

Marja Riihelä, Risto Vaittinen and Reijo Vanne

Changing Patterns of Intergenerational Resource Allocation in Finland

All societies transfer resources across generations or along life-cycles because individual consumption needs and the capacity to finance these needs do not match. Intergenerational transfers or transfers from one age group to another are means to finance this gap. They exist alongside market mechanisms for shifting income from one age to another by borrowing and lending or by saving and investing in capital. In this study we evaluate the implications of changing life-cycle patterns of earnings and consumption that have taken place in Finland from 1990 to 2006.

Putting Age into Finnish National Accounts

The National Transfer Accounts (NTA) is a methodology to measure intergenerational relations and provides means to interpret its economic aspects. Existing systems of national accounts do not include the dimension of age, nor do they include familial transfers. NTA adds these two dimensions to national accounting systems in a way that is consistent with existing measures of intergenerational transfers. In section two we review NTA methodology and its implementation to the Finnish data.

Demographic Transition and Macroeconomic Turbulence

In section three, we discuss the institutional setup of generational relations in Finland, the economic policy changes and aspects of general macro-economic development that are of significance for intergenerational exchange. In terms of intergenerational transfers, Finland displays two specific features. Approximately two thirds of public expenditure can be regarded

as age-related spending, accounting for approximately 30 per cent of the GDP. Unlike most countries, the public sector in Finland has a positive net financial wealth because of partially funded statutory employment pension insurance. Another distinguishing feature of the Finnish society is that, in relative terms and compared to other countries, the post-war baby-boom generations are exceptionally large.

Finland has already entered the stage of demographic transition where the share of the working-age population is declining because of the population ageing. This far the transition has been moderate. The largest generations enter the retirement age during 2008–2013 causing a sharp decline to the share of the working-age population in the 2010s. The decline will continue at an accelerating rate during the next decades. The population transition as such will have profound implications for intergenerational resource flows.

The transition in population structure during the period under review has coincided with major transformations in the economic policy environment: The dual income tax system was introduced in 1993; Finland became a member of the EU in 1995 and later on a common currency and monetary regime were introduced. When becoming a member of the EU value added tax was adopted as a main form of taxing overall consumption. These changes coincided with macro-economic volatility that has been unprecedented in the Finnish post-war history.

Consumption is the Main Contributor to the Increased LCD

The economic lifecycle is characterized by the age profiles of consumption and labor income. The gap between the two is called the life-cycle deficit (LCD). It is large and positive for children and the elderly. Lifecycle deficits are possible only because economic systems facilitate two kinds of inter-age flows of income: transfers and asset-based reallocations. In section four, we evaluate the changing patterns in the age profiles of consumption and labor income. We decompose the change in LCD into elements caused by transition in population structure and to those caused by changes in the patterns of age specific per capita consumption and wage income.

The changing age patterns in consumption and production are manifested in the aggregate life-cycle deficit of Finland. On average, the aggregate LDC was only a few percentage points relative to the wage sum from the mid-1970s to the late 1980s. After 1990, the deficit increased considerably and amounted to approximately 17 per cent of the wage sum in 2006.

We have estimated that, had the relative profiles of life-cycle earnings, and consumption remained constant, the life-cycle deficit relative to the wage sum would have been 5.5 percentage points lower than the one we observed in 2006. Thus, about 40 per cent of the growth in the deficit between 1990 and 2006 can be attributed to the transition in the population structure. The remaining part is explained by structural shifts in age-specific patterns of consumption and wage earnings. As a matter of fact, the changing profile of per

capita wages by age has reduced the deficit by roughly four percentage points. The labor market and population developments have had a modest, joint net impact on the aggregate life-cycle deficit.

The demography alone would have reduced the child deficit, but a delayed entry onto the labor market at young ages has had an impact in the opposite direction. This has more than neutralized the effect of demography and implied an increasing child deficit. The opposite is true for the generation of the old-age deficit. Improved labor market performance has succeeded to eliminate three quarters of the deficit that ageing alone would have implied. A lengthening of working careers has thus almost eliminated the burden of ageing at the given consumption structure.

Growth in private consumption relative to wages has increased significantly the life cycle-deficit. Without changes in consumption by age and relative to the wages, the LCD would have been 13 percentage points lower. Consumption relative to wages has increased uniformly at all ages. Its importance in changing the life-cycle deficit has been almost as significant in the group generating the old age-deficit as in the group generating a life-cycle surplus. Since the population responsible for the old-age deficit is a significantly smaller group than the prime-age population, the consumption per head among the elderly population in 2006 has increased relative to others since 1990.

The Growing LCD has been Mainly Financed by Private Asset Income

Lifecycle deficits are financed either by inter-age transfers or asset-based reallocations. Asset based reallocations are composite of two flows: asset income and saving, which include purchases and sales of assets, and borrowing and lending from financial institutions. These flows are mediated by either private or public institutions.

Since the aggregate LCD relative to the wage sum has increased considerably it is worthwhile to consider whether the newly established level is sustainable in the future. It turned out that at the first phase of the growth of the LCD in 1991–1995 it was financed by private but especially by negative public saving or de-cumulation of net wealth. In later years the financing stems from private asset income. Private and public saving has recovered and both have been positive, private saving for the last 15 and public saving for the last 10 years. From a sustainability point of view, one of the necessary conditions for sustainability has been fulfilled. Taking into account the probable future age-structures of the Finnish population, and without further research, it is not evident whether the level is sufficient.

We have evaluated the financing of life-cycle deficits by private and public transfers across ages and private and public asset reallocations along the life cycle using five broad age categories those aged 0–19, 20–29, 30–54, 55–64 and 65+ years. The most significant relative shifts in per capita terms have taken place in broad age groups of 10 years before and after the group of the prime-age working population of those aged 30–54 years.

In public age reallocations, changes in transfers are of more importance than asset-based reallocations. We have subdivided public transfers into net cash and net in-kind transfers. Pensions are the most important age related cash transfers. The received transfers-in-kind by age comprise of the age-specific public services that people consume. The age-specific share of the financing of the public transfers-in-kind is the same as the age-specific share of all taxes, excluding social security contributions.

The most significant decline in the net public cash transfers has taken place in the population aged 55–64 years. Relative to the peak value in this group, net public cash transfers have declined by 15 percentage points to nearly zero in net terms. The same positive pattern, from the point view of the LCD, also appears in net in-kind transfers. The opposite is true in both cases of public transfers for young adults aged 20–29 years. In the case of in-kind transfers, young adults have turned from net contributors to net beneficiaries. In per capita terms, this particular group has turned from a modest life-cycle surplus contributor, with 9 per cent relative to prime-age wages, to a life-cycle deficit contributor, with equals 8 per cent relative to the prime-age wages.

We have noted that, in aggregate terms, private asset-based reallocation, and especially income on private assets, has contributed mainly to the financing of the growth in the life-cycle deficit during the period under study. The relative asset income per capita has followed the general pattern among all broad age categories. The development has been the most pronounced among those aged 55–64 years. The relatively abundant asset incomes within this group during the last years coincide with an expansion of private consumption within the same age range compared to earlier cross-sections of consumption by age.

The relative importance of private asset-based reallocation to the financing of the life-cycle deficit has also increased significantly among the elderly population aged 65 or more. Private asset-based reallocation covers half of the increase in their life-cycle deficits. The improved asset income of senior citizens is reflected in the increased private consumption relative to that of the middle-aged. This is most apparent among those nearing the retirement age, but also those aged 70+ are consuming more, in relative terms, than did the population of the same age in 1990.

Final remarks

The changing age patterns in consumption and production have manifested themselves in the growth of the overall life-cycle deficit from three per cent in 1990 to 17 per cent in 2006 relative to the wage sum. Demographic transition explains for two fifths of the overall increase. However, improved labor market performance at older ages has almost neutralized the deteriorating effect of ageing to the LCD. It turns out that growth in consumption relative to wages is the main contributor to the growth in aggregate LCD. Is the observed increase in the deficit sustainable? Giving a definite answer to this question is beyond the scope of this

study. However, we can say that the growth in the deficit has been sustainable in the sense that it has not been financed by de-cumulating private or public net wealth. As a matter of fact, private asset income, which has become an increasing share of the total disposable income, has been the main source in the financing of the life-cycle deficit. To evaluate whether the public and private wealth is sufficient to cover future obligations or aspirations would require a forward-looking framework of analysis.

More information:

Marja Riihelä

E-mail: marja.riihela@vatt.fi

Puhelin: +358 04 304 5509

Risto Vaittinen

E-mail: risto.vaittinen@etk.fi

Puhelin: +358 10 751 2153

Reijo Vanne

E-mail: reijo.vanne@tela.fi

Puhelin: +358 680 6723

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