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# Social Observatory of "la Caixa"

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April 2020

## The redistributive effects of the **system of taxes and transfers in Europe**

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The redistributive capacity of Spain's tax and transfer system is among the lowest in the European Union and is particularly limited in the case of social contributions and policies for combatting social exclusion. Possible reforms in both areas by assuming an increase in spending, which is studied in this report by simulations, would lift the Spanish welfare state to levels of redistribution similar to that of the European average.

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**Amadeo Fuenmayor**  
**Rafael Granell**  
**Teresa Savall**

Universitat de València



**"la Caixa" Foundation**

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## Credits

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## Research and writing of report

Amadeo Fuenmayor, Rafael Granell  
and Teresa Savall

Universitat de València

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This issue forms part of the Collection  
"Reports on the **Redistributive Economy**"  
which is made up of the following publications:

- **The redistributive effects of social benefits and taxes: a review of the current situation**

Luis Ayala, UNED and Equalitas, and Olga Cantó, Universidad de Alcalá and Equalitas

- **The redistributive effects of the system of taxes and transfers in Europe**

Amadeo Fuenmayor, Rafael Granell and Teresa Savall,  
Universitat de València

- **The redistributive effects of family policies**

Olga Cantó and Andrea Sobas, Universidad de Alcalá

- **The redistributive effects of special taxes**

José M. Labeaga, UNED

- **The redistributive effects of wealth tax**

José María Durán and Alejandro Esteller, Universitat de Barcelona  
and Institut d'Economia de Barcelona

## Summary

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The redistributive capacity of the Spanish taxes and transfers system is among the lowest in the European Union (EU-28), with a reduction of 0.194 points in the Gini index, whereas the European average is 0.209 points. This puts Spain in sixteenth position among the 28 states of the European Union.

In the case of income substitution benefits (unemployment, retirement, survivor, illness and disability), the redistributive effect is greater than the EU average: Spain occupies ninth position. However, in the case of guaranteed minimum income benefits (family, social exclusion, education and housing), Spain lags far behind the EU-28 average, occupying the bottom position.

Especially serious problems are detected in contributions to Social Security, which worsen income distribution, and in the policy against social exclusion. Therefore, by way of two simulations, we analyse possible modifications to social contributions and to guaranteed minimum income benefits.

For Social Security contributions, our proposal has taken inspiration from the Belgian system while for guaranteed minimum incomes, our proposal is to achieve effective application of the existing regulations, guaranteeing 100% of the minimum income for all those people who would have the right to receive it.

## Main ideas

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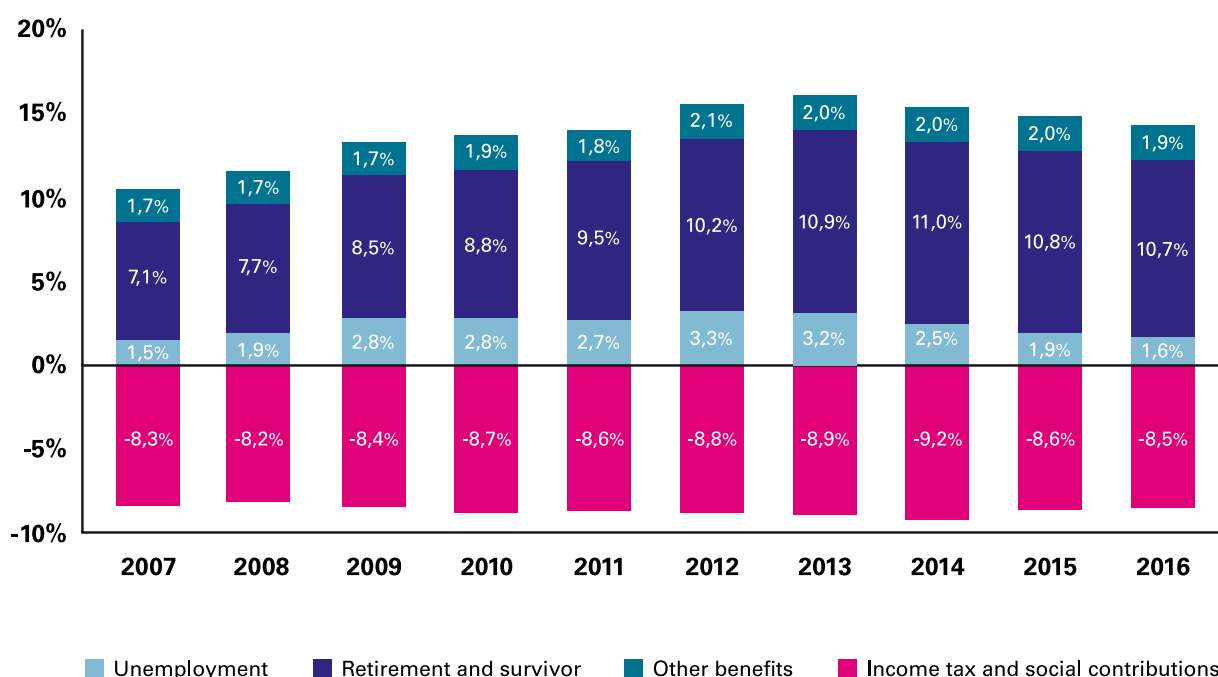
- // Spending on public transfers in Spain during the 2007-2016 period shows a marked anti-cyclical nature, increasing during the worst years of the crisis. Prominent because of the volume they represent are retirement and survivor benefits, followed by unemployment benefits.
- // The distribution of market incomes worsens as a consequence of the crisis. However, taxes and public transfers, in general, have a powerful redistributive effect.
- // From the perspective of both income and that of spending, Spain is set within the context of a Mediterranean welfare model, characterised by revenues and transfers representing a GDP percentage lower than the European average.
- // With respect to income, the redistributive potential of Spanish income tax (IRPF) is slightly above that average. However, the Spanish system of social contributions etc. does not favour income distribution, with Spain being the only country in the European Union where this does occur.

- // Spain presents serious problems in the set of guaranteed minimum income benefits (family, social exclusion, education and housing), and is positioned very much lower than the EU-28 average. Spending and the redistributive effect are especially reduced in family policies and in policies against social exclusion.
- // The proposals for change analysed here would situate Spain within the range of the EU-28: a scenario of modifications of social contributions towards a model closer to that of Belgium, and a scenario of modifications in minimum incomes towards the complete implementation of the current system.

## Taxes and benefits in Spain. The country has not recovered the degree of redistribution that existed prior to the crisis

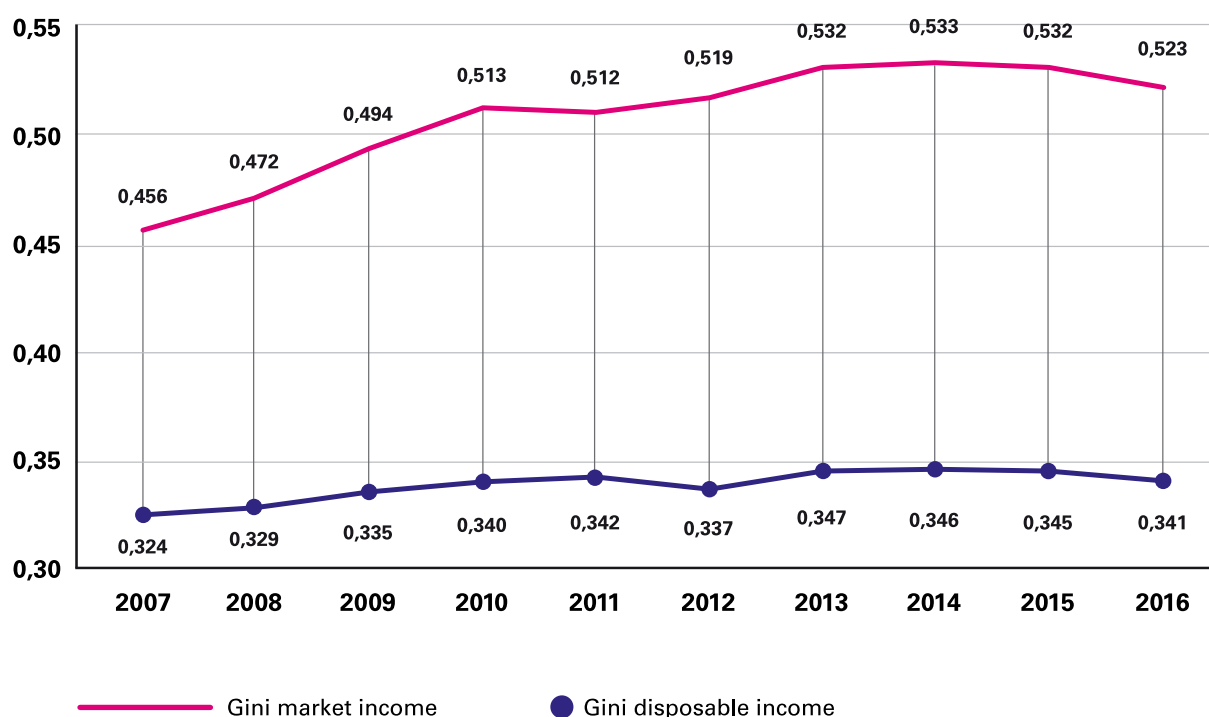
Cash benefits in Spain (the positive part of the bars in the graph) show a marked anti-cyclical nature, increasing in the worst years of the crisis. Prominent because of the volume they represent are retirement and survivor benefits, followed by unemployment benefits. The rest of transfers (illness, disability, family, social exclusion, housing and education) barely reach 2% of GDP. Personal income tax (IRPF) and social contributions (negative section of the graph) are more stable over time and their amount is lower than that of cash benefits.

Figure 1. Benefits received and Taxes paid by households (% of GDP)



The distribution derived from market income worsened during the crisis, as shown by the evolution of the Gini Index up to 2014. From 2015, a slight improvement in the distribution occurs. However, both the taxes and social expenditure have, in general, a powerful redistribution effect. As a consequence of these policies, the distribution of disposable income is more equal than that of the market, although the disposable income of the richest 10% of the population is up to fourteen times greater than that of the poorest 10%. In any event, the Gini index has not recovered its level prior to the last crisis.

**Figure 2. Gini indexes and the redistributive effect of Benefits and Taxes.**

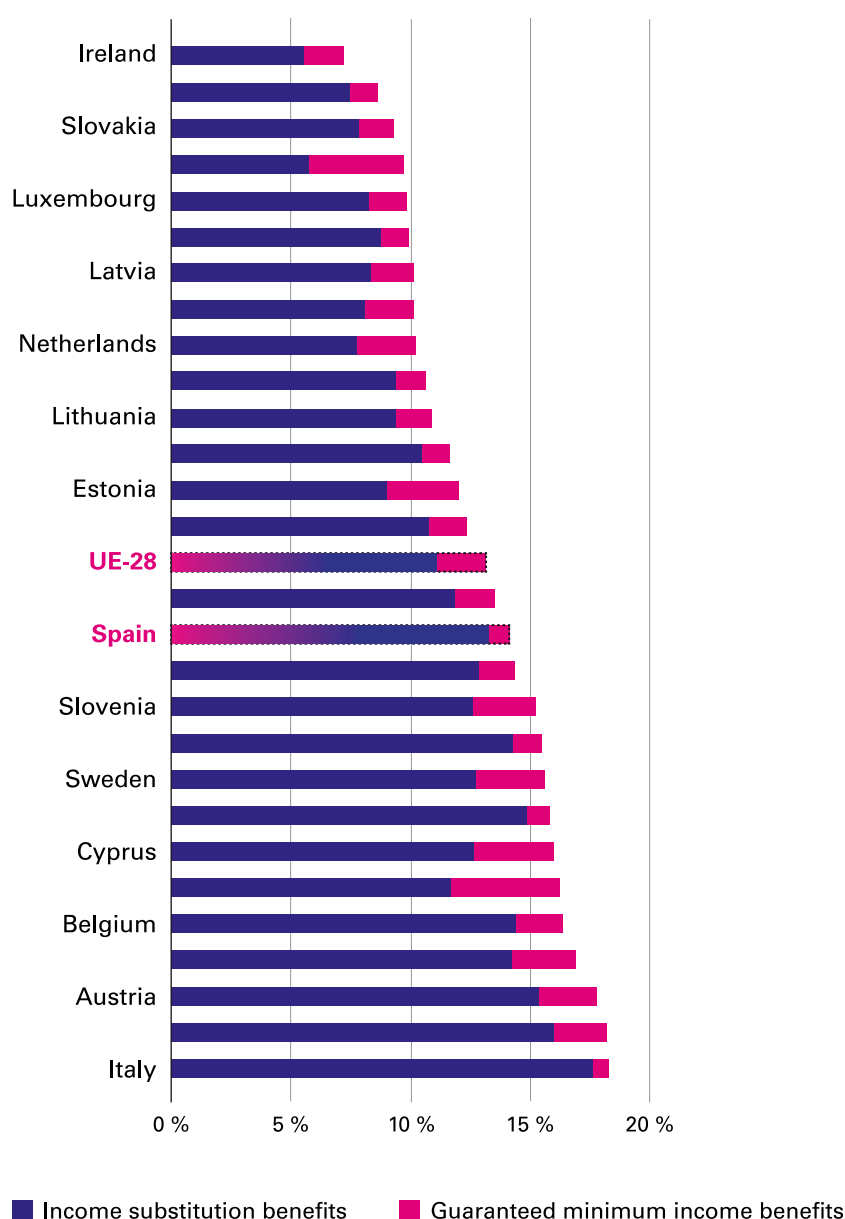


## Lights and shadows of Spain in the European environment. Pensions and income tax (lights), Social Security contributions and guaranteed minimum income benefits (shadows)

The volume of total spending on cash benefits as a percentage of the GDP summarises the effort made by each country in trying to correct inequality. It is one of the determining factors of the redistributive power of benefits systems. The data and simulations presented below have been prepared with EUROMOD, a model of microsimulation of taxes and benefits of the European Union.

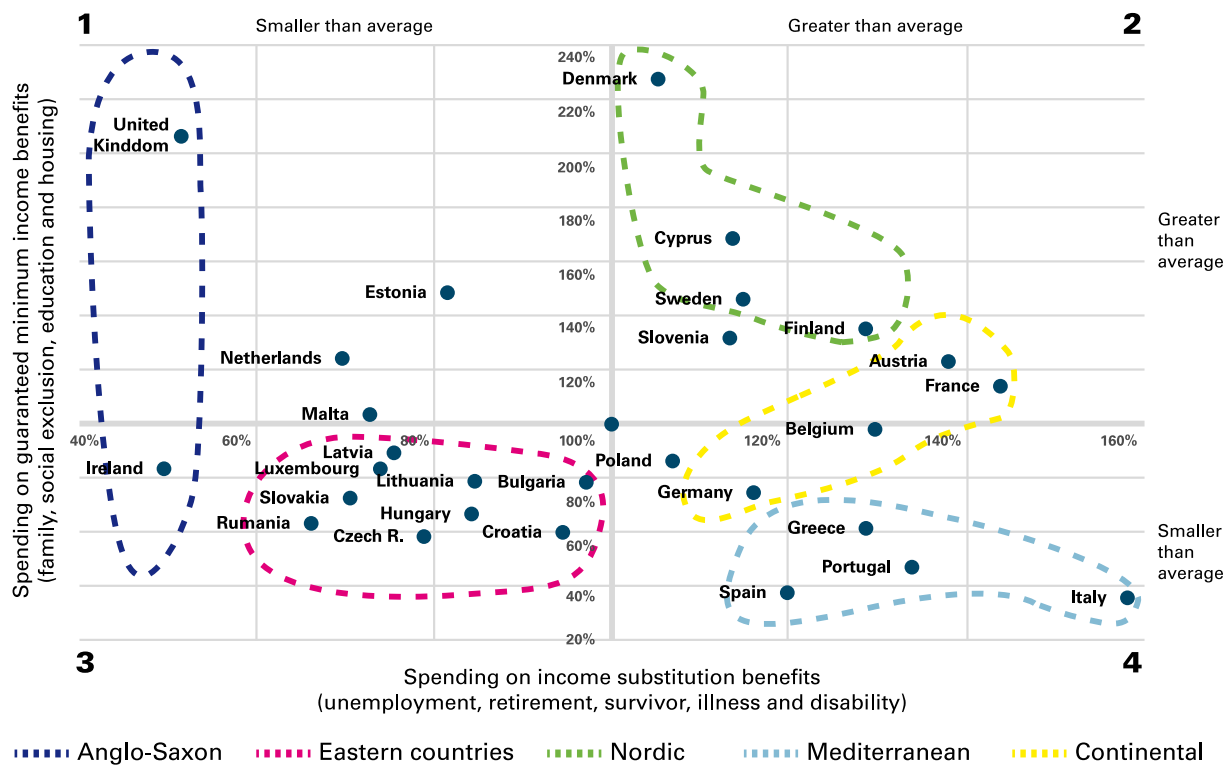
In 2018, Spain stood in thirteenth place among the countries of the EU according to this indicator, i.e. slightly above the average. Income substitution benefits (unemployment, retirement, survivor, illness, and disability) have a greater weight than guaranteed minimum income benefits (family, social exclusion, education and housing).

Figure 3. Cash benefits as a percentage of GDP among the EU-28, 2018



We can distinguish five models of countries. The Nordic countries have a high level of spending in terms of both guaranteed minimum income benefits and income substitution benefits. In Eastern European countries, the volume of spending is lower than the EU-28 average for both types of benefits. The Mediterranean and continental countries have a similar behaviour (above average) in income substitution benefits, but in guaranteed minimum income benefits they show divergencies. The continental countries are situated approximately at the average spending level of the EU-28, but the Mediterranean countries are clearly below. Finally, the Anglo-Saxon countries assign proportionally higher spending on guaranteed minimum income benefits than on income substitution benefits.

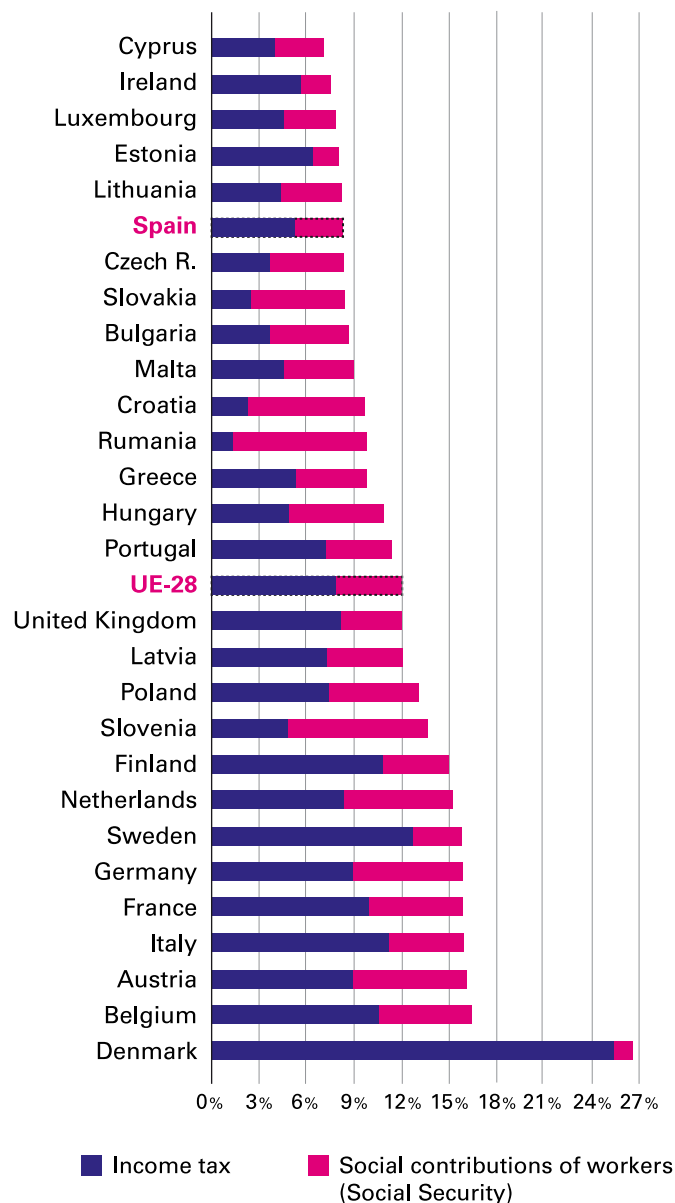
**Figure 4. Distribution of spending according to benefit type (2018 deviation with respect to EU-28 average)**



With respect to revenues, those corresponding to income tax and social contributions of workers in Spain is low in comparison with the European average, at below 9% of GDP. Only Cyprus, Ireland, Luxembourg, Estonia and Lithuania are situated below Spain. At the other extreme, Denmark is the country with the highest revenues, achieving close to 27% of GDP.

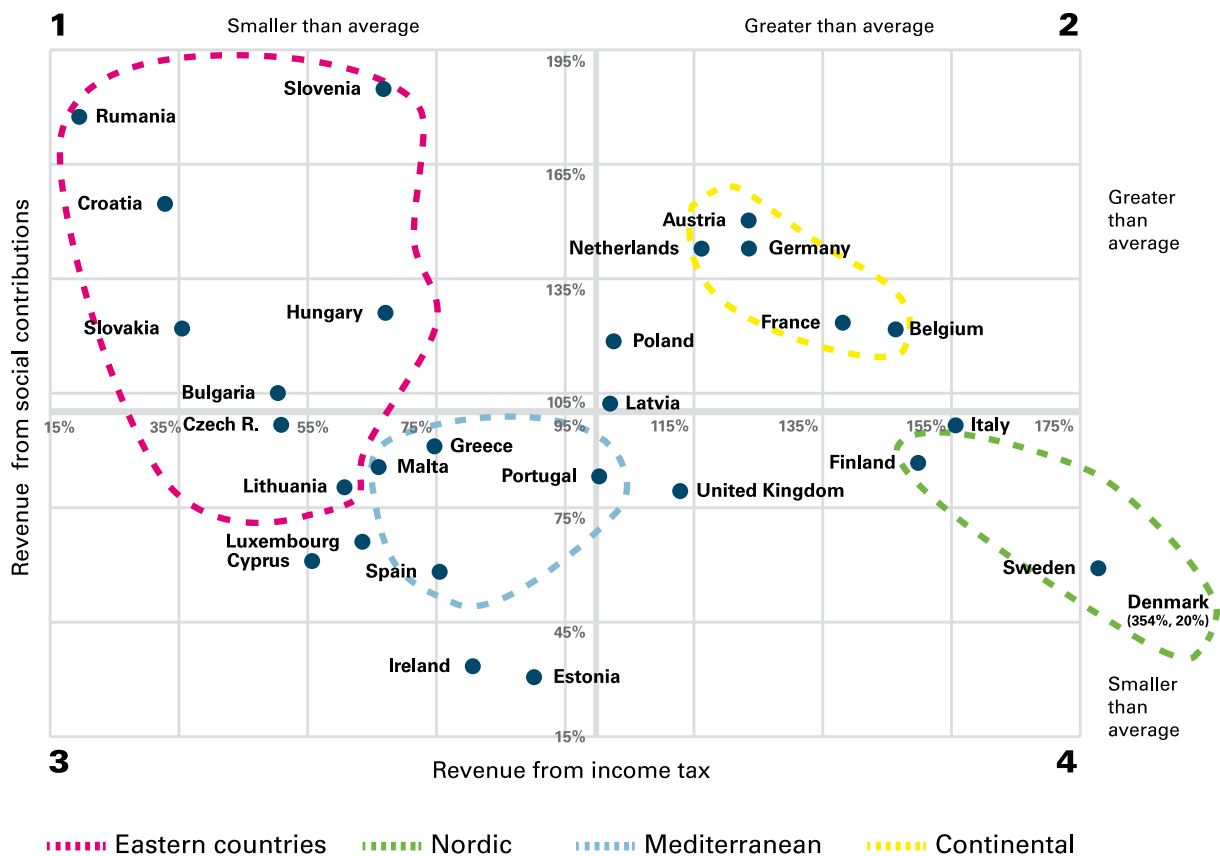
With regard to the weight of the income considered, it is observed that in the EU average income tax has a greater weight and Spain follows this tendency. And it is detected that in some countries in Eastern Europe, the tendency is the opposite, with income from social contributions having a greater weight than that of income tax.

**Figure 5. Revenues from income tax and social contributions as a % of GDP in the EU-28, 2018**



With respect to country models, the continental countries have higher volumes of revenue than the EU-28 average, for both income tax and social contributions. In both cases, the Mediterranean countries (except for Italy) present revenues below average. Revenues from income tax in Nordic countries are higher than the average, but revenues from social contributions are below, whereas in the Eastern countries the opposite occurs.

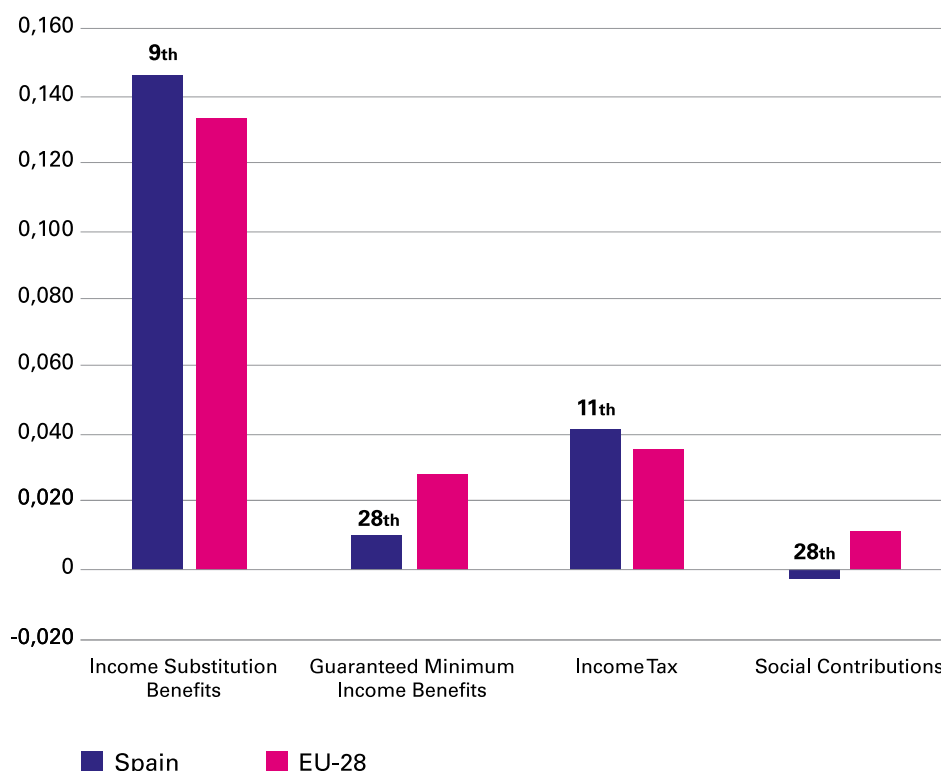
**Figure 6. Distribution of income according to type (2018 deviation with respect to the EU-28 average)**



As is observed in the graph, in Spain, income substitution benefits reduce inequality by above the European average (9th position), whereas the guaranteed minimum income benefit has an almost negligible effect (bottom position in the EU).

With respect to public revenues, the redistributive effect of IRPF income tax in Spain is higher than the European average (11th position), but social contributions have a negative effect with respect to redistribution. This is the only one, of all the policies analysed, that increases the inequality between households.

Figure 7. Redistributive capacity of taxes and benefits

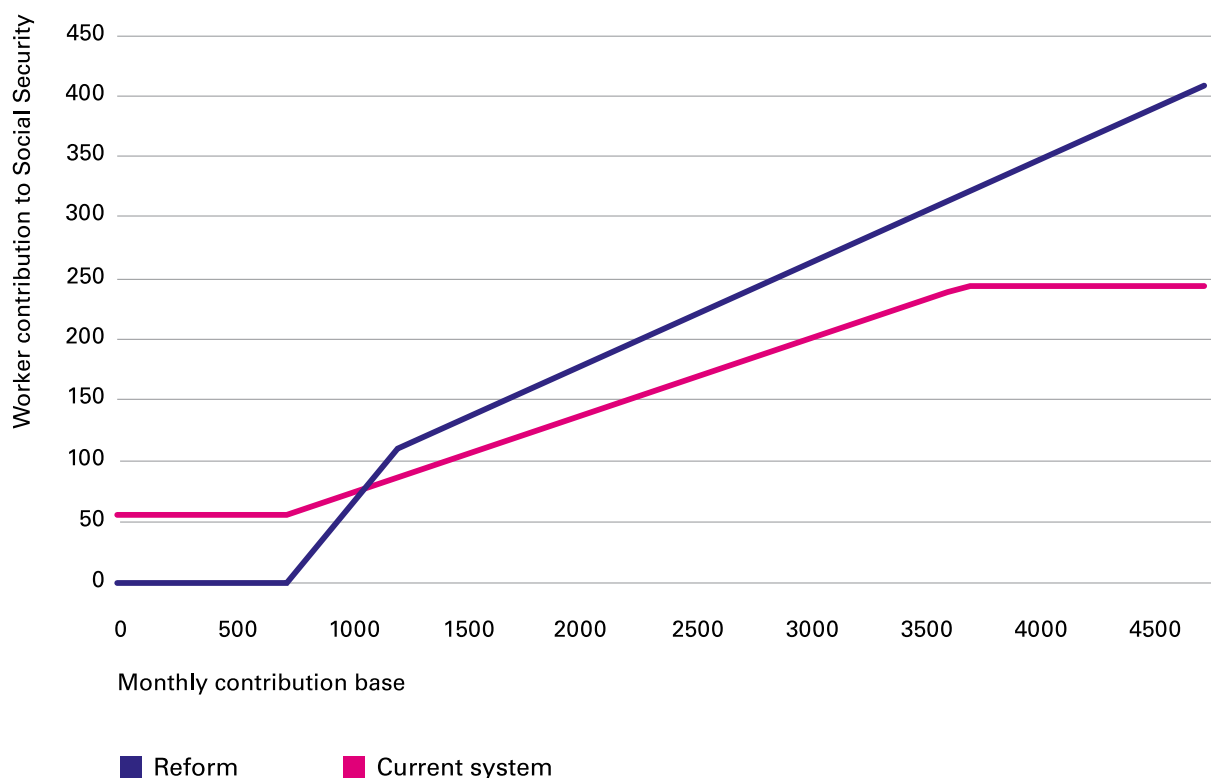


## Simulation of the adaptation of Spain's contributions system to the Belgian system to avoid its regressive nature

The system of worker contributions to the Social Security system increases inequality in Spain (this being a unique case in the EU-28). The system uses fixed contribution rates on contribution bases, with minimum and maximum amounts that, in practice, make this policy regressive. However, elimination of the limits would have a very small effect on revenues collected and on the end redistribution.

For this reason, we simulated a policy inspired by the Belgian system, which is one of the most redistributive in the EU-28. This system introduces a reduction in the worker's contribution (*workbonus*), which gets higher the smaller the gross salary is. This change would endow the system with a certain degree of progressivity. Although the tax rate continues to be proportional, the introduction of a tax-exempt minimum means that contributions would increase. The average contribution would fall from 116 to 114 euros per month, especially favouring workers with lower salaries of between 800 and 1,300 euros per month. Above this latter limit, the worker's contribution to the Social Security would grow slightly. In the graph, the difference is shown between the application of the current system and the new proposal.

Figure 8. Worker contributions to Social Security



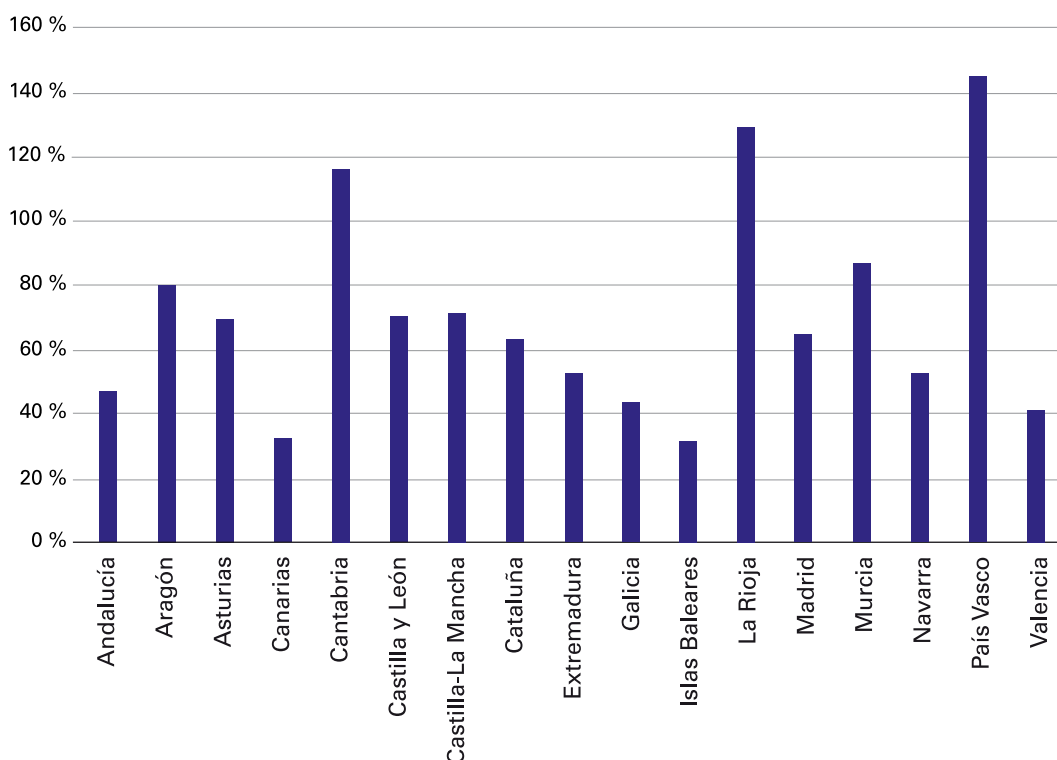
## A minimum income system that is highly unequal between Spain's Autonomous Communities

The proposal that is presented below consists of simulating, through EUROMOD, the minimum autonomous community incomes were the cover to be complete.

In Spain, the system of autonomous community minimum income, or minimum integration income, is present in all of the Autonomous Communities with varying amounts, requirements and duration. However, the ways of functioning share many elements in common. These incomes usually present the problem that few of those people who have the right to receive the subsidy end up receiving it. The participation rate is, furthermore, very unequal by Autonomous Community, which indicates that its implementation is inadequate in many regions.

The graph shows what percentage is represented by the expenditure currently made by each Autonomous Community with respect to what it would have to spend if the cover of its potential beneficiary population were complete. In some Autonomous Communities, their spending exceeds 100% because protection is received, in addition to by those households, by others in a vulnerable situation and people with insufficient salaries or in a temporary situation of poverty, such as those receiving benefits of a social emergency type.

**Figure 9. Current spending on minimum incomes and other benefits such as exclusion with respect to the simulated cost of a minimum income in which the cover reached 100% of the potential beneficiary population (in %)**



## Combined economic outcome of the two scenarios

With this modification of the Social Security system, contributions decrease very slightly, by barely 133 million euros per year. The modification of minimum incomes would increase spending by 58.9% (around 2 billion euros more per year, from 0.29% to 0.46% of GDP). This greater spending would increase the number of beneficiaries by 68% (577,491 households), with a somewhat lower monthly sum (it would decrease from 334 to 296 euros/month).

It is important to highlight the possible interrelation between the different policies. Although new scenarios have been considered in two areas, these have effects on other policies. When a policy reform is entered into the EUROMOD simulator, the data that this change produces in each household also affects the calculation of the other policies, because some variables change in certain households. In this case, retirement, survivor, family and income tax policies are altered, even though there has not been any change in the corresponding regulations. The change in income tax (IRPF) revenue collected is especially important, as it would reduce as a consequence of these new proposals by 1,664 million euros (workers' Social Security contributions are considered a deductible expense for income tax purposes and the tax bill of workers changes significantly).

**Table 1. Main results of the reform of the Spanish tax-transfer system**

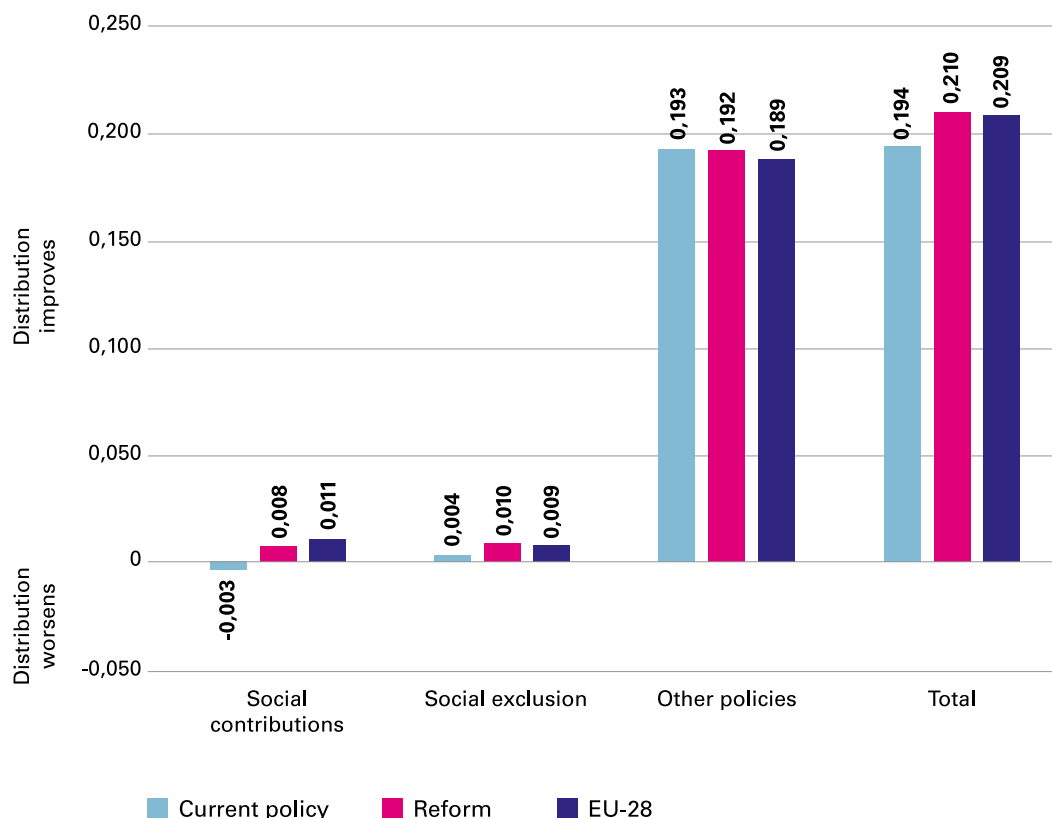
|                      | Annual cost of the proposed modifications |              |
|----------------------|-------------------------------------------|--------------|
|                      | Millions €                                | % GDP        |
| Social contributions | 133                                       | 0,01%        |
| Social exclusion     | 2.000                                     | 0,17%        |
| Unemployment         | 0                                         | -            |
| Retirement           | -10                                       | 0,00%        |
| Survivor             | -8                                        | 0,00%        |
| Illness              | 0                                         | -            |
| Disability           | 0                                         | -            |
| Family policy        | -85                                       | 0,00%        |
| Education            | 0                                         | -            |
| Housing              | 0                                         | -            |
| Tax on income        | 1.664                                     | 0,14%        |
| <b>Total</b>         | <b>3.694</b>                              | <b>0,32%</b> |

With respect to the redistributive effect, if, with the current system, worker social contributions worsen distribution by 0.003 points, in the new scenario the Gini index would improve by 0.008 points. In other words, the Spanish system would become clearly redistributive, rising from the bottom position to be situated, with the proposal implemented, at a level very close to the European average.

Modification of minimum incomes would considerably improve the system's redistributive effect. If the current policy reduces the Gini index by 0.004 points, the new proposal would improve it by more than double, up to 0.010, slightly above the European average.

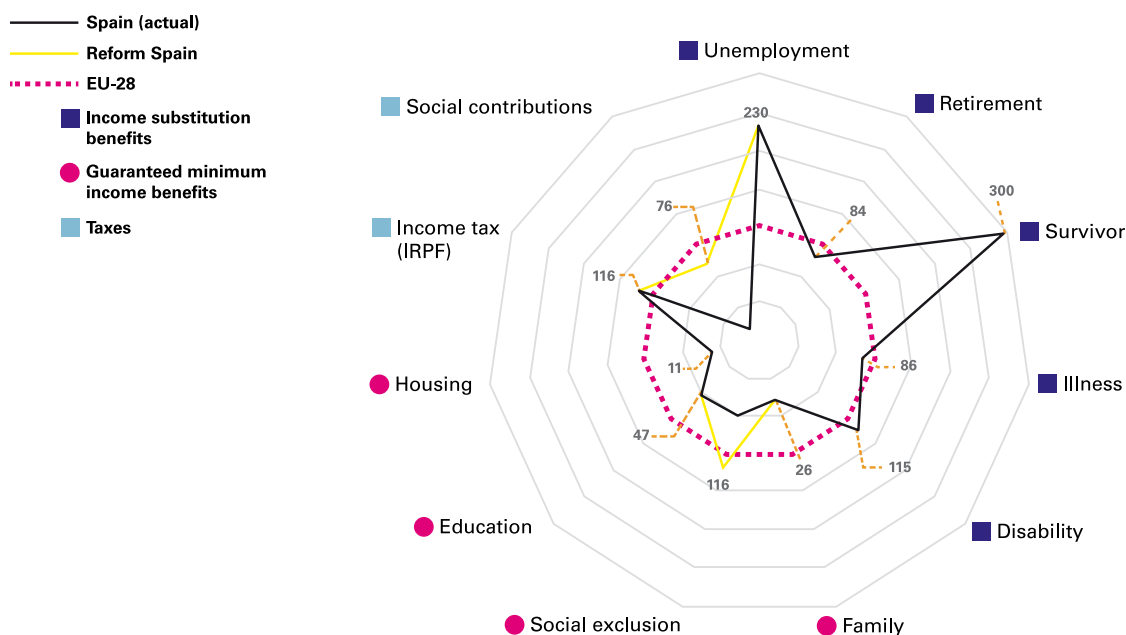
With respect to the interrelation between the different policies, these changes in social contributions and minimum incomes would cause a slight worsening of the redistributive effect of the IRPF income tax (from 0.042 to 0.041). On the opposite side, the proposed changes would improve the redistributive capacity of social contributions and minimum incomes. These proposals would lead Spanish policies to have a redistributive effect (0.210), slightly higher than the European average (0.209).

**Figure 10. Current redistributive effect, reforma and EU-28 average**



The following graphic contains a diagram of the redistributive effect by types of policy. The fine dotted magenta line shows the average redistributive effect in the EU-28 (base 100). The black line represents the current Spanish situation, while the yellow line reflects the result of the proposals that have been mentioned.

**Figure 11. Decrease of the GINI index after taxes (income taxes and social contributions) and benefits, 2018**



In summary, the policies proposed would make up for the shortages detected. Despite the cost of these changes being far from negligible (3,694 million euros per year), such an effort would have an important redistributive effect: the Gini index would improve as a consequence of these reforms by 0.016 points. If, at present, the market income Gini index (0.532) is reduced thanks to the policies in force in Spain by up to 0.338 (a considerable difference), then in the new scenario put forward here this latter value would fall to 0.322, which would situate Spain slightly above the average of the EU-28 with regard to the redistributive capacity of its system of taxes and transfers.

## Conclusions

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- // The economic crisis led, in Spain, to an increase in economic benefits, as some of them are clearly anti-cyclical (such as those for unemployment or against social exclusion). The public revenues analysed have remained quite stable.
- // The largest amounts are represented by retirement and survivor benefits, followed by those for unemployment. The rest of the benefits are relatively small in volume.
- // The distribution of market revenues in Spain is much more unequal than prior to the start of the Great Recession. The system of taxes and transfers considerably redistributes income, although this redistributive capacity has also been weakened by the crisis. The most important redistributive effect is due to retirement and survivor benefits, and to income tax (IRPF).
- // Total spending on cash benefits in Spain in 2008 (12.6%) was slightly lower to the average of the EU-28 (13.7%). With respect to the weight of revenues analysed as a percentage of GDP, Spain is also positioned below (8.2%) the European average (12%).
- // The redistributive capacity of the Spanish taxes and transfers system is among the lowest in the EU-28, with a reduction of 0.194 in the Gini index, against an average European reduction of 0.209 points. Spain is situated in the tenth worst position in terms of this redistributive capacity. In the case of income substitution benefits, Spain (0.146) is above the average of the EU (0.134), in ninth position. However, in the case of guaranteed minimum income benefits, Spain (0.009) is very much below the average of the EU-28 (0.028), in the bottom position.
- // the case of income something similar happens. The improvement of inequality caused by income tax in Spain (0.042) is above the European average (0.035), putting it in eleventh position. However, social contributions have a negative effect on inequality in Spain (-0.003), a feature that is unique in the whole of Europe. Consequently, Spain stands in the bottom position, lagging far behind the European average (0.011).

- // Especially serious problems are detected in terms of the redistributive effect of Social Security contributions and policies against social exclusion, therefore changes are proposed in each of these areas. To analyse the effects of these changes, in the case of contributions to Social Security, the new scenario has been inspired by the Belgian system, and in the case of minimum incomes, the proposal has been to achieve the effective application of the regulations that already exist.
- // The simulated changes have a significant cost, but they would make a very important impact on the redistributive capacity of the Spanish taxes and benefits system. As a consequence of these new scenarios, the Spanish welfare state would be positioned closer to its European counterparts in terms of the redistributive effect of social contributions and policies against social exclusion.

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