

THE END OF A GROWING ITALY. WHAT ARE THE CONDITIONS FOR WELL-BEING AND DEVELOPMENT IN AN AGING POPULATION?¹

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Abstract. Demographic projections indicate a significant decline in both the overall and working-age populations, resulting in increased economic and social dependency on older generations. This demographic shift requires strategic planning, especially in terms of employment and social welfare systems. This paper emphasizes the importance of policies addressing both quantitative factors (such as increasing birth rates and immigration) and qualitative aspects (such as enhancing workforce efficiency and integration). The paper underscores the significance of aligning Italy's demographic strategy with successful European models. It advocates for comprehensive measures to support family planning, create job opportunities, and facilitate intergenerational exchange. Furthermore, we highlight the potential contributions of an actively aging population and the concept of 'Silver Ecology' in advancing sustainable development.

1. Introduction

In the 21st century, a unique transition in the history of humanity is underway, leading to a transformation of the traditional phases of life and an alteration of the typical intergenerational relationship. This carries implications that challenge the foundations that have thus far enabled economic development and social sustainability.

The driving force behind this monumental transformation is the process of "Demographic Transition." Without this process, we would still be, as was commonly the case in the past, grappling with an infant mortality rate exceeding 20 percent, life expectancy below 40 years, and a fertility rate of five or more children per woman. This would also entail a population structure shaped like a pyramid: a broad base of youth and a scarcity of the elderly. Demographic Transition can thus

¹ For research articles with several authors, a short sentence specifying their individual contributions can be provided here. The affiliations and contacts of the authors should NOT be reported here, but at the bottom of the last page.

be understood as the process that shifts society from one organized around an abundant presence of youth to one with a predominant weight of mature and elderly individuals.

In contrast to what the term "transition" implies, the significant ongoing change is not merely a translation of demographic system coordinates, transitioning from an old to a new equilibrium. The evidence suggests a continuous shift in the generational dynamic and within life phases: longevity continues to expand, and fertility universally tends to fall below the minimum replacement threshold between generations.

Within the context of this fundamental shift, there exists a wide divergence of experiences among various countries in the advanced stage of this process. Where, thanks to robust and consistent policies, fertility hovers around or slightly below two, the population tends to maintain a certain stability in both size and internal structure (as observed in the United States, France, and the Scandinavian countries).

Conversely, in countries where fertility persistently remains below the value of two, the population tends to steadily decrease, fueling internal imbalances that progressively intensify, as is the case in Italy (alongside other Southern European countries and those in the East Asia, particularly Japan and South Korea).

The objective of this contribution is to delineate the scenarios Italy faces regarding demographic imbalances, examining the available margins, both quantitatively and qualitatively, to mitigate the negative impact on economic development and the sustainability of the social system by mid-century.

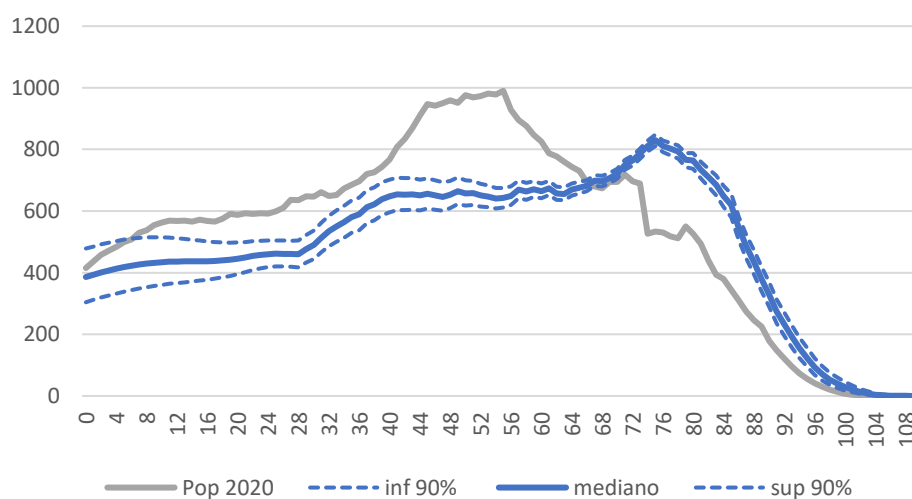
2. A country increasingly unbalanced

Demographic projections clearly highlight that in Italy the overall population will decline further and the population at older ages will increase. The scenarios from the latest Istat projections (Istat 2021) show that these two trends are the least uncertain aspects of our future. The share of those over 65, traditionally considered elderly residents, is projected to rise from about 14 million in 2021 to a range between 18 and 20 million by the middle of this century, with an incidence on the total population shifting from 23% to values between 34 and 36%. This is an unavoidable phenomenon resulting from the shift of the Baby Boomer generation (born between the late 1960s and early 1970s and therefore aged between 45 and 55 in 2020) into retirement age (Figure 1). In this case, there is no room to act on the numbers, i.e. the quantitative dimension (Rosina and Impicciatore 2022).

An ageing population inevitably faces an increase in the number of the more fragile age groups, which are more susceptible to the onset of severe and disabling diseases. The highest incidence of disability and chronic conditions among the

elderly necessitates a greater commitment in terms of care and healthcare. In Italy at the beginning of the third decade of the 21st century, nearly a third of those over 65 suffer from chronic and multimorbidity conditions, a figure that rises to nearly half among those over 85. About a third of those over 75 have a severe limitation of autonomy, affecting both personal care activities and for one in ten this affects both the daily activities of personal care and those of domestic life (Istat 2019). Even in the case of a reduction in disability rates, the condition of not being fully self-sufficient in the coming years will affect an increasing number of Italian citizens as a consequence of the absolute increase in the elderly population, becoming one of the main critical points for the country's economic sustainability, as also highlighted in the National Recovery and Resilience Plan (PNRR).

Figure 1 – Population by age in 2050 (median scenario and 90% confidence interval) and comparison with 2020. Data in thousands.



Source: elaborations on Istat population projections (base 1 January 2021).

The second and more immediate effect of aging is linked to the increasing pressure on pension spending. Our "pay-as-you-go" system stipulates that pensions are funded by contributions from currently employed individuals. The ratio between pensioners and workers is inevitably set to grow, as will the ratio between pension spending and GDP. In fact, according to the State General Accounting Office, the containment effect on pension amounts exerted by the gradual application of the contributory calculation system throughout one's entire working life will not be enough to offset the effects of ongoing demographic dynamics (Ragioneria Generale

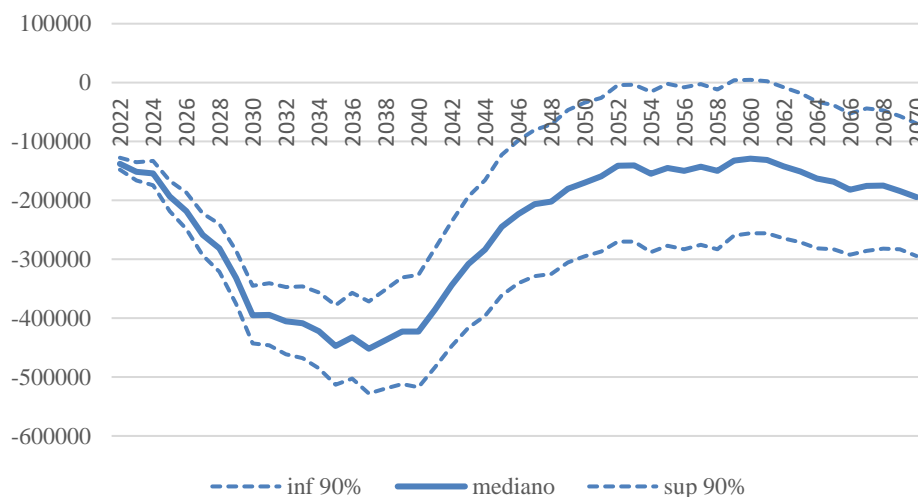
dello Stato, 2021). In the mid-2040s, total public spending (pensions, healthcare, and long-term care) will likely exceed 25% of GDP. The situation will change after 2050 when the gradual exit of the baby boomer generations under full contributory system operation will allow for a better sustainability of the ratio between pension spending and GDP. In the meantime, however, the cohorts entering the workforce may be further reduced without a reversal in birthrate trends, leading to a continuous downward spiral that would definitively compromise the country's trajectory even in the second half of the century (in such a case, progressively moving towards the worst-case scenario). Overall, while the aging process has been underway for some time, the decades leading up to the mid-century are certainly those in which the imbalance between generations in various life stages will be most pronounced whereas the outlook after the mid-century remains largely uncertain.

Italy has entered a new phase in its history not only due to the reduction of the overall population but also because of an unprecedented decrease in the active workforce (Impicciatore and Semenza, 2017). Istat projections indicate that, despite migratory flows, the contingent of potentially working-age individuals (15-64 years old) will decrease to an even greater extent, reaching an annual decrease between 350 thousand and half a million units in the 2030s (Figure 2). This constitutes a loss net of the considered positive migratory balance. The next two decades identify the phase of greatest impoverishment of the working-age population, while it is likely that towards the middle of the century, the intensity of the decline will subside. The criticality of the next twenty years emerges even when looking at the dependency ratio of the elderly, given by the ratio between the population over 65 and those in working age (15-64 years) (Figure 3). This index provides a measure of the economic-social dependency level between generations outside and within the working age. In Italy today, this stands at 37%, meaning there are about 2.7 individuals in the active age group for every individual of pensionable age. By 2050, this value is projected to rise to a range between 64 and 67, meaning for every individual over 65, there will only be 1.5 people in working age. It's worth noting that the degree of uncertainty is relatively low.

Based on these data, it may be interesting to focus on how many people will actually be employed. At the beginning of 2022, the number of employed individuals was around 23 million, and the employment rate, given by the ratio between the employed and the population aged 15-64, was close to 60%. According to projections by the State General Accounting Office, the employment rate would rise just above 66% in 2050. This leads, in any case, to a reduction in the number of employed individuals, which, according to the median Istat scenario, would be around 19 million (Ragioneria Generale dello Stato, 2021). Even considering the upper limit of the uncertainty range, the number of employed would still remain

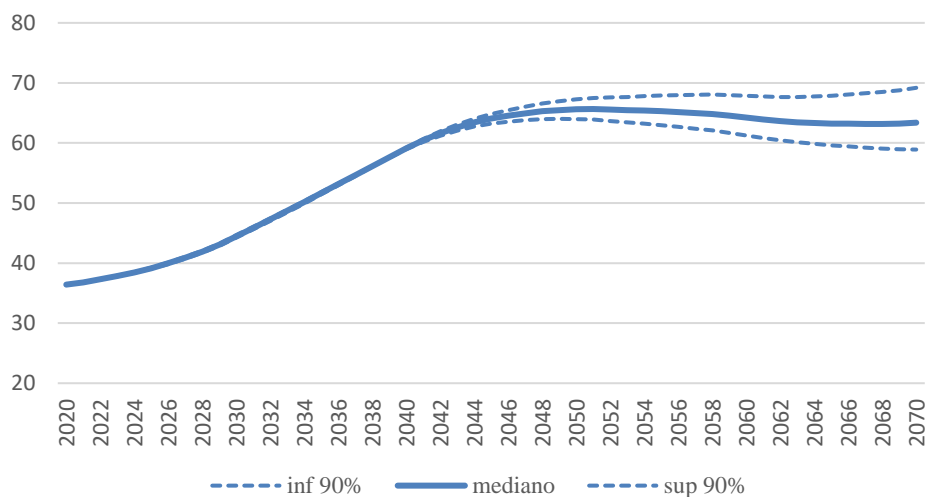
below 21 million, roughly 2 million fewer than current values (while carrying a considerably increased burden of elderly individuals).

Figure 2 – Annual change in the number of individuals of working age (age 15-64) projected for the years 2022-2070.



Source: elaborations on Istat population projections (base 1 January 2021).

Figure 3 – Old age dependency ratio. Years 2020-2070.

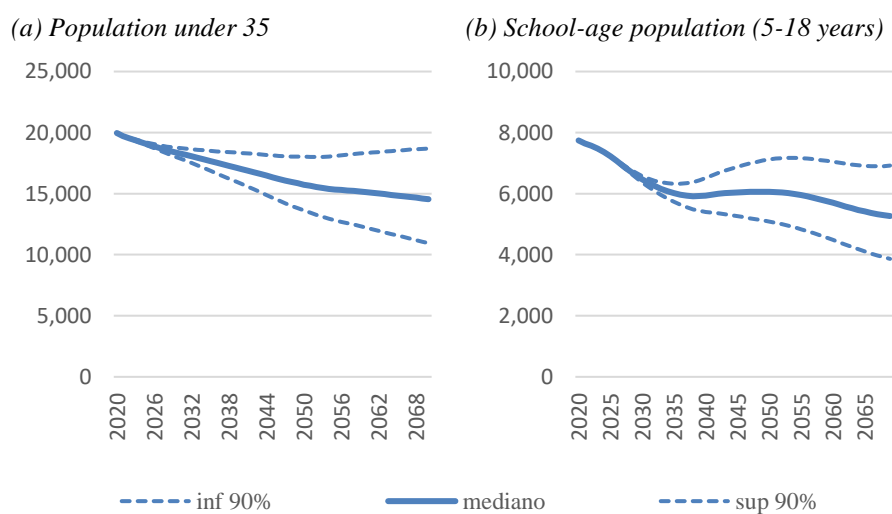


Source: elaborations on Istat population projections (base 1 January 2021).

Alongside the increase in the number of elderly people, Italy is facing an important contraction of the youthful population as a direct consequence of fertility well below the generational replacement threshold. This is a process set to continue in the coming years. However, it is important to note that in the forecasting phase, the uncertainty regarding the youngest age groups is greater as fertility assumptions play a determining role. The Istat median scenario indicates a loss of 4.2 million individuals under 35 by 2050 (Figure 4a). Nevertheless, this loss drops below 2 million when referring to the upper limit of the confidence interval. It would still represent a significant contraction but undoubtedly less dramatic. However, it is not excluded that the opposite extreme (lower limit) may occur, resulting in a loss of as many as 6.3 million.

A relevant indicator, also for educational planning purposes, is expressed by the number of young individuals of school age (Figure 4b). The decline in this component and its repercussions on the education system are one of the most immediate evidences that the decline in births is a pervasive phenomenon destined to produce tangible effects, which will be all the more profound the less we are able to govern and potentially counteract them.

Figure 4 – Projected youth population according to Istat scenarios. Median scenario and 90% confidence interval. Years 2020-2070. Data in thousands.



Source: elaborations on Istat population projections (base 1 January 2021).

3. Possible margins for action

3.1. Quantitative aspects

Italy shares with other Western countries the challenge of ensuring a good quality of life for the growing number of people reaching old age due to longevity (with adequate pensions, care possibilities, and assistance). This challenge can be positively addressed to the extent that the active population remains solid, as this component determines a country's capacity to generate prosperity, that is, to fuel economic development processes and make the social system sustainable (by financing and operating the welfare system).

It is in this regard that Italy appears most fragile. This places the new Italian generations at a competitive disadvantage compared to peers in countries they compete with due to the greater imbalances they must address (in the ratio between old and new generations, as well as between public debt and GDP).

For much of human history, society and the economy have operated based on a large base of young individuals and relatively few elderly. What is entirely new is the challenge of ensuring development and well-being in a world where young individuals become a scarce resource in the face of a continuous growth of the elderly population. The combination of low fertility and a reduction in the population during the family-forming age carries the risk of triggering a generational chain reaction: fewer parents, and subsequently even fewer children and future parents, a mechanism known as the "demographic trap" (Menclarini and Vignoli 2018).

Past birth dynamics have already produced an irreversible result: the Italian population has exhausted its endogenous growth capacity and is heading towards continuous decline. The balance between births and deaths turned negative towards the end of the last century, and it was then compensated by immigration. However, since 2014, not even the contribution of the foreign component has been able to counteract demographic decline (from that year until 2023, the loss was about one and a half million inhabitants).

What is at stake for Italy now is whether to resign itself to making the negative trend in births also irreversible. To avoid resignation, that is, to prevent the "demographic trap" that leads to an increasingly unstable structural configuration, an increase in fertility alone is not enough. The average number of children per woman must rise to levels that compensate for the reduction in potential mothers. In 2010, the average number of children per woman in Italy was 1.44, which allowed for 562 thousand births. The median Istat scenario (based on 2021 data) contemplates an increase in the total fertility rate to 1.44 children by 2039 (from the current 1.25), which, however, corresponds to a total of just 424 thousand births. With the same average number of children per woman, in 2039 we would have about 140 thousand fewer births compared to 2010.

Only the "high" scenario (the most favourable among those outlined in the latest Istat projections) still holds the possibility of containing imbalances in age structure and avoiding the "demographic trap." This scenario contemplates a combination of increased fertility up to 1.82 in 2050 (effectively approaching the highest levels in Europe, close to France's levels) and a migratory balance with foreign countries rising to 250 thousand (which corresponds to annual entries exceeding 350 thousand).

Increased fertility stabilizes the age group under 20 and prevents it from further decreasing, while immigration has its main effects on the crucial 20-54 age group, which, instead of losing almost 7 million inhabitants (in the worst-case scenario with migratory balance approaching zero), would limit the loss to 3.7 million (still within the scope of 2050).

In any case, this would not make the Italian population grow again; it is already in irreversible decline. However, the downward spiral mechanism would be deactivated, securing the structural basis of Italy's future with births returning to over 500 thousand. Furthermore, the reduction in potential workforce would be contained at levels that do not constitute a competitive disadvantage compared to other countries and can be compensated on the qualitative side (by investing, in particular, in a long active life and in employment opportunities for young people and women).

This scenario outlines a path similar to that of Germany, which in the last fifteen years has raised fertility from values lower than those in Italy to levels above the European average. German births went from 663 thousand in 2011 to 795 thousand in 2021. In 2011, the gap between Italy and Germany in terms of births was around 120 thousand, now it is about 400 thousand. Germany is the most interesting case of a country that has recently managed to reverse the trend by combining careful family policies with the ability to attract and manage migratory flows of individuals in working and reproductive age. In the decade preceding the pandemic, the average migratory balance was around half a million per year.

It is important to be aware that for the situation Italy finds itself in (a combination of persistent low fertility and a demographic structure tilted against new generations), the possibility of giving impetus to a solid new phase leading towards the high scenario can only be achieved by aligning with the best European experiences. European experiences tell us that economic aid is the most effective short-term effect for boosting births, as it allows for the unlocking - especially after a crisis and in conditions of uncertainty - of a choice that has been put on hold and continuously postponed. However, for this impulse to be coupled with an actual trend reversal process that continues in the medium to long term, there needs to be a solid improvement in services and tools in favour of families and in support of parental choices (with continuous monitoring and evaluation of effectiveness compared to expected results).

A recent report from the United Nations (World Population Policies 2021) shows that countries with pro-birth policies have surpassed those engaged in reduction worldwide. In the first case, these are countries with fertility rates below 2. In addition to maternity leave, the most widely adopted tool is that of fundamental childcare services for the reconciliation of work and family life (88%), followed by economic contribution (78%) and paternity leave (73%). Italy lags far behind the best international experiences in all of these measures (UN 2021).

It is not about convincing people to have children or creating psychological pressure on those who do not want to, but simply about favouring an ecosystem conducive to the free choice of having them. The margins on which family policies in Italy can act are wide, as the possible strategic space is that of the gap ("demographic deficit") between current fertility (1.25) and the desired number (around 2), or at least the value that the experience of other European countries shows as achievable (1.8). The data from the most solid research available on the comparison between intentions and behaviors (Beaujouan and Berghammer, 2019; Sobotka and Beaujouan 2014) show that Italy is among the developed countries with the greatest gap between the number of children that women at the end of their reproductive life (around 45 years) have had and what they declared they wanted when they were 20-24 years old.

No advanced mature country has seen this gap reduced without implementing solid measures and effective tools to support birth rates. Instead, the opposite can happen: the desired number can decrease in contexts where the lack of policies and public attention leads to consolidating the message that the birth of a child is not considered a social value but only a cost and a complication borne by parents. This is the risk for Italy.

The data from the Toniolo Institute's Youth Observatory highlight that the new Italian and European generations, by and large, desire to have children (biological or adopted), but they also feel free not to have them. They do not feel obliged to have them due to a biological imperative or to conform to a social norm, but they have the desire to share with them the pleasure of seeing them grow up in a context of security, with adequate care and well-being (Istituto Giuseppe Toniolo, 2023). These are the conditions that are most lacking in countries like Italy, which stand out for lower fertility and a continuous postponement of the age of having the first child. Having a child must be within the bounds of possible planning in the transition paths to adulthood for new generations, not positioned beyond a horizon that is continuously pushed further ahead until the threshold of renunciation. The lack of adequate measures to support autonomy and initiative (through housing and active labour policies) risks keeping many young Italians in the condition of children until an age where it becomes too late to become parents.

3.2. *Qualitative aspects*

Another key awareness that must be acknowledged is that it's not enough to address the quantitative reduction (through birth rates and immigration), but there's also a need for a qualitative strengthening of the contribution of the working-age population (starting with the new generations, across the entire territory, for both genders, as the foundation of a long active life). Even if fertility were raised to the highest levels and there were increased migration, Italy would still experience a reduction of approximately 3.7 million individuals in the 20-54 age range (almost 5 million across the 20-64 age range). Italy also has a significant margin for improvement in the efficiency of existing labor force utilization, particularly represented by the gap between youth and female employment compared to the European average.

In the crucial phase of transitioning to adulthood and building solid foundations for future paths, between the ages of 25 and 29, only two out of three people are employed (67.3%, according to Eurostat data from 2022). This is the lowest value in the entire European Union, where in the vast majority of member states, over three out of four young individuals are employed, and the EU-27 average is above 80%. This represents both a generational and gender disadvantage. In the 25-29 age group, the female employment rate in Italy is 53.9%, compared to a EU-27 value of 72.0%. In the overall 20-64 age range, Italy has the lowest female employment rate (55%) in the European Union (with an average of 69.3%), and the second largest gender gap (after Greece, at 19.7 percentage points) (Eurostat 2023).

In a systemic and integrated perspective, this qualitative improvement must be understood and implemented interdependently with the quantitative one. Improving young individuals' autonomy in housing and providing them with a solid entry into the workforce also allows for the formation of families and having children. Increased female employment, combined with reconciliation policies (at both the public and corporate welfare levels), leads to increased fertility and reduces the risk of poverty for families with children.

The management of immigration must also be considered part of a systemic action to structurally strengthen the country, with measures that help all gears integrate positively and move in the right direction. On one hand, immigration is a significant factor in addressing demographic imbalances and meeting business needs in many sectors. On the other hand, quality attraction is not possible without economic development and opportunities for work and social integration. What doesn't work in the school-to-work transition also penalizes (often even more) young immigrants. Similarly, deficiencies in work-family balance tools constrain the participation of both native-born and immigrant women in the labor market.

The response to quantitative imbalances (resulting from demographic dynamics) lies particularly in mechanisms that establish a positive relationship between life

stages and generations in society and the working world. The European Union and many developed world countries are increasingly promoting active aging. This concept refers to the process that allows for better quality of life and more enduring and satisfying participation in society and processes that generate collective well-being. This is in line with the perspectives of age Management regarding work and silver ecology regarding consumption and investment.

The extension of the retirement age must be accompanied by age management policies capable of making the prolongation of working life positive for individuals and productive for companies and organizations. However, these policies are struggling to take off in Italy. In the coming decades, the success of a company will depend more on the management of its workforce than on the provision of new technologies. As various studies highlight, by cultivating one's course of life adequately through its various stages, with necessary updates and a positive attitude, the majority of people tend to experience significant cognitive decline only after the age of 75 (Bordone et al 2020). This does not mean expecting a 60-year-old to be able to do the same things they did at 40, but it is true that a 60-year-old today can do better and more than a 60-year-old from twenty years ago. The basic principle is that the fruits of the labour of those over 55 are not something unchangeable and predetermined, but rather there is ample elasticity and room for improvement through proper management.

The collaboration between generations is becoming increasingly important. There are companies in Italy that have this approach and are excellence in their field. The aging of the population does not necessarily put mature workers in competition with the opportunities of new entrants. This only happens in economies that are not growing. If human capital is leveraged for development and innovation, raising the level of competitiveness of companies and organizations, growing opportunities are created that benefit everyone. Those contexts that are able to establish mutually stimulating, exchanging, and supporting relationships between different generations are the ones with the greatest potential for growth and competitiveness.

The impact of aging on consumption is also broad and profound and should not only be understood quantitatively (increased demand for products and services characterizing the so-called "Silver Economy"). There are lifestyle changes, preferences, and interests related to the new sense that individuals and society give to this new phase of life. However, the offerings from institutions and companies are still heavily deficient and too traditionally age-bound in this regard.

The combination of quantitative consistency of seniors, economic and time availability, higher levels of education, and the role of new technologies makes them a valuable resource within an aging society that still wants to remain dynamic on the social and cultural fronts. It is, therefore, strategic, especially for countries like Italy, that the increasing presence of the mature population is put in a position to become

increasingly enabled and enabling within the major cultural, social, and economic transformations underway. In this context, an interesting perspective is that of "Silver Ecology". It encompasses that part of the Silver Economy that concerns consumption and investments capable of promoting ecological transition in line with the objectives of Agenda 2030. But Silver Ecology also includes: volunteer activities that help reduce social and generational inequalities; civic engagement activities that help enhance culture, environment, and territory; in addition to the contribution that seniors can make within organizations through specific practices of transferring experiences and skills that improve the knowledge and actions of the new generations.

The data from a survey conducted in the early months of 2023 by AstraRicerche for the Senior Observatory on a representative sample of 1000 people aged between 60 and 75, highlights a wide awareness that seniors can significantly contribute to the economy through spending and consumption (this is the opinion of about 3 out of 4 seniors) and that they could contribute to promoting sustainable development (76.6%).

In the same perspective, the development of enabling new technologies (quality employment opportunities for new generations) that improve both long active life and mobility and safety in the home environment in advanced ages should also be considered. Investments in research and development driven by this demand increase quality employment in the most advanced sectors (especially valuing the human capital of the new generations) and strengthen and improve technologies that then extend to the entire population.

The central issue to address is, therefore, the strategies and actions necessary to prevent demographic imbalances from becoming unsustainable and to generate new well-being under conditions very different from those that allowed growth in the past. This is a challenge that needs to be approached from both a quantitative and qualitative perspective.

The combination of these data and the developed considerations makes it clear that there are no easy answers. However, it also emphasizes that seizing the challenge that demographics pose and acting in an integrated way on these fronts not only allows for addressing structural imbalances but also enables families to make their own life choices, young individuals and women to find full realization, companies to combine attention to worker well-being and productivity, and the country's system to reduce generational, gender, and social inequalities to unleash its potential to the fullest.

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