

Income inequality and redistribution: What is the real role of taxation in Spain?

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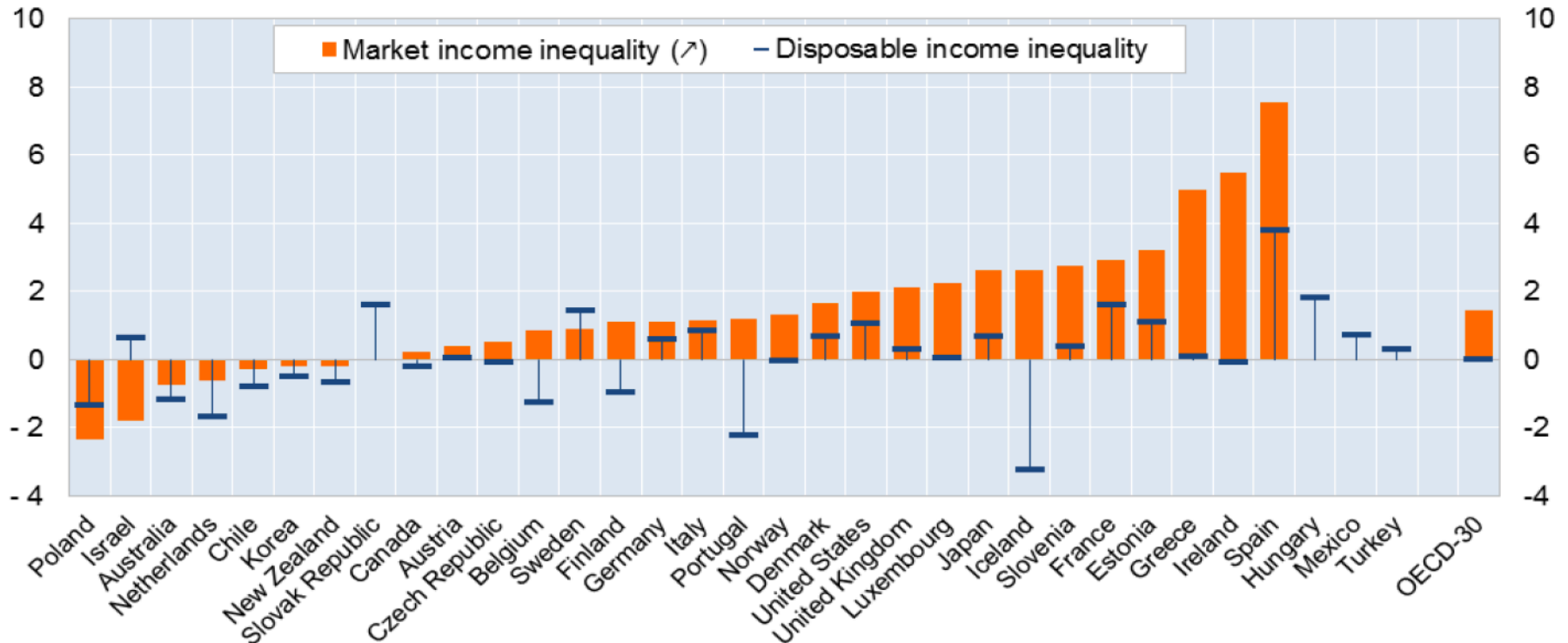
1. Introduction

- Since last global economic crisis started, data from OECD Income Distribution Database show that the distribution of pre-tax and transfer income remains significantly more unequal than it was before.
- Taxes and social transfers have rather cushioned the market income inequality increase (OECD, 2014).
- The distribution of “market income” –gross earnings and capital income– kept widening even as many countries recovered from the crisis.
- Measured by the Gini coefficient, market income inequality rose by 1 percentage point or more in 20 OECD countries between 2007 and 2011

1. Introduction

Figure 1

Changes in the Gini indexes of household market and disposable incomes (2007-2011)
(percentage points of variation)



Source: OECD (2014)

1. Introduction (OECD Countries)

- The largest increases occurred in those countries hit hardest by the crisis: Spain, Ireland, Greece, Estonia and Iceland but also in France and Slovenia.
- In Spain and Greece, inequality of market income widened considerably in the aftermath of the crisis, and kept increasing more recently as the crisis persisted: compared to 2010, it increased by another 1.5 and 3 percentage points, respectively, in 2011.
- Market income inequality also increased by more than 1 percentage point in 2011 in Germany, Luxembourg and Portugal, compared to 2010.
- By contrast, Australia, Canada, Ireland, Israel and Sweden recently reversed the trend and experienced a fall in market income inequality during 2011.

1. Introduction (OECD Countries)

- At the same time, inequality of disposable income increased by 1 percentage point or more between 2007 and 2011 only in a handful of countries while remaining stable overall in the OECD (blue dashes in Figure 1).
- Larger increases in disposable income inequality occurred in Spain (+ 4 points), as well as in France, Hungary and the Slovak Republic (close to +2 points). Germany and the United States, following a few years of stable inequality in disposable income, had a significant increase in 2011 and 2012.
- On the other hand, the slight decrease in disposable income inequality continued in 2011 in Finland, Korea, the Netherlands, Poland and Portugal. Over the whole period, the most important disposable income inequality fall in Iceland.

1. Introduction (European Union)

- In Europe, the European Union enlargement started in 2004 largely explains this increase in inequality, although it also was a remarkable income increase for the richest households in the previous Member States (Bonesmo Fredriksen, 2012).
- During the crisis, inside European Union, the inequality of disposable income has remained almost stable between 2007 and 2013, with a Gini index around 0.306 (Eurostat, 2015).
- However, there are significant differences between countries, highlighting the case of Spain, with a continuous inequality increase between 2007 (0.319) and 2012 (0.342) –the highest value since 1980–, but it has fallen slightly in 2013 (0.337).

1. Introduction (Where Spain stands?)

- These income inequality figures place Spain at the top of European countries in inequality of disposable income, behind only Serbia (0.38), Bulgaria (0,354), Latvia (0.352), Lithuania (0.346), Greece (0,344), Portugal (0.342) and Romania (0.34).
- Within the OECD, in 2011, Spain also had one of the highest levels of disposable income inequality (0,344), just below Chile (0.503), Mexico (0,482), Turkey (0.412), United States (0.389), Israel (0.377) and equalized with the UK.

1. Introduction (Where Spain stands?)

- Focusing on Spain, it should be noted that the evolution of income inequality since the eighties has been quite different from the main developed countries.
- Whereas in these countries income inequality rose very significantly in the eighties and the first half of the nineties, at the same period there was a sharp decline in Spain.
- So, the Gini index fell from 0.332 in 1985 to 0.276 in 1992, although the early nineties crisis broke this trend, reaching a Gini index of 0.296 in 1995. The economic recovery began in the second half of the nineties led to further decreases in inequality, reaching in 2001 the lowest value of the Gini index in historical series (0.267).

1. Introduction (Where Spain stands?)

- Nevertheless, we have to clarify there are discrepancies regarding the homogeneity of the Gini index values published over time. These are mainly due to different statistical series used in each study (Decennial HBS, Continuous HBS, ECHP, EU-SILC), as well as the lack of homogeneity on disposable income definitions.
- But, we can say there is a reasonable consensus about the decline of disposable income until the early twenty-first century, stabilizing then until the beginning of the Great Recession (Goerlich and Villar, 2009).
- Most studies put the stagnation in the decline of inequality in Spain from 2003, with Gini index values between 0.29 and 0.31, depending on data source used.

1. Introduction (Spain: crisis and inequality)

- The impact on income inequality of the current economic crisis in Spain has been analysed by both OECD (OECD, 2014b) and the International Monetary Fund (IMF, 2014). Both institutions found a close relationship between this income inequality increase and the huge unemployment raise suffered by our economy, as well as by the uneven behaviour shown by wages since then, especially the lowest ones.
- However, the two institutions pointed out that the tax-benefit system would be enabled to reduce significantly the disposable income inequality and poverty, highlighting the progressive nature that the process of fiscal consolidation undertaken by Spain from 2010 seems to have had.
- Thus, the fiscal consolidation measures –tax hikes and public expenditure cuts– have had, in relative terms, a greater impact on the households with higher incomes.

1. Introduction (Spain: crisis and inequality)

- Even so, it should be noted that a full assessment of the distributional effects of fiscal consolidation requires a dynamic analysis that affects the influence of the measures taken on the permanent income and the equality of opportunities, which is not easy to do, at least in the short term (Rawdanowicz *et al.*, 2013).
- So, with respect to the assessment of tax measures, this would require not only consider separately, in each year, changes in the distribution of the tax burden, but also the influence of the disincentive effects on the economic behaviour in the mid-term.

2. Redistributive impact of taxation

- Traditionally, the political constitutions of developed countries have explicitly assigned to the tax system a key role in the redistribution of income. Although literature generally finds that public spending programs are more efficient and effective to achieve redistributive goals pursued, its complementarity with taxation does not seem questionable, particularly in countries with high levels of Welfare State (Atkinson and Marlier, 2010).
- The average public spending on cash transfers (mainly public pensions, and unemployment and family benefits) explains about 75% of the public sector redistributive effect in OECD countries, while remaining 25% comes from taxes.
- Nevertheless, there are significant differences between countries in terms of size, composition and the progressivity of taxes and transfers (OECD, 2012).

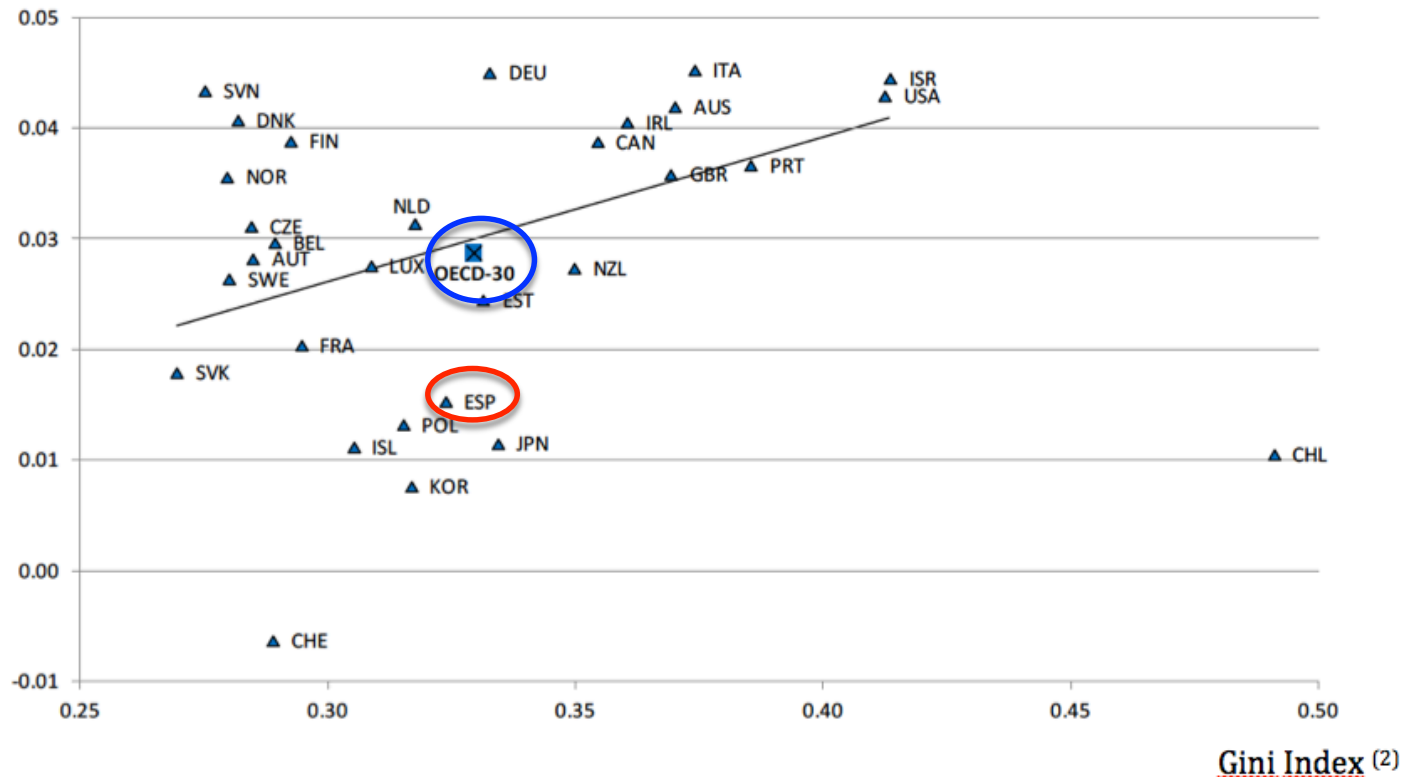
2. Redistributive impact of taxation

- The redistributive impact of the tax system can be considered relatively uniform among OECD countries, regardless of the tax burden level.
- This result reflects the fact that many countries with high tax burden have a tax-mix with a high proportion of consumption taxes and social contributions often have more progressive taxes on personal income, unlike what happens in those countries where the tax-mix is more balanced or is even more favourable to direct taxation (OECD, 2012).
- We must also take into account the gap between formal or legal and effective progressivity, mainly caused by tax expenditures, which benefit in many cases individuals with middle or high income.

2. Redistributive impact of taxation

Figure 2. The redistributive effect of household taxes and inequality (late 2000s)

Reynolds-Smolensky Index ⁽¹⁾



(1) Direct and indirect taxes paid by the households

(2) Equivalized market income, including public cash transfers.

Source: OECD (2012).

2. Redistributive impact of taxation

Figure 3. Progressivity of household taxes and inequality (late 2000s)

Kakwani Index⁽¹⁾



(1) Direct and indirect taxes paid by the households
Source: OECD (2012).

2. Redistributive impact of taxation

- As shown in Figures 2 and 3 (OECD, 2012), countries with greater market income inequality tend to have a more redistributive tax system, while taxation in countries with a greater tax burden is usually less progressive.
- The design of tax systems that help to reduce market income inequality is a growing concern of EU member states' governments, especially since the deepening economic crisis in 2009.
- In Spain, as shown López-Laborda and Sanz-Arcega (2012), there is a very positive social valuation of the tax system such an instrument to reduce income inequality. This social preference is reflected in the opinion polls since the initial tax reform of the democratic transition, in the last seventies.

2. Redistributive impact of taxation

- In comparative terms, as can be seen in Figure 2, the contribution of taxation to the redistributive effect in Spain is significantly lower than countries around us, as well as the tax burden is placed also among the lowest one.
- The tax collection weakness and its influence on the limited redistributive capacity of the Spanish tax system have been highlighted by some recent studies, in which this shortcoming is associated with the income inequality evolution from 2000s (Ayala, 2013; Ayala *et al.*, 2013).
- Thus, increasing disposable-income inequality during the crisis would coincide with the deterioration of the tax-benefit system redistributive capacity, although there was a slight recovery in 2010, essentially caused by changes in personal income tax schedules introduced (Cantó, 2013).

2. Redistributive impact of taxation

- However, the additional PIT schedules in force between 2012-2014, strongly progressives, increased the contribution of this tax to income redistribution, but the recent PIT 2015 reform has reversed it (López-Laborda *et al.*, 2015).

3. Distributional impact of the Spanish tax system (on household income)

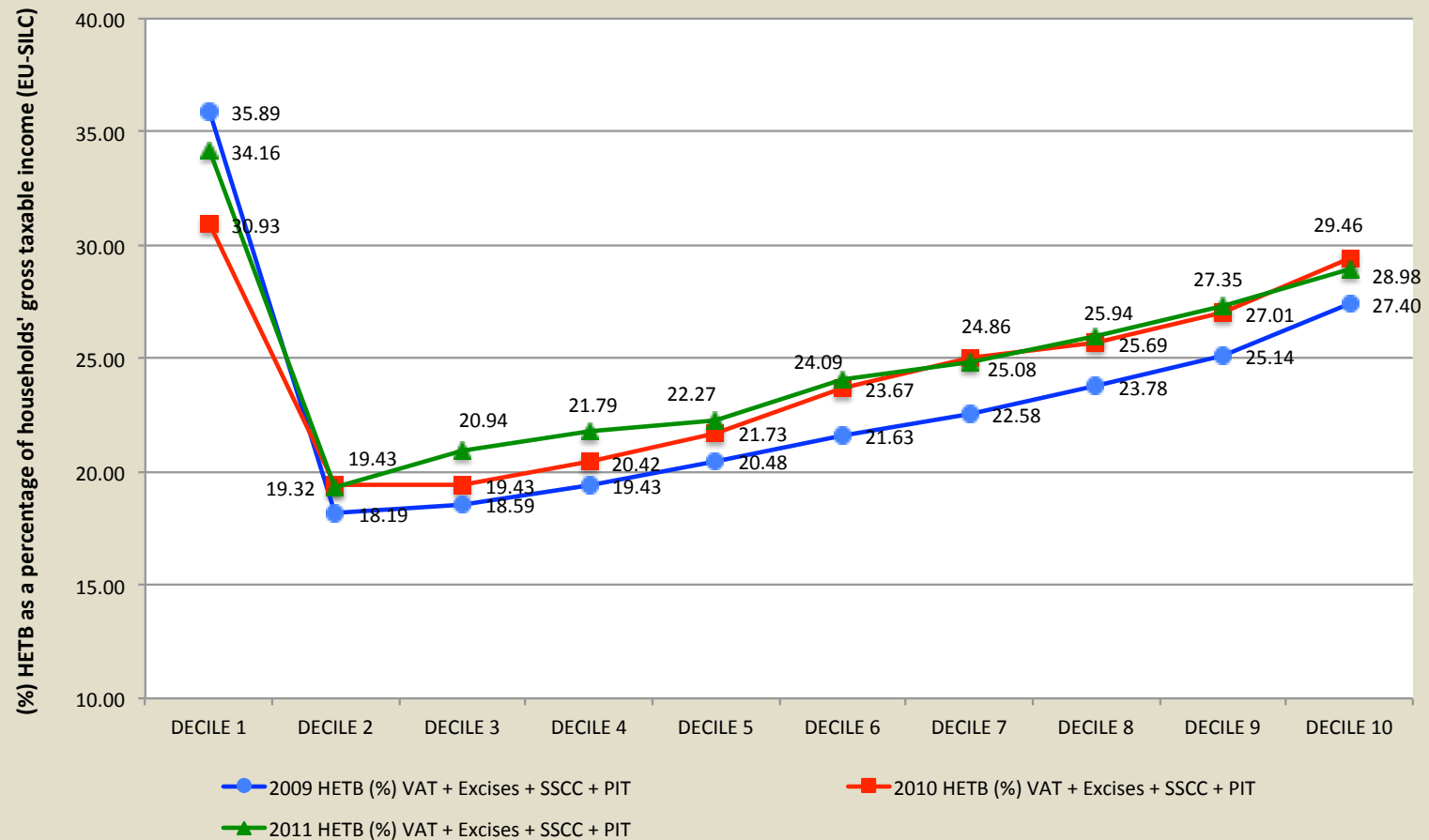
- To what extent has the Spanish tax system reduces income inequality?
- How each of the main taxes paid by households contributes to the income redistribution?
- To answer these questions we show here the results of the distributional impact analysis performed for the period 2009-2011, in which we include the main taxes that have a direct impact on Spanish households (Onrubia and Rodado, 2014)
- Our analysis includes payments made by households for VAT, Excise Duties, Personal Income Tax (IRPF) and Social Contributions paid by employees and self-employed persons. Social Contributions of employer fall outside of the analysis for incidence reasons.
- For years 2009 to 2011, we use matched-databases, where EU-SILC is the recipient-base and the HBS is the contributor-base.

3. Distributional impact of the Spanish tax system (on household income)

- The achieved results show that Spanish households' tax burden has considerably grown between 2009 and 2011, evolving average effective tax rate from 23.8% (2009) to 25.6% (2010) to 25.8% (2011).
- As is well known in Spain, behind this strong increase is essentially found the first package measures of fiscal reform adopted in 2010 to face the large and fast budget balance deterioration.
- In fact, in 2010 the marginal rates of the two PIT schedules were increased, at the same time some costly tax expenditures were limited (as the tax credit for an amount of 400 euros for workers and self-employed passed in 2008).
- Also in 2010, the reduced rate of VAT rose from 7% to 8%, and the standard rate from 16% to 18%.

3. Distributional impact of the Spanish tax system (on household income)

Figure 4. Households' effective tax burden (HETB) (Years 2009, 2010, and 2011)



3. Distributional impact of the Spanish tax system (on household income)

Table 1. Effective average tax rate and households' effective tax burden (HETB) (%)

	Deciles of Households' Gross Taxable Income										All Households
	1	2	3	4	5	6	7	8	9	10	
2009											
<i>VAT</i>	11.81	6.76	6.45	6.35	6.17	6.10	6.08	6.02	6.05	6.13	6.22
<i>Excises</i>	3.79	2.70	2.83	2.78	2.71	2.74	2.61	2.43	2.21	1.92	2.40
<i>SSCC</i>	5.00	4.25	4.74	4.87	5.00	5.32	5.11	5.05	4.42	2.79	4.24
<i>PIT</i>	15.29	4.47	4.57	5.44	6.59	7.47	8.77	10.27	12.46	16.56	10.89
Total HETB	35.89	18.19	18.59	19.43	20.48	21.63	22.58	23.78	25.14	27.40	23.76
2010											
<i>VAT</i>	10.85	7.41	6.99	7.04	6.87	6.74	6.7	6.68	6.71	6.73	6.85
<i>Excises</i>	3.33	2.78	2.85	2.82	2.74	2.74	2.62	2.46	2.22	1.94	2.42
<i>SSCC</i>	4.81	4.04	4.74	4.81	5.04	5.36	5.16	5.09	4.48	2.96	4.32
<i>PIT</i>	11.95	5.20	4.84	5.76	7.07	8.83	10.6	11.45	13.6	17.83	11.97
Total HETB	30.93	19.43	19.43	20.42	21.73	23.67	25.08	25.69	27.01	29.46	25.56
2011											
<i>VAT</i>	10.90	7.44	7.30	7.44	7.15	7.07	7.09	7.01	6.94	6.93	7.12
<i>Excises</i>	3.53	2.72	3.10	3.01	2.80	2.84	2.74	2.48	2.35	2.00	2.50
<i>SSCC</i>	5.11	4.11	4.65	4.72	4.89	5.42	5.11	5.05	4.42	2.92	4.28
<i>PIT</i>	14.95	5.15	6.02	6.78	7.58	8.95	10.14	11.65	13.94	17.51	12.18
Total HETB	34.48	19.43	21.06	21.94	22.43	24.28	25.08	26.19	27.65	29.35	26.08

3. Distributional impact of the Spanish tax system (on household income)

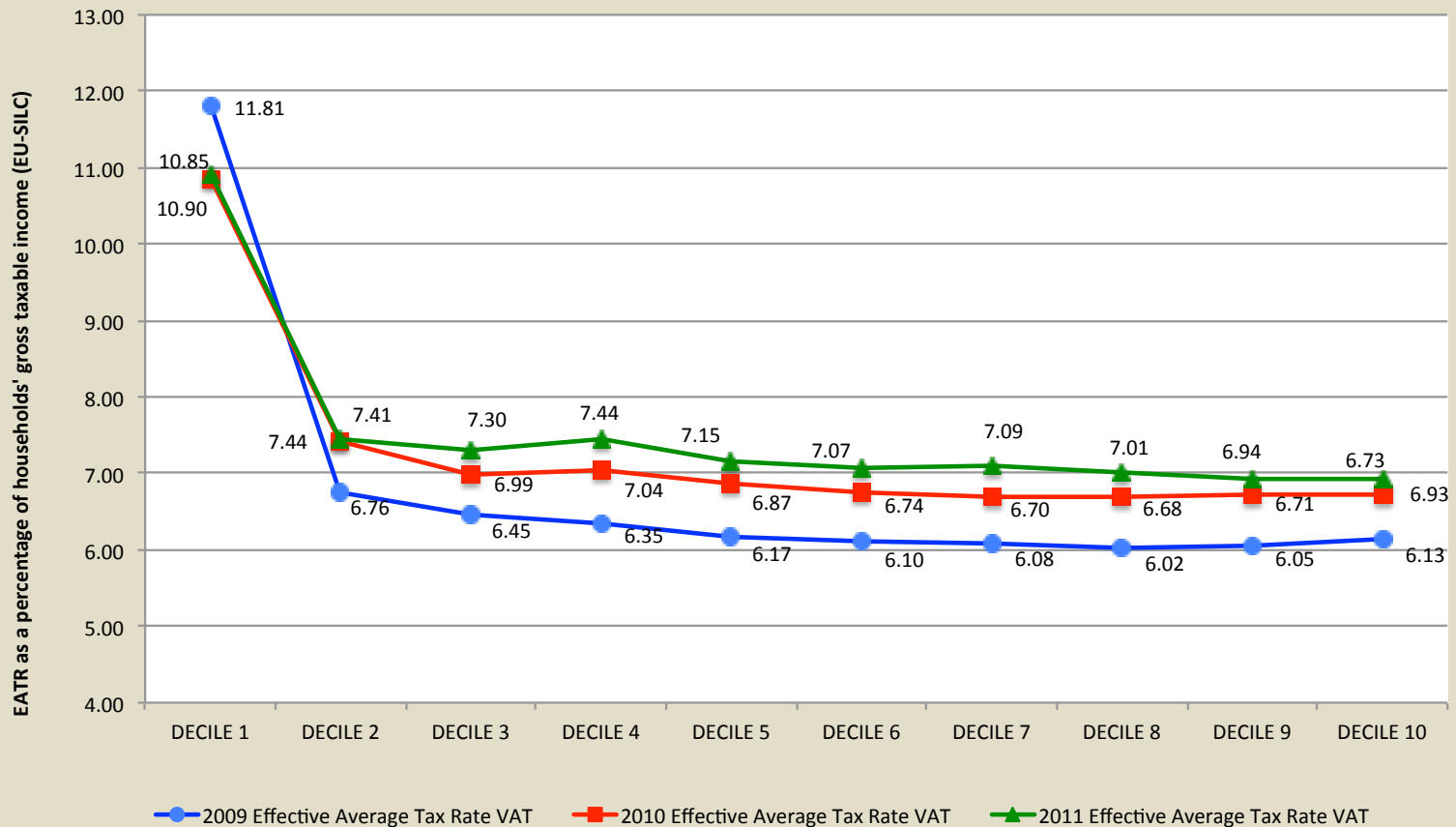
- Overall effective average tax rates increasingly evolve along the household income distribution, except in the first decile (Figure 4). Hence, this result reveals an overall progressive behaviour of the four tax figures in the three years covered.
- The obtained values for the first decile are affected by the usual statistical income and expenditure measurement problems in the very low-income households.
- However, if we disaggregate by taxes the results are very different in terms of progressivity, although they are expected according to the theoretical and empirical public finance literature.

3.1. Distributional impact of the Spanish VAT

- In the case of VAT (Figure 5), for the three years analysed, the effective average tax rate slightly decreased from decile 2 to decile 8 (with a slight upturn in decile 4), stabilizing henceforth (while in 2011 this reduction occurs up to the last decile).
- This result reflects a moderately regressive behaviour of the VAT, in line with evidence from the literature.
- From an overall distributive perspective, this regressivity is confirmed by the negative value of the VAT Kakwani index in the three years analysed: $-0,0228$ in 2009, -0.0191 in 2010, and $-0,0200$ in 2011.
- Should be noted that VAT rates rise in force since July 2010 coincides with a slight attenuation of the regressivity, although the negative redistributive effect of VAT remained in the three years studied, contributing to an annual inequality worsening around 0.0015 Gini points.

3.1. Distributional impact of the Spanish VAT

Figure 5. VAT effective average tax rates (Years 2009, 2010, and 2011)

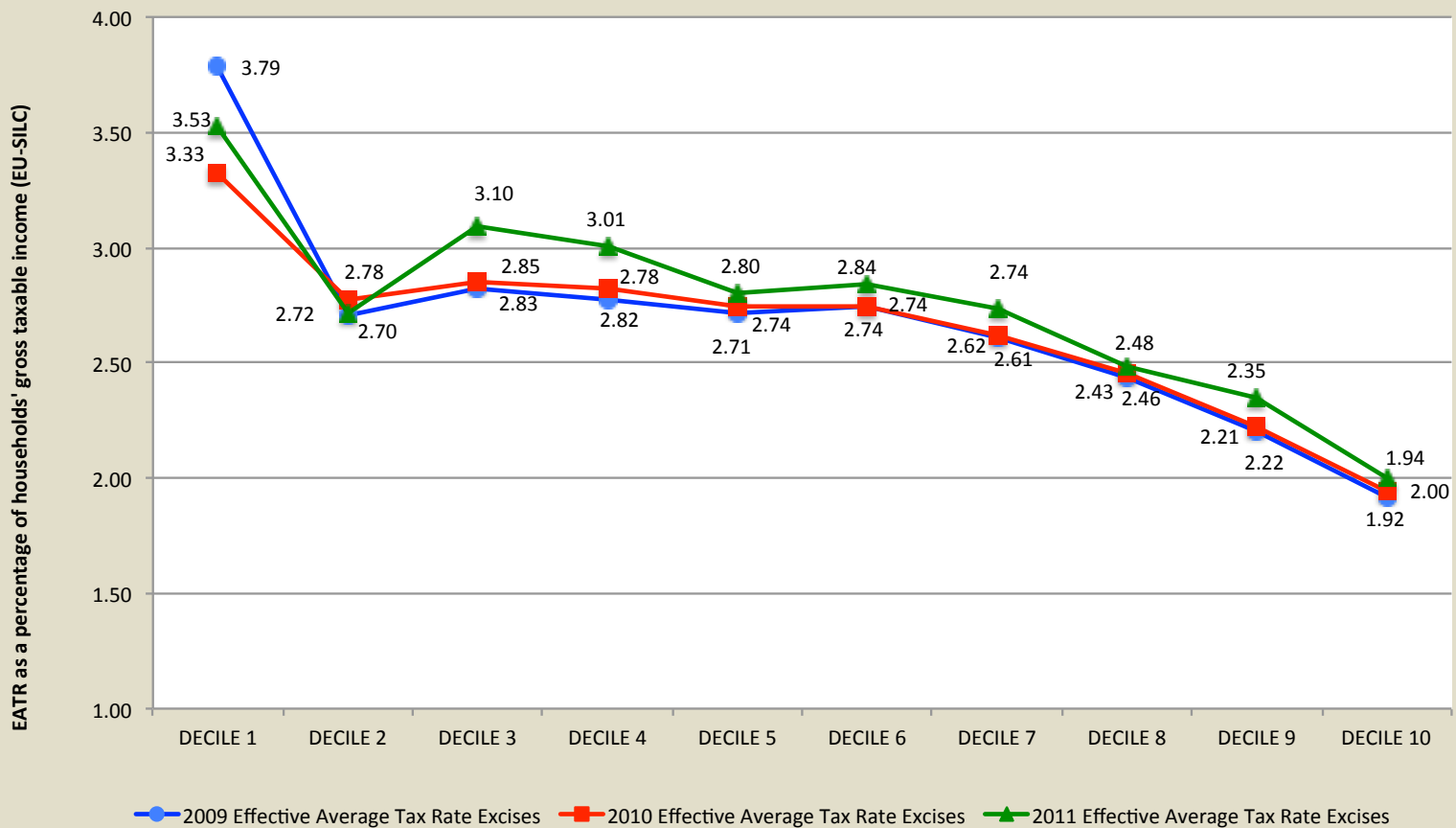


3.2. Distributional impact of the Spanish Excise Duties

- As regards excise duties (energy, tobacco, alcoholic beverages, etc.), the effective average rates ranged from 2.4% in 2009 and 2.5% in 2011, exceeding 3% for the second and third decile. In general, for excise duties, we can say the average tax burden remained stable throughout the whole period. The slight increase in 2011 was mainly due to some minor changes in the legal rates levied on cigarettes and other tobacco products.
- In the three years, the effective average rates of excise duties continuously decreased from the third decile (Figure 6), even though this decline is more pronounced for VAT, especially from the decile seven. Therefore, we have again a set of regressive consumption taxes, as the literature on taxation traditionally shows.
- This regressivity is reflected in the negative Kakwani index values, which barely fluctuate in the period (-0.0688 in 2009, -0.0669 in 2010, and -0.0694 in 2011).

3.2. Distributional impact of the Spanish Excise Duties

Figure 6. Excise duties effective average tax rates (Years 2009, 2010, and 2011)

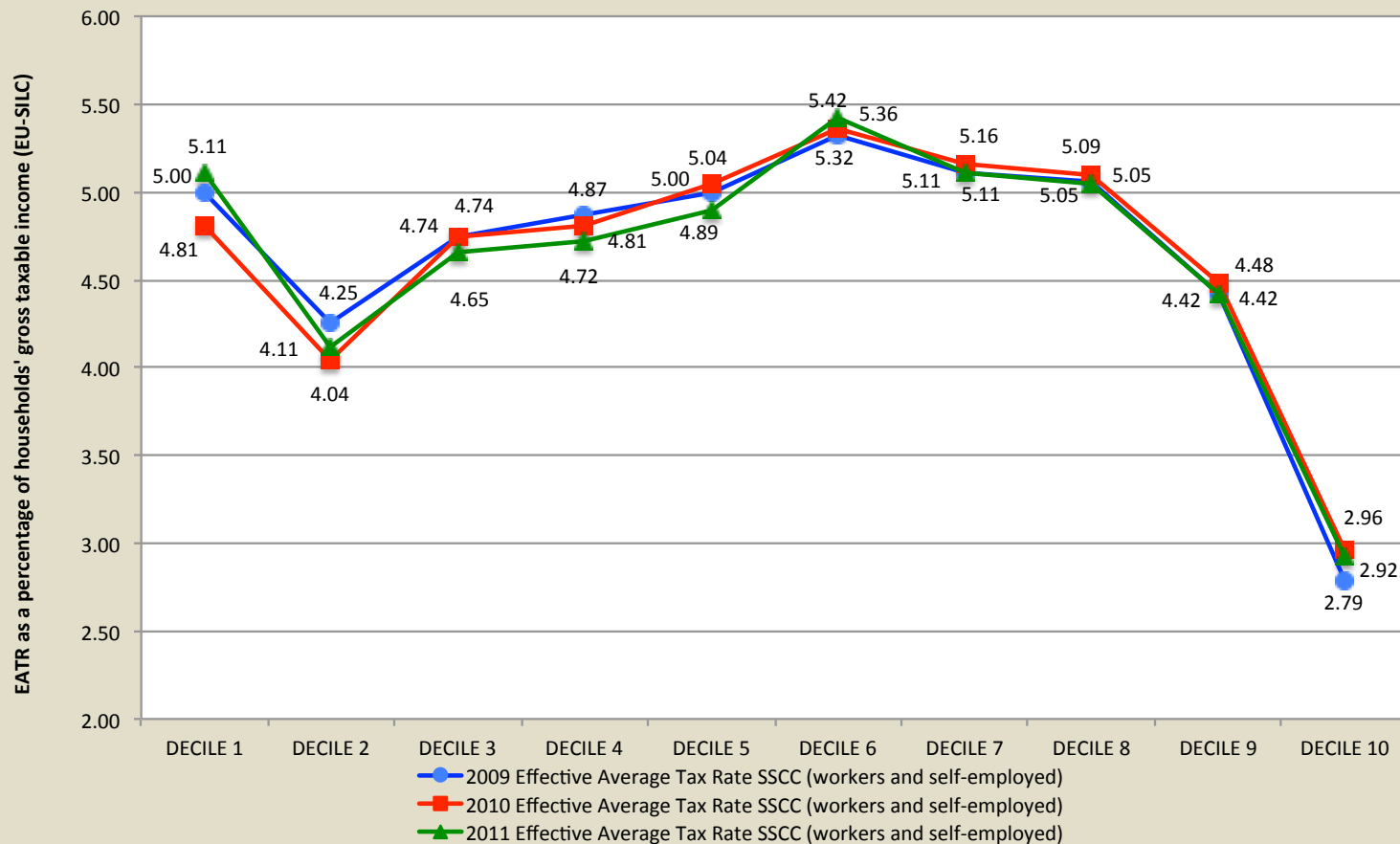


3.3. Distributional impact of the Spanish Social Contributions of workers and self-employed

- Our analysis for Social Contributions is limited to payments made by workers and self-employed persons, which represents approximately one-third of the total. The remaining two thirds are paid by employers (Their incorporation to analysis require to establish tax incidence assumptions).
- So, we contrast the formally proportional indirect tax structures become, in fact, regressive taxes and therefore unequalizing, as a result of the decreasing pattern that average propensity to consume shows.
- During the period, the effective average rates of Social Contributions were altered barely: 4.24% in 2009, 4.32% in 2010, and 4.28% in 2011. We cannot overlook that throughout the analysed period, the high unemployment rates have considerably influenced on the revenues provided by this fiscal instrument.

3.3. Distributional impact of the Spanish Social Contributions of workers and self-employed

Figure 7. Social Contributions Effective average tax rate (workers and self-employed). (Years 2009, 2010, and 2011)



3.3. Distributional impact of the Spanish Social Contributions of workers and self-employed

- During the three years covered, the behaviour of the effective average tax rates along the households' income deciles shows two clearly differentiated patterns (Figure 7).
- If we exclude the first decile for the reasons already discussed, we observed in the three years an effective average tax rates increase from the decile 2 to 6, in which households bear the greatest average burden (around 5.4 % of household gross taxable income).
- From sixth decile, the average tax rates decrease intensely from the decile 8, reaching the effective rate for the last decile below 3%.
- Given statutory rates are nearly proportional, this pattern of regressivity is mainly explained by two reasons: First, the existence of an upper limit on the contribution bases (around 3,200 euros per month in 2011); Second, the loss of relative weight of salary income as households' income grows, which is especially outstanding in the last two deciles.

3.3. Distributional impact of the Spanish Social Contributions of workers and self-employed

- Consequently, the Kakwani index shows that the Social Contributions are the most regressive instrument of the four analysed, with values of -0.0855 in 2009, -0.0715 in 2010, and -0.0725 in 2011.
- In terms of distributional impact, this strong regressivity has contributed to increase income inequality 0.0038 in 2009 and 0.0032 in 2010 and 2011.

3.4. Distributional impact of the Spanish Personal Income Tax (IRPF)

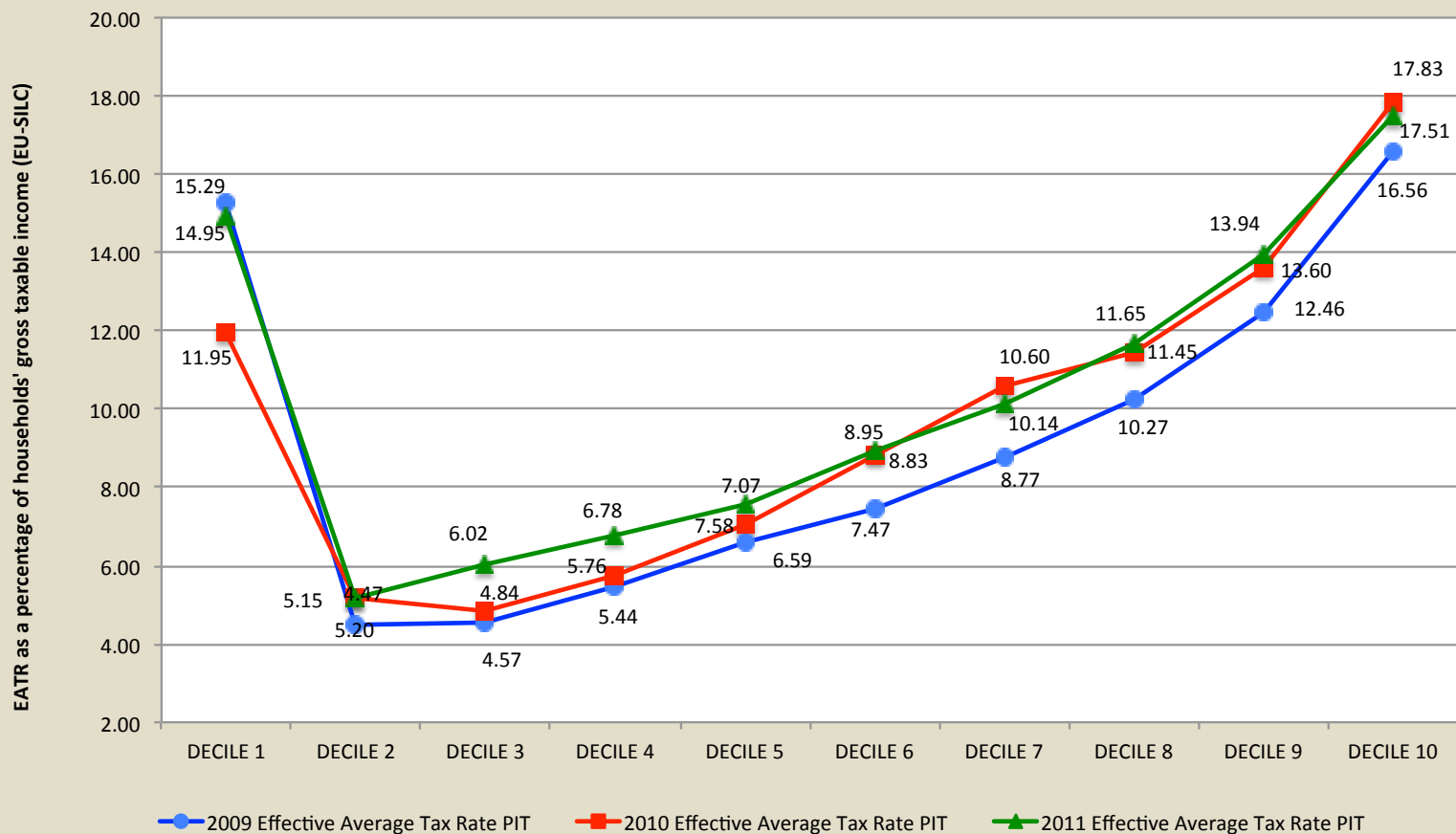
- The PIT is the second source of public revenues in Spain, only surpassed by the total Social Security Contributions.
- In the three years considered, the PIT effective average tax rate for Spanish households was 10.89% in 2009, 11.97% in 2010 and 12.18% in 2011.
- As mentioned above, this sharp increase was essentially due to partial-reform measures applied in 2010, which significantly increased the marginal rates, while also eliminated some tax credits.
- We must clarify that these average tax rates are lower than those usually shown in tax statistics. The explanation lies in the different income definition used, household's income versus personal adjusted gross income.

3.4. Distributional impact of the Spanish Personal Income Tax (IRPF)

- From a distributional perspective (Figure 8), the effective average tax rates of PIT are increasing with the average households' gross taxable income reflected in deciles, as would be expected given the progressive nature of PIT structure.
- At this result, we should highlight the strong increase in average rates from the eighth decile: 6.3 points in 2009 (from 10.27% to 16.56%), 6.4 points in 2010 (from 11.45 % to 17.83%), and 5.9 points in 2011 (from 11.65% to 17.51%).
- Once again remember herein the problems discussed above for the first decile, especially generated in this tax, caused by the existence of withholding unreimbursed, although its average amount per household is very small.
-

3.4. Distributional impact of the Spanish Personal Income Tax (IRPF)

Figure 8. Personal Income Tax Effective Average Tax Rate (Years 2009, 2010, and 2011)



3.4. Distributional impact of the Spanish Personal Income Tax (IRPF)

- Overall progressivity of PIT through the Kakwani index reflects the undoubted progressive behaviour of this tax.
- However, should be noted that the positive values of the Kakwani index decreased in the period analysed. Being especially important progressive loss of the last year (0.1722 in 2009, 0.1707 in 2010, and 0.1521 in 2011).
- Given that PIT reforms passed between 2010 and 2011 were quite irrelevant, we think this result may be mainly due to the changes in the households' taxable income distribution: both by inequality increase (Gini index rises from 0.3678 to 0.3733), and by the variations in the amount and relative composition of income sources.
- Without forgetting the distributional impact that would have had tax evasion.
-

3.4. Distributional impact of the Spanish Personal Income Tax (IRPF)

- Regarding to the income inequality reduction, we have seen the income tax is the only one tax with positive contribution.
- The Reynolds-Smolensky index reveals that its redistributive effect remained almost constant from 2009 to 2011, around 0,019 points of the Gini index.
- Nonetheless, it should be noted that in 2010 the aforementioned partial PIT reform significantly increase the effective average rate (from 10.9% to 12%), which allowed to offset the loss of global progressivity, even enhances its redistributive effect, from 0.0188 to 0.0205.
- However, this redistributive improvement was lost in 2011 due to the mentioned significant progressivity reduction.
-

4. What is new in our analysis?

- The achieved results in our study are in line with those obtained in other studies carried out for Spain, with different methodologies, but under the common denominator of taking as reference income from household's income and budget surveys (Calonge y Manresa, 1997, 2001; Avellaneda y Sánchez-Maldonado, 2002). However, all these studies mostly reach the nineties decade.
- In a much more recent paper using the simulator *FUNCASindi* with data from the HBS 2010, Romero *et al.* (2013) found "a slight progressivity" for VAT between 2009 and 2012 (Kakwani index between 0.0420 and 0.0396), which leads to a positive redistributive effect, measured by the R-S index, between 0.0033 and 0.0039. The most plausible explanation for this surprising result for VAT is that the analysis was performed using the household expenditure "as a proxy of income", excluding any correction on the average propensity to consume with respect to household income.

4. What is new in our analysis?

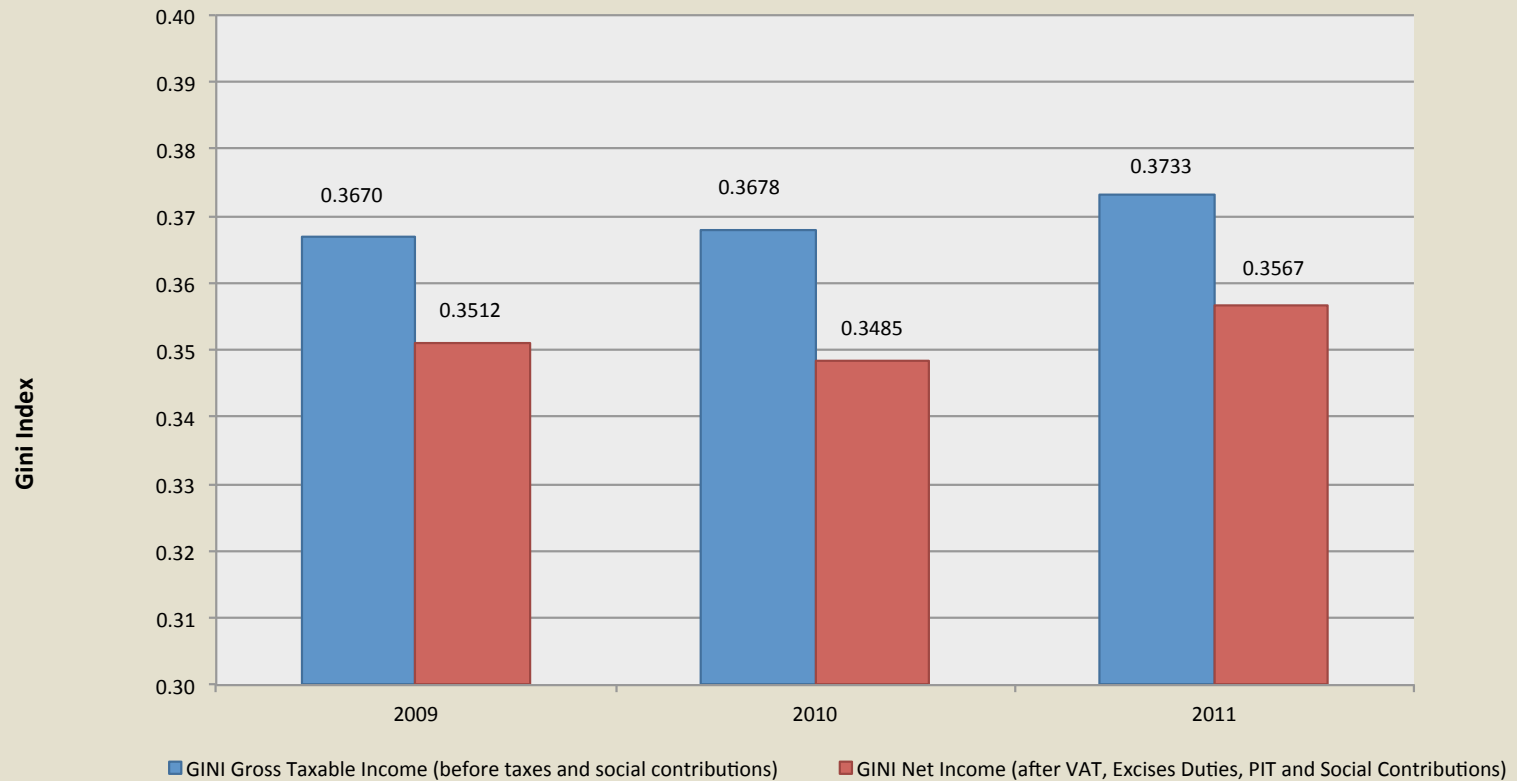
- Using EUROMOD (with data from the EU-SILC waves for Spain) Cantó (2013) analyses the redistributive impact of social benefits system and personal income tax and social contributions of workers and self-employed for the 2005-2011 period.
- The progressivity and redistribution results for the PIT and Social Contributions are consistent with those obtained in our study.
- In the case of PIT, Cantó (2013) obtains a positive contribution to inequality reduction, due to the progressive performance of this tax, strengthened from 2010 after raising marginal tax rates, while social contributions for workers and self-employed shows a regressive behaviour, with a moderately inequalizing impact.

5. Concluding remarks

- In view of the results obtained, we can answer the question we asked at the beginning of the presentation: What has been the redistributive impact caused by the taxes paid by Spanish households during the crisis years?
- The first consideration we can draw from the analysis is the tax system as a whole has performed progressively in all covered years, in regard to the four great taxes with direct impact on households' income. As we have seen, this involves a contribution to the reduction of households' income inequality before taxes and social contributions (Figure 9).

5. Concluding remarks

**Figure 9. Spanish Household's income inequality (before and after taxes and social contributions)
(Years 2009, 2010, and 2011)**



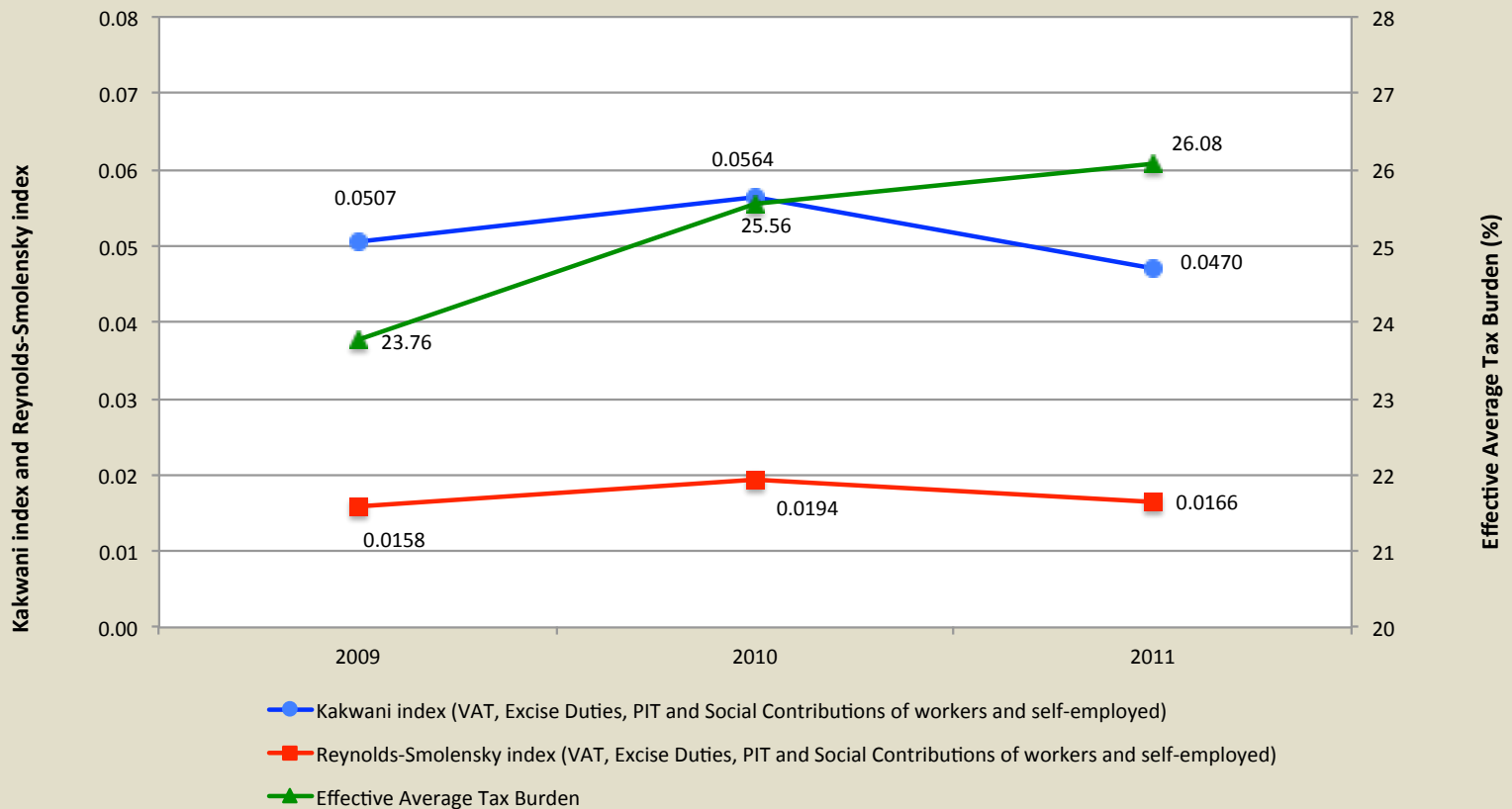
5. Concluding remarks

Table 2. Progressivity, redistributive effect and effective average tax burden

Year	Gini index of Gross Taxable Income	Gini index of Net Income	Concentration index of taxes and SSCC	Δ (%)	Kakwani index	Δ (%)	Reynolds-Smolensky index	Δ (%)	Effective Average Tax Burden (%)	Δ (%)
<i>VAT + Excise Duties + PIT + Social Contributions of workers and self-employed</i>										
2009	0.3670	0.3512	0.4177	...	0.0507	...	0.0158	...	23.76	...
2010	0.3678	0.3485	0.4242	1.6	0.0564	11.2	0.0194	22.8	25.56	7.5
2011	0.3733	0.3567	0.4203	-0.9	0.0470	-16.7	0.0166	-14.4	26.08	2.0
<i>VAT</i>										
2009	0.3670	0.3685	0.3441	...	-0.0228	...	-0.0015	...	6.22	...
2010	0.3678	0.3692	0.3487	1.3	-0.0191	16.2	-0.0014	6.7	6.85	10.0
2011	0.3733	0.3748	0.3532	1.3	-0.0200	-4.7	-0.0015	-7.1	7.12	4.0
<i>Excise Duties</i>										
2009	0.3670	0.3687	0.2982	...	-0.0688	...	-0.0017	...	2.40	...
2010	0.3678	0.3695	0.3009	0.9	-0.0669	2.8	-0.0017	0.0	2.42	0.7
2011	0.3733	0.3751	0.3039	1.0	-0.0694	-3.7	-0.0018	-5.9	2.50	3.4
<i>Social Contributions of workers and self-employed</i>										
2009	0.3670	0.3708	0.2814	...	-0.0855	...	-0.0038	...	4.24	...
2010	0.3678	0.3711	0.2963	5.3	-0.0715	16.4	-0.0032	15.8	4.32	1.8
2011	0.3733	0.3765	0.3008	1.5	-0.0725	-1.4	-0.0032	0.0	4.28	-1.0
<i>PIT</i>										
2009	0.3670	0.3482	0.5391	...	0.1722	...	0.0188	...	10.89	...
2010	0.3678	0.3474	0.5386	-0.1	0.1707	-0.9	0.0205	9.0	11.97	9.9
2011	0.3733	0.3547	0.5254	-2.5	0.1521	-10.9	0.0186	-9.3	12.18	1.8

5. Concluding remarks

Figure 10. Global progressivity, Redistributive effect and Spanish Households' tax burden (Years 2009, 2010, and 2011)



5. Concluding remarks

- However, this contribution to the redistribution has not been the same in each of the three covered years. While between 2009 and 2010 the overall progressivity of the tax system significantly rose (Kakwani index increased from 0.0507 to 0.0564), in 2011 it suffered a sharp decline, reaching the index value at 0.0470, lower than 2009 (Figure 10).
- Loss of overall progressivity was not offset by the increase in the effective average tax burden, which caused redistributive effect reduction of the Spanish household's tax system.
- In other words, this reduced his ability to reduce households' gross income inequality. After the improvement of 2010 (with 0.0194 reduction points in the Gini index, compared to 0.0158 in 2009), in 2011 the reduction returned to a level similar to 2009 (0.0166 points).

5. Concluding remarks

- The results allow us to conclude that personal income taxation remains the most suitable tax instrument for fighting against the growing income inequality in our developed societies.
- With regard to the balance between direct and indirect taxation, the results available in the literature highlight the importance of finding a balance in the “tax-mix”. But, we should not forget that the only contribution to tax redistribution comes to progressive PIT.
- In choosing the tax-mix, comparative tax systems show different combinations of progressivity and tax burden, where the consumption taxation regressivity (and by the social contributions) are usually offset by the PIT progressivity.



Thank you very much