# NEWSLETTER
## OF THE
# EUROPEAN NETWORK
## OF
# ECONOMIC POLICY RESEARCH INSTITUTES*

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# About ENEPRI

The European Network of Economic Policy Research Institutes (ENEPRI) was created in 1999/2000 at the initiative of the Centre for European Policy Studies (CEPS). ENEPRI brings together leading national institutes from a number of EU member states and accession countries. The network will foster the international diffusion of existing research, help to co-ordinate research plans, conduct joint research and increase public awareness of the European dimension of national economic policy issues. The activities of the network are co-ordinated and managed by CEPS. See the front page of this newsletter for a listing of the current ten member institutes.

The activities of ENEPRI include the organisation of workshops and conferences, the publication of working papers and policy papers and the formulation of joint research programmes. The network, in particular, prepares common research proposals to be presented to European bodies and national sources of funding for economic research. A contract providing financial support to ENEPRI during its first three years of operation (2000-2002) under the 5th Framework Programme of the European Union was signed in February 2000 and the first operations were launched in September in Paris. The European Science Foundation funded an exploratory workshop, which took place in November 2000.

A number of workshops and conferences have already been implemented which are profiled in Newsletter N°1. Three workshops were held in the first half of 2001 and are reported on in this Newsletter. ENEPRI workshops scheduled for the second half of 2001 include:

- ***Simulation properties of macroeconometric models*** (Royaumont, France, 5-6 July),
- ***Ageing, skills and labour markets*** (Nantes 7-8 September). An exploratory workshop sponsored by the 5th Framework Programme, and
- ***Savings, Demographic Changes and World Growth*** (The Hague, November).

A selection of the contributions to these events and, additionally, from the output of ENEPRI member institutes are published as ENEPRI Working Papers, a series focusing on European policy issues. A selection of the titles of already published and forthcoming ENEPRI Working Papers are listed on the back page of this newsletter. They are available from the ENEPRI web site (http://www.enepri.org) and from member institutes.

# An End to Fortress Europe?

## Labour Migration after Eastern Enlargement

*CEPS Lunchtime Meeting, Brussels 19 April 2001, organised in the framework of ENEPRI*

At this lunchtime meeting, Herbert Brücker (German Institute for Economic Research, DIW Berlin), Witold Orlowski (NOBE, Lodz) and Sandra Pratt (European Commission) discussed the likely magnitude of labour migration after enlargement and consequences for European policy.

Herbert Brücker based his presentation on a study by a consortium of European economic research institutes. The accession countries have a GDP per capita that is less than 50% of the EU average, and a wage level that is 10-15% of the EU average. Such income differentials are an important determinant of migration, in addition to unemployment rates. Mr Brücker's talk focused on legal migration to Germany. Data for other European countries are not available. Since data on migration from Eastern Europe were not available for a sufficiently long period, he estimated the propensity of Southern Europeans to migrate to Germany over the period from 1967 until 2000 in response to income and unemployment differentials and other variables like language and distance. The model hypothesis is that there is a long-run equilibrium between the stock of migrants and these variables. Given the estimate of the propensity to migrate, this can be applied to forecasts of income and wage differentials for accession countries to Germany.

Mr Brücker made clear that these projections are only a rough indication. Initially, after accession and if free movement of labour were unrestricted for all 10 accession countries, around 200.000 people might migrate in the first year. Since not all of them are workers, they would occupy around 100.000 jobs. In the long-run, that is until 2030, 2.2-2.6 million persons could have migrated to Germany. The long-run impact on the labour market, however, would be negligible, as there was time for adjustments.

**An End to Fortress Europe** ?

There is broad agreement among experts that fears that the EU, after enlargement, will be swamped by immigration from the new member countries are exaggerated. However, information campaigns are needed to provide, on one hand, real data and figures to counteract fears and exaggerations and, on the other hand, information about jobs and employment conditions to address labour market needs.

Mr. Brücker further presented several accession scenarios. Postponing accession by five or ten years would not visibly reduce the migration potential. However, waves of accession would lower initial flows - although not the stock – in particular if Bulgaria and Romania were not in the first wave as their income differential to Germany was very high. In regard to these scenarios, transition periods with suspension of free movement of labour would just postpone the flows but not alter the migration potential.

Mr Brücker pleaded for transitional quota. These would smooth the migration flows and also give more information on how large the migration potential was. From outright denial of free movement policy makers would be unable to learn more about the actual potential. Mr Brücker suggested that initially 100.000 work permits could be issued in Germany. He further pointed out that temporary permits were inferior to permanent ones: Most migrants work in low-skill jobs but have a higher qualification. Permanent work permits would facilitate the better allocation of these unused resources.

Witold Orlowski said that migration evoked such a strong response in host countries for reasons other than economics, as the projected flows were not very large. He stressed that there are considerable transaction costs to migration. For the German Green Card system of work permits for computer scientists, only about 200 Polish had shown interest. The case of Poland has shown that income differentials can diminish rapidly if the right economic policies were applied.

Many of the fears, however, would focus on illegal migration. Even here, Mr Orlowski showed for the Polish experience, migration flows depend on income differentials. Illegal "tourist" emigration from Poland was highest in the 1980s when Poland displayed negative GDP growth. As soon as growth became positive, illegal migration fell rapidly. People were forward-looking to growth when making their migration decision.

On the possible impact of migration on Western European labour markets, Mr Orlowski said, this would be more a function of labour market flexibility than of labour supply. Moreover, demographic studies point to a need for immigrants in the future to secure funding of social security.

Mr Orlowski pointed out that migrants would concentrate in particular regions. Polish migrants are likely to head for the Western part of Germany, while they themselves were likely to come from the richer parts of Poland (the West).

Sandra Pratt's presentation then complemented those of Mr Brücker and Mr Orlowski by discussing the broader political context with which Europe is faced. Europe currently faces amongst others, three main challenges: immigration, the ageing of Europe and enlargement.

In Europe there is a multiracial population amongst which around 13 million are of non-EU origin. The largest numbers of migrants (in descending order of magnitude) are of Turkish, persons from the former Yugoslavia, Italians, Moroccans and Portuguese. There are three main reasons for migration: family reunification, economic migration and to ask for asylum. Migration policy and asylum policy should be treated as two separate policies though they are not mutually exclusive. A considerable number of asylum-seekers tend to be under cover economic migrants and it is very difficult to determine who is in genuine need of protection or not. In Europe, one currently also finds a certain degree of cross-frontier migration as well as highly skilled migration. Human traffickers further exacerbate this situation.

On the other hand, there are demographic questions to be addressed coupled by skill shortages - particularly in certain sectors. There is also a change in competency in the sense that the Treaty of Amsterdam gives more competence to the Union to take initiative in the area of asylum and migration. As a consequence the above-mentioned challenges need to be evaluated within the framework of these newly acquired competency. During the Tampere Presidency Council meeting in October 1999, it was agreed to maintain asylum policy as a corner stone while on the other hand migration and integration policies need to be developed in parallel to help people to live alongside each other; combat exploitation of migrants and illegal immigration.

Legal channels for migration need to be opened. The Stockholm Presidency Council meeting last month has identified strategies, which enable us to view migration as a tool, which benefits the host society as well as it being a means of development for the sending country. The question is how to develop societies in a more egalitarian and to combat discrimination. A major factor is to minimise undeclared work. A process, which assists Member States to review their own policies to identify common goals, needs to be enacted.

The candidate countries to enlargement need to be viewed in this context and information needs to be disseminated to counteract false perceptions of immigrants. Until now there has been a considerable migration flow of highly skilled labour from the Central and East European Countries to Germany and neighbouring Member States. When the transition period is over, would this signify that the EU would get more low-skilled migrants, who previously could not obtain a work permit? The level of education in candidate countries is similar to that of Member States, however we need to ensure an effective distribution of human capital in the labour market.

Ms Pratt concluded with the recommendation that in Europe more information campaigns are needed to provide, on one hand, real data and figures to counteract fears and exaggerations and, on the other hand, information about jobs and employment conditions to address labour market needs.

(Papers by Herbert Brücker and Witold Orlowski were presented at the *ENEPRI* Workshop on "Eastern enlargement and migration" in Brussels on 17 December 2000, see ENEPRI Newsletter N° 1 available on the ENEPRI web site (http://www.enepri.org )).

# Ageing Population in the EU

This workshop was organised in Berlin on 8-9 February 2001 by the DIW (Deutsches Institut für Wirtschaftsforschung) and FEDEA.

***Ageing of the population and the demand for health and long-term care.***

It is commonly assumed that ageing population has wide-ranging implications for social and health policy. Many official forecasts predict an impending cost explosion and therefore huge fiscal problems difficult to solve for the welfare state if pensions and medical care are not cut. However, the question is whether the parallel trends in ageing population and health care costs indicate a causal context or if they are caused by different influences so that future health cost development is not simply to be determined mechanically by the patterns of ageing. Furthermore, projections of health expenditure need to take account of a potential conflict between care giving at home and a rise in the labour market participation of women.

## *Ageing of the population and the demand for health and long-term care.*

### Ageing and health care

**Hilke Brockmann** (Max Planck Institute for Demographic Research, Rostock, Germany) presented an analysis of individual health care expenditures for different age groups and classes of morbidity of patients in Germany and Denmark. The paper showed, in particular, that age is not an adequate indicator for the health status of an elderly population. In fact, health care costs are dependent rather on the individual time-until-death of a person.

On the basis of Danish data from the Prevention Register at Statistics Denmark and German data from the largest public health insurer, the AOK, Brockmann analysed the differences in costs for inpatient hospital services. The expenditures for non-survivors were in all age groups higher than the costs for survivors. The most expensive non-survivors were those in the age between 50 and 60 years. In the highest age group the costs per person show a decrease. In this group chronic diseases were a significant cost factor, but these expenses decline significantly with the age of the patient. So Brockmann concluded that ageing of the population was not the main factor of exploding health expenditures. Consequently an ageing hospital population does not appear to be per se a chronic burden for the health system.

### Ageing and long term care

Long term care is one of the most relevant categories of expenditure associated with old age. However, in contrast to other kinds of health care, long term care is to a large extent not covered by contribution, but relies on social assistance. This could cause tensions in financing social assistance out of general tax income if population ages. A paper by **Joan Costa i Font** (Economics of Social Policy Research Unit, University of Barcelona, Spain) focused on the long-term care system in Spain. Spain –in contrast to most other EU-countries – has no special social prevention system to cover risk associated with old age dependency. Long-term care services (LTC) are mainly funded by the families and mostly the care givers are part of the family (informal care). Using a simulation model for Spain Costa shows that ageing during the 2000 to 2030 period may entail a significant rise in the demand for LTC. It may be difficult to satisfy this rise in long-term care within the framework of the existing, largely informal, care system. An important policy issue is therefore whether Spain will need to design a social insurance scheme more in line with models of the Northern member states.

## Care giving and employment

The influence of ageing on the demand for health and nursing care is also felt in other member states. According to new estimates for Germany the number of people in need of long-term care is expected to rise from today's 1.9 million to 2.94 million in 2020 and even to 4.73 million in 2050. The law on nursing care insurance passed the German legislation in 1994 was intended to support family members who provide long-term care in their private households. Empirical research in the last few decades has shown that, alongside care provided by daughters, a second noteworthy source of potential care-giving exists within the family – the partner. However, daughters and daughters-in-law play a crucial role in coverage of the care risk. This can lead to conflicts and such conflicts can be expected to become even more severe with increased labour market participation of women. As a result, the conflict between care giving and employment is an important question for social policy.

A discussion of these issues using data from the German Socio-economic Panel (GSOEP), an longitudinal study of persons, households and families was presented by **Thorsten Schneider** (DIW, Department Longitudinal Data and Micro Analysis). Applying an "event history analysis" the paper examined the effect of the presence of an older person in need of care in a household on the employment of a working woman. The analysis focused on three transition processes: the transition from employment to non-employment, the transition between full- and part-time employment, and the transition from full- or part-time employment to non-employment. The paper concluded that the transition from employment to the status "housekeeping" depends significantly upon the presence in the household of elderly in need of care. Furthermore, the withdrawal from gainful employment to housekeeping becomes more likely as the age of women increases. Finally the transition rate is very high for women having been working less than a whole year full-time or part-time. However, on this count, full-time workers have a lower probability of withdrawal than part-time workers whereas there is no significant impact of the education of the employed woman on this transition.

A paper by **Ulrike Schneider** (Department of Economics, University of Hannover, Germany) and **C. Katharina Spiess** (DIW, German Institute for Economic Research, Berlin) presented an analysis of adjustments in work hours and care hours for female employees in a number of European countries. Using data from the European Community Household Panel, they showed that starting or increasing informal care giving is generally accompanied by a decline in weekly work hours. However, stopping or reducing the number of hours devoted to care giving is not necessarily accompanied by an increase in the working time for gainful employment. The survey shows that the negative impact on the number of working hours resulting from an increase in informal care giving is more pronounced in northern Europe (except for Ireland) than in southern countries (Greece, Italy, Portugal and Spain). Furthermore, as could perhaps be expected, the impact is stronger for women who were employed at the time of the first interview.

Further research is needed to test whether the decisions on working hours and care hours are made simultaneously, to improve the understanding of specific features observed for individual countries, and to explore the role of economic distress in explaining patterns of work and care for midlife women.

# *Implications of ageing for growth, employment and financial sustainability.*

## Ageing and growth

Whereas most projections of medical expenditure are based on (exogenous) assumptions concerning life expectancy, a paper presented by **Fernando Perera Tallo**

(University of the Laguna, Santa Cruz de Tenerife, Spain) presented a growth model (a standard Ramsey model) in which life expectancy is influenced by the level of medical care. Consequently, the economy faces a trade off between non-medical consumption and longevity. However, the calculations assume that, in any case, life expectancy is bounded for biological reasons reducing therefore the marginal utility of foregoing consumption.

## *Implications of ageing for growth, employment and financial sustainability.*

As demonstrated in the papers presented during the first half-day there is an increasing need to analyse bio-metric, medical and sociological aspects of the process of ageing. However, this in no way reduces the need for a more traditional analysis of the financial sustainability of social policy and of the potential effects of ageing on growth, labour market participation and retirement decisions. Some of these aspects of the ageing process were examined in the papers presented during the second half-day.

This is however a neo-classical perspective and endogenous growth models would deliver different conclusions. Many other factors also determine life expectancy, as well as growth, but as long as life is (biologically) bounded, the above results would not change. Interesting extensions could be: a) include health expenditure in the human capital production function, b) other ways to make life expectancy endogenous, c) include other benefits out of longevity and not just more utility for consumers (for instance, more savings and capital accumulation), etc. Clearly, more analysis of the economic determinants of longevity is needed (this is an interesting avenue for further research). Furthermore, life-styles are important, but taking those aspects into consideration requires moving beyond the economic sphere.

## Labour market participation and retirement

During recent decades the average age of retirement has declined in practically all OECD countries, albeit less fast in the United States and Japan than in most European countries. The analysis of patterns of retirement and determinants of retirement decisions is, therefore, an important complementary task for research on the consequences of ageing.

This subject was examined in a paper by **Pasi Houvinen** and **Hannu Piekkola** (both from ETLA, the Research Institute of the Finnish Economy, Helsinki) linking employment data and establishment data drawn from the Finnish register of establishments. Using a comprehensive data set covering about 8 million employment transitions (to unemployment, retirement, etc.) during the major depression of the early 1990s, they show how the pressures for change, caused by contraction and restructuring during the 1990s, were reflected in the use of the elderly labour force. An important finding, however, was that the pattern of transition into early retirement, unemployment or disability pension depended rather strongly upon the nature of the protection schemes in force for different class-sizes of firms.

## Ageing and the government budget

The paper contributed by **Ed Westerhout** (CPB, The Central Planning Bureau, The Hague) provided an analysis of the sustainability of the retirement financing in the Netherlands using an intergenerational accounting methodology.

This paper showed that with relatively modest fiscal adjustments, the Netherlands would not face major financial problems caused by the ageing of the population. In fact, due to a comparatively high rate of fertility, the degree of ageing of the Dutch population is not expected to pose as severe problems as in most other EU member states.

In the baseline scenario, health and pensions expenditure grow significantly from 2020 to

2040, compounded with a strong "snowball effect", and will drive the government debt ratio well above 100% of GDP in the long run.

However, a moderate permanent tax increase (tax smoothing, after all) now or a modest benefit cut will prevent the snowball effect. Consequently in the Netherlands the ageing process presents less of a problem than in other European countries, particularly in what concerns pensions.

In all countries the future problem of sustainability of retirement schemes and of public finance in general is of course importantly determined by the position of public finance in the starting position. Thus, as a result of a pronounced decline in the general government budget deficit in recent years, the longer-term sustainability of public finance now looks easier to obtain than thought five years ago. Nevertheless, as shown in a paper contributed by **Gemma Abío and Eduard Berenguer (University of Barcelone), Holger Bonin (Institute for the Study of Labour (IZA) Bonn) and Juan Gil (University of Barcelona)**, Spain is facing a strong ageing problem, particularly acute after 2050 when baby-boomers start retiring. Assuming the continuation of current pension arrangements the government budget may, therefore, encounter a certain sustainability gap and this despite recent improvements. According to the paper, in order to ensure sustainability, the government would need to accumulate rather large budget surpluses. In addition there would be a need for fiscal reform notably to avoid perverse redistribution effects and restore actuarial fairness in the pension scheme.

An important result of the simulations is that an increase in labour force participation would increase the sustainability gap (this was also found in the simulations for the Netherlands presented by Ed Westerhout). Consequently, an increase in the labour force participation ratio would only help to restore sustainability if accompanied by reform of the pension system in order to reduce actuarial generosity.

The nature of intergenerational accounting exercises, however, raises many points in the debate. In particular, the precise definition of intergenerational fairness or equity. A society needs to address unexpected shocks that necessarily distort intergenerational equity. To prevent this from happening, a permanent precautionary fund financed by all generations could be kept.

All in all, the contributions to this second day of the Berlin workshop added important evidence to the analysis of the consequences of ageing in Europe. Further applied research is particularly needed on the economic determinants of longevity and on the transitions from work to retirement at mature ages. An important finding from these and other simulations is also that a return to higher fertility or even a higher growth in productivity, nor indeed higher immigration, will not necessarily be sufficient to ensure sustainability.

# Social security and pension reform

A workshop on social security and pension reform was held on 9th March 2001 at the National Institute of Economic and Social Research. Six papers were presented.

**Social security and pension reform**

1. Ageing, actuarial neutrality and flexible retirement. How to reduce the incentives to early retirement.
2. The influence of political constraints on the choice between PAYG and funded pension schemes.
3. Coping with demographic risks and uncertainties through pre-funding.
4. Means-testing of social pensions may be politically popular but may lead to sub-optimal outcome.
5. Benefits of reversible vs. irreversible funding and their implications for pension reform in an uncertain world.
6. Extending the conventional generational accounting framework to take account of the age-specific impact among living generations of fiscal policy reform.

**Martin van der Ven** (CPB Netherlands Bureau for Economic Policy Analysis) looked at ageing, actuarial neutrality and flexible retirement. It is well known that ageing affects PAYG-financed pensions. Less attention is paid to the effects on funded pension schemes. His paper identified two major channels. First, ageing increases pension costs due to the increase in life expectancy. Second, ageing reduces the possibilities to absorb shocks in defined benefit schemes due to the decline in the relative number of active members of these schemes. Using a stylized model of the Dutch funded pension schemes he analyzed the effects of ageing and policy options intended mitigate their consequences.

One option to alleviate the burden of ageing would be to raise the (effective) retirement age. One route followed to achieve would be to replace the current early retirement schemes, the so-called VUT-schemes, by flexible retirement schemes. Policy makers assume that this development is beneficial for labour force participation of older workers because these schemes are more actuarially fair. However, in fact such schemes are found still to contain a premium on early retirement.

**Marcello D'Amato** (Boston University and Università di Salerno) and **Vincento Galasso** (IGIER and Universidad Carlos III de Madrid) analyzed the behaviour of a fully funded system, whose portfolio is composed of a risk free and a risky asset, in a stochastic environment, in the presence of political constraints.

If an aggregate negative shock were to occur, a large share of the wealth of the elderly would be wiped out. In this case, office-seeking policy-makers would act as a lender of last resort, and institute a long-lasting PAYG system. Under these political constraints, a fully funded system would suffer from a moral hazard problem, since agents would have an incentive to choose an excessively-risky portfolio, which would increase the wealth loss associated with the bad state. The introduction of a mixed system would reduce the riskiness of the portfolio, which would remain however higher than in the case of no political constraints. The early adoption of a mixed system, before the occurence of a negative shock, could prevent the policy-makers from intervening as a lender of last resort, but at a high cost. In fact, its PAYG pillar would be larger than the PAYG system introduced in the case of a bad shock: This would amount to impose an extra loss on all future generations, since in this environment, a PAYG system would be dominated, in rate of return, by the risk-free asset.

**Jukka Lassila and Tarmo Valkonen** (The Research Institute of the Finnish Economy (ETLA)) investigated the links between demographic risks and pension reform. Ageing will increase pension expenditure and contribution rates. There is also increasing awareness that the risks connected to mortality, fertility and migration are considerable. When reforming pension one must decide how these risks should be shared between workers and pensioners, and also take into account that in the transition phases different cohorts may gain or lose. They discussed the risk-sharing and intergenerational distribution aspects of three pension policy measures that are either already adapted or being proposed in Sweden and Finland. Each of these methods, linking benefits to life expectancy, indexing benefits to the total wage bill, and using fertility-dependent prefunding, has its own advantages and weaknesses. Using a numerical OLG model, and realisations from stochastic population simulations, they demonstrated that these methods greatly enhanced the sustainability of a pension system in unfavourable demographic outcomes but had practically no effects if demographics remained stable. Thus the allocation of risks could be improved without fundamentally changing the systems.

**James Sefton** (Imperial College of Science and Technology and National Institute of Economic and Social Research) and **Martin Weale** (National Institute of Economic and Social Research) studied the issue of means testing. As the financial burdens of pension schemes mount, governments face increasing pressure to reduce the costs of such schemes. Means testing offers one way of doing this, with smaller state pensions being paid to more wealthy people. They explored the differences between means tested state pensions and a universal state pension in a dynamic overlapping generations model of a large number of households of different ages and spread out along the income distribution. They showed the likely importance of the income and substitution effects generated by means testing and its consequences for the rate of return to saving. Means tested pensions would be preferred to flat-rate pensions by those currently alive but would reduce overall welfare in the long run. This suggested that political pressures might lead to a sub-optimal outcome.

A paper by **J.Michael Orszag** (Birkbeck College, London) and **Peter R. Orszag** (Sebago Associates Inc, Belmont Callifornia) addressed benefits of reversible vs. irreversible funding and their implications for pension reform in an uncertain world. Ageing populations are expected to put increasing strains on government budgets across the globe. At the same time, policy-makers recognize the substantial uncertainty surrounding estimates of pension costs several decades into the future. The paper examined the implications of uncertainty over future pension costs for current decisions over *how* to undertake pension reforms, especially those involving prefunding. Prefunding can be thought of as an investment that entails some cost (during the transition to the new prefunded system) and the offers long-run benefits. It found that in the face of uncertainty over the long-run benefits, systems with more flexibility in the level of funding might be preferable to systems with less flexibility. The intuition was simply that flexibility allows policy to adapt more quickly should circumstances change.

**Holger Bonin (**IZA, Bonn) and **Karen Feist** (Albert-Ludwig University, Freiburg) explored the practical question of pension reform in Germany and its implications for redistribution between living generations¨ Their paper extended the conventional generational accounting framework to take account of the age-specific impact among living generations of fiscal policy reform. They proposed a benchmark to compare alternative fiscal policy options by their intergenerational neutrality, and to analyze three reform concepts for the German pension system: a gradual pension cut, a subsidization of payroll contributions financed by energy taxes, and a long-term partial funding strategy. The latter was found to be best at reducing fiscal pressure on future generations, but it interferes considerably with the cohort distribution of consumption possibilities among the living. Combining the policy with additional measures could partly offset this redistributive effect.

List of Papers Presented

Ageing, Funded Pensions and Early Retirement Schemes. M van de Ven. Central Planning Bureau, Netherlands. Discussant J-L. Guerin

Aggregate Risk and Social Security Design. M. D'Amato (Boston University and Università di Salerno) and V. Galasso. (IGIER and Universidad Carlos III de Madrid) Discussant David Miles.

Ageing, Demographic Risks and Pension Reform. J. Lassila and T. Valkonen. ETLA. Discussant J. Mortensen

State Pensions and Public Choice. James Sefton (Imperial College of Science and Technology and National Institute of Economic and Social Research) and Martin Weale (National Institute of Economic and Social Research). Discussant B-A Wickström.

The Benefits of Reversible vs. Irreversible Funding: Implications for Pension Reform in an Uncertain World by J. Michael Orszag (Birkbeck College) and Peter R. Orszag ( Sebago Associates, Inc.).

Pension Reform in Germany and Redistribution between Living Generations H. Bonin and K. Feist. Freiburg. Discussant J. Banks..

# Welfare, intergenerational distribution and households: What does generational accounting tell us?

Workshop organised by ISAE (Instituto di Studi e Analisi Economica, Rome) in the framework of ENEPRI, Rome, 25 May 2001.

## *Analysing the incidence on welfare using generational accounting*

So far, generational accounting has focused on "representative" individuals, with no account taken of the family structure and the intra-generational distribution of taxes and benefits.

A paper presented to this workshop presents a new approach, analysing the incidence on welfare (net taxes) of different types of family units of taxes and benefits in kind and in monetary terms.

## *The background*

General accounting has, at least up to now, been mainly a tool of analysis of the longer-term *sustainability of public finance* based on the government's inter-temporal budget constraint. The budget constraint compares the present discounted value of the government's projected future purchases of goods and services plus its official net financial liabilities with the present value of projected future tax payments. The balance of these two items is, thus, an expression of the net tax burden facing future generations implied by current policy (for further details see, for example, Alan J. Auerbach, Laurence J. Kotlikoff and Willi Leibfritz: "Generational Accounting Around the World", NBER 1999).

Besides comparing the lifetime burdens facing members of future generations with that of newly born, generational accounting calculates the present-value of changes in net taxes of generations, both living and future, resulting from changes in fiscal policy and, thus, offers a tool for analysis of policy options. The methodology allows analysis not only of changes in policy but also changes in the future demographic structure of the population. It thereby also constitutes a tool for determining the size of the burden on future generations of "covering the bills left unpaid by those now alive" (Auerbach, Kotlikoff and Leibfritz, page 3).

## *Analysing the incidence on welfare using generational accounting*

So far, generational accounting has focused on "representative" individuals, with no account taken of the family structure and the intra-generational distribution of the different categories of taxes, transfers and other expenditure categories influencing the welfare of particular groups of individuals or households. However, in a new approach, professor Nicola Sartor of the University of Verona and his team of researchers partly from the University of Verona and partly from ISAE, have undertaken an analysis of these "horizontal" aspects of generational accounting. The methodology of this analysis and some first findings were presented in a paper contributed to this workshop.[1]

In order to examine these horizontal aspects of generational accounting, the study has involved a detailed definition and classification of family units and a corresponding assignment of taxes, transfers and other categories of public expenditure. In the classification of family units, the following characteristics have been taken into account:

1. The number of children;
2. The level of education of each adult;
3. The occupation of each adult;
4. Financial dependence/independence;
5. Marital status;
6. Delivery of a child of n'th order, conditional upon a certain level of education.

Combining these different characteristics, the study identified a total of 174 different family units: 144 categories of couples, 24 categories of single women and 6 categories of single men (all categories representing different combinations of family size, level of education, occupation, etc.).

[1] Nicola Sartor, Carlo Azzarri, Maria Cozzolino, Carlo Declich and Alberto Roveda: *Intragenerational distribution across families: what do generational accounts tell us?*

The second phase of the study then involved the detailed attribution of taxes and benefits to individuals. In fact, in many cases taxes and benefits are assigned to individual members of the family even though the may formally accrue to the head of the family. Taxes and benefits, consequently, are attributed to the individual family member determining the legal obligation even if he/she is not formally the recipient or payee. The basic data for the study, thus, consisted in a matrix assigning (a share of) each category of taxes and benefits to each of the individuals of the 174 family units.

For each of the 174 family units a generational account was then established by summing up the (underlying) generational accounts of each of its members. It should be stressed, in this context, that individual GAs in this framework will differ from the individual GAs of traditional generational accounts. Both are calculated by summing up the net present value of the different tax and spending programmes. However, while traditional GA considers the entire lifetime of the individual, the FU (family unit) approach considers only the part of the life, which is spent by the individual a member of a family of a certain type. Moreover, when summing up the individual GAs for families with children, tax and spending programmes referring to children are added to adults' GA starting from the average age at which the woman has delivered the baby.

The study is expected to be completed towards the end of year 2001. However, the preliminary findings already suggest a number of possibly applications, notably with respect to analysing the effect on the net taxes of different families (and individuals) of current social and fiscal policies. In particular, the calculations can show the incidence on net taxes of moving from one family category to another, such as, for example, having a child, seeking an employment for an unemployed or moving from employment into inactivity. The calculations can also show the implications for net taxes of the level of education or of being single rather than married.

So far the study has followed a static approach, focussing only on a single year (1999). The next step would be to introduce dynamic elements into the model, for example to study the implications of switching from one family type to another and other types of transition. To the extent that data for longer periods (or selected years) would become available it would then be possible to analyse the probability of (and make projections of) certain types of transition. Such scenario calculations would clearly be of immense utility in the analysis of the economic and social consequences of ageing and the ongoing parallel changes in the family structure in the whole of Europe.

As stressed by **Holger Bonin** (IZA, Bonn and University of Bonn, Germany), in an oral contribution to the workshop, intra-household attribution of net tax incidence is the main condition for undertaking an evaluation of the changes in individual welfare induced by public (social and fiscal) policy. However, even if the goal of a certain exercise in generational accounting is to assess fiscal sustainability, the detailed consideration of net tax burdens within a household may be a necessary condition to avoid certain fallacies. Thus the level of income taxation often reflects household characteristics and changes in the latter (due to demographic changes) may thus induce changes in the (average) rate of income taxation. The level of consumption of public services (for example health and education) will depend intimately upon household characteristics and projections of such items could therefore usefully take account also of demographic changes in the structure of households. The methodology developed by the team of professor Sartor and ISAE would therefore seem to be a pertinent extension even of the more traditional (sustainability-oriented) generational accounting.

## *The scope for undertaking comparable research in other countries*

An additional question, briefly discussed at the workshop, is whether and under what conditions it would be possibly to apply, in other countries, the methodology of the study undertaken by the team of professor Sartor. In principle the techniques of attribution and calculation of the generational accounts should be really easy to adapt to other circumstances.

However, the detailed classification of family units and the detailed classification of taxes and benefits used in the Italian study may not be fully compatible with that found in other countries. To obtain harmonised, and thus comparable, findings for other countries will therefore most likely require an additional amount of rather detailed analysis, and possibly regrouping of the basic data on the family structure and the classification of taxes and benefits.[2]

That the task of rendering the classification of public expenditure internationally comparative is a difficult one, was illustrated in a contribution by **Bernhard Seidel** (DIW, Berlin) on *Family Burdens and the Transfer/Tax System in Germany.* This paper presented a run-down of tax and transfer measures addressed the particular issue of the ways in which public policies influence the costs of bringing up children and the extent to which poverty is relieved through such measures. The paper did not actually assess the overall effects of the measures analysed. However, there was broad agreement that a detailed analysis of the welfare effects of such measures could usefully be undertaken within a framework and with the methodology developed by professor Sartor and his research team.

## *Sustainability of public finance and pension schemes in Finland*

> A study of the effects on the net tax burden of future generations resulting from the policy measures taken in Finland in the late 1990s reveals dimensions of public finance, which are not taken into consideration in the inspection of the current government budget balance.

The more traditional generational accounting, nevertheless, still presents a useful tool of analysis of the sustainability of public finance and, notably, of the effects on the generational accounts of changes in policies and in the growth prospects. This was demonstrated in a paper on *Generational Accounts, Fiscal Policy and Business Cycles in the Years 1990-2000 in Finland,* by **Reijo Vanne** of the Central Pension Security Institute, Finland.

In fact, after a deep recession in the early 1990s, due mainly to the loss of the important export markets in the ex-USSR, the Finnish economy has grown rapidly during the second half of the decade with a brisk change in industrial structures and product innovation. The rapid economic growth was accompanied by a considerable improvement of the general government budget balance. Furthermore, measures were taken to raise the funding rate of the earnings-related pension schemes and social transfers and production subsidies were severely cut. Total public expenditure was, consequently, reduced from 48.9% of GDP in 1995 to 40% of GDP in 2000.

These measures not only resulted in a huge improvement in the (current) government budget balance but also in a pronounced shift in the level of intertemporal public liabilities as revealed by the generational accounts. In fact, the generational accounts for the year 2000 show intertemporal public net assets amounting to 95% of (current) GDP as against net liabilities amounting to 253% of GDP in 1995.

As stressed by **Holger Bonin**, in the subsequent discussion, the initial value of the primary deficit is critical for the assessment of the level of intertemporal public liabilities/assets. It would therefore be desirable to correct the initial primary surplus (and the underlying levels of taxation and public expenditure) for the effects of the business cycle and other transitory elements. Nevertheless, this study offered pertinent insights into the effects on the net tax burden of future generations resulting from the policy measures taken in the late 1990s and, consequently, confirmed that generational accounting reveals dimensions of public finance, which are not taken into consideration

[2] Important progress in this respect has already been made in the framework of the work on harmonisation of social statistics undertaken by the European Commission (Eurostat and DG EMPL). Nevertheless given that the social legislation and regulation in the different member states have evolved largely within a framework of national terminology and tradition, the task is an immense one and requires not only analysis of statistics but also of the underlying legal and administrative texts.

in the inspection of the current government budget balance.

# Forthcoming ENEPRI events

## *Scheduled events*

5-6 July 2001: Workshop on ***Simulation Properties of Macroeconometric Models*, organised by CEPII at the Royaumont Abbey (north of Paris).**

This workshop will include presentation and discussion of simulation properties of a number of macroeconometric models such as the QUEST model of the European Commission, the IMF MULTIMOD model, the AWM model of the ECB, the French models MARMOTTE, MACSIM and MARCOS and the world economic model of NIESR.

**7-8 September 2001: Exploratory Workshop on *Ageing, Skills and Labour Markets*, organised by CEPII, Nantes.**

The prospective ageing of the European population will exert profound impacts on labour markets. The structure of employment, unemployment, productivity, skills and retirement decisions are all likely to be affected. This workshop will discuss whether the impact on skills and labour markets will influence inequalities, relative wages and warrant changes in labour market and wage policy, such as, notably, subsidies to youth employment or seniority wages. The aim is to provide preliminary evidence of the quantitative importance of changes in the composition of the labour force and thereby indicate directions for future research within ENEPRI. This workshop is accepted as an accompanying measure under the programme "Improving the Human Research Potential and the Socio-economic Knowledge Base" of the 5th Framework Programme (IHP-ACCO-00-1). Acronym PALM under contract HPAM-2000-00077

## *Events to be scheduled*

Workshop on *Savings and Demographic Change* to be organised by CPB and CEPII in the autumn of 2001.

Workshop on *Mutual recognition of labour market regulations and welfare regimes* (ISAE)

Workshop on *Impact of alternative policy rules* (CEPII)

Workshop on *Portability of Pension Entitlements* (CEPS)

Workshop on *Welfare systems and policy competition* (CPB)

Workshop on *Labour markets and welfare systems* (CEPII/FEDEA/DIW)

Conference on *Policy options for welfare systems in an integrating EU (CEPS)*

# ENEPRI Working Papers

Ulrich Thiessen, *Fiscal federalism in Western European and selected other countries: Centralization or decentralization? What is better for economic growth*? (No. 1)

Ray Barrell and Karen Dury (NIESR), *Asymmetric labour markets in a converging Europe: Do differences matter? (*No. 2)

Michael Burda, *European Labour Markets and the Euro: How much flexibility do we really need? (*No. 3)

Sébastien Jean, *The Effect of International Trade on Labour-Demand Elasticities: Intersectoral Matters*

Agnès Bénassy-Quéré, Lionel Fontagné, and Amina Lahrèche-Révil, *Foreign Direct*

*Investment and Corporate Income Taxation in Europe*

Andrew Hughes Hallett and Nicola Viegi, *Labour Market Institutions and Monetary Policies in EMU: Do asymmetries matter? Countries during the Run-Up to EMU*

William Peterson, *Housing and Labour Mobility in Europe: What are the issues?*

György Szapáry, *Maastricht and the Choice of Exchange Rate Regimes in Transition*

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