

The need for comprehensive reforms to cope with population ageing

Population ageing will have a profound impact on euro area economies. Public pension systems based on the pay-as-you-go principle will come under pressure as the ratio between the number of pensioners and the number of contributors rises. Public expenditure on health and long-term care is set to increase as progress in medical technologies continues and the demand for these services grows with the number of elderly. Moreover, the slowdown and, subsequently, even the reversal of growth in the number of working age people exert downward pressure on economic growth.

This article argues that comprehensive reforms need to be implemented swiftly to cope with the effects of ageing. Although there is a broad consensus on the sources and approximate extent of the impending problems, current policy intentions in many countries do not appear sufficiently ambitious to avert major imbalances in the future. Reforms should place both public pension systems and health and long-term care arrangements on a sustainable financial footing by limiting the public sector's exposure, enhancing private funding and setting incentives for efficient service provision. At the same time, policy reforms must reduce public debt levels and strengthen economic growth and employment to alleviate the demographic impact on output. Delaying reforms will result in a higher eventual adjustment burden and could jeopardise macroeconomic stability.

A comprehensive institutional framework has been set up at the European level to co-ordinate and monitor ageing-related policies. It promotes information exchange and the application of peer pressure to ensure fiscal sustainability and strong economic growth. In particular, the commonly agreed "three-pronged strategy" to deal with the implications of population ageing calls for countries to raise employment, reduce public debt and reform pension systems. This framework should be implemented in full to support governments in adopting appropriate policies at the national level.

I Introduction: the impact of ageing on fiscal sustainability

The article is structured as follows. The introduction outlines the major economic implications of population ageing. The following section discusses the need for reforms in the area of pensions, health and long-term care, as well as measures to strengthen overall growth. Further sections outline the relevant EU policy framework and provide an assessment of past and proposed reforms.

Ageing will result in considerable fiscal burdens

European populations are growing older. The scale of population ageing is reflected in the rise of the old-age dependency ratio, i.e. the ratio of the population aged 65 and above to the population aged 15 to 64. For the euro area, Eurostat projects that this ratio will rise from about 25% in 2000 to about 36% in 2025 and to more than 50% in 2050 (see Chart 1).¹ Two major forces drive the ageing

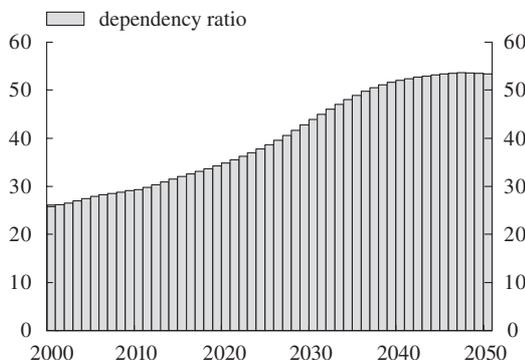
process: increasing life expectancy and low fertility rates. The rise in longevity experienced over the past few decades is projected to continue. For the euro area, average life expectancy is projected to increase by between four and five years between 2000 and 2050. Fertility rates have declined sharply and are now well below the rate necessary to maintain a constant population. Although the average number of children per woman is projected to increase somewhat for most countries in the Eurostat projection, it will not be sufficient to reverse the trend of a shrinking population from around 2020 (see Chart 2).

The demographic shift will put pressure on public finances by driving up ageing-related expenditure. The most important expenditure

¹ These projections were produced specifically for the EU's Economic Policy Committee report entitled "Budgetary challenges posed by ageing populations" (2001), discussed below, and constitute a "central" scenario. To allow for uncertainty, they are complemented by a higher and lower demographic scenario.

Chart 1
Euro area old-age dependency ratio¹⁾

(in percentages)



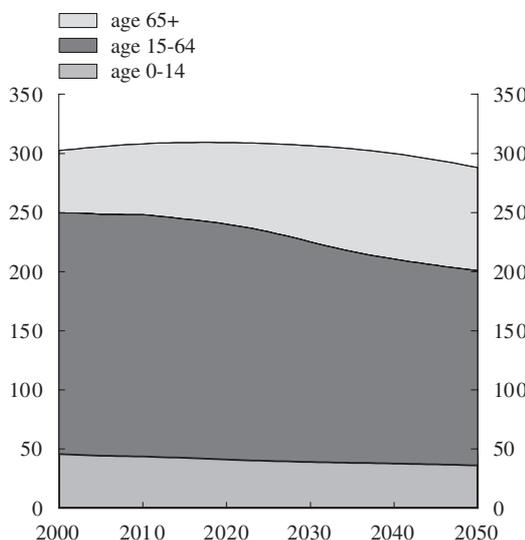
Source: Eurostat projections.

1) Ratio of the population aged 65 and above to the population aged 15 to 64.

effects are projected for public pension systems and for spending on health and long-term care. Public pension systems in Europe are mostly based on the pay-as-you-go principle whereby current contributions finance current expenditure. The rising number of pensioners will put these systems under considerable strain. In addition, health care expenditure is set to rise as the demand for health services tends to increase with the

Chart 2
Euro area total population and components

(in millions)



Source: Eurostat projections.

number of elderly people. The problem of financing long-term care for the frail and elderly is receiving growing attention as changing work and life patterns are reducing the importance of the intra-family provision of care services. By contrast, possible offsetting effects from reduced expenditure on education and family allowances, due to lower birth rates, are likely to be small. Similarly, although net inward migration tends to alleviate the ageing process, given a lower average age of immigrants, a sizeable economic effect from migration would require much higher inflows than currently observed and a lasting absorption of working-age migrants into employment.

However, population ageing also has a negative effect on the resource base which ensures fiscal sustainability. The overall number of working-age people will stagnate and later decline, negatively affecting the base for taxes on labour. In addition, abstracting from other possible effects, such as the impact of a more experienced workforce on productivity, this stagnation and decline will tend to reduce output in the economy.

The overall impact of all of these effects will be considerable. A study commissioned by the ECOFIN Council and carried out by the Working Group on Ageing of the Economic Policy Committee has projected that the increase in public pension expenditure due to population ageing in most euro area countries will be between 3% and 6% of GDP by 2050.² Even larger increases are projected for some countries. A further 2% to 4% of GDP could be added from rising health and long-term care expenditure. Roughly half of the projected increase would materialise by 2025, although the speed and timing of expenditure increases vary across countries and expenditure categories. The increase would come on top of average total spending on pensions and health and long-term care which amounted to around 18% of GDP in 2000.

² The study is available from the website of the European Commission's Directorate General for Economic and Financial Affairs, http://europa.eu.int/comm/economy_finance/epc_en.htm.

Consequently, debt burdens in the euro area could rise considerably. As a simplified example using the midpoints of the above projections, expenditure on pensions and health is assumed to rise linearly between 2010 and 2040 by a total of 7.5 percentage points of GDP and to stay at that level until 2050. Under realistic macroeconomic assumptions, the present value of this additional expenditure burden amounts to more than 100% of GDP. In other words, the additional burden implicit in future liabilities of unreformed social security systems in some countries far outweighs the current average level of public debt in the euro area, which amounts to some 70% of GDP.

The expenditure projections may even present an optimistic view of the problem for the euro area countries. First, they are based on fairly favourable assumptions about future employment growth. Second, the health expenditure projections focus only on the demographic impact, ignoring factors that, in the past, have made an important contribution to the rise in the level of expenditure (for example the impact of advances in medical technologies, rising per capita demand for health services and increasing relative prices of health-related goods and services).

Fiscal sustainability and growth

The challenge for fiscal policy is twofold: to ensure sound public finances and, at the same time, to strengthen the economic growth potential. Focusing only on financing the forthcoming liabilities – with no regard for the induced growth effects – will prove illusory as weakening growth will erode the basis for sound public finances. In particular, in view of already high tax and social security burdens, a further increase in social security contributions would be harmful to economic growth. At the same time, the commitment to maintain sound public finances under the Stability and Growth Pact rules out systematic fiscal deficits to finance rising expenditure.

Thus, reforms need to be comprehensive. Broadly, the thrust will be to strengthen the actuarial balance in social security systems, i.e. to achieve a stronger link between individual contributions and transfers/services received. At the same time, the overall level of contributions needs to be limited. This objective could be attained, for example, by strengthening the pre-funding of pension entitlements – also with occupational and private arrangements – and through a reform of health service provision and insurance. Reforms need to be complemented by measures to reduce public debt levels and strengthen growth and employment.

These reforms should be carried out as a matter of urgency so that the beneficial effects materialise in time and alleviate the ageing-induced burdens. Such major reforms of social security systems, which are geared towards streamlining and restraining public expenditure, are likely to face opposition from some groups of society. Thus, there is a risk that it will often take a long time to reach political consensus on such issues. In addition, growth-friendly changes in social security arrangements, such as a partial move to funded pension plans, require a long lead time to enable participants to adapt their behaviour to the changed environment.

Failure to implement reforms would jeopardise fiscal sustainability and macroeconomic stability. If governments do not adapt social security systems and overall public finances in time, they will find themselves facing rapid and substantial increases in expenditure pressures. These might force them to adopt stopgap measures, such as tax hikes, which will impose additional distortions on the economy and shatter confidence.

Fiscal sustainability and price stability

Fiscal sustainability is of immediate relevance to the monetary policy of the ECB. Once market participants perceive public finances to be unsustainable, pressure might increase

Box I

Fiscal sustainability: definition and measurement

The assessment of the fiscal implications of population ageing relies to some extent on analyses of fiscal sustainability. However, as the theoretical concept of sustainability does not have strong implications for the assessment of current policies, policy recommendations are based on more ad hoc definitions.

Theoretical approach

An analytical definition of sustainability can be derived from a government's intertemporal budget constraint, which implies that all debt must be covered by future primary surpluses. However, for the assessment of current fiscal policies, the intertemporal budget constraint is not immediately useful. In particular, it is consistent with large debt stocks as long as the potential of sufficiently large primary surpluses in the (possibly distant) future allows their repayment. Thus, it does not provide a clear indication of the extent to which fiscal policies could be deemed sustainable.

Practical approach

For policy purposes, studies of fiscal sustainability are generally based on a calculation of the primary surpluses necessary to achieve a specified target level for public debt at some point in the future. Such methods have the advantage of being intuitive and providing clear policy signals. For example, one can analyse the required surplus for debt to be reduced to a certain percentage of GDP, possibly zero, over the next 50 years. The difference between the current primary surplus and the required surplus is the fiscal gap that needs to be closed by policy measures.

The ageing-induced burden can be calculated from sector-specific forecasts for health and pension systems, whereas some general assumptions are necessary for the revenue and expenditure items not affected by ageing. Further assumptions are required regarding GDP growth and interest rates. In addition, it is interesting to see what policy changes will be required within the EU institutional framework to keep fiscal positions within the limits established by the Treaty and the Stability and Growth Pact.

Caveats

The sustainability analyses must be interpreted with care, as the mechanical relationships might obscure important economic effects. For example, such analyses generally appear to indicate that high-debt countries, which are currently running higher primary surpluses to finance the interest burden, would be relatively well-positioned to cope with the ageing burden. This is because debt reduction frees up fiscal resources that can be used to finance ageing-induced burdens. However, such reasoning takes no account of the fact that these countries are imposing a high tax burden on their economies, which would have to be maintained for a long time under the assumptions of the sustainability analysis. Furthermore, current value calculations over long-term horizons are sensitive to the choice of the starting position and to the assumptions regarding growth and interest rates.

in favour of policies geared towards easing the public debt burden. Despite the strong framework guaranteeing the ECB's independence, this would make the conduct of stability-oriented monetary policy more difficult (see the article entitled "The relationship between monetary policy and

fiscal policies in the euro area" in the February 2003 issue of the ECB's Monthly Bulletin).

At the same time, a stable macroeconomic environment, including price stability, is a prerequisite for the successful implementation

of reforms which include strengthening private involvement in pension and health insurance arrangements. In view of their long-term nature, markets for such private arrangements will thrive only where macroeconomic and social

stability are guaranteed. In this regard, maintaining price stability is essential to provide a sound framework for long-term financial arrangements.

2 The need for comprehensive reforms

The scope of the ageing problem will require the adoption of a variety of reform measures. In the area of pensions, these range from adjusting existing pay-as-you-go systems to strengthening alternative financing arrangements. With rising financing constraints, public health and long-term care systems will also need to become more efficient. Finally, governments need to address the wider implications of population ageing through comprehensive policies aimed at strengthening employment and economic growth as well as improving public finances by reducing public debt.

Necessary reforms to pay-as-you-go pension arrangements

Public pay-as-you-go pension systems are immediately affected by demographic shifts and are therefore in particular need of reform. A demographic shift that reduces the number of contributors relative to that of pensioners means that, if contribution rates are to remain constant, average pensions have to be reduced, or, for constant average pensions, contribution rates must increase. However, putting the entire adjustment burden on pensioners would be socially unacceptable and lead to a loss of confidence. Similarly, focusing solely on contribution rates would raise distortions and reduce work incentives, thus choking growth. These prospects suggest that two sets of strategies need to be pursued: the adjustment of existing pay-as-you-go arrangements with regard to the structure of benefits and contributions (parametric reforms) and fundamental changes in the structure of financing pensions (systemic reforms).

With regard to the reform of existing pay-as-you-go systems through parametric reforms, overly generous provisions will need to be reduced. Particular attention should be paid to raising effective retirement ages, i.e. the average age at which an individual starts to receive a pension. Pension expenditure could fall as those eligible draw pensions for shorter periods of time. Possibly more importantly, with individuals staying longer in the labour market, employment and economic growth could increase during the transition period. Consequently, higher output would augment the base for fiscal revenues. Employment conditions for older workers would need to be improved, including by providing opportunities for continued training and flexible working hours.

Simulations suggest that there is a large potential gain for sustainability from raising retirement ages. Despite the continuous rise in life expectancy over the past decades, effective retirement ages have in fact decreased. The effective average age of withdrawal from the labour market for men in the euro area now ranges between 58 and 64 years, with women retiring earlier. As a consequence, the average time that pensioners spend in retirement has increased to roughly 20 years, up from around 13 years in the 1960s.

Research into the determinants of retirement behaviour points to the importance of reducing the retirement incentives implicit in social security systems. In many systems, working one year beyond the legal minimum yields only small gains in the average pension, which do not compensate sufficiently for the one year's worth of pension payments foregone. Thus, the total amount of pensions

received during the whole retirement period actually decreases, making the additional year of work a waste in terms of pension wealth. The incentive for early retirement can be reduced through a move towards actuarial neutrality, with payments to and from the pension system having, on average, no impact on the optimal timing of retirement.

Funding to alleviate the pension burden

Systemic reforms can alleviate pressure on public pay-as-you-go pension systems through the diversification of financing arrangements for old age pensions. Basically, this means that instead of paying pensions only out of current transfers from labour income, they can also be financed from capital previously accumulated via pension funds. Such systems exist in most euro area countries, but in many countries they are too small to provide substantial old-age income on top of public pensions. The major benefit from strengthening funded pension arrangements derives from the shift of the financing burden from labour to capital. Pay-as-you-go arrangements are especially vulnerable to demographic shifts because any additional burdens have to be borne fully by current workers, i.e. human capital. By moving part of pension financing to funding, the exposure of the overall pension system to this risk is reduced: human capital, which is becoming scarcer owing to population ageing, is replaced by real capital.

The move towards stronger funding must start as early as possible before the onset of the demographic change. This is because such systems need time to accumulate the necessary capital out of which future pensions are to be paid. The compound interest effect is essential for such long-term financial arrangements. Participants starting early can let this effect work for them and keep necessary contributions small. Any delay in starting a funded system increases the future contribution burden.

Funded pension arrangements carry additional advantages for economic growth through the

effects on labour and capital markets. Labour markets would benefit, as such systems could reduce the labour disincentives that exist in current pay-as-you-go systems by linking pension benefits directly to contributions. Participants would therefore perceive their social security contributions as savings for retirement rather than as a tax. For the same reason, such arrangements would also help to reduce existing incentives for early retirement. The development of capital markets would benefit through the accumulation of capital in the funded pillars. In this regard, private management of pension assets has advantages. Competition and diversification provide the insured with a choice of investment opportunities to adapt to their specific needs, while reducing governance problems that arise from centralised management of pension assets.

During the move towards more funding, existing pension claims have to be honoured. This requirement does not represent an additional burden; rather it makes these existing claims transparent. How the transition is financed is a political question and will usually involve some burden-sharing between pensioners and contributors.

It is clear that a shift towards funded systems also requires efficient regulation in order to avoid overly risky investment strategies and to safeguard the life savings of individual investors. Investing retirement funds in potentially volatile financial assets would expose large parts of the population to asset market risks. The risks are even greater in the latter stages of contributors' lives when they are particularly vulnerable and have fewer opportunities to smooth out fluctuations in wealth and income. Proper regulation must ensure that such risks are allocated efficiently and that individuals are aware of their specific risk situation. Default of funded pension schemes also poses the risk of substantial implicit liabilities for fiscal budgets.

At the same time, funded pension arrangements must be allowed to seek

economically efficient investment opportunities. By restricting investments to particular assets, participants would be deprived of the benefits of portfolio diversification. In addition, it should be noted that investing funds in domestic government bonds would not truly diversify the sources for pension financing, as such bonds ultimately need to be redeemed through domestic tax revenues. However, the involvement of public and private institutions in the design and implementation of funded arrangements can also be adapted to specific national requirements.

Health and long-term care reforms also necessary

In the area of health and long-term care, rising expenditure pressures impose equally hard choices on many public health systems. To face the future burden, governments may have to raise contribution rates, streamline services and secure private financing and funding. Here, discussions in the relevant literature suggest a differentiation between essential, privately non-insurable and non-affordable services and those where private financing might be more efficient. Public health and long-term care systems should focus on providing core services for health care and prevention, while leaving individuals to provide for non-essential health expenditure. Individuals could then decide to what degree they wish to seek insurance cover for such costs. Greater private involvement in health care financing can be achieved, in particular, through patient co-payments, as already implemented in a number of countries. Such co-payments could increase efficiency if they provide the appropriate incentives on the demand side. Pre-financing of ageing-related health and long-term care services via funding has also been proposed.

Moreover, the conditions governing the supply and demand of health services need to be conducive to generating the most efficient outcomes. It is important to adapt country-specific solutions to the institutional context.

It has been argued that the setting of budget caps for specific areas of the health sector can improve overall performance. Within the framework of such budgets, market forces can help to move towards efficient solutions.

Complementary reforms to promote employment and growth

The necessary reforms to social security systems should not divert attention from the need for comprehensive policy reforms to reduce public debt-to-GDP ratios and to strengthen employment and growth – in fact, they should do quite the opposite. Indeed, there is great potential to raise GDP growth in the euro area by means of a comprehensive reform strategy.

There is a large untapped potential in labour markets. On average, employment rates in the euro area fall short of those in other industrialised countries, reflecting both low rates of labour force participation and high unemployment. To raise employment, a strong case can be made for adapting tax and benefit systems to increase work incentives, including using measures to raise the effective retirement age. The containment of labour costs, including non-wage costs, would provide incentives to increase the demand for labour, whereas wage flexibility and differentiation would support the efficient allocation of labour. Additional scope for growth would lie in the extension of working hours, which are also shorter in the euro area than in other industrialised countries.

With regard to productivity, structural reforms in the euro area could help to generate higher growth. In particular, further liberalisation and integration of goods and services markets would help to boost productivity growth by promoting competition.

Where needed, fiscal consolidation and debt reduction should form part of such a comprehensive reform strategy, contributing to macroeconomic stability and thus strengthening economic confidence and

growth. Financial market participants have started to register the magnitude of the impending ageing-induced burdens. The repayment of newly issued long-term government bonds will have to be redeemed during the period of rapidly rising dependency ratios. Once market participants perceive the preparations for population ageing to be insufficient, risk premia on long-term bonds for those countries may rise, putting additional strain on their financial situation. As government borrowing becomes more

difficult, the overall financial environment may suffer, leading to a crowding-out of private investment, or, in an extreme case, financial instability. In order to be growth friendly, consolidation measures should reduce high and distortive tax burdens in step with expenditure decreases, most notably in areas of non-productive expenditure (see the article entitled "Fiscal policies and economic growth" in the August 2001 issue of the ECB's Monthly Bulletin).

3 The EU policy framework

Reflecting the need for comprehensive reforms, as described above, and to provide more substantial guidance on policies, in 2001 the EU agreed on a "three-pronged strategy" to cope with the projected pressures of population ageing. This strategy was first reflected in the 2001 Broad Economic Policy Guidelines (BEPGs) and comprises three broad objectives: to raise employment rates, to reduce government debt rapidly and to reform pension systems, including moves towards a greater reliance on funding.

The EU's involvement in the monitoring and assessment of ageing-related policies is taking place at three levels. At the first level, the Treaty establishing the European Community (the Treaty) and the Stability and Growth Pact provide a quantitative framework for fiscal policies. At the second level, ageing-related policies are a matter of concern for the EU and are thus covered by the enhanced code of conduct for the stability and convergence programmes and the BEPGs. Finally, the EU's open method of co-ordination reflects the principle of subsidiarity by providing a platform for the co-ordinated peer assessment of pension policies.

EU fiscal framework conducive to sustainable public finances

The Treaty and the Stability and Growth Pact establish rules for the prudent conduct of

fiscal policies. As these rules apply to general government accounts, they also cover the fiscal effects of population ageing. To comply with the Treaty, countries should avoid excessive deficits (Article 104). Compliance with budgetary discipline is examined regularly with reference to numerical values for the budget deficit and public debt, with threshold values of 3% of GDP for the deficit and 60% of GDP for debt. The Stability and Growth Pact aims both to ensure lasting compliance of fiscal policies with the requirement of budgetary prudence and to implement procedures for monitoring fiscal developments.

The overall fiscal framework provided by the Treaty and the Stability and Growth Pact is appropriate to address the fiscal challenges of population ageing. The numerical limits on deficits and debt imply that countries have to undertake sufficient efforts to cope with the fiscal burden of population ageing.

More specifically, the Stability and Growth Pact's requirement that public finances be close to balance or in surplus over the medium term implies a reduction of public debt stocks relative to GDP. The resulting decline in interest burdens will free up fiscal resources, making it easier for countries to adjust their fiscal policies to meet the ageing-induced burden. Both the European Commission communication of November 2002 and the recent Council opinions on

stability programmes have put particular emphasis on the need for fiscal sustainability.

Broad Economic Policy Guidelines and Code of Conduct

Turning to the second level for the co-ordination of ageing-related fiscal policies, the EU has identified the impending pressures due to ageing as an area of common concern. As a tool to communicate overall policy orientations, the BEPGs are at the centre of economic policy co-ordination. The guidelines are currently adopted annually by the ECOFIN Council with the approval of the European Council, as stipulated in the Treaty, and the ECOFIN Council may issue a recommendation to countries not complying with the BEPGs.

The code of conduct governing the content and format of stability and convergence programmes has also become an important element of monitoring sustainability since it has been revised to reflect the growing awareness of ageing-induced fiscal burdens. Since 2001 countries' programmes have provided information on the long-term sustainability of public finances up to 2050 and discuss measures to tackle the budgetary implications of ageing. As with the BEPGs, the submission of stability programmes and the respective Council opinions strengthen transparency and peer pressure.

Open method of co-ordination promotes transparency

At the third level of co-operation and in full respect of the exclusive competencies of EU Member States on social security matters, the open method of co-ordination provides a platform for Member States to discuss their specific pensions-related policy strategies in a broadly standardised framework. Thus, the process of the open method of co-ordination takes its place alongside the existing EU processes. In 2002 the EU Member States prepared national pension strategy reports describing their approaches for securing the sustainability of pension systems.³ These reports were discussed in a peer review exercise at the European level and provide the basis for a report to the Spring 2003 Council meeting on pensions which outlines the perceived challenges to pension systems and reform intentions.

To summarise, the three levels of policy co-ordination in the area of ageing-related issues provide a comprehensive framework to secure stable and sustainable public finances. As the design and implementation of appropriate reforms remain a national responsibility, the institutional framework within countries and the incentives for policy-makers to pursue viable, long-term solutions carry particular importance for achieving the objectives. In view of the impending burdens, these national arrangements may deserve particular attention.

4 Practical aspects of designing reforms

Some essential elements of past pension reforms

Previous reforms of social security systems have been largely piecemeal and few countries have systems that appear well placed to deal with the ageing-induced burdens. Nevertheless, some progress has been made and full implementation of current reform proposals would already go some way to preparing countries adequately.

As far as reforms of current pay-as-you-go pension systems are concerned, over the past few years many countries have implemented reforms aimed at reducing future expenditure pressures, including revisions in benefit formulas. In addition, for such schemes the number of years on which the calculation of

3 These reports are available from the website of the European Commission's Directorate General for Employment and Social Affairs, http://europa.eu.int/comm/employment_social/index_en.htm.

pension benefits is based has been extended. Further adjustments have been made to the indexation of pension benefits. Switching from wage indexation towards a greater weight of price indexation reduces pension benefits over time relative to the productivity of active workers. Finally, the eligibility criteria for receiving pension benefits have been tightened in many pension systems.

Several countries have also started to strengthen funded pension pillars. Such measures have involved legal changes, for example allowing companies to set up own pension funds for their employees. Another important aspect of such reforms lies in the design of incentives to participate in funded arrangements. Given the long-term nature of pension planning, individuals may not realise the need to start contributing to voluntary-funded schemes early in their careers. Fiscal incentives have been used to alleviate this problem.

“Notional defined contribution” schemes can help to improve the financial viability of pay-as-you-go systems. In such schemes, individual benefits are calculated from own contributions and the system’s sustainable rate of return under the constraint of constant contribution rates, while buffer funds and automatic longevity adjustments ensure the system’s financial viability. As the pay-as-you-go system becomes less generous, resulting reductions in public pensions are replaced by stronger provision through funded pillars.

Health and long-term care reforms particularly challenging

Health care reforms have responded primarily to immediate expenditure pressures rather than focusing on long-term issues. Measures to curb total expenditure of public systems have included specific controls of prices and quantities in selected areas, such as spending on hospital treatment or pharmaceutical products. More recently, policies have moved more towards laying down overall budget

limits and establishing incentive systems to generate economically efficient outcomes. These policies include the promotion of long-term contracts between providers of health services and the cost-covering institutions, and the implementation of performance standards for health care providers. In terms of financing, policies have tended to strengthen the importance of patient co-payments.

Regarding long-term care, many countries are moving towards an integrated approach. A particular problem in this area lies in the diversity of current long-term care arrangements, covering informal, formal, public and private activities. Preparations include moves to separate long-term care from acute health care services and the setting-up of dedicated long-term care insurance.

Need for ambitious, comprehensive and timely strategies

Further reform strategies – as shown, for example, by countries’ stability programmes – remain restricted to generally acceptable measures. The strategies announced focus mainly on strengthening overall employment (including that of elderly workers) and consolidating public finances. Some countries have started to set up dedicated accounting mechanisms to make their preparations more transparent.

However, while such efforts are mostly necessary and appropriate, the strategies do not appear to be ambitious enough. To start with, there is evidence that many public pension systems require further reform to attain financial sustainability and that early retirement incentives could be reduced. Similarly, there seems to be scope in health systems for new incentives for cost-efficient behaviour. In addition, strict budget caps could help to avoid systematic cost overruns. Furthermore, recent experiences with fiscal consolidation and debt reduction show that such targets may be readily abandoned

when political priorities change. Finally, it should be noted that raising overall employment has so far been more of a policy objective than a measure. Such objectives need to be backed by strong, credible policy changes, for example regarding the containment of labour costs and the abolition of overly rigid labour market regulations. Although some progress has been made, further efforts will be necessary.

Uncertainty calls for additional prudence and monitoring

The uncertainties surrounding long-term projections call for additional fiscal prudence. The population projections presented above are in fact subject to some uncertainty, regarding fertility and migration, for example. In terms of economic developments, productivity growth is also too unpredictable to justify naive reliance on the projections. Moreover, as ageing represents a major structural shift in the economy, effects on fundamental relationships, including individual choices between labour and leisure as well as savings and consumption, may be substantial.

Furthermore, given the degree of uncertainty and the size of the problem, a solid information base is warranted. Long-term policies need to be based on comprehensive and realistic forecasts. In the area of pension reform, a set of broadly homogeneous forecasts has been put together for the EU countries by the Working Group on Ageing. (Box 2 below discusses alternative methods of projecting ageing-induced burdens.) In the area of health and long-term care expenditure, the computation of forecasts is an even more complex problem. Consequently, it is all the more important that comprehensive projections are provided for all euro area countries in a transparent and comparable way that would also allow for the sensitivity of the results to be assessed with respect to alternative specifications. The inclusion of long-term projections in countries' stability programmes is a first step in this direction. In addition, the BEPGs and the open method of co-ordination in the area of pensions provide useful frameworks to reduce uncertainty through the harmonised analysis of national data.

Box 2

Alternative methods of projecting ageing-induced burdens

Methods of projecting the impact of population ageing on fiscal accounts and the overall economy can be classified into three categories, according to the degree of complexity that they capture. It is reassuring to note that, with similar underlying assumptions, all three types of model come to broadly similar conclusions in terms of the severity of the ageing problem. Therefore, the advantage of different approaches lies not so much in the repudiation of one strategy or another, but in the opportunity to capture specific aspects of the ageing problem through the appropriate type of model.

Projections of social security systems focus on identifying the impact of demographic changes on particular areas of public finances, such as pensions and health care. Essentially, such projections involve, first, specific assumptions on public expenditures (sometimes also revenues) by age cohort, and second, the projection of total expenditures by applying demographic projections. Other assumptions, including those relating to macroeconomic developments, are exogenous. This procedure is particularly suitable for projections of pension expenditure, where future payouts can be derived from broad economic and demographic relationships by (relatively) simple formulae. In other areas, where expenditures are driven to a larger extent by behavioural patterns (e.g. health care), the mechanical approach is likely to miss important factors.

Generational accounting widens the scope of the analysis to capture all financial payment streams between individuals and the government. It can therefore present a full account of all benefits received from and

obligations claimed by the government over the lifetime of a representative individual on the basis of cohort-specific payment streams. As with the mechanical approach above, macroeconomic developments are introduced via exogenous assumptions. Since the seminal contribution by Auerbach and Kotlikoff (see “Dynamic Fiscal Policy”, 1987), a wide literature has focused on assessing fiscal sustainability for many countries. However, the necessary assumptions for such computations, e.g. regarding the life-cycle hypothesis and the incidence of fiscal transactions, do limit this approach.

Computable general equilibrium models address the shortcomings of the above models regarding exogenous macroeconomic assumptions. In general, they are based on the concept of overlapping generations with agents passing through various stages of learning, work and retirement throughout their lifetime. In addition to utility-maximising agents, the models comprise profit-maximising firms and governments that may provide education and pension systems. The models are calibrated to replicate observed economic relationships. As a major advantage, computable general equilibrium models allow the capture of important macroeconomic implications of demographic shifts, such as those regarding private and national savings, labour supply or international capital flows. Such models, however, can become fairly complex and thus difficult to understand intuitively.

5 Conclusion

Population ageing will put pressure on public finances in the euro area. Pension systems will be affected adversely by the rising number of pensioners and stagnating or shrinking numbers of contributors. Demand for health and long-term care will also rise with increasing longevity. Failure to implement timely reforms could jeopardise fiscal sustainability through rising spending, taxes and public debt. This also risks weakening economic growth and stability.

To cope with the ageing-induced burden, governments will need to implement comprehensive reforms. These should aim both to address specific problems in pension systems and health and long-term care arrangements and to reduce overall public debt and strengthen the forces driving overall growth. Price stability is a prerequisite for the successful implementation of such reforms.

Social security reform should reassess behavioural incentives and the public-private financing mix. While parametric reforms of pension systems could help to reduce incentives for early retirement, financing arrangements should be diversified through a strengthening of pension funding. Health and long-term care systems may reconsider

financing arrangements and the strengthening of incentives for cost-efficient behaviour on the demand and supply side.

However, fiscal sustainability will depend crucially on economic growth. The adverse impact of population ageing on the labour force can be offset to some extent by raising employment rates and working hours. In addition, it is necessary to foster productivity growth through structural reforms, including reforms of tax and benefit systems and the liberalisation of goods and services markets. Finally, debt reduction and sound public finances are crucial to cushion the impact of ageing-induced pressures and to strengthen confidence in macroeconomic stability.

Comprehensive reform requires proper institutional incentives both at the euro area and national levels. At the European level, the rules contained in the Treaty and the Stability and Growth Pact also provide an appropriate framework for the conduct of fiscal policies in view of population ageing. Countries' overall policies for coping with ageing are monitored and assessed under the BEPGs, whereas the open method of co-ordination provides an arena for progress through mutual learning in the area of pensions. The mutually agreed three-pronged

strategy highlights the most important areas for policy measures. However, national governments remain exclusively responsible for implementing reforms and institutional incentives may need to be strengthened at this level.

Although many countries have started to implement reforms to improve the sustainability of public finances and strengthen employment and economic growth, further

wide-ranging reforms are necessary. Many reform plans do not appear to be sufficiently ambitious and, therefore, vigilance in the monitoring and assessment of reform efforts is needed. However, the timely implementation of comprehensive and incentive-compatible reforms could go a long way to preparing for the ageing burden as adjustments can be spread over time and positive growth effects help to alleviate future pressures.