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REVIEWS

ON GENERATIONAL ECONOMICS IN HUNGARY

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Gál, R.I. (ed.): *Apák és fiúk és unokák: jövedelemáramlás együtt élő korosztályok között.* [Fathers and Sons and Grandsons: Income Flows among Coexisting Generations.] Budapest: Osiris, 2003.

Fathers, sons, and grandsons. Politically correctly: parents, children, and grandchildren (though the 'children' are also parents). Humanity has been dealing with the flow of incomes among coexisting generations since the beginning of times and would continue to do so. This important topic is studied by András Gábos, by the editor Róbert Iván Gál, Márton Medgyesi and Géza Tarcali in their 200-page book.

The Editor has arranged the book in four chapters: 1. Introduction, 2. Fertility, 3. Inter-generational redistribution, and 4. Flow of income and wealth within the family.

First I would briefly describe the contents of the four chapters, next I would assess the book.

1. In the *Introduction* the Editor surveys the topic, breaking it up into six chapters. It is learned from *Section 1.1* how many specializations do research into this issue from demographers to the experts of dynamic macro-economy. *Section 1.2* outlines the scheme of flows between generations and distinguishes between goods flowing ahead and those flowing backward, in the first case goods and services flow from those who work to the children, and from the working members to the elderly in the second one. *Section 1.3* presents the age profile of domestic welfare programs, and *Sections 1.4–1.6* analyze the systems of transfers with, and without capital and insurance markets and social security respectively.

The *Introduction* is followed by a detailed exposition of the three topics. Wherever it is possible the theoretical introduction is followed by the presentation of international and next of the domestic empirical results.

2. *Fertility.* It is commonly known that one of the greatest problems of modern societies is that women in reproductive age do not want to bear as many children as would ensure the reproduction of population. At the same time too many children are born in the traditional societies, and as a result of modern health care the population grows in incredible dimensions (Bangladesh).

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In *Section 2.1* Róbert Iván Gál studies the relationship between the hypothesis of ‘old-age security’ and the pension system. It is a plausible explanation for the above process that the system of social security in developed societies has made children ‘unnecessary’, whereas too many children are needed in the ‘developing’ countries, if the parents want to spend their old age in security. The existence or the non-existence of the capital market may have a similar effect.

In *Section 2.2* Róbert Iván Gál studies the impacts of the pension system on fertility. The surveys apply questioning techniques as well as time series methods. “The majority of cross-section data support the old-age security hypothesis of fertility...” (Gál 2003: 47). Here also the question related to the direction of the causation chain does emerge: is the pension system needed because there are fewer children, or is it the pension system that makes children unnecessary?

In *Section 2.3* András Gábos presents the impact of the family support system on fertility. The theoretical starting point is G. Becker’s model which considers the child as a purely consumer good. According to that model the larger family assistance is the greater number of children is born. The experiences of developed countries however, contradict the conclusions of the model (Gál 2003: 51). Under the influence of criticism Becker reconsidered his model and introduced the quality of children in addition to their number. Parents may maximize the output, and, according to Becker, fewer (children) represent more (profit) in modern societies. Here reference is made only to theories considering children as capital goods.

The statistical (econometric) analysis of family support also has rich literature. The only problem is what kinds of control variables are used and what kinds of lags are applied. The studies corroborate the theoretical forecast: larger assistance means larger fertility under otherwise unchanged conditions.

In *Section 2.4* András Gábos also analyses this issue separately on Hungarian data. The difficulty arises from the fluctuations of the real and relative values of family support, while fertility has been continuously falling. The timing of births represents a separate problem. It is commonly known that the number of births reached an unprecedented record in the early 1950s, when abortion was prohibited (in 1954 220 thousand Ratkó-babies were born), and it was followed by a sharp fall after the abolition of that prohibition in 1956 (in 1961 only 130 thousand babies were born). It is difficult to say what proportion of women in reproductive age would have given birth to children at a later date! Instead of surveying the entire related literature I quote only a single figure: “in the period under survey one per cent change of the total sum of family support granted for the age-group between 0 and 14 years was accompanied by a change by 0.17–0.19 per cent of the value of the total fertility ratio for the next year” (2003: 74).

3. *Inter-generational redistribution.* It is perhaps inter-generational redistribution that calls for the greatest attention because of its political significance.

In *Section 3.1* Róbert Iván Gál studies redistribution by the pension system, as this is the largest one and can be best measured. The simplest method determines the internal rate of return of the pension system for each age group (IRR) that corresponds to such a real interest rate at which the present values of the lifetime contributions and of allocations would be equal. This indicator is a very spectacular one, but it does not consider the size of transfers. It is improved by the calculation of the net present value of contributions (NPV), though in this case the value of the interest rate is an arbitrary one. According to *Table 3.2* the IRR would be 97%/year for those born in 1880 in a fictitious pay-as-you-go pension system, while it would be only 1.2% in the case of those who were born in 1920 and after. At the same time the NPV would be reduced to zero from a modest USD 596 (1997 value) in the case of those born in 1910, and subsequently would become negative: its maximum is USD 166 of 1920. (Is not this a mistake? Are not those figures too small?)

The author's care is appreciated by the fact that after having compared the indices of several pension systems (American, German, etc.); he also points out the limitations of those calculations. The most important question is if there were a deficit emerging in the long run, which generations would foot the bill?

In *Section 3.2* Róbert Iván Gál and Géza Tarcali survey the method of generational accounts on the basis of Hungarian data. At first they identify the transfer profile of a given year, next they project that profile to the future with the help of a suitably selected rate of growth. Based on reliable demographic forecasts, the authors specify the long-term budgetary constraint of the government (a realistic factor of discount is needed!!). They evenly distribute the resulting deficit among the population to be born after the base year.

The original method did not credit the contributions of the age groups already born before the base year for the age-group bill, therefore only the bills of the newborn and future generations can be compared. It is possible, however, to reconstruct earlier contributions, this is the so-called retrospective method. The two authors have prepared even this more complete account with enormous work, and the main result of their studies is presented by *Figure 3.4* on page 115 of the book. "It is clear from the Figure that the approximately 50 age groups born after 1880 who entered the system first, did gain from the pension system ...From then on, however, the system is inefficient for every age group."

4. *Flow of income and wealth within the family.* Chapter 4 deals with an issue that is most difficult to grasp, yet it is a fundamental one: what is the direction and size of the flow of incomes and wealth within the family?

In *Section 4.1* Géza Tarcali's starting point is why do rationally behaving parents spend on their children? Becker's model (1993) includes the consumption of two children besides parental consumption in the usefulness function, whereas the usefulness of the two children only depends on the parent's consumption. In the case of optimization the parent balances the income difference between him- or herself and the children by transfer: a child of smaller income would receive a bigger transfer. Further considering Becker's thesis of the "Rotten Kid", Barro (1974) the so-called Ricardo's equivalence (although Ricardo did not believe in it, the inventor of the adjective considered it as only secondary): "Any kind of redistribution between the parents' and children's generation, generated by the government (financed by social security or by credit of the budgetary deficit) will be neutralized by those involved by private transfers" (Gál 2003: 124).

In *Section 4.2* Márton Medgyesi reports on the empirical methods of the study of the topic. Here I would refer only to the most remarkable discussion: the father of the theory of life cycle, the Nobel-laureate Modigliani stated from 1954 onwards that the vast majority of socially accumulated capital is advance savings for the purposes of pension (Brumberg and Modigliani, 1954), whereas according to Kotlikoff and Summers (1981) the situation is just the reverse: only a fragment of the accumulated capital is linked to the life cycle. Obviously there are issues of interpretation behind the dispute, but it is difficult to disperse the suspicion that there is an excessive incentive for differentiating in intellectual product in modern economics and particularly in America.

In *Section 4.3* Márton Medgyesi presents the Hungarian experience. Here too I can just offer an indication: "...44 per cent of households with children are characterized by supporting their children ... wealth for transfer constitutes about 8 to 20 per cent of the wealth of households" (Gál 2003: 196). A rich bibliography closes the book.

Having reached the end of the description, I would now offer an assessment of the book. The book very profoundly studies the complex problem. It gives a detailed presentation of competing theories, and describes the empirical research methods applied. It is significant that the authors are actively involved in the topic (the reviewer himself has written several papers together with Gál and Tarcali on generational accounts, included in the present volume). It is due to this creative attitude that the authors are not satisfied with a mechanical presentation of foreign studies, but add their research results concerning the domestic situation, and present the work of others through that screen.

The language of the book is enjoyable, its form is careful; the more complicated mathematical formulae are poor only in a few instances. In all probability it would not only be utilized as a textbook but also as a manual for the interested Hungarian reader.

Actually no review would be a real one if it did not contain some criticism as well.

To my taste the book itself is not sufficiently critical. According to my experience, many people are inclined to believe that once something was published in a prominent and refereed scientific journal, it must be true. This is not the case even in the most reliable natural sciences, and the situation is far worse in economics. The social reality to be studied by itself is far more complex, and economists, wishing to compete with physics, express their opinion with exaggerated self-confidence.

In order to avoid excessive generalization, let me call an example from my own field. Recently a paper was published (Razin et al. 2002) in a leading periodical of the profession, written by world-famous authors, and quoted in this book, dealing with one of the central topics of the present book, namely: what is the relationship between the ageing population and the size of the welfare state? (It could be reported on in a next edition of the book.) The authors of the paper reported on the fact that the size of the welfare state expressed in GDP grew from 30 to 41 per cent in 13 OECD-countries between 1965 and 1992, while the proportion of dependants fell from 58 to 54 per cent in the population. Based on complicated econometric calculations and on controlling the other factors, they found that the decreasing proportion of dependants explained 1.5 per cent of the total change. This observation is explained by a witty and modern model by the authors.

The eminent authors (and the referees of the paper) only skipped the following circumstances: a) the size of the dependant part of the population is only very loosely linked to the demographic structure of the population (see the fast deteriorating employment indices of economies in transition); b) parallel to the growth of the share of the elderly, the share of children also falls, and even the sum of the two may decrease, yet the population continues to get older; c) though every theoretical model simplifies, yet it is not to be assumed that not only the elderly but even the young (namely those who work) receive an identical social security benefit, so that they also may be directly interested in voting for the system of transfer. d) It is also doubtful what we can do with a model in which old-age pension is practically only some addition to income earned by work and to employee's allowance (unemployment benefit, etc.). I think that current economics has excessively accepted Milton Friedman's advice: the assumptions of the model are insignificant, only the forecast should be good.

The assessment of the pay-as-you-go pension systems is a more important issue. Despite all my respects I do not agree with the Editor (and with the majority of the profession) in their negative assessment of the pay-as-you-go pension systems. A reference was made to the generational accounts under item 3, and I myself have participated in the elaboration of the Hungarian variant. I consider the interpretation of the accounts debatable and misleading according to which those who are the first participants in the social security enjoy an advantageous position, and that they are free riders to the detriment of others.

Generally these systems have not burst forth from the brain of selfish politicians but have developed on the ruins of funded pension systems. (A reference to it is made by footnote 13 on page 105 as well: "...in the case of economic or social cataclysms the pay-as-you-go system is usually more stable and regenerates easier than the scheme of capital reserves, as the destruction of human capital is more difficult than that of physical capital"). One may argue (for example with Diamond, 2002, the best known theoretical advocate of the few who stand for the social security systems) that it was a mistake to help even the rich with the introduction of the pay-as-you-go system after the Great Depression. (As far as I remember, the star of the silent films of the 1920, Buster Keaton's wealth of several million dollars was lost in the stock exchange collapse of 1929. In the 1950s he completed his modest public pension by advising American television channels how to make cream cakes that could be thrown.) One may also argue that the private funds, gone bankrupt after World War I, should have been recapitalized by state debt after World War II so that there should not be benefits that were not served for by the year 2000. But it practically did not occur to anyone, and even if it did, it is not quite sure that it would have been worth implementing.

One may mention also the Hungarian pension of the members of the newly founded agricultural cooperatives of the 1960s that, as far as I remember, compensated the elderly for their confiscated land by a monthly allowance of HUF 230. (For the sake of younger readers I note that at that period a pair of medium-quality shoes could be purchased for that sum, so it was not much money.)

Moving towards happier times, currently the entire world is in the midst of a new stock-exchange crisis and nobody can say when we would emerge out of it: Japan has been in it since 1990. Is it sure that private pension is such a good business for the individual?

Reaching the end of my review, once again I stress: the *Fathers and Sons and Grandsons* is a good book, I myself have learned a great deal from it, and I am sure that the interested reader would also learn a lot from reading it.

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