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Problems and challenges in organizing, financing and managing
a sustainable Long Term Care sector in Italy

Project Title: Determinants and financial effects of the increase of long-term care demand:
An analysis on Italian and European data

One of the most important demographic phenomena that Europe is facing is the aging process of the population. Over the last decades life expectancy has markedly increased and this, combined with low fertility rates, led to a significant growth in the share of people aged 65 or over. If on one hand longevity is undeniably a great achievement for societies (Breyer et al. 2010), on the other hand it represents a challenge also for governments and private markets (Costa-Font and Courbage, 2012), because of an expected growing number of individuals who will live extra years of life with some level of dependency requiring the use of long- term care - LTC (Comas-Herrera et al., 2006).

LTC identifies a variety of services, provided on a daily basis, formally or informally, to people with chronic illnesses or disability that are limited in their ability to care for themselves for long periods of time. Although the share of old-age dependent individuals is growing quite uniformly across Europe, public coverage of LTC expenses and availability of public and private LTC services are very heterogeneous among countries (Colombo et al., 2011). This inevitably highlights the need of a deeper understanding of both demand and supply factors to provide a LTC schemes tailored to country and culture.

Italy has been experiencing a strong ageing process and this trend is going to strengthen in the next decades. Alongside the ageing of the population, the support provided by the family and other informal carers – which traditionally bore the burden of caring for the aged – has been (and will be) decreasing due to declining fertility rates, increasing female labour force participation rates, and increasing delay in the time of retirement. Therefore, the demand of formal interventions for the frail elderly is likely to increase dramatically in the incoming years. Moreover the public system of care provision for frail old people is badly designed, being mainly based on a relatively ineffective cash allowance, and faces the risk to become socially and financially unsustainable in the future.

According to the Report of the Italian Ministry of the Economy and Finance (2014), the public expenditure for care of people aged 65 or over whose dependency is due to old age and disability accounts for 1.3 percentage points of GDP in 2013 compared to 1.2 in 2008 but the projections of the LTC expenditure to GDP ratio forecast an increase between 50 and 70% (according to different scenarios) in 2060. However these projections may be considered rather optimistic, since the European Commission and OECD forecast a much higher increase (over 100% according several scenarios) in LTC public expenditure (European Commission, 2012; De la Maisonneuve and Oliveira Martins, 2013). It is necessary therefore to properly organize a sustainable and effective LTC sector and this will require a design where both the family, the public sector and the private sector interact to face changes in demand and supply of LTC expected for the future.

In order to cope with the issue of the sustainability of LTC systems is important to design new policies to control the dynamics of public expenditure both on the demand and on the supply side. These policies aim at improving the way health and social systems address the rise in chronic disease and disability, seeking to nudge individuals towards healthy behavior and to enhance the quality and efficiency of LTC services (e.g. through a better coordination between health and social services, in order to obtain continuity of care). Financial sustainability of LTC sector calls also for a balanced mix of public and private financing, without imposing unsustainable burdens on public budgets but, on the same time, without denying care to the disadvantaged. A microsimulation analysis in this context would allow to consider both the sustainability and distributive implications of the Italian Long-Term Care system.

In this project we aim at analyzing the main determinants of the LTC expenditure and of its sustainability, providing information about LTC demand and supply by analyzing European as well as Italian data.

Especially we will follow two lines of research.

1) The first focuses on the policies for the sustainability of LTC systems on the demand side; within this first research area, we will analyze the main determinants of the potential demand for LTC services among the elderly population and the impact of retirement on life-styles changes.

We will analyze the effects of individual and environmental/institutional determinants on physical and cognitive impairment in order to understand the different paths that need-related determinants of LTC might take across

individuals. This analysis has important policy implications. In fact, if few important variables are able to shape the long-term care risk, then decision makers should give the priority to policy interventions affecting those variables. This approach can contribute to the existing literature in two ways. From a positive point of view, this method allows us to order the main determinants of physical and cognitive impairment, revealing important interaction effects among predictors. From a normative point of view, a robust clustering analysis may help institutions understand the level of intervention to reduce the risk and then the demand of long-term care.

We will also investigate how individuals change their life-styles and health behaviors upon retirement, that represents one of the major event later in life. Unhealthy behaviors account for a large part of chronic diseases and functional capacity; for this reason it is important to provide information about behavioral changes later in life also upon retirement to design preventative interventions to contain LTC costs and favor the sustainability of the system. We focus on retirement because it is considered a shock to time discounting, incomes, or beliefs about the future that might affect behaviors later in life (Cutler and Glaeser, 2005).

2) The second line of research considers the financial and distributive implications of different LTC models according to possible trends in the demand for LTC; this second research field will be particularly centered on the Italian case. We will estimate the role of age, gender and a vector of socio-demographic characteristics in determining disability among the elderly. Those estimates will serve to forecast the likely evolution of frail old individuals, their distribution among different cohorts and social-economic groups of the future population and the LTC expenditure, using CAPP_DYN, a population-based Dynamic Microsimulation Model (DMM). Projections will allow researchers to describe and discuss potential demand for LTC in the future in an environment where heterogeneity of the population, and the likely evolution of participation of women into the labor market are explicitly taken into account. With this approach we shall project the likely evolution of expenditure under different scenarios for the public provision of LTC and for private funding of LTC, taking into account the expected availability of informal care, which depends on trends in female labor force participation and the evolution of retirement age.

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