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Trends in social expenditure and distributional impact of policy changes until 2013

Social Europe

This supplement to the Quarterly Review provides in-depth analysis of recent labour market and social developments. It was prepared by O. Bontout and V. Maestri from the Employment Analysis and Social Analysis Units in DG EMPL.

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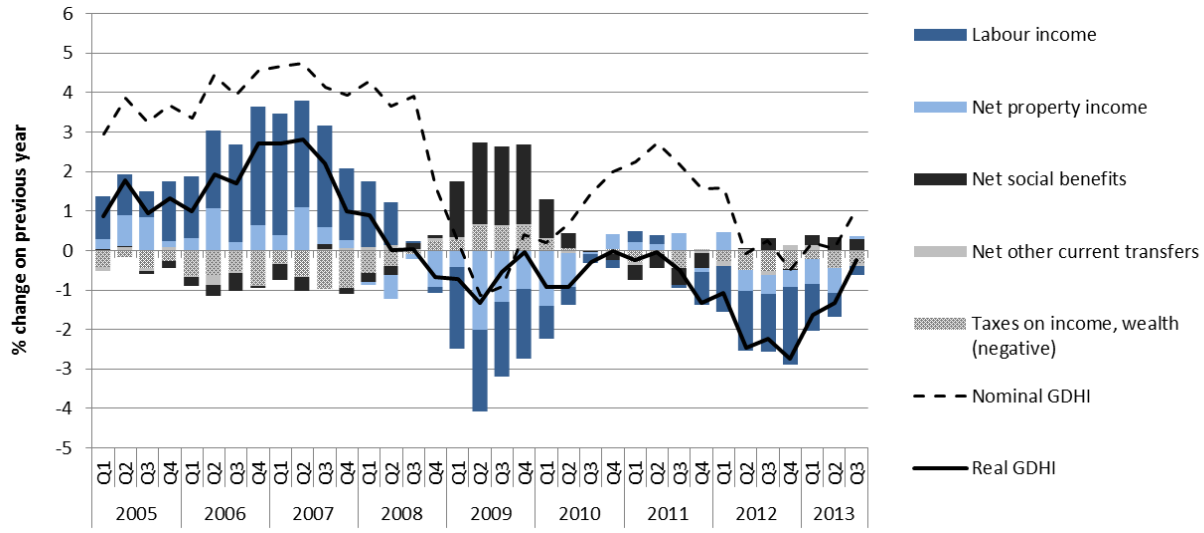
Trends in social expenditure and distributional impact of policy changes until 2013

The latest data available shows that the stabilising impact of social protection expenditure remained very weak in 2013 despite a slight improvement

In 2013, as the decline in labour market incomes slowed down, the stabilising impact of social benefits[1] improved slightly in comparison to 2012. However, the impact remained well below the effects observed at the onset of the crisis (2007-09), when social benefits were the main contributing factor to the stabilisation of household incomes in Europe[2] (see Chart 1).

Chart 1 - Contributions of components to the growth of real gross disposable of households in the Euro area (2000-2013)

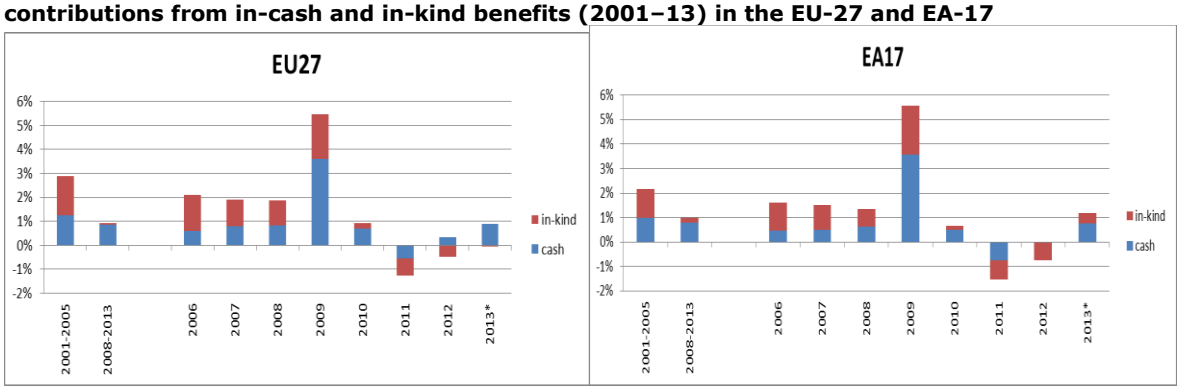


Source: ECB and Eurostat. Note: annual percentage change and percentage point contributions. Labour income includes compensation of employees and gross operating surplus and mixed income (compensation of self-employed).

In 2013, while the economic environment remained weak[3], most Member States registered increases in cash expenditure and relatively stable in-kind expenditure[4]. However, declines were very significant in some Member States (IE, EL, CY, LT, SI and UK), while cash benefits actually recorded real increases in most Member States (except IE, EL, CY, LT and AT). These diverse developments in 2013 translated into a relatively weak pattern of social expenditure growth in the EU and EA (see Chart 2). This slight increase in 2013 only partly compensates for the declines observed in 2012. Indeed, in 2012, despite a weaker economic environment [5], most Member States registered a decline in in-kind expenditure, and relatively stable cash expenditure.

[1] Social protection expenditure generally helps to stabilise the economy in bad economic times, since social benefits partly compensate for the decline in households' market income. Unemployment benefits typically have a stabilising function, as do means-tested benefits of various sorts (typically social exclusion, family or housing).Health and pensions expenditure play a role too, but to a lesser extent, since they generally increase (or remain constant), while market incomes decline.
[2] The stabilising role of social benefits is analysed in detail in the 2013 review Employment and Social Developments in Europe.
[3] In 2013, GDP remained stable in the EU and declined by 0.4% on average in the EA (with positive developments in BE, BG, DE, DK, EE, IE, F, LV, LT, LU, HU, MT, AT, PL, RO, SK, SE and the UK).
[4] For 2013, the annual growth rate of social expenditure reflects an estimate based on quarterly National Accounts.
[5] In 2012, GDP declined by 0.4% on average in the EU and 0.7% in the EA (with positive developments in BG, DE, EE, IE, LV, LT, MT, AT, PL, RO, SK, SE and the UK).

Chart 2: Breakdown of the annual change in real public social expenditure between the contributions from in-cash and in-kind benefits (2001–13) in the EU-27 and EA-17



Source: Eurostat (NA and DG EMPL calculations). Note: the values for 2013 are generally an estimate based on national accounts. Note: When no data are available in the National Accounts (annual), the data were either based on National Accounts (quarterly) or the AMECO database (in the latter case by usually applying calculated growth rates to the data available from National Accounts (annual).

In 2013, social protection expenditure grew much less than expected given poor economic conditions

In this section, the evolution of social expenditure (deviation from trend) is analysed in relation to the output gap, and compared to developments in past recessions (See chart 3).[6] Based on past experience, social expenditure is expected to grow above the trend when the output gap declines and particularly when it is negative, and to adjust downwards and return to the trend when the output gap recovers.

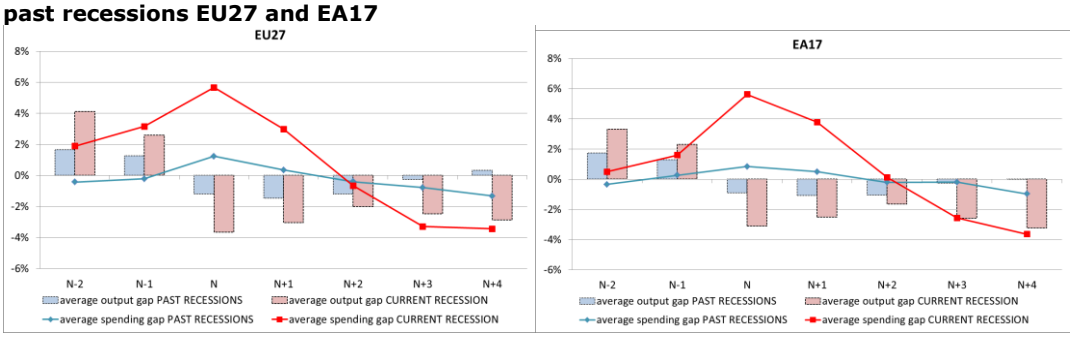
Compared to past recessions, the year of recession (N, 2009 in most countries) was much deeper in this crisis, and led to a strong increase in public social expenditure well above the trend. In past recessions, the output gap was generally narrower and the deviation from the trend of social expenditure was smaller.[7] During the following two years (N+1, 2010 in most countries and N+2, 2011 in most countries), the output gap improved and growth in social expenditure declined, which resulted in them approaching their trend levels, as one would expect from past recessions. However, three years into the crisis (2012 in most countries), social expenditure grew well below its trend and went on adjusting downwards despite a worsening of the output gap, contrary to what happened in past instances of declining and negative output gap.

In 2013 (which corresponds to 4 years after the first recession year in most countries), growth in social protection expenditure remained below their trend, despite the further deterioration of the output gap (around -3 %), which resulted in a further weakening of their stabilisation impact.

This partly reflects the exceptional scale of the fiscal consolidation needed during this crisis, which translated into a significant downward adjustment in the cyclical component of social protection expenditure, as well as a potential permanent adjustment of the trend of social protection expenditure.

[6] For a detailed description of the method and analysis See 2013 review of Employment and Social Developments in Europe p. 328.
[7] This tends to suggest that the increase in social expenditure in the first year of this crisis was more sensitive to the economic cycle in this crisis, reflecting greater increases in unemployment levels and also greater increases in other types of expenditure (such as health and pensions expenditure due to the play of indexation mechanisms in a context of slowdown of inflation).

Chart 3: Deviation from the trend of public social expenditure and GDP output gap in current and past recessions EU27 and EA17

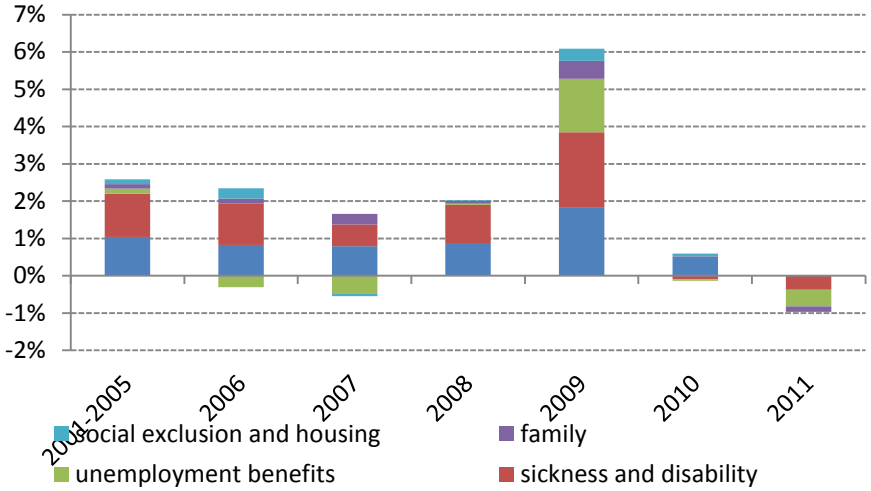


Source : Eurostat, National Accounts, DG EMPL calculations. Notes: 2013 data are estimated based on quarterly data from the first three quarters. In the current recession, N is year 2009. Estimates of the deviation from the trend in social protection expenditures are based on a standard Hodrick-Prescott filter. Reading notes : in the year of the recession, in the current crisis, social expenditure was about 5% above their trend in Europe, while the GDP was about 4% below its potential (output gap of -4%). Averages are unweighted country averages (since countries do not always experience a recession the same year).

What drove the changes in social protection expenditure?

Detailed information on the evolution of social expenditure by function is only available until 2011. In 2011, social protection expenditure declined in real terms, mainly driven by the reduction in expenditure on unemployment benefits and sickness and disability. This decline followed on from the significant growth observed in 2008 and 2009, and the very modest increase of 2010. The 2008-09 increase in unemployment expenditure mainly reflected increases in the number of unemployed persons (see Chart 4), while the contribution of pensions and health expenditure reflected the automatic impact of indexation mechanisms in a context of inflation slow-down.

Chart 4 — Annual real growth of social expenditure in the EU-27 (2001–11) and the contribution of different functions



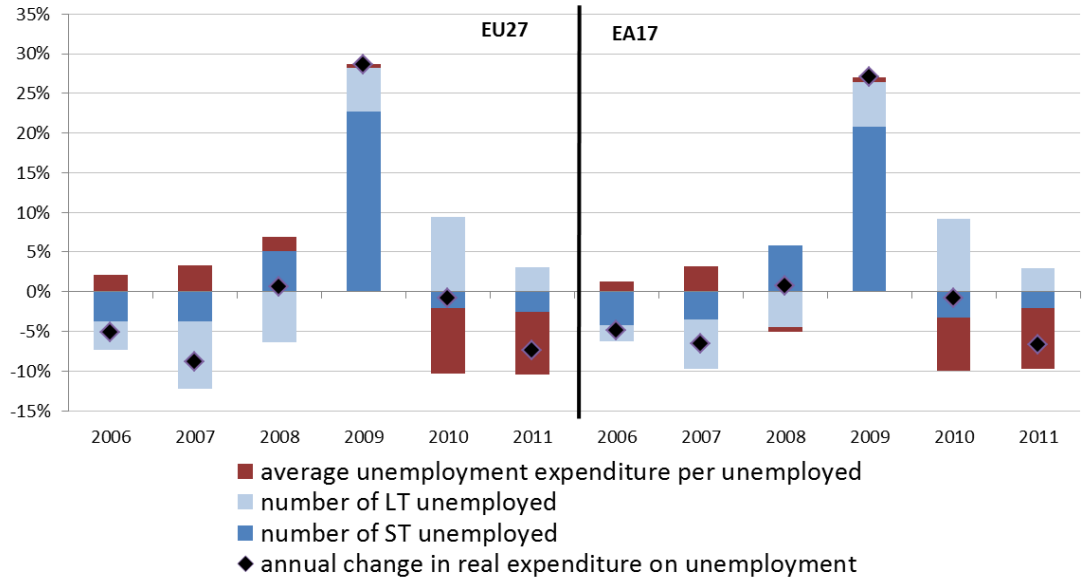
Source: Eurostat (ESSPROS) and DG EMPL calculations. Note: For the EU-27, 2001–05 actually refers to the EU-25 since data for all of theEU-27 were not available; 2001–05 refers to the average annual growth rate.

In 2011, average expenditure per unemployed[8] decreased further compared to 2010 contributing to a real decline in real unemployment expenditure (Chart 5). This may reflect a number of factors, such as erosion of the eligibility of unemployed people, an increase in the share of long-term unemployed people among the unemployed, as well as the impact of

[8] Development in unemployment expenditure can be broken down into the effects of changes in the numbers of unemployed (the total number of potential beneficiaries) and changes in average expenditure per potential beneficiary.

indexation rules in the specific sequence of inflation during this crisis or tightening of benefit calculation rules in some countries. The impact of these factors differs depending on the country, as illustrated in the section below.

Chart 5: Contributions to the annual change in real unemployment expenditure (2006–11) — EU-27 and EA-17



Source: Eurostat (ESSPROS). Note: This graph shows the annual change in real expenditure on unemployment benefits (in %) and the main factors that influence it: the average expenditure per unemployed and the number of short-term (ST) and long-term (LT, i.e. for more than one year) unemployed. The contributions of these factors is expressed in percentage points.

Distributional impact of tax-benefit changes since 2008

Until detailed data become available, it is difficult to evaluate the impact of changes in the tax-benefit system on inequality. Even then,[9] it will be difficult to distinguish the direct effect of the crisis from that of policy changes.[10] This section illustrates the impact of changes in the tax benefit system in 12 Member States, including some where household incomes were particularly affected during the crisis. This assessment takes into account changes in taxes (direct income taxes and social contributions, as well as VAT changes) and in cash benefits (pensions and other benefits). It does not take account of other measures that may have had an indirect impact on the distribution of households' income, such as those affecting employers or cuts in public services.[11]

Updated results from the EUROMOD micro-simulation model illustrate the impact of measures enacted over the 2008-2013 period on households' incomes in 12 countries.[12] It should be

[9] The most recent data available reflect the income situation in 2011, while nowcast estimates of poverty trends up to 2013 are available for a number of Member States.

[10] A recent IMF study analysed past fiscal consolidation episodes (in a number of OECD countries over the period 1980–2010) and found that a 1 percentage point of GDP consolidation is associated with an increase of about 0.6 % in inequality of disposable income (as measured by the Gini coefficient) in the following year. It also suggests that the cumulative impact peaks after five to six years and fades after the tenth year. IMF (2012), Fiscal monitor, Taking Stock: A Progress Report on Fiscal Adjustment, October 2012.

[11] Furthermore, some measures may have already expired during the period considered (from 2008 until mid-2012), while some countries may have planned further adjustments after mid-2012.

[12] De Agostini P., Paulus A., Sutherland H. and Tasseva I. (2014), "The effect of tax-benefit changes on income distribution in EU countries since the beginning of the economic crisis", Research note 02/2013, Social Situation Monitor, forthcoming.

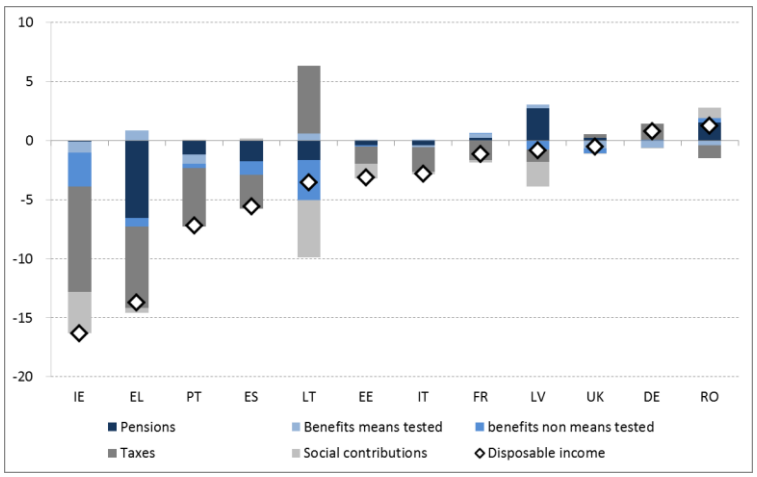
noted that to assess the impact of overall changes over the period, a counterfactual needs to be chosen, specifically on the implicit indexation of benefit levels and calculation rules over the period and that price indexation (CPI counterfactual) is used in the results presented below.

Size of overall impact on household incomes differ…

EUROMOD results focus on the impact of measures implemented after the 2008 economic downturn and up to mid-2013. The impact of these measures on household incomes was particularly strong in Ireland, Greece, Portugal, Spain and Lithuania. It was less pronounced in Estonia, Italy, France, Latvia and the UK and was positive in Germany and Romania.

The composition of measures taken into account varies significantly across Member States (Chart 6), with large contributions from cuts in pensions, increases in income taxes or social contributions and reduced benefits. Cuts in public pensions were particularly important in Greece. Cuts in non-means-tested benefits were relatively large in Ireland and Lithuania, while there were also cuts in means-tested benefits in Ireland, Portugal, the UK and Germany. Increases in income tax were important in Ireland, Greece, Portugal and Spain, and in terms of the share of the total, also in Estonia, Italy and France. Increases in social contributions were significant in Ireland, Lithuania and Latvia.

Chart 6: Aggregate effects of policy changes on household disposable income (2008-2013)

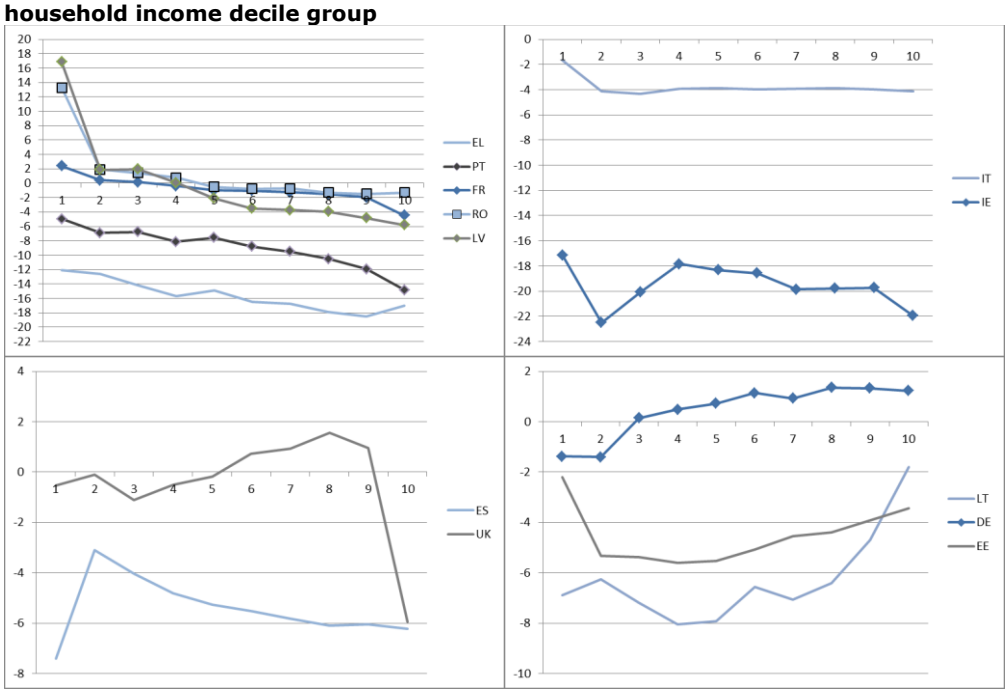


Note: counterfactual on CPI (prices). Source: De Agostini and al (2014).

… and can have different impacts on the distribution of household incomes…

In France, Greece, Latvia, Portugal and Romania, the better-off lose a higher proportion of their income than the poor, as a result of the measures modelled over 2008-2013 (Chart 7). In Spain and the UK, the burden of fiscal consolidation falls slightly more heavily on the poor and/or the rich than it does on those on middle incomes, producing an inverted U-shaped pattern. Italy and Ireland show more mildly progressive and nearly proportional changes in incomes over the income distribution. While the effect of consolidation measures can be labelled progressive, a proportional income drop can actually affect the living standards of those already in lower income brackets more severely. At the other extreme, in Estonia, Germany and Lithuania, measures over the period 2008-2013 period have had a clearly regressive impact.

Chart 7: Percentage change in household disposable income due to policy changes 2008-2013 by household income decile group



Notes: Deciles are based on equivalised household disposable income in 2013 with 2008 policies in place, indexed by the CPI counterfactual index and are constructed. Measures include changes in benefits and taxes and social contributions and changes in VAT. Changes in VAT are also included though they do not impact directly on incomes, but they do indirectly through changes in price levels. The charts are drawn to different scales, but the interval between gridlines on each of them is the same. Source: De Agostini and al (2014).

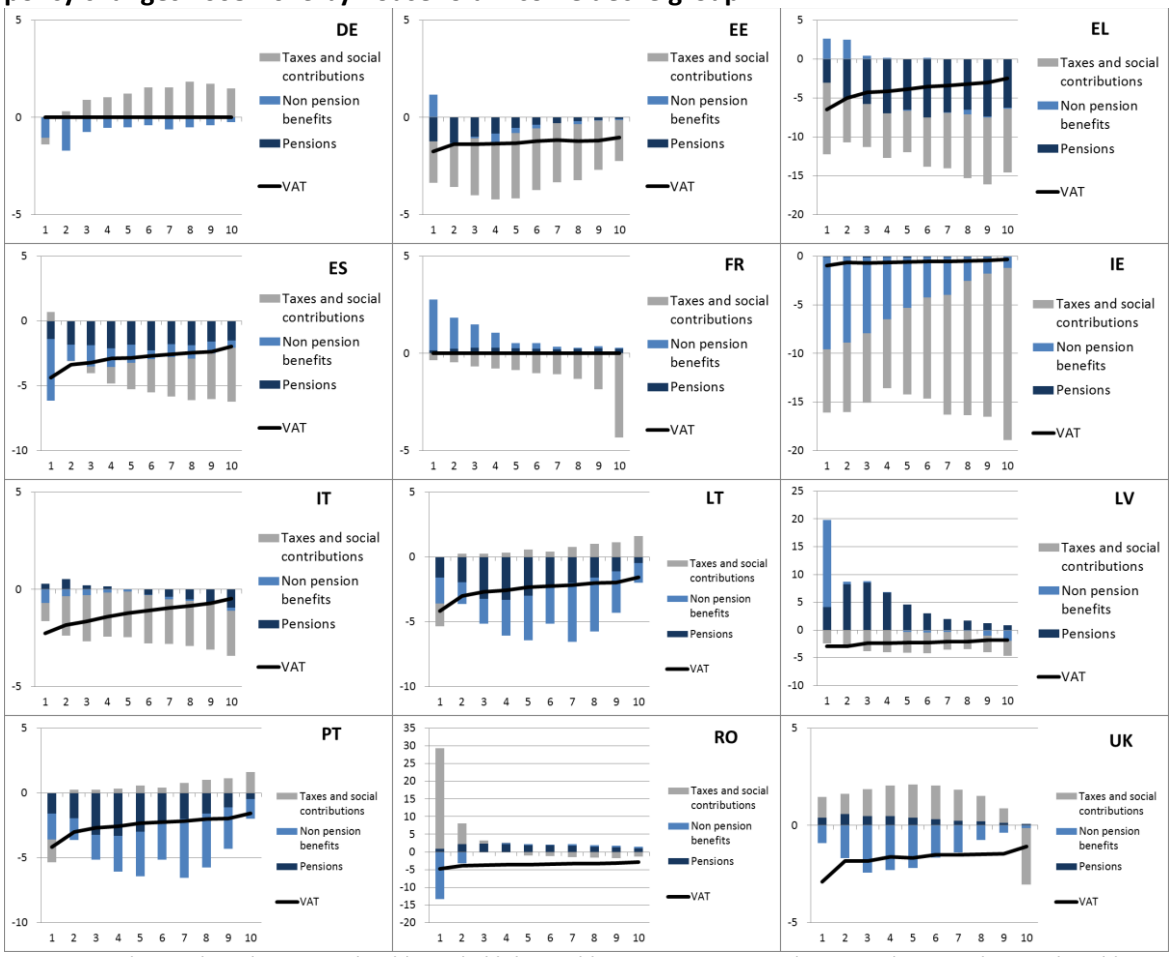
As a consequence, it appears that the overall distributional impact of measures over the period 2008-2013 period is not related to the overall size of the average impact on household incomes. In other words, more regressive and progressive patterns are observed both in countries with more or less significant overall impact on household incomes, which highlights the central importance of the design of measures as regards their distributional impact.

… and the same types of tools can have different distributional impacts depending on their design

The overall progressive impact on household incomes shown for Greece, France, Latvia, Portugal and Romania reflects different types of effects, such as changes in the design of non-means-tested benefits, of public pensions and of taxes (Chart 8). The regressive pattern observed in Estonia mainly reflects changes introduced in the indexation of pension benefits, the one observed in Lithuania mainly reflects changes in VAT and the one observed in Germany mainly changes in taxes and non-pension benefits.

Changes in the design of non-pension benefits were progressive in Greece, Latvia, France and Romania, while they were regressive in Ireland, Germany, Portugal (resulting from the freeze of means-tested benefits) and Romania.

Chart 8: Contribution by type of measure to the change in household disposable income due to policy changes 2008-2013 by household income decile group.



Notes: Deciles are based on equivalised household disposable income in 2013 with 2008 policies in place, indexed by CPI counterfactual index and are constructed. The charts are drawn to different scales, but the interval between gridlines on each of them is the same. Source: De Agostini and al (2014).

The design of changes to public pensions was progressive in Greece and, to a lesser extent, in Portugal (where downward changes have been limited for lower levels of pensions) and Italy, and regressive in Estonia and to a lesser extent in Latvia (reflecting changes in the indexation of benefits).

Changes in SICs (social insurance contributions) and income taxes were generally progressive, while they were merely proportional in Estonia, Greece and Italy, and were regressive in Germany and Portugal.

Increases in VAT generally had proportional or regressive effects. Changes in the main VAT rate were null in Germany and France and ranged from 2 pps (Estonia, Ireland, Italy and Portugal) to 5 pps (Spain and Romania). The differences across countries are linked to differences in the structure of VAT, consumption patterns and savings rates (which generally increases along the income distribution), as well as differences in increases in the standard rate of VAT. In several countries (such as Spain, Italy, Lithuania, Romania and the UK), the extent of the effect on household incomes is similar to the total of other tax and benefit measures.

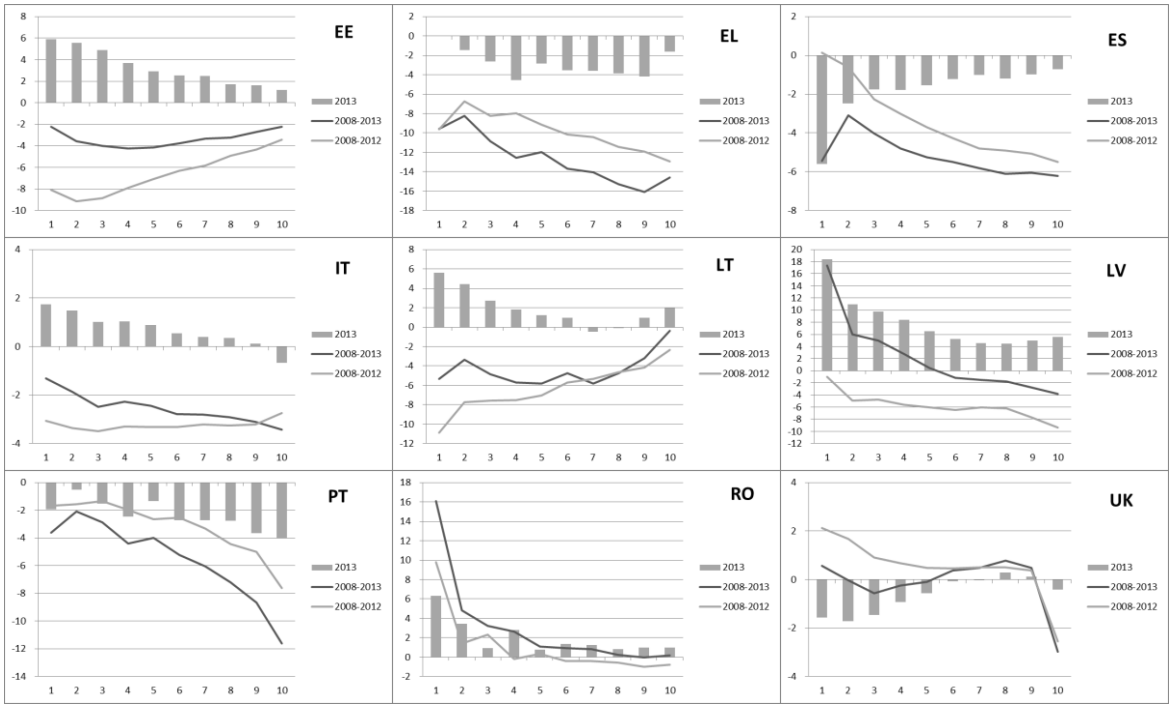
The burden of fiscal consolidation can also be shared differently across different types of households. The effects across countries are generally similar for children and older people, with a few exceptions. Households with children are more affected in Estonia and Lithuania and less

so in Germany, while households with older people have been more affected in Ireland, Italy, Greece, Spain and Lithuania. This partly reflects changes in tax and benefits, particularly for children or elderly people, such as changes in child tax credits or pensions (but also the composition of households across the income distributions).

Policy changes introduced in 2012-2013 were progressive or neutral in seven out of nine countries, but had a clearly negative impact on low income households in Spain and the UK

These results also help to shed some light on changes introduced between mid-2012 and mid-2013, and in particular those implemented since the analysis for 2008-2012 presented in Avram et al. (2012).[13] Chart 9 contrasts them directly for the nine countries included in both studies.[14] In Greece and Portugal the effect of additional policy changes in 2012-2013 was to reduce incomes, across all or most of the income distribution. In Estonia, Italy, Latvia, Lithuania and Romania the overall impact on household incomes was positive (except in Italy for the highest decile), with those at the bottom of the distribution benefiting most in proportional terms from the changes in the most recent year. In the UK and Spain households in the bottom of the distribution have seen reductions in their income due to policy changes in 2012-2013.

Chart 9: Percentage change in household disposable income due to policy changes 2012-2013 (by household income decile group)



Notes: Deciles or quintiles are based on equivalised household disposable income in 2013 and 2012 respectively with 2008 policies in place, indexed by change in prices (CPI). The charts are drawn to different scales, but the interval between gridlines on each of them is the same. Source: De Agostini and al (2014).

Conclusion

Social protection spending played a prominent role in compensating households' income losses in the early phase of the crisis and helped stabilise the economy. Its impact declined since mid-

[13] Avram and al (2012) (Avram, S., F. Figari, C. Leventi, H. Levy, J. Navicke, M. Matsaganis, E. Militaru, A. Paulus, O. Rastrigina, and Sutherland H., (2012), "The distributional effects of fiscal consolidation in nine EU countries", Research Note 1/2012 of the social Situation Observatory) compared 2012 policies with those from 2008, indexed by CPI by measuring the percentage change in household disposable income (by income decile) and are there therefore broadly comparable with the CPI indexed comparison of 2008 with 2013 from De Agostini and al (2014).

[14] It should be noted that these two sets of results are based on different micro-data. The 2008-2013 results use 2010 SILC and the 2008-2012 results use 2008 SILC.

2010, was negligible in 2012 and slightly resumed in 2013. This reduction in social spending was stronger than in past recessions, partly reflecting the exceptional need for fiscal consolidation in the context of the Euro crisis. It neutralised the economic stabilisation function of social protection systems in many Member States.

Changes to the tax and benefits systems over the period 2008-13 have sometimes led to significant reductions in the level of real household incomes, potentially putting a heavy strain on the living standards of low income households. The impact of spending cuts and tax hikes was different on high and low income households. The analysis shows that careful design of the measures is crucial to avoid the poorest being disproportionately affected, as has been the case in a few countries.