

Generation and Redistribution of Income from an Age-Perspective. European National Transfer Accounts for the Period 2008 - 2022

Extended Abstract

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November 1, 2025

Abstract

The ageing population of Europe enforces changes in the age-specific distribution and redistribution of income, potentially leading to imbalances and increasing inequalities between generations. We analyse age- and sex-specific individual incomes in European countries during the period 2008 - 2023 using data from European National Transfer Accounts. A particular focus is on the effect of taxes and social benefits on age-specific incomes. Preliminary results highlight the decline in the relative income of young individuals in many countries, especially in Southern Europe.

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1 Introduction

When the baby boom cohorts in Europe are finally retired, Europe's economies and social systems need to be very different from today's. Whether European societies will provide perspectives and good living standards for all generations depends on how they organise their generational economies: how they allocate primary income and how they redistribute income, goods, and services between age groups.

Adapting the economy and social systems to the changing demographics is a challenge. The profound demographic changes meet inert government institutions, such as public pension systems,

and an ageing electorate. As a consequence, imbalances are increasing, including a decline in the income of the young, shortages in care and health services, high fiscal deficits, and increasing government debt. During the last two decades, Southern European countries, in particular, have been characterised by a decline in income and living standards for the young.

Research can make an important contribution to meeting the challenges regarding ageing and generational inequalities. First, by monitoring the changes in income and its components from a generational perspective. I.e., by distinguishing income trends by age. Second, by evaluating the relationship between demographic changes and government revenues and expenditures, and how it is affected by country-specific institutions. Especially, cross-country comparisons can identify successful strategies for the adaptation of labour markets and welfare state systems to the ageing population.

2 Literature and research gaps

Past research has identified large differences in the age-orientation of European welfare, reflected in the direction of government redistribution and in who pays the costs of economic crises. Already for the post-1975 economic slowdown, Chauvel and Schröder (2014) show that in conservative welfare states, in particular, Mediterranean countries, the burden of adjustment was placed mainly on young cohorts, with long-term effects on their income. In liberal and social democratic welfare states in Northern Europe, this effect was much weaker. Lynch (2001) uses aggregate data on social spending by function to analyse the age orientation of social policy regimes. She finds Greece, Italy, and Spain among the countries with the most elderly-orientated policies, and northern European countries among age-neutral countries. In Lynch (2006), she emphasizes that the way governments redistribute and allocate income and economic risks between the young and the old is a consequence of the long-term evolution of welfare states and is deeply embedded in welfare state institutions. Therefore, it is not surprising that Chen et al. (2018) and Hammer, Spitzer, and Prskawetz (2022) show that the financial crisis and government debt crises from 2008 to about 2014 resulted in stronger income losses for the young, with similar country patterns: large income losses for the young in Southern European countries, but also a decline in the relative income of the young in many Central and Northern European countries.

The past research identified important differences between countries and shows important developments in a particular time period. However, most of the research is based on aggregate data and indicators based on household income. The evaluation of these changes can improve with measures of age-specific individual income and its components over an extended time period. To improve decisions and economic policies, access to and use of actual data is of central importance.

In general, there is excellent and detailed data on aggregate quantities of income, taxes, and benefits, their differences across countries, and changes over time. Some of them are highly relevant to generational issues, such as the tax to GDP ratio, tax wedge, pension, health, and education expenditure as a share of GDP. All of these indicators are publicly available in the Eurostat or OECD databases and are published in reports. However, it is challenging to find information on age-specific individual incomes and their changes, and how they are affected by taxes and benefits. This information is central to evaluating the economic situation of distinct generations.

3 Research questions

Our research uses the age- and sex-specific data from European National Transfer Accounts on individual income, taxes, and benefits for the period 2008-2022. It allows us to gain additional insights into age-specific income trends, the effects of taxes and benefits, and how they are influenced by demography.

- How do primary incomes differ between the young and the old, and how did they change between 2008 and 2022?
- How does disposable income differ between age groups, and how is the age pattern shaped by taxes and social benefits?
- How are changes in total age-specific income, taxes, and social benefits related to changes in the age-structure of the population?

4 Data: European National Transfer Accounts

National Transfer Accounts (NTA) address the gaps in the availability of age- and sex-specific data on individual income and its components. NTA combine aggregate data from National Accounts and microdata to provide age- and sex-specific data on individual income, government redistribution, disposable income, as well as on private transfers and consumption (Lee & Mason, 2011; United Nations, 2013).

The European NTA (ENTA) are based on publicly available data from EUROSTAT and combine aggregate data from the European System of Accounts with European microdata, mostly from EU-SILC. Currently, work on the European NTA is still ongoing, but preliminary data are available at <https://geneco.shinyapps.io/dataexplorer/>. The full ENTA data will be published in the beginning of 2026. The huge advantage of European NTA is the high degree of standardisation of input data, which increases the comparability between countries; and the availability of data for each year from 2008 to 2022.

5 Results

The goal of our research is to generate intuitive indicators that measure primary and disposable income, as well as their components, at each age. Because work is still ongoing and we do not have final results yet, we present an overview that illustrates the importance of the age-dimension when analysing income and the potential of the ENTA data.

Figure 1 and 2 illustrate the importance of the age-dimension when analysing labour income, which comprises income from employment plus the labour component of income from self-employment. Labour income in Italy has been decreasing in the aftermath of the financial crisis and the government debt crisis, reflected in the lower mean for all age groups in the main working age up to about age 60. Italy is among the countries with a strong increase in employment rates at older ages, which is reflected in the much higher mean labour income for those aged 60 and older.

The age-perspective is not only important for Southern European countries. In Sweden, labour income did increase in the period from 2008 to 2023. The age-specific results show that this increase was concentrated among those aged 40 to 60; it stagnated for the younger working age population.

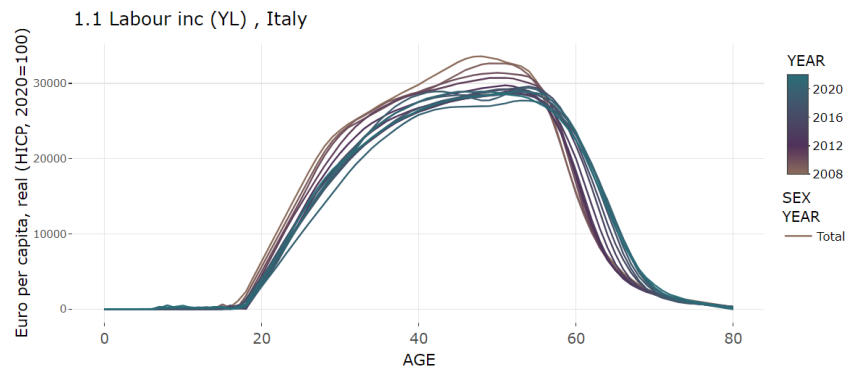


Figure 1: Real labour income by age and year, Italy

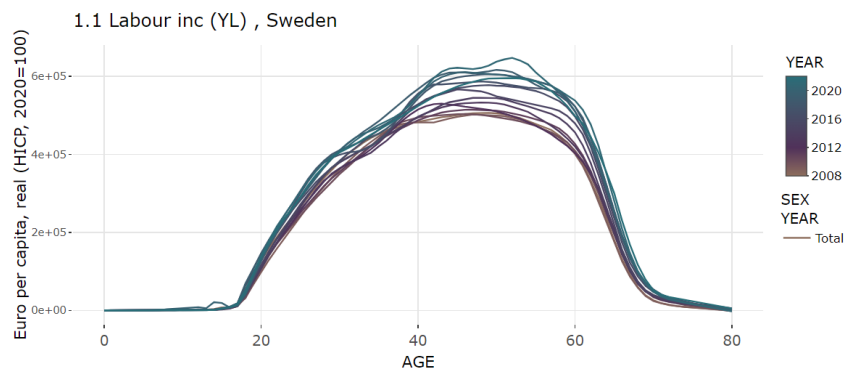


Figure 2: Real labour income by age and year, Sweden

Social benefits by age

Age-specific social benefits reflect the later retirement age in most countries. Consequently, the averages per capita largely change with labour income, with few exceptions. In Italy, average benefits for the older generations increased, despite the decline in labour incomes (Figure 3).

The age-specific ENTA data can be combined with the population structure, which provides great insights into aggregate changes in income and social benefits. In Italy, total social benefits increased significantly between 2008 and 2015 (Figure 4), due to the larger population at older ages and the higher benefits directed toward them. To facilitate comparisons over time, the social benefits are measured relative to average labour income at ages 30 to 49.

In France, mean values of public benefits in real terms remained about constant in the period from 2008 to 2022; However, the aggregate values changed considerably due to the change in the population structure. Figure 5 shows the increase in total social benefits for older age groups.

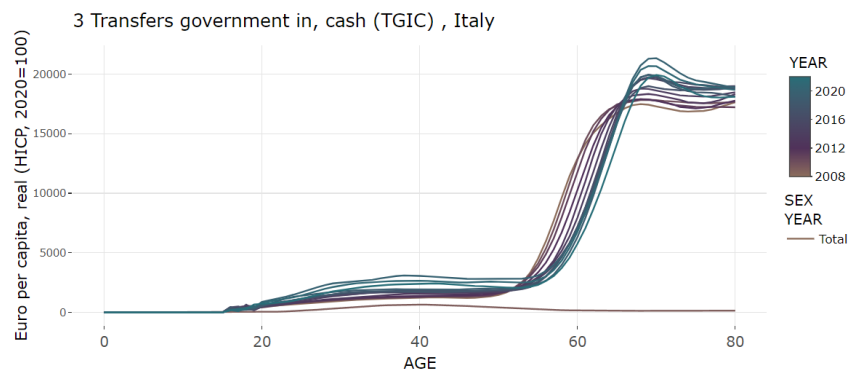


Figure 3: Social benefits in cash by age and year in Italy, 2020 prices

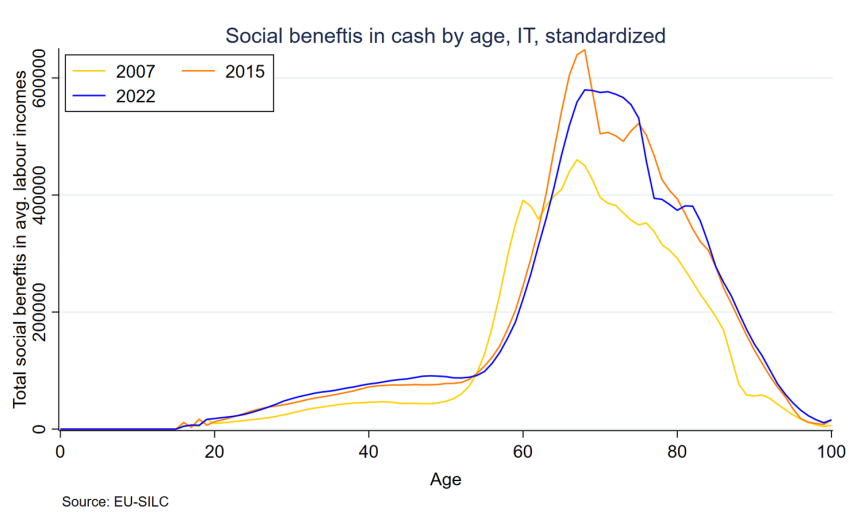


Figure 4: Total social benefits by age in Italy, 2007, 2015, 2022; measured in avg. labour incomes

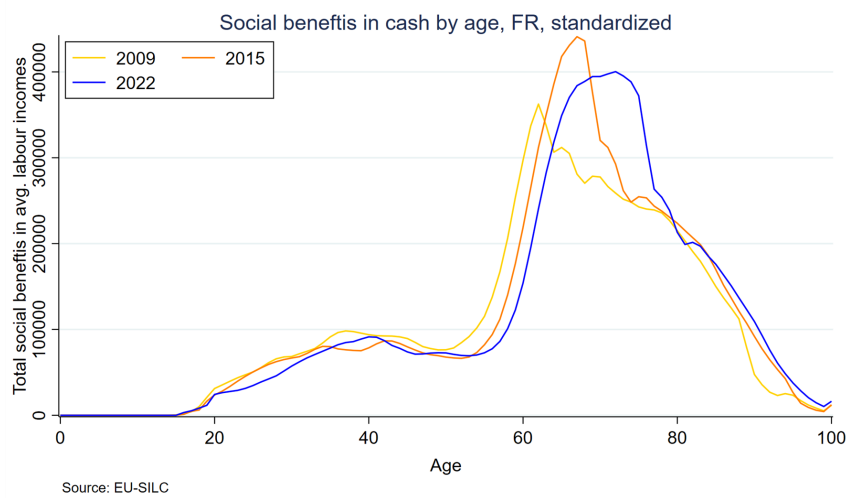


Figure 5: Total social benefits by age in France, 2009, 2015, 2022; measured in avg. labour incomes

6 Discussion

The information on individual primary income, taxes, social benefits, and disposable income in ENTA closes gaps in the availability of data, which focusses on aggregates or on measures of household income. Research based on ENTA data delivers great insights into the economic situation of distinct age groups, and in combination with population data, it improves our understanding of the economic consequences of demographic changes.

This extended abstract includes only a preliminary overview. The work on ENTA and the age-specific analysis of income, taxes, and benefits will be finished by the beginning of 2026. It will provide detailed information on country differences and age-specific changes in disposable income, and how it is affected by primary incomes, taxes, and benefits.

References

- Chauvel, L., & Schröder, M. (2014). Generational inequalities and welfare regimes. *Social Forces*, 92(4), 1259–1283.
- Chen, T., Hallaert, M. J.-J., Pitt, M. A., Qu, M. H., Queyranne, M. M., Rhee, A., . . . Yackovlev, I. (2018). *Inequality and poverty across generations in the european union*. International Monetary Fund.
- Hammer, B., Spitzer, S., & Prskawetz, A. (2022). Age-specific income trends in europe: The role of employment, wages, and social transfers. *Social indicators research*, 162(2), 525–547.
- Lee, R. D., & Mason, A. (2011). *Population aging and the generational economy: A global perspective*. Edward Elgar Publishing. <https://idl-bnc-idrc.dspacedirect.org/server/api/core/bitstreams/168f97d0-da44-48d4-aa73-fb3eb4606b88/content>.
- Lynch, J. (2001). The age-orientation of social policy regimes in OECD countries. *Journal of Social Policy*, 30, 411–436.
- Lynch, J. (2006). *Age in the welfare state: The origins of social spending on pensioners, workers, and children*. Cambridge University Press.
- United Nations. (2013). *National Transfer Accounts Manual: Measuring and Analysing the Generational Economy*.