

## **Population ageing in Poland and its consequences on public and private transfers**

Agnieszka Chłoń-Domińczak, Warsaw School of Economics

Wojciech Łątkowski, Warsaw School of Economics

### Extended abstract

According to the EUROSTAT population projections, the Poland's population will be ageing at one of the fastest paces in Europe. As a result, from one of the youngest populations in Europe (measured by the level of old-age rate and old-age dependency rate), Poland's population will become one of the oldest ones. This is an unprecedented change within 50 years that will have an impact on public expenditure level and structure affecting inter-generational directions of public transfers. It will also affect other intra-generational transfers, including those within families.

Current research on the impact of population ageing on economic and social development of Poland usually focuses on selected areas such as social protection, health care or long-term care. There are also studies on the impact of population ageing on the economic growth. The European Commission indicates that the potential GDP per capita growth in Poland will fall from 4.7% to 3% due to changes in the population age composition. Advanced ageing accompanied by the shrinking working-age population imposes pressures for longer working lives, higher labour market participation at all ages (including increases in female labour market participation) and higher productivity.

However, these developments depend on progressing in human capital and productivity as well as extending labour market participation of generations. There are inter-generational transfers involved that contribute to the qualitative and quantitative aspects of human capital development. These include, among others, public and private expenditure on health and education, particularly for children, that are essential for the formation of human capital in the future and have an impact on the productivity. Similarly, the existing division of care responsibilities between those organised by the public or private services and those provided at the household level determine the work-family life balance and result in labour market participation of selected population groups, particularly women (Drobnič and Guillén (eds.) 2011). Research on women's employment and fertility also shows that tensions experienced by families are context-dependent: in countries with better "reconciliation regimes", also seen at the level of generational public and private transfers, both women's employment rates and fertility levels are higher (Knijn (ed.) 2012). The NTA approach allows seeing these developments in a comprehensive manner, taking into account inter-generational dynamics of transfers that can either stimulate or hamper the human capital formation and utilisation.

The NTA methodology supports development of forward-looking projections of public expenditures and revenues in the context of life course developments. This will contribute to better understanding of the long-term consequences of population ageing on public finance in a broader perspective of intra-generational solidarity and impacts of public finance on private transfers. Research shows that there are links between public and private transfers directed towards different generations and societal responses. Galasso, Gatti and Profeta (2008) demonstrate for example that higher spending on pensions (directed towards older cohorts) causes a reduction of private savings in developed economies and in the case of developing countries also can be associated with reduced fertility levels. Using the NTA profiles for Poland we identify the range of transfers between generations, taking into account responses of households to the policy setting at the macroeconomic level. This includes age profiles of income, consumption, transfers and asset-reallocation, including among others private family transfers.

National Transfer Accounts provide estimates with sufficient historical depth to study the evolution of intergenerational transfer systems; the consequences of alternative approaches to age reallocations embodied in public policy with respect to pensions, health care, education and social institutions, e.g., the extended family; and the social, political, and economic implications of population aging.

The NTA profiles are used order to test hypotheses concerning wealth building, financial and fiscal systems for Poland. A broader perspective of the inter-generational solidarity and the inter-generational contract in Poland is discussed by Szukalski (2012), who presents a comprehensive approach to dilemmas of inter-generational relations in Poland in the past, today and in the future. Szukalski (2012) by taking the life-course approach formulates three notions related to the inter-generational contract:

- The proportions of transfers to children and seniors should be changed, with larger part of transfers directed towards children;
- There is a need to reduce burden for future generations, who in the situation of financing the consumption of current generations with public debt – will have a high burden, reducing their development potential;
- There is a need to strengthen the awareness of the need to prepare to reduced generosity towards the elderly in the future as well as a need to extend working lives in the life course.

At the moment, these notions are not fully supported by research-based evidence. Estimation of NTA profiles for Poland provides a tool to measure inter-generational transfers and inter-generational solidarity that can support these notions or lead to formulation of alternative ones.

In the paper we focus on the analysis of potential effect of changes in the age structure of population on the size of private and public transfers both towards children and youth (before working age) as well as towards the elderly who are past productive age. Currently, despite relatively young population, Poland diverts significant part of its public expenditure towards the elderly, while transfers towards families and children are relatively limited. As a result, significant share of financing of the consumption of children is financed by parents and families. With the change of the age structure, we expect rising pressure to increase transfers to the older part of the population, which in turn can lead to rising contribution and wage tax levels, which could reduce the level of private transfers towards children and reduce propensity of families to have children.

By applying the National Transfer Accounts approach we investigate the relationship between the population age composition and economic development as well as public finance. In the paper we focus on the following research hypotheses:

1. There is an interrelation between transfers received early in the life course, particularly transfers in health and education, and transfers happening later in the life course (such as health, long-term care, disability, old-age transfers) that affects the level of public expenditures;
2. Non-public (in particular households) transfers over the life course and to specific cohorts compliment public transfers, i.e. private transfers supplement shortages of public services, particularly when childcare and long-term care are underdeveloped and evolve accordingly to the development of relevant public policies;
3. Supplementing public transfers by private transfers (care, health, education) may produce inequalities across population strata which generate life course effects;
4. There is an unequal distribution of public and private transfers (including time transfers) for men and women, which reduces possibilities to increase women's employment;
5. Population ageing will lead to significant shifts of consumption between generations that will affect the level and structure of public expenditure.

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