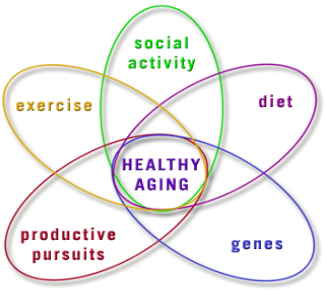

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HALM Working Paper

Financing elderly care in Italy and Europe. Is there a common vision?

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Working Paper n. 2-2017

UNIVERSITÀ CATTOLICA del Sacro Cuore

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Financing elderly care in Italy and Europe. Is there a common vision?

Abstract: There is a general consensus in considering the public financing for LTC as a suitable proxy of the resources committed to elderly care by each Government. But the preciseness of this approximation depends on the extent to which LTC is representative of elderly care within a country.

We investigate this issue by estimating the resources specifically spent on elderly assistance in Lombardy, an Italian region which in terms of population, dimension, health care organization and economic development could be compared to many European countries, such as Sweden, Austria or Belgium. The analysis focuses on the public financing on elderly care in Italy and, in particular, in Lombardy, both in terms of organizational level (central/regional/local) and governmental responsibility (Welfare/Social Department). Quantitative data on the financing of elderly care is drawn from the national and regional balances; the provision of services is analyzed using regional and community based data.

Results address two main questions. First, they highlight the absence of an appropriate method for assessing the public resources committed by each European country to LTC elderly expenditure. Second, our findings suggest an overestimate of the funding actually spent for elderly care in Italy: this should be of warning for policy makers, especially in view of an increasing ageing of the population.

Keywords: LTC financing; elderly care; European LTC policies.
Jel codes: H53; H72; I38

1. Introduction

Long-term care (LTC) is defined as a range of services and assistance for people who depend on help with daily living activities and/or are in need of some permanent nursing care [1]. Since the risks of dependency for children, young people and adults of working age are very low compared to the risks for the elderly, generally LTC financing is considered a good approximation of the resources destined for the ageing population.

In Italy for example, according to the Italian Ministry of Finance's definition and coherently with the OECD methodological indications, the term "Long Term Care" is used to address the services mainly devoted to elderly care [2].

Similarly, in the OECD and European Union's Reports, when comparing the expenditure for the ageing population in different countries, LTC share on GDP is often used as a proxy of the resources dedicated to elderly care [1, 3-7]. Other studies, focused on the ageing policies across Europe, rely on the same parameter in order to indicate the resources allocated for assisting the elderly: as an example, Crespo and Mira [8], as well as Brenna and Di Novi [9], while identifying a "North South gradient" across Europe in the provision of formal elderly care, use LTC share on GDP as a proxy of the public resources devoted to the assistance of the elderly

Though in the majority of cases it is specified that elderly care expenditure does not correspond to LTC spending, an unsolved issue consists in defining to what extent the public expenditure for LTC is representative of the resources destined by each Nation to elderly care. On this point, two questions have to be addressed. First, the gap between the two amounts may be not insignificant. Second, the gap can differ consistently among countries, depending on the variables influencing LTC distribution and financing in each member State. This circumstance may bias any comparison.

There is a mix of approaches and strategies for organizing and funding LTC across European countries: each member state follows its internal setting of welfare, social security and health care system and, consequently, the provision, funding and organizational frame of formal and informal care varies significantly among countries [10-11]. Furthermore, family ties play an important role and the provision of formal and informal care changes across European countries depending on the responsiveness of either the community or the family in supporting needy members [1, 7, 9].

This heterogeneous pattern mirrors in the provision of elderly care and in the way formal care is financed and organized within each country. Despite the increasing importance of ageing policies within each country, very few studies have attempted to investigate the exact amount of resources

devoted by each Government to elderly LTC. Some contributes focus on health care expenditure by using micro data on health care access: for example, longitudinal data have been used to estimate health care expenditure during individuals' lifespan and, specifically, during older ages [12-13]. In a study on the provision of elderly care [14], a micro-simulation model has been applied to forecast the consumption of publicly funded LTC for the elderly: the amount of resources varies according to changes in selected variables, such as population composition and increasing levels of education. Other articles provide estimates using data on either selected chronic conditions such as cardiovascular diseases, musculoskeletal diseases, diabetes, etc. [15] or selected services, such as hospital admissions [16] and ambulatory care admissions for ageing population [17]. All these findings are undoubtedly useful to address ageing policies, but do not provide a measure of the public resources actually spent by each country in formal elderly care. As a result, when comparing the expenditure for ageing population across European or OECD countries, the most common proxy is provided by the amount of resources devoted to LTC.

Our analysis furnishes an estimate of the amount of public resources devoted to elderly care in Lombardy, an Italian region that in terms of population, dimension, health care organization and economic development could be compared to many European countries, such as Belgium, Switzerland, Austria or Sweden. Due to the federal setting of the Italian NHS, Lombardy rules autonomously its Health and Welfare System and henceforth any comparison to other countries' Health and Welfare Systems is feasible.

From a methodological point of view, the analysis focuses on both financing and expenditure on elderly care in Italy and in Lombardy, both in terms of organizational level (central/regional/local) and institutional responsibility (Health/Welfare Department). Quantitative data on elderly care's financing are drawn from the national and regional balances; the provision of services is analyzed using regional and local data. For the community based services, the main source is the Italian National Institute of Statistics (ISTAT).

Overall, this paper contributes to the extant literature by providing a suitable method of estimating the share of public spending for the elderly care within a European region/country. Findings show that in Italy the parameter normally used for international comparison, namely the percentage of LTC expenditure on GDP, is actually much higher than the amount we found. This evidence could help policy makers in reallocating resources to elderly care, whose relevance is inevitably destined to absorb an increasing share of GDP in the future.

The remainder of the paper is organized as follows: Section 2 defines LTC organization across Europe, Section 3 analyses the funding system for elderly care in Italy, Section 4 presents the

empirical analysis on the Lombardy Welfare System, Sections 5 and 6 address respectively Discussion and Conclusion.

2. A common vision of LTC among European countries

The issue of LTC organization and expenditure has been widely examined at the European level.
In Europe, common objectives for social protection, including LTC, have been developed by the Social Protection Committee, which monitors social conditions in the EU and promotes the development of social protection measures in member countries[1].
LTC has been defined as a wide range of services provided over a prolonged period of time, due to chronic conditions and/or disabilities [18]. Although LTC services are delivered to both elderly people and younger disabled groups, the vast majority of beneficiaries are over 65 years of age[2].
Several reports carried out in the last decades have been outlining how the growing number of elderly dependent people in many countries will lead to consequences for LTC [1-2, 19]. The main criterion used to predict the increase of LTC demand in the next decades due to population ageing looks at the share of elderly population [5, 20]: the first consequence is that LTC supply might be inadequate for satisfying future demand.
Not all the resources for LTC are directed to the elderly, but additionally to people who present a condition of dependency; to this extent, LTC costs related to severe disability are relatively independent of age and cannot be easily predicted.
In spite of many studies carried out for Europe, that have been focusing on describing aggregate data related to the overall amount of resources spent to finance LTC, a clear distinction between LTC expenditure and elderly care expenditure has not been attempted so far. Given the growing rates of population ageing in Europe, this issue becomes of great interest for policy considerations. A formal way of disentangling this question consists in analyzing all the expenditure items included in LTC and focusing on the services explicitly devoted to the elderly.
To this extent, a common classification system for the European countries is the System of Health Accounts (SHA)[3], implemented by OECD in 2000 and lastly reviewed in 2011. SHA data is currently used to develop common EU indicators on health and LTC expenditure, as well as to monitor various EU policy objectives, such as the goals of social inclusion and social protection,

[1] For an overview of the activities of the Social Protection Committee see http://ec.europa.eu/social/main.jsp?catId=758.
[2] Among all LTC recipients, around 60% are women because of their higher life expectancy, combined with a higher prevalence of disabilities and functional limitations in old age.
[3] This obligation is due to the Regulation (EC) No. 1338/2008 of the European Parliament and of the Council of 16 December 2008 on Community statistics on public health and health and safety at work.

which encompass health care. The first topic to be addressed is the separation between LTC health services (designed as HC3) and LTC social services (designed as HCR1). The first category includes residential care, daily care and home-based care, while social LTC services in themselves are not considered part of health care because they encompass assistance services, *i.e.* formal care that enable a person to live independently by her residence (laundry, cooking, administrative tasks, etc.), and also cash benefits. All these services, although mainly destined to the elderly, are directed also to other subjects, such as physically disabled people, mental health and substance abuse patients.

Based on the SHA classification, the Italian Ministry of Finance suggests that almost 2/3 of the whole LTC spending are destined to the elderly [2]. This approximation is built on LTC services consumption by population over 65 years of age, but neither the estimation method nor data on service consumption are represented in this Report.

It is possible that similar studies have been carried out in other European member states, the results depending on organizational and demographic variables. However, there is still no agreement on a common indicator to define the share of LTC elderly expenditure on the total amount; and international Reports persist with the erroneous interpretation which overlaps the two concepts of LTC and elderly care expenditure.

In the next sections, we present a method that uses both regional balance and service consumption data in order to get a reasonably realistic estimate of the amount of public resources devoted to elderly LTC in Lombardy. This estimate provides some insights for a comparison with other European countries presenting similarities with the Lombardy region.

In fact, Lombardy could be easily compared to many European countries, such as Austria, Belgium, Switzerland or Sweden. In 2015, residents in Lombardy region were 10,002,615 [22]. In the same year, Belgium and Sweden had a population of respectively 11,258,434 and 9,747,355 inhabitants, while in Austria there were 8,576,261 residents [23]. Another common indicator is the percentage of public expenditure on health care, which is 76% for Austria, 77% for Belgium and Italy, 84% for Sweden [24]. These similarities stand out when considering the degree of administrative efficiency and the organization of public services: a 2004 Report on public administration quality outlines the similarities among some Northern and Central European countries. Italy is far away from reaching the highest scores of governance indicators [25], although Lombardy, whose efficiency in public administration has been improving in the last years, represents an exception [26]. It should be noted that *per capita* income in Lombardy (data of 2014) was about € 35,700, far above the national Italian average of € 26,500 and very close to Belgium (€ 35,900) or Austria (€ 38,500) [27].

3. Financing LTC and elderly care in Italy

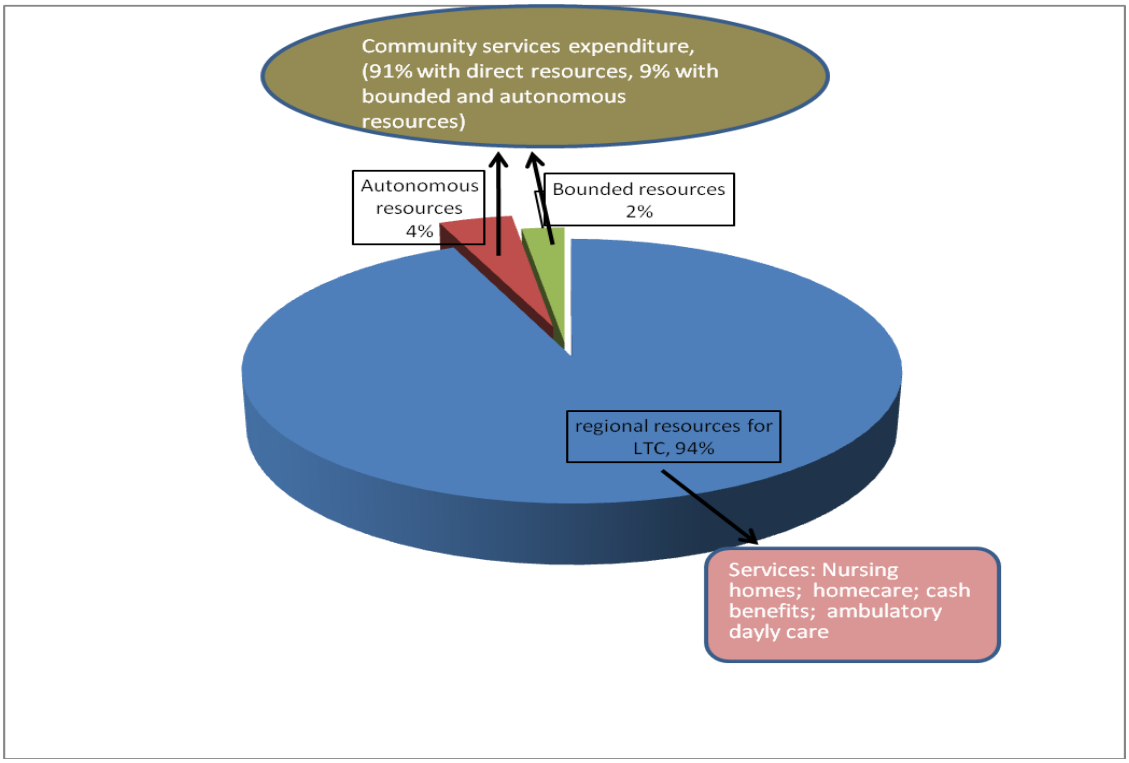
The Italian LTC financing is managed through three institutional levels: central, regional and community based.

The Central Government, through Social Security, administers the so called "indemnities for caring", cash benefits amounting to € 507 *per capita* provided to invalid people, 80% of whom are elderly. Checks are granted in relation to the health condition of the recipient and independently from his/her economic position. Although there are no restrictions on their use, they are thought to cover formal care expenditure. Indemnities for caring represent almost 50% of the whole elderly care financing. Still, the size of specific flows that transit through the Regions and are ultimately devoted to community care, are set at the central level. Some examples are the National Fund for LTC (*Fondo Nazionale per la Non Autosufficienza* - FNA) or the National Fund for Social Policies (*Fondo Nazionale Politiche Sociali* - FNPS). These resources are designed as "bounded resources", since, basically, regions should transfer them to the community care, without directly using them.

Regions are responsible for LTC services: they manage and allocate resources devoted to LTC. The source of funding is the Regional Health Fund, autonomously administered by each region. Almost all the financing destined to LTC is retained by the regions, except for a small share, which amounts to 4% in Lombardy, which is devoted to the municipalities in order to run the community based services. These funds are called "autonomous resources" because they are set yearly accordingly to the regional budget and they have to be distinguished from the bounded resources coming from the central government. Bounded and autonomous resources contribute only a small percentage (from 9% to 13%, depending on the region) to the community services managed by the municipalities, the main share being provided by communities' direct taxation.

Fig. 1 gives a representation of the regional budget for LTC in Lombardy. As it has been said, a small share is destined to municipalities, which run autonomously community care and contribute with 91% of their own resources. Checks coming from the central Social Security (indemnities for caring) are not included in the regional LTC budget because they follow a different financial channel and are provided directly to the recipients after an appropriateness test. As it has been pointed out, the majority, but not the entirety, of LTC financing is destined to the elderly care.

Fig. 1 Regional budget for LTC in Lombardy



Source: Data elaboration from Lombardy regional balance: year 2009 and followings.

4. The Lombardy welfare system

Lombardy is located in the Northwest of Italy and it is the biggest Italian region, with a population of nearly 10 million people, which is 1/6 of national population and very close to Austria, Sweden and Belgium's population. People over 65 represent 21.5% of the resident population (data of 2014). The age distribution is not very dissimilar from the national one, with the exception of the extremes - the youngest and the oldest categories - both slightly lower than the national average. For ageing people, considering the relatively high presence of people over 65 and the value in absolute terms, the demand of formal care requires an appropriate services' supply. However, both community and primary care are not yet sufficiently developed to accomplish the increasing need of care [28].

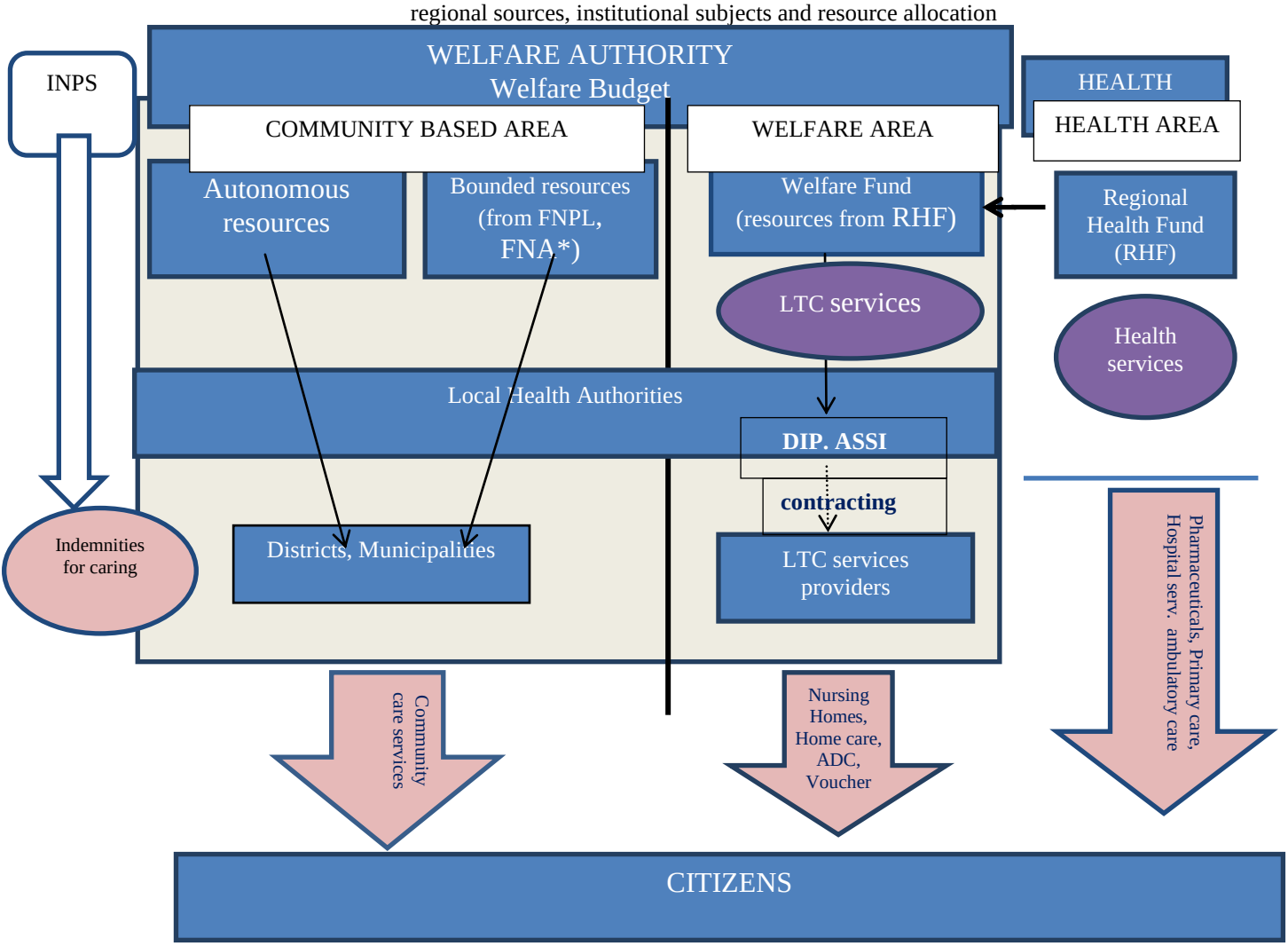
Largely debated is the issue of the integration between hospitals and community: the new regional directives focus on the need to increase the territorial network, in order to avoid long staying admissions for patients affected by chronic diseases.

As for elderly care, until 2015[4] Lombardy was characterized by the shared competence of two Authorities (respectively Health and Welfare). The flows financing elderly care, as well as the institutional levels governing it, are well represented in Fig. 2. The Regional Health Fund transfers resources (almost 8,9% of its total amount) to the Welfare Fund in order to finance the regional services destined to LTC, such as nursing homes, homecare, etc. These services refer to the Welfare area, whose commitment is regional, to be distinguished from the community-based services area, directly run by the municipalities.

There are specific administrative departments (referred as Dep. ASSI in Fig. 2) within each Local Health Authority, that manage LTC services at the regional level. Funding for community services comes mainly from community taxation but, as reported in the previous section, there is also a little share (almost 9% of their total amount) originating, respectively, from bounded resources (Funds established at the central or European level) or *ad hoc amounts* set yearly by the region to be devoted to social services (autonomous resources).

[4] A reform has recently been implemented (regional law no.23/2015) with the aim of joining the two regional Authorities under a unique Department. In such a way, the same array of services could be provided at a lower cost, therefore reducing the fiscal burden for tax payers.

Fig. 2 The welfare model in Lombardy:
regional sources, institutional subjects and resource allocation



*FNPL = National Fund Social Policies, FNA = National Fund for disability

Source: Personal elaboration of data drawn from Lombardy regional balance and Report 2015 on National Accounting [2]

4.1. Financing elderly care in Lombardy: the regional sources

The analysis focuses on the financing of elderly care from 2009 to 2014. This temporal lag is prejudiced by both the economic recession, with public expenditure cuts, and a succession of two different political parties at the regional government.

Table 1 reports our data elaboration on the welfare budget from 2009 to 2014: the financing of LTC services, designed as (a) in Table 1, has been kept separate from the funding of community-based care, designed as (b) in Table 1.

For LTC care, a new source of funding, the Household Fund, was implemented in 2012 by the new regional government. This Fund was specifically set in order to help families with frailties, such as

minors with disabilities, minors temporarily committed to social services, adults with addictions' problems, and also elderly. The Regional Welfare Fund collects its resources from the Regional Health Fund and it is the main source of funding for LTC.

For community-based care, we kept separate the amounts of, respectively, bounded and autonomous resources. It is possible to observe that, while LTC financing exhibits a rise in the five years considered in the analysis (+13%), the community care decreases overall by 15%. This is the result of a regional policy that increasingly tried to drive resources from community to regional level [29]. However, the whole amount augmented in this time period by 10%.

Data on elderly care funding is not provided by the actual regional government, so we had to compute it in two separate steps. We first computed the share of elderly funding over LTC in the previous legislature (years 2005-2009), which is an accessible information, and then we applied the same percentage on the new total funding[5].

In the previous legislature, elderly care required on average 60%[6] of the whole LTC financing, so we applied this share to the total welfare budget (see table 1: a) + b)). As a result, the LTC financing for the elderly in Lombardy region amounted to € 1,120.2 mln in 2014, which corresponds to € 522 per resident over 65.

Table 1: Budget for LTC (million € 2010-2014)

	2010	**2011**	**2012**	**2013**	**2014**	**% change**
a) Regional sources for LTC	1,500	1,597	1,650	1,652	1,702	13%
From Household Fund			*30.0*	*20.0*	*70.0**	
From Regional Welfare Fund			*1,620.0*	*1,632.0*	*1,632.0*	
b) regional sources for community care	195.0	110.0	73.0	153.9	165.3	-15%
Autonomous resources	85.0	70.0	70,0	70.0	70.0**	-18%
Bounded resources	110.0	40.0	3.0	83.9	95.3	-13%
a)+b) Total regional budget for LTC	1,695.0	1,707.0	1,723.0	1,805.9	1,867.3	10%
Elderly care funding (estimation)***	1,017	1,024.2	1,033.8	1,083.6	1,120.2	10%

Source: elaboration of data reported in http://www.lombardiasociale.it/ [30]

* originally it was 80 million, but 10 million were encompassed into autonomous resources for community care.

** originally was 60 but 10 million were collected from the Household Fund.

*** we computed 60% of total welfare budget.

[5] Notice that this share refers to the whole LTC funding, which comprises also the regional funding for community-based care (a + b) in table 1.

[6] We rely on the average value during the 5 years of the previous legislature (2004-2009).

4.2. Estimating elderly care regional funding with the bottom-up technique

In the previous chapter, we analyzed the welfare budget and estimated the elderly care funding by computing the share of financing on average committed to this kind of recipients. As has been said, no information is given on the exact amount of LTC funding dedicated to the elderly. Hereby, we use different data source and the bottom up technique in order to verify the accurateness of our estimation.

Information is derived from the "Regional Report on Balance indicators", published on the Lombardy region website [31]. Here, the planned public expenditure is disaggregated into chapters, named "Missions", which are additionally parted into expenditure items (see Table 2).

Mission 12, named "Social Rights and Policies" includes two programs concerning elderly care: program 3, specifically addressed to the elderly and devoted to residential buildings' maintenance (€ 237,570 in 2014) and program 7, with a broader prospect and addressed to elderly, disabled and young people. The latter comprises almost 56% of the resources destined to Mission 12, for a value of € 61,407,814, which are distributed to municipalities and Local Health Authorities for planning and administering the community and LTC services. Elderly care services are mainly covered by daily care centers, which, according to recent normative (DRG X/2260), requires almost 40% of the resources pertaining to program 7, for a value of € 24,563,126 (see the last column in Table 2).

The main amount in the financing of LTC is embodied in Mission 13, which represents the planned resources devoted to health care, namely the Regional Health Fund. As reported above, the Welfare Fund, which is the Fund specifically devoted to LTC, absorbs just a small share of the Regional Health Fund, almost 9% in 2014, for a value of € 1,632,000,000. Of this amount, only a part is devoted to the elderly (share of 63% in the past legislature).

We applied the same share and found a value of € 1,028,160,000. Hence, summing up all the amounts reported in the last column of Table 2, we were able to find the total funding devoted to the elderly in 2014, which amounted to € 1,052,960,696 (corresponding to € 490 per resident over 65).

This value differs from the amount computed in the previous chapter by almost € 66 mln, which is not a negligible amount. However, given the scarcity of evidence on the real share of public resources devoted to elderly care, we consider the bottom-up technique more precise, because it gives the opportunity to check for the services specifically addressed to the elderly.

Moreover, the difference of almost € 66 mln can be due to the use of the newly implemented Household Fund (see Table 1), which is more oriented towards frail subjects (children without parents, children with disabilities, game addicted adults), who present different characteristics and needs compared to the ageing recipients.

Overall, the present analysis highlights the relevance of a method – the bottom up technique – that helps in the inspection of every expenditure item devoted to the elderly. Our estimate shows that the difference between LTC and elderly care funding is apparent.

Table 2: Regional expenditure for elderly care

	Denomination	**Total expenditure**	**Share for the elderly**
Mission 12	**Social rights and policies**	**109,881,810**	
Program 3	Residential buildings		237,570
Program 7	Planning and management of community services	61,407,814	
		Of which 40% destined to the elderly	*24,563,126*
Mission 13	**Health and health care**	**18,326,395,354**	
Program 1 (98.5%)	Financing health services	18,051,499,424	
Health services	Of which 9% devolved to the Regional Social Fund	1,632,000,000	
		Of which 63% destined to the elderly	*1,028,160,000*
Elderly planned expenditure			1,052,960,696

Source: elaboration of data from Lombardy region, 2014 [31]

4.3 Community-based services for the elderly

As stated in the introduction, municipalities autonomously run community-based services, which are partly destined to the elderly. Funding comes mainly from municipality's taxation, while a little share (almost 9%) is collected from regional sources (autonomous and bounded resources, see Figure 1).

Data is provided from Istat and refers to 2011 [32]. Per capita expenditure for residents over 65 is € 119. This value is slightly below the national average and it is generally compensated by a higher share of private (out of pocket) funding. From 2007 to 2011 per capita expenditure has decreased by nearly 10% from € 133 to € 119. However, such decrease is compensated by an increasing trend of the resources financed by the region (see Table 1).

Services for the elderly can be grouped into three main categories, namely home care, cash benefits and residential services: yearly expenditure for treated person are respectively € 1,848, € 1,464 and € 6,304 (see Table 3). It should be noted that, for residential care (nursing homes), the elder recipient or his family are required to pay a private contribution of nearly the same amount.

Table 3: Community based services

Type of service	Expenditure financed by municipalities	Share over total amount	Number of recipients	Average expenditure for treated person
Home care	58,583,015	39.6%	31,699	1,848
Home care co-funded by regional sources	988,386	0.7%	3,471	285
Cash benefits	14,733,471	10.0%	10,035	1,468
Nursing homes	73,710,452	49.8%	11,693	6,304
Total	148,015,324	100.0%	56,898	*2,601

* this value refers to the average expenditure for treated elderly person, independently from the service acquired.
Source: Elaboration of data from Istat [32].

In 2011, community care expenditure for the elderly was almost € 148 mln. The share of community care funding dedicated to ageing people was 12%, somewhat below the national average, which is 19% [24]. This gap is mainly due to two reasons. First, in Lombardy community based services are more oriented to categories other than the elderly, such as children or disabled people. Second, most of the services devoted to the elderly are directly managed and financed with regional resources.

4.4. The central level: indemnities for caring

In order to complete the analysis of the resources devoted to LTC for the elderly in Italy, the indemnities for caring, financed by the central Government and managed through social security programs, need to be considered.

Indemnities are cash benefits that amount to € 507 *per capita* and are provided to invalid people (elderly in eight cases out of ten) with the specific aim of furnishing economic help to buy formal care. Their financial flows are autonomously administered by a central organism of Social Security (the *Istituto Nazionale per la Previdenza Sociale*, INPS, in Italy). Indemnities are provided based on the health conditions and independently from the economic position of the user, which raises equity issues. Moreover, their distribution can create distortions, since their use is not bounded to formal care's purchase. Therefore, indemnities are often considered as an integration on the personal/familiar income, rather than a channel to buy personal care.

Our elaboration on Istat data, shows that in 2014 the indemnities' expenditure for persons over 65 in Lombardy was € 1,183,865,760, which corresponds to almost 49% of the whole amount of resources destined to the elderly in Lombardy (see Table 4).

5. Discussion

We are now able to provide a quite appropriate estimate of the resources destined yearly to the elderly LTC in Lombardy.

As shown in table 4, the whole expenditure for elderly care in 2014 is almost € 2,4 billion, € 1,111 per resident over 65. Indemnities represent half of the amount, regional resources 44% and community based share is 6%.

If we consider only the LTC services and omit the indemnities, the per capita amount would be half, almost € 550. This is important, because indemnities checks are not bounded to formal care's consumption and there is no income threshold to bet awarded them, two issues that address both distortions and inequalities. A better allocation of resources would require targeting indemnities exclusively to people in need of a financial benefit, and investing the remaining resources on elderly care services' strengthening[7].

Table 4: Public financing for elderly LTC in Lombardy - estimate

	Absolute terms	Percentages
Regional funds (estimate)	1,052,960,696	44%
Community's funds	148,000,000	6%
INPS indemnities	1,183,865,760	50%
Tot amount year 2014*	2,384,826,456	100%
Funding per resident over 65	1,111	100%

*or last available year.

Regardless of these considerations, strictly related to the Italian welfare system, the method we propose could be applied to each European country, the rapidity of the results being highly dependent on the complexity of the internal welfare system.

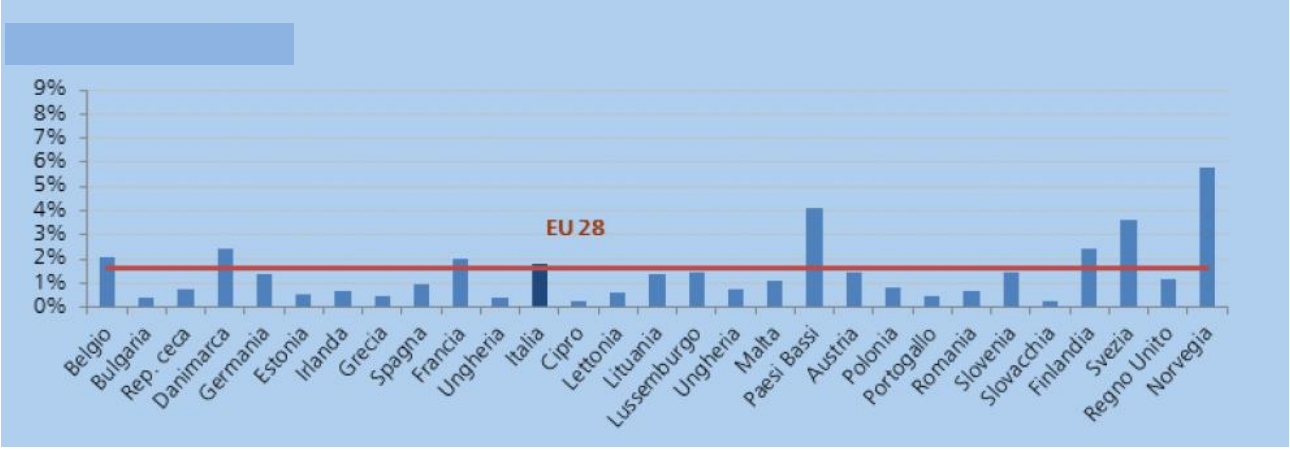
Our estimate reveals a considerable gap between LTC and elderly care financing. For Lombardy, given a regional GDP of 350,024,68 million euro in 2014, the share of elderly care expenditure on

[7] This criterion is currently followed in some European countries. In Austria, for example, since 2012, the central level of government is competent for administering the so-called '*Pflegegeld*', some funds established according to individuals' needs. *Pflegegeld* are cash benefits that are used to buy formal care services from public or private providers or to reimburse informal care. Further, there is the possibility, for people whose care needs have increased, to update their status and to change from cash benefits to benefits in kind [24].

GDP is 0.7%, well below the percentage normally reported for Italy[8] in the international comparisons, which is 1.9% (see figure 3) [2, 33]. We do not assume to provide a precise estimate, but, given the lack of accountability data on this topic, our bottom-up technique on the services destined to the elderly may provide a feasible result, which finds a validation in the data previously elaborated on the welfare budget.

The methodology applied rises interesting policy insights, especially in terms of allocative efficiency, because it sheds light on the type of services provided and the resources needed to guarantee such services.

Figure 3 Share of LTC over GDP for European Countries – year 2013



Source: Ministry of Finance Report [2]

6. Conclusions

The paper addresses two main questions. First, it highlights the absence of an appropriate method for assessing the public resources devoted by each European country to LTC elderly expenditure. Since the parameter usually adopted within international comparisons is the share of LTC on GDP, estimations could be biased depending on the extent to which LTC is representative of elderly care within each member state. This representativeness of course depends on different variables, such as internal organization and funding of health and welfare systems as well as demographic variables.

Second, our results suggest an overestimate of the share definitely destined to the elderly care in Italy, and this should be of warning for policy makers, especially in view of an increasing ageing of the population.

[8] Lombardy generally shows values on health funding close to the average value, henceforth we consider the national average as a good approximation of the value reported for Lombardy

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