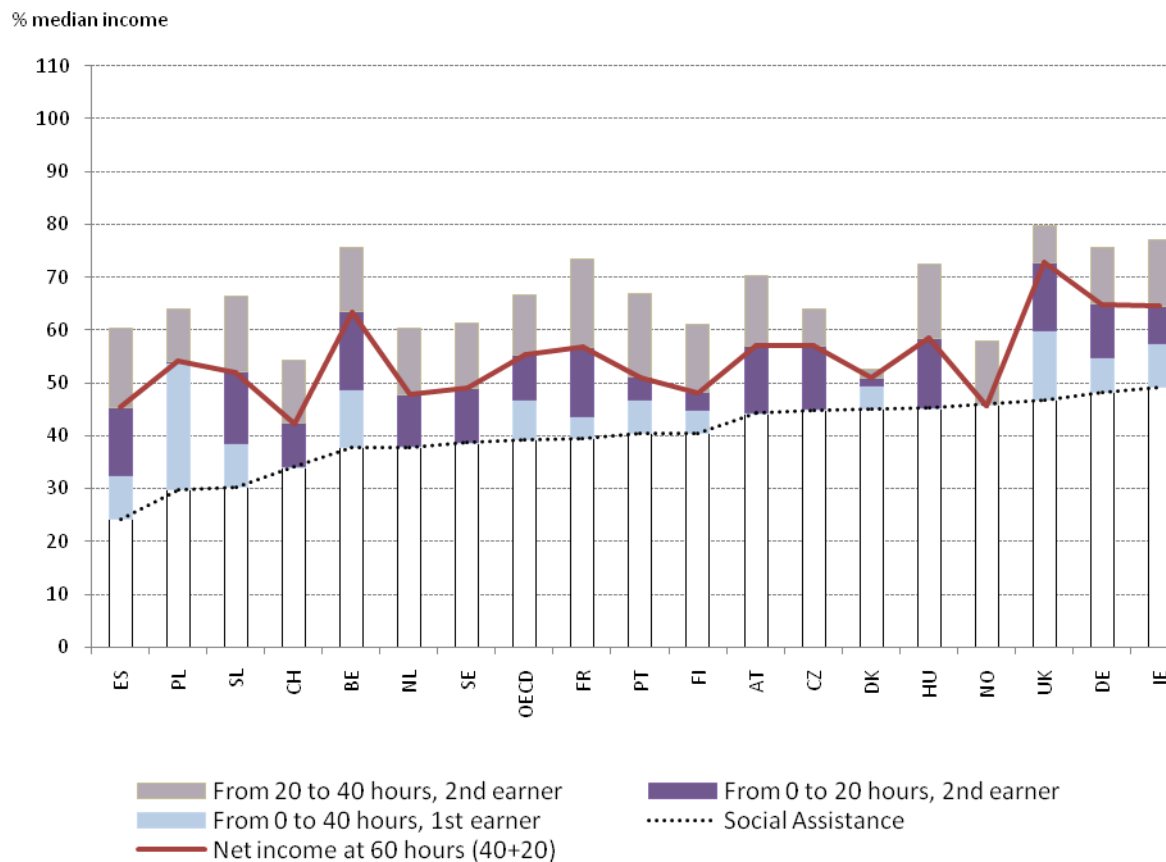
Box 1: OECD calculations on taxes and benefits – methodology

The OECD makes various assumptions in order to calculate net incomes on a comparable basis across countries (OECD 2007). Earnings are computed on a monthly basis and annualized. No longer-term effects on future earnings, pensions and benefits are taken into account. Consequently, this static framework does not include all financial incentives. Annualization means that annual maxima and differences in the timing of benefits are not taken into account: income affects benefits instantly. The OECD tax benefit model excludes benefits “in-kind”, reduced price transport and other subsidies. Included are social assistance, family benefits, housing benefits, child-raising allowances, employment-conditional benefits, and income taxation. Concerning social assistance, benefits used are those set in national regulations or guidelines. Housing benefits schemes are very complex and often require a set of assumptions. The OECD usually assumes rents equal to 20% of gross earnings of an average worker and, where relevant, a size of 70 square meters. In this model, rent therefore does not depend on household size, or on income level. Concerning Family Benefits, children are assumed to be aged four and six.

The calculations presented below refer to families with “low earnings potentials”, where head and spouse are paid an hourly wage equal to 40% of the average wage or to the national minimum wage if the latter is higher than this level. The figure just displays the budget constraints shown in Figure 1 in a different way and including more countries.

Figure 3 : Net incomes of households with a low earnings potential, 2006

Individuals working in a low-paid job, earning 40% of the average wage on an hourly basis



Source: OECD tax-benefit models (figure based on data presented in OECD 2009: 209)

Concerning the *employment goal*, the following points are noticeable:

- In the majority of countries second earners face a much lower tax rate than primary earners, because their earnings move the household out of benefit receipt already when working part time (20 hours) – the net social transfer is negative at that level in most countries .
- The cross-country differences are much more important for the second earner than for the first earner: When excluding the outlier Poland³, the additional household income to be gained through a full-time job for the first earner ranges between 0% (e.g. SE) and 13% (UK) of the median income, while the same figure for the second earner ranges between 3% (DK) and 28% (ES).
- However, while the difference between Spain and Denmark confirms the nexus between low out-of-work benefits and low tax rates, the figure also shows that work obviously can pay at both ends of the scale: In the three countries with the lowest out-of-work benefits (ES, PL, SL) the household income increases by more than 30 percentage points of the median income, but the increase is only slightly lower for the three countries with the highest out-of-work benefit (UK, DE, IE).

³ The case of Poland also shows another peculiarity that needs closer examination: according to the calculations of the OECD, while the household income increases strongly with the first earner taking up a full-time job, an additional half time job of the second earner does not increase the household income by any fraction.

Concerning the *redistributive* objective, the following points are striking:

- At first sight, there seems to be a positive nexus between high out-of-work benefits and few working hours needed to cross the poverty threshold: The three countries with the highest out-of-work benefit (DE, IE, UK) are also among the minority of 4 countries (+BE), where a part-time job of the second earner in addition to the fulltime job of the first earner suffices to cross the 'at-risk-of-poverty'-threshold of 60% of the median income. However, this nexus is obviously less strong at second sight: In a number of countries with above average out-of-work benefits, the disposable income from 60 hours of work hardly reaches the 50% poverty threshold, among them the Scandinavian countries (SE, FI, DK and NO). Moreover, while in the three countries with the lowest out-of-work benefits, a second fulltime job lifts the household over the 60%-threshold, this is not the case in Denmark and Norway.

Hence, in both respects the 'worlds of welfare' we are used to seem to be turned upside down: While the liberal Anglo-Saxon countries are both among those countries with high (relative) income gains and those with high out-of-work benefits, the Nordic countries seem to be most prone to produce a relatively high level of both working and non-working poor: They are distinctly less generous for those out-of work and, by contrast to South and Eastern European Countries with the lowest out-of-work benefits, they tax low earnings much more strongly, thereby preventing even double earner households with children where both spouses work full-time to reach a decent living standard.

The OECD concludes from these calculations that there is some "room for reshaping national systems of benefits and taxes in a number of countries so as to provide further support to families with children", mainly suggesting to shift tax burdens to childless couple households who according to the same calculations are much better off (OECD 2009a:192f).

However, there is one important assumption underlying the OECD calculations which distorts the picture and therefore also require some caution with respect to the conclusions to be derived: Housing benefits, which are an important share of benefits paid to both working and non-working households, are uniformly calculated based on assumed housing costs equal to 10% of the average wage, which is only half of the costs usually assumed by the OECD (cf OECD 2009a: 189). Besides the fact that households with children are usually entitled to higher housing benefits than their childless counterparts – which reduces the privilege of childless households identified by the OECD – the level of 10% of the average wage⁴ is a rather low level particularly for couple households with children. For instance, the maximum housing costs that are taken into account for a Swedish family of four amounts to SEK 5900 per month in 2007 (OECD 2009b) instead of the 3257 SEK assumed by the OECD. Moreover, the housing costs of recipients of social assistance are covered in full through a combination of housing benefit and social assistance supplements (cf. Nelson 2010)⁵ Basing the calculations on a more realistic assumptions of 20% of the average wage in the case of the couple households with children raises the out-of-work benefits in the Scandinavian countries substantially, and widens the gap between Southern European Countries like Spain and the Nordic countries (see Annex Figure 1).

⁴ Corresponding to € 308 in Germany, € 266 in France, € 304 (SEK 3257) in Sweden, € 183 in Spain and € 398 (£ 272) in the UK.

⁵ An alternative data set on the level of minimum income protection in OECD countries (SaMip) assumes housing benefits of 6456 SEK for a family of four in 2007 (cf. Nelson 2009).

Moreover, the picture of the worlds of welfare turned upside down does not only change with changes within the model, i.e. by adopting different and probably more realistic assumptions on benefit levels when calculating the net household incomes, but also when these tax and benefit structures are put into the broader context of the national labour market. This contextualisation is done in the remaining parts of this paragraph. The effective impact of the incentive structures at low earnings levels as depicted above depend on the incidence of this constellation, i.e. on the question how many couple household with children receive social assistance and have low (potential) wages of about 40% of the average wage. Hence, there are at least two important parameters, that need to be taken into consideration in order to ‘weight’ the tax/benefit systems as depicted by the OECD: the general wage structure and the structure of the benefit recipients. Recent labour market trends and policy reforms have affected both parameters.

Contextualisation I: Wage Levels

Since the mid 1990s there has been an increase of wage inequality and of low wage work in several countries (cf. OCED 2008, Gautié/Schmidt 2010). This has in turn increased the number of those that are at risk of falling into an income range where marginal tax rates are high. In a number of countries, however, employees earning only 40% of the average wage on an hourly basis remain the exception: this is not only the case in countries like France with higher minimum wages, but also in countries with no legal minimum wages as Sweden: *Skedinger* for instance reports collectively agreed minimum wages in typical low-wage industries (retail, construction, hotel and restaurants) of € 8,48 in Sweden for 2006 (Skedinger 2008: 11) – which is much higher than the hourly wage assumed by the OECD (see Table 1). In Germany, by contrast, as much as 5 million persons or 16,7% of all employees earned hourly wages of less than 8 € , (Kalina/Weinkopf 2009), and thereby less than the 40% of the average wage calculated by the OECD.

Table 1: Hourly wages equal to 40% of the average wage, according to OECD calculations (2007)

DE	ES	FR	SE	UK
€ 8,26	€ 6,38	(€ 6,15)	SEK 64,77 (€ 7)	£ 6,28 (€ 9,18)

** Hourly wages are derived from gross yearly earnings at 40% of the AW, divided by 52 weeks and 40 weekly working hours. Extra payments (holiday bonus, 13th monthly salary) are thereby included in the hourly wages.*

Basing the calculations of the marginal tax rates on more appropriate housing benefits as well as wage levels that are comparable in terms of their empirical relevance – e. g. by choosing the threshold separating the first and second decile of the wage distribution – would therefore result in a more ‘realistic’ and comparable depiction of the incentive structure at low wage levels.

Contextualisation II: From first to second and third pillars of unemployment related benefits

The second factor that determines the empirical relevance of the incentive structures set by minimum income systems is the number of unemployed that have to rely on this kind of financial assistance – instead of other non means-tested benefits or private support. Both the increase of atypical employment and labour market policy reforms in several European countries have contributed to a shift from the first (non means-tested, individualized, income related) to the second or third (means-tested, household-based) pillar of unemployment related benefits, as more

and more unemployed are not entitled any longer to unemployment benefits or income related unemployment assistance. In addition to stricter eligibility rules (e.g. longer employment records prior to the application) and tighter conditions for benefit receipt (e.g. job search requirements), reductions in the maximum duration and wage replacement rates of unemployment benefits and unemployment assistance have particularly occurred in those countries with previously relatively generous levels, like Denmark, but also in Germany and France, although the differences between the countries remain substantial. Consequently, the means-tested social assistance, which originally was often established as a 'last resort' form of financial assistance, has gained importance also in those countries that traditionally had a strong first pillar. Forms of atypical employment that are exempt from contributions to the insurance-based unemployment benefit or are too discontinuous and do not allow to accumulate the required contribution period add to the growth of employees not entitled to non means-tested unemployment benefits.

This shift from the first to the second or third pillar of financial support in case of unemployment can not only be seen as a policy that reinforces and stabilizes the dualisation of the labour markets (Palier / Thelen 2010), but also entails a gender dimension as it affects the incentive structure for men and women differently. For, on the one hand, under the given gendered labour division, unemployed women are more likely to lose their benefit entitlement as they more often have a partner with earnings that moves the household above the threshold for the means-tested benefit. And secondly, and more importantly in our context, the incentive structure is negatively affected at least for second earners in low-income households: According to Immervoll/Pearson (2009:9) the "financial work incentives are generally also weaker for those entitled to (higher) unemployment insurance benefits", hence conversely a shift to means-tested benefits should bring about higher work incentives. In the case of couple households, however, the effect is at most ambiguous: If a previously inactive woman in a couple household takes up paid work (or increases working hours, if already employed) in order to compensate for income losses of her partner, her *individualised* unemployment benefits would not be reduced; but *means-tested*, household based benefits will. Therefore taking up paid work for the "second earner" (who then becomes a first earner) pays much less in the case of the 'second pillar' regime. And for a first earner with relatively low wage levels, the reduction of the replacement rate is less net, since the individualized unemployment benefit would often be too low anyway in order to meet the ends of the family.

There are however strong country differences with regard to this overall trend, as a comparison of Germany, France and Sweden shows (Table 2). In Germany, not least as a result of the recent reform abolishing the former unemployment allowance and reduced the maximum duration of the unemployment benefit ('Hartz-IV'), the number of unemployed relying on the new means-tested basic allowance for job seekers (ALG II) widely exceeds the number of unemployed receiving the contributions based unemployment benefit: in 2009, only one in five recipients of financial assistance in the case of unemployment received the contribution based unemployment benefit (compared to was accompanied by five recipients of the means-tested ALG II. By contrast, in Sweden, the drop in unemployment was paralleled by a decline in the number of social assistant recipients since the mid 1990s, and (at least until 2007) the numeric relation between recipients of unemployment benefit and means-tested social assistance has not changed significantly. In France, , the number of recipients of the social assistance has continued to increase over the last 15 years, but at the same time the unemployment benefit systems seems to remain rather inclusive and the social assistance / unemployment benefit ratio has not declined as strongly as in Germany.

Table 2: Recipients of means-tested social assistance, unemployment benefits and unemployment assistance, 1995-2009 (1000)

		1995	1997	1999	2001	2003	2005	2007	2009
Germany	Unemployed	3.612	4.384	4.100	3.853	4.377	4.861	3.777	3.423
	Unempl. Benefit(UB)	1.780	2.155	1.829	1.725	1.919	1.728	1.080	1.141
	Unempl. Ass. (UA)	982	1.354	1.495	1.477	1.994	-	-	-
	Social Ass. (SA)	1.512	1.782	1.701	1.632	1.783	4.502*	5.349*	4.830*
	SA : UB+UA	1:1,8	1:2,0	1:2,0	1:2,0	1:2,2	1:0,4	1:0,2	1:0,2
Sweden	Unemployed	391	437	300	269	305	360	296	408
	Unempl. Benefit + Ass. (UB + UA)	n.a.	n.a.	352*	260*	246*	290*	226*	139*
	Social Ass. (SA)	453	470	379	307	276	272	255	284
	SA : UB+UA			1:0,9	1:0,8	1:0,9	1:1,1	1:0,9	1:0,5
France	Unemployed	2.787	2.940	2.711	2.226	2.476	2.598	2.382	2.753
	Unempl. Benefit (UB)	1.796*	1.773*	1.811*	1.611*	2.081*	2.217*	1.797*	1.850*
	Unempl. Ass. (UA)	486	480	470	392	349	376	324	321
	Social Ass. (SA)	989	1107	1173	1099	1169	1317	1205	1.314
	SA : UB+UA	1:2,3	1:2,0	1:1,9	1:1,8	1:2,1	1:2,0	1:1,8	1:1,7

Notes: Data with * refer to beneficiaries in January of the respective year; the other data refer to annual averages. Data for the recipients of social assistance cover slightly different age groups: 15-64 (Germany), 18 and older (Sweden)

Sources: Data on unemployed: ELFS; data on benefit recipients: National Statistics on recipients of unemployment benefit (UB), unemployment assistance (UA) and Social Assistance (SA):

- Germany: UB = Arbeitslosengeld; UA = Arbeitslosenhilfe; SA = Sozialhilfe (until 2004), Arbeitslosengeld II (from 2005)
- Sweden: UB + UA = inkomstrelaterad ersättning / grundbelopp; SA = Ekonomiskt bistånd
- France: UB = Assurance chômage; UA = Allocation de solidarité spécifique (ASS); SA = Revenu Minimum d'Insertion (RMI) + Allocation de Parent Isolé (API) (until 2008) / Revenu de solidarité active (RSA) (2009)

So far, we have considered the shape of the incentive structure across countries and described how changes both in the labour market (increase of atypical and low waged work) and in labour market policies (shift from non-means tested to means-tested benefits) has contributed to increase the share of those who face low financial incentives to take up paid work. This 'contextualization' is important, firstly, in order to fully capture the changes of welfare systems since the first attempts of 'making work pay' some 15 years ago – a mere account of institutional changes associated with mwp policies would miss the full scope of changes that are accompanying these policies and also overlook the essentially political origin of changes in the broader background of mpw policies. Secondly, the contextualization also helps to interpret the data on current incentive structures provided by the OECD and puts a strong question mark behind the comparability of the OECD calculations, as the situation described by them seems affects the countries to a very different extent and seems to be of rather virtual importance in some countries at least. More research is required for a more appropriate description of tax / benefit systems in the wider context of wage structures and structures of benefit recipients.

While this section has treated the shape and scope of mwp policies, i.e. the question how they make work pay and how many people are affected by them, the next section is going to take a closer look at the goals they were designed for, i.e. at employment participation and poverty rates.

4. With what consequences? Employment participation and poverty rates

The European tax-benefits systems differ by the generosity of their out-of-work benefits and by the marginal tax rates for first and second earners in the household. How do these differences translate in terms of employment participation, poverty and in-work poverty?

Consequences I: Employment participation rates and concentration of earnings among households

What is the impact of high marginal tax rates on the employment of less-skilled workers? We will first present a brief review of findings on the employment impact of in-work benefits, instruments that lower marginal tax rates for low-earners; and then present some results using EU-SILC data.

In a review of literature, Immervoll and Pearson give several conditions for IWB to be effective at raising employment. First, the labour market should be strong so that an increase in labour supply is matched by a sufficient demand. Second, IWB can only be effective if the distribution of income at the bottom is not compressed. This condition underlines with a new angle the dilemma between incentives and the reduction of inequalities. This condition shows that IWBs cannot be considered as a panacea: they are only effective in increasing employment in conditions that are not desirable in terms of income inequality. Third, familialized IWB can only be effective in raising employment if work incentives for second-earner are not already low; they can be counterproductive otherwise. This is due to the fact that labour supply is more responsive for women than for men. Finally, IWB will be effective in raising employment if incentives are increased for individuals who are most responsive to higher payoff to work and for groups for whom activity rate is not already high (for example, women and low-income groups, especially when children are present). In the United States, the EITC increased employment rates of single mothers by 4-7 percentage points between 1984 and 1996 (Meyer and Rosenbaum, 2001). In-work benefits have the strongest impact on this target group: they are low-income, have children and there are no negative effects due to the presence of an additional worker. Moreover, the United States enjoyed a strong labour market during this period. The conditions for effectiveness of IWB were therefore met for American single mothers during this period. However, for married couples, there were negative effects due to the lowering of work incentives for secondary earners. Eissa and Hoynes (1998) conclude that the EITC reduced the likelihood of married women's labor force participation by over a full percentage point. Similarly, several studies show that, in the United Kingdom, the WFTC led to substantial employment gains among lone parents (Blundell and Hoynes, 2004) but slightly reduced employment rates for mothers in couples. In France, most studies find very small employment effects for the PPE (*Prime pour l'emploi*). This can be partly explained by very modest benefits (due to the individual nature of the instrument and its target on full-time work) but also by high unemployment. Immervoll and Pearson underline a dilemma concerning in-work benefits: individualized instruments avoid the negative effect for the second earner (married women) but are paid to a larger group of workers and therefore must be substantially lower than family-based instruments. Immervoll and Pearson conclude that if in-work benefits (IWB) can be effective at raising employment rates among the target group, the total effect on employment is small: the gain in employment at raising incentives for the target group is compensated by a loss in a reduction of incentives for other groups. Furthermore, the cost per job created is very high: the cost effectiveness of in-work benefits is very unfavorable as an employment policy.

What is the relation between high marginal tax rates and the employment of less-skilled/low qualified workers across European countries? To answer this question, it is first necessary to define

this category in a comparative perspective. The information in EU-SILC concerning the ISCED level of the highest diploma obtained is difficult to use for international comparisons. Indeed, the share of the population in each ISCED category differs greatly across the European countries. Therefore, if we define the low-qualified using an ISCED category, we would not compare the same type of population in each country. Being low-skilled is more a relative matter than an absolute one: a relative 'less-skilled' category is preferable. We therefore use the information relative to the age at the end of initial studies to distinguish three quantiles: the less-skilled represent the third of the population which finished their initial studies the earliest.

Figures 5 and 6 show that there is no strong and significant relationship between the employment rate of the less-skilled and marginal tax rates at low-earnings level. This is also true if we consider the employment gap between the less-skilled and the highest-skilled. In Figure 5, we see that the relationship between men's employment rate and marginal tax rates is even slightly positive. Evidently, it is not possible to conclude from simple correlations that high marginal tax rates do not have an impact on the labour supply of the less skilled. The countries under review differ on numerous aspects that can explain the differences in employment rates: labour market institutions, conciliation policies, etc. However, it is possible to say that the relationship between the incentive nature of the tax-benefit system and the employment rate is far from obvious. Incentives do not seem to be the main determinant of employment rates.

Figure 5 : Men's employment rate according to first earner METR
Couples with 2 children

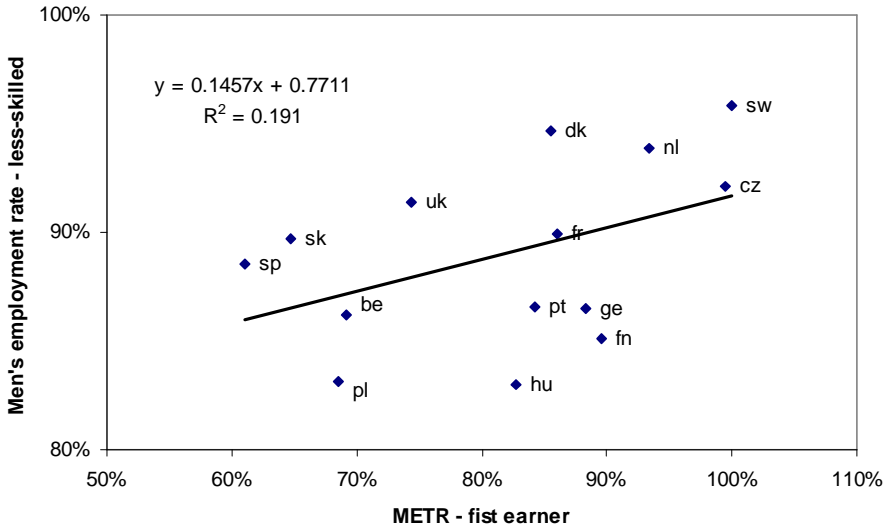
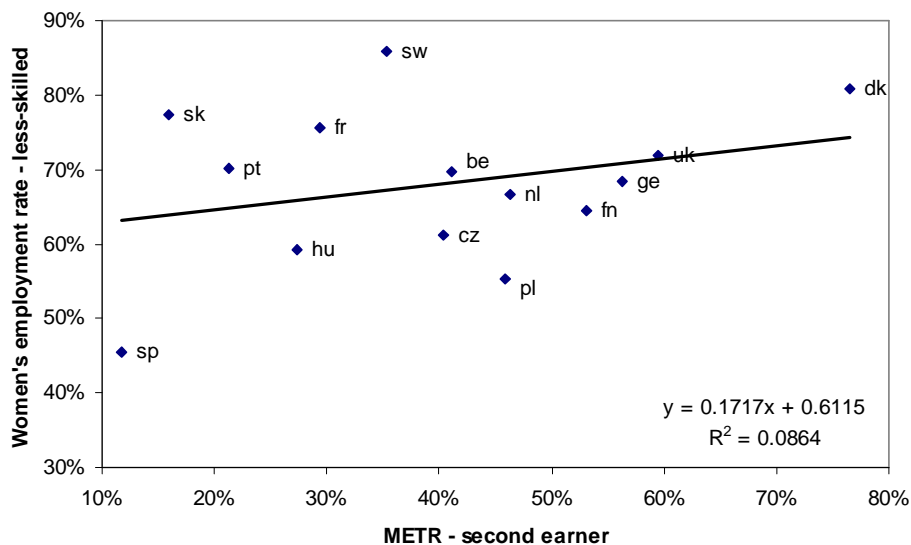


Figure 6 : Women's employment rate according to second earner METR

Couples with 2 children



Consequences II: Poverty rates: Making work pay policies as an effective redistribute tool?

Immervoll and Pearson (2009) defend the use of in-work benefits as a cost effective *redistribution* instrument, especially where in-work poverty is high. Since in-work benefits are not accompanied by a reduction of labour supply and employment, their efficiency cost can be very small, and sometimes close to zero. Family-based instruments especially target low-income household and therefore have an impact on income poverty (measured at the household level). The authors cite studies showing that EITC payments in the United States reduced child poverty in lone-parent households by 4.5 percentage points in 1999. Overall poverty was reduced by EITC by 1.5 percentage points. The WTC in the United Kingdom is expected to have an even bigger impact on the income of the working poor because of higher average benefits per household. However, it is necessary to put the conclusions of Immervoll and Pearson in perspective. The working poor have the highest earnings among the poor: it is therefore expected that the cost effectiveness of reducing their poverty be highest. This kind of analysis is not sufficient for policy recommendations: if make work pay policies are cost effective at reducing in-work poverty, they might impede the poverty reduction of other groups. Poverty reduction cannot be analyzed uniquely by its effectiveness or by the number of individuals it takes out of poverty. Statistically, the number of individuals taken out of poverty will be highest in the absence of other instruments combating poverty; it will be highest if *ex-ante* poverty is important; it will also be highest if it targets the households which are closest to the poverty line. It is therefore important to analyze the tax-benefit systems as a whole, and not specific instruments separately.

Figure 7 graphs the relationship between in-work poverty rate and marginal tax rates faced by low-wage first earners when taking up full-time-employment. Low in-work poverty rates are associated with higher marginal effective tax rates. Figure 8 shows that low in-work poverty is also associated with higher marginal effective tax rates for second earners. Of course, these correlations should not come as a surprise. The causal effect goes through redistribution: the higher the redistribution, the higher the marginal tax rates faced by workers at the bottom of the distribution. Since redistribution

directly lowers poverty and in-work poverty, the resulting association of low in-work poverty rates and high marginal tax rates is not surprising. However, the related conclusion that in-work poverty is lowest where work pays least at low earnings levels might be counterintuitive to policy-makers. Evidently, this does not mean that introducing in-work benefit programs that lower marginal tax rates for first earners will increase in-work poverty rates. On the contrary, these programs have the direct effect of decreasing in-work poverty rates. So, how can we explain the link between in-work poverty rates and METR whereas a lot of countries have introduced in-work complements in their tax-benefit systems? A hypothesis is that the focus on incentives that bring about in-work benefits also tend to reduce overall redistribution (in particular through decrease in unemployment generosity and relative social assistance levels). For example, In France, the introduction of RSA, a generous in-work benefit, was preceded by a decline in the relative level of RMI (the Social Assistance program) since the level of RMI is indexed on prices and has not been revalued beyond this indexing since its introduction in 1989. Also, the focus on the cost-effectiveness of redistribution instruments will reduce overall redistribution because of increasing marginal cost of reducing poverty: if policy makers are excessively attentive to cost effectiveness, they will only take the 'cream' of the poor out of poverty. In effect, it is the countries that are most generous with the inactive that also reduce working poverty the most (Figure 9). This relation cannot be interpreted in terms of direct causality because, by construction, out-of-work benefits do not concern workers. It is not due to the fact that generous out-of-work benefits reduce the employment of less-qualified workers. The relation can probably be explained by differences in social preferences for equality: the countries where social preferences for equality are strongest put in place redistributive policies that favor both non-workers and low-income workers.

Figure 7 : In-work poverty rate and METR faced by low wage first earners
Couples with 2 children

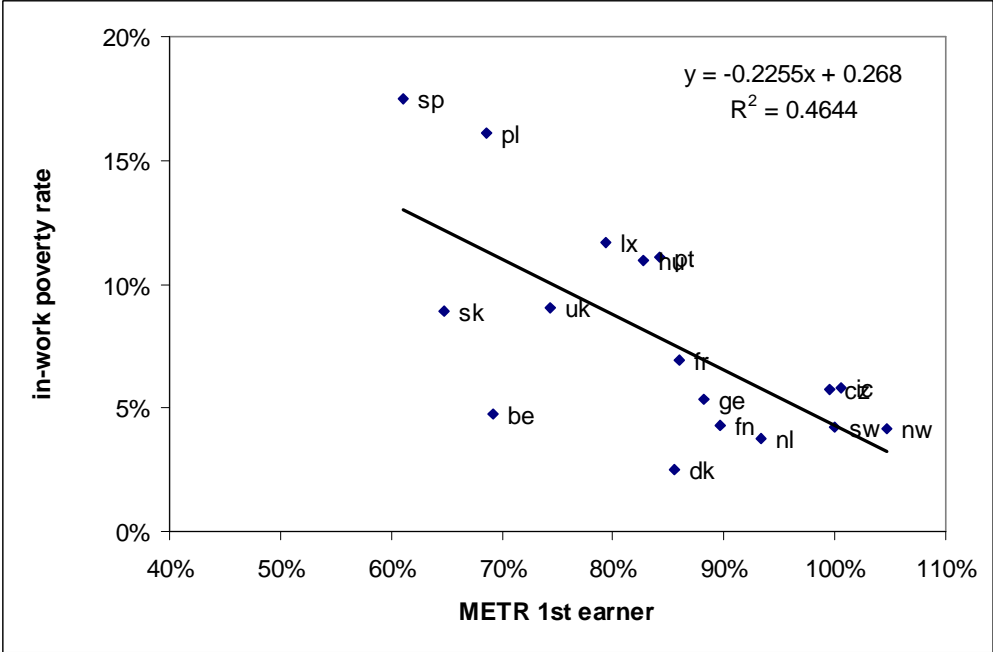


Figure 8 : In-work poverty rate and METR faced by low wage second earners
 Couples with 2 children

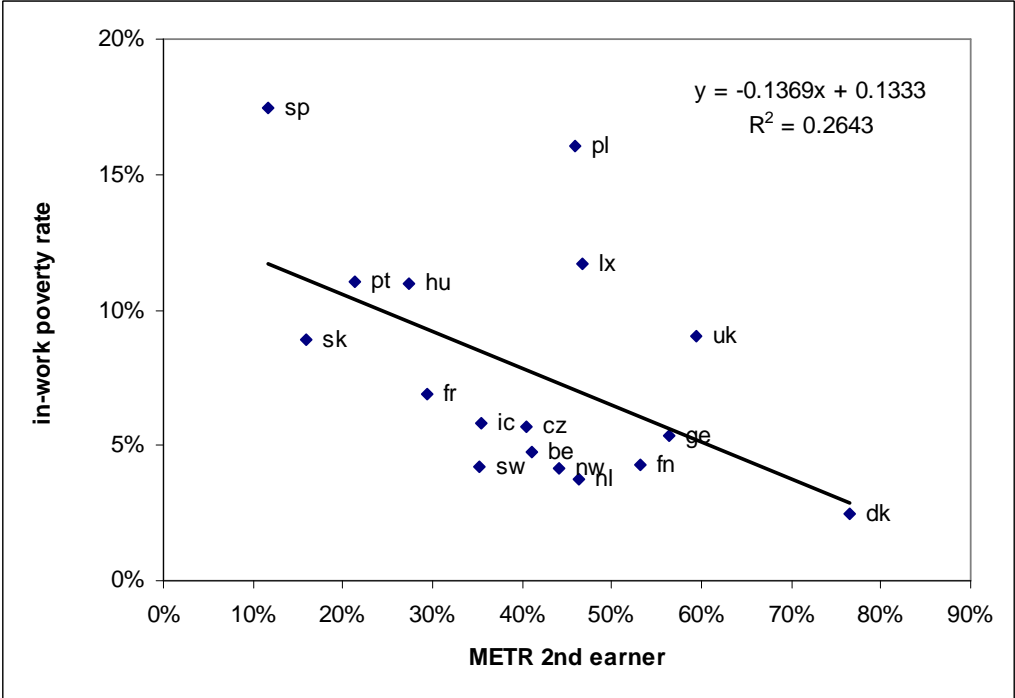
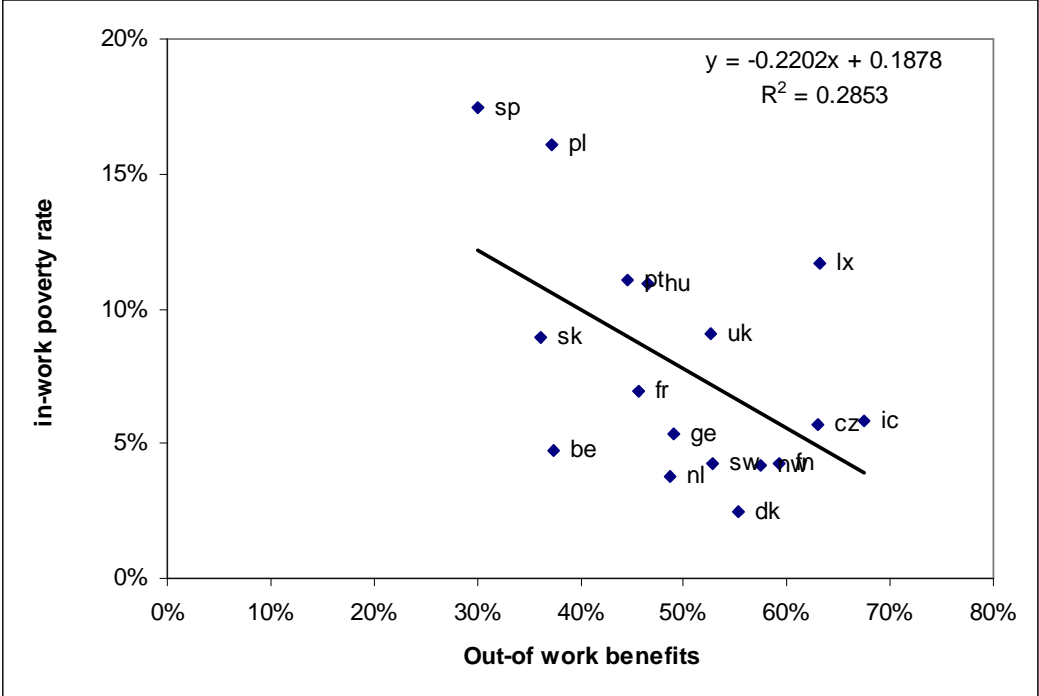


Figure 9 : In-work poverty rate and level of out-of-work poverty
 Couples with 2 children



5. Conclusions

In-work benefits promise to lower poverty and increase employment. They are supposed to resolve the dilemma between redistribution and incentives; or the tradeoff between equity and efficiency. However, as we have seen, these promises are, partly an illusion. In-work benefits increase incentives at the bottom of the distribution but decrease them higher in the distribution of income. For example, family-based benefits increase incentives for first-earners but decrease them for second earners. In terms of total employment there are only very small gains to expect. In fact, we show that incentives do not seem to be an important determinant of employment rates of less-skilled in a comparative perspective. In terms of redistribution, the case for in-work benefits is stronger. However, it is in the countries where work pays the least where in-work poverty is also the lowest. This can be explained by the fact that the working poor benefit from policies combating general poverty (and not just in-work poverty) and these policies are often combined with high effective marginal tax rates, even at the bottom of the distribution (because transfers decrease with income and taxes needed to finance them usually increase with income). The relationship between 'Making work pay' and reducing in-work poverty is therefore not as straightforward as it might seem. Also, in-work benefits are most effective towards its objectives (employment, inequality reduction) in economies where wage inequalities are high, which by itself is not desirable. One can question the political pertinence of an instrument whose effectiveness is greatly reduced when approaching its apparent objectives.

How could the economic crisis affect this analysis? Incentives are more effective in strong labour markets. In times of economic downturns, involuntary unemployment is high and the level of employment is mostly determined by the demand. In-work-benefits should therefore not be expected to increase employment. Redistributive needs are higher in times of crisis. However, it is doubtful that in-work benefits are the most adapted instrument in times of high involuntary unemployment. The case for more universal and more generous unemployment benefits is probably stronger when unemployment is considered mostly involuntary. The case for in-work benefits is strongest in a strong labor market: incentives will be more effective at increasing employment and redistribution towards the employed is more legitimate if 'voluntary' unemployment makes up a bigger share of the unemployed. On the other hand, if in-work benefits are more effective in a strong labor market, they are also less needed: tensions in the labor market should increase wages and career opportunities and therefore incentives to work.

On the other side, demand-side policies that reduce the cost of labour for the less-skilled are effective in both downturns and expansions. In downturns, they reduce unemployment losses. They will then have a much higher impact on employment than supply-side policies. During expansions, supply sides policies that reduce the cost of labour for the less-skilled will translate into higher wages and therefore into wage inequality reduction. Demand-side policies that lower labour cost for the less-skilled are however costly: constructed on an individual basis, they are not well targeted on the poorest. Demand-side policies imply indeed substantial transfers from the more-skilled to the less-skilled. This confirms the trilemma of social policies pointed out by Esping-Andersen between employment, equality and budgetary constraint.

References

- Bargain, O. / Orsini, K.(2006), "In-work policies in Europe: Killing two birds with one stone?", *Labour Economics*, 13, 667-697.
- Eissa, N. and H. Hoynes, 1998 : "The earned income tax credit and the labor supply of married couples"
- Fagan, C. / Hebson, Gail (2005): 'Making work pay' debates from a gender perspective. A comparative review of some recent policy reforms in thirty European countries. Report prepared by the Group of Experts on Gender, Social Inclusion and Employment for the Unit Equality for women and men, DG Employment, Social affairs and Equal opportunities of the European Commission, Luxembourg.
- Gautié, J./ Schmitt, J. (eds.): *Low-wage work in the wealthy world*. New York: Russell Sage Foundation
- Immervoll, H. / Kleven, H.J. / Kreiner, C.T./ Verdelin, N. (2009): An evaluation of the tax-transfer treatment of married couples in European countries. OECD Social, Employment and Migration Papers No. 76 OECD, Paris.
- Immervoll, H. / Pearson, M. (2009): A good time for making work pay? Taking stock of in-work benefits and related measures across the OECD.-OECD Social, Employment and Migration Papers No. 81, OECD, Paris.
- Immervoll, H. (2009): Minimum-income benefits in OECD countries: policy design, effectiveness and challenges, OECD Social, Employment and Migration Papers No. 100, OECD, Paris.
- Kalina, T. / Weinkopf, C. (2009): Niedriglohnbeschäftigung 2007 weiter gestiegen: zunehmende Bedeutung von Niedrigstlöhnen. Duisburg: Inst. Arbeit und Qualifikation. IAQ-Report, Nr. 2009-05, URL: <http://www.iaq.uni-due.de/iaq-report/2009/report2009-05.pdf>
- Kleven, H.J. / C.T. Kreiner / Saez, E.(2009): The optimal income taxation of couples." *Econometrica*, Vol. 77, No. 2 , 537–560.
- Meyer, B. and D. Rosenbaum (2001), "Welfare, the earned income tax credit, and the labour supply of single mothers", *Quarterly Journal of Economics*, 116
- Mirrlees, 1971 : « An Exploration in the Theory of Optimum Income Taxation », *Review of Economic Studies*, vol. 38(114).
- Nelson, Kenneth (2009): *The Social Assistance and Minimum Income Protection Interim Data-Set. 2.0 Beta Documentation*. Stockholm: Swedish Institute for Social Research
- Nolan, B. / Marx, I. (2000): Low pay and household poverty, in: M.Gregory, W. Salverda and S. Bazen (eds.): *Labour market inequalities. Problems and policies of low-wage employment in international perspective*, Oxford: Oxford University Press, pp. 100-119
- Nollmann, G. (2009): Working Poor. Eine vergleichende Längsschnittstudie für Deutschland und die USA, *Kölner Zeitschrift für Soziologie und Sozialpsychologie* 61: 33-55
- OECD (1997): *Making work pay. Taxation, benefits, employment and unemployment*, OECD, Paris
- OECD (2003): *Employment Outlook: Towards more and better Jobs*, Chapter 3: Making work pay, making work possible, OECD, Paris, pp. 113-170.
- OECD (2007), *Taxing Wages: 2005-2006*, OECD, Paris.
- OECD (2008): *Growing Unequal? Income Distribution and Poverty in OECD Countries*, OECD, Paris.
- OECD (2009a): *Employment Outlook: Tackling the job crisis*, Chapter 3: Is work the best antidote to poverty?, OECD, Paris, pp. 165-210.

OECD (2009b): Benefits and Wages – Country Chapter: Sweden 2007, OECD, Paris.

Palier, B./ Martin, C. (2008): Reforming the Bismarckian welfare systems. Malden, Mass.: Blackwell (Broadening perspectives on social policy).

Palier B. / Thelen K., 2010, Institutionalizing Dualism: Complementarities and changes in France and Germany, Policy and Society 38 (1), pp. 119-148

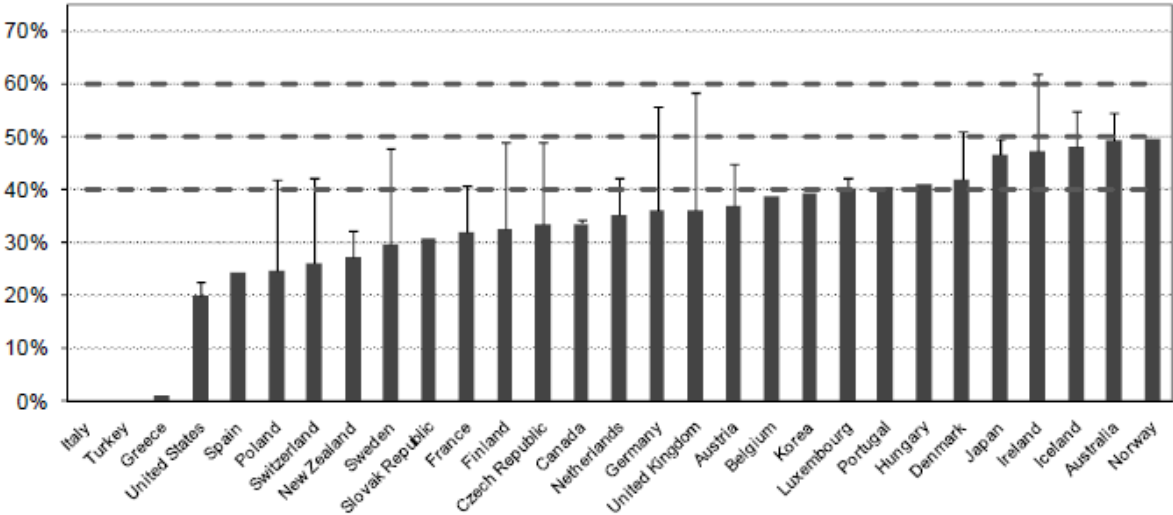
Saez E. (2001) : « Using Elasticities to Derive Optimal Income Tax Rates », Review of Economic Studies, 68, 205-229

Saez E. (2002): « Optimal Income transfer programs: Intensive versus Extensive Labor Supply Responses, The Quarterly Journal of Economics, August

Whiteford P. and W. Adema (2007), What Works Best in Reducing Child Poverty: A Benefit or Work Strategy?, OECD Social, Employment and Migration Working Paper, No. 52, OECD, Paris.

Annex

Figure A-1: Income levels provided by cash minimum-income benefits.
Net income value in % of median household incomes, 2007



Notes: The figures shows the benefit entitlements in a situation where the recipient claims no housing costs (bottom of 'error bars') and in a situation where he or she lives obtains partial or full compensation for housing expenditures. Housing benefit calculations in this latter case are based on a uniform rent assumption across countries (20% of the average gross wage of a full-time worker), which is regarded as a "high", but not unreasonably high" rent level (see Immervoll 2009b: 13),

Source: OECD tax/benefit models (figure taken from Immervoll 2009b: 14)