

**Population Ageing in Italy:
A study on Retirement from 1995 to 2020**

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1. Introduction

Demographic ageing, which has been a very popular topic among scholars (Rowland, 2009; Tomassini and Lamura, 2009; Schoeni and Ofstedal, 2010; Golini and Rosina, 2011; Castagnaro and Cagiano De Azevedo, 2013; Galasso and Profeta, 2014; Reher, 2015; Grundy and Murphy, 2017; Leeson, 2018; Reynaud *et al.*, 2018), represents a challenge for the whole of society of all advanced development countries.

In particular, one of the oldest population in the world is the Italian one: in the last decades, the decrease in mortality rate, especially for older ages, has led to an increase both in the absolute number of elderly people in respect to the total population and compared to other subgroups, e.g. younger, and working population. The rise in the percentage of the elderly people exiting the labour market and the concurrent reduction in the workforce, have been arising questions on the stability of the entire financial system of the country and suggests investigating the elderly population as well as social and generational dynamics related to ageing.

In this context, the present study investigates the economic weight of ageing in Italy and focuses on retirement income as the main source of economic sustainment for the elderly population. The portion of elderly persons who do not receive a retirement income or other types of economic revenue, indeed, represent a group of inactive persons needing financial support, i.e. a potential burden for the whole of society.

2. Background and aim of the study

Italy has been experiencing a deep ageing process: let us note that in 1995, there were 112 elderly persons per 100 young people and 24 elderly per 100 active persons, while on the 1st January 2020, there are 179 elderly persons for every 100 young persons, and 36 elderly persons for every 100 working-age persons.

However, such a process has been uneven over time and across regions. In particular, the analysis at the NUTS (Nomenclature of Units for Territorial Statistics) level 1 – North-west, North-east, Centre, South, and Islands – shows that demographic evolution has developed in relation to the economic evolution of the referred areas. Overall, in the northern regions, where industrial development started earlier than in the other regions, thus leading to a higher economic expansion compared to the Centre and the South

(which are still the most disadvantaged areas of the country), also population ageing took place earlier.

Indeed, until the end of the 90s, Italian manpower in particular came from the southern regions, and only thanks to a rapid decrease in fertility occurred in the last decade, has the ageing of the southern population reached the values that had been registered in the North earlier (Reynaud *et al.*, 2018).

This suggests investigating the ageing process and its consequences in Italy by a geographic perspective and conducting an analysis on the evolution of the population's age structure over time. In particular, our paper has two main objectives:

1. Investigating the old population composition by age, gender, and geographic area: How many old people are given a pension? Which is their income bracket?
2. Examining the evolution of the retired subgroup of elderly people over the last decades: Has such composition changed over time? Has the likelihood to receive a pension increased/decreased for people aged 60 and over?

Our major hypothesis is that the share of retired individuals has been increasing over the years although the impact of ageing on society has not been as strong as expected. For instance, the financial burden of retired women on the whole of society can be seen as increasing given the higher participation of women in the labour market compared to past decades. However, such burden can be seen as decreasing since women receive survivors' pensions later in time than in the past, given the increase in individuals' lifespan. These observations suggest considering the type of pension people receive as a key factor in this context. Therefore, in our study, we split people who are given a pension into two groups: those who exited the labour market and are given a work pension (because they have met the State pension age or because they have accumulated the required working years) and those who are in receipt of other types of pensions – such as the Survivor's pension or Social Allowance – in order to examine the evolution of work pensions over time by gender and geographic area.

3. Data and methods

We use the INPS (National Social Security Institute) database, which allows identifying not only persons who receive a pension but also their province of residence, their individual characteristics, and retirement features. As a first step, we group Italian provinces and regions in broad geographic areas according to the NUTS-1 standard, i.e. North-west, North-east, Centre, South, and Islands. However, for the South and Islands we consider one category only, which is indicated as 'South', so that the analysis focuses on four broad zones.

Also, we use ISTAT (Institute for National Statistics) data on resident persons in the period 1995-2020, by age, gender, and geographic area. In order to calculate the number

of retired individuals by age (we focus on people aged 65+), we select those receiving a pension by year of birth, sex, and geographic area from 1995 to 2020, and exclude those dying over the same years.

As a first step, we conduct a descriptive analysis by selecting the resident population by age, gender, and geographic area from 1995 to 2020. We consider four broad geographic areas, North-West, North-East, Centre, South and Islands, and split the sample in the following pension type categories:

- i. those receiving a pension from work;
- ii. those receiving the Survivors' pension;
- iii. those receiving other types of pensions;
- iv. those who are not given a pension.

Afterwards, a Poisson Regression Model is run in order to investigate the evolution of Retired Population by demographic characteristics, type of pension, and geographic area. The dependent variable is the number of people aged 60+, while the explanatory variables are observation year (from 1995 to 2020), age, gender, pension type, and geographic area.

4. Preliminary results and next steps

The descriptive analysis shows that a deep change in the old population age structure of the country between 1995 and 2020. The share of old people receiving a pension from work is higher than the proportion of those receiving other pension types in all geographic areas, and this is observed both in 1995 and in 2020. Differences by gender and geographic area keep existing.

Moreover, preliminary results from Poisson Regression suggest that, compared to the North-West, the share of retired women is still lower than the share of retired men in all geographic areas. Also, compared to the North-West, in the North-East, the proportion of people who are not given a pension is lower than the share of those perceiving a pension from work. Over time, the increase in the proportion of retired persons is slightly higher for women than for men, for all pension types compared to pension from work, and higher the age higher such increase.

Given these preliminary results, in addition to the inclusion of interactions among variables in the Poisson Regression Model, the future analysis will consider all the twenty Italian regions instead of the four broad areas only, will select all the available pension types and will examine the amount of the perceived pension.

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