



“The taxed away burden in the Spanish tax and benefit system”

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1.- Introduction

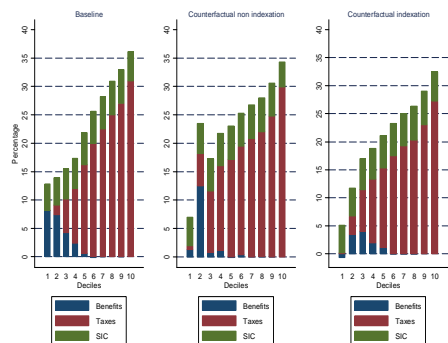
- Policy makers usually face a trade off between equity and efficiency when transferring money from rich to poor households (Adam et al., 2006)
- Since the beginning of the economic crisis tax-benefits systems have been mostly aimed at poverty and inequality reducing (De Agostini et al., 2015). They have all included austerity measures within their welfare state system.
- Several reforms have taken place in Spain between 2005 and 2012.

2.- Research questions

- How unequal the Spanish income distribution would have been in 2012 had the 2005 tax-ben rules been applied?
- How much income would have been taxed away after a marginal increase in earnings in 2012 had the 2005 tax-ben rules been applied?
- Are the redistributive policies discouraging individuals to enter the labour market or enlarging their hours worked?

4.- Main results (2)

Figure 2. Mean METR decomposition of household disposable income by deciles



- METRs grow with household disposable income. E.g., the mean METR difference between the first and last decile is about 23% in the baseline.

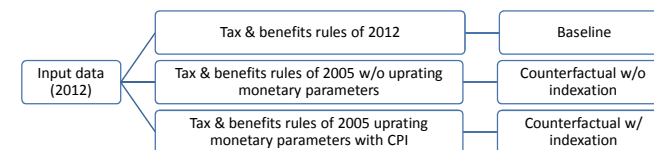
- Benefits are the key explaining factors of METRs within the first and second deciles. As we move along the income distribution the tax component becomes the most relevant.

- If 2005 tax benefits rules (w/ and w/o uprating monetary parameters) had been applied, METRs would have been lower at the top (10th decile) and the bottom (1st decile)

3.- Data and methodology

Data: The underlying micro-data are drawn from the National Living Conditions Survey (ECV) in 2012 (income year 2011).

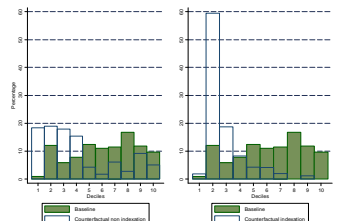
Methodology: “What if?” approach following Adam and Browne (2010). Allow us to avoid the problem of comparing different populations.



Then, we have calculated the **Marginal Effective Tax Rates (METRs)** for **working age population** after an **increase in earnings of 3%** as our financial work incentive indicator for the 3 scenarios. Inequality and poverty indicators are also obtained.

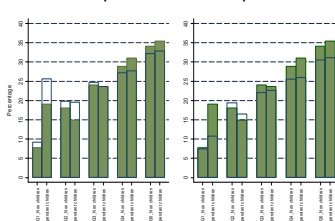
4.- Main results (3)

Figure 3. Share of working population with METR>50% by deciles



- The share of individuals with METRs higher than 50% is very low in Spain (=1% of total working age population).
- In the baseline scenario most individuals with METRs>50% are placed at the higher deciles of the income distribution. If 2005 tax benefits rules had been applied, individuals with METRs>50% would have been placed at the bottom of the income distribution.

Figure 4. Mean METR by household w/ or w/o dependent children over quintiles of household disposable income



- Individuals living in households w/ dependent children have higher METRs than individuals living in households w/o dependent children at the first quintile and at the last two quintiles.
- This difference is particularly higher at the first decile.

4.- Main results (1)

Table 1. Simulation of main changes on income inequality, poverty and financial work incentives

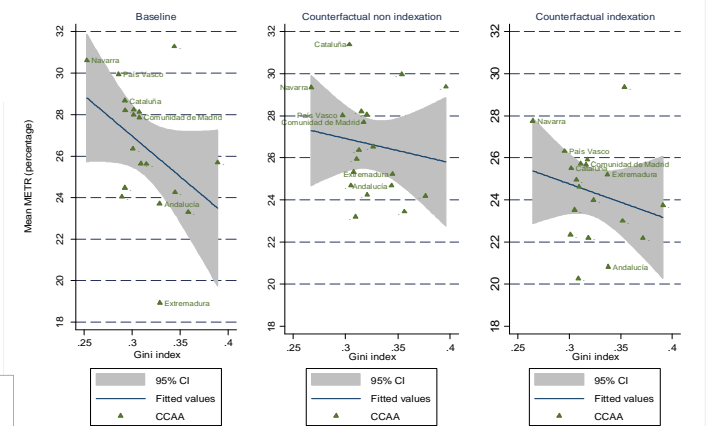
	Baseline (1)	Counterfactual non indexation (2)	Counterfactual indexation (3)	Difference (2)-(1)	Difference (3)-(1)
Inequality and poverty indicators					
Gini index	31,89 (0,0017)	33,26 (0,0017)	32,92 (0,0017)	1,37% (0,0024)***	1,03% (0,0024)***
FGT(0)	21,68% (0,0025)	22,95% (0,0025)	21,75% (0,0026)	1,27% (0,0036)***	0,08% (0,0036)
Financial work incentive indicator					
Mean METR	26,36% (36,3743)	26,12% (62,9472)	23,67% (31,5285)	-0,24%***	-2,69%***

Notes: Significance level ***p<0.01. Poverty line = 60% median. Equivalised household disposable income is taken as the income measure

If 2005 tax-ben rules (without uprating benefits and tax thresholds) had been applied in 2012, the Gini Index would have been 1,37% higher than the baseline's. Instead, mean METRs would be 0,24% lower.

In the scenario where monetary parameters are indexed according to inflation, the Gini Index is 1,03% larger than the baseline's but the mean METRs 2,69% lower.

Figure 1. Correlation between Gini index and METR over Spanish regions (NUTS2)



5.- Conclusions, limitations and extensions

Conclusions:

- The Spanish tax-ben system during the crisis yields positive redistributive effects (by implementing 2005 policies in 2012 the equity indicators would have worsen)
- Estimating the METRs as work incentives the analysis shows similar findings to previous papers and pay special attention to:
 - METR Structure (SICs, taxes and benefits)
 - HH decomposition
 - Regional behaviour
- The METR in 2012 would have been lower if the 2005 tax-ben system had been taken place (**TRADE OFF BETWEEN EQUITY AND EFFICIENCY**)

Limitations:

- METR only captures the intensive margin of labour transitions.
- A cross country comparison shows how Spain is one of the EU members with lowest METRs (Jara and Tumino, 2013)

Extensions:

- Calculate Net Replacement Rates or Participation Tax Rates to extend the analysis to the extensive margin.
- Assess the potential effect of a hypothetical in-work benefit in Spain in terms of income redistribution and work incentives.

References

- [1] Adam, S.; Brewer, M. and Shephard, A. (2006)
- [2] Adam, S. and Browne, J. (2010)
- [3] De Agostini, P.; Paulus, A. and Tasseva, I. (2015)
- [4] Jara, X. and Tumino, A. (2013)