## EXPENDITURE CUTS AND ACCESS TO HEALTHCARE UNDER THE GREAT RECESSION IN EUROPE: INCOME GROUPS ARE UNEQUALLY AFFECTED

Background: A universal health coverage is existed in almost all European countries. In spite of the universal coverage, a considerable part of the citizens experience difficulties to take up medical care, especially because of financial reasons. Moreover, these difficulties are more common in certain social groups, contributing to inequity in healthcare. In 2008 Europe was hit by an economic crisis called the "Great Recession. The recession was characterized by an overall reduction in living standards. This pushed governments across the European Union to restrict expenditures, also in the area of healthcare. As a result, a slower real annual growth rate in per capita health expenditures was noted in the period during and after the crisis in most OECD countries. This was part of an attempt to keep the budget in balance. These reductions in health expenditures resulted in an increase of out-ofpocked payment (OOP). The combination with a decline of the purchasing power in many countries, due to soaring unemployment and decreasing wages, made it more difficult for citizens to pay for the rising OOP for medical care. This is expected to affect the access to healthcare, probably unevenly among social groups. This study examines the unequal effects of cuts in healthcare expenditures on the access to medical care for different income groups across European countries.

**Method:** Using data of two waves (2008 and 2014) of the European Union Statistics of Income and Living Conditions survey (EU-SILC), a difference-in-differences (DD) approach was used to analyse the overall change in unmet medical needs over time within and between countries. By adding an additional level the differences in the effects between income quintiles (difference-in-difference-in-differences: DDD) were estimated. Using a DDapproach enables to isolate the effect of budget trends, net of differences that already existed before the crisis. Through a careful selection of treatment and control cases, this study is also able to isolate changes in health expenditures, net of the impact of the crisis on living standards. To do so, three relevant comparisons were made: Greece versus the other countries, Iceland versus Sweden, and Ireland versus the United Kingdom. The latter two are comparisons of countries with recessions equal in magnitude, but with different levels of healthcare cuts, in order to isolate the effect of these cuts . This isolated effect is an important added value of this study since previous studies did not use the change in health expenditure, but saw the Great Recession as proxy for budget cuts in healthcare. **Results:** The DD-estimates show a higher increase of unmet medical needs (UMN) during the Great Recession in Greece compared with the other countries (+4.15pp). Although this first model gave only a view of the overall effect of the recession, the same but weaker effects were found in the two other models (Iceland vs Sweden: +3.24pp and Ireland vs United Kingdom: +1.15pp). The DDD-estimates shows difference results over the three models. In Greece and Iceland the lowest income groups were most affected, while this was not the case in Ireland. In Ireland the UMN increases more in income quintiles 2, 3 and 4 compared to the lowest income group. In income quintile 3 the highest increase in UMN is found compared to income quintile 1 (1.60pp) over the period 2008-2014.

**Conclusion:** Restrictions on health expenditures during the Great Recession caused an increase in self-reported unmet medical needs. The burden of these effects is not equally distributed; in most cases the lower income groups suffer most. The case of Ireland, nevertheless, shows that certain policy measures may spare lower income groups, while disproportionately affecting middle class income groups. These results bring in evidence that policies can reduce and even overshoot the general effect of income inequalities on access to healthcare.