



Economic Policy Research Institutes*

Final report on scientific achievements

Content

A.	Abstract	3
B.	Executive summary	4
	Implementation of the contract	4
	Labour markets, enlargement and migration	5
	Policy rules, policy competition and economic modelling.....	7
	Simulation properties of economic models	7
	Impact of alternative policy rules	7
	Policy competition or policy coordination.....	8
	Population ageing: consequences and policy issues	9
	Macroeconomic consequences of ageing.....	10
	Consequences of ageing of the labour force	11
	Intra- and inter-generational distribution.....	11
	Issues in pension financing and health care.....	12
	Conference: Ageing And Welfare Systems: What Have We Learned?	12
	Introduction by Governor Guy Quaden.....	12
C.	Detailed proceedings of workshops and conferences.....	18
	Labour markets, enlargement and migration	18
	Workshop on “EMU and asymmetries in labour markets”	18
	Workshop on “Eastern enlargement and migration”	20
	Workshop on “Housing and labour mobility”	21
	Lunch-time meeting: An End to Fortress Europe?.....	23
	Conference on “Economic and social dimension of EU enlargement”	26
	Workshop on Mutual recognition of labour market regulations and welfare regimes.....	27
	High-level discussion forum on "Mutual recognition of labour regulations"	28
	Workshop and lunchtime meeting: Enlargement and EU Cohesion Policy.....	28

Policy rules, policy competition and economic modelling.....	29
Workshop on "Simulation properties of macro-econometric models"	29
Workshop on Impact of alternative policy rules (CEPII), July 2002.....	31
Competition and co-ordination: complementary requirements for the welfare state in a changing Europe.....	33
Population ageing: consequences and policy issues	35
Workshop on "Savings and Demographic Change"	35
Exploratory Workshop on "Ageing, Skills and Labour Markets"	37
Workshop: Ageing Population in the EU (part 2).....	40
Welfare, intergenerational distribution and households: What does generational accounting tell us?	42
Workshop: Social security and pension reform	45
Workshop: Ageing Population in the EU (part 1).....	47
Conference: Ageing And Welfare Systems: What Have We Learned?	49
Introductory speech by Governor Guy Quaden, National Bank of Belgium	49
Conference proceedings	51
Annex I: The original work programme.....	66
1. Objectives, expected benefits and overall approach.....	66
2. Work Content/Methodology	67
3. Project Management.....	67
4. Deliverables/Milestones	68
5. Exploitation Plans.....	68
6. Complementary Projects.....	69

A. Abstract

The European Network of Economic Policy Research Institutes (ENEPRI) was created under the 5th Framework Programme of the European Union 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 organised 12 workshops and 2 conferences with the funds from Contract HPSE-CT-1999-00004. It also organised one exploratory workshop funded separately as an accompanying measure and one exploratory workshop funded by the European Science Foundation.

The scientific findings can be summarised under the following headings:

Labour market asymmetries: within the old EU-15 such asymmetries will continue to exist and that substantial obstacles remain to “Europeanisation” of wage formation. The mobility of labour into the EU from third countries and from the (now) new member countries would be considerably higher than mobility between EU-15 member states, but it would still be limited.

Policy rules: Simulations with large-scale macro-econometric models do not provide conclusive evidence concerning the nature of the cross-border spill-overs of fiscal policies in the EMU. When it comes to stabilise the economy or absorb adverse shocks, relatively simple policy rules could potentially be more efficient than discretionary policy measures.

Ageing: Evaluation of policy needs to be based on the consequences for income maintenance of different cohorts and socio-economic groups. A new methodology can show variations in fiscal burden according to differences in the number of dependants, the difference between net taxes paid by families of a certain type and those paid by the same type of family with one child less (the so-called marginal net subsidy or MNS).

In addition to the implementation of the original contract a major result of the ENEPRI project is that it has developed into a long-term collaboration among its partner institutes. This collaboration continues beyond the duration and scope of the initial Commission contract, and has been extended to other research institutes not initially included in the ENEPRI contract. Thus ENEPRI has not only intensified its activities, but it has also extended its membership: From its founding 8 member institutes, ENEPRI has increased to twenty-one partners from the EU-27 countries. Consortiums made up of ENEPRI partners also in association with non-ENEPRI partners have submitted a number of research projects to the 5th and 6th Framework Program, several of which have been favourably evaluated. In the spring of 2004 three research projects and one research training network was already being implemented and contract negotiations were finalised or under preparation for two other projects. The dissemination of research output beyond the national frontiers has been ensured through the creation of the ENEPRI web site (www.enepri.org), the creation of three series of research papers: ENEPRI Working Papers, presenting a selection of working papers from the partner institutes, ENEPRI Occasional Papers, presenting the main findings from ENEPRI workshops and conferences and ENEPRI Research Reports, presenting, under a common heading, the reports on findings from research projects undertaken within the framework of ENEPRI.

B. Executive summary

Implementation of the contract

The European Network of Economic Policy Research Institutes (ENEPRRI) was created in 1999/2000 at the initiative of the Centre for European Policy Studies (CEPS). ENEPRRI brings together leading national institutes from a number of EU member states and accession countries. A contract providing financial support to ENEPRRI 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 network fosters 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 coordinated and managed by CEPS.

The activities of ENEPRRI 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. The European Science Foundation funded an exploratory workshop.

In addition to the implementation of the original contract a major result of the ENEPRRI project is that it has developed into a long-term collaboration among its partner institutes. This collaboration continues beyond the duration and scope of the initial Commission contract, and has been extended to other research institutes not initially included in the ENEPRRI contract. Thus ENEPRRI has not only intensified its activities, but it has also extended its membership: From its founding 8 member institutes, ENEPRRI has increased to twenty-one partners from the EU-27 countries (see list of current ENEPRRI partners in annex), all of them leading economic and social research institutes, with wide-ranging experience in conducting policy-oriented research to high academic standards

Over and above the formal implementation of the work programme, ENEPRRI has proved to be an extremely fertile venture in several ways:

- The collaboration between eight first-rank institutes in the field of applied socio-economic research has been a positive exercise for the partners. Even after the termination of the initial contract all the founding institutes decided to stay on in the network and to extend the partnership by inviting at least one partner institutes in other EU member states and candidate countries.
- The decision concerning enlargement of the network has met with a very positive response and ENEPRRI now has partners or close contacts in all new member states and in Bulgaria and Romania. Partners are actively sought in Greece, Portugal, Denmark and Turkey.
- Consortiums made up of ENEPRRI partners, frequently in association with non-ENEPRRI partners, have submitted a number of research projects to the 5th and 6th Framework Program, several of which have been favourably evaluated. In the spring of 2004 three research projects and one research training network was already being implemented and contract negotiations were finalised or under preparation for two other projects.

- The dissemination of research output beyond the national frontiers has been ensured through the creation of the ENEPRI web site (www.enepri.org), the creation of three series of research papers: ENEPRI Working Papers, presenting a selection of working papers from the partner institutes, ENEPRI Occasional Papers, presenting the main findings from ENEPRI workshops and conferences and ENEPRI Research Reports, presenting, under a common heading, the reports on findings from research projects undertaken within the framework of ENEPRI.
- Through the intense collaboration on the organisation of workshops and conferences and the participation in several major research projects, the partner institutes now has gained a high degree of awareness of the activities, priorities and strength of the other partners. This process of osmosis has been the point of departure for a high degree of specialisation within the ongoing research projects in which the partners are exploiting the existing, and developing new complementarities and capacities.

The overview of the scientific achievements of ENEPRI under the 5th FP contract is presented below under four main headings:

- Labour markets, enlargement and migration;
- Policy rules, policy competition and economic modelling;
- Population ageing: consequences and policy issues; and
- Ageing and welfare systems: what have we learner?

The last entry provides the summary of proceedings of the final conference.

Labour markets, enlargement and migration

This part of the programme included five workshops, a conference and two lunchtime meetings focussing on the functioning of the labour market under EMU, the consequences of enlargement for migration and social policy, obstacles to labour movements within the internal market, mutual recognition of labour market standards.

Papers presented to the workshop on labour market asymmetries within the EU tended to confirm that such asymmetries continue to exist and that substantial obstacles remain to "Europeanisation" of wage formation. The low labour mobility within the EU contributes to maintaining a certain degree of segmentation and a number of member states are likely to encounter difficulties in adjusting smoothly to the conditions of EMU. However, positions are not static and there were signs of changes in the behaviour of trade union with more account taken of the need for labour market flexibility within a monetary union. An exploratory workshop organised by ENEPRI partners with support from the European Science Foundation, however, served to illustrate that the low labour mobility may have many causes and that increased flexibility in the housing market might contribute to an increase in labour mobility notably but not only within the individual member states.

Many studies have concluded that the mobility of labour into the EU from third countries appear to be considerably higher than mobility between EU member states. Concerns are also regularly expressed that the Eastward enlargement might result in an inflow of labour from the new to the old member states. Papers presented at the workshop on "Eastern enlargement and migration" (and at a CEPS lunchtime meeting) seemed to confirm the arguments that, after accession, migration between the present EU member states and the accession countries may be considerably higher than migration following the Southern enlargement. The papers, however, also showed that the accumulated migration flow is likely to remain small in proportion to the labour force in the EU and to reach an equilibrium level only after an extended period of

adjustment. The profile of migration will also be determined by the rate of growth of activity in the accession countries and thus by the overall speed of and conditions for accession. Finally it was argued that, as the stocks of migrants are at present far below their equilibrium level, transition periods after accession may only postpone migration flows but not change much in their magnitude – unless the speed of macroeconomic convergence is very high.

In addition it was argued, at a conference on “Economic and social dimension of EU enlargement” organised within the framework of ENEPRI on behalf of the French presidency of the EU, that the frequently expressed fears of social dumping were exaggerated. In fact, accession countries already had high contribution rates and a high degree of labour market security. Concerns rather arise from the informal sector and from the still high level of corruption, spurred by soft law enforcement.

Other voices at the latter conference discussed the potential migration flows between the EU and the accession countries and argued that their magnitude is very hard to ascertain. However, even if temporary migration is on the rise, permanent migration seems to be decreasing. Furthermore, in this field, according to those speakers, economic risks (brain drain, illegal immigration, and absorption problems for neighbouring countries) have to be weighed against political benefits and citizenship issues.

Of relevance for both the incumbent and the new member states is, however, that differences between social-economic systems within the European Union depend on disparities which are not only unavoidable, but which must be exploited to create those opportunities for exchange and competition necessary to reduce production costs, eliminate artificial obstacles to the free movement of workers, improve quality and prices for consumers, make the society less unequal, guarantee a safer environment for businesses and citizens.

In the past, as stressed in a workshop on “Mutual recognition of labour market regulations and welfare regimes”, difficulties emerged while trying to implement the principle of harmonisation. Meanwhile, the introduction of the principle of mutual recognition in the European Union policies has led to significant results in the area of the free circulation of goods, persons, capitals and services. This triggered real competition between countries/ruling systems and has favoured the prevailing of allocation systems drawing inspiration from those systems/countries which obtained higher efficiency and smaller managing costs.

In the long run, the final result of the mutual recognition of systems would be an a posteriori harmonisation of the economic, social and regulatory systems, with an increase of wellbeing and employment for the society.

Whereas a higher labour mobility within the EU might be beneficial to economic efficiency it might also have costs in the form of an additional concentration of people and productive capacity in already congested areas. Support to the less-developed regions through the EU's Structural Funds has probably at the same time provided financial assistance to these regions and contributed to stemming the outflow of labour to regions with higher income levels. According to studies presented at a lunchtime meeting in Brussels (Enlargement and EU Cohesion Policy), the GDP of poor regions has converged towards that of richer EU regions. However, evidence about the positive contribution to this convergence of EU structural support is not conclusive.

Enlargement is, however, likely to have, at least temporarily, a negative impact on some of the present beneficiaries of the Structural Funds. In the past, the GDP of poor regions has converged towards that of richer EU regions. Evidence about the positive contribution to this convergence of EU structural support is not conclusive. But in the debate on costs and benefits of enlargement, we should not forget that cohesion funds were introduced to compensate those economies that, at that time, were not prepared to fully benefit from the internal market and the European monetary union. The essence of structural support is that it should be terminated once

an economy grows, and indeed, due to their successful economic growth, many regions are expected to lose their classification of objective 1, independently of enlargement.

Policy rules, policy competition and economic modelling

This part of the project involved two large workshops both organised by the French CEPII and a conference organised by the Netherlands Bureau of Economic Policy Analysis (CPB).

Simulation properties of economic models

The assessment of the effects of policy measures increasingly depends upon economic models encompassing features considered as essential for the specific policies and measures assessed. The work programme of ENEPRI consequently included workshops allowing a confrontation and comparison of the simulation properties of key national and internationally managed economic models.

Studies presented at a workshop in Royaumont (France) focussing on the results of simulations confirm the theoretically based hypothesis that the absolute size of short-run cross-border externalities is rather low. The two basic transmission channels working through trade and capital market cancel out each other to a large extent. The spillovers hardly seem to pose any important threat to European economies and it is disputable whether they would call for a more extensive cooperation framework.

The considerable variability of simulation results between the models relating to the size and, at times, also the sign of spillovers makes it impossible to determine the real impact of economic policies undertaken in one country on the economic variables of the others. This makes the coordination very complicated if not unfeasible as the policy-makers do not know the 'true' model according to which they could coordinate their economic policies. As some studies indicate a bad choice of model can even have welfare decreasing consequences. Moreover, the currently used models are calibrated with the use of historic data for the last couple of decades, if some structural characteristics of economies change as a result of functioning of the monetary union, the outcomes of the model simulations may be considerably different to the reality.

Simulations with large-scale macroeconometric models thus do not seem to provide a conclusive evidence concerning the nature of the cross-border spillovers of fiscal policies in the EMU. In general, their absolute size is indeed rather small. However, when one disaggregates the average figures, an extremely colourful picture appears. The absolute size of spillovers varies widely among countries. And so does their sign. Therefore, it seems improbable that the EMU members would take the cross-border externalities as a serious argument in favour of strengthening of fiscal policy coordination. It is also unlikely that the countries could agree on a concrete mechanism that would be advantageous for all.

In view of the relatively weak evidence in favour of discretionary policy coordination, it is particularly interesting to explore the evidence of the effects of other policy rules and/or automatic stabilisers within the EU's economic policy framework.

Impact of alternative policy rules

In general the model simulations presented and discussed at the second Royaumont workshop on simulation properties of economic models suggested that, when it comes to stabilise the economy or absorb adverse shocks, relatively simple policy rules could potentially be more efficient than discretionary policy measures. However, as it is important to take full account of effects on trade and payments, the simulations should be based on sophisticated multi-country models.

Several model simulations found the output effects of expansionary fiscal policy measures (an increase in public consumption) to be positive but small and ephemeral. Furthermore they lead to

a fall in investment and private consumption and will therefore in the long run have negative effects on the supply side of the economy.

On the contrary, a number of simulations of fiscal or monetary rules found positive outcomes with respect to reduction of the amplitudes of swings in output and stabilisation of the rate of inflation. One model simulation thus found that the central bank does not necessarily have to increase the nominal rate of interest when it faces an inflation shock. In fact a part of the rise in inflation will be reflected in a lowering of output. Furthermore, wages react to inflation with a lag. As also confirmed by other simulations, for the euro area a combined rule of targeting of nominal GDP growth and inflation will be preferable to a simple inflation targeting.

However, another simulation found that if the central bank fails to recognise a permanent supply shock, a higher degree of inflation targeting may be more efficient than nominal income targeting in stabilising the economy.

Policy competition or policy coordination

The (three-way) trade-off between policy competition, harmonisation and (discretionary) policy coordination is a concern not only for macroeconomic (monetary and budgetary) policy but even more so as far as many aspects of social policy is concerned. In fact, with the ongoing economic integration in Europe, questions on the desirability and the consequences of systems competition become more and more important. European borders are vanishing rapidly, increasing factor and product mobility. Does this call for more intense policy co-ordination? Does this automatically lead to policy competition? What are the consequences of these developments for the European welfare states? And how do institutions influence these developments? Why have welfare state policies remained within the national domain for such a long time? Why and how has this changed over the last few years and how could welfare state policies be dealt with in Europe in the perspective, notably, of population ageing during years to come? And, not least, will enlargement and increased migration result in intensified competition between systems?

These issues were discussed in an ENEPRI conference in The Hague in November 2002 chaired by Mr. Oosterwijk (Secretary General of the Dutch Ministry of Economic Affairs and chairman of the Economic Policy Committee of the European Union).

It was initially argued, that various trends such as ageing and globalisation put pressure on the welfare state. The rising dependency ratio due to ageing may lead to intergenerational conflicts as rising pension cost ask for higher taxes and/or lower other benefits. Furthermore, ageing reinforces the effects of Baumol's law, which describes the rising demand for (public) services, notably the health care sector. Globalisation can be a threat to the position of trade unions in their traditional form. There was, however, hardly a broad consensus on where to draw the line between policy competition and policy coordination (and discretionary harmonisation). One speaker argued that coordination may provide rules for the exercise of competition and therefore is a way to diminish welfare losses for some groups. Against this, others argued that migrants and firms were not just "voting by their feet" and that labour and social policy was only one determinant of capital movements.

In addition a deeper model-based analysis demonstrates the need to analyse the "nuts and bolts" of systems before drawing definitive conclusions. It is even important to take account of the educational system and notably the influence of migration on the costs and benefits of investing in human capital. One study at least found that since migrants in general were better informed on the labour market situation than on the social security arrangements, open borders did not necessarily lead to a "race to the bottom" with respect to social security.

Nevertheless, pressure on welfare systems will increase not only due to enlargement and globalisation but also, and even more so, due to the ageing of population. Ageing challenges the

European Union to reduce risk (as the risk-return trade-off is worsened by falling returns and a narrowing contribution base) and to invest in (the maintenance of) human capital. This requires policy makers to consider ageing and pension systems in a comprehensive framework. Risk is absorbed by raising the effective retirement age by indexing the retirement age to life expectancy. Moreover, this strengthens the incentive to invest in human capital. Furthermore, on the other end of the age spectrum, there is a conflict between the need to slow down the decline in fertility and the wish to raise (female) participation. Solving this conflict calls for a system that stimulates a more equal distribution of labour over the lifetime, thus internalising external effects of breeding.

There is possibly a general and increasing need for a pension system with three main elements. First, a reformed pay-as-you-go pillar which is actuarially fair, features a transparent notional account set-up, and freezes contribution rates at the current level. Second, a funded component which is based on US 401(k)-style grouped accounts that finance the impending aging burden. Finally, to combat poverty the pension system should in all countries be augmented by a first pillar scheme with redistributive features that guarantee a minimum pension and strengthen human capital formation.

Population ageing: consequences and policy issues

This part of the activities of the Network included four workshops as planned in the initial work programme plus an exploratory workshop on "Ageing, skills and labour markets" organised within the framework of ENEPRI but financed as an accompanying measure.

Research on the consequences of population ageing is a huge, and continuously expanding, field. During the 1980s and 1990s the focus of research has been mainly on the implications of population ageing on the sustainability of public finance and the (implicit) transfer between generations. The tool of generational accounting, developed by Auerbach, Gokhale and Kotlikoff, and the calculation of the implicit liability of pay-as-you-go systems, have here provided essential tools for enhancing the perception of the burden for future generations implied in the unchecked continuation of the present systems. Furthermore more recent research on the funding properties of the funded defined-benefit systems has demonstrated these systems share many characteristics of the PAYG systems and, consequently, will in no way be automatically protected against the consequences of ageing.

Increasingly, in recent years, the research agenda has focussed on the consequences for income maintenance of the different cohorts and socio-economic groups of the policy measures conceived in order to ensure the overall sustainability of the pension systems and public finance in general. Addressing key aspects of social policy, the research has aimed at establishing a classification of welfare systems rather than analysing each national system separately. Another stream of research has explored the socio-political aspects of reform programmes with the aim of analysing the public perceptions and voter preferences, such as, in particular, the question as to whether and when key reforms can be expected to obtain sufficient public support. Research (notably within the framework of research programmes sponsored by the OECD and by the NBER) has also increasingly analysed the "determinants of retirement" with the objective of identifying, in particular, the incentives to early retirement in the various OECD countries. Finally, an increasing volume of research is now addressing the consequences for social policy objectives (specific indicators of "adequacy") of the various reform measures considered.

In view of the vastness and complexity of the issues, the workshops and conferences organised within the framework of the activities of the Network could not be expected to cover in an exhaustive manner the consequences of population ageing.

Macroeconomic consequences of ageing

Ageing in Europe during the coming decades is mainly the result of decreased birth rates. This implies that an increase in the dependency ratio will go hand-in-hand with a decrease in the growth rate of the working-age population. In 2020, labour supply in Europe will be roughly at its current level. The combination of a high dependency ratio and stationary employment puts pressure on the financing of pensions and health expenditure. To relieve this pressure, pensions systems could be (more) capital funded. However, as shown by some papers at a workshop organised by the Netherlands Bureau of Economic Policy Analysis, large-scale investment at home is likely to depress the return on capital to low rates, especially since employment growth is virtually zero.

Investments abroad could therefore avoid the problem of low rates of return at home. Especially developing countries may offer abundant investment possibilities. Their labour force will still be growing significantly in the coming decades, and technological progress is expected to be large since these countries can exploit their potential to catch-up with developed countries. However, since developing countries are likely to account for less than 40% of world production in 2020, the funding of pensions cannot rely too heavily on capital income from emerging economies. Therefore, it is worthwhile to consider also the differences among developed countries. While ageing starts early in Japan, the United States is expected to see an annual employment growth rate of 0.7% until 2020. That means that one might expect considerable capital flows among these three OECD areas.

The participants of the workshop considered these issues from different perspectives. Most of them used simulation models, while others concentrated on empirical relations between ageing and capital mobility. Despite the differences in method, they reached a pressing conclusion: Net foreign capital income is not the ultimate source for financing old-age expenditures. The reasons are straightforward. First, the absorptive capacity for investment is limited to the non-OECD countries. Second, the (political) risks involved in investing in emerging economies hamper the size of these capital flows. Third, foreign investment will increase capital income in the ageing OECD countries, but will reduce labour income because capital is invested abroad.

Overall net foreign capital income might be an additional source for financing old-age expenditures, but it is surely not the most important one. International capital markets smoothen the effects of ageing to some extent, but not sufficiently. In this respect, one of the conclusions of the OECD¹ still holds: to deal with ageing, domestic policies are needed.

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 demonstrated in papers presented at a DIW workshop in Berlin, in a number of countries the government budget may 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.

¹ D. Turner, C. Giorno, A. De Serres, A. Vourc'h, and P. Richardson (1998), The macroeconomic implications of ageing in a global context, Economics Department Working Papers No. 193, OECD, Paris.

Consequences of ageing of the labour force

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.

In fact, as demonstrated in a number of papers presented at an exploratory workshop organised by CEP II in Nantes, France, 7-8 September 2001, the ageing of the population in industrialised countries is expected to affect labour markets in several ways. Firstly, the level of productivity and other characteristics are not the same across different cohorts. Consequently, the ageing of the labour force may influence aggregate productivity, wage levels, unemployment and participation rates simply due to the changes in the relative size of different cohorts. Those effects are not independent, however, and the evolution of the cohorts' relative sizes will therefore not be linearly reflected in the aggregates.

The expected rise in longevity will lead to longer periods spent in retirement, undermining the sustainability and viability of pension schemes. Consequently, pressure is mounting to scale down early retirement plans in favour of an increase in the statutory retirement age. This again will lead to an even more pronounced ageing of the labour force, with, notably, an increase in the average age of a large number of professions and additional adjustment problems for a number of low-skilled labour market groups.

Intra- and inter-generational distribution

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 a workshop organised by ISAE in Rome presented 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 application of this new methodology has led to some important and interesting findings. Variations in fiscal burden according to differences in the number of dependants, the difference between net taxes paid by families of a certain type and those paid by the same type of family with one child less (the so-called marginal net subsidy or MNS) are calculated. Thus permitting the evaluation of both direct effects due to the cash and in-kind transfers benefiting families with children and the effect due to tax variations indirectly related to the presence of one additional child, due to a different consumption behaviour and/or level of earnings and wealth.

In addition, 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 Italian team would therefore seem to be a pertinent extension even of the more traditional (sustainability-oriented) generational accounting.

Issues in pension financing and health care

A workshop organised in London in 2001 covered a number of key issues in the field of social security and pension reform. Thus an analysis of the incentives in favour of early retirement in the funded pension schemes in the UK and the Netherlands showed that these schemes still frequently contained a premium on early retirement. In order to raise the effective retirement age in these countries it might therefore be appropriate to replace the current early retirement schemes by more flexible schemes containing incentives to stay in the job.

Yet another paper showed that a fully funded system might suffer from a moral hazard problem in case of unanticipated shocks. The introduction of a mixed system including both a funded pillar and a PAYG system would reduce the riskiness of the whole system and facilitate a smooth adjustment of the schemes as a function of changes in the basic demographic and economic parameters. Another paper demonstrated that the different schemes for dealing with the uncertainties concerning mortality, fertility and migration might exert a strong influence on the gains and losses of different cohorts and between active and inactive.

According to one paper, pre-funding could, from the point of view of macroeconomic analysis, be considered an investment entailing costs. In the face of uncertainty systems with flexibility in the level of funding might be preferable to systems with less flexibility. Furthermore, it was argued in another contribution that means-testing of social pensions may be politically popular but may lead to sub-optimal outcome. It may be preferred to a flat-rate pension by those currently alive but will reduce overall welfare in the longer run.

Finally, a more methodologically oriented paper argued that extending the conventional generational accounting framework to take account of the age-specific impact among living generations of fiscal policy reform.

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. This was the subject of the first part of a workshop organised in Berlin by the DIW. Based on Danish data one paper here showed that ageing of the population was not the main factor of exploding health expenditure and an ageing hospital population would not per se be a chronic burden for the health system. Nevertheless, at least in a country like Spain but also in Germany and certain other EU countries, there may be an increasing need for expanding the capacity for formal long-term care in response to ageing of the population and increasing labour force participation of females.

Conference: Ageing And Welfare Systems: What Have We Learned?

Introduction by Governor Guy Quaden

In his introduction to this conference, which was co-sponsored by the Belgian National Bank, the Governor, Guy Quaden, took stock of the policy response to the ongoing research on ageing, and argued that the results so far have been mixed.

He recognised that ageing features prominently on the political agenda and that, in many countries, significant steps are being taken. However, he also saw some worrying trends. He stressed that first, fiscal consolidation has not been commendable everywhere with some

countries in the euro area clearly showing signs of post Maastricht fiscal fatigue. Even worse is the fact that, following the problems that those countries are experiencing now, the credibility of the Stability and Growth Pact and the whole institutional framework was constantly undermined either by calling into question sensible rules or by resorting to creative accounting. The ECB Governing Council had recently confirmed in the strongest possible terms its support for both the Pact, which, if applied correctly, offers enough leeway to reconcile short-term flexibility and long-term sustainability of public finances, and the 3 p.c. of GDP deficit ceiling.

Second, he underlined that policies geared towards market liberalisation, increased research and development and human capital formation, which could spur long run productivity growth, have been hesitant at most in many cases.

Third, even if some initiatives have aimed at increasing the employment rate of older workers, progress has generally been slow, partly due to popular resistance. Still too often, negative temporary demand shocks, both at the macro and the micro level, crystallise into permanent institutional arrangements that put downward pressure on the effective retirement age and, hence, undermine future governments' capacity, if not to ward off the ageing crisis, then at least to soften its impact.

Thus, according to the Governor of the BNB, to avoid the famous Lisbon objectives becoming just a slightly offbeat alternative scenario in our projections, rather than realistic targets, then, clearly, more action were needed in these areas and it was essential that policy makers fully understand that the window of opportunity that we have now, will not last forever. We should be aware of the fact that we still have a lot of convincing to do.

Ageing, labour markets and migration in an enlarging EU

In this session of the conference Tito Boeri first argued that the influx of migrants could only modestly contribute to the intergenerational consistency of otherwise unsustainable public pension systems and stressed that the EU by creating new obstacles to immigration might aggravate present policy dilemmas. Juan Jimeno showed that demographic change will affect the age structure of both population and of the labour market. Changes in the age structure of the labour force might affect aggregate unemployment through composition effects and may also affect age/gender specific employment rates. However, there was some controversy concerning the sign and magnitude of the effects on the age/gender specific unemployment rates and there were reasons to believe that (as in the case of labour market effects of migration) the effects of ageing on the labour market would depend on the specific labour market institutions and regulatory framework.

In the perspective of enlargement and the resulting further liberalisation of labour movements within the enlarged EU a key issue is, however, whether migration will actually respond to wage and unemployment differentials. Here Sjef Ederveen and Nick Bardsley argued that within the range of data and countries considered, unemployment differentials would appear to have only modest impact on flows of migration. For wage differentials the elasticity appears to be somewhat higher, suggesting that the increase in income differentials resulting from the EU enlargement could indeed be expected to increase the incentives for migration.

Another frequently advanced argument: that that ageing process will per se lead to a lowering of unemployment, was seriously questioned in a paper by Jean Château, Jean-Louis Guérin and Florence Legros (CEPII, France). They argued that in the absence of reforms the doubling of the ratio of pensioners to the active population could lead to a lowering of labour supply and, consequently, to a rise in unemployment. This could be countered by an increase in mandatory work duration but for this measure to be successful there would need to be change in the firms' behaviour towards senior workers.

Rob Euwals and Hans Roodenburg of the Netherlands Bureau for Economic Policy Analysis (CPN) furthermore showed that immigration might not contribute as much as argued by Juan Jimeno (see above) to enhancing labour market flexibility in the EU. Against this Margo Alofs of the Faculty of Applied Economics, University of Antwerpen, argued that migration is a Pareto-improving measure and that all economic migrants and the autochthonous income and age groups existing at the time of arrival would be better off. Margo Alofs, therefore, concluded that it is preferable to trace and repatriate illegal migrants than to curtail the legal entry of migrants. A corollary is that young legal migrants alleviate the fiscal burden by their contribution to the welfare system in the host country. Furthermore, a less restrictive policy with respect to legal migration simultaneously addressed the adverse effects of illegal immigration.

Evidence presented by Jan Fidrmuc (ECARES, Free University of Brussels and ZEI, University of Bonn) however, suggests that migration in transition countries has little to offer in terms of contribution to adjustments. He argued that since migratory flows show little response to wage and employment differentials, regional disparities will not get smoothed away by migration and he did not expect massive East-West migration in the wake of the next EU enlargement.

Session 2: Sustainability of welfare systems

As an introduction to this session Henri Bogaert, Director, Belgian Federal Planning Bureau, Chairman of the Working Group on Ageing of the Economic Policy Committee presented the main findings of the study of the impact of ageing on public pension systems and health care expenditure undertaken by the Working Group. According to Henri Bogaert the Working Group had concluded – in line with the conclusions of the Lisbon and Barcelona European Councils - that in some countries a clear policy priority should be placed on increasing the activity rate of older workers by providing strong incentives for the elderly workers to remain in the labour force or by introducing disincentives to early retirement. It was however recognised that this would be unlikely to materialise unless the present incentives to early retirement in most member states were eliminated or substantially reduced. Furthermore, based on the findings of the third simulation the Group recommended that reform strategies take account of the time spent in retirement in proportion to the time spent in activity.

Martin Werding, ifo/CESifo, Munich, stressed that the particular approach involving simulations by national experts on the basis of broadly comparable assumptions involved some gain with respect to details but loss in comparability. He saw a need for a broader comparison of benefit systems and in particular of the “generosity” of pension systems as a means to formulate a more consistent view of the overall economic cost of ageing.

Erika Schultz, DIW, Berlin saw no clear trend towards compression of morbidity:

- In several countries the length of hospital stays in a given population showed a decline but the number of hospital discharges an increase. This could be interpreted more as a change in policy (more out-patient care) than as a change in morbidity.
- The European Community Household Panel (still to be further analysed) in general showed no decline in age-specific self-declared health status or in the prevalence of a number of indicators of disability.
- Various estimates of healthy life expectancy such as the Disability-adjusted life expectancy (WHO) or Disability-free life expectancy (the REVES network) in general showed some improvement following the increase in overall life expectancy but an increase in the proportion of life in morbidity.

- Available scattered and incomplete data are therefore consistent with some overall expansion of morbidity in proportion to total life expectancy.

Given the prospects of an expansion of morbidity, Erika Schulz, consequently saw a need for a considerable expansion of the capacity for long-term health care for the elderly over the coming decades. Howard Oxley, Directorate for Economic Affairs, OECD, argued that the ongoing reduction in the size of families would mean fewer children to care for the elderly and grand parents. Furthermore, that the anticipated increase in the labour market participation rate for women could also reduce their capacity to care for their parents. This effect could be further enforced due to an increase in the retirement age. This could thus enhance pressures for a larger role of the state in the provision of care for the elderly. Bernard Casey, London School of Economics argued that while the purpose of the seminar was to ask “what we have learnt”, the principal conclusion of his paper was that we have scarcely started learning about paying for long term care. He argued the need to recognise that it is undesirable for the relative position of older people to deteriorate and that policy makers needed to find longer-term solutions that ensure an equitable distribution of its costs and do not mean that these are borne largely or entirely older people themselves, and particularly by the very old. That we cannot escape from this task is something we still have to learn.

A paper by P.C. Rother, M. Catenaro and G. Schwab underlined the urgency of pension reform and provided an assessment of the viability of alternative reform approaches. The paper argued that only comprehensive and profound reform will ensure permanent financial viability of the public pension systems while partial reform is found incapable of solving the ageing problem despite favourable macroeconomic assumptions.

Although ageing is now increasingly perceived as a world-wide phenomenon the pace of ageing shows considerable disparity between the major regions. This may give rise to capital movements and beneficial exchanges between regions with different demographic developments. While the papers presented above and most of other studies of the consequences of ageing do not explicitly take account of these aspects of ageing, a paper by the French Ingénue-team² aims explicitly at evaluating the potential magnitude of equilibrating capital flows. The paper showed that large capital flows between the main regions help considerably in smoothing the long accumulation cycles arising from ageing and fluctuations in the size of population. It concludes by stressing that the prospect of large discrepancies between domestic saving and investment raises the question of the sustainability of such trends and, hence, of the more precise forms of capital flows and of the institutional environment and regulation of international financial markets.

Observation of the pension form debate shows that retiree lobbies have displayed strong opposition to reforms aimed at retrenching the PAYG systems. Furthermore, the electoral activity of the elderly is generally more dynamic than that of the young. In France, 95 per cent of retirees are registered to vote, compared to 86 per cent of the young generations. And among registered voters, 85 per cent of the elderly vote as compared to 78 per cent for the whole population. In addition, retirees are well represented within trade unions, notable in the Southern European countries. An important issue for public policy is therefore the impact of ageing of the population on electoral behaviour and other expressions of political preferences of the citizens.

A paper by Florence Legros, CEPII and University of Paris Dauphine, presents an analysis of the conflicts between retired and nearly retired and workers in a general equilibrium model with overlapping generations. She stressed that a key (economic) issue is the level of the rate of return on capital in general in relation to the rate of return of the PAYG system and the “weight” attributed to the younger generations by the “social planner”. An additional issue is however the

² The team consists of staff members from three French research institutes : CEPII, OFCE and CEPREMAP.

way in which the “social planner” defines social welfare and in particular the weight put to the future needs of the younger generations.

In the concluding remarks Florence Legros underlined that when the PAYG scheme is not perceived as inefficient (it provides the same yield as savings) the major channel by which the contribution rate has an impact on welfare is through the interest rate.

A paper by Marcello D’Amato and Vincenzo Galasso (respectively University of Salerno and IGIER, Boconi University) argued that, given the prospective ageing, the only feature of the new regime that appears to have a relevant impact on the equilibrium tax rate is an increase in the retirement age. This is, according to the authors, encouraging since the reforms paved the way for a steady rise in the effective retirement age.

However, as stressed in a paper by Bengt-Arne Wickström (Humboldt University Berlin and DIW Berlin), the political process does not work gradually and might never reach a steady state. On their side individuals adjust their behaviour, taking advantage of the incentive structure of the system. However, as they grow older lose the capacity to adjust to new parameters. In terms of economic analysis, this implies that behaviour in later periods of an individual’s life to a greater extent will be governed by income effects and to a lesser extent by substitution effects.

Wickström argued that possibly when older generations develop behavioural sclerosis (and myopia) behaviour may possibly change under drastic circumstances (for example in a context of political crisis). This would imply that for example only large reductions in social benefit levels would move individuals back into the labour while marginal reductions would have little or no effect at all.

A contribution by Juha Alho (University of Jyväskylä, Finland), showed that uncertainty in demographic forecasts is much higher than generally thought. He showed that stochastic simulations of future demographic developments, including explicit data on the statistical errors (variance) of past developments of the main components have the potential of offering a pertinent alternative to the mechanistic projections based on standard assumptions. By introducing the ranges of probability of the central projections, such stochastic simulations offer a measure of reliability of projections and, thus, a measure of the potential risk of taking policy decisions on the basis of erroneous assumptions.

Session 3: What have we learned from research on ageing?

(A comparative EU-US perspective)

In this, final, session Richard Blundell, Institute for Fiscal Studies and University College, London, initially provided a broad review of the current know-how in, and policy implications of, the research on ageing in Europe. He presented “counter-factual” simulations based on the NBER project (published in the volume edited by Gruber and Wise) but assuming an increase in the retirement age, some reduction of the replacement rate and actuarial adjustment of the annuity in the age interval from 60 to 70. According to Blundell, a reform involving these measures would significantly reduce the option value of early retirement and induce a significant enhancement of the sustainability of the pension systems.

Robert J. Willis, Director, Health and Retirement Study (HRS), Institute of Social Research, University of Michigan stressed in particular the strong correlation of health and economic status, with evidence pointing towards an impact of economic status on health during the first part of the life-cycle and effect of health on wealth during the later phases (age 50-70). He pointed out that there was evidence of an improvement of the state of health among the elderly but it was still an open question whether this was a firm trend. Furthermore there was now strong evidence that dementia will be a growing problem even if other forms of disability are decreasing. Arie Kapteyn, Rand Corporation, ex-University of Tilburg, stressed that we had still some way to go

to obtain sufficiently reliable and consistent data for international comparisons. Arie Kapteyn also stressed that health and disability were also the outcome of cultural norms and that whether one can or cannot work is also dependent on workplace accommodation (for example for disabled persons).

C. Detailed proceedings of workshops and conferences

The summary of proceedings of the workshops and conferences organised by ENEPRI under the 5th FP contract is presented below under four main headings:

- Labour markets, enlargement and migration;
- Policy rules, policy competition and economic modelling;
- Population ageing: consequences and policy issues; and
- Ageing and welfare systems: what have we learner?

The last entry provides the summary of proceedings of the final conference.

Labour markets, enlargement and migration

Workshop on “EMU and asymmetries in labour markets”

This workshop was organised in Paris, 29-30 September 2000 by CEPPI on behalf of the European Network of Economic Policy Research Institutes (ENEPRI). It was the first in a series of workshops and conferences dealing with European welfare systems and policy implications of an integrating European Union. The workshop also benefited from the support of the Fondation Banque de France pour la recherche.

Asymmetric shocks represent a key topic for research on the EMU. Within an Economic and Monetary Union monetary policy is designed for the Union as a whole and the constituent economies are not in a position to react to country-specific shocks (asymmetric shocks) by changing the stance of macroeconomic policy. Consequently, adjustment to such shocks must take place via labour markets and/or goods and services markets. Furthermore, even symmetric shocks (common to the whole EMU) may have asymmetric effects if economic structures are asymmetric. Analysis of asymmetric shocks has mainly concerned two areas: the transmission channels of the monetary policy, and the wage-setting mechanisms. This workshop dealt with the latter of the two areas.

The workshop was structured into three main sessions:

1. Existing asymmetries between European labour markets
2. The evolution of wage-setting mechanisms
3. Labour asymmetries and the conduct of monetary policy in EMU

Existing asymmetries between European labour markets

David Mayes (Bank of Finland) presented a paper written with Matti Viren (Bank of Finland) on the existing asymmetries in the euro area and the problems of aggregation they raise for policy-makers. Asymmetries could concern economic variables (output per head, inflation, unemployment, specialisation patterns), different coefficients of variables in functions (elasticities), different relations between economic variables and different policy responses. The paper stressed that these asymmetries may increase the probability of asymmetric shocks although even symmetric shocks could entail asymmetric answers given the differences in reactions to shocks.

Eric Pentecost (Loughborough Univ.) presented a paper written with John Sessions on the determinants of labour market flexibility in the EU. They too found, using a time-varying methodology, that Phillips curves show significant differences across the main European Union member states.

Jean-Pierre Laffargue (CEPII) presented a paper written with Stéphanie Guichard on private sector wage behaviour in industrialised countries. Using a panel methodology, the authors show that the reaction of the wage rate to changes in productivity and in the employment rate show considerable differences across countries. The employment rate is found to be a better indicator of labour market tensions than the unemployment rate. In addition, they presented some evidence of nominal rigidity in wage behaviour and of a small fiscal wedge effect on wage setting.

The evolution of wage setting mechanisms following the introduction of the euro

Karen Dury (NIESR) presented a paper written with Ray Barrell on the potential impact on the design of policy rules of asymmetries in labour markets in Europe. While acknowledging differences between European countries with respect to labour demand, wage bargaining and speed of response to shocks, the authors concluded that those differences appear to have little influence on the optimal setting of monetary policy of the ECB. Using different models of Europe (imposing labour market relations to be equal in all, some or none of the countries), the authors found the preferred rule for the ECB to be a combination of nominal aggregate and inflation targeting rules.

Alain Borghijs (Antwerp Univ.) presented a paper on the impact of EMU on wage-setting mechanisms. This paper showed that economic integration and product market integration might increase the incentives for trade unions to cooperate. But there are arguments against the "Europeanisation" of wage formation, which stem from a risk of higher wage demands in a large, relatively closed economy such as the EU and from a decrease in the possibility for wage policy to adjust for asymmetric shocks. However the author showed that EMU did not always increase the incentives for trade union cooperation; moreover, the claim that wages would react less responsively when set jointly is no more supported by the model.

Wolfgang Scheremet (DIW) presented a paper on the convergence of wage policy after EMU. Using both econometric tests and analyses of wage-setting institutions, the author underlined that wage behaviour is still very heterogeneous in Europe. The convergence of inflation rates consequently implied a continuation of regional differences in unemployment rates. Only a few countries show a structural break in their wage formation process since 1970.

Steven Tanguy (Rennes Univ.) presented a paper on the degree of coordination between national trade unions. Economic integration has an ambiguous impact on wage formation: this will automatically be a move towards decentralisation of wage negotiations, which could increase wages. However, the intensification of international competition should discipline trade unions.

Labour asymmetries and the conduct of monetary policy in EMU

Nicola Viegi (Strathclyde Univ.) presented a paper written with Andrew Hughes Hallett on the importance of asymmetries in labour market institutions in the operation of a monetary union. The authors acknowledge the importance of asymmetries in preferences or in shocks, but, in their assessment, the main problem caused by asymmetries stems from differences in market structures and institutions. Countries with flexible (i.e. decentralised) labour markets should not be expected to wish to join a union of economies with less flexible (i.e. more centralised) markets. However, at the same time, the less flexible countries prefer only the more flexible to join. In addition, once countries have joined, there is little incentive to make markets more flexible.

Kari Alho (ETLA) presented a paper on the Finnish experience. The Finnish EMU buffer funds' goal is to maintain the social security contributions of employers during a possible recession in the EMU. However, their capacity to act as a stabilisation tool must not be overvalued and they may even lull participants to postpone necessary reforms. According to the author, to maintain

employment during a recession, cuts in indirect labour costs, even at the cost of social security provision, may yield better results.

Richard Nahuis (CPB) presented a paper written with Ashok Parikh on the role of labour mobility and flexibility as an adjustment tool. Labour mobility can play a role in resolving regional disparities and absorbing shocks, especially in the absence of fiscal redistribution. However this is low in Europe relative to the US, and seems to stay low despite regional disparities.

Workshop on “Eastern enlargement and migration”

Full membership of the Eastern European countries will entitle them to benefit from the “four freedoms” enshrined in the Treaty of the EU. As of now, trade and capital flows are already, albeit with a number of exceptions, liberalised within the framework of the association agreements. Free movements of labour, on the other hand, will only be implemented after accession. The potential size, direction and nature of migration flows after EU enlargement are therefore important subjects of research on the effects of accession of the CEECs.

This was the focus of a workshop organised within the framework of ENEPRI in Brussels on 17 November 2000.

In an introductory contribution, Jorgen Mortensen (CEPS) recalled some basic concepts of migration in general and of labour mobility in particular. He argued that the modelling of labour movements ought to take account not just of the incentives but also of a number of obstacles, such as distance, age, portability of pension rights, flexibility of the housing market, culture and language. These obstacles probably constituted the main explanation for the comparatively low labour mobility within the European Union. He underlined, furthermore, that the study of labour mobility was hampered by a serious lack of data on the dynamic aspects of movements between the different categories of labour.

Witold Orłowski (NOBE) then presented a paper on Migration from Central and Eastern European Countries after the Accession: Effects for Regions and Labour Markets. Using a gravity model this paper looks at the regional impact of migration. Under two convergence scenarios, different regional impacts may be expected. Focusing on the movements between Poland and Germany, the paper argues that, in a scenario with low growth in Poland, immigration may concentrate on southwest Germany. In a scenario with higher growth in Poland, immigration may be distributed more evenly in Germany, whereas the overall number of migrants may not differ by much. The outflow of migrants will come mostly from the already better developed Polish West. Thus emigration will do little to alleviate labour market problems in Poland which are concentrated in the eastern part, with a high share of agriculture and ailing industries.

The next paper, by Michiel Van Leuvensteijn (CPB), focused on Wage Convergence and Migration: Lessons from Germany for the EU Enlargement. Using data on migrations from the German Länder, this paper analyses intra-German migration patterns after unification. The determinants of migration include such variables as regional wage and unemployment differences for blue and white collar workers as well as “amenities” such as hospital beds, housing prices, the rate of house rentals, cost of living and population. The results indicate a U-shaped relation between wage differences and immigration flows for white-collar workers and the reverse for blue-collar workers. These paradoxical results were discussed and the question was raised whether they would be incompatible with other, competing hypotheses concerning the behaviour of different categories of workers. It was also argued that the findings concerning German inter-regional migration could not necessarily be applicable in the field of migration between the EU and the CEECs.

A paper by Herbert Brücker (DIW), Will EU labour markets be swamped by migrants from the East? Some lessons from post-war migration to Germany, presented a model in which migration into the EU is determined by income and employment rate differentials between the country of destination and

the country of origin. This model is then applied to Germany, estimating the impact of these determinants of migration and then using the findings to project migration rates after Eastern enlargement, controlling for country-specific effects.

In the long run, it is shown that the stock of migrants in the host country is linearly determined by the income and employment differential. Migration flows, however, will depend negatively on the initial stock of migrants present in the host country. In the case of the EU's Southern enlargement, a considerable amount of migration had taken place before actual accession so that stocks were close to equilibrium. After accession, migration was consequently rather low. With Eastern enlargement, the picture is different. Although some migration has taken place since 1989, the main adjustment can be assumed to take place after accession.

Projections based on this model indicate that, if all ten countries accede at once, the initial inflow of migrants to Germany will be around 220,000 persons in the first year but will fall to 95,000 persons per year at the end of the decade following accession. This will increase the number of EU residents originating from the CEECs from half a million in the initial position to 1.9 million at the end of the decade. Further migration will be much lower so that, in 2030, around 2.5m persons from the CEECs will reside in Germany. If accession takes place in waves, the initial profile of migration will be flattened but eventually the stock of migrants will remain similar. Also, results are robust to whether income differentials are calculated in purchasing power parities or in current exchange rates.

A final paper, by Jan Fidrmuc (ZEI, Bonn, and CPB), focused on Migration in Transition Economies: Adjustment to Shocks?. It looked at the role played by regional migration within a transition country, here the Czech and Slovak Republics, in adjusting to regional differentials in wages and unemployment. Based on highly detailed data on migration from Slovak counties, the paper finds that the efficacy of labour mobility as a means of adjustment is rather low. Unemployment rates and average wages seem to have significant effects on net migration in Slovakia but not in the Czech Republic. Regions with higher average wages appear to experience higher migration in terms of gross inflows and outflows. This may be attributed to a higher mobility of high skilled and employed workers. Low-skilled and unemployed appear to be rather immobile.

Conclusion: The papers presented and the subsequent discussion seem to confirm the arguments that, after accession, migration between the present EU member states and the accession countries may be considerably higher than migration following the Southern enlargement. Furthermore, it is important to analyse migration flows at the level of individual countries and regions, and particularly so when flows between Poland and Germany are concerned.

The papers, however, also show that the accumulated migration flow is likely to remain small in proportion to the labour force in the EU and to reach an equilibrium level only after an extended period of adjustment. The profile of migration will also be determined by the rate of growth of activity in the accession countries and thus by the overall speed of and conditions for accession.

As the stocks of migrants are at present far below their equilibrium level, transition periods after accession may only postpone migration flows but not change much in their magnitude – unless the speed of macroeconomic convergence is very high.

Workshop on “Housing and labour mobility”

Labour markets in Europe are far from homogeneous and transparent. Segmentation is widespread both within and between countries. Moreover, demographic changes and rapid development of certain sectors are producing labour shortages in some localities while there are labour surplus and high unemployment in other regions. At the same time, housing in different European countries is undergoing important changes, both regulatory and

structural, while most Europeans remain attached to their owned or subsidised homes throughout their lifetimes. This may well be one of the reasons why labour mobility across European frontiers and between regions is extremely low in comparison with other industrialised countries. This was the subject of a workshop on "Housing and Labour Mobility" organised in Madrid by FEDEA on 27 November 2000.

The purpose of this workshop was to analyse these issues in sufficient detail to ascertain the opportunity to launch a European-wide research project exploring the link between labour mobility and housing in its many dimensions and implications, including an in-depth analysis of administrative, financial and cultural obstacles.

The subject was introduced by a lecture on "Housing and labour mobility in Europe: What are the issues?" by William Peterson, Professor at the Department of Economics, University of Cambridge, UK.

Labour mobility is in itself a complex issue. Compared to the US, Europe seems to lag far behind on this account. This is one of the reasons why the unemployment record in the EU fares so poorly. The design of policies to enhance mobility of the labour force thus represents a challenge for Europe. Many barriers may be at work such as, differences with respect to: language, financial institutions, welfare systems, schooling, housing. It is, however, also necessary to distinguish between several types of mobility, which each may present different policy issues:

Short-distance mobility: does not affect labour mobility but affects household welfare

Long-distance mobility: regional mobility is difficult to distinguish from long-distance commuting

Age-related mobility: university students should be highly mobile and aged households would not be expected to move too much

Skill-related mobility: manual workers rely on local labour markets; low qualified workers tend to stick to their rented housing arrangements (social housing); managerial workers tend to move more (housing is not a problem for them).

Slump mobility: happens when a certain area experiences industrial or economic decline. There, people are discouraged from moving out and frequently lack the skills necessary for conversion.

Boom mobility: low-skilled workers will not move into a booming region because house prices and rents there are too high.

Frictional immobility: may happen even if flows in both directions are high but net flows are small.

Migration

Housing seems to affect mobility, but statistical difficulties are important. As for the propensity to move, it matters whether one rents or owns one's home, but other household characteristics are important. This finding holds at least for the UK where social housing is important. Private renters tend to move more. Migration is higher among owners and private renters of unfurnished residences. However, data limitations are serious and many questions still remain unanswered due to a lack of adequate information.

Michiel van Leuvensteijn and Pierre Koning (CPB, Den Haag) then presented their paper on Oswald's theses revisited: The effects of house ownership on labour mobility in The Netherlands. Using a hazard model estimating the probability of moving, these authors find that employed renters are twice as likely to move as employed owners. The opposite holds for unemployed and those in job transition. Social renters appear to be locked-in. Renters however have a larger probability of becoming unemployed or leaving current employment. As an explanation the authors conjecture that workers who are more committed to their job tend to suffer less from unemployment, participate more and are less mobile, which applies more to home owners. It is not clear, however, whether the causality is not the inverse: home owners who become unemployed may search harder for a new job.

Olavi Rantala and Namkee Ahn also contributed to the debate by describing the situation in Finland and Spain.

Overall conclusions: The general discussion of these papers and the subsequent panel discussion confirmed that the relation between housing and labour mobility, in general, is a promising area for research. Household decisions on housing should be more explicitly modelled, so that different characteristics can be analysed. Dynamic data can be better exploited by exploring duration dependency issues and the behaviour of households when housing tenure changes. There are also strong arguments for exploring the regional dimension of these issues. It is also desirable to incorporate a wide range of variables, such as, for example, user cost of housing.

In general, it seems that studies undertaken so far suffer from a lack of data. For Spain, the labour surveys show some positive correlation between ownership and willingness to move. Other regression results show a negative relationship between housing prices and willingness to move. The duration of unemployment does not seem to affect the willingness to move.

Labour mobility is, in itself, a very complex issue and no single determinant factor can be detected. There is therefore a need to look for a wide array of causes, and housing may only be one factor among others. Labour mobility is not necessarily without costs but an increase in labour mobility may contribute to the adjustment process within EMU. Most EU member states suffer from severe imbalances between the demand and supply of labour, and enhancement of labour market flexibility may help to alleviate certain categories of such structural unemployment. Mobility and flexibility may also contribute to ensuring macroeconomic stability. Increased flexibility in the housing market may, therefore, working through its effect on the labour market, bring significant macroeconomic benefits.

Lunch-time meeting: 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 Orłowski (NOBE, Lodz) and Sandra Pratt (European Commission) discussed the likely magnitude of labour migration after enlargement and consequences for European policy.

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.

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.

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 Orłowski 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 Orłowski 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 Orłowski 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>)).

Conference on “Economic and social dimension of EU enlargement”

This conference took place in Brussels on 16 November 2000 and was organised by CEPII, CEPS and the French Ministry of Economics, Finance and Industry on behalf of the French Presidency of the EU.

The on-going accession talks raise many concerns both in the EU (fear of immigration flows and costs for the EU budget) and in the accession countries (costs of entry, evolution of social systems and unequal rights for member states).

The conference was structured into three main sessions:

1. The labour market in accession countries
2. Potential spillover between the labour markets of EU and accession countries
3. Social security reform: Is it a different issue for accession countries?

The labour market in accession countries

Tito Boeri (Bocconi Univ.) argued that the fears of social dumping were exaggerated, as accession countries in fact already had high contribution rates and a high degree of labour market security. Concerns rather arise from the informal sector and from the still high level of corruption, spurred by soft law enforcement.

Marek Gora (Warsaw School of Economics) attributed the prevailing high level of unemployment in Poland, after several years of high growth, to the low level of productivity, high social security contributions and excessive labour market regulations. The pension reform of 1999 will not cause any substantial labour market effect in the short run; investment in education was in this respect one of the most effective measures to be taken.

Potential spill over between the labour markets of EU and accession countries

Claire Wallace (Derby Univ.) discussed the potential migration flows between the EU and the accession countries and argued that their magnitude is very hard to ascertain. However, even if temporary migration is on the rise, permanent migration seems to be decreasing. Furthermore, in this field, economic risks (brain drain, illegal immigration, and absorption problems for neighbouring countries) have to be weighed against political benefits and citizenship issues.

Serge Feld (Liege Univ.) studied the determinants of international migration in Europe. According to the author, demographic and economic factors were almost totally disconnected from migration flows. The main determinants were of a political nature. However, the advancement of integration can be expected to trigger a surge in temporary immigration towards EU.

Social security reform: Is it a different issue for accession countries?

Michal Rutkowski (World Bank) stated that social security reforms were a different issue in accession countries, as potential benefits from such reforms were higher while costs were lower. Their move towards a multi-pillar pension system should be assisted by quicker reforms in the EU with respect to portability of pension plans. Furthermore, it should be acknowledged that pension reforms may legitimately induce higher temporary budget deficits and explicit debts.

Zsuzsa Ferge (Budapest Univ.) expressed her concern about the pressures from the Commission and the World Bank on the accession countries aimed at their non-adoption of the European social model for economic reasons: these double standards could entail political problems.

These presentations were followed by a panel discussion with political and business leaders, academics and high-level civil servants. The conference was concluded by Jean Pierre Jouyet (French Treasury Director).

Workshop on Mutual recognition of labour market regulations and welfare regimes

(ISAE), 14 June 2002, Rome

The differences between States and social-economic systems within the European Union depend on disparities which are not only unavoidable, but which must be exploited to create those opportunities for exchange and competition necessary to reduce production costs, eliminate artificial obstacles to the free movement of workers, improve quality and prices for consumers, make the society less unequal, guarantee a safer environment for businesses and citizens.

However, evident difficulties emerged while trying to implement the principle of harmonisation. Meanwhile, the introduction of the principle of mutual recognition in the European Union policies has led to significant results in the area of the free circulation of goods, persons, capitals and services. This has triggered real competition between countries/ruling systems and has favoured the prevailing of allocation systems drawing inspiration from those systems/countries which obtained higher efficiency and smaller managing costs.

In the long run, the final result of the mutual recognition implementation would be an a posteriori harmonisation of the economic, social and regulatory systems, with an increase of wellbeing and employment for the society.

Aim of this workshop was to examine the prospects and applications of the principle of mutual recognition, by analysing its effects in terms of labour market, welfare state (pensions, health care, etc.), political systems, financial settings, legal and judicial structures, according the following guidelines:

- mutual recognition versus harmonisation in the European Union and the effects on economic and social cohesion and on political systems;
- mutual recognition and rules and regulations in the production factors' markets;
- mutual recognition and unemployment;
- mutual recognition and welfare states;
- mutual recognition and education and qualifications;
- mutual recognition and legal and judicial frameworks;
- mutual recognition and financial systems.

The workshop included the following presentations:

Mutual Recognition versus Harmonisation in the European Union and the Effects on Economic and Political Systems, debate opened by: Paolo REBOANI (Ministry of Labour and Social Policy, Rome) with the participation of (Alfonso MATTERA (European Commission) Discussant: Angelo Maria PETRONI (Scuola Superiore della Pubblica Amministrazione, Rome).

Mutual Recognition in the Product and Service Markets (Inclusive of Education and Qualifications) by

Jacques PELKMANS (Netherlands Scientific Council for Government Policy) Discussant: Daniele CHECCHI (University of Milan) Debate open by: Grazia SGARRA (Confindustria, Rome)

Mutual Recognition, Unemployment and Welfare States (Fiorella KOSTORIS PADOA SCHIOPPA (ISAE) Discussant: Daniel GROS (CEPS) Debate open by: Giuliana BONGIORNO (Collège d'Europe, Bruges) *Mutual Recognition and Legal and Judicial Frameworks*: Author: Alberto PERDUCA (Office of the Prosecutor, Turin) Debate open by: Sascia LUBICZ (ISAE)

Mutual Recognition and Financial Systems Piergaetano MARCHETTI (“Bocconi” University, Milan) Discussant: Marcello DE CECCO (Rome University “La Sapienza”) Debate open by: Sergio DE NARDIS (ISAE)

High-level discussion forum on "Mutual recognition of labour regulations"

A conference on labour mobility was held at CEPS on 27 June 2001, dealing inter alia with "mutual recognition of labour regulations". The event served to interest policy-makers in the basic idea contained in this part of the ENEPRI work programme. The President of the European Commission, Romano Prodi, and the Italian Foreign Minister, Rocco Buttiglione, participated actively in this meeting, which was attended by 250 persons.

Workshop and lunchtime meeting: Enlargement and EU Cohesion Policy

CEPS Workshop and Lunch time Meeting – 17 October 2002:

Joeri Gorter (CPB), José Antonio Herce (FEDEA), Christian Weise (DIW)

Chairman: Paul de Grauwe

The following three studies by institutes belonging to ENEPRI (European Network of Economic Policy Research Institutes) were presented:

- *“Funds and games: The economics of European cohesion policy”, by CPB (Netherlands Bureau for Economic Policy Analysis)*
- *“European Union Enlargement: Effects on the Spanish Economy” by FEDEA (Foundation for Applied Economics Studies, Spain)*
- *“How to finance Eastern Enlargement of the EU”, by DIW (German Institute for Economic Research)*

These three studies are available at the ENEPRI website: www.enepri.org

The debate around the consequences of the forthcoming enlargement has mainly concentrated on the implications for the EU's budget of the application of the common agricultural policy and the structural funds (the cohesion fund, the regional and social funds. However, as it became clear from the three speakers invited to our lunch time meeting, the fiscal implications of enlargement are only a part of a wider complex of economic and financial consequences of the admission of ten, and later more, countries of Central and Eastern Europe, the Mediterranean and the Balkan.

The CPB study, presented by Joeri Gorter shows that there is considerable scope for improving the effectiveness of the EU's Structural Funds. Although not clearly defined in official documents, the goal of the EU Cohesion Policy is to be interpreted as to foster convergence of regional GDP per capita. The distribution of EU structural support seems to be coherent with this objective, as poorer regions get more funds than richer regions. This study also reveals that during the last decades, the GDP of poor regions has converged towards that of richer EU regions. However, evidence about the positive contribution to this convergence of EU structural support, including CPB's own estimates, is not conclusive. Cohesion policy has a high potential to contribute to regional economic growth, but its real impact to economic growth in the last decades has been very low. This might have been due to several factors: although poor regions receive a high share in the total, an important part of cohesion support still flows to relatively rich regions. Furthermore, EU support may have crowded out national regional aid and have replaced natural convergence mechanisms (for example reducing labour mobility). Finally, national authorities may choose to use EU support to finance low effectiveness projects. There is therefore room for improving the effectiveness of EU cohesion policy. This could allow more to be done at a lower cost, thereby easing the pressure from enlargement. The CPB study suggests

three alternative options for reform of the EU cohesion policy: 1) to strengthen the monitoring and control over the use of cohesion support by the European Commission, 2) to move to a system in which funds are allocated to projects (instead of being allocated to regions), 3) to replace the cohesion policy by a system of fiscal transfers from rich to poor countries.

Spain is one of the main recipients of EU structural support and, according to a study presented by José A. Herce, enlargement is expected to have, at least temporarily, a negative impact on the Spanish economy. In fact, in relative terms, Spain may become less attractive for foreign direct investment and trade which may shift in favour of new Member States. Furthermore there is likely to be a reduction of the Spanish share of EU structural and agricultural support. Moreover, the Spanish economy is not expected to benefit so much from the expansion of the single market, due to the fact that she has relatively little direct trade and investment flows with accession countries. Nevertheless, if Spanish economic agents reacted and decided to increase its exchanges with future Member States, the impact of enlargement in the Spanish economy could be improved. Unfortunately, public opinion has preferred to focus on the potential loss of structural funds instead. But, as pointed out by José A. Herce, in this debate we tend to forget that cohesion funds were introduced to compensate those economies that, at that time, were not prepared to fully benefit from the internal market and the European monetary union. According to José A. Herce, the essence of structural support is that it should be lost once an economy grows, and indeed, many regions are expected to lose their classification of objective 1, independently of enlargement, due to their economic growth.

As Christian Weise explained, the enlargement of the EU could be financed without overshooting the EU budget limits. However, the enlargement should be taken as an opportunity to carry out the long needed reform of both the EU structural policy and the common agricultural policy (CAP). Not only an EU of 25 Member States will be more costly than the current EU 15, but enlargement will also make it more important to have comprehensible and transparent rules for the financing of the budget. In the DIW estimations, a moderate reform would consist of national co-financing of direct income support payments to farmers and concentration of structural funds on objective 1 regions.

The DIW paper proposes a more substantial reform involving a reduction of the income support of the CAP and a concentration of EU structural support on the poorer Member States (which is more coherent with the subsidiarity principle of the EU). These substantial reforms would distribute the cost of enlargement more evenly among Member States. In fact only two countries, Spain and Greece, would suffer more from a substantial than from a moderate reform, (which, according to Christian Weise, would happen anyway) It should then, following Weise, be feasible to find an arrangement compensating Spain and Greece from the particular loss implied in a substantial reform.

Policy rules, policy competition and economic modelling

Workshop on "Simulation properties of macro-econometric models"

This workshop took place in the Royaumont Abbey on 4-6 July 2001 and was organised by CEPII³ on behalf of the European Network of Economic Policy Research Institutes (ENEPRI). The workshop benefited from financial support from the European Commission Directorate General Research, the European Central Bank, the Fondation Banque de France pour la recherche and the Institute Caisse des dépôts et consignations pour la recherche.

³ For more information, contact Prof. Florence Legros, CEPII, +33 1 53 68 55 00; email legros@cepii.fr. Papers can be downloaded under:
<http://www.cepii.fr/anglaisgraph/meetings/2001/05060701.htm>

Simulation properties of macro-economic models

The main objective of the workshop was to compare the properties of different multi-country macroeconometric models. Such models give useful insights into the diffusion of shocks and national policies in an interdependent world. In order to do so, the participants were asked to realise four standard simulations with their models.

Seven macroeconometric models were presented during this workshop, as well as the results of symmetric and asymmetric shocks, such as increases in government expenditures in the United States and in Germany, and productivity shocks in these two countries.

In the opening address Lionel Fontagné, Director of CEP II, stressed the importance of trade as a transmission channel of shocks, especially in the euro area, where the countries differ by their size, the structure of their economies and their degree of openness in trade with the rest of the world.

Werner Roeger and Jan Int'Veld (European Commission) presented the model QUEST II, which is designed to analyse the economies in the member states of the European Union and their interactions with the rest of the world, especially the United States and Japan. The model is essentially devoted to economic policy analysis.

Doug Laxton (IMF) presented the Multimod Mark III model, which contains a specification of the inflation-unemployment nexus, an extended non-Ricardian specification of consumption-saving behaviour, and improved specifications and estimates of investment behaviour and international trade equations.

Jerôme Henry (ECB) presented an Area-Wide Model (AWM) for the euro area. This model treats the euro area as a single economy that aggregates all the EMU member states. Agents' expectations are in general adaptive but forward-looking for the financial variables. The equations estimation represents one of the first attempts of this kind in the euro area.

Jean-Pierre Laffargue (CEPREMAP) explained the philosophy behind Marmotte, the multi-country model of CEP II and CEPREMAP. A main motivation in the construction of Marmotte was to introduce a strong theoretical background, with the agents' behaviour being derived most often from intertemporal optimisation. The other team members – Arjan Kadareja, Stéphane Dées and Bronka Rzepkowski from CEP II – underlined the specific characteristics of Marmotte: the supply side of the model and its original putty-clay technology.

Karen Dury (NIESR) presented the model NiGEM. She explained that this model is devoted to the production of forecasts and scenario analysis. It has complete demand and supply sides, and there is an extensive forward-looking monetary and financial sector. The model uses a 'new-Keynesian' framework, in which agents are presumed to be forward-looking but nominal rigidities slow the adjustment process to shocks.

Jean-Louis Brillet (INSEE) presented the MACSIM Project, elaborated with the Méditerranée University. This model is a teaching tool designed to illustrate the main macroeconomics concepts, focusing on international trade. It is influenced by the neo-Keynesian approach: short-run output is determined by variations in demand, prices are relatively sticky and therefore, have a slow correctional impact.

Pascal Jacquinot and Ferhat Mihoubi (Banque de France) presented the model Marcos. This model intends to answer the usual critique addressed to standard neo-Keynesian macroeconometric models. It is a calibrated rational expectations model of the euro area, designed to medium-long run simulations. It has been build under the assumption of a small economy with monopolistic competition in goods and labour markets.

Michel Juillard (CEPREMAP) presented a synthetic comparison of the simulations of the 7 models. To make the comparisons easier, the participants had prepared four simulations in advance of the workshop. The first shock simulated a symmetric demand shock in Europe, which was taken to be a permanent increase in government spending in the US by 1% of its GDP. The second represented an asymmetric demand shock in Europe, taken as a permanent increase in government spending in Germany by 1% of its GDP. In both cases, the increase in tax rates, necessary to satisfy the intertemporal constraint of the government budget, would be made in the far future (10 or 15 years). Before this date, tax rates were kept exogenous in all countries. The third simulation represented a symmetric supply shock in Europe and a permanent increase in total factor productivity by 1% in the US. The last simulation represented an asymmetric supply shock in Europe and a permanent increase in total factor productivity by 1% in Germany.

Michel Juillard pointed out the differences and the similarities among models concerning the shock effects on output in the short and medium term. Especially, he considered the impact of these four shocks on GDP, stressing the specific characteristics of each model in the explanation of the differences in the results. This synthesis gave rise to a fruitful discussion.

The workshop ended up with a round table conducted by Ray Barrell (NIESR), Douglas Laxton, Werner Roeger, Pierre-Yves Hénin (CEPREMAP and University of Paris-I), Stéphane Dées and Jean-Pierre Laffargue. They expressed their point of view concerning the utility of econometric modelling to study the international transmission of shocks.

In the closing address, Florence Legros, CEPII's Deputy Director, thanked all the participants for their useful presentations and discussions. She also thanked the sponsors and B. Rzepkowski for the logistical and intellectual organisation of the workshop.

Workshop on Impact of alternative policy rules (CEPII), July 2002

This workshop took place in the Royaumont abbey on July 1-2, 2002 and was organised by CEPII on behalf of the European Network of Economic Policy Research Institutes (ENEPRI). The purpose of the workshop is to analyse the effects of alternative policy rules and their efficiency to stabilise the economy faced with adverse shocks. To do this, several macro econometric models have been simulated in a deterministic way as well as in a stochastic way.

Francis Ailhaud (Member of the Cepii's club) in his opening address stressed the importance of multi-country models to evaluate the effectiveness of monetary and fiscal policies to stabilise the economy faced with adverse shocks. Evaluating the efficiency of economic policies in the euro zone is also interesting for the UK government, which has to make a decision on membership of EMU in the next two years.

Alberto Locarno (Bank of Italy) presented a paper that analyses the monetary transmission mechanism in the euro area through the use of the National Central Banks models of the Eurosystem. Using common hypothesis concerning the euro exchange rates and the long term interest rates, a 100 basis point increase in the interest rate results in a maximum aggregate fall in output and prices of 0.4%. The dominant transmission channel is the exchange rate in the first two years and the user cost of capital after.

Jean-Pierre Laffargue, Bronka Rzepkowski, Stéphane Capet and Paolo Zanghieri (CEPII) presented a paper that evaluates the efficiency of several discretionary fiscal policies using the MARMOTTE model. An increase in government consumption has positive effects on effective production : however they are not very big and prove to be ephemeral. Investment and private consumption and employment drop. A reduction in profit taxes has beneficial effects on investment, consumption and employment. Lower wage taxes have similar, but less relevant effects.

Vanessa Rossi (Oxford Economic Forecasting) presented a paper that compares the UK economy response to interest rate inside and outside EMU. She found that the UK response is generally likely to be more pronounced inside EMU than outside because of the relatively rapid wage-price response.

Ray Fair (Yale University) presented two papers. The first examined the ability various interest rate rules to dampen economic fluctuations caused by random shocks using his MC model. His main result was that rules with a coefficient on inflation less than one is efficient in reducing the output and price variability. This conclusion is contrary to what would be obtained using "modern-view" model in which the economy is not stable if the inflation coefficient is less than one. The second paper showed that the Central Bank does not have to increase the nominal interest rate when it faces an inflation shock. One reason is that the data support the use of nominal interest rather than real interest rates in aggregate demand equations. An other reason is that nominal wealth increases less than inflation. A third reason is that wages react to inflation with a lag.

Jean-Louis Brillet (INSEE) assessed if the introduction of the Taylor rule in the MACSIM model reduces the uncertainty of both real elements and prices. One conclusion of his study is that the Taylor rule is efficient in reducing variability of both GDP and inflation if uncertainty comes from real side elements.

Ray Barrell (Niesr) analyses the monetary policy implication for the ECB of diversity in consumption behaviour using the NIGEM model. The main conclusion of his study was that, whatever the structure of the world, for the euro area, a combined rule of nominal and inflation targeting should always be chosen by the ECD if it is concerned about price level stability.

Pascal Jacquinot and Ferhat Mihoubi (Banque of France) examined the optimality of the Taylor rule in the case of a two area model MARCOS. The optimality of this rule is examined with respect to either the value of its parameters or to its horizon.

Stefano Siviero (Bank of Italy) presented a paper which assessed the role of national information for the monetary policy rule in the euro area. Using a simple multi-country econometric model he finds that the performance of a central bank that chooses the nominal interest rate to minimize a standard quadratic loss function of area-wide inflation and output gap significantly improves if the reaction function includes national variables -as opposed to the case in which the interest rate reacts to area-wide

Jan Int'Veld (European Commission) presented a paper that looks at the effectiveness of monetary and fiscal policy rules for stabilising output and inflation. Using the QUEST model, he analysed the performance of different sets of monetary rules in the presence of misperceptions about the nature of the output shocks by the central bank. If the central bank fails to recognise a permanent supply shock, a higher degree of inflation targeting is more efficient in stabilising the shock. Concerning fiscal rules, he found that expenditures based is more efficient than revenue based in stabilising country specific demand shock.

Marga Peeters (Dutch Central Bank) presented the theoretical properties and several simulations of EUROMON, the Nederlandsche Bank's multi-country model. It is an aggregate neo-keynesian model where output is driven by demand factors in the short run and by supply in the long run.

Matthieu Darracq-Pariès (Direction de la Prévision) analysed the implications of different price setting rules for optimal monetary cooperation using a two country dynamic general equilibrium model with imperfect competition and nominal price rigidities. His main result was that the optimal cooperative policy depends on the price setting rule: producer-currency-pricing or local-currency-pricing.

The workshop ended up with a synthesis conducted by Kenneth Wallis (University of Warwick), who stressed that all the models are not designed to analyse the same economic question. Finally,

Florence Legros, CEPII's deputy director, in the closing address thanked all the participants for their interesting and very useful presentations and discussions.

Competition and co-ordination: complementary requirements for the welfare state in a changing Europe

29 - 30 November, CPB, The Hague

With the ongoing economic integration in Europe, questions on the desirability and the consequences of systems competition become more and more important. European borders are vanishing rapidly, increasing factor and product mobility. Does this call for more intense policy co-ordination, does this automatically lead to policy competition? What are the consequences of these developments for the European welfare states? And how do institutions have an impact on these developments? In the framework of ENEPRI, the CPB Netherlands Bureau for Economic Policy Analysis organised a workshop on these topics, focussing on areas such as social security, pensions, immigration and labour market policies. Below, we discuss a selection of papers and discussions of the conference.

On 29 and 30 November 2002, researchers gathered in The Hague to discuss the issues from various perspectives. Oosterwijk (Secretary General of the Dutch Ministry of Economic Affairs and chairman of the Economic Policy Committee of the European Union) opened the conference by discussing why welfare state policies have remained within the national domain for such a long time, and why and how this has changed over the last few years. He concluded with some observations as to how welfare state policies could be dealt with in Europe in the years to come. In his speech, Oosterwijk highlighted both the European perspective as well as the Dutch view, reflecting his double expertise, being both secretary general of the Dutch Ministry of Economic Affairs.

Ruud de Mooij and Paul Tang (CPB) proceeded to discuss the future of the European welfare states by sketching several trends and their implications for the welfare state. Various trends put pressure on the welfare state, such as ageing and globalisation. The rising dependency ratio due to ageing may lead to intergenerational conflicts as rising pension cost ask for higher taxes and/or lower other benefits. Furthermore, ageing reinforces the effects of Baumol's law, which describes the rising demand for (public) services, notably the health care sector. Globalisation can be a threat to the position of trade unions in their traditional form. Do these and other threats call for a scaled-down welfare state? De Mooij and Tang propose several directions for reform, doing justice to the trade-off between equity and participation inherently present in every welfare state.

Although Tito Boeri could not present his paper due to illness, Jose Herce did an excellent job in discussing the main results of the paper. Boeri took a clear stance in favour of social policy co-ordination as a way to promote a more effective competition across systems. While it may sound as a contradiction, it is not. Insofar as the proposed notion of co-ordination allows for more mobility of the European workforce, it implies that EU citizens can "vote with their feet" enhancing competition among systems. Coordination and competition can thus coexist. Coordination provides rules for competition among systems and is a way to make sure that competition among systems enhances welfare of European citizens.

After a lively discussion, Krieger and Sauer (University of Gottingen) proceeded to ask whether Eastern European migrants will happily enter the German pension system. With diminishing wage differentials between Eastern Europe and the EU, the migration decision will be based more and more on other factors than wages. Besides cultural and social motives, also the welfare system may play a role. An important factor might be the pension system. They showed that the ideal migrant has little reason to migrate to Germany on the basis of the different pension systems. The Eastern European pension systems not only have a relative large

funded pillar; they also have a higher rate of return in both the pay-as-you-go and the funded system. The ideal migrant will migrate to Germany not owing to the pension system, but in spite of it.

Jensen, Lau and Putvaara (CEBR) assessed the welfare effects of different European pension systems using an overlapping generations life cycle model on time allocation. They compare the Beveridgian and the Bismarckian pension systems, both with and without actuarial adjustment. They show that the pension system has a large impact on the retirement age: non-actuarial-adjusted systems encourage retirement at the official age, whereas actuarially adjusted systems promote more gradual retirement. Furthermore, the Bismarckian system is generally preferred over the Beveridgian system with its strong redistributive effects, even by the lowskilled, as they can be compensated owing to increased efficiency.

In the presentation of Haupt and Janeba (University of Frankfurt Oder), attention was drawn to the impact of globalisation on education and redistribution in developing countries. Whether individuals will attend school and whether they will migrate both depend on the tax rates. On the one hand, globalisation thus limits the possibilities for governments to raise revenues to support education, due to reduced migration costs. On the other hand, globalisation presents a positive incentive for individuals to attain education as the returns are raised. Using a two-period model of a small developing country with internationally mobile skilled labour, they show that in the case of a redistributive government, declining migration costs first improve the available income of both the poor and the rich, then worsen the consumption opportunities for all workers and finally raise the welfare of the mobile workers at the expense of the unskilled labour force.

Dur and Teulings (Erasmus University Rotterdam) also discussed the relationship between education and schooling. In contrast with Haupt and Janeba, they also considered the impact of skill supply on income. With rising average years of schooling, the returns to schooling drop, reducing the incentive to attain education ("wage function twisting"). This wage compression effect of education provides a motivation for left-wing governments to subsidise education to be able to redistribute income.

Goebel and Otto (DIW Berlin) compared the real world to a world without social transfers. Via a micro-simulation with data from the European Community Household Panel (1998), they show that the social democratic welfare states experience the largest reduction in poverty owing to social transfers. Also, their simulations show that the decomposition of the effect on poverty (through a change in intensity, impact on income equality and incidence) is different for the various European countries.

Paul O'Brien (OECD) discussed the economic impacts of migration in the OECD. Theory tells us that migration increases unemployment or leads to falling wages in the destination country, depending on the rigidity of the labour market. Empirical findings are less univocal, however, showing e.g. the effects of education and institutions. Furthermore, he argues that a broad approach is needed to assess the fiscal impacts of migration, as the impact strongly depends on time horizon considered. On the one hand, negative fiscal impacts could lead to a race for the bottom in social security systems. On the other hand, these effects could also stimulate the implementation of more cost-efficient systems. That open borders need not lead to a race to the bottom in social security is supported by the finding that most migrants are better informed about the labour market situation in the destination country than about the social security system.

Lans Bovenberg (Tilburg University) discussed financing retirement in the European Union in the face of ageing. Ageing challenges the European Union to reduce risk (as the risk-return trade-off is worsened by falling returns and a narrowing contribution base) and to invest in (the maintenance of) human capital. This requires policy makers to consider ageing and pension

systems in a comprehensive framework. Risk is absorbed by raising the effective retirement age by indexing the retirement age to life expectancy. Moreover, this strengthens the incentive to invest in human capital. Furthermore, on the other end of the age spectrum, there is a conflict between the need to slow down the decline in fertility and the wish to raise (female) participation. Solving this conflict calls for a system that stimulates a more equal distribution of labour over the lifetime, thus internalising external effects of breeding.

Fugaro and Daianu (University of Bucharest) discussed institutional and policy variety and their implications for economic development. They sketched the historical developments and in particular the transition process of Eastern European socialist countries. They showed that over the past decades the consecutive paradigms and panaceas were not fully successful in solving the present dilemmas and were ever overturned by newly arising challenges.

Delsen (University of Nijmegen) argued that a distinction should be made between positive and negative policy competition. European integration could lead to policy competition between the several types of welfare systems. Negative policy competition includes phenomena such as social dumping, race-to-the-bottom policies and social tourism. Positive policy competition, by contrast, implies that the welfare state can be seen as an investment that can improve competitiveness. Both types of policy competition call for co-ordination, preventing a race to the bottom and implementing best practices.

Fiorella Kostoris Padoa Schioppa (ISAE Rome) discussed the idea of mutual recognition in European labour markets. She provided a law-and-economics analysis on the impact of accepting the home country rules in welfare state provisions, instead of the current host country rules which imply equal treatment instead of mutual recognition. According to the author, mutual recognition will have a number of advantages for European labour market performance.

Axel Börsch-Supan (MEA Mannheim) elaborated on the German public pay-as-you-go pension system. This mandatory "retirement insurance" has become under severe pressure, mainly from population aging and from incentive effects that have reduced labor supply. He argued that Germany needs a pension reform with three main elements First, a reformed pay-as-you-go pillar which is actuarially fair, features a transparent notional account set-up, and freezes contribution rates at the current level. Second, a second funded pillar which is based on US 401(k)-style grouped accounts that finance the impending aging burden. Finally, it should be augmented by redistributive features that guarantee a minimum pension and strengthen human capital formation.

Michael Burda (Humboldt University in Berlin) discussed the difference between small and large countries in reforming institutions. His conjecture was that small countries, which are less heterogeneous than large countries, find it easier to agree upon institutional changes than large countries and, therefore, perform better in terms of economic development.

Population ageing: consequences and policy issues

Workshop on "Savings and Demographic Change"

Net foreign capital income as a source for financing old-age expenditures was the leading theme of an ENEPRI workshop, organised by CPB⁴ and CEPII in The Hague on 16-17 November 2001. Researchers gathered to focus on the effects of ageing on savings and investment, and net

⁴ For more information, contact Dr. Arjan Lejour (tel: +31-70-3383311; e-mail: aml@cpb.nl); papers can be downloaded from:

[http://www.cpb.nl/eng/activ/ageing/..](http://www.cpb.nl/eng/activ/ageing/)

foreign capital income as a possible source for financing old age expenditure in Europe during the coming decades.

International Capital Mobility: No panacea for ageing

Ageing in Europe during the coming decades is mainly the result of decreased birth rates. This implies that an increase in the dependency ratio will go hand-in-hand with a decrease in the growth rate of the working-age population. In 2020, labour supply in Europe will be roughly at its current level. The combination of a high dependency ratio and stationary employment puts pressure on the financing of pensions and health expenditure. To relieve this pressure, pensions systems could be (more) capital funded. However, large-scale investment at home is likely to depress the return on capital to low rates, especially since employment growth is virtually zero. The question discussed at this workshop is whether investment abroad could help to relieve the pressure.

Investments abroad could avoid the problem of low rates of return. Especially developing countries may offer abundant investment possibilities. Their labour force will still be growing significantly in the coming decades, and technological progress is expected to be large since these countries can exploit their potential to catch-up with developed countries. However, since developing countries are likely to account for less than 40% of world production in 2020, the funding of pensions cannot rely too heavily on capital income from emerging economies. Therefore, it is worthwhile to consider also the differences among developed countries. While ageing starts early in Japan, the United States is expected to see an annual employment growth rate of 0.7% until 2020. That means that one might expect considerable capital flows among these three OECD areas.

The participants of the workshop considered these issues from different perspectives. Most of them used simulation models, while others concentrated on empirical relations between ageing and capital mobility. Despite the differences in method, they reached a pressing conclusion: Net foreign capital income is not the ultimate source for financing old-age expenditures. The reasons are straightforward. First, the absorptive capacity for investment is limited to the non-OECD countries. Second, the (political) risks involved in investing in emerging economies hamper the size of these capital flows. Third, foreign investment will increase capital income in the ageing OECD countries, but will reduce labour income because capital is invested abroad.

Philippe Liégeois (Université Libre de Bruxelles) and Thijs Knaap (OCFEB Rotterdam) presented overlapping generations models for France and the Netherlands, respectively. These models are well suited to represent the coming demographic changes and the effects on the economy. Due to the reduction in labour supply and stimulation of capital accumulation, wage rates will rise and interest rates may fall. Liégeois showed that the payroll tax will rise rapidly until 2050 to finance public pensions at the current level. Knaap showed that the surplus on the current account for the Netherlands will reduce significantly, but that it will be positive to 2050. The main reason for the declining surplus is the decline in personal savings. Interestingly, this result applies for different scenarios for the world interest rate. An advantage of these models is that pension systems and health expenditures can be presented quite well.

This is not the case for the multi-country models that were presented by Joachim Winter (University of Mannheim), Jacques Le Cacheux (OFCE Paris), and Landis MacKellar (International Institute for Applied Systems Analysis, Austria). They have explicitly modelled international capital flows. MacKellar confirmed that, due to capital mobility, returns on capital in the OECD countries will increase, while wage rates decline. The effects on pensions thus depend on the extent to which these are financed by returns on capital and taxes on wages. Winter showed that capital flows from fast-ageing countries to the rest of the world can be substantial. He compared the cases that the capital market is restricted to Germany and is extended to the

OECD. From this comparison he concluded that the benefits of pension reform in Germany are much higher if capital is mobile internationally. The main reason is that the return on invested capital is higher in that case. Le Cacheux discriminated three OECD and three non-OECD regions in his model. He concluded that the economic effects of ageing are significantly smaller when capital is internationally mobile.

Melanie Lührmann (University of Mannheim) and Henri de Groot (CPB and VU) concentrated on the empirical relations between ageing, savings and investment. Lührmann showed that demographic changes affect international capital flows. Countries that are confronted with a declining share of the youth in the population export relatively more capital. De Groot showed that savings will decline due to ageing. Before the baby-boom generation retires, countries will build up foreign assets. After this generation retires, these assets will cut back. In 2050, the net foreign assets position of the ageing countries will be lower than it is now (measured as the share of GDP), while it will be higher in Asia and the rest of the world.

Overall net foreign capital income might be an additional source for financing old-age expenditures, but it is surely not the most important one. International capital markets smoothen the effects of ageing to some extent, but not sufficiently. In this respect, one of the conclusions of the OECD⁵ still holds: to deal with ageing, domestic policies are needed.

Exploratory Workshop on “Ageing, Skills and Labour Markets”

This workshop was organised by CEPPI⁶ in Nantes, France, 7-8 September 2001, 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 (contract HPAM-2000-00077).

Ageing, skills and labour markets

The ageing of the population in industrialised countries is expected to affect labour markets in several ways. Firstly, the level of productivity and other characteristics are not the same across different cohorts. Consequently, the ageing of the labour force may influence aggregate productivity, wage levels, unemployment and participation rates simply due to the changes in the relative size of different cohorts. Those effects are not independent, however, and the evolution of the cohorts' relative sizes will therefore not be linearly reflected in the aggregates.

The expected rise in longevity will lead to longer periods spent in retirement, undermining the sustainability and viability of pension schemes. Consequently, pressure is mounting to scale down early retirement plans in favour of an increase in the statutory retirement age. This again will lead to an even more pronounced ageing of the labour force, with, notably, an increase in the average age of a large number of professions and additional adjustment problems for a number of low-skilled labour market groups.

Composition effects and structural impacts of the demographic evolution on labour markets. Thai-Thanh Dang and Howard Oxley (OECD) looked at three issues raised by the ageing of the labour force. Firstly, older workers must be discouraged from early retirement. Current transfer schemes need to be redrawn towards an actuarially fair system in order to make it neutral as to the time of retirement, while taking into account the joint incidence of individual

⁵ D. Turner, C. Giorno, A. De Serres, A. Vourc'h, and P. Richardson (1998), The macroeconomic implications of ageing in a global context, Economics Department Working Papers No. 193, OECD, Paris.

⁶ For more information, contact Prof. Florence Legros, CEPPI, +33 1 53 68 55 00; email legros@cepii.fr. Papers can be downloaded under:
<http://www.cepii.fr/anglaisgraph/meetings/2001/07080901.htm>

measures. Secondly, the efforts to reduce poverty among the elderly, which have been one of the main social achievements of the past quarter century, need to be continued in an actuarially fair system, for example by mandatory minimum schemes of retirement benefits. Lastly, the weak employability of old low-skilled workers may justify public support for training policies for the old.

Pauline Givord (INSEE) considered the reasons behind the decline in participation rates of older workers in France, which can be attributed mainly to an extensive use of early retirement. Will the young cohorts of today retire later when they are old because they will possess better qualifications? Taking today's observed qualification structure of the population and the corresponding retirement behaviour as given and simulating for the next 20 years, she found only a very small positive effect on participation rates.

Didier Blanchet (INSEE) analysed the direct consequences of ageing within the labour force. The potential impact on productivity is probably low in absolute value. Despite evidence of seniority wages (that is, a ratio of productivity to the wage rate decreasing over the life-cycle), a direct demographic impact on labour costs will be small. However, the indirect effects through a cumulation of other cost increases outside the labour force (such as pension and health care contributions) may be larger.

Landis MacKellar and Martin Spielauer (IIASA) presented some micro-simulation extensions to the macroeconomic demographic growth model of IIASA. Those extensions were designed to endogenise labour market behaviour (such as exit from the labour force and human capital acquisition), as well as closely related demographic behaviour (such as fertility, mortality and migration). Some preliminary simulations were presented.

Apart from the labour supply aspect, ageing may also affect labour demand, even in the absence of seniority wages or a decline in productivity over age. To test this hypothesis, Victoria Büsch and Manfred Königstein (Humboldt University) conducted a questionnaire study to look at the age discrimination in hiring decisions. Negative age stereotypes appear clearly in the answers, especially as the capacity to learn and flexibility are concerned.

Workers of different ages do differ and are not perfect substitutes. To study the composition and structural effects of ageing within the labour force, Jean Chateau, Jean-Louis Guérin and Florence Legros (CEPII) built a labour market matching model. Its calibration will enable the authors to forecast the wage and employment effects of demographic evolutions.

Social security, asset accumulation and retirement decisions. The influence of social security schemes on wealth accumulation and retirement decisions depends on the individual preference variables describing the attitude towards the future, but also to risk and uncertainty. Luc Arrondel, André Masson and Daniel Verger (DELTA-CNRS) discussed methodological issues in a questionnaire they designed to better evaluate those variables and also assess their impact on wealth distribution and composition. This survey was administered to over 1000 respondents in the framework of the INSEE "Patrimoine" survey. Using the dynamic micro-simulation model Destinie, Carine Burrigand, Emmanuelle Klotz and Béatrice Sédillot (INSEE) found too that the evaluation of effects of pension reforms is sensitive to the value of individual preference parameters. Of the two reforms designed to encourage workers to retire later (more actuarially adjusted schemes versus a 3-year increase in the length of the contribution period), the second is deemed to provide stronger incentives to postpone retirement.

According to Helmut Cremer, Jean-Marie Lozachmeur and Pierre Pestieau (GREMAQ, CREPP-CORE), early retirement comes mainly from implicit taxation on continued activity of elderly workers. This distortion cannot be averted if redistribution was an objective in a world of asymmetric information (for example on health prospects) and in the absence of lump-sum instruments. Andras Simonovits (CEU) found too that the conflict between efficiency and

insurance cannot be eliminated but only mitigated. The differences between the life expectancies used by the authorities to design its benefit rule and individuals to determine their employment length lead to unfairness.

Andreas Wagener (University of Siegen) noted, however, that the clear-cut results of many studies on the impact of changes in social security provisions on either savings or retirement decisions change profoundly when interdependencies between these two in individual decision-making are considered. An application to the German pension reform shows that, contrary to conventional wisdom, the increase in pension risk may well lead to a decrease in the savings rate and possibly to earlier retirement.

Roundtable discussion. The participants discussed a large range of topics: Karl Gustav Schermann (ISSA) underlined the need to take into account the impact of the demographic evolution, not only on labour supply (reactions of workers to incentives), but also on labour demand (firms' behaviour). Also there was need for a more time-coherent and consistent government planning to better develop the human resources that would be needed in 20 years. Landis MacKellar (IIASA) reminded participants that many early retirement decisions were made by the agents on health considerations; to his mind, a major problem nowadays was the very blurred estimation by firms of older workers' productivity. He stressed the importance of looking at the distributional impact, and not just only at the aggregate effects. A move back to a Beveridgian system was maybe the only way to prevent a never-ending rise in contribution rates.

Henry Nogues (CDU Gérontologie) worried about the consequences of the fading family support for the elderly, and the potential lack of skilled personnel for services for dependent people. He called for the development of better suited long-term indicators to look at the living conditions of old people. According to Annie Jolivet (IRES), most demand today for early retirement came from workers (and not firms); in this light, flexible progressive schemes seemed worth looking at. Economists should learn from the various works in psychology, sociology or management to study old workers' productivity and to understand the peculiar matching problems (worse than the wage problems) faced by this population. Bernard Casey (OECD) questioned whether financial transfers to subsidise leisure time could be considered a good thing as very few people seemed to use the extra leisure time for "active" leisure activities.

Lessons drawn from case studies. Population ageing affects all social spheres in every industrialised country; however, market settings and institutional circumstances and the ongoing reforms do vary.

Using a political economy model (with median voter), Hans-Werner Sinn and Silke Übelmesser (CESifo) looked at the possible outcome of putting reforms of the pension system to the vote. Until 2023, the median age of the electorate will be lower than the indifference age (defined as that cohort not adversely affected by a reform of pensions). However, after that date, only altruism or fears of youth emigration will make a political situation to this problem possible and prevent the old from exploiting the young.

The process of population ageing in Japan started earlier than in other industrialised countries, so studying Japan may help in forecasting ageing impacts in other countries. However, noting that after a decade of poor economic performance, the level of labour force participation amongst older men remains very high, Bernard Casey (OECD) outlined some possible explanations of Japan's special situation: seniority wages, sheltered employment in some sectors or firms' affiliates. Those peculiarities make it hard for other countries to emulate Japan; at the same time, the Japanese policies are unlikely to be continued since the conditions that favoured them will not prevail any longer.

Retirement decisions are often considered to depend on the pensions system. Trying to better evaluate the consequences of specific social programmes, Madior Fall and Muriel Roger

(ENS) looked at the impact of the 1990s reform on French farmers' retirement decisions. Using multiple treatment statistical methods, the authors showed that retirement decisions have, as expected, been influenced by the reform, but also that these impacts strongly vary between sub-categories of farmers, which raises questions on the distribution effects of pensions reforms.

Are older workers more exposed to the adjustment pressure from technological shocks? Pasi Huovinen and Hannu Piekkola (ETLA) conducted an empirical analysis of gross job flows in Finland in the context of the great depression of the early 1990s. The aged workers appear to have a considerably higher propensity to lose their job than the majority; however, their withdrawal rate is rather weakly correlated to the long-run productivity and profitability of the firm. This can be interpreted as job destruction due to skilled-biased technical change.

Looking at the effects of various reforms of the social security system in Romania, Costin Borc (University of Wisconsin-Madison) found, using an overlapping generations general equilibrium model, a strong impact upon many economic variables, among them wages and labour supply. The three separate aspects of the proposed reforms (increase in the retirement age, linking contributions and benefits, and introducing a complementary fully funded system) can have very different effects depending on the choice (and level) of parameters.

The great variety of methods used to study the impact of the demographic evolution on labour markets in the papers presented at this workshop underlines how far-reaching are the associated problems with which industrialised countries will be confronted in the coming years, and how wide is the spectrum of possible solutions.

Workshop: Ageing Population in the EU (part 2)

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

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.

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

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.

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 Abio 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.

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

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

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.

Analysing the incidence on welfare using generational accounting

The background

Generational 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.⁷

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 nth 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.).

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 they 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.

⁷ Nicola Sartor, Carlo Azzarri, Maria Cozzolino, Carlo Declich and Alberto Roveda: Intragenerational distribution across families: what do generational accounts tell us?

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.⁸

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

⁸ 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.

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

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 in the inspection of the current government budget balance.

Workshop: 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.

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 Vincenzo 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 occurrence 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 California) 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 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.

Workshop: Ageing Population in the EU (part 1)

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.

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.

Conference: Ageing And Welfare Systems: What Have We Learned?

Introductory speech by Governor Guy Quaden, National Bank of Belgium

Ladies and gentlemen,

I am very pleased to welcome you all at the National Bank of Belgium and to open this ambitious two-day conference on population ageing.

The steadily increasing life expectancy in our countries is very good news but, as you know, combined with the dramatic decline of birth rates after the baby boom in the 1950s and the 1960s it implies that populations in a large number of countries are ageing rapidly. Ultimately, the elderly dependency ratio will rise gradually but substantially. To put it more clearly: our children will have to cater for a growing number of pensioners.

Even if ageing pressures will in most cases only culminate from the second decade of the current century onwards - when the baby boom generation starts to retire from the labour market - the economics profession has a long-standing interest in population ageing. As early as the 1980s, individual authors or international bodies singled out ageing as one of the biggest economic challenges of the future.

The first task at hand for economic researchers was obviously to estimate the size of the problem: what is it that we are facing? How bad will it be? Most studies initially focused on the pensions problem and the budgetary impact of ageing. Two remarks in that respect.

§ Subsequent studies revealed that, contrary to what is still often thought, pension expenditure is not the only budgetary item that will soar because of population ageing. The ageing problem is as much a health care problem, for instance, as it is a pension problem. On the other hand, one should not forget that ageing will have a beneficial effect on other spending categories like child allowances and education expenditure. Hence, the net budgetary cost of ageing can be somewhat lower than the projected increase in pension and health care spending. All in all, even taking into account the large degree of uncertainty inherent in this kind of exercise, ageing will undoubtedly weigh substantially on future governments' budgets.

§ One should refrain, however, from simplifying a problem as complex as population ageing into a kind of bill for the governments to pay. Ageing will have a substantial impact on a wide range of economic variables without speaking of other serious aspects of the social life, from activity growth to unemployment, from national saving to the composition of private consumption and yes, I am a central banker, from asset prices to inflation. Hence, it goes without saying that ageing requires a holistic approach on our behalf.

From the very beginning central bankers have always been keen observers of, if not active contributors to the research on ageing. Any shock that has a sizeable impact on the macroeconomic environment should be taken into account when setting monetary policy and, as we have seen, the potential consequences of population ageing, for the government accounts, for instance, can hardly be underestimated. Considering the impact that the combination, in a number of European countries, of sizeable tax cuts and an, altogether limited, slump in activity growth currently has on public finances, it is quite unsettling to imagine what kind of havoc can be wreaked in government budgets by inappropriate policy responses to population ageing. If

what we are currently witnessing is the budgetary fall out of a mild economic storm, then, surely, the ageing problem should be compared to a genuine earthquake.

All in all, it is a problem that can only be countered by a well-balanced and consistent strategy that should be put into action as soon and as determinedly as possible. The lines along which action should be taken have been clearly identified. First, governments should get their fiscal houses in order before ageing really starts to kick in; excessive deficits should be avoided and countries that still face a high public debt ought to continue and, if necessary, intensify debt reduction. Second, economic policy has to be geared towards increasing productivity growth and the employment rate - especially of older workers - so as to broaden the tax base as much as possible. Third, the buoyant growth of health care spending needs to be analysed and the individual pension entitlements, both in the private and in the public sector, need to be thoroughly assessed taking into account also the development of second- and third-pillar schemes. In addition, governments of some countries should consider in what way the latter schemes can be encouraged further, either by tax abatement or by regulation. Considering present market returns, it's probably needless to add, however, that second and third pillars based on capitalisation in the stock market, can not by themselves provide a miracle solution, contrary to what some people advocated previously.

Any viable solution to the ageing crisis is bound to be a blend of those three ingredients: it would be very easy, for instance, to offset the upward pressure on government spending coming from the rising number of elderly by simply reducing the average pension to a basic-needs level and to turn the health care system into a two-tier one, where public insurance is very limited and only the richest part of the population has access to new technologies via private schemes, but that would simply amount to a hollowing out of the welfare state, which our fellow citizens and myself do not wish.

Taking stock of the policy response to the ongoing research on ageing, I guess it is fair to say that the results so far have been mixed.

On the plus side, one can not deny that ageing features prominently on the political agenda and, in many countries, significant steps are being taken. Several countries are reforming or are set to reform their pension systems with a view to improving the sustainability of public finances. Considerable progress towards sound fiscal positions is also made in some countries. In a high-debt country like Belgium - and you will hopefully forgive me that I take this example - a special pension fund, the so-called Silver Fund, has been created within the government sector in order to clearly visualise the link between debt reduction and the impending costs of ageing and to enhance public support for further fiscal consolidation.

However, there are also some worrying trends. First, fiscal consolidation has not been commendable everywhere with some countries in the euro area clearly showing signs of post Maastricht fiscal fatigue. Even worse is the fact that, following the problems that those countries are experiencing now, the credibility of the Stability and Growth Pact and the whole institutional framework is constantly undermined either by calling into question sensible rules or by resorting to creative accounting. The ECB Governing Council has recently confirmed in the strongest possible terms its support for both the Pact, which, if applied correctly, offers enough leeway to reconcile short-term flexibility and long-term sustainability of public finances, and the 3 p.c. of GDP deficit ceiling.

Second, policies geared towards market liberalisation, increased research and development and human capital formation, which could spur long run productivity growth, have been hesitant at most in many cases.

Third, even if some initiatives have aimed at increasing the employment rate of older workers, progress has generally been slow, partly due to popular resistance. Still too often, negative

temporary demand shocks, both at the macro and the micro level, crystallise into permanent institutional arrangements that put downward pressure on the effective retirement age and, hence, undermine future governments' capacity, if not to ward off the ageing crisis, then at least to soften its impact.

If we do not want the famous Lisbon objectives to become just a slightly offbeat alternative scenario in our projections, rather than realistic targets, then, clearly, more action is needed in these areas.

All in all, it is essential that policy makers fully understand that the window of opportunity that we have now, will not last forever. We should be aware of the fact that we still have a lot of convincing to do.

Earlier on I have likened the ageing problem to an earthquake. Contrary to a regular earthquake, however, we can predict almost exactly when and where it will hit us. In addition, the quake will not take the form of a big bang but will reach its full impact only very gradually: its disrupting ripples will be felt throughout the following decades.

And although it is hard to give precise estimates of the amount of damage that it will do, this is the kind of earthquake that is certain to shake the very foundations of our modern welfare states. It is our task, as economic researchers, policy advisors and, ultimately, policy makers, to make sure that, by the time ageing really starts to kick in, these foundations can withstand the blow.

I firmly believe that conferences like this one bringing together a host of distinguished researchers from both sides of the Atlantic are a crucial step in reaching this objective.

Conference proceedings

Session 1: Ageing, labour markets and migration in an enlarging EU

Chair: Lionel Fontagné, Director CEPII, Paris.

Tito Boeri of Bocconi University, Milano, addressed the question: Immigration: Panacea or Danger for the EU?

Tito Boeri first argued that the influx of migrants could only modestly contribute to the intergenerational consistency of otherwise unsustainable public pension systems. In fact, the number of immigrants would have to be much larger and the stays longer than at present. In addition not all migrants actually contribute to pension systems. However, he argued that migrants are much more mobile than natives and that migration therefore might support economic growth by "greasing the wheels" of European labour markets. Furthermore, enlargement would not constitute a remedy to the ageing of the European population. In fact at present the population aged 65 and above in 2001 amounted to 16.5% of the total in the EU and to 13.2% in the accession countries. In 2050, according to present baseline projections, the share of elderly (65+) may reach practically the same level, 29.2% in EU15 and 29.3 in the new EU member states.

Tito Boeri argued that the EU by creating new obstacles to immigration might aggravate present policy dilemmas. Already illegal immigration is considerably higher and legal immigration considerably lower in the EU than in the US. Further restrictions to immigration might actually generate additional illegal migration implying that migrants might not even contribute at all to the financing of welfare systems. Without actually making specific recommendations, he mentioned as possible policy options to restrict access to welfare by migrants or to adopt selective migration policies such as the "points systems" applied in Canada and New Zealand.

Juan Jimeno, FEDEA, Madrid, then addresses the question as to whether the prospective decline in the entry into labour market over the coming one or two decades could be expected to

lead to a lowering of unemployment. Juan Jimeno first stressed that a mechanical projection of employment and unemployment, on the assumption of unchanged age/gender employment/unemployment rates, would lead to a lowering of the overall rate of employment on average for the EU from 63.5% in 2000 to 62.9% in 2010 and to 61.9% in 2020. The rate of unemployment would remain constant at 8.4%. However, as workers of different ages are imperfect substitutes and relative wages of different age groups are inflexible unemployment of each group may according to certain studies increase with its relative size (cohort crowding out).

Juan Jimeno concluded that demographic change will affect the age structure of both population and of the labour market. Changes in the age structure of the labour force might affect aggregate unemployment through composition effects and may also affect age/gender specific employment rates. However, there was some controversy concerning the sign and magnitude of the effects on the age/gender specific unemployment rates and there were reasons to believe that (as in the case of labour market effects of migration) the effects of ageing on the labour market would depend on the specific labour market institutions and regulatory framework.

In the perspective of enlargement and the resulting further liberalisation of labour movements within the enlarged EU a key issue is, however, whether migration will actually respond to wage and unemployment differentials. This was the subject of a paper by Sjef Ederveen and Nick Bardsley, from respectively the Netherlands Bureau for Economic Policy analysis (CPB) and the University of Nottingham. Presenting an analysis of the results of 24 studies of the determinants of migration within or between countries, the paper showed that on average for the studies examined a 1 percentage point increase in the wage in the host country could lead to an increase of 0.7 points in the inward flow of migration, corresponding to an elasticity of 0.7. A one percentage point increase in the rate of unemployment in the host country would, on average for the 24 studies examined lead to a lowering of the inward flow of migration by 0.25 %. The authors also examined the effects of certain dummies, such as the size of the region/country, house prices, the origin of the data (Eurostat or national sources) and the particular position of certain countries. The general conclusion was that, within the range of data and countries considered, unemployment differentials would appear to have only modest impact on flows of migration. For wage differentials the elasticity appears to be somewhat higher, suggesting that the increase in income differentials resulting from the EU enlargement could indeed be expected to increase the incentives for migration.

Another frequently advanced argument: that that ageing process will per se lead to a lowering of unemployment, was seriously questioned in a paper by Jean Château, Jean-Louis Guérin and Florence Legros (CEPII, France). The paper presents the results of simulations using an economic model in which the labour market is segmented in age groups. In each age group the alternative income that workers may receive depends upon their age, assistance income for the younger ones and pre-retirement income for the elderly. Wage bargaining power is thus different for different labour market segments.

In sharp contrast to the "standard wisdom" the matching model applied to the French data shows that, under the realistic assumptions imposed, the doubling of the ratio of pensioners to the active population, in the absence of reforms could lead to an increase in the "fiscal wedge" (the difference between gross and net wage). This would lead to a lowering of labour supply and, consequently, to a rise in unemployment. This could be countered by an increase in mandatory work duration but for this measure to be successful there would need to be change in the firms' behaviour towards senior workers. The authors, however, stressed that further paths of research should be explored such as notably a more explicit modelisation of the trade-off between work and leisure, better perception of the productivity of different age groups etc.

In general economic analysis immigration is on the whole assumed to have positive net effects on the national income of the host country essentially by allowing a more efficient allocation of

resources. Using a General Equilibrium Model calibrated to the Dutch economy, Rob Euwals and Hans Roodenburg of the Netherlands Bureau for Economic Policy Analysis (CPN) however show that the "immigration surplus" may at best be small and possibly even negative. In fact, an arrival of immigrants causes adjustments in wages and the return to capital. However, the size and direction of the adjustments depend upon the flexibility of wages and of the stock of capital. The authors argue that if capital is relatively immobile within Europe capital owners may gain from immigration. In the case of mobile capital high-skilled labour may gain while low-skilled workers may lose. If wages are relatively rigid (the most likely assumption for the Netherlands) immigration might increase unemployment among natives. Various studies reviewed by the authors however suggest that overall employment effects of immigration may be small. This would suggest that immigration might not contribute as much as argued by Juan Jimeno (see above) to enhancing labour market flexibility in the EU. The authors however stress that further research, for example of regional breakdown of migration, may be needed before firm conclusions can be drawn.

Margo Alofs of the Faculty of Applied Economics, University of Antwerpen, based on an inter-temporal dynamic migration model with human capital accumulation, shows that migration is a Pareto-improving measure. That is, all economic migrants and the autochthonous income and age groups existing at the time of arrival would be better off. However, the welfare gains will be overturned if strict migration quotas lead to enhanced illegal immigration. Illegal migration in fact undermines the legal economy and does not support the social welfare system and may push more migrants into the criminal sphere. Furthermore, being more lenient with respect to illegal migration may be counterproductive in reducing the stream of legal migration.

Margo Alofs, therefore, concludes that it is preferable to trace and repatriate illegal migrants than to curtail the legal entry of migrants. A corollary is that young legal migrants alleviate the fiscal burden by their contribution to the welfare system in the host country. Furthermore, a less restrictive policy with respect to legal migration simultaneously addresses the adverse effects of illegal immigration.

Another issue is, of course, whether migration may help to facilitate regional adjustment to asymmetric shocks in the home country of migrants. Evidence presented by Jan Fidrmuc (ECARES, Free University of Brussels and ZEI, University of Bonn) however, suggests that migration in transition countries has little to offer in terms of contribution to adjustments. Studying for the Czech Republic, Hungary, Poland and Slovakia the response of inter-regional migration flows to fluctuations in unemployment and wage differentials, he finds only weak effects on net migration. A rise in unemployment does appear to discourage both immigration and emigration, rendering the capacity of net migration to reduce regional disparities rather small, even if it is statistically significant. The results for the four transition economies are on the whole consistent with estimates undertaken by the author for Italy, Spain and Portugal.

Jan Fidrmuc therefore concludes that since migratory flows show little response to wage and employment differentials, regional disparities will not get smoothed away by migration. In fact it would take decades rather than years for even moderately large unemployment and wage differentials to be eliminated solely by way of migration. Furthermore, in view of the relatively low labour mobility in the major accession countries, the author does not expect massive East-West migration in the wake of the next EU enlargement. Furthermore, because of the low efficacy of migration in smoothing away inter-regional differentials in unemployment and wages, an early membership of the EU is not necessarily, in the opinion of Fidrmuc, the optimal policy choice. According to Fidrmuc, EMU membership implies loss of autonomy in monetary policy and imposes important limitations on counter-cyclical fiscal policy. As the transition countries continue to face different shocks than the EMU core, at least in the medium term, they may benefit from retaining the option to adjust their exchange rates.

Session 2: Sustainability of welfare systems

Chair: Henk Don, Director, CPB Netherlands Bureau of Economic Policy Analysis

As an introduction to this session Henri Bogaert, Director, Belgian Federal Planning Bureau, Chairman of the Working Group on Ageing of the Economic Policy Committee presented the main findings of the study of the impact of ageing on public pension systems and health care expenditure undertaken by the Working Group.

Henri Bogaert initially pointed out that the prospective increase in the old-age dependency ratio with no change in the age specific pension and health care expenditure would lead to an increase in pension spending in proportion to GDP on average for the EU of more than 6 percentage points while health care expenditure would rise by 2.7 percentage points.

The Group has then prepared illustrative estimates of certain changes in the basic “parameters” of the pension systems. Due to the large differences in the basic structure of the pension systems such changes would have varying effects on the overall pension expenditure in proportion to GDP in 2050.

The Working Group simulated on an illustrative basis three selected options for reforming the basic parameters of the public pension systems of the Member States⁹. The comparability of the evaluated impact of the different parametric reform options presented in the report depends highly, amongst other things, on the underlying social protection systems, the actuarial indexation rules and the legal retirement age. The country comparisons need therefore to be interpreted with great caution. Overall the results indicate that all assumed changes in the parameters had a noticeable impact on expected pension expenditure although, as a rule, the various reforms taken alone would only partly absorb the expected increase in pension expenditure by 2050.

The first simulation showed that a reduction of the indexation of pensions by half a percentage point per year in earning-related pension systems would absorb approximately 30% of the expected increase in pension expenditure. In flat-rate systems (Denmark, Ireland, Netherlands and the UK) the effects of lowering indexation would be much greater but as a result the replacement rate of the flat-rate part of public pensions would decrease considerable and thus lower the standard of living of the pensioners.

The second simulation showed that raising the effective retirement age from its present level of close to 60 to an average age of 65 would go a long way to compensate the effects of ageing. According to the simulation, if workers were to work one additional year before retiring, the level of pension expenditure on pensions in proportion to GDP would be reduced by 0.84 percentage points. At the same time growth would be boosted by over 13%, thereby going a long way towards offsetting the GDP loss associated with ageing over the next 50 years and avoiding large changes in income distribution.

The third simulation started from the notion that, from the point of view of inter-generational equity and given the same contribution rate and the same active lifetime, a cohort with higher life expectancy should have a proportionally lower pensions; The simulations showed that on average approximately 45% of the expected increase in pension expenditure is the result of the expected increase in life expectancy. Adjustment of the benefits to account for life expectancy could thus have a very significant impact (0.4 to 1.9 percentage points) albeit at the expense of a

⁹ The following is an extract of the Executive Summary of the Report from the Working Group

progressively lower replacement rate for pension benefits. (the Table presented by Mr Bogaert is omitted here but can be found on the ENEPRI web site).

The Working Group concluded – in line with the conclusions of the Lisbon and Barcelona European Councils - that in some countries a clear policy priority should be placed on increasing the activity rate of older workers by providing strong incentives for the elderly workers to remain in the labour force or by introducing disincentives to early retirement. It was however recognised that this would be unlikely to materialise unless the present incentives to early retirement in most member states were eliminated or substantially reduced. Furthermore, based on the findings of the third simulation the Group recommended that reform strategies take account of the time spent in retirement in proportion to the time spent in activity.

Commenting on the presentation by Mr Bogaert, Martin Werding, ifo/CESifo, Munich, argued that the project implemented by the EPC Working Group (in parallel with similar work at the OECD) represented a very valuable effort, resulting in progress with respect to detailed simulation for a total of 25 OECD countries. He stressed, however, that the particular approach involving simulations by national experts on the basis of broadly comparable assumptions involved some gain with respect to details but loss in comparability. Nevertheless, wherever the national experts had complied with the set of assumptions suggested by the coordinators (the Working Group and the OEC Secretariat) these appeared to be workable. As no hard test of consistency was feasible, running a broad variety of sensitivity analysis was crucial for assessing the findings.

Analysing the initial estimates of the “mechanical” effects of ageing on pension expenditure, Martin Werding underlined the considerable diversity of results, due essentially to the differences with respect to institutional build-up and nature of regimes. He consequently saw a need for a broader comparison of benefit systems and in particular of the “generosity” of pension systems as a means to formulate a more consistent view of the overall economic cost of ageing.

Drawing to a considerable extent on the findings of the ongoing ENEPRI/AGIR research project on Ageing, Health and Retirement in the EU countries (AGIR), Erika Schultz, DIW, Berlin initially underlined the complexity of the analysis of health, morbidity and health care expenditure. She pointed out that health care expenditure was the result of the combined operation of demographic factors, morbidity of the various age groups, use and supply of health care services, health care insurance schemes, medical technology, life style, genetic conditions and the general economic framework. However, in all EU countries, health expenditure increases with age and since the share of elderly in the total population will rise sharply over coming decades we may expect to increase public spending on health care. This development may contribute to pressures on public finance coming in addition to the likely increase in spending due to the pressure coming from pensions.

Erika Schultz first of all underlined that life expectancy is not an appropriate indicator for the global health status of the population. In fact, for the analysis of the impact of ageing it is preferable to introduce a distinction between the number of years in good health (Healthy-Life Expectancy) and the number of years in bad health and/or disability. Increasingly the future of health care is therefore analysed in terms of three basic scenarios: Compression of morbidity, dynamic equilibrium or expansion of morbidity:

- A. Compression of morbidity involves a reduction in the proportion of life lived in chronic ill-health. An optimistic assumption will be that the number of years spent in ill-health/disability will remain constant as life expectancy increases.
- B. Expansion of morbidity is defined as an increase in the proportion of life lived in chronic ill-health/disability. A pessimistic assumption may that the age-specific morbidity rates

will remain unchanged as life expectancy increases but it is by no means excluded that age-specific morbidity may even get worse.

- C. "Dynamic equilibrium" is defined as a scenario in which the increase in life expectancy is accompanied by a shift of morbidity to higher ages in such a way that the duration of morbidity remains more or less constant in proportion to the overall life expectancy. In practical terms, thus, in this scenario a 5% rise in life expectancy would be accompanied by a 5% increase in the (average) duration of morbidity/disability for the population in question.

Erika Schultz then presented a brief overview of some indicators for the development of health life expectancy during the recent past and providing a basis for projections for the development over the coming decades. In her opinion no clear trend towards compression of morbidity had been discerned so far in the research within the AGIR project:

- In several countries the length of hospital stays in a given population showed a decline but the number of hospital discharges an increase. This could be interpreted more as a change in policy (more out-patient care) than as a change in morbidity.
- The European Community Household Panel (still to be further analysed) in general showed no decline in age-specific self-declared health status or in the prevalence of a number of indicators of disability.
- Various estimates of healthy life expectancy such as the Disability-adjusted life expectancy (WHO) or Disability-free life expectancy (the REVES network) in general showed some improvement following the increase in overall life expectancy but an increase in the proportion of life in morbidity.
- Available scattered and incomplete data are therefore consistent with some overall expansion of morbidity in proportion to total life expectancy.

According to Erika Schultz, a projection based on constant (current) age/gender- and diagnosis specific hospital utilisation rates would in Germany lead to an increase in hospital days of 34% from 2000 to 2050. If utilisation rates were additionally specified as between survivors and decedents in their last year, second last and third last year before death, the projection would lead to a more moderate increase of 24% in the number of hospital days. Consequently, there was a need for a more detailed data not only on age-specific prevalence but also on the use of health and hospital care with a breakdown between survivors and decedents.

In his comments to the presentation by Erika Schultz, Howard Oxley, Directorate for Economic Affairs, OECD, underlined in particular the high level of uncertainty attached to the projections. In fact, in the preparation of these scenarios countries have not allowed for other factors such as lengthening of lifetimes, the possible lowering of morbidity, technological change, changes in the relative price of health care, lowering of the capacity of the family to care for the elderly and other potential changes in demand for care and social choices.

In particular, Howard Oxley argued that the ongoing reduction in the size of families would mean fewer children to care for the elderly and grand parents. Furthermore, the anticipated increase in the labour market participation rate for women could also reduce their capacity to care for their parents. This effect could be further enforced due to an increase in the retirement age. This could thus enhance pressures for a larger role of the state in the provision of care for the elderly.

However, this may induce new conflicts as publicly provided care already now is rationed in most countries. Policies should therefore aim at minimizing long-term care costs while aiming at improving the quality of care and maintaining widespread access. There was also the option of

reducing the demand for health care by reducing morbidity and disability through improved prevention. However, there would be no assurance that this option would be less expensive. It would nevertheless be necessary to encourage later entry into long-term care through a wider application of user charges. More generally, there might also be a need for increasing cost sharing at the cost of some reduction of ambitions concerning equity.

Howard Oxley finally stressed the need for a better management of care, improved oversight of care providers, careful control with relative prices of health care (albeit with due regard to ensuring appropriate supply) and to exert better control over the diffusion and application of new technology in the health sector.

On the issue of health care, Bernard Casey, London School of Economics (ex-OECD official) argued that while the purpose of the seminar was to ask "what we have learnt", the principal conclusion of his paper was that we have scarcely started learning about paying for long term care. However he argued that some points could be made.

First, he stressed that little information was available about how formal care is provided. Data sources fail to adequately separate nursing care and personal care and to understand what formal care is being provided and by whom. The boundary between nursing care and personal care costs is, by necessity, a fuzzy one, but it is one that proves conflicts between different branches of government and different agencies as to who pays for what, when. The decentralisation of care and the greater reliance on non-profit and for profit providers also implies greater difficulty in collecting adequate data. Related to this, little is known about informal care providers and little about the formal care workforce.

Second, too little is known about the relative costs of alternative forms of provision. Data show per capita costs in different kinds of institutions and the costs of care provided at home relative to care provided in institutions. However, there are few like-for-like comparisons available that allow us to overcome "selection bias". Thus there is a need for more "evidence", so that public bodies, older people and older people's families can make "evidence based" decisions. Over and above this, there is a need to know more about the "costs" of informal care provision and the costs of substituting formal for informal care.

Third, the demands for formal care that are likely to arise have probably been grossly underestimated. Too much faith has been placed in a substantial amount of care being provided informally and changes in household structures and labour market behaviour that are likely to occur have not been taken sufficiently into account. Indeed, at many points advocate behavioural change – higher labour force participation – are advocated that will aggravate the demand for formal care.

Fourth, we have been insufficiently innovative in finding financing solutions. The debate has centred upon long-term care insurance and upon equity release. His paper faulted both approaches and argued for an alternative that recognises the importance of assets and tries to find an efficient and equitable way of calling upon them. More attention and research should be devoted to this idea.

Lastly, Bernard Casey argued the need to recognise that it is undesirable for the relative position of older people to deteriorate. We probably do not wish to see them experience lower incomes or lower levels of physical and psychic well-being. We probably recognise that, in the same way as adequate pensions is a vital element in ensuring the maintenance of the former, adequate long-term care provision is a vital element in ensuring the maintenance of the latter. In his view, what we are less willing to recognise is that to realise this aim, some redistribution of resources is required. He stressed that such redistribution will not be redistribution within a stagnant economy but within a growing one arguing that this would make it a little bit easier in the short term and much easier in the longer term. He concluded that societal ageing is a longer-term

challenge and that, to respond to it, policy makers needed to find longer-term solutions that ensure an equitable distribution of its costs and do not mean that these are borne largely or entirely older people themselves, and particularly by the very old. That we cannot escape from this task is something we still have to learn.

With respect to the future of pension systems, numerical projections undertaken within the European Central Bank arrive at results in line with those of the EPC Working Group on Ageing. A paper by P.C. Rother, M. Catenaro and G. Schwab presented the results of a partial equilibrium analysis for the four major Eurogroup countries (Germany, France, Italy and Spain) showing both two baseline scenarios for pension expenditure and scenarios simulating various reform options.

The numerical projections undertaken by the ECB team underline the urgency of pension reform and provide an assessment of the viability of alternative reform approaches. In the baseline scenario pension expenditure for the EU as a whole in proportion to GDP is projected to rise by more than 4 percentage points between 2000 and 2050.¹⁰ With more or less unchanged 2000 contribution rates¹¹ and relatively optimistic assumptions concerning labour market and private sector employment, the pension system is then in this study projected to incur deficits as from 2010 rising to a level of 4.5% of GDP by 2050. Assuming a real rate of interest of 4% per annum, the present discounted value of the future deficits is calculated at 51% of GDP. With unchanged labour market participation and a real rate of interest of 3% the present value of the future deficits would, in fact, be as high as 90% of GDP.

The paper argues that only comprehensive and profound reform will ensure permanent financial viability of the public pension systems while partial reform is found incapable of solving the ageing problem despite favourable macroeconomic assumptions.

The partial reform scenario is based on a combination of three parameters:

- § A gradual increase in the effective retirement age by one year until 2010 with unchanged replacement rates;
- § An increase in the contribution rate by 10%, e.g. from 30 to 33% of the gross wage; and
- § A reduction in average replacement rates sufficient to balance the system, i.e. reducing the present value of deficits to zero in 2002.

However, this scenario is not considered viable. The authors argue that the assumed rise in contribution rates will raise the disincentives to work (at least in the official economy) so that the projected increase in employment rates will remain out of reach.¹² Furthermore, the reform only balances the pay-as-you-go systems through 2050 but leaves them in substantial deficits after that date. Consequently there remains a need for additional reform to ensure balance in a longer perspective.

The paper therefore presents a more comprehensive reform scenario assuming a partial shift to a funded scheme. In all four countries, contribution rates to the pay-as-you-go system are reduced immediately and permanently by 6 percentage points. The corresponding amount is invested into a funded scheme assumed to carry a net return of 4% after taxes and administrative

¹⁰ An internal study by the Directorate-General for Economic and Financial Affairs of the European Commission actually projects an increase of more than 7 percentage points, but on the assumption of unchanged labour market participation rates and pension system « generosity » (McMorrow and Roeger (2002)).

¹¹ Due to the complex and opaque nature of the various national pension systems the authors have calculated hypothetical contribution rates balancing the pension system in 2000.

¹² This is consistent with the results of the general equilibrium model estimates presented in the paper by Château, Guérin and Legros, presented in the first session of this conference.

costs. All working age generations participate in the partial shift to funding and replacement rates for new old-age pensioners are reduced to achieve balance of the system (zero present value of the deficits). Effective retirement ages and labour market developments are assumed to be as in the partial reform scenario.

The scenario calculations show that comprehensive reform combining the features of the partial reform and a partial shift to funding can ensure permanent financial viability of the public pension system and induce necessary employment growth. Shifting part of the PAYG contributions into a funded pillar and reducing replacement rates makes the PAYG systems fully sustainable. New pensioners offset the reductions in replacement rates through benefits from the funded pillar but total replacement rates remain below those of the partial reform until 2040. The authors therefore underline that the distribution of this reform burden is a political question. In addition to leaving it on new pensioners as in the reform scenario, it could be shifted partly to current pensioners through lower indexation,¹³ on future generations through raising public debt or a combination of the two.

Although ageing is now increasingly perceived as a world-wide phenomenon the pace of ageing shows considerable disparity between the major regions. This may give rise to capital movements and beneficial exchanges between regions with different demographic developments. While the papers presented above and most of other studies of the consequences of ageing do not explicitly take account of these aspects of ageing, a paper by the French Ingénue-team¹⁴ aims explicitly at evaluating the potential magnitude of equilibrating capital flows.

The study makes use of an international overlapping generations model (INGENUE) dividing the world into six regions: three developed ((i) the European Union, (ii) North America, Australia and New Zealand and (iii) Japan) and three developing areas ((iv) emerging economies with an already ageing population, (v) emerging economies just starting their demographic transition; and (vi) developing countries with a high fertility).

The model is calibrated with the UN (1998) demographic projections completed with parameter values for households' and firms' behaviour and with macroeconomic data for the period 1970-1995 as well as exogenous growth rates and assumptions on international technological convergence and, finally, the structure of pension schemes in the different regions. Projections are undertaken for the period up to 2100. Specifically for Europe, the baseline scenario assumes persistence of an effective retirement age of 60 and a replacement rate of 70%. In the baseline scenario the contribution rate is assumed to adapt so as to balance the public pension system.

The simulations yield a slowly converging equilibrium path for the world economy involving a decline in the world rate of interest during the first three decades and then approximate stability for the remainder of the century. The growth rate of aggregate (real) GDP is projected to decline from about 3.3% to about 2.5% by 2030 and to remain at this level during the remainder of the century. In the three developing regions the rate of growth is projected to converge to wards 3% per annum while in the three developed regions the rate of growth of GDP is projected to converge towards 3% per annum (from 4-6% at the beginning of the century).

In the baseline scenario, Western Europe and Japan are, during the first two decades, exporting capital (current external account in surplus) with the three developing regions and North America attracting capital. After 2020 the Japanese current account starts fluctuating around equilibrium. And after 2030 Europe plunges into a persistent current account deficit, reaching almost 5% of GDP in 2055. During the second half of the century current account balances converge to within a range of +/- 1% of GDP.

¹³ As simulated in the scenarios by the Working Group on Ageing presented elsewhere in this note.

¹⁴ The team consists of staff members from three French research institutes : CEPPII, OFCE and CEPREMAP.

Three European reform scenarios were then calculated: (A) constant contribution rate with the replacement rate adjusted so as to balance the public pension schemes; (B) increasing the legal retirement age from 60 to 65 over the period 2000-2020 and; (C) indexing pensions on gross instead of net wages. The policy measures are in each case assumed to be perfectly anticipated by households and firms, implying that their major direct and immediate effects are on the private saving ratio (in response to the reforms of public pension systems, households adjust their saving so as to smoothen life-cycle income and consumption (labour supply is in these scenarios assumed to be constant!). In general scenarios A and C deliver a less favourable overall development of the European current external account while increasing the legal retirement age (scenario B) results in the persistence of a current account surplus during the whole period.

The paper shows that large capital flows between the main regions help considerably in smoothing the long accumulation cycles arising from ageing and fluctuations in the size of population. It concludes by stressing that the prospect of large discrepancies between domestic saving and investment raises the question of the sustainability of such trends and, hence, of the more precise forms of capital flows and of the institutional environment and regulation of international financial markets.

Observation of the pension form debate shows that retiree lobbies have displayed strong opposition to reforms aimed at retrenching the PAYG systems. Furthermore, the electoral activity of the elderly is generally more dynamic than that of the young. In France, 95 per cent of retirees are registered to vote, compared to 86 per cent of the young generations. And among registered voters, 85 per cent of the elderly vote as compared to 78 per cent for the whole population. In addition, retirees are well represented within trade unions, notable in the Southern European countries. An important issue for public policy is therefore the impact of ageing of the population on electoral behaviour and other expressions of political preferences of the citizens.

A paper by Florence Legros, CEPII and University of Paris Dauphine, presents an analysis of the conflicts between retired and nearly retired and workers in a general equilibrium model with overlapping generations. It then analyses different voting configurations according to utility functions and electoral majority in three different scenarios for maximisation:

- § Maximisation of the general social welfare by the "social planner";
- § Electoral majority of the young generation; and
- § Electoral majority of the older generation in the specific perspective of increasing life expectancy.

As demonstrated in the paper, a key (economic) issue is the level of the rate of return on capital in general in relation to the rate of return of the PAYG system and the "weight" attributed to the younger generations by the "social planner". An additional issue is however the way in which the "social planner" defines social welfare and in particular the weight put to the future needs of the younger generations.

In the concluding remarks Florence Legros underlines that when the PAYG scheme is not perceived as inefficient (it provides the same yield as savings) the major channel by which the contribution rate has an impact on welfare is through the interest rate. In this configuration there are two reasons why the retirement age is lower than it would be if the individual were free to choose:

- § First, when the authorities underweight the younger generation, the older generation is powerful and demands a low retirement age, which is obtained with a high contribution rate;
- § Second, when retired people have an electoral majority.

In contrast, if the economy suffers from a significant lack of capital accumulation, if the interest rate is much higher than the rate of return of the PAYG scheme, and if people perceive that the PAYG scheme is not efficient, then the younger generations of wage earners will choose a higher retirement rate than the authorities. This is due to their ignoring the impact of such an increase on the real wage. The authorities are led to diminish the contribution rate to increase the incentives for individuals to save more, and to retire earlier (the discounted income is not reduced any more if the PAYG represents a smaller share of this income). The older generation wants to diminish the contribution rate and the retirement age at the same time, in this case, a conclusion which is not really consistent with observation.

Whether old people retire so soon because they do not perceive any difference between the interest rate and the PAYG rate of return, it should be concluded that the egoistic case is relevant. In an extreme configuration of this case, if a demographic shift gives the electoral majority to the elderly, and if the older generations do not care about the other generations (including the forthcoming older generations), the older generation can select a high contribution rate, linked to a low retirement age. The intermediate configuration, in which the elderly only take care of old generations (including subsequent ones) can be interpreted as myopic: the old generation does not want any rolling back of the welfare state, despite the unknown effects on younger generations.

The conclusion that the elderly, if voting in accordance with their "interest" as expressed in their welfare function, will express preference for an increase in the contribution rate and a low retirement age is also emerging from a study of the political sustainability of the recent (1992/1995) reforms of the Italian pension system. This is illustrated in a paper by Marcello D'Amato and Vincenzo Galasso (respectively University of Salerno and IGIER, Bocconi University). The authors present the results of simulations in an overlapping-generations model in which individuals play the double role of economic agents and of voters in the elections that determine the level of the rate of contribution (social security tax) required to balance the pension scheme.

The authors simulate two versions of the model, one where agents are only heterogeneous with respect to age (basic model), and another where they differ also with respect to education level, income, survival probabilities and retirement age.

The results obtained in the basic version of the model suggest that, in the absence of the 1992/95 reforms (Amato-Dini reforms), the ageing process would have driven the equilibrium tax rate supported by majority voting from 38% in 1992 to 58.1 in 2050. The provisions in the Amato-Dini reforms are able to limit the increase only partially: Under majority voting the equilibrium tax rate would increase to 51% for an average retirement age of 62 years and to 46.8% if the average retirement age is increased to 65. However, a raise in the retirement age would induce voters to increase the generosity of the system (i.e. the replacement rate).

The results of the second version of the model (heterogeneity in education, income, electoral participation, survival probabilities and retirement age) confirms that the new regime is only partially able to reduce the upward trend in the social security tax. The bottom line of the analysis is that, given the prospective ageing, the only feature of the new regime that appears to have a relevant impact on the equilibrium tax rate is an increase in the retirement age. This is, according to the authors, encouraging since the reforms paved the way for a steady rise in the effective retirement age. It should be noted, furthermore, that the simulations do not include the likely effects on labour supply of future increases in the tax rate which could induce additional distortions in the economy as shown in the paper by Château, Guérin and Legros presented in another session of this conference (see above).

With respect to the political economy of ageing differences in electoral preferences may, however, not be the only problem. As stressed in a paper by Bengt-Arne Wickström Humboldt

University Belin and DIW Berlin), the political process does not work gradually and might never reach a steady state. On their side individuals adjust their behaviour, taking advantage of the incentive structure of the system. However, as they grow older lose the capacity to adjust to new parameters. In terms of economic analysis, this implies that behaviour in later periods of an individual's life to a greater extent will be governed by income effects and to a lesser extent by substitution effects.

In his paper Bengt-Arne Wickström formulates a model with a number of cohorts of equal size within which individuals have different abilities. The distribution of abilities is assumed to be the same for each cohort and within each cohort individuals consume leisure and a composite good of all market goods, possibly including a publicly provided (collective or individual) good, which may be termed "public good". The latter may be both a classical collective good and income redistribution. In the younger cohorts the degree of substitutability between leisure, market goods and the publicly provided good is relatively high but in older cohorts the shape of the indifference curve will change and the pattern of consumption will become more rigid.

By analysing various possible solutions to the model, Wickström then shows that on the given assumptions the marginal effects of a tax increase on the "supply of funds for redistribution" are greater in the short than in the long run. He also shows that the steady-state tax rate will be higher than what is optimal if individuals are "myopic", that is if they overestimate the benefits of short-term gains from income redistribution and underestimate the long-term effects of the associated tax hike.

Wickström finally infers that possibly when older generations develop behavioural sclerosis (and myopia) behaviour may possibly change under drastic circumstances (for example in a context of political crisis). This would imply that for example only large reductions in social benefit levels would move individuals back into the labour while marginal reductions would have little or no effect at all.

Most available studies of the consequences of ageing have started from the demographic projections compiled by the UN, the OECD, Eurostat and, of course, projections by national statistical or demographic institutions. Most or all of these demographic projections include variants based on higher or lower assumptions concerning mortality, fertility and migration. Most of the analyses of the consequences of ageing and of the policy options or reforms are based mainly on the baseline scenarios, assumed to represent the most "likely" outcome. However, as stressed in a contribution by Juha Alho (University of Jyväskylä, Finland), uncertainty in demographic forecasts is much higher than generally thought. In fact, looking back a century we find that demographic flows (births, deaths and migration) have been non-stationary and unpredictable. For example the emergence of the post-war baby-boom was not anticipated by official forecasters in Europe or the United States nor was the rapid decline in mortality during the 20th century.

When errors of different components have all been in the same "direction", the error of a 30-year forecast of the total population has sometimes been as high as 20%. At other times errors in mortality and fertility may have compensated for each other and errors for the total population have been more accurate. However, in such case the errors concerning the age structure have then been very high. For example certain studies have found errors of over 25% for the number of persons in specific age groups over just 15 years.

Since relatively little is known concerning the determinants of fertility, demographic projections normally assume only moderate changes in fertility, at least in baseline simulations. There is also a clear tendency to assume only moderate and gradual changes in fertility even in the longer term. A review by Juha Alho of even recent developments in a number of developed countries however, show that fertility has been particularly volatile in Europe during the last 40-50 years.

As far as life expectancy is concerned the “best practice life expectancy” (the life expectancy of the country that at any point in time has the highest life expectancy) has risen almost linearly by about 0.25 year annually for the last 160 years or so. However for individual countries the evolution has been substantially more erratic with periods of rapid improvement followed by periods with little or no improvement. Furthermore the life expectancy of the elderly has not risen in line with the LE at birth and has been more erratic with a tendency towards slowing down in recent years in certain countries.

Even without considering the contribution from migration, the paper by Juha Alho shows that stochastic simulations of future demographic developments, including explicit data on the statistical errors (variance) of past developments of the main components have the potential of offering a pertinent alternative to the mechanistic projections based on standard assumptions. By introducing the ranges of probability of the central projections, such stochastic simulations offer a measure of reliability of projections and, thus, a measure of the potential risk of taking policy decisions on the basis of erroneous assumptions.

Session 3: What have we learned from research on ageing?

(A comparative EU-US perspective)

Chair: Daniel Gros, Director, CEPS.

Richard Blundell, Institute for Fiscal Studies and University College, London, initially provided a broad review of the current know-how in, and policy implications of, the research on ageing in Europe. He pointed to six main issues as being of particular importance for policy making:

- § Life expectancy;
- § Disability-free life-times;
- § Labour market attachment and routes to retirement;
- § Disability benefits and other “early retirement” incentives;
- § Labour market transition; and
- § Family labour supply and caring issues.

He underlined that all developed countries had experienced an increase in life expectancy. However, international trends in life expectancy at age 65 also showed some striking discrepancies: whereas in 1961 life expectancy at 65 was at approximately the same level in the UK, the US, France and Japan, the latter country has experienced a more pronounced increase than the other three and in 1997 was some two years ahead of the UK and also ahead of the level in US and France. During this period life expectancy at 65 in Japan had thus improved by more than five years as against only 1.2 year in the US.

He also stressed that according to available estimates for the UK disability-free life-expectancy had increased considerably less than the rise in overall life expectancy, suggesting an expansion of morbidity among the elderly.

Turning the labour force developments and retirement behaviour, Richard Blundell stressed in particular that in a number of countries the route to retirement did not only pass through early retirement but also for many elderly persons through stages of disability or unemployment with associated benefits. He therefore saw a need for a general review of incentives to retire, including analysis of evidence for wealth effects and the respective role of the incentives provided by private pensions and occupational pensions and to calculate the full option value (discounted present value) of future value of earning as measured against the present value of pensions. In this respect it would also be essential to include family labour supply interactions and incentives.

Richard Blundell then presented “counter-factual” simulations based on the NBER project (published in the volume edited by Gruber and Wise) but assuming an increase in the retirement age, some reduction of the replacement rate and actuarial adjustment of the annuity in the age interval from 60 to 70. A reform involving these measures would significantly reduce the option value of early retirement and induce a significant enhancement of the sustainability of the pension systems.

Specifically for the UK, Richard Blundell saw several reasons for expecting an “endogenous” rise in the effective age of retirement over the next decade or two. This would result from a prospective decline in the generosity of the state pension system, decline in the generosity of the invalidity/disability schemes, increase in the retirement age for women, reduction in opportunities to create exits to retirement in defined-benefit schemes, a general move from defined-benefit to defined-contribution schemes and reform of the public sector retirement scheme.

Finally Richard Blundell stressed the pressing need for an improvement of the data supply for demographic and health care analysis. Two research projects under implementation (the SHARE (EU) and ELSA (UK) projects) would be of considerable importance in this respect. However, there was a need for additional cross-disciplinary surveys in order to study the dynamic relationships and to develop better predictors of the disablement process and measurement of retirement incentives.

(Discussion by Timothy Smeeding and presentation of elements of the LIS)

The main features of research on ageing and retirement in the United States were then presented by Robert J. Willis, Director, Health and Retirement Study (HRS), Institute of Social Research, University of Michigan. Robert Willis pointed out that the HRS was a longitudinal survey of more than 22,000 persons, funded by the National Institute on Aging with additional support from the Social Security Administration. From its inception the HRS was designed through a multidisciplinary effort to provide data for a community of scientific and policy researchers studying the economics and demography of ageing. The HRS data base had become an extremely important source of data for the research community with more than two thousand registered users and a record of more than 400 papers written using HRS data.

The HRS core data set contained information on health and health care, labour market status, income and expenditure and family status. However, linkages to other surveys, for example of home dementia, social security, health insurance, medicare and national death index could provide additional scope for cross-section analysis and analysis of transition. The analytical potential of the HRS was therefore enormous and would be further enhanced when data from the SHARE and ELSA projects would come on stream and allow additional cross-national analysis.

Robert Willis then presented some essential findings of the research on ageing in the US using the HRS and other available data. He stressed in particular the strong correlation of health and economic status, with evidence pointing towards an impact of economic status on health during the first part of the life-cycle and effect of health on wealth during the later phases (age 50-70). Furthermore, in the low-income groups a high proportion of medicare beneficiaries cut down on prescription drugs and therefore did not make use of the potential benefits of the medical support.

He pointed out that there was evidence of an improvement of the state of health among the elderly but it was still an open question whether this was a firm trend. Furthermore there was now strong evidence that dementia will be a growing problem even if other forms of disability are decreasing. Like Richard Blundell, Robert Willis stressed the need for a deeper analysis of the interaction of disability policy and retirement. In fact, the Gruber-Wise study had found disability

policy to be one important source of variation in labour force participation. However, reform of disability policy would require knowledge of labour supply effects of alternative policies and, not least, of the potential effects of reforms on the welfare of "truly disabled". He did underline, however, that against the wide-spread opinion that disability pensions were granted too generously the HRS data showed no evidence of a bias in self-reported disability. Clearly self-reported disabled were much less healthy than non-disabled and there were indications that self-reported disability provided a better measure of the prevalence of disability than the social security award system.

In his discussion of the presentation by Robert Willis, Arie Kapteyn, Rand Corporation, ex-University of Tilburg, stressed that we had still some way to go to obtain sufficiently reliable and consistent data for international comparisons. Micro-data available in several countries were of uneven quality and there was a lack of relevant information on covariates such as health care or family support. International comparison were likely to be very instructive for policy design and data from ELSA and SHARE once on stream would help a lot to support comparative analysis. However, Arie Kapteyn stressed that health and disability were also the outcome of cultural norms and that whether one can or cannot work is also dependent on workplace accommodation (for example for disabled persons).

In a written contribution to the conference, Alan Walker, Professor of Social Policy, University of Sheffield, UK and member of the Steering Group of the European Forum on Population Ageing Research provided an overview of the genesis, aims and work programme of the Forum.

A principal feature of the Forum is to organise meetings at which representatives from the national research programmes and centres in the field of population ageing from each country (responsible for policy and funding) in the field of population ageing will discuss potential synergies between national programmes and potential avenues for collaboration; relationships between the key action and national programmes and centres; share information and identify gaps in knowledge and agree mechanisms for disseminating information. Feeding into the Forum will be the results of six workshops on three priority topics in ageing research. The workshops are multi-disciplinary scientific meetings designed to identify gaps in research, future avenues for research and potential partners for collaboration. The three agreed priority topics are demography, longevity and genetics; health care and management; and quality of life in old age. In addition it is proposed to hold a user consultation conference in which policy makers, NGOs, the public and private sector providers can make an input to the process of priority setting for research on ageing. The whole coordination effort is managed by a Steering Group drawn from eight Member States, the DGs for Research and Employment and Social Affairs and a member from the EU NGO representing older people AGE. Finally, there will be a range of dissemination techniques designed to reach specific user communities and the general public, including a web site, research reviews, newsletter and scientific papers.

Annex I: The original work programme

The original project proposal was presented in the following terms

1. Objectives, expected benefits and overall approach

Welfare Systems remain a national responsibility even under EMU, but in all member states they will face similar challenges deriving from the ageing of the European population, the fiscal constraints under EMU, changing patterns of work and increased fiscal policy competition as tax bases become more mobile. Important research in these areas is done in many member countries within institutes that in many cases are the privileged conduit between the academic community and (national) policy makers.

But despite the similarity of the problems and their European dimension the research and policy advice produced by (national) economic policy research institutes starts often from a national point of view and even if it treats the problems in a European perspective is diffused only at the national level. There is also considerable duplication: similar studies are being produced in many countries (e.g. ageing and the future of the welfare System, the impact of EMU on labour markets, etc.)

The purpose of the European Network of Economic Policy Research Institutes (ENEPRI) is to change this by bringing together the leading (national) institutes from 7 member countries in order to diffuse existing research, co-ordinate research plans and increase the awareness of the European dimension in national problems. The Centre for European Policy Studies (CEPS, located in Brussels) will provide co-ordination and reinforce the EU perspective as it does not have a national identity.

As can be seen from the work plan some of the major specific issues to be addressed, that could be subdivided under the two headings 'Welfare Systems' and 'Labour markets', are:

- the impact of ageing: whether the EU can save for its ageing population in the rest of the world, the different roles of private and public pensions
- how to evaluate welfare Systems (generational accounting),
- the threat to national welfare systems in an integrating Europe in which tax bases become more mobile,
- the links between welfare Systems and employment (which determines the financing potential),
- consequences of welfare Systems for (international) mobility of labour, (can one extend the mutual recognition approach to labour markets, etc.?).

These issues are mainly of a microeconomic nature. But they must be seen in a general equilibrium perspective and the policy conclusions should be quantifiable, especially in terms of the financing of welfare System. As policy makers require tools to evaluate policy options quantitatively, a lot of work is going into developing medium to long-run general equilibrium models at the national level! (We do not intend to duplicate the existing models used for short-run macroeconomic policy evaluation). The network would be instrumental in providing solid foundations for asymmetries between member countries in labour markets. Moreover, this type of quantitative analysis supported by model, originally used only at the national level, could become a resource at the EU level via this network.

A steering committee, meeting in Brussels at CEPS once a year, will accompany the activities of the network; provide critical advice and a first evaluation of research. Papers retained by this committee will become joint publications of all participating institutes.

2. Work Content/Methodology

As Chart 1¹⁵ shows, the programme of work will be subdivided into 13 main work packages, which account for 10 distinct research workshops and three conferences, each numbered sequentially (see the number in the top left-hand corner of the boxes referring to each package). Each work package has been assigned a project leader which will be in charge of co-ordinating research tied to the specific work package. Chart 1 includes the timing of each work package in the bottom left hand corner of each box corresponding to the work packages. The first institute indicated in the bottom right-hand corner is the one in charge of the specific package. For the specific objectives and description of methodologies, readers should refer to the appendix where each work package is described in more detail.

3. Project Management

In addition to the annual meetings of the Steering Committee in Brussels at CEPS, the management and co-ordination of the network will be guaranteed by CEPS, through the involvement of both a senior and a junior research fellow.

As regards the co-ordinating role of CEPS, co-ordination and management of the network will be ensured by CEPS. Deputy Director Daniel Gros will provide intellectual leadership and be responsible before the Commission (a junior research fellow (Ph.D. level) will be responsible for administrative tasks). Daniel Gros will have to devote a substantial part of his time to the management of the network

The management by CEPS will be flanked by the steering committee (see above) composed of the research directors of the other institutes involved (plus a couple of outsiders), which is scheduled to meet three times: at the start of the project and then 12 and 24 months later. The final conference will provide the occasion of a fourth meeting, but this has not been budgeted separately as it is likely that they will anyway participate in the final conference. We would suggest the following composition:

Daniel Gros, CEPS, Casper van Ewijk, CPB, Lans Bovenberg, Juan Jimeno, FEDEA, Fiorella Padoa-Schioppa, Kostoris, ISAE, Martin Weale, NIESR, Leading researcher, DIW

The first meeting will finalise the work programme in the light of the comments and suggestions we expect from the Commission, and/or the referees, regarding the work programme and the budget. Later meetings of the steering committee would then be devoted to quality control and providing intellectual input for the ongoing activities.

The management at CEPS will provide continuous monitoring of the overall coherence of the project; will collect information for the meetings of the Steering Committee and will prepare the agenda for these meetings (which do not necessarily have to take place at CEPS). CEPS will assume the overall responsibility for the network vis-à-vis the Commission but will not micro-manage. Once the assignment of tasks has been finalised (i.e. at the first meeting as explained above) the participating institutes will be able to take on their own most decisions regarding the organisation and content of the events they are responsible for.

The communication flow will be decentralised to the extent possible. For example, the many communications necessary to organise a particular conference or workshop will be the responsibility of the participating institute involved. However, all communications with the Commission will go via CEPS which will also be informed about major developments concerning the workshops and conferences organised by the participating institutes

¹⁵ Not included here

As regards, the reporting procedure, we plan to follow closely the Commission's directives and provide outsiders with both short bi-annual progress reports and longer annual ones, where the main results reached by research conducted until then and those to be expected in the following twelve months will be highlighted and discussed. Special reports will follow each workshop and conference, as indicated in the deliverables (point 4 below), and a final concluding report will be issued shortly after the final conference, to be held at the end of year three of the project.

4. Deliverables/Milestones

Chart 2¹⁶ in the appendix provides the table of deliverables for each work package. As can be seen from it, each work package will offer several deliverables in terms of workshops and/or conferences, in the form of working papers to be disseminated across the scientific community. Occasional (larger, 4 per year) papers to be presented in road shows across the EU, and of conference volumes that contain the main results and policy conclusions reached by the project. Whereas access, for obvious logistic reasons, will be restricted for workshops and conferences, we plan to disseminate at the widest possible level all other deliverables following each work package.

Last but certainly not least, a website and a library devoted entirely and uniquely to ENEPRI are being prepared, under the responsibility of the officers at CEPS, to allow for further dissemination of the project objectives and deliverables across the scientific and wider community.

As is also obvious from chart 1, the milestones of the project can be sub-divided as follows:

- Milestones year 1: the organisation of 6 workshops and the publication of 24 ENEPRI working papers;
- Milestones year 2: further 6 workshops (and associated working papers) leading to the preparation of the first topical conference (on welfare Systems).
- Milestones year 3: second topical conference on labour markets and final concluding conference.
- The main tangible outputs of the network (apart from academic publications) would be policy conclusions regarding welfare Systems in Europe; e.g. how they can be financed (Public versus private, internationally) and whether there is a case for an EU competence in this area.

5. Exploitation Plans

As discussed above under points 3 and 4, dissemination and exploitation plans take several forms:

- Workshops and conferences;
- Working papers and conference volumes;
- Road shows for occasional working papers;
- The creation of an ENEPRI specific library and website.

In what follows we provide the reader with a more detailed description of the deliverables involved.

¹⁶ Not included here

a) Academic audience:

In this area, the network will follow the standard approach: The more technical results that take the form of individual papers will be published as Working Paper. The advantage of the network here is that the papers that will be produced under the project will constitute a series that will be common to the Network in the sense that these Working Papers will appear under the cover of all the participating institutes. As the series of the participating institutes have a wide reach this will ensure that all the results will be diffused in the scientific community at the European level (and beyond). The Working Documents will, of course, also be available on the web sites of the individual institutes, all of which will contain links to the ENEPRI website which will also be set up.

It is likely (although no guarantee can be given at this point) that the more important conferences will result in book publication in the usual format (summary by editors, followed by the individual papers) that will further ensure dissemination in the academic community.

b) Policy makers and media:

Here we propose a new approach that is based on the strong position of the participating institutes in their home countries. The major policy implications will be summarised, together with the scientific evidence, in Occasional Papers (of about 50-60 pages each). The authors will be invited by the participating institutes to present 'road shows' in different countries to ensure that the results are brought to the attention of national policy makers throughout Europe. All of the participating institutes have a System of seminars, or other meetings open to the public (e.g. lunch-time meetings, press breakfast, etc.) through which they diffuse their own research at the national level. This type of meeting will be used to diffuse the research supported by DGXII. The type of meeting and the attendance varies from country to country. One example is:

CEPS, Brussels:

Title: 'Lunch-time meeting',

Target audience: EU personnel, press, diplomatic corps,

Attendance: 30-80.

The institutes participating in the network should ensure a wide diffusion at the national level not only through this type of meetings, but also because they are recognised in their own country as an important source of research and policy advice by policy makers and the media. Research done within the network should thus have a wide echo throughout the EU.

6. Complementary Projects

No complementary projects are envisaged so far. But we do believe that research carried out under this project is very likely to spark the setting up of other related projects and inter-institutional collaboration plans in the future.