HOUSEHOLDS FACING CONSTRAINTS.
FUEL POVERTY PUT INTO CONTEXT

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Overview
This study discusses the concept of fuel poverty taking into account the arbitrages made by households when they are facing budget constraints. Fuel poverty is still lacking a common definition throughout Europe: while the UK and France have (different) official definitions, there is still no definition in a country like Germany, or at the European level. Where definitions exist, they often consider that fuel poor households have high energy needs compared to their income. The possibility of being fuel poor even without having excessive energy needs and the various arbitrage possibilities of households – i.e. to under-spend and use too little energy – are not systematically discussed. Our paper tries to fill that gap by putting fuel poverty into the larger context of constraints faced by households. Based on a graphical analysis, it shows that different situations of fuel poverty might occur. It concludes that two distinct fuel poverty problems exist: an “energy inequality” problem, reflected by the fact that some households pay disproportionately high energy bills, and an “energy affordability” problem that can affect a larger share of the population. It finally explores the two types of fuel poverty for European countries and discusses policy implications.

Method
In the UK the debate on fuel poverty has the longest history (see e.g. Boardman, 1991). Currently the Hills approach seems to be the state of the art in defining fuel poverty (Hills 2011 and 2012). However, what the Hills approach is missing out on is that different situations of fuel poverty exist. A discussion of this can be found in Moore (2012). In this study we explicitly explore these differing situations of fuel poverty by putting fuel poverty into a context of other (constrained) expenses. There are two groups of economic approaches that explore the constraints faced by households: Mandatory expenses that are either mandatory because of contracts or because they relate to the consumption of necessity goods. Energy is part of mandatory expenses as households usually sign contracts with their energy provider and energy is a necessity good by nature. The second group concerns a situation of deprivation where households face difficult living conditions. This can be reflected by difficulties to afford necessities. Living conditions indicators like the material deprivation indicator within the EU-SILC measure deprivation. Based on these approaches we analyse fuel poverty as “being constrained” and explore the variety of situations faced by fuel poor households. Based on a graphical analysis (adapted from Thalmann, 2003) we identify six groups of households. The size of these groups depends on where energy expenses standards or budget standards are set. We further explore differing types of fuel poverty for European countries by comparing the poverty incidence ratio with the percentage of a country’s population that is unable to keep adequately warm at home (Data provided by the EU-SILC survey, 2012).

Results
Our graphical analysis shows that different groups of fuel poor households can be identified. This typology allows to differentiate between two polar fuel poverty problems: the first one concerns households whose income is not necessarily significantly lower than the budget standard, but who face disproportionately high energy expenses. The second one concerns households with low incomes and energy expenses that are close to the standard or even lower than the standard. The first problem relates to “energy inequality” whereas the second one is rather a problem of “energy affordability”.

Exploring these two problems for European countries shows that in the old member states, energy affordability problems are more widespread in the Southern part of Europe, where poverty incidence is also less important. In countries of Northern Europe, energy affordability seems to be a problem that is limited to the poorest parts of the population and the proportion of the population affected by that problem is very low. In the new member states, energy affordability problems are globally more severe and poverty incidence is lower (i.e. affordability problems are not affecting low-income households to
a disproportionately high extent in comparison to households above the poverty line), suggesting that energy affordability problems are more widespread among the population. There are also important variations in the poverty incidence of energy affordability problems. The percentage of households affected is particularly high in countries like Bulgaria, Lithuania, Cyprus and Latvia. In these countries, energy affordability problems are clearly not limited to the poorest populations.

Conclusions

Knowing that there are two types of fuel poverty has implications regarding the policies that can be implemented. Whereas energy inequality (affecting a limited share of the population) can be addressed through social policy measures and targeted energy efficiency improvements, the problem of energy affordability is more challenging because it affects a larger share of the population. It cannot be fully addressed with measures of social policy like energy subsidies: this would require important public budgets for a long time, as energy prices are not expected to decrease in the next years. Consequently, if policymakers want to prevent an expansion of energy affordability problems, it seems that the only solution is to engage into ambitious policies of energy efficiency improvement of buildings.

References