Modernising Social Policy for the New Life Course

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Foreword

For many decades, social policy interventions were designed to assist and insure against a limited number of well-defined risks. As a result of various ongoing social trends, however, the nature and scope of these risks has changed – the social order based on standard employment relations, the male breadwinner model and social security in defined but exceptional circumstances is no longer relevant. New risks have emerged. Different groups of individuals respond to risks differently. The development of these new risks, new social relations and differing responses to risks raises key questions for social policy. To address these issues, the OECD held a seminar in Paris on May 31 and 1 June 2007 to analyse and review responses to these emerging challenges.

The seminar covered a range of topics, including conceptual issues, such as the rationale for government intervention in the life course; empirical questions, such as evidence for increased variability in life courses, and the actual amount and form of redistribution across the life course that currently takes place in existing tax and benefit systems; and more policy-focused questions on the range of existing policy interventions and their effectiveness. This volume presents the main messages that emerged during the seminar, and the contributions to the seminar itself.

This report has been prepared by Anna Cristina D'Addio and Peter Whiteford, with contributions of Lans Bovenberg, Lei Delsen, Stephanie Devisscher, Christine Erhel, Colette Fagan, Michael Mendelson and Ann-Charlotte Ståhlberg. Valuable comments have been also provided during the seminar by Willem Adema, Martine Durand, Peter Hicks, Elaine Kempson, Ivar Lødemel, Gerry Mangan, Robin McKay, Amilcar Moreira and Jussi Toppila. Mark Pearson, Head of the OECD Social Policy Division, took the lead in originally developing this project and supervising it.

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Executive Summary

The development of new social risks, and the additional complexity of already existing risks, raises key questions for social policy. Recognising these developments, the 2005 meeting of OECD Social Affairs Ministers asked the OECD Secretariat to undertake work on the topic of "Life Risks, Life Course and Social Policy", noting that "the OECD should identify how social and economic goals can be best achieved, for example by policy interventions at certain critical 'transition points' or by redistribution of income from one point in the life course to another. The OECD should further assess the best ways of financing social policies across the life course".

To respond to this mandate, the OECD held a seminar in Paris in May 2007. The seminar covered a range of topics, including conceptual issues, such as the rationale for government intervention in the life course; empirical questions, such as evidence for increased variability in life courses, and the actual amount and form of redistribution across the life course that currently takes place in existing tax and benefit systems; and more policy-focused questions on the range of existing policy interventions and their effectiveness.

The introductory chapter (Chapter 1) presents the main messages that emerged during the seminar, while the different chapters of this volume represent the contributions to the seminar itself.

The keynote address by *Lans Bovenberg* (Chapter 2) discusses the usefulness of a life-course perspective in developing proactive social policies that better fit the changing life cycles of individuals who combine formal work with other activities on transitional labour markets. It also devotes special attention to the accumulation and maintenance of human capital over the life course and stresses that reconciliation of work and family goes beyond child-care facilities and parental leave, and involves the entire life course.

The paper by *Colette Fagan and Pierre Walthery* (Chapter 3) reviews the available evidence on the role and effectiveness of different approaches to time-based policies designed to assist individuals in their role as carers (children and dependent adults) by enabling them to adjust the distribution of their work-time across the life course.

The paper by *Stephanie Devisscher and Debbie Sanders* (Chapter 4) focuses on the end of the career as a crucial element in the life course of employees. The paper explores the ways that specific policy measures (which stimulate flexible working conditions for older workers, by means of part-time work or phased retirement) at the national level can contribute to the objective of a more active work force in the age group of 50 and older. The measures selected involve government, social partners, sectors and individual companies and employees.

Lei Delsen's paper (Chapter 5) analyses in detail the individual voluntary Life-course Savings Scheme (LCSS, *Levensloopregeling*) for employees. This scheme, unique in Europe, was introduced in January 2006 in the Netherlands and offers employees the

opportunity to save funds to finance periods of unpaid leave, and attracts tax concessions to those who do.

Christine Erhel's paper (Chapter 6) stresses that the concept of the life course is dynamic and makes it possible to analyse individuals' trajectories over time. In this respect, life-course policies modify the traditional public policy approach, by introducing a global approach, consisting of giving individuals certain rights, resources and services enabling them to be the authors of their own life courses. The paper sets out the theoretical foundations for this global life-course approach, and discusses its implications for the labour market.

Michael Mendelson's paper (Chapter 7) looks at a range of new "asset-based social initiatives" intended to assist lower income households to increase their financial assets. The paper concentrates on programmes for households of pre-retirement age and that do not involve preparation for retirement.

Finally, the paper by *Ann-Charlotte Ståhlberg* (Chapter 8) reviews available evidence on how inter-personal and intra-personal distributions differ in countries which have chosen completely different principles for shaping social policy. The various systems have widely differing motives, and in many cases redistribution of economic resources between the rich and the poor is not the primary objective. Particular importance is attached to comparing a country, such as Sweden with its highly universal welfare-state arrangements, with countries, such as Australia and Ireland, whose welfare systems have a strong element of targeting.

Chapter 1.

From Separated Life Phases to Interrelated Life Risks
A life-course approach to social policy

Anna Cristina D'Addio[1] and Peter Whiteford[2]

New economic and social life risks have emerged and may affect both the income and the management of time of the households or of the individuals requiring them to shift money and/or time during the life course. These new risks are an important challenge for social policy makers. Changes in the nature of social risks and in the interactions between them strongly suggest that new social policies should be considered and evaluated in order to respond to these developing trends more effectively. This introductory chapter presents the main messages that emerged during the seminar "Life Risks, Life Course and Social Policy" which brought together a number of experts to respond to these new key social policy questions.

1. OECD, Social Policy Division, Directorate for Labour, Employment and Social Affairs.

2. OECD, Social Policy Division, Directorate for Labour, Employment and Social Affairs.

1. Introduction

For many decades, social policy interventions have covered and insured a small number of well defined risks, including unemployment of short duration, disability during the years of active age, and insufficiency of resources in childhood and during old age. This approach rested on a number of assumptions: a clear demarcation between the various phases of the life of an individual (childhood, studies, activity, retirement); strict delimitation of the roles of men and women within the family (housewife, male breadwinner); the existence of strong bonds within the nuclear family; and uninterrupted careers of full-time work. In the majority of OECD countries, these assumptions no longer correspond to reality.

New economic and social life risks have emerged and they often mutually reinforce each other (for example, especially for women, changing forms of family relations and increasing rates of divorce interact with their attempts to combine careers and children). These life risks may affect the income of the household or of the individual (*e.g.* divorce, the loss of a job, disability, and childbirth when it obliges parents, usually mothers, to reduce their working times, etc.) but also the management of time over the life course, as individuals and families feel under increasing pressure to combine family roles and employment successfully. The expression "the rush hour of life" has been coined to describe those periods of time when multiple and conflicting demands are felt most pressing.

These new life risks require individuals to shift money and/or time during the life course. This can be done in multiple ways. For example, individuals may seek personal solutions to extra time or money demands – *e.g.* by delaying childbearing, by having smaller families or by having one spouse who scales back work hours (*i.e.* either controlling family size or controlling career demands). However, the welfare state can cushion the consequences of some important events; for example, social transfers can mitigate the effects related to the loss of income related to unemployment; or publicly financed childcare services can help households to reconcile work and family life.

These new risks are an important challenge for social policy makers. Changes in the nature of social risks and in the interactions between them strongly suggest that new social policies should be considered and evaluated in order to respond to these developing trends more effectively.

In this perspective, the seminar "Life Risks, Life Course and Social Policy" brought together a number of noted experts to respond to these new key social policy questions. This introductory chapter presents the main messages that emerged during the seminar, while the different chapters of this volume represent the contributions to the seminar itself.

2. Assets and the life-course perspective: "time" and "money"

Lives are shaped, to a certain extent, by the transfers of resources that flow from one institution to the other (family, communities, markets, and the public sector), and assets matter in this perspective. For example, poverty is not only due to insufficient incomes but also to lack of other resources (assets) that are strategic in shaping an individual's life.

Both time and money are crucial assets in this framework and should, indeed, be dealt within a dynamic perspective: their needs are different in different phases of life and multiple events may underpin changes in these assets over the life course. These include for example changes in: *a)* the level of employment (*i.e.* in the number of jobs held by

different members or in the number of hours worked by all household members); *b)* the percentage of household members working for pay (versus dependents); but also in *c)* the family structure following, for example, a divorce.

Working time options, but also time spent out of work, shape an individual's life trajectory. The rise of individualism in life styles and in the number of activities carried out beyond work underscores the need to consider the *time dimension* of individuals' life carefully. If individuals still highly value work, they also tend, increasingly, to value more non-professional times (such as those devoted to family, leisure and social commitments). Individuals are nowadays increasingly aware of their time needs over the life course. This increasing awareness is related to changes in the nature and content of jobs, to structural changes in the labour market and also to socio-cultural changes, such as those concerning partnerships and female labour participation (single parent households and dual earner households).

For many individuals, their current allocation of hours between market work and non-market activities represent active choices – they may work long hours, for example, because they wish to progress in their job and to accumulate assets that they can use to finance other activities at different stages in their life course, or they may work fewer hours in the market because at this stage in their life they give higher priority to the important work of caring or because they wish to study or simply to have "time out". However, many people also wish to change the balance of their activities; there is also the danger that current choice may have unforeseen and unwelcome consequences later in life, particularly for those undertaking caring responsibilities.

Welfare state regimes may contribute to reinforce or hopefully reduce the obstacles to a better balance of the use of time over the life course; but current working time options can also affect the sustainability of social protection systems. A life-course perspective may therefore help policy makers to narrow the gap between the preferences for, and the availability of, various ways to make working patterns more flexible over the life course.

In this context, balancing of work and family life has become a pervasive concept. The need to cope with family and work responsibilities appears for younger and older mothers; it appears for workers that need to care for small children; it appears when parents help their young/adult children to choose their education/work paths; it appears when they are older workers dealing with their own health problems. Young people also need to balance the time allocated for education and for other activities such as paid work and leisure activities. The ways through which work and family are balanced depend also on pathways taken early in the life course.

3. Investigating new social policy responses: the seminar

The development of new risks, and the additional complexity of already existing risks, raises key questions for social policy. Recognising these developments, the 2005 meeting of OECD Social Affairs Ministers asked the OECD Secretariat to undertake work on the topic of "Life Risks, Life Course and Social Policy", noting that "the OECD should identify how social and economic goals can be best achieved, for example by policy interventions at certain critical 'transition points' or by redistribution of income from one point in the life course to another. The OECD should further assess the best ways of financing social policies across the life course".

To respond to this mandate, the OECD held a seminar in Paris in May 2007. The seminar covered a range of topics, including conceptual issues, such as the rationale for government intervention in the life course; empirical questions, such as evidence for increased variability in life courses, and the actual amount and form of redistribution across the life course that currently takes place in existing tax and benefit systems; and more policy-focused questions on the range of existing policy interventions and their effectiveness.

3.1. The nature of social and economic changes in the new life-course perspective: addressing the issues

The keynote address by Lans Bovenberg on *"The Life-course Perspective and Social Policies: An Overview of the Issues"* (Chapter 2) notes that a number of trends are changing the nature of social risks and increase the importance of human capital, adaptability and flexibility. His paper discusses the usefulness of a life-course perspective in developing proactive social policies that better fit the changing life cycles of individuals who combine formal work with other activities on transitional labour markets. The paper gives special attention to the accumulation and maintenance of human capital over the life course and stresses that reconciliation of work and family goes beyond child-care facilities and parental leave, and involves the entire life course. In particular, longer and deeper involvement in paid employment allows people to exploit their longer life to reconcile the two ambitions of, first, investing in the next generation as a parent and, second, pursuing a fulfilling career in paid work in which one keeps learning. Greater flexibility of working time over the life course requires more individual responsibility for financing leave. Moreover, rather than shielding older insiders through employment protection, labour-market institutions should enable parents of young children to easily enter and remain in the labour market. Finally, more activating social assistance and in-work benefits should replace the passive income support for breadwinners that results in high minimum wage floors.

The paper argues for policies that transform passive benefits compensating for loss of human capital into preventive, proactive social policies that build and maintain human capital. Another conclusion is the importance of flexibility in wages and work practices. As workers increasingly combine their work with other activities (caring, resting and learning), new social-protection institutions should facilitate transitions and changing combinations of activities during the life course. Among other things, an adaptable labour force provides the legitimacy for competitive open markets and the creative destruction associated with rapid innovation and growth. Moreover, substantial human capital contributes to a high level of labour force participation as the basis for ensuring solidarity with vulnerable elderly, children and disadvantaged adults of working age.

However, transforming passive, reactive social policies into more proactive policies yields a transitional problem similar to that associated with a shift from a PAYG to a funded pension system. In particular, society still has to pay for passive benefits to the currently old generations; these generations have typically depreciated their human capital because they have not profited from more proactive social policies. At the same time, the human-capital investments in the young generations, which reduce social spending and increase tax revenues only with a lag, must be financed. The combination of passive old-age benefits and proactive spending aimed at especially the human capital of younger generations can create fiscal pressures and gives rise to difficult political choices.

As people gain more discretion to construct their own biographies, they become more responsible for their life courses. A challenge in this respect is to better prepare people for more responsibility for their employability, social insurance and financial planning. Schools, employers and unions can play an important role in helping people acquire the necessary financial competences and life and work skills. This may also make voters more aware of the fundamental trade-offs in social policy, thereby enhancing the quality of the political debate and policymaking.

3.2. The heterogeneity of life-course patterns: policy issues

Christine Erhel's paper on *"Life-course Policies and the Labour Market"* (Chapter 6) notes that life course is a dynamic concept that makes it possible to analyse individuals' trajectories over time. Life-course policies are starting to be developed in OECD countries and they constitute one of the integrated guidelines in the European Employment Strategy for 2005-2008 ("Promote a life-cycle approach to work") and a major thrust of the renovation of policies for the regulation of working hours in certain countries (for example, the Netherlands). These policies modify the traditional public policy approach, centred on certain phases of life or certain age groups, by introducing a global approach, consisting of giving individuals certain rights, resources and services enabling them to be the authors of their own life courses, especially concerning the allocation of working time (market and domestic) and leisure throughout their lifetime. The paper sets out the theoretical foundations for this global life-course approach, and discusses its implications for the labour market.

The main conclusions of the paper are that first, different social protection models and employment regimes have widely differing effects in terms of the life course. In general, the Nordic model turns out to be the most favourable in terms of flexibility in the allocation of time throughout a life span, facilitating the reconciliation of working and non-working life. However, it is still marked by some inequalities in life courses, especially between men and women. Second, looking beyond the differences between countries, there exists a general tendency towards individualisation of the management of time and to an extension of the period during which it takes place, via arrangements such as working time accounts. This tendency remains highly fragmented, however, and is most often limited to certain firms or certain categories of workers. The paper therefore argues that life-course policy provisions need to be improved in order to permit the constitution of new workers' rights.

4. Time over the life course

4.1. How to redistribute time over the life course? Assisting families in their role of carers

The paper by Colette Fagan and Pierre Walthery on *"The Role and Effectiveness of Time Policies for Reconciliation of Care Responsibilities"* (Chapter 3) reviews the available evidence on the role and effectiveness of different approaches to time-based policies designed to assist individuals in their role as carers (children and dependent adults) by enabling them to adjust the distribution of their work-time across the life course. Time policies which contribute to the reconciliation of domestic care responsibilities with those of employment include maternity at the time of birth, parental leave and other family leave options, part-time/reduced and other working-time adjustments.

The paper focuses on parental leave and on part-time hours (particularly the "right to request" reduced/flexible hours which exists in a few countries), but also mentions other working-time adjustments. The paper discusses the implications of these policies for individuals' careers and income across their working life, for aggregate (and firm-level) labour supply. The paper argues that appropriately designed social policies in this arena enhance the capacities of individuals, families and communities to deal with life events and risks (arrival of children, care needs of fragile elder parents, labour market uncertainties and future job security/career progression, income security) and for societies to progress a range of social and economic objectives (raising the female employment rate and optimising the use made of women's skills; sustainable fertility patterns; enhanced child welfare and family cohesion; family capacities to provide informal care for the ageing population).

The paper notes that national institutional arrangements exhibit a "time policy" orientation which shapes individual working-time options and the gender division of labour in households across the life course. The evidence suggests that parental leave has a positive impact on the employment integration of women providing certain elements are built into the design: the duration of leave is up to about a year, there is flexibility for the leave to be taken in more than one block or on a part-time basis; there is a reasonable level of earnings-replacement and the leave is complemented by the provision of childcare services.

It is still mainly women who use parental leave, even in countries where fathers have an individual entitlement or a reserved portion of a household entitlement. This means that while parental leave can improve the employment integration of women over the life course it perpetuates the practice whereby it is still mainly women who adjust their working patterns for care responsibilities. Fathers' take-up has improved in some countries, and the level of financing and flexibility are important pre-conditions for promoting this shift in men's behaviour.

Options for periods of part-time work can also enhance work-family integration across the life course; but in many countries there is a labour market penalty or scarring from a period of part-time work in terms of reduced occupational advancement or even downward mobility and an associated loss of earnings progression, which also impacts negatively on pension accumulation. The development of individual's "right to request" reduced or flexible hours offers potential for some employees to secure an hours-adjustment in their existing post and this may help to reduce the penalties for seeking part-time hours by opening up part-time opportunities in a wider range of positions. This is pertinent for the reconciliation needs of carers of adult dependents as well as parents with young children; and may become increasingly important in policy debates concerned with raising the employment rate of older workers and prolonging working life given that the likelihood of having elder care responsibilities increases sharply among the workforce aged 50+.

4.2. How to redistribute time over the life course? Examples from Belgium and the Netherlands

The paper by Stephanie Devisscher and Debbie Sanders on *"Ageing and Life-course Issues: The Case of the Career Break Scheme (Belgium) and the Life-course Regulation (Netherlands)"* (Chapter 4) focuses on the end of the career as a crucial element in the life course of employees. The paper explores the ways that specific policy measures (which stimulate flexible working conditions for older workers, by means of part-time

work or phased retirement) at the national level can contribute to the objective of a more active work force in the age group of 50 and older. The measures selected involve government, social partners, sectors and individual companies and employees. Moreover, they are illustrations of the hypothesis that the possibility of flexibility in working time will contribute to a longer career. The paper presents a detailed analysis of two policy measures focussing on part-time work and phased retirement in Belgium and the Netherlands, and also discusses programmes in Denmark, Sweden, Germany, the United Kingdom and the United States:

- The Dutch life-course saving scheme (LCSS) offers employees the opportunity to save a percentage of their gross income per year (with a maximum of 210%) to finance periods of unpaid leave or of early retirement. Studies on the Dutch career break show that it is expected that people will save mainly for financing early retirement.
- The Belgian time credit system has been established to enable all employees to take a break or reduce their working hours for a certain period of time in agreement with their employer and on condition that their position be filled by an unemployed person during their absence. The main aims were *a)* to create a redistributive effect on the labour market; and *b)* to encourage a better work-life balance. Detailed research on the effects of the Belgian scheme is difficult because there are a range of direct and indirect effects produced by the scheme, which can have both positive and negative consequences for the labour market supply of older workers.

The conclusions suggest that the systems are valuable and relevant tools supporting the policy objective of active ageing. Taking into account evidence from other OECD countries (Finland, Sweden, the United States and Japan), however, the author highlights a number of conditions needed to enhance the effectiveness of the tools. First, the set of social and labour market policy programmes, measures and legislation should be *consistent* towards the stimulation of the labour market position of older workers. There needs to be coherence between unemployment schemes for older workers, retirement systems (early retirement and old age pensions), invalidity schemes, policies to stimulate flexible working conditions and also life-long learning. Second, policies need to be delivered through a multi-stakeholder model taking into account objectives, needs and preferences of government, intermediary actors (sectors), individual companies and employees. Third, the systems should be checked on their relevance for target groups. The participation of persons in low skilled and or low/middle paid jobs to the schemes seems especially limited. Finally, it is important to decide upon the most appropriate type of financial incentives that are needed to induce a positive effect on the participation of older workers. Subsidy schemes like the Belgian career break system are relatively costly; while they appear to offer a potentially useful instrument for time reallocation, they may offer rights without obligations and have the danger to turn into another type of early retirement scheme.

Lei Delsen's paper on the *"Ins and Outs of the Dutch Life-course Savings Scheme"* (Chapter 5) analyses in detail the individual voluntary Life-course Savings Scheme (LCSS, *Levensloopregeling*) introduced in January 2006 in the Netherlands. This scheme, unique in Europe, offers employees the opportunity to save funds to finance periods of unpaid leave, and attracts tax concessions to those who do. The Dutch LCSS aims at increasing labour market participation of women and older workers. It supports

combining employment and family responsibilities by enabling employees to cope better with stressful periods in their life.

The paper finds that in 2006, the first year of operation, the LCSS had a low take-up among the Dutch employees. Actual participation was lower than expected by the government for various reasons, including the design and fiscal facilitation, myopia, the fact that LCSS is a recent innovation in competition with a more favourable scheme (*i.e.* the SSS), and more importantly that people with low income have limited incentive to participate. The scheme does not contribute to extending the working life of participants, and indeed the effect may even be negative, inducing early retirement in conflict with the aim of the scheme. Furthermore, the contribution of the LCSS in facilitating the free choice of individuals to plan their life course so as to balance the work-life balance over the life cycle is limited because of the low take up rate. Investment in human capital over the life cycle is not addressed in the present LCSS explaining why its use to finance education leave was very limited in 2006.

Although the LCSS performed poorly in 2006, the paper argues that the future of the LCSS looks brighter. The spread of employers' contributions to the scheme as well as the inclusion of the LCSS in more collective agreements will have a positive impact on the participation rate in the years to come. Recently announced government policy to expand and re-design the LCSS and to incorporate the SSS in the LCSS will also contribute to increasing the participation rate of the LCSS and to make it a more attractive scheme than at present.

5. Assets over the life course: how social policy fits in?

Michael Mendelson's paper on *"Asset-based Social Programmes: A Critical Analysis of Current Initiativ*es" (Chapter 7) looks at a range of new "asset-based social initiatives" intended to assist lower income households to increase their financial assets. The paper concentrates on programmes for households of pre-retirement age and that do not involve preparation for retirement. Some asset-based programmes do not involve fully liquid financial assets, in that the programmes may impose conditions requiring funds to be spent on a dedicated purpose – usually education, housing or small business.

The paper notes that asset-based programme initiatives are limited in number and that they concentrate only in few OECD countries such as the United Kingdom (which is introducing a large asset-based programme), the United States (which has many relatively small, individually-oriented savings programme), and Canada (which has introduced one new asset-based programme and is in the process of concluding a large, social experiment with a randomised control group). For these countries, the paper reviews the Child Trust Fund (CTF) and the Savings Gateway; in the United Kingdom, a range of small-scale programmes, including "Saving for Education, Entrepreneurship and Down payment" (SEED), and the Tulsa experimental individual development account in the United States and the Canada Learning Bond, the Canada Education Saving Grant and Learn$ave for Canada.

The paper reaches a number of conclusions, finding the evidence to be consistent across countries. People with low incomes *will* save if they are offered incentives and if the institutional structures are available to encourage them to save. In addition, most people will feel empowered by saving and will see their experience as positive. However, little is known beyond that. The author concludes that some of the rhetoric surrounding asset-based programme advocacy needs to be balanced with realistic expectations. Asset-

based programmes are not the new great panacea for the poor. While there is without doubt much to be learned by employing an asset-based perspective to review existing income security and tax programmes, this is not a technique which will radically alter existing programmes; rather, it will complement them.

The paper by Ann-Charlotte Ståhlberg on *"Redistribution across the Life Course in Social Protection Systems"* (Chapter 8) reviews available evidence on how the distribution of income is affected by taxes and benefits in public transfer systems. The paper notes that each year the public sector redistributes large sums between different individuals and households. This redistribution is carried out by means of taxes, transfers and benefits, and by means of publicly financed consumption. The various systems have widely differing motives, and in many cases redistribution of economic resources between the rich and the poor is not the primary objective. Pensions, child benefits and student allowances are examples of systems whose primary purpose is redistribution over the life course. The progressivity of taxes also acts as a source of income smoothing as during periods of higher income individuals pay proportionally higher taxes than during periods of lower income. All of these mechanisms can be regarded as being redistributive, whether between persons (inter-personal) or across an individual's life course (intra-personal).

The paper focuses on redistribution over the life course in social protection systems. How do inter-personal and intra-personal distributions differ in countries which have chosen completely different principles for shaping social policy? Particular importance is attached to comparing a country, such as Sweden with its highly universal welfare-state arrangements, with countries, such as Australia and Ireland, whose welfare systems have a strong element of targeting. The paper concludes that public social spending as a share of GDP is closely related to the degree of "universality" of public social spending. In countries with highly universal welfare-state arrangements, such as Sweden, the main part of social spending constitutes intra-individual redistribution – *i.e.*, the proportion of self-financed transfers and subsidies – rather than inter-individual redistribution – *i.e.* how incomes are redistributed between individuals – of lifetime income, in contrast to countries whose welfare systems have a strong element of targeting, such as Australia. Finally, in countries with large intra-individual redistribution over each individual's life cycle, the remaining part of public social spending (and its financing) is often sufficient, however, to generate considerable inter-individual redistribution of yearly income.

6. Some preliminary conclusions

The fundamental policy question addressed in the seminar was whether the current designs of social protection systems in OECD societies are well-suited to contemporary life-course realities. The answers to this question are diverse but some unifying messages emerge.

1. Virtually all OECD welfare states already have a wide range of programmes to redistribute resources across individuals' life courses. Analysis of the extent to which different welfare states either redistribute resources from rich to poor or across the life course shows that most current social spending involves lifetime redistribution. However, the life-course approach offers the opportunity to address questions such as: is redistribution occurring over the right portion of the life course or are there risks or periods of need not adequately covered by existing programmes?

2. The life-course approach gives a new set of lenses through which to look at issues, because it links different life events while taking account of the "dynamics of interrelated risks". However new analytical tools, which provide a new way of looking into issues, and more generally a new analytical framework, are needed. These tools and framework should account for the dynamics of and the links among different events.

3. A life-course approach requires a link to a consideration of the allocation of resources over the long term. While private allocation of resources over the life cycle is a well-known phenomenon, allocation of resources through "innovative" social policy is a newer concept. However, because many programmes are relatively recent in their introduction, it is probably too early to evaluate these new tools and draw definitive conclusions. Moreover, one should be very clear about the goals of these new schemes as they may be used simply as alternative to already existing programmes (*e.g.* to phase-out of the labour market cohorts whose human capital has depreciated). Careful evaluations of these new schemes are important, which obviously entails the collection of comprehensive data and the use of appropriate analytical tools.

4. It is also important to note that some innovative ways of managing time/money can shift risk management from collective to individual actors and lead to a shift from collectively financed to more individualised social security provision. Greater individualisation offers advantages in terms of personal choice and can improve incentives, but it is important to ensure that such a shift does not reduce security or reinforce existing inequalities.

Chapter 2.

The Life-course Perspective and Social Policies: An Overview of the Issues

Arij Lans Bovenberg[1]

A number of trends are changing the nature of social risks and increase the importance of human capital, adaptability and flexibility. This chapter discusses the usefulness of a life-course perspective in developing proactive social policies that better fit the changing life cycles of individuals who combine formal work with other activities on transitional labour markets. It pays special attention to the accumulation and maintenance of human capital over the life course and stresses that reconciliation of work and family goes beyond child-care facilities and parental leave, and involves the entire life course. In particular, longer and deeper involvement in paid employment allows people to exploit their longer life to reconcile the two ambitions of, first, investing in the next generation as a parent and, second, pursuing a fulfilling career in paid work in which one keeps learning. Greater flexibility of working time over the life course requires more individual responsibility for financing leave. Moreover, rather than shielding older insiders through employment protection, labour-market institutions should enable parents of young children to easily enter and remain in the labour market. Finally, more activating social assistance and in-work benefits should replace the passive income support for breadwinners that results in high minimum wage floors.

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1. Introduction

Life courses are becoming more heterogeneous in terms of the distribution of time over working, caring, learning and resting. As a consequence of the feminisation of work, workers increasingly combine a career in the formal labour market with family obligations. Moreover, in transitional labour markets, workers move between periods of full-time work to periods of voluntary (part-time) absence from the labour market to enjoy leisure, educate themselves, set up a business, or care for children or frail relatives.

These developments are changing the nature of social risks at a time when traditional institutions for insuring social risks are under pressure. In particular, firms can offer less job security to their employees in a dynamic economy with constant innovation and creative destruction. At the same time, governments find that insuring human capital through ex-post income replacements becomes increasingly costly in terms of harming the incentives to accumulate and maintain that capital.

This chapter discusses the usefulness of a life-course perspective in developing proactive approaches to social policy that better fit the changing nature of social risks over the life cycle. We pay special attention to the accumulation and maintenance of human capital over the life course as well as reconciliation of work and family. Human capital becomes more and more the key to personal fulfilment, stable personal relationships and social inclusion on a micro level, and to high levels of employment and labour productivity on a macro level. Human capital is produced not only in schools but also in families and firms. Reconciliation of work (including workplace learning in firms) and family (including informal care for young children) is therefore essential for safeguarding durable labour supply and an adaptable labour force generating substantial productivity growth. This chapter stresses that the reconciliation of work and family goes beyond child-care facilities and parental leave during the family phase, and involves the entire life course.

Section 2 considers a number of trends that are changing the nature of social risks and call for a life-course perspective. These trends point to an increased importance of human capital, adaptability and flexibility. The most important components of human capital – the ability to learn, emotional resilience and the capacity to work well with others – are shaped early in life. Section 2 also considers a number of challenges that endanger the level and quality of human capital at a time when corporations and governments are withdrawing from their traditional roles as insurers of human-capital risks.

To investigate the role of social policy, Section 3 investigates the market and institutional failures that damage human capital accumulation and hamper flexibility and adaptability over the life cycle. Traditional social policies, such as compressed wage scales and job protection, are becoming increasingly counterproductive in generating security. This calls for institutional innovation in developing new proactive approaches to social protection over the life cycle. Section 4 employs the life-course perspective to describe various elements of such approaches. Section 5 concludes by focusing on the political economy of reform.

2. Trends and challenges

2.1. Trends

Female human capital stronger

Female labour force participation has increased strongly in almost all OECD countries over the last few decades (see Figure 2.1). A major factor is the increased supply of female human capital as a result of better-educated women, improved birth control, better household appliances, and changing female aspirations (Golden and Katz, 2002). At the same time, increasing employment shares of the service sector and technological developments have boosted the demand for female labour by facilitating part-time work and by raising the demand for communication and creative skills at the expense of raw muscle power in the industrial sector (Golden, 2006). The increased potential earnings of women in the formal labour market reduce the scope for specialisation in home production between male and female partners and encourage more gender equality (Jones *et al.*, 2003). As a direct consequence, both male and female employees increasingly combine a career in the formal labour market with family obligations (see Table 2.1). About half of the working European workforce combines paid work with unpaid work of at least 12 hours a week (Groot and Breedveld, 2004). Moreover, life courses become increasingly heterogeneous in terms of the distribution of time over working, caring, learning and resting, as people are more and more able to construct their own choice biographies.

In eastern European countries, in contrast, women's participation rates have not increased, as the transition weakened the labour-market position of young women and reduced family-related supports and benefits. Moreover, in contrast to most other European countries, the traditional male breadwinner model remains the preferred model in several eastern European countries. Table 2.2, which provides the results of a survey of preferences on gender role models carried out in 2002, illustrates this.

Large cross-country differences in the levels of female participation exist, especially for low-skilled women. Whereas participation ratios of high-skilled women (with tertiary education) exceed 75% in all EU countries, participation ratios of low-skilled women (with less than upper secondary education) vary substantially from above 50% in Nordic countries and France to close to 35% in southern and eastern Europe (see Figure 2.2).[2] Although the presence of young children depresses the participation rates of women, employment rates of both mothers with young children and other women rise strongly with the educational level, even though high-skilled mothers opt for part-time work much more often than their childless peers (see Tables 2.3 and 2.4). Indeed, highly educated women appear to combine work and family by reducing their working time rather than by exiting employment, thus remaining in touch with the labour market. These data bear out the close complementarity between human capital (as measured by the level of education), on the one hand, and the employment level, on the other hand.

2. Portugal is an exception in southern Europe. These participation ratios are based on participation in the formal sector and thus do not include the participation of low-skilled women in the informal, grey economy (for example, by providing cleaning services).

Human capital more important

The importance of the educational level as a crucial determinant of female labour participation points to human capital as the key to a successful career in a modern knowledge-intensive economy. Indeed, several studies indicate that the skill premium has increased as human capital has become scarcer (Autor and Katz, 1999). The additional demand for skills on account of rapid technological change outstrips the additional supply of skills as a result of a better-educated workforce.

At the same time, work and career are increasingly important for personal fulfilment and development, life-long learning, the maintenance of social networks and (mental and physical) health. This holds true not only for men but also increasingly for women. Indeed, well-educated women aspire to the independence and fulfilment that paid employment brings. Access to employment, and thus workplace learning, prevents not only social exclusion but also depreciation of skills as a result of rapid technological change.

Longer life and rapid innovation call for life-long learning

Increased longevity implies that human capital has become more durable. Average life expectancy at birth has increased by about 2½ years per decennium since 1950 in the countries included in Table 2.5. Life expectancy at age 65, which is more relevant for the costs of pensions, rose by on average one year per decennium (Table 2.6). At the same time, knowledge and specific skills age faster on account of creative destruction associated with fierce competition and rapid innovation. The combination of a longer life combined with faster obsolescence of skills and the increased importance of human capital implies more need for life-long learning.

An adaptable labour force enhances the legitimacy of competition

Also the creative destruction associated with a competitive, innovative economy requires greater adaptability and employability of the workforce to prevent a competitive market economy from losing its social legitimacy. By absorbing the idiosyncratic shocks associated with creative destruction, an entrepreneurial workforce empowered with sufficient skills safeguards the legitimacy of a dynamic market, thereby boosting productivity growth. Moreover, an adaptable labour force can embrace risk, thereby raising the supply of risk-taking capital for additional R&D and risk-taking entrepreneurs who experiment and challenge existing firms. More generally, in a continuously changing and highly competitive environment of a modern economy, intellectual flexibility, emotional resilience and the capacity to work well with others are at a premium.

Non-cognitive skills are becoming more important and are shaped early in life

Adaptability and the ability to learn are important components of human capital. The same holds true for non-cognitive skills (such as social and communication skills facilitating stable relationships, self-discipline, self-control and self-esteem, perseverance and other virtues, emotional security, time preference, motivation to learn, openness to change) and values stressing creativity, personal growth, responsibility, and readiness to meet challenges. These skills and values, which enhance adaptability and the ability to learn throughout the adult life, are shaped early in life, mainly in families.[3] Early child

3. See Heckman (2000) and Cunha *et al.* (2005) for the theory and evidence on human-capital formation over the life cycle and the key role of the family as the producer of skills.

development therefore gains in importance in accumulating key skills for successful careers in paid work and stable, supportive personal relationships in two-parent families easing the stresses of life (Council of Economic Advisers, 1997). In order to lay the basis for life-long learning through child development in families, while at the same time maintaining the marketable skills of parents, workers should be able to reconcile work with family obligations. Indeed, work is important to maintain skills because an important part of skill formation occurs on the work floor through on-the-job training.

Aging makes human capital more valuable

Aging raises the importance of human capital. More funding of pensions raise capital-labour ratios, thereby depressing returns around the world and at the same time raise wages (Boersch-Supan *et al.*, 2006; Aglietta *et al.*, 2001). Moreover, if commodities and services are not perfectly tradable, shifts in the real exchange rate and real wages imply that the return on pension saving fall – even in a small open economy that is perfectly integrated in world financial markets. Intuitively, as the older, inactive generations become larger in number compared to the active working generation, a tight labour market raises real wages, thereby depressing the real value of the capital that the older generations have accumulated (Knaap, 2005). Aging thus makes human capital more valuable. Accordingly, investment in human capital becomes more attractive compared to that in other capital. Aging thus increases the need to not only save more in the form of financial capital but also invest more in human capital. In particular, high levels of human capital and employment ensure that the additional financial savings that result from more funding do not result in low rates of return.

2.2. Challenges

We can identify several challenges involving the need to create more room for investments in human capital, particularly those that foster the adaptability of parents and their children.

Maintaining the intergenerational contract

A first challenge is to maintain social cohesion in the face of a population that is aging on account of increased longevity and declining fertility. In particular, aging threatens the intergenerational contract according to which each generation invests in the human capital of the next and is taken care of at the end of its life by the generations in which it has invested. Hence, each generation cares twice (once for the previous and once for the next generation) and is taken care of twice (as a child and in old age). Within a family context, women are the traditional brokers of the intergenerational contract, providing most of the informal care to children and aged relatives.[4] The higher potential earnings of women in the formal labour market have increased the opportunity costs of these activities at a time when most elderly have fewer younger relatives who can care for them as a result of shrinking family size. Moreover, the middle aged face a heavy tax burden as the large baby-boom generation starts to take advantage of pay-as-you-go (PAYG) pensions and health care provisions. This threatens the

4. Time surveys indicate that women in couples still provide the bulk of informal care and work within the household (see Table 2.1). Even women in full-time work spend about twice as much time on these activities as their male partners do (OECD, 2001a). Women older than 50 provide a lot of informal care to aged relatives.

sustainability of the public intergenerational contract according to which the middle-aged must care not only for the very old but also for the very young.

Stopping the vicious circle of early retirement and rapid depreciation of human capital

The so-called work-age paradox exacerbates this threat. Whereas life expectancy increases and people enjoy better health at 65 years of age than ever before in history, the effective retirement age, in Europe especially, has fallen substantially below 65. Biological aging and social aging have thus moved in the opposite direction. As a direct consequence, the expected retirement span has increased substantially while the working life is being compressed. Indeed, many OECD countries depreciate their human capital quickly (see Figure 2.3). Across the OECD, the number of years that men can expect to spend in retirement has increased from an average of 11 years in 1970 to 18 years in 2004. For women, the corresponding numbers are 14 and 23 years (see Figure 2.4).

Maintaining investments in younger generations

With increased longevity, earlier retirement and the compression of the working life, the aging European continent risks becoming entangled in a vicious circle of early retirement and lower fertility in which politically strong older generations favour generous passive spending on pensions and health care at the expense of investments in the human capital of younger generations. The decline in fertility in various European countries implies that current generations are investing less in future generations (see Table 2.7).[5] The opportunity costs of raising children in terms of foregone career possibilities seem excessive for many high-skilled women, who opt for a career in paid work rather than raising children.[6] Low-skilled women, in contrast, make the opposite choice. Indeed, highly educated women feature the lowest fertility rates, while more than a quarter of high-skilled women remain childless (Schoenmaeckers and Lodewijckx, 1999). Moreover, countries featuring the largest increases in female participation rates tend to show relatively large declines in fertility rates (Chart 4.1 in OECD, 2001a). The low fertility rates of high-skilled women have adverse consequences for the future quality of human capital, because the skill level of children tends to be closely related to that of their parents (Plug en Vijverberg, 2003).

Families face difficulties in reconciling work with rearing children. In particular, the Employment Options of the Future (EOF) survey carried out in 1998 in EU member

5. Actual fertility levels are not a good measure of the true level of fertility because they are sensitive to changes in the timing of births. Also completed fertility, which measures the average numbers of live births at the end of the childbearing years, indicates that fertility has dropped below replacement levels in almost all European countries (Schoenmaeckers and Lodewijckx, 1999).

6. Recent research shows that the gender gap in wages is to a large extent a "family gap". In the United Kingdom, for example, the gender wage gap (that cannot be explained by other observable factors) for men and women without children is 10%, but increases to more than 30% for those with children and stays at 25% for those whose children have grown up (Paull, 2006). Similar consequences of motherhood are found for hours worked, with little shrinking of the work gap when children have grown up. Rather than a time when many mothers return to work, school entry of the child is in fact a time of high labour-market turnover – with mothers both moving into and out of work and changing their working patterns. Indeed, substantial gender wage and work gaps persist 30 years after birth. Motherhood thus substantially harms the human capital of women, especially for high-skilled women (Anderson *et al.*, 2002).

states shows that many couples with children under the age of six prefer to work shorter hours, even taking into account the need to earn a living (see Tables 2.8 and 2.9). About half of the working population in the EU would prefer to reduce their working hours with a corresponding cut in pay (EFILWC, 2003). Moreover, European women would like to bear more children than they actually have. In some countries, the difference between desired and actual number of children is as large as –0.7 (Schoenmaeckers and Lodewijckx, 1999). When considering options for combining work with other activities, European workers consider flexible working times and time-bank arrangements to save overtime as the most promising options (see Table 2.10).

Insuring human capital while protecting the incentives to maintain human capital

Various developments increase the dangers of moral hazard and hence make human-capital risks less insurable. As the economy shifts from blue-collar work in industrial sectors to white-collar work in service sectors and knowledge-intensive activities, mental causes of sickness and disability become more prominent. These types of sickness and disability can be less easily verified than physical disabilities. Moreover, an increasing number of workers now move between periods of full-time work to periods of voluntary absence from the labour market to enjoy leisure, educate themselves, set up a business, or care for children or frail relatives. In such a transitional labour market with a growing diversity of life courses, it becomes more difficult to separate voluntary periods of inactivity from involuntary unemployment. At the same time, individuals can increasingly affect the probability that they become unemployed or sick by investing in their own employability or by the way in which they organise their life. In other words, the dividing line blurs between the contingencies that people are responsible for (the so-called manufactured or voluntary risks) and those for which they are not (the so-called external risks). More and more periods in which people experience a cut in income are in part "manufactured", increasing the risk of moral hazard in social insurances that protect people against these losses in income.

These changes in the nature of and the responsibility for social risks make it more costly to insure human capital through ex-post income replacements in terms of harming the incentives to accumulate and maintain that capital. At the same time, a more dynamic world economy and a decline of the extended family as an insurance device have increased the demand for such insurance as people experience more substantial economic insecurity.

Empowering workers to become less dependent on corporations

Also corporations can offer people less job security. Fewer and fewer employees work for 40 years for the same company. More intense competition implies that companies exhibit shorter life spans. In a dynamic economy, constant innovation results in substantial creative destruction. Firms can thus offer less security to their employees. Within firms, employees have to update knowledge and qualifications regularly as they move between different jobs on the internal labour market. These developments point again to the importance of continuously maintaining and updating skills in order to guarantee income security. Making workers less dependent on their employer requires more employable workers through more general human capital.

Protecting social cohesion

The labour-market position of unskilled workers (including many unskilled migrants) weakens as a result of technological and other developments. Together with the relatively high minimum-wage floors in European labour markets, this produces structural

unemployment yielding social exclusion of the unskilled. These minimum-wage floors are compatible with high levels of employment for vulnerable groups only if expensive and intrusive active labour market policies assist disadvantaged adults in entering the labour market and if early-intervention programmes help disadvantaged children to accumulate sufficient skills. By reducing the budgetary room for such activating and preventive policies, the large call of the elderly on public resources threatens not only intergenerational but also intragenerational solidarity protecting disadvantaged adults who lack human and social capital.

2.3. A life-course perspective

Reconcile career and family in longer life

A modern knowledge-intensive economy requires longer periods of learning so that young adults start their working lives later. At the same time, older workers terminate their working careers earlier as effective retirement ages decline or stagnate, even though life expectancy increases. People thus concentrate work effort increasingly in the relatively short life season in which they also raise children (see Table 2.11 and Figures 2.5 and 2.6). At the same time, many parents wish to look after their children, especially immediately after childbirth. The key challenge is to accommodate these preferences by allowing parents to strengthen family life while also maintaining their human capital through continued attachment to the labour force so that they can enjoy long, fulfilling careers.

From dividing tasks in breadwinner model to combining work and family

The traditional breadwinner model relies on a strong division of labour between men and women. In the face of an eroding comparative advantage of men in paid work, young generations increasingly combine various activities by engaging simultaneously in learning, working, caring and relaxing. The relative importance of these activities varies during the life course, depending on family obligations and idiosyncratic and macro-economic shocks.

Spring and fall complement summer and winter

In the modern longer life course, adults spend considerable time in households without young children as a result of delays in family formation and parenthood as well as death. Indeed, in the "spring" of the modern life course (or early adulthood phase or "playtime of life"), young adults first experiment with relationships and jobs before they take responsibility for raising children during the "summer", the family season when adults bear the responsibility for raising minors. After their children have grown up, adults typically spend considerable time in good health in the "fall" season of their life course (or the active senior phase) before they enter "winter", the last phase of life in which people suffer from serious health problems. The modern life course is most apparent in northern Europe. In this region, many people in the age brackets between 20 and 30 and between 50 and 60 live as singles or as couples without children. In southern Europe, in contrast, the extended family is still dominant in these age groups. Figure 2.7 illustrates these different household patterns over the life course for Denmark (representing northern Europe) and Spain (representing southern Europe).[7]

7. Kalle *et al.* (2002) provide these data for twelve other EU countries.

The summer season in the modern life course is quite hot. The costs of living are high while time is scarce, as parents invest not only in their children but also in their careers. During this so-called "rush-hour of life" people may experience "combination stress". Compared to other European household types, families with co-residing children are least satisfied with living conditions, including their work (or main activity), income, housing, and leisure time (Avramov, 2002).Time pressure can result in broken relationships and burn out. Especially single-parent households face both a "time crunch" and a "money bind". In the spring and the fall, in contrast, the climate is more moderate. Adults thus do not have to care for young children and enjoy relatively high purchasing power. Figure 2.8 presents the purchasing power (corrected for the number of persons in the household) for the dominant household type for each age group in a typical northern and southern European country (the Netherlands and Italy, respectively).The figure clearly shows the relatively affluent spring and fall seasons. In Italy, in contrast, the main transition is between leaving the family of the parents and starting a family with children oneself.

3. Economic theory and empirical evidence

To explore the role of social policy, this section investigates relevant market and institutional failures in the accumulation of human capital over the life cycle.

3.1. Market failures

Liquidity constraints

Agents cannot borrow against the future value of human capital because of adverse selection and moral hazard. Indeed, financial institutions cannot use human capital as collateral to ensure that loans are paid back. Liquidity constraints discourage parents from investing in the human capital of themselves and their children and tend to increasing the time pressure on young parents (Apps and Rees, 2004).

Capital-market imperfections also prevent agents from smoothing consumption over time in the face of various shocks. This stimulates precautionary saving because the presence of a financial buffer helps agents to optimally diversify temporary risks over time. Indeed, precautionary motives rather than saving for retirement tend to be the main reason why young households save (Cocco *et al.*, 2005).

Externalities of children

By socialising the intergenerational contract, PAYG pension and health insurance systems insure against childlessness. Children who have been reared by others support the elderly without children. By bearing children, parents thus generate positive external effects for the childless. This provides an argument for public support of children through family support and publicly funded primary education and child care (Sinn, 2000). This public support should increase with the opportunity costs of raising children (due to, *e.g.*, loss of career opportunities and higher costs of raising children in a complex society), the social benefits of investing in the non-cognitive skills of young children, and the PAYG benefits provided to the elderly.[8] The case for public support for households

8. These latter external effects of children are measured by the net tax burden on unborn generations computed by so-called generational accounting (Auerbach *et al.*, 1999). These measures account for all

with children is stronger if these households cannot finance investments in children because they face capital market imperfections, including liquidity constraints. Table 2.12 reveals how much governments spend on family services and benefits compared to pension spending and other spending on the elderly.

In the case of grants to families, the traditional arguments based on consumer sovereignty in favour of cash grants over in-kind subsidies are modified because children do not have a say in how parents spend cash grants. In order to ensure that the public resources benefit the children, the government may thus want to provide benefits in kind. Indeed, the key market failure is that children cannot choose their parents, are not able to buy services from them, and cannot ensure against being born in a disadvantaged family (Cunha *et al*., 2005).

As regards externalities of parental leave on children, Ruhm (2000) and Tanaka (2005) find on the basis of panel data for 16 European countries (and in the case of Tanaka, 2005, also for Japan and the United States) that job-protected paid parental leave enhances pediatric health. Parental time thus is an important investment in the human capital of young children. Care responsibilities can be outsourced, for example through formal child care. However, some more personal dimensions involving emotional attachment and care are difficult to contract out, especially in the beginning of a child's life (Plantenga, 2005). Blau (1999), Cunha *et al.* (2005) and Blau and Currie (2004) find that the features of the home environment are especially important in shaping the cognitive and non-cognitive abilities and talents of young children.

The relationship between maternal employment and the cognitive development of children has been studied for the United States, which features only limited statutory maternity leave and publicly funded child care. These studies find that maternal employment tends to hurt the child's development during a child's first year. As regards the impact on the mother's employment on older children, evidence is less conclusive and depends on the nature of the work performed by the mother and the child-care and school arrangements[9] (Blau and Currie, 2004). Ruhm (2002) finds that children appear to perform better when their mothers work part-time rather than full-time during their second and third years of life. An additional 20 hours per week of mother's employment during the first three years of life harms the reading and mathematics performance of five- and six-year olds by about 0.10 standard deviation.

Externalities of human capital formation

Welfare states protect the living standard of citizens who lack sufficient human and social capital to maintain a minimum standard of living. The implicit income insurance provided by the intragenerational social contract harms the incentives to accumulate human capital, supply labour, and form stable personal relationships. This provides arguments for public early intervention in case of disadvantaged groups and dysfunctional families (Haveman and Wolfe, 1995) and public support for basic education more generally (Bovenberg and Jacobs, 2005).[10] These instruments can help to ensure that

public spending and taxation. For a survey of the literature of the effects of family policies (such as parental leave, child benefits and subsidised childcare) on fertility (Björklund, 2007).

9. To illustrate, adolescents tend to suffer as a result of maternal employment if they are left unsupervised after school.

10. Also other market imperfections, such as monopsony power of employers, a compressed wage structure, liquidity constraints, lack of contractibility of training, may prevent the efficient sharing of costs and

citizens enter adult life with sufficient human capital and interpersonal skills. These citizens thus do not have to rely on social assistance but are productive enough to earn the minimum standard of living. The welfare state insuring against a lack of human capital makes human capital (including a work ethic) a merit good that yields positive externalities in terms of lower welfare payments for society at large.

Learning is a dynamic process exhibiting increasing returns to scale: learning begets learning, as skills acquired early in life facilitate further learning (Knudsen *et al.*, 2006). Empirical evidence indeed suggests that learning is most effective when it begins at a young age: marginal returns on schooling are highest for the young (Council of Economic Advisers, 1997). For elderly workers whose skills have become obsolete and who lack marketable skills, in contrast, in-work benefits rather than public training programmes are typically the most efficient way to attach them to the labour market and to build human capital through learning-by-doing in private firms (Heckman, 2000). Indeed, adults prefer to learn through learning-by-doing in a work setting. Heckman *et al.* (1998) estimate that post-school learning in firms accounts for almost half of all skill formation in modern economies. Indeed, life-long learning is implemented primarily outside the formal education system in firms.

A related market failure involves the impact of the tax system on work. Redistributive taxation harms labour supply, which yields underinvestment in human capital. It also encourages individuals to substitute time away from taxed formal work into untaxed home production (Sandmo, 1990). This is an argument in favour of subsidising child care. Blau and Currie (2004), however, argue that the best available evidence suggests that the effects of child-care subsidies on labour-force participation tend to be rather small, as formal care crowds out informal care.

Adverse selection in labour markets

Privately negotiated labour contracts may yield inefficient solutions due to adverse selection. To illustrate, firms may not voluntarily offer socially optimal leave schemes if low-risk individuals who are not likely to take advantage of these schemes signal their status to employers by agreeing to contracts providing little or no leave (Aghion and Hermalin, 1990). Government mandates forcing firms to offer leave schemes (*e.g.* parental schemes) combat this adverse selection. The same holds true for collectively negotiated mandates applying to a whole industry. These mandates may encourage the development of more inclusive and flexible workplace cultures in which workers who temporarily work shorter and more flexible hours remain employable and can enjoy fulfilling careers. This, in turn, is likely to strengthen social norms facilitating the combination of work and family obligations.[11]

Most of the recent evidence suggests that public parental leave mandates increase female employment, but that lengthy entitlements depress the relative wages of women. Based on a panel of nine European countries (Ruhm, 1998), for example, finds that job-protected leave paid by the government raises female participation by about 3%. Apparently, women enter the labour force in order to qualify for leave benefits, while job-protected leave accelerates the return to work of young mothers. Brief leave

benefits of training and thus result in underprovision of training (see OECD, 2003, Chapter 5, Section 2). Liquidity constraints may hurt training especially for low-skilled workers. Low-skilled workers may lack funds also to invest in the human capital of children (*e.g.* by reducing working time).

11. For how changes in work patterns can change preferences and social norms (Lindbeck, 1997).

entitlements (three months) do not affect women's earnings, but lengthier leave (nine months and longer) depresses relative wages by about 3%. Indeed, with longer leave entitlements, employers face higher rescheduling costs in replacing young mothers during leave, especially in countries that restrict temporary fixed-term contracts. Moreover, a woman bearing multiple children depreciates her human capital by being away from her job for several years.

Lack of foresight

Behavioural economics is gathering more and more evidence that individuals suffer from myopic behaviour and that they have difficulty planning for the future. To illustrate, many individuals believe that they should be saving more for retirement but are unable to do so (Laibson *et al.*, 1998). People apparently lack the self control that is required to implement a savings plan. Individuals may thus experience an unanticipated drop in consumption when their incomes decline as a result of retirement or the birth of children.

A convenient way to model this behaviour is hyperbolic discounting. With this type of discounting, nearby events are discounted more heavily than events that are still far away. These preferences imply time-inconsistent behaviour and cause individuals to seek ways to commit themselves by restricting their discretion to reverse earlier decisions. Hyperbolic discounting can explain why women may understate the importance of remaining attached to the labour force in terms of protecting their future earning capabilities.

3.2. Institutional failures

Early retirement…

Various schemes encouraging early retirement have resulted in workplace cultures that fail to maintain human capital. Various schemes facilitating early exit from the labour force have also produced an early retirement culture setting in motion a vicious circle: workers retire early because their skills are obsolete, while human capital is not maintained because people can retire early and thus feature only a short time horizon and a low utilisation rate of human capital. Indeed, cross-country data show a strongly positive correlation between spending on training and the effective retirement age (OECD, 2006a). In Europe, additional leisure time after retirement is not used actively but rather for home-centred leisure activities and watching TV in particular (Avramov and Maskova, 2003).

The waste of human capital as a result of early retirement originates in the erroneous belief that early retirement reduces unemployment because the amount of work is fixed: the so-called "lump-of-labour fallacy". In fact, early retirement has contributed to unemployment by putting a heavy financial burden on companies and families with young children.[12] Moreover, early retirement has nurtured working place cultures in which careers must be made during the time when people bear family responsibilities for young children, thereby creating time pressures in the family season of life in the age range between 30 and 45. By thus preventing men from taking on more household duties and caring for children, these cultures have fostered gender inequalities in employment and earnings patterns. Indeed, fathers often cite workplace cultures as the key reason why

12. Indeed, countries with the lowest participation rates (and thus labour supply) feature the highest unemployment rates (Burniaux *et al.*, 2004) and (OECD, 2006a).

they are not more involved with their families (EFILWC, 2003). This explains why the European countries with the lowest effective retirement age also feature the lowest female participation and fertility rates. In this connection, early retirement has also worsened liquidity constraints in early adulthood by transferring resources away from this early phase in the adult life cycle to the active senior phase of the life course.

…and lack of wage flexibility

An important factor explaining the low effective retirement age in Europe is the lack of wage flexibility for elderly workers, which reduces labour demand and thus results in a weak labour-market position of these workers. Since many social benefits (provided by unemployment and disability insurance, for example) are directly linked to previously earned wages through fixed replacement rates, elderly workers who have experienced a decline in their earning potential are hard pressed to find a job that is acceptable to them, and therefore reduce their search intensities.

Wage rigidity explains the increase in structural, long-term inactivity in Europe following adverse macro-economic shocks and in the face of more idiosyncratic shocks to earning potentials of individual workers due to more creative destruction. Whereas European displaced workers experience smaller income losses than their American colleagues, they face smaller reemployment probabilities, resulting in further rapid depreciation of their human capital rather than restoration of old levels through on-the-job learning (Lunqvist and Sargent, 1998).

Another factor weakening the demand for older workers is the implicit labour contract according to which workers are underpaid when young and overpaid later on. This contract can encourage young workers to invest in firm-specific human capital and promote workers' effort and cooperation. At the same time, however, it ties older workers with golden chains to their employer. Moreover, it makes older workers dependent on the survival of the firm they work for and discourages entrepreneurship. These workers thus experience a lack of security associated with "fear of falling" in a dynamic economy in which creative destruction causes companies to exhibit shorter life spans. Indeed, the implicit contract creates a gap between the *insiders* who are lucky enough to work for a surviving firm and the *outsiders* whose firms have not survived.

Another drawback of the implicit contract is that it requires a mandatory retirement age at which workers are laid off (Lazear, 1979). Hence, the speed and extent of phased retirement cannot act as a buffer for absorbing aggregate financial market and aggregate longevity risks. In an actuarially neutral pension system, working one year longer (and thus receiving annuities one year later) tends to raise their pension by about 8%. The speed and timing of retirement is thus a powerful instrument for absorbing risks.

Employment protection

Social insurance systems in various European countries protect breadwinners against income shocks through employment protection legislation and social insurance linked to previous earnings. These systems shielded families against poverty at a time when the earning potential of women was low and men could look forward to a continuously increasing wage profile in a single-track full-time career. In modern economies that rely on creative destruction and feature a large potential labour supply of female skilled workers who aim for careers in paid work, these systems protecting insiders are increasingly costly in terms of wasting human capital of outsiders, tying older incumbents to the fortunes of their employer, and discouraging these insiders from moving into new

jobs that better fit their life season. Paradoxically, workers seem to feel more secure in those European countries in which employment protection is lowest (Cahuc and Kramarz, 2004). One reason is that employment protection discourages not only firing but also hiring, thereby reducing the turn-over in the labour market and thus the jobs that are opening up for new entrants to the labour market and those that want to get out of their current jobs. Rather than the difficulty of being laid off from the current job, the ease with which a worker can find a new job is becoming increasingly important in determining the sentiment of security in a transitional labour market.

In addition to preserving the status quo when innovation requires new work practices, employment protection discriminates against outsiders by slowing down turnover in the labour market. The lower probability of finding a good job in a dual labour market depresses the labour supply of secondary workers and raises the opportunity costs of bearing children for young, highly educated women. In countries with strict employment legislation in which workers hold permanent highly protected jobs, women face both higher unemployment risk and the prospect of lower future wage growth (through foregone experience and delayed wage growth) if they temporarily (or on a part-time basis) exit the labour market during the childbearing years. Indeed, worsened future career prospects rather than foregone earnings during the relatively short period spent with the baby account for the bulk of the opportunity costs (in terms of lower lifetime income) of becoming a mother (or of sharing household work and caring for a child as a father). Thus, whereas the literature has traditionally focused on maternity benefits and child care as the key towards reconciling work and family life, an inclusive labour market is at least as important because in such labour markets young workers do not have to engage in costly rent seeking to acquire highly protected jobs when they build a family.[13]

On the basis of a panel of OECD countries for the last 35 years (Adsera, 2004a) shows that countries with labour-market institutions facilitating women's exit and entry in the labour market combine high fertility rates with high female labour supply. This third factor of rigid labour markets protecting insiders at the expense of younger workers explains why the cross-country correlation between fertility and female labour-force participation, which has traditionally been negative (conforming to the theoretical predictions), became positive in the mid-1980s (Da Rocha and Fuster, 2006). In particular, fertility dropped in southern European countries (with traditionally low female participation rates) when structural unemployment rose. In the same vein (Kugler and Pica, 2003) find that employment protection in Italy raises employment for men, who are more likely to be insiders, at the expense of women, who are likely to be outsiders. Indeed, employment protection substantially depresses the hiring of young women.

Bertola *et al.* (2002) show that employment protection and wage compression price women as well as young and elderly men out of employment and into other states (the informal economy, home making, education and retirement).[14] By discouraging employment of young adults and the elderly, these labour-market institutions thus contribute to the compression of the working life. Moreover, young adults stay in full-time education longer than would be optimal. As a direct consequence, social

13. Using the European Community Household panel for 13 European countries (Adsera, 2004b) finds that, compared to maternity benefits, flexible labour markets that do not penalise part-time work are more effective in stimulating fertility.

14. OECD (2006a, Chapter 3) also shows a significant negative relationship between employment protection and the employment rate of the population aged 50-64 across OECD countries.

adulthood and the responsibility for supporting oneself is increasingly postponed beyond the age of biological maturation.

Using aggregate evidence for 12 European countries (Becker *et al.*, 2004) find that low job security of children compared to their parents prevents young people from leaving the parental home and starting their own family. In particular, if the 20-30 year olds would have secure rather than insecure jobs, co-residence rates of children with their parents would decline by 13 percentage points. For parents aged 50-59, co-residence rates with their children rise by 9 percentage points if they have secure rather than insecure jobs.

Housing market: insiders versus outsiders

Young households often face difficulties entering not only the labour market but also the housing market. To illustrate, rent control protecting incumbent renters typically reduces the rental housing supply for new entrants and results in the rationing of rental properties. As a direct consequence, workers find it difficult to move around. This hurts their job prospects and, more generally, the flexibility of the labour market.

Tax incentives that are not targeted at new entrants may drive up house prices. High house prices reallocate resources from young households who have not entered the housing market towards older incumbents. Imperfect capital markets that prevent young households with insecure jobs from taking out mortgages add to the strain experienced by youngsters. The difficulty of entering the labour and housing markets discourages young people from starting a family. This lengthens the period of social adolescence, thereby postponing the establishment of a durable relationship and parenthood.

Internal flexibility of firms

Workplace practices and cultures in many countries are still oriented towards the full-time male breadwinner who can devote all of his time and energy to his career. Senior male management and unions (often dominated by older male workers) sometimes lack leadership in introducing family-friendly workplace measures. These measures include flexible leave policies (parental leave, emergency leave to care for sick elderly relatives or children); flexible working hours (*e.g.* school-holiday adjusted working hours; part-time work; flexi-time); flexible working arrangements (like tele-working); support with child-care and eldercare; and provision of training during or after leave so that the allocation of work over the life cycle is better adjusted to the biological clock of women.[15] Even if some of these facilities are present, workers sometimes fail to take advantage of them because they fear that doing so would harm their careers (Groot and Breedveld, 2004).[16] Indeed, employers may perceive women who take time off for childbirth as less committed to their career than male breadwinners, and are therefore less likely to invest in female career opportunities. This produces a vicious circle, as many women do not pursue a career in view of a limited likelihood to advancement.

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15. Some countries are more successful than others in more fully reintegrating mothers into the labour market when their children have grown older (Klammer, 2005).

16. Employee surveys suggest that workers especially value flexible working hours and short-duration leave schemes (see Table 2.10 but also OECD, 2001a). For an overview of indicators of these arrangements see OECD (2001a), Table 4.8. Access to part-time work boosts female labour-force participation see OECD (2003), Chart 3.3.

Empirical evidence suggests that the career effects of taking parental leave differ substantially across countries, reflecting different workplace cultures. To illustrate, Kunze (2003) finds that taking parental leave substantially reduces future wage growth in Germany. In Sweden, in contrast, women do not experience much smaller wage growth after taking parental leave (Albrecht *et al*., 1999). Apparently, since taking parental leave is so common in Sweden, it does not signal anything about career commitment. Whereas the Swedish labour market for women is thus the outcome of a pooling equilibrium, the corresponding German market is better described by a separating equilibrium.

High wage floors

Welfare payments and minimum wages in many countries are based on a breadwinner having to care for a dependent adult and young children. The need to provide an income for two adults results in high minimum-wage floors and compresses the wage scale. Moreover, the limited wage flexibility at the bottom of the labour market puts the unskilled out of work, resulting in social exclusion and further loss of skills and morale. Indeed, high minimum wages act as a tax on employers who employ low-skilled labour. The absence of a low-wage sector prevents families (and also the elderly) from contracting-out household services (cleaning and housekeeping, small repairs around the house, child minding, old-age care).[17] Women thus reduce their labour supply as households face more difficulties in reconciling work and family life.

The idea that a minimum wage should be sufficient to provide for a dependent adult and young children is increasingly inappropriate for two reasons (see also Section 2). First of all, the potential earnings of the secondary earner have increased because of the stronger labour-market position of women. Second, in the modern longer life course, adults spend considerable time in households without young children. In the spring and fall of the modern life course, adults thus do not have to care for young children and therefore can make do with lower incomes and social protection. In any case, a higher minimum wage floor raises the human-capital requirements of those entering the labour force. If agents do not have sufficient capabilities to earn the minimum wage, they risk ending up in welfare schemes.

Equity versus efficiency

Redistribution from rich to poor and social insurance against income losses are basic functions of the welfare state. In modern welfare states, however, a large part of the taxes levied to finance social transfers merely redistributes resources from one stage in an individual's life cycle to another. Hussénius and Selén (1994) estimated that for the average citizen in the early 1990s only about 24% of the taxes levied to finance social insurance in Sweden accomplished interpersonal redistribution. Pettersson and Pettersson (2003) recently updated and refined the estimates by Hussénius and Selén, estimating lifetime incomes with the aid of a dynamic micro-simulation model and including the value of important public services such as education, health care and care for the elderly in a comprehensive measure of lifetime income. With this extended concept of income, Pettersson and Pettersson found that only 18% of the taxes levied to finance social

17. High-skilled households and low-skilled agents can get around the minimum-wage floors by contracting household services on the black market, where social protection and quality of service are (very) limited. Moreover, this raises moral issues, as unskilled workers complement social assistance benefits with additional labour income in the informal sector.

insurance transfers and social services in Sweden can be categorised as interpersonal redistribution. Falkingham and Harding (1996) found a degree of interpersonal redistribution of almost 50% in Australia and about 30% in Great Britain. For Ireland and Italy, O'Donoghue (2001) estimated a degree of interpersonal redistribution of 45% and 24%, respectively. Sørensen *et al.* (2006) found that the degree of interpersonal redistribution in Denmark amounts to 26% across all taxpayers.

These studies show that a considerable part of the tax bill does not redistribute lifetime income from the lifetime rich to the lifetime poor but is essentially income that the taxpayer transfers to himself over his own life course. In the absence of an actuarial link between (social security) taxes paid and social transfers received, taxes and transfers inevitably distort labour supply. Moreover, transfer programmes often create moral hazard, as taxpayers have no incentive to reduce their reliance on transfers.

In a transitional labour market with a growing diversity of life courses, individuals increasingly experience periods of voluntary inactivity during their life course (to enjoy leisure, educate themselves, set up a business, or care for children or frail relatives). As noted above, the danger of moral hazard increases in such an environment. Moreover, annual incomes (on which many transfers and taxes are based) become an increasingly poor indicator of lifetime needs. Indeed, more efficient capital markets allow individuals to smooth their consumption over their life courses themselves without the help of the welfare state.

4. Policy recommendations

The trends and challenges outlined in Section 2 and the market and institutional failures in Section 3 call for social innovation. Traditional social policies, such as high minimum wages and job protection, are increasingly counterproductive in generating social protection. At a time when corporations and governments are withdrawing from their traditional roles as insurers of human-capital risks, new institutions should be created to offer workers more durable social protection and lasting security. Indeed, a more dynamic world economy and a decline of the extended family and the firm as insurance devices have raised the demand for new ways to absorb social risks over the life cycle. These new institutions should operate in a transitional labour market in which human capital is the key determinant of macroeconomic performance and personal fulfilment. Each country, depending on its history, institutional framework, industrial sector, and worker's preferences, will opt for different solutions. As most countries face similar challenges, however, we can outline some common policy conclusions for the OECD countries. These policy conclusions apply to most countries albeit not to the same extent.

4.1. A longer working life

Raising retirement age in line with increased longevity

A higher effective retirement age is crucial for a number of reasons. First of all, it raises the return on human capital by lengthening the horizon for investments in human capital. Indeed, raising the retirement age in line with longevity capitalises the benefits of increased longevity in terms of more durable human capital. Increased longevity is then turned into an economic opportunity rather than a financial threat. In fact, one can argue that all ages that are used to measure old age should be linked to longevity so that one in fact measures old age from the end rather than the beginning of life. In this way, society

ensures that social aging and biological aging do not diverge further and people age actively rather than passively. Moreover, fulfilling work that provides stimulus and companionship prevents social exclusion of the elderly, while better maintained human capital allows the elderly to bear more risk. Indeed, in many countries, tomorrow's elderly can be expected to be healthier, wealthier and better educated than every before.

Measuring age appropriately stabilises pension systems, as increased longevity puts financial stress on not only PAYG-schemes but also funded pension schemes if retirement ages are not raised in line with life expectancy. Indeed, funded pension schemes are particularly vulnerable to increased longevity. The reason for this is that the longer life spent in retirement calls for more financial saving, which depresses the return on capital and thus hurts funded pension schemes. Indeed, aging calls for more accumulation, better maintenance and more intense use of human capital in addition to fiscal discipline and additional private saving. With better maintained human capital, effective retirement ages can be raised in line with longevity, thereby protecting long-run labour supply.

Linking retirement ages to longevity also enables the government to issue longevity bonds so that insurance companies and pension funds are better able to provide retirement security to retired generations. This is because linking the age at which citizens first receive their public pension to life expectancy reduces the exposure of the government balance sheet to longevity risk. Hence, it becomes less unattractive for the government to acquire more longevity risk on behalf of younger and future generations. Indeed, these generations are best able to absorb these risks through a longer working life associated with more human-capital investment.

The rule of automatically linking public pensions and tax privileges to life expectancy avoids the political costs of discretionary decisions to limit eligibility to public pensions and tax benefits if longevity increases further. Agreeing on a risk-sharing rule *ex ante* also reduces the political risks associated with collective discretionary decision-making. Moreover, it allows individuals and firms to adapt gradually to a longer working life by better maintaining human capital and adjusting the organisation of work to the needs of older workers. An increase in spending on disability pensions and unemployment benefits is thus avoided.

Decompressing the working life

Another benefit of a higher effective retirement age is that it allows people to exploit their longer life to reconcile the two ambitions of, first, investing in the next generation as a parent and, second, pursuing a fulfilling career in paid work in which one keeps learning and applying new technologies. A longer active working life better fits the biological clock of women; whereas some men of about 45-50 years of age already look forward to their retirement, women in the same age group would like to return to work as their children are leaving the household. Indeed, a better reconciliation of work and family goes beyond child-care facilities and parental leave schemes during the family phase, but involves the way the entire life course is organised.

By decompressing the working life, a longer working life facilitates greater flexibility in employment patterns over the life course by loosening the link between age and career progression. This reduces career pressure at the biologically determined time when parents care for young children, thereby promoting gender equality, fertility and child development. Parents of young children can continue to invest in the human capital of their children without having to depreciate their own human capital. Rearing children and reducing work

effort somewhat, or taking a career break during the family season thus becomes less costly in terms of depreciated human capital of the parents.[18] In this way, increased longevity can help to bring fertility back closer to replacement levels so that countries do not get entangled in a vicious circle of early retirement and lower fertility in which politically stronger older generations favour generous passive spending on pensions and healthcare at the expense of investments in the human capital of younger generations.

More generally, a longer working life reduces the need to transfer resources from the summer season of life to the fall season either through intergenerational transfers (such as PAYG pension systems) or through the allocation of resources over the life cycle (for example, through forced pension saving). This reduces the time and income squeeze in the hot summer of the modern life course and helps to relieve the liquidity constraints in this life season. Resources are used to proactively to maintain and invest in human capital rather than to reactively provide additional transfer income as a compensation for the premature depreciation of human capital.

A higher and more flexible effective retirement age requires actuarially fair systems…

More adaptability and employability facilitating a longer effective working life requires people to bear more individual responsibility for the maintenance of their own human capital, thereby stimulating life-long learning in firms.[19] To that end, retirement schemes should be actuarially fair. This gives workers also more individual choice about when and how to retire. Indeed, actual retirement ages should be flexible and adjust to individual circumstances and preferences. To illustrate, blue-collar workers who started to work early and exhibit lower life expectancy than others may want to retire earlier.[20]

….tighter eligibility criteria for passive unemployment and disability benefits,...

As another way to stimulate the maintenance of human capital, the eligibility criteria for passive unemployment and disability benefits facilitating early retirement and rapid depreciation of human capital should be tightened and should not depend directly on age. Moreover, by no longer allowing firms to shift the costs of reorganisations onto public disability or unemployment schemes, governments encourage firms and social partners to invest more in older workers (instead of getting rid of them) and to adapt work and workplace cultures to the needs of elderly workers. Indeed, for some types of social insurance (such as disability and unemployment insurance), large firms can become the insurer of the first period of inactivity.

18. A longer working life also helps to spread human capital risks, such as a spell of unemployment, over a longer working career.

19. See OECD (2006a) for a comprehensive three-pronged approach to increasing effective retirement ages: getting labour-supply incentives right; raising demand for older workers by changing employment practices; and promoting employability.

20. Actuarially fair retirement systems that link pension benefits to longevity not only on a macro level but also on the level of homogeneous group of workers can facilitate retirement ages that are better tailored to the health of workers. Indeed, life expectancy typically differs substantially across various socioeconomic groups with low-skilled workers featuring lower life expectancy than high-skilled workers.

…and flexible wage setting and employment practices

A more flexible labour market for elderly workers ensures that additional demand for older workers matches additional supply generated by improved labour-supply incentives. Together with less employment protection, wages that are more closely related to labour productivity (for example, by diminishing the role of seniority-based pay increments and rigid worker classification systems) reduce the need for mandatory retirement. Hence, workers can use the speed and time of retirement as an instrument to buffer risk. As the elderly become better educated, their human capital is better maintained during the life course and individuals anticipate the possibility of a declining wage, rewarding elderly workers on the basis of their marginal productivity can become socially acceptable.

More generally, if workers are no longer paid more than their productivity when old, the labour-market position of elderly workers becomes stronger so that elderly workers enjoy more discretion to adjust working conditions to their specific needs. More flexible retirement patterns (*e.g.* part-time and gradual retirement) and more opportunities to change jobs and work patterns (so that elderly workers become less dependent on their current job and the talents of elderly workers can be better used) then become possible.[21] The flexibility to change one's working conditions to better suit changing needs and to find new challenges in fulfilling work can help to extend fulfilling working lives. The positive effect of flexibility on labour-market attachment holds true also for women between the ages of 50 and 70, who often provide informal care to aging, fragile relatives and friends. This informal care is likely to remain important in the future due to shrinking family sizes and budgetary pressures on formal care provided by the public sector.

4.2. More flexibility of working time over the life course

More flexibility of working time over the life course protects labour supply

More flexibility in allocating working time over the life course can prevent stress and excessive time squeeze when workers bear substantial family responsibilities. Moreover, it helps women, who still carry most of the family obligations (see Table 2.1), to remain attached to the labour force. Their human capital is thus maintained better, thereby strengthening their labour-market position and raising their labour-force participation when the children have grown up. The opportunity to alter one's working patterns to better fit changing private circumstances is thus an important instrument to protect the labour supply of not only older workers but also young parents. Greater flexibility in employment and career patterns can also encourage men to take up more family responsibilities in middle age. Indeed, Europeans show a keen interest in more flexible working-time regimes (EFILWC, 2003) and Table 2.10.

Savings accounts provide more individual discretion over working times…

More individual discretion in allocating working time (*i.e.* time sovereignty) over the life course requires more individual responsibility for financing periods of (part-time) leave. This ensures that more flexibility in selecting work times results in more rather than less hours worked over the life course as a whole. In this connection, tax-favoured savings accounts for financing (part-time) parental leave can supplement minimum public

21. The health of the elderly seems to benefit from being engaged in a variety of activities (Avramov and Maskova, 2003).

income provisions (such as child and child-care benefits and publicly financed parental leave schemes) to protect purchasing power during the summer of the family season without resulting in excessive consumption of leave and childcare and large budgetary costs. In this way, tax incentives help internalise the externalities of children at relatively low costs, while at the same time stimulating the labour supply of younger workers in the spring season of life. Savings accounts that are the property of the individual worker also strengthen the position of the worker vis-à-vis the employer and thus contribute to the emancipation of workers. Whereas the employer creates flexible work arrangements and career paths, the worker can offer to finance (part of) the actual leave taken.

To further protect overall labour supply over the life cycle, personal savings accounts can be integrated with tax-favoured (early) retirement accounts. In particular, individuals can be allowed to withdraw funds from these accounts before retirement – for example, to care for children or to update skills.[22] Hence, rather than taking leave only at the end of the working life to facilitate the rapid depreciation of human capital through passive social insurance (and early retirement) benefits, individuals can use the funds already in the stressful and expensive family season of life to invest in the human capital of their children or their own human capital so as to prevent the obsolescence of skills. In this way, individuals save for old-age risks in the form of not only financial but also human capital; by investing in human capital earlier in life, individuals are able to work longer.

By helping agents to take more responsibility for drops in income, savings accounts can stimulate not only a more flexible working life but also a more flexible labour market and better management of human resources. In particular, individuals can self-insure a larger part of the shocks to the value of their human capital by using personal savings accounts. For example, older workers can draw on the account to retire gradually or supplement a reduction in the hourly wage at an advanced age. This facilitates wage flexibility of older workers, thereby strengthening their labour-market position.

4.3. Workplace cultures aimed at employability and flexibility

More flexible and inclusive workplace cultures aimed at employability…

Social partners should nurture more inclusive, flexible workplace cultures that reconcile the needs of individual employees who balance work with family obligations with the needs of employers to flexibly respond to fluctuations in demand in increasingly competitive markets. In order to remain competitive in an aging labour market and to promote themselves as good places to work, firms should attune work conditions to the needs of employees who want to remain employable despite substantial family obligations and rapid innovation and creative destruction. They should aim to create workplaces in which workers develop and maintain their talents, skills and health. Moreover, firms should help their workers to think and plan ahead about how they can remain productive in fulfilling work when they grow older (*e.g.* by taking education leave in mid-career). Reducing excessive stress or physical strain at an early stage can help to extend working lives. Proactive thinking aimed at preventing human-capital risks later in life is called for in aging societies in which human resources become increasingly scarce and early retirement schemes are being phased out.

22. The government may want to subsidise some withdrawals if these withdrawals are used to finance care activities with positive externalities.

....with wage flexibility

Employees should accept more wage flexibility, internal flexibility in work practices, less employment protection for full-time male breadwinners, and more personal responsibility for financing leave and their own personal development (including early retirement and the costs of training). Rather than engaging in general, rigid working-time reductions, social partners should allow more flexible working times tailored to the needs of individual workers and firms. This may require changes in the way work is structured. The necessary changes in cultures and organisations aimed at better managing human resources will happen only gradually as many companies still base their working conditions on a male breadwinner who is freed from other duties and can retire early.

4.4. More inclusive labour and housing markets

Protection through flexibility to enter and to adjust

To allow young adults to build a family, European labour markets should become more inclusive so that workers do not have to be continuously employed full time in order to enjoy a successful career. Rather than shielding insiders through employment protection, labour-market institutions should enable parents of young children, secondary workers and young people to easily enter and remain in the labour market (*e.g.* through job-protected parental leave) and adjust their working conditions to changes in family conditions. This helps to reduce the opportunity costs in terms of foregone career prospects of becoming a mother and of sharing household work for fathers. Various privileges for full-time male breadwinners should be replaced by facilities that allow parents to raise young children while maintaining their own employability. Employability is the best employment protection.

Portable arrangements diversify firm-specific risks

Basing their security on employability and portable saving, retirement and social insurance schemes rather than on employment protection helps workers to better diversify their human and financial capital; emancipated workers become less dependent on the firm for which they work. Endowed with sufficient human and financial capital, adaptable individuals are empowered to embrace the non-verifiable, idiosyncratic risks associated with creative destruction in a dynamic competitive world economy and a transitional labour market. Moreover, workers enjoy greater flexibility in adjusting working conditions to changing needs during their life courses and in finding fresh challenges from which they can continue to learn.

Decompressing the working life by shortening social adolescence

A more inclusive labour market can help reverse the trend towards a compression of the working life and postponement of social adulthood by facilitating the first entry into the labour market. Condensing the period of full-time education, combining learning with work at an earlier state, and spreading learning more over the life cycle by integrating it better with work could also be helpful in shortening the period of social adolescence, decompressing the working life, and bringing forward parenthood.[23] Activating social

23. For early school leavers with few skills, the obligation to either work and/or learn can help to inculcate a work ethic and generate human capital.

policies should induce young adults to build up their human capital through education, work or both. Indeed, some form of education (possibly combined with work) could be compulsory until a young adult has achieved some minimum qualification.

Role of housing

Also a well-functioning housing market can reduce the stress that young adults experience in the early reproductive stage of their lives. Moreover, tax facilities for home ownership may have to be targeted better at new entrants into the housing market. Equity in housing can also help the old to supplement their pension – for example, to pay for their medical expenditures and other consumption needs. Financial innovation (for example, through reverse mortgages) may be needed to turn home equity into an income stream.

4.5. From breadwinner support to in-work benefits for parents

In-work benefits and mutual obligations strengthen labour-market position of low skilled …

Lower minimum-wage floors boost the supply of reliable household services for families and the elderly, while at the same time improving the employment prospects of low-skilled women in the formal labour market. To accomplish this while protecting the income position of vulnerable households, more activating social assistance should be combined with in-work benefits (including child-care benefits) for parents caring for young children. In particular, social assistance based on mutual obligations should be conditional on each adult (including low-skilled women) being available to the labour market – possibly on a part-time basis while parents care for young children who are not yet of school age.[24] Work and search obligations should thus be credibly enforced for both lone mothers and secondary earners within a two-adult household. In this way, parents would realise that living on passive long-term social benefits (supplemented by black market activities) is not an option. They are thus encouraged to maintain their marketable skills so that they are able to re-enter the labour market in a full-time job when their children are older. This would boost labour supply.

… by decoupling income policy from the allocative role of wages

With less wage compression, in-work benefits can be better targeted at low-skilled workers with children whose productivity is insufficient to earn a minimum standard of living, without the phasing-out of these in-work benefits resulting in very high marginal tax rates higher up the income scale. By moving away from breadwinner support (in which the breadwinner needs to earn sufficient wage income to provide for a dependent adult and children) towards targeted in-work benefits for families with young children, governments decouple income policy from the allocative role of wages. This creates more low-wage jobs in the formal sector.

Subsidised child care can protect human capital

Subsidised (or publicly provided) child care for households with low earnings helps women (including single mothers) to escape poverty, and alleviates liquidity constraints during the summer season of life. At the same time, school times should be attuned to the

24. Box 3.5 in OECD (2003) contains some valuable suggestions on how this could be done.

needs of working parents, with affordable after-school care for children of working parents with low labour incomes. Subsidies for high quality child care internalise the externalities of child development and alleviate the distortions of the tax system on female participation and human capital accumulation in the formal sector and the production of labour-intensive goods and services in the untaxed household sector. In view of their higher rates of labour-force participation, high-skilled women tend to benefit most from general child-care subsidies. Targeting child-care subsidies and child benefits (and other family benefits) at low-income households alleviates poverty but yields high marginal tax rates and thus disincentives to increase the earnings of the secondary earner in the phase-out range.[25] Hence, governments face a difficult trade-off between poverty alleviation and gender equality. The same trade-off bedevils the choice between household income or individual income as a base for redistribution.

Early intervention in disadvantaged families

Activating policies facilitate social integration of low-skilled migrants and their children, especially if work obligations for women are combined with programmes supporting the development of young children. Indeed, early intervention in dysfunctional families is the key to preventing social exclusion, raising the participation rates of unskilled men and women alike, and encouraging durable two-parent families. A proactive social policy aims at creating equal opportunities at the start of life through an equal distribution of human capital. Early interventions aimed at enriching the family environments of disadvantaged children can carry a high economic return in terms of raising school performance in adolescence and boosting wages and labour-force participation in adulthood (Cunha *et al.*, 2005; and Blau and Currie, 2004). At early ages, therefore, a trade-off between equity (targeting the most disadvantaged children) and efficiency (targeting training at those individuals who yield the highest return on learning) is absent. Once skills have been formed at later ages, returns on schooling are the largest for the most able, so that a trade-off between equity and efficiency exists. Accordingly, social policy can become more efficient by redirecting skill investments in disadvantaged groups from adults to young children.

4.6. Shift public support from the old to the young

The aging of the population is due to increased longevity and lower fertility. Whereas both funded and PAYG pension systems are vulnerable to increased longevity, PAYG pension schemes are especially vulnerable to lower fertility because PAYG systems rely on human capital of the young to finance the pensions of older generations. As generations invest less in the human capital of the next generations by reducing fertility, they should invest more in financial capital. Hence, lower fertility calls for gradually shifting from PAYG financing to funded pension schemes (Sinn, 2000). In this way, public support is gradually shifted away from the fall and winter seasons of life towards the spring and summer seasons.[26] This is consistent with a gradual move from a reactive social policy

25. Targeting may also stimulate the breaking up of families. The associated damage to role of the family as an institution for buffering risk and providing mutual care reduces the effectiveness of targeting in alleviating poverty.

26. Whereas increased saving and more public support for young parents at the expense of the elderly is the appropriate response to lower fertility, increased longevity calls primarily for a higher retirement age and more investment in human capital.

that provides passive income support to those who have depreciated their human capital to a proactive social policy that helps people to build up and manage human talents better. Stimulating private saving for retirement by shifting public PAYG benefits from the old to young parents is thus not only the appropriate response to declining fertility but also helps to halt the decline in fertility and to internalise the positive externalities of additional children in PAYG pension systems (van Groezen *et al.*, 2003).

Countries with large PAYG systems should consider focusing the public scheme on poverty alleviation by gradually reducing earnings-related PAYG benefits for those earning higher incomes. This would yield a better balanced portfolio between funded and PAYG schemes, as workers with middle- and higher incomes substitute private, funded pensions for public PAYG benefits (OECD, 2001b, Chapter 6). Reducing PAYG benefits for, and increasing the tax payments by, the more affluent elderly is consistent with the trend towards a more heterogeneous older population. When PAYG schemes were established, the economic depression of the 1930s and the Second World War had impoverished the older generation. Since poverty was thus concentrated among the elderly, poverty alleviation called for transfers from the younger to the older generation. At present, in contrast, age is generally no longer a good indicator of poverty, as many elderly have accumulated substantial financial wealth and more risks have shifted to the beginning of the life cycle. Hence, information on age should increasingly be supplemented by other information (particularly on incomes and family status) to identify those most in need of income support.[27]

The currently retired generation has not been able to anticipate lower public PAYG benefits. Moreover, this generation cannot adjust easily because it has already depreciated its human capital. Accordingly, a strong case can be made for changing the rules of the game (*i.e.* reducing PAYG benefits and increasing taxes on the elderly) only gradually.[28] Extensive grandfathering provisions protecting those who are currently old are expensive, however, and would eliminate benefits in terms of enhanced fiscal sustainability. Indeed, grandfathering implies that younger generations have to pay not only for their own private benefits but also for the public benefits of the currently old. The government thus faces a trade-off between flexibility and stability. To enhance confidence and trust in a stable social contract while at the same time facilitating timely adjustments, governments should announce as early as possible any prospective changes in the social contract. This would allow the large baby-boom generations to anticipate reduced public transfers in retirement by starting to build up more funded pensions.

4.7. Individual accounts in social insurance

Self insurance …

Social security can in part be based on mandatory contributions to individual accounts.[29] These accounts can in fact be viewed as a self-insurance device against human

27. Dang *et al.* (2006) argue that social spending (taxation) can be reallocated from the old (young) to the young (old) without compromising the objective of preventing old-age poverty.

28. Relative PAYG benefits can be reduced gradually by indexing benefits to prices rather than wages.

29. See Orszag and Snower (1997) and Stiglitz and Yun (2002), who propose replacing part of unemployment insurance with mandatory individual savings accounts. These savings accounts can also be in the form of so-called notional accounts. The implied PAYG financing avoids a costly transition.

capital risk over the life cycle (due not only to old age, but also to unemployment and obsolescence of human capital during the working life). Agents become stakeholders in their own social security. If individuals bear more financial responsibility for the maintenance of their own employability, they face better incentives to work and train than under regular social insurance. By allowing people to shift the payment of deductibles in social insurance to the periods in which these costs can be more easily afforded, the schemes continue to offer security even though human-capital risks have become less easily insurable.

… with liquidity insurance and lifetime income protection …

The government in effect provides liquidity insurance and alleviates capital-market imperfections by allowing individuals to make withdrawals from the accounts even if the account balance is negative. Moreover, the government can protect the lifetime poor by bailing out individuals who end up with a negative account balance at the end of their working lives. In this way, the government provides insurance against catastrophic shocks that substantially harm lifetime incomes. Redistribution is thus targeted more closely at the lifetime poor who are suffering a combination of low wage incomes and frequent adverse shocks during their lives.

… yields more efficient insurance …

The accounts, in fact, combine a number of risks that occur during different periods of an individual's life in a single insurance contract with a deductible that is conditioned on the aggregate loss during the life course. Gollier and Schlesinger (1995) show that an umbrella insurance policy that adjusts the deductible on each separate loss to the outcome of the other risks in the form of a straight deductible based on the aggregate loss provides the best protection against large aggregate losses for a given insurance budget. Compared to separate insurance policies, the umbrella insurance contract provides better protection in the worst-case scenario of a succession of adverse shocks during the life course in exchange for less protection in other cases.

… but requires compulsion and active labour-market policies, …

Lifetime redistribution as well as liquidity and lifetime income insurance still give rise to some moral hazard; agents have an incentive to minimise their contributions and maximise their withdrawals. The government must therefore regulate withdrawals so that they can be made only for pre-specified purposes. Especially the lifetime poor will continue to face high marginal tax rates as a direct consequence of the lifetime income guarantee. Hence, the government should focus its active labour-market policies (including workfare) on this group and employ instruments other than financial incentives to activate the lifetime poor. Savings must also be mandatory – at least until a specific upper limit is reached. In addition to moral hazard, lack of self control and myopia are other reasons for making saving mandatory. Compulsory savings accounts in effect extend mandatory saving aimed at retirement to precautionary saving aimed at social insurance for individuals of working age.

…uncorrelated shocks and inclusive labour markets,…

The potential of individual accounts in improving the trade-off between insurance and incentives depends crucially on the extent to which individuals face correlated shocks during their lifetimes. The potential welfare gains of individual savings accounts are large if

various income shocks are uncorrelated across time and among each other. In that case, annual incomes are poor indicators of lifetime incomes, and income shocks are in fact only small in the context of an entire lifetime. If shocks are strongly positively correlated, in contrast, risks do not become much smaller in a lifetime context (compared to an annual context). Risks then remain catastrophic, even when viewed over the entire life course. For each type of human capital risk, another combination between insurance and self-insurance through saving is optimal, depending on the magnitude of the risk in terms of the potential drop in lifetime income and the potential danger of moral hazard because of endogeneity and non-verifiability of the insured risk. Self-insurance should be relatively important for non-catastrophic risks that people can affect through non-verifiable actions (Stiglitz and Yun, 2002). Hence, individual accounts become more attractive in fast-moving transitional labour markets in which people experience short involuntary unemployment spells in addition to voluntary periods of absence from the labour market. The opposite is true in the presence of dual labour markets in which insiders enjoy high incomes throughout their lives while disadvantaged outsiders must make do with insecure jobs and tend to suffer from frequent and long-lasting unemployment.

... and equal distribution of human capital

Mandatory individual savings accounts can thus be a useful component of an overall social policy package that includes policies aimed at creating equal opportunities at the start of life through an equal distribution of human capital and early intervention. It should also provide some form of lifetime income guarantee. By using information on lifetime incomes, redistribution implicit in such an income guarantee can occur at lower efficiency costs. Moreover, actuarially fair links between contributions and expected benefits alleviate the labour-market distortions associated with social insurance for middle- and high incomes. Finally, by facilitating consumption-smoothing through saving schemes offering liquidity insurance, the government increases the scope for self-insurance, thereby combating moral hazard in social insurance. Through all of these channels, savings accounts support social policy by reducing the costs that are associated with an effective mix of redistribution, social insurance and consumption smoothing.

5. Conclusions

The policy conclusions imply transforming passive benefits compensating the loss of human capital into preventive, proactive social policies that build and maintain human capital. Another common thread in these conclusions is the importance of flexibility in wages and work practices. As workers increasingly combine their work with other activities (caring, resting and learning), new social-protection institutions should facilitate various transitions and changing combinations of activities during the life course. Among other things, an adaptable labour force provides the legitimacy for competitive open markets and the creative destruction associated with rapid innovation and growth. Moreover, substantial human capital contributes to a high level of labour-force participation as the basis for ensuring solidarity with vulnerable elderly, children and disadvantaged adults of working age.

The required reforms confront politicians with a major challenge because these reforms often run against vested interests and the perceived short-term interests of powerful insiders. Moreover, transforming passive, reactive social policies into more proactive policies yields a transitional problem similar to that associated with a shift from

a PAYG to a funded pension system. In particular, society still has to pay for passive benefits to the currently old generations; these generations have typically depreciated their human capital because they have not profited from more proactive social policies. At the same time, the human-capital investments in the young generations, which reduce social spending and increase tax revenues only with a lag, must be financed. The combination of passive old-age benefits and proactive spending aimed at especially the human capital of younger generations can create fiscal pressures and gives rise to difficult political choices.

As people gain more discretion to construct their own biographies, they become more responsible for their life courses. A challenge in this respect is to better prepare people for more responsibility for their employability, social insurance and financial planning. Schools, employers and unions can play an important role in helping people acquire the necessary financial competences and life and work skills. This may also make voters more aware of the fundamental trade-offs in social policy, thereby enhancing the quality of the political debate and policymaking (Boeri and Tabellini, 2005).

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Table 2.1. Time spent on four different obligations in hours per week, working population EU-15, 2003

	Men					Women				
	Total of all obligations	Paid work	Household and looking after children	Voluntary work	Education	Total of all obligations	Paid work	Household and looking after children	Voluntary work	Education
EU Total	58.4	42.6	13.3	0.8	1.7	59.5	34.7	22.6	0.8	1.8
Finland	55.1	40.8	10.5	1.5	2.4	59.9	37.3	18.3	1.3	2.6
Sweden	56.9	40.4	13.6	2.0	1.2	59.1	37.0	18.9	1.6	1.6
Denmark	57.2	40.8	13.3	1.7	1.2	62.5	36.5	22.4	1.1	2.3
Germany (West)	59.1	42.2	13.3	0.7	2.2	57.2	32.1	22.3	0.8	1.8
Germany (East)	60.6	42.9	13.1	0.5	3.2	59.6	35.4	21.8	0.4	2.2
Netherlands	54.9	39.8	11.6	1.4	1.9	53.4	27.4	23.8	1.8	1.2
Great Britain	57.5	42.2	13.7	0.6	1.6	55.4	28.6	25.9	0.6	1.3
Northern Ireland	54.5	41.1	11.5	0.8	1.2	61.2	32.7	24.6	1.0	2.4
Ireland	56.2	43.7	11.0	0.7	1.0	59.6	33.7	23.8	1.3	2.6
Belgium	59.5	42.3	13.7	0.8	1.3	60.7	36.4	21.5	0.6	1.2
Luxembourg	66.0	43.2	19.0	2.4	1.9	69.4	32.9	32.0	3.5	2.3
Austria	60.3	46.2	11.5	1.3	1.8	62.2	37.7	22.2	0.9	1.4
France	52.7	40.0	10.4	0.9	0.9	55.5	35.9	18.2	0.6	1.6
Portugal	54.1	45.1	8.4	0.4	0.4	64.6	41.9	21.4	0.3	1.0
Spain	59.0	44.0	13.4	0.1	1.7	67.9	39.9	23.8	0.2	3.1
Italy	66.0	45.0	18.0	0.8	1.8	66.3	39.5	25.3	1.1	2.0
Greece	61.5	46.9	13.0	1.0	2.0	69.8	41.2	26.8	1.3	1.7

Source: Eurobarometer 60.3.

Table 2.2. Preferences on gender role models, 2002

	A man's job is to earn money; a woman's job is to look after the home and family				*A pre-school child is likely to suffer if his/her mother works*		
	Strongly agree or agree	Neither agree or disagree	Disagree or strongly disagree		Strongly agree or agree	Neither agree or disagree	Disagree or strongly disagree
Australia	21.6	22.0	56.4	Australia	40.2	21.0	38.9
Austria	29.5	24.6	45.9	Austria	64.6	14.9	20.5
Canada				Canada			
Czech Republic	47.1	23.1	29.9	Czech Republic	48.1	15.7	36.2
Germany				Germany			
- East	14.6	10.6	74.8	- East	32.7	11.4	56.0
- West	23.3	15.6	61.1	- West	55.8	14.1	30.1
Hungary	39.2	30.6	30.2	Hungary	66.1	16.1	17.9
Ireland	18.5	55.2	67.7	Ireland	35.5	12.5	52.0
Japan	30.9	20.6	48.5	Japan	30.8	23.3	45.9
Netherlands	12.4	20.2	67.5	Netherlands	39.8	24.7	35.4
New Zealand	19.8	17.7	62.5	New Zealand	46.4	19.0	34.7
Poland	45.7	19.2	35.0	Poland	66.8	11.4	31.8
Spain	24.7	8.9	66.4	Spain	52.2	11.0	36.8
Sweden	7.6	14.7	77.7	Sweden	23.7	22.2	54.2
United Kingdom	19.8	18.3	61.7	United Kingdom	38.4	18.7	42.9
United States	23.6	23.9	52.5	United States	38.4	24.8	36.8

Source: International Social Survey Programme (2002), *Family and Changing Gender Roles III*, pp. 134-135, pp. 146-147.

Table 2.3. Maternal employment rates, women aged 15-64, 1996-2006

	By age of youngest child				By number of children under 15		
	0-16	<2	3-5	6-16	One child	Two children	Three children
Australia	63.1	48.3[1]		70.5	63.5	58.1[2]	
Austria	64.7	60.5	62.4	67.5	67.7	60.1	46.5
Belgium	59.9	63.8	63.3	56.9	58.3	58.5	39.4
Canada	70.5	58.7	68.1	71.1	70.1	73.2	66.3
Czech Republic	52.8	19.9	50.9	67.6	57.4	52.5	34.4
Denmark	76.5	71.4	77.8	77.5			
Finland	76.0	52.1	80.7	84.2	71.2	70.9	60.1
France	59.9	53.7	63.8	61.7	62.2	57.6	38.1
Germany	54.9	36.1	54.8	62.7	58.4	51.8	36.0
Greece	50.9	49.5	53.6	50.4	48.4	44.4	37.4
Hungary	45.7	13.9	49.9	58.3	53.7	48.3	24.6
Iceland	84.8	83.6[1]		86.5	88.5	82.3[2]	
Ireland	52.8	54.8[1]		60.5	55.4	52.5	42.3
Italy	48.1	47.3	50.6	47.5	48.3	41.0	27.4
Japan	52.4	28.5	47.8	68.1			
Luxembourg	55.4	58.3	58.7	52.7	56.0	49.8	33.8
Netherlands	69.2	69.4	68.3	69.4	70.1	70.6	59.9
New Zealand	64.6	45.1	60.6	75.3	64.1	64.5	56.7
Poland	46.4				42.7	35.6	28.5
Portugal	67.8	69.1	71.8	65.4	63.5	59.2	46.1
Slovak Republic	48.4	23.1	46.6	60.4	56.4	49.4	31.5
Spain	52.0	52.6	54.2	50.9	51.1	44.7	38.5
Sweden	82.5	71.9	81.3	76.1	80.6	84.7	75.6
Switzerland	69.7	58.3	61.7	77.0	69.5	65.4	58.0
United Kingdom	61.7	52.6	58.3	67.7	67.1	62.4	42.3
United States	66.7	54.2	62.8	73.2			
OECD average	61.5	51.9	61.3	66.4	60.6	57.0	44.0
EU-19	59.2	51.1	58.2	63.2	59.4	55.2	41.2

1. By age of youngest child under five.

2. Two or three children.

Source: Australian Bureau of Statistics (2005); Statistics Canada (2001); Statistics Denmark (1999); Statistics Finland (2002); Statistics Iceland (2002); Japanese authorities (2001); Swiss LFS (2006); UK Office of National Statistics (2005); US Current Population Survey (2005); all other EU countries, European Labour Force Survey (2005), except for Italy which concerns 2003; and OECD (2005).

Table 2.4. Female employment rate and the presence of children, 2000 (persons aged 25-54)

	Total		No children		One child		Two or more children	
	Employment rate	Gender gap[1]	Employment rate	Gender gap	Employment rate	Gender gap	Employment rate	Gender gap
Australia	66.8	20.0	68.4	16.1	55.3	33.3	43.2	47.5
Austria	73.5	16.2	76.0	10.5	75.6	18.5	65.7	29.0
Belgium	67.8	20.1	65.6	17.4	71.8	23.5	69.3	24.7
Canada	74.0	11.8	76.5	6.0	74.9	14.9	68.2	23.6
Czech Republic	73.7	15.6	80.8	5.4	72.3	21.2	59.4	33.5
Denmark (1998)	80.5	7.7	78.5	7.7	88.1	3.5	77.2	12.9
Finland (1997)	77.6	7.0	79.2	0.1	78.5	11.8	73.5	19.7
France	69.6	17.7	73.5	9.6	74.1	18.7	58.8	32.9
Germany	71.1	16.3	77.3	7.2	70.4	21.2	56.3	35.6
Greece	52.6	35.9	53.1	31.1	53.9	40.3	50.3	45.4
Hungary	61.7	16.0	-	-	-	-	-	-
Ireland	53.1	29.0	65.8	14.1	51.0	33.2	40.8	43.2
Italy	50.7	33.9	52.8	26.2	52.1	40.9	42.4	49.9
Japan (1999)	62.7	31.6						
Luxembourg	63.0	29.8	68.7	21.3	65.8	30.4	50.1	46.1
Netherlands	70.9	21.4	75.3	15.6	69.9	24.3	63.3	30.8
New Zealand (2001)	70.6	17.0	80.7	5.7	66.9	20.2	58.9	30.9
Poland	72.0	9.6						
Portugal	73.9	16.4	72.6	13.4	78.5	16.6	70.3	24.8
Slovak Republic	64.8	13.7						
Spain	50.6	34.8	54.6	26.0	47.6	44.7	43.3	48.6
Sweden	81.7	4.1	81.9	-0.4	80.6	9.8	81.8	9.4
Turkey								
United Kingdom	73.1	14.4	79.9	5.4	72.9	17.1	62.3	28.2
United States (1999)	74.1	14.8	78.6	7.2	75.6	17.4	64.7	29.0
Unweighted average	69.0	18.6	73.7	11.8	70.6	22.9	61.9	32.3

1. Gender gap: percentage point difference between the employment rates for men and women.

Source: OECD (2002b), Table 2.4, p. 77.

Table 2.5. Life expectancy at birth, 1950-2050

	1950	1960	1970	1980	1990	1995	2000	2004[1]	Change 1950-2004	2020[2]	2050[2]	Change 1950-2050
Austria												
Male	61.9	65.4	66.5	69.0	72.4	73.3	73.7	76.4	+14.5	79.4	83.6	+21.7
Female	66.9	71.9	73.4	76.1	78.9	79.9	81.1	82.1	+15.2	84.9	87.7	+20.8
Belgium												
Male	65.0[3]	66.9	67.8	69.1	72.0	73.4[4]	74.6	75.1	+10.1	78.9	82.3	+17.3
Female	70.1[3]	72.6	74.3	75.7	78.6	80.2[4]	80.8	81.1	+11.0	85.0	88.3	+18.2
Canada[5]												
Male	66.3	68.4	69.3	71.9	74.9	75.3	76.0		+9.7[6]			
Female	70.8	74.2	76.4	79.0	81.2	81.3	83.0		+12.2[6]			
Czech Rep.												
Male	62.3	67.9	66.1	66.8	67.6	69.7	71.7	72.6	+10.3	75.9	79.7	+15.4
Female	67.0	73.4	73.0	73.9	75.4	76.6	78.4	79.0	+12.0	81.3	84.1	+17.1
Denmark												
Male	67.8	70.4	70.6	71.2	71.9	72.7	74.5	75.2	+7.4	78.0	80.9	+13.2
Female	70.1	73.8	75.4	77.2	77.7	77.8	79.3	79.9	+9.8	81.6	83.7	+13.6
Finland												
Male	58.6	64.9	65.9	69.2	70.9	72.8	74.2	75.3	+16.7	78.7	81.9	+23.3
Female	65.9	71.6	73.6	77.6	78.9	80.2	81.0	82.3	+16.4	84.2	86.5	+20.6
France												
Male	63.4	67.0	68.4	70.2	72.8	73.9	75.3	76.7	+13.3	79.4	82.7	+19.3
Female	69.2	73.6	75.9	78.4	81.0	81.8	82.7	83.8	+14.6	86.2	89.1	+19.9
West Germany												
Male	64.6			69.9	72.6	73.3	75.0	75.7	+11.1	78.9	82.0	+17.4
Female	68.5			76.6	79.0	79.7	81.0	81.4	+12.9	84.2	86.8	+18.3
Greece												
Male		67.3	70.1	72.2	74.6	75.0	75.5	76.6	+9.3[7]	78.1	80.3	
Female		72.4	73.8	76.8	79.5	80.3	80.6	81.4	+9.0[7]	83.1	85.1	
Hungary												
Male	59.9	65.8	66.3	65.5	65.1	65.3	67.4	68.6	+8.7	72.8	78.1	+18.2
Female	64.2	70.1	72.0	72.7	73.7	74.5	75.9	76.9	+12.7	79.8	83.4	+19.2
Italy												
Male	63.7	67.2	69.0	71.1	73.6	74.9	76.6		+12.9[6]	80.1	83.6	+19.9
Female	67.2	72.3	74.9	77.8	80.2	81.3	82.5		+5.3[6]	85.6	88.8	+21.6
Netherlands												
Male	70.4	71.5	70.8	72.5	73.8	74.6	75.5	76.4	+6.0	78.1	80.2	+9.8
Female	72.7	75.4	76.5	79.2	80.1	80.4	80.5	81.1	+8.4	82.2	83.6	+10.9
New Zealand[5]												
Male	67.2	68.4	68.6	70.4	72.9	74.3			+7.1[8]			
Female	71.3	73.8	74.6	76.4	78.7	79.6			+8.3[8]			
Poland												
Male	58.6	64.8	66.8	66.9	66.5	67.6	69.7	70.0	+11.4	74.6	79.1	+20.5
Female	64.2	70.5	73.8	74.4	75.5	76.4	77.9	79.2	+15.0	81.3	84.4	+20.2
Portugal												
Male	55.5	60.7	64.2	69.1	70.5	71.6	73.2	74.9	+19.4	77.1	80.4	+24.9
Female	60.5	66.4	70.8	76.7	77.4	78.7	80.0	81.4	+20.9	83.9	86.6	+26.1
Spain												
Male	59.8	67.4	69.2	72.5	73.4	74.3	75.7	77.2	+17.4	79.1	81.4	+21.6
Female	64.3	72.2	74.7	78.6	80.5	81.5	82.5	83.8	+19.5	85.9	87.9	+23.6
Sweden												
Male	69.0	71.2	72.2	72.8	74.8	76.2	77.4	78.4	+9.4	80.7	83.3	+14.3
Female	71.6	74.7	77.1	78.8	80.4	81.4	82.0	82.7	+11.1	84.5	86.5	+14.9

1. 1951, 1961, 1971, 1981, 1991; 2. 1955; 3. Provisional value; 4. *www.europa.eu.int/comm/eurostat*, yearbook 2006-2007; 5. Eurostat Europop, 2004, baseline ; 6. Change 1950-2000 ; 7. Change 1960-2004 ; 8. Change 1950-1995.

Source: Before 1995: *www.unece.org/ead/pau.* The Population Activities Unit (PAU) of the United Nations Economic Commission for Europe (UNECE) is a United Nations office specialising in population issues in Europe and North America. *Source*: 1995 and 2000: *www.europa.eu.int/comm/eurostat*.

Table 2.6. Life expectancy at 65, 1950-2050

	1960	1970	1980	1990	1995	2000	2002	Change 1960-2050	2020[1]	2050[1]	Change 1960-2050
Austria											
Male	12.0	11.7	13.7	14.3	14.9	16.0	16.3	+ 4.3	18.1	20.9	+8.9
Female	14.7	14.9	16.3	17.8	18.6	19.4	19.7	+ 5.0	21.8	24.0	+9.3
Belgium											
Male	12.4	12.1	13.0	14.3	14.8	15.5	15.8	+ 3.4	18.1	20.5	+8.1
Female	14.8	15.3	16.9	18.5	19.1	19.5	19.7	+ 4.9	22.2	24.8	+10.0
Canada											
Male	13.6	13.8	14.6	15.7	16.0	16.9	17.1	+ 3.5			
Female	16.1	17.4	19.0	19.9	20.0	20.5	20.6	+ 4.0			
Czech Rep.											
Male	12.5	11.1	11.2	11.6	12.7	13.7	14.0	+ 1.5	15.5	18.4	+5.9
Female	14.5	14.2	14.3	15.2	16.0	17.1	17.4	+ 2.9	18.8	20.9	+6.4
Denmark											
Male	13.7	13.7	13.6	14.0	14.1	15.2	15.4	+ 1.7	16.8	18.6	+4.9
Female	15.3	16.7	17.6	17.8	17.5	18.3	18.3	+ 3.0	19.2	20.5	+5.2
Finland											
Male	11.5	11.4	12.5	13.7	14.5	15.5	15.8	+ 4.3	17.8	19.9	+8.4
Female	13.7	14.3	16.5	17.7	18.6	19.3	19.6	+ 5.9	21.5	23.3	+9.6
France											
Male	12.5	13.0	13.6	15.5	16.1	16.7	16.9	+ 4.4	19.1	21.7	+9.2
Female	15.6	16.8	18.2	19.8	20.6	21.2	21.3	+ 5.7	21.5	23.3	+7.7
West Germany											
Male	12.4	12.0	13.0	14.0	14.7	15.7	16.0	+ 3.6	18.0	20.1	+7.7
Female	14.6	15.0	16.7	17.6	18.5	19.4	19.6	+ 5.0	21.4	23.5	+8.9
Greece											
Male	13.4	13.9	14.6	15.7	16.1	16.3	16.3	+ 2.9	17.6	19.2	+5.8
Female	14.6	15.2	16.8	18.0	18.4	18.7	18.7	+ 4.1	19.8	21.3	+6.7
Hungary											
Male	12.3	12.0	11.6	12.0	12.1	12.7	13.1	+ 0.8	15.4	18.6	+6.3
Female	13.8	14.3	14.6	15.3	15.8	16.4	17.0	+ 3.2	18.5	21.1	+7.3
Italy											
Male	13.4	13.3	13.3	15.1	15.8	16.5	16.5	+ 3.1	18.6	22.2	+8.8
Female	15.3	16.1	17.1	18.8	19.6	20.4	20.4	+ 5.1	22.8	26.1	+10.8
Netherlands											
Male	13.9	13.3	13.7	14.4	14.7	15.3	15.6	+ 1.7	16.5	17.8	+3.9
Female	15.3	16.1	18.0	18.9	19.0	19.2	19.3	+ 4.0	19.9	20.9	+5.6
New Zealand											
Male	13.0	12.4	13.2	14.7	15.4	16.5	16.5	+ 3.5			
Female	15.6	16.0	17.0	18.3	19.0	19.8	19.8	+ 4.2			
Poland											
Male	12.7	12.5	12.0	12.7	12.9	13.6	14.0	+ 1.3	15.9	18.8	+6.1
Female	14.9	15.3	15.5	16.9	16.6	17.3	17.9	+ 3.0	18.1	20.4	+5.5
Portugal											
Male	13.0	12.2	12.9	13.9	14.6	15.3	15.6	+ 2.6	18.0	21.5	+8.5
Female	15.3	15.0	16.5	17.0	17.8	18.7	19.0	+ 3.7	19.2	21.5	+6.2
Spain											
Male	13.1	13.3	14.8	15.4	16.0	16.5	16.5	+ 3.4	18.5	20.1	+7.0
Female	15.3	16.0	17.9	19.0	19.8	20.4	20.4	+ 5.1	22.6	24.2	+8.9
Sweden											
Male		14.2	14.3	15.3	16.0	16.7	16.9	+ 2.7[2]	18.3	20.0	+5.8[3]
Female		16.8	17.9	19.0	19.6	20.0	20.0	+ 3.2[2]	21.3	22.8	+6.0[3]

1. Eurostat Europop, 2004, baseline.
2. Change 1970-2002.
3. Change 1970-2050.

Source: OECD (2005).

Table 2.7. Fertility rate, 1980-2004, and mean age of women at childbearing first child, 1980-2003

	Total fertility rate				Mean age of women at childbearing first child (years)			
	1980	1990	2001	2004	1980	1992	1998	2003
Austria	1.7	1.4	1.3	1.4	26.30	27.30	28.00	28.80
Belgium	1.7	1.6	1.6	1.6	26.60	28.09		
Canada	1.7	1.7	1.5	1.5		28.40		
Czech Republic	2.1	1.9	1.1	1.2		24.82	26.64	28.10
Denmark	1.5	1.7	1.7	1.8	26.80	28.77	29.52	30.10
Finland	1.6	1.8	1.7	1.8	27.70	28.95	29.55	29.80
France	2.0	1.8	1.9	1.9	26.80			
Germany	1.4	1.5	1.4	1.4	26.40	27.93[1]	28.58[1]	29.10[1]
Greece	2.2	1.4	1.3	1.3	26.10	27.55	28.70	29.40[2]
Hungary	1.9	1.8	1.3	1.3		25.80	26.86	28.00
Ireland	3.2	2.1	2.0	1.9	29.90	30.01	30.30	30.60
Italy	1.6	1.3	1.2	1.3	27.40	29.21	30.30[3]	
Luxembourg	1.5	1.6	1.7	1.7	27.50	28.58	29.25	29.90
Netherlands	1.6	1.6	1.7	1.7	27.70	29.67	30.25	30.40
Poland	2.3	2.0	1.3	1.2		26.38	27.19	27.90
Portugal	2.2	1.6	1.5	1.4	27.10	27.60	28.40	29.00
Slovak Republic	2.3	2.1	1.2	1.2		25.13	26.39[3]	27.30
Spain	2.2	1.4	1.3	1.3	28.20	29.25	30.55	30.80[2]
Sweden	1.7	2.1	1.6	1.8	27.60	28.87	29.73	30.30
Turkey	4.4	3.0	2.5	2.2				
United Kingdom	1.8	1.8	1.6	1.8	26.90	27.84	28.32	28.80
United States	1.8	2.1	2.1	2.1				

1. Including former East Germany.
2. 2002
3. 1999.

Source: OECD Social Indicators database; Eurostat.

Table 2.8. Preferences for hours worked, 1998[1]

Total hours in couple families where the respondent was aged 20-50 years with a child under six

Perceived financial situation[2]	Hours worked at present time	Hours worked (preferences)	Change in hours needed to meet preferences	Percentage of families in this situation
Austria				
Well off	67	58	-9	64
Just manage	59	48	-11	33
Belgium				
Well off	67	55	-12	64
Just manage	58	52	-7	34
Denmark				
Well off	73	62	-11	80
Just manage	60	51	-9	18
Finland				
Well off	72	56	-16	64
Just manage	60	41	-19	34
France				
Well off	61	49	-12	32
Just manage	60	49	-11	55
Germany				
Well off	62	49	-13	52
Just manage	55	45	-10	42
Greece				
Well off	65	50	-16	30
Just manage	64	47	-17	37
Ireland				
Well off	66	53	-13	28
Just manage	55	37	-18	67
Italy				
Well off	62	50	-12	32
Just manage	55	45	-10	58
Luxembourg				
Well off	56	48	-8	73
Just manage	58	49	-9	26
Netherlands				
Well off	58	47	-11	82
Just manage	47	37	-10	16
Portugal				
Well off	78	57	-21	21
Just manage	68	61	-7	62
Spain				
Well off	61	48	-13	20
Just manage	46	38	-8	68
Sweden				
Well off	70	58	-12	69
Just manage	59	45	-14	27
United Kingdom				
Well off	66	50	-16	29
Just manage	60	45	-15	63

1. The table provides information on average hours worked and preferred hours, according to the perceived financial situation of a household in 1998. The information about preferred hours is derived from questions about a "free choice" of hours by the respondents and his/her partner, "taking into account the need to earn your living".

2. The financial perceptions are responses to the question, "Taking into account the income that the members of your household receive from different sources, would you say that your household is financially well off, that you just manage or that you have difficulties". The proportion of respondents indicating "difficulties" is not shown. It was under 10% in all countries, except France, Greece, Portugal and Spain.

Source: OECD (2001c), Table 4.4, p. 138.

Table 2.9. Actual and preferred hours of men and women with and without children in the same household, 2002

	With children in the same household			Without children in the same household		
	Current hours	Preferred hours	Difference	Current hours	Preferred hours	Difference
Austria						
Men	45.7	39.9	-6.5	44.6	39.3	-5.4
Women	32.2	29.3	-3.1	39.2	34.8	-4.4
Belgium						
Men	40.7	35.9	-3.9	40.1	38.1	-1.9
Women	32.9	29.8	-3.0	34.5	32.9	-1.7
Denmark						
Men	40.6	35.1	-5.4	36.9	34.6	-2.3
Women	35.8	29.5	-6.3	31.8	30.1	-1.8
Finland						
Men	42.3	36.4	-6.0	40.3	35.2	-4.5
Women	37.8	33.0	-4.8	36.7	33.2	-2.9
France						
Men	40.8	36.1	-4.6	40.5	35.7	-4.6
Women	34.0	31.1	-2.8	35.0	33.4	-1.5
Germany						
Men	43.4	37.4	-6.1	40.8	36.2	-4.7
Women	28.9	27.8	-1.2	35.4	32.2	-3.3
Ireland						
Men	42.7	37.1	-5.7	41.9	37.7	-4.2
Women	31.6	26.0	-5.7	37.1	35.3	-1.8
Italy						
Men	39.9	36.9	-3.0	39.3	36.9	-2.3
Women	34.2	29.6	-4.5	34.2	31.3	-3.0
Netherlands						
Men	43.2	37.6	-5.7	36.4	34.2	-1.9
Women	21.2	21.3	0.1	29.3	28.7	-0.8
Portugal						
Men	43.3					
Women	35.8	33.4	-2.1	36.6	33.9	-2.7
Spain						
Men	40.8	36.2	-4.6	41.6	37.7	-3.8
Women	34.4	33.1	-0.9	35.4	35.3	-0.1
Sweden						
Men	42.9	36.2	-6.5	39.6	36.6	-3.1
Women	35.0	31.5	-3.3	34.9	33.5	-1.3
UK						
Men	46.9	38.3	-8.5	40.6	36.6	-4.1
Women	28.3	25.8	-2.7	34.3	30.8	-4.2
Norway						
Men	41.9	34.9	-7.0	39.9	35.8	-4.1
Women	32.4	28.5	-1.3	31.7	31.0	-1.3
EU-15 + NOR						
Men	42.5	37.1	-5.4	40.3	36.5	-3.8
Women	31.3	28.8	-2.5	34.7	32.1	-2.7

Source: Bielenski *et al.* (2002), p. 61.

Table 2.10. Opinions on importance and availability of different options for combining paid and unpaid work, percentage of the working population, EU-15, 2003

	Importance			Available	Difference important/ available
Which of these options are important to you personally for combining paid work with other activities	Men and women	Men	Women	Men and women	Men and women
Working more or less hours if needed	59	58	60	44	14
Saving up overtime to take as extra time off	38	38	39	29	10
Carrying over holidays to next year	32	32	31	24	7
Early retirement	25	27	23	9	16
Taking extra paid time of to look after relatives	25	22	28	12	12
Early retirement but with the option of still working part-time	24	23	25	7	17
Taking extra pay instead of holiday	23	25	21	14	9
Taking unpaid leave	21	20	22	19	2
Taking extra paid time off for study	19	18	19	11	8
Childcare facilities at your workplace	15	11	21	4	11
Teleworking	15	16	14	8	7
Taking a sabbatical, career break	15	14	16	7	8
Don't know	7	47	6		
Others	4	4	4		

Source: Eurobarometer 60.3.

Table 2.11. Changes in lifetime allocation of labour and leisure, 1965-2000

Percentage deviations[1]

		Men			Women		
	Period	Childhood & education	Length of working life	Length of retirement	Childhood & education	Length of working life	Length of retirement
Australia	1970-2000	-0.7	-5.5	6.3	-1.8	-1.9	3.7
Belgium	1990-2000	-0.3	-1.8	2.0	0.9	2.1	-3.0
Canada	1980-2000	-0.2	-3.1	3.3	-0.5	-1.9	2.4
Denmark	1990-2000	0.1	-7.1	7.1	2.6	-8.6	6.0
Finland	1970-2000	0.2	-3.9	3.8	-0.2	-2.7	2.9
France	1970-2000	0.8	-6.8	6.1	-1.6	-4.4	6.0
Germany	1975-2000	2.0	-6.5	4.6	0.2	-4.9	4.7
Greece	1990-2000	1.0	-1.0	0.0	1.3	0.4	-1.7
Ireland	1985-2000	0.6	-1.1	0.4	0.7	-3.5	2.8
Japan	1970-2000	-0.3	-3.4	3.6	0.4	-3.8	3.4
Luxembourg	1990-2000	1.5	-4.6	3.1	7.0	-8.6	1.6
Netherlands	1975-2000	-0.3	-2.1	2.4	-0.3	-3.2	3.5
New Zealand	1990-2000	0.2	-0.9	0.7	3.2	-5.7	2.5
Portugal	1980-2000	1.8	-5.6	3.8	0.1	-5.2	5.1
Spain	1980-2000	1.8	-4.4	2.6	1.7	-6.1	4.4
Sweden	1970-2000	0.2	-3.8	3.6	-2.9	-0.7	3.6
Turkey	1995-2000	-0.2	-11.0	11.1	-0.8	-7.2	7.9
United Kingdom	1990-2000	0.3	-3.9	3.6	-2.5	0.6	1.9
United States	1965-2000	-0.4	-4.3	4.7	-2.4	-0.3	2.7
OECD average	1990-2000	0.2	-3.3	3.1	0.0	-2.3	2.3

1. Changes in lifetime allocation of labour and leisure across OECD countries, normalised over (several periods) a ten years period.

Source: Burniaux *et al.* (2004).

Table 2.12. Public spending on families and on elderly, 1998[1]

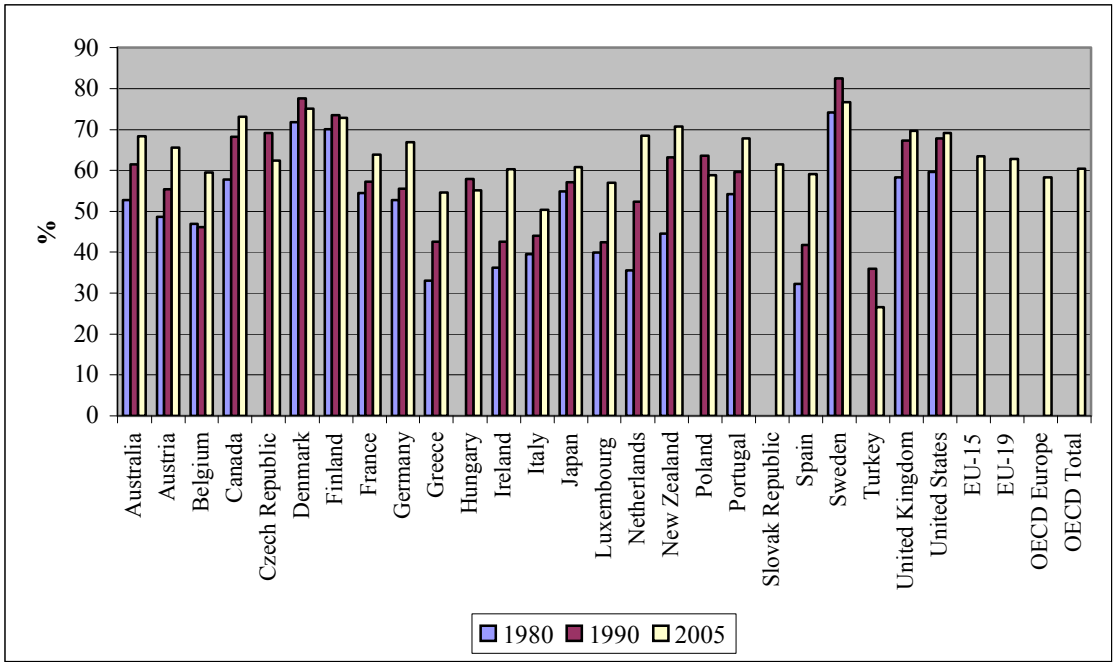
	Public spending on families (1)= (2)+(3)	Cash benefits (2)	Family services (3)	Public spending on elderly (4) =(5)+(6)	Old age cash (5)	Services for the elderly (6)	Spending on families versus spending on elderly (7) = (1):(4)
Australia	*2.60*	2.19	0.41	*5.06*	4.30	0.76	*0.51*
Austria	*3.03*	1.92	1.11	*10.86*	9.94	0.92	*0.28*
Belgium	*2.22*	2.06	0.16	*7.50*	7.37	0.13	*0.30*
Canada	*0.76*	0.76		*5.10*	5.10		*0.15*
Czech Republic	*1.61*	1.61		*6.85*	6.37	0.48	*0.24*
Denmark	*3.77*	1.54	2.23	*9.77*	6.82	2.95	*0.39*
Finland	*3.36*	1.92	1.44	*8.53*	6.99	1.54	*0.39*
France	*2.69*	1.46	1.23	*11.25*	10.59	0.66	*0.24*
Germany	*2.73*	1.93	0.80	*11.21*	10.46	0.75	*0.24*
Greece	*1.91*	1.18	0.73	*10.49*	10.22	0.27	*0.18*
Ireland	*1.74*	1.58	0.16	*2.90*	2.54	0.36	*0.60*
Italy	*0.88*	0.58	0.30	*13.01*	12.84	0.17	*0.07*
Japan	*0.47*	0.21	0.26	*5.98*	5.67	0.31	*0.08*
Luxembourg	*2.81*	2.40	0.41	*8.53*	8.02	0.51	*0.33*
Netherlands	*1.21*	0.81	0.40	*7.51*	6.21	1.30	*0.16*
New Zealand	*2.65*	2.55	0.10	*5.47*	5.47	0.00	*0.48*
Poland	*0.93*	0.93		*8.25*	7.97	0.28	*0.11*
Portugal	*0.98*	0.65	0.33	*6.58*	6.31	0.27	*0.15*
Slovak Republic	*2.19*	2.10	0.09	*5.62*	5.20	0.42	*0.39*
Spain	*0.40*	0.29	0.11	*8.41*	8.12	0.29	*0.05*
Sweden	*3.31*	1.63	1.68	*11.17*	7.46	3.71	*0.30*
Turkey	*0.98*	0.91	0.07	*4.31*	4.22	0.09	*0.23*
United Kingdom	*2.22*	1.73	0.49	*10.58*	9.77	0.81	*0.21*
United States	*0.51*	0.22	0.29	*5.20*	5.15	0.05	*0.10*

1 Cash amount for a two-earner family with two children as a percentage of GDP. A blank means that there is no scheme; a "0.00" means that a scheme exists but is not visible as a percentage of GDP.

Source: Author's calculations using the OECD Statistical database.

Figure 2.1. Female labour force participation, 1980-2005

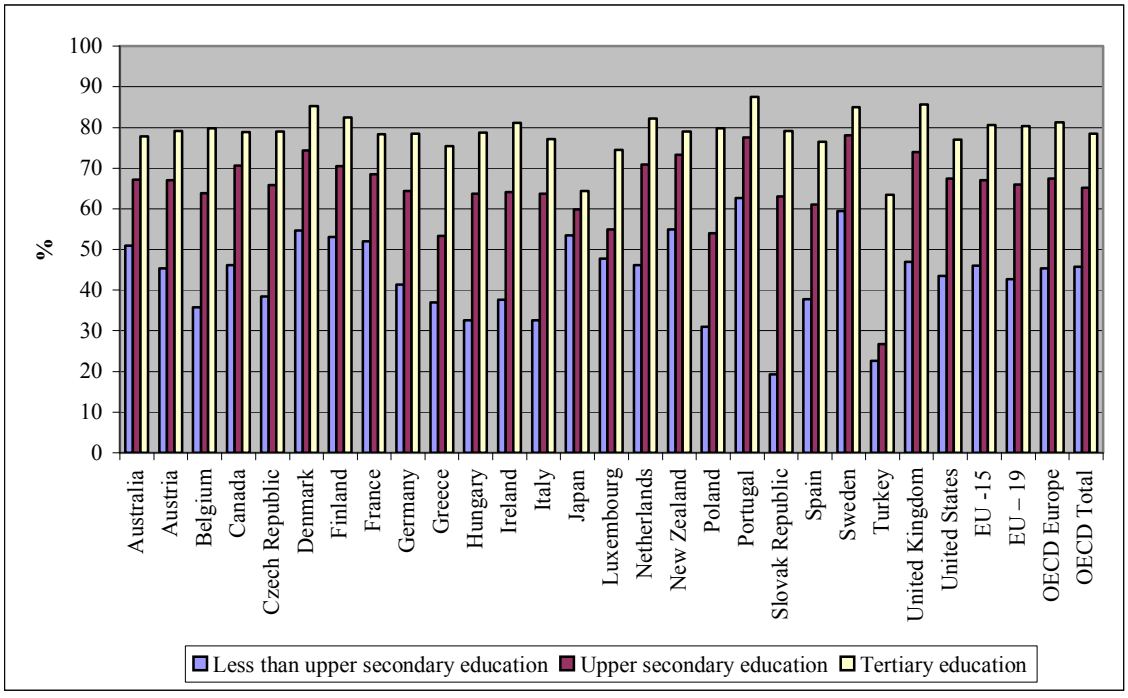
Persons aged 15-64 years



Source: OECD (2002a & 2006a), Statistical annex, Table B, p. 250; European Union Labour Force Survey. Before 1990: *OECD Labour Force Statistics*.

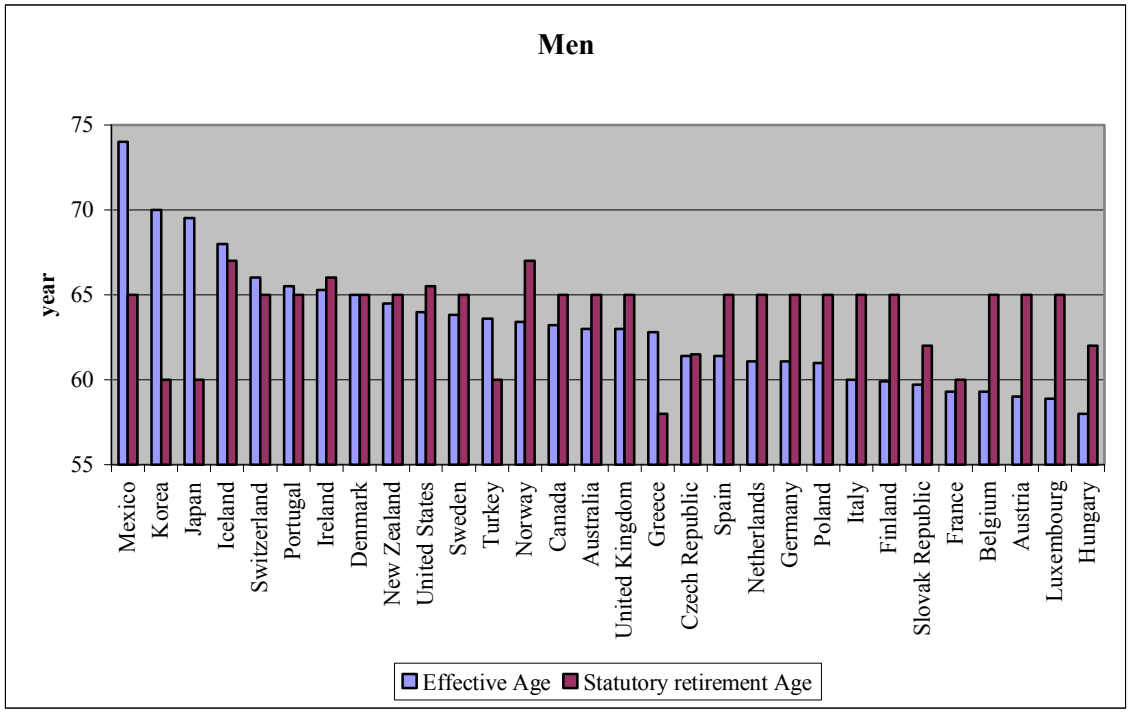
Figure 2.2. Female employment rates by educational attainment, 2004

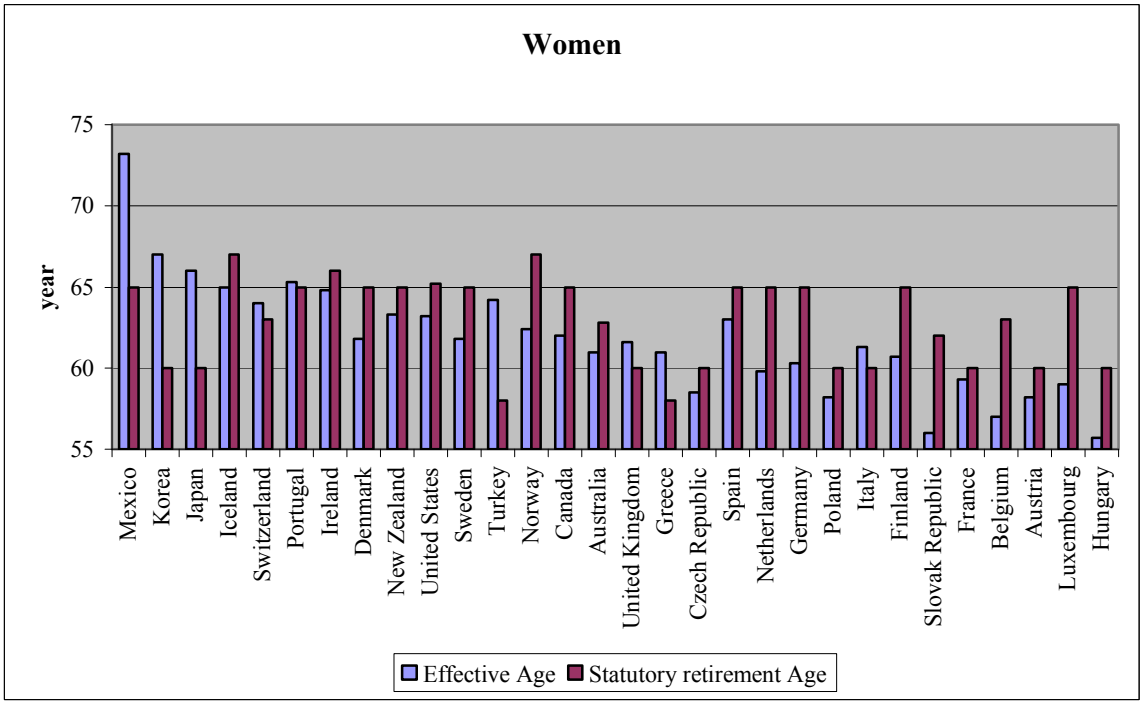
Persons aged 25-64 years



Source: OECD (2006b), Statistical annex, Table D, pp. 260-262.

Figure 2.3. Effective age of retirement versus statutory retirement age,[1] 1999-2004

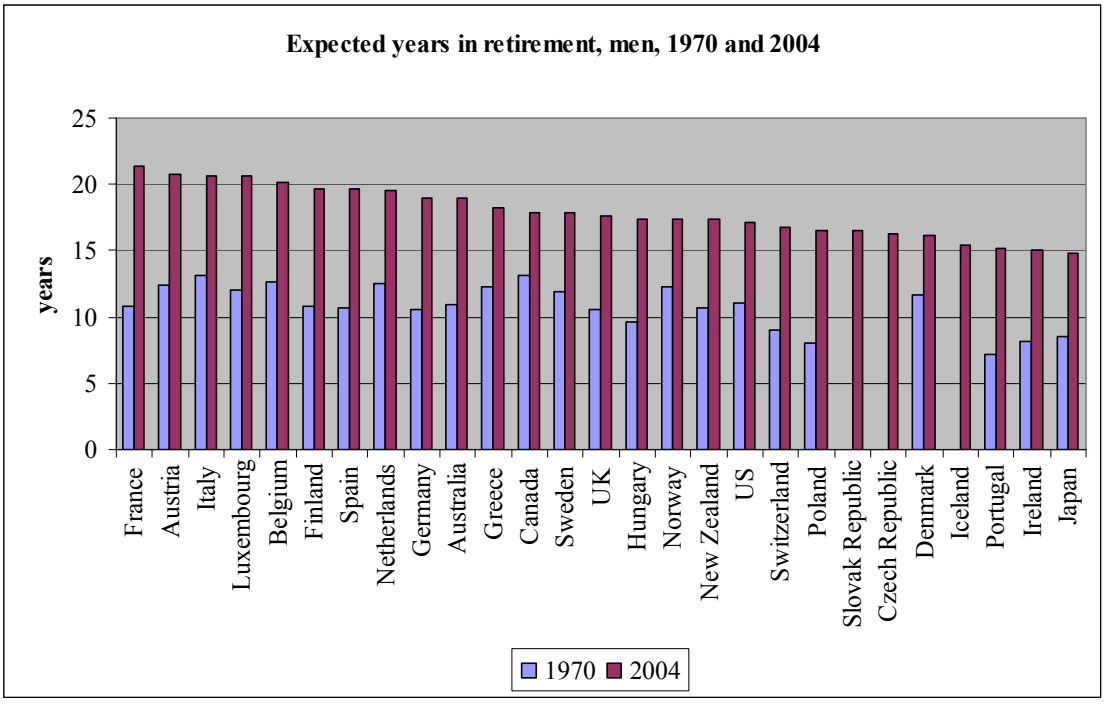


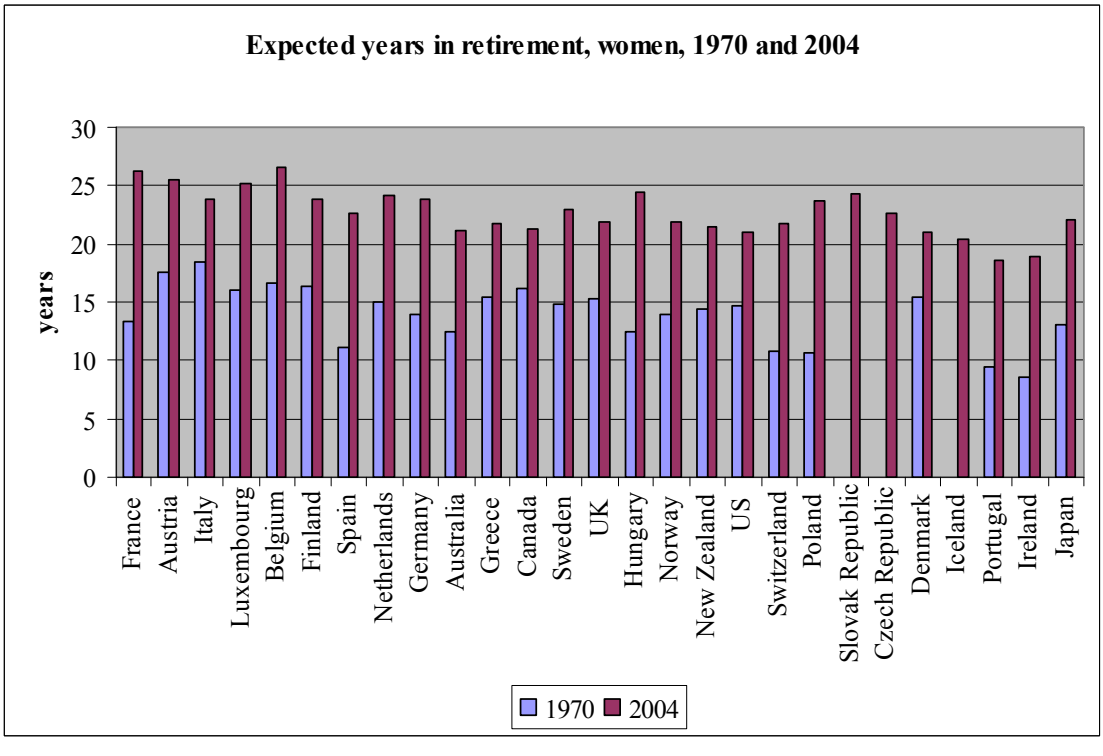


1. The effective age of retirement refers to the average at which persons aged 40 and over left the labour force during the period 1999-2004. The official retirement refers to the earliest age in 2004 at which workers are entitled to a full old-age public pension irrespective of contributions and work history.

Source: OECD estimates based on the European Union Labour Force Survey and other national labour force surveys.

Figure 2.4. Expected years in retirement,[1] 1970 and 2004





1. The data refer to life expectancy at the average effective age of retirement.

Source: OECD estimates. See also OECD (2006a), p. 35.

Figure 2.5. Lifetime allocation of labour and leisure, 2000[1]

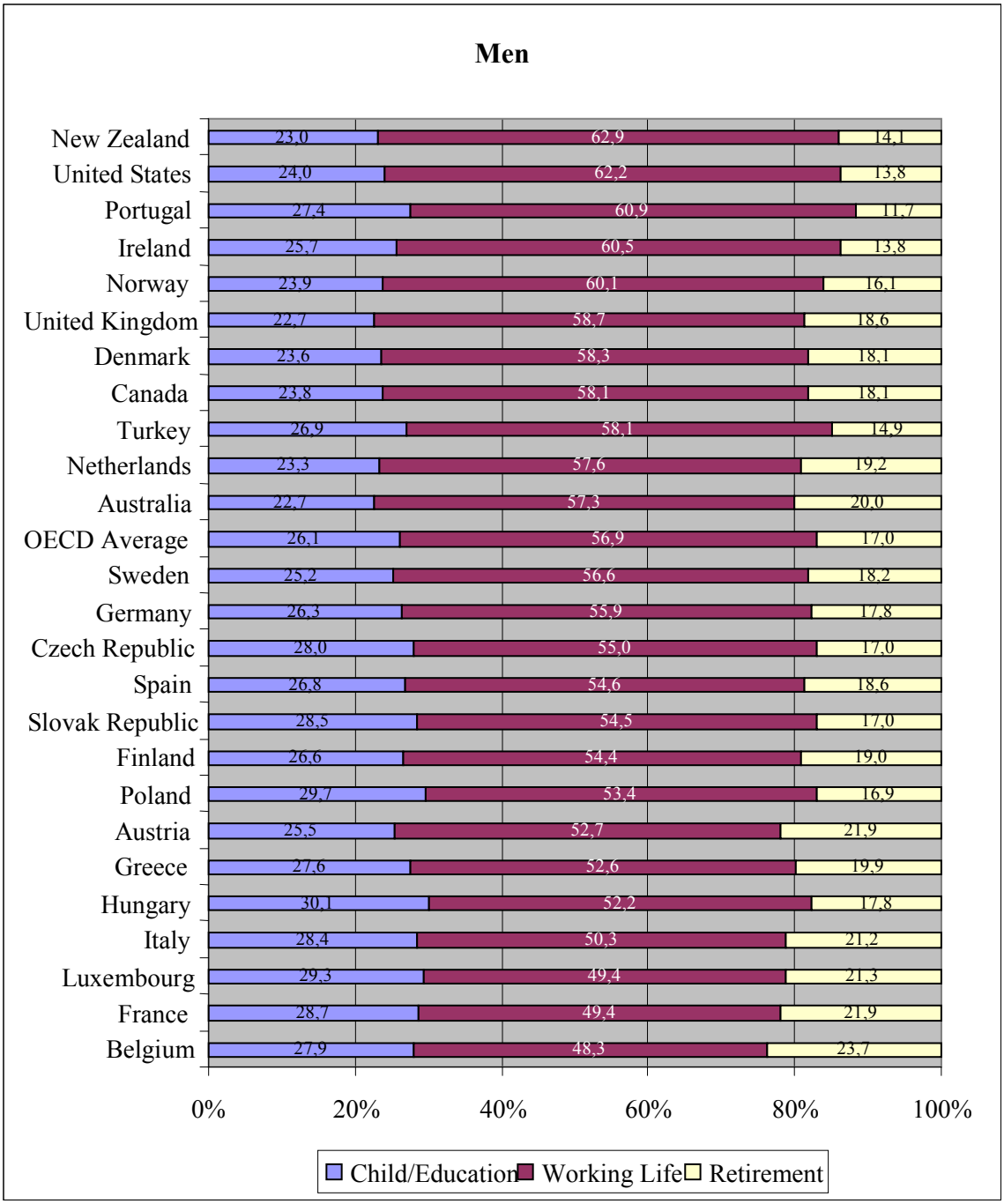
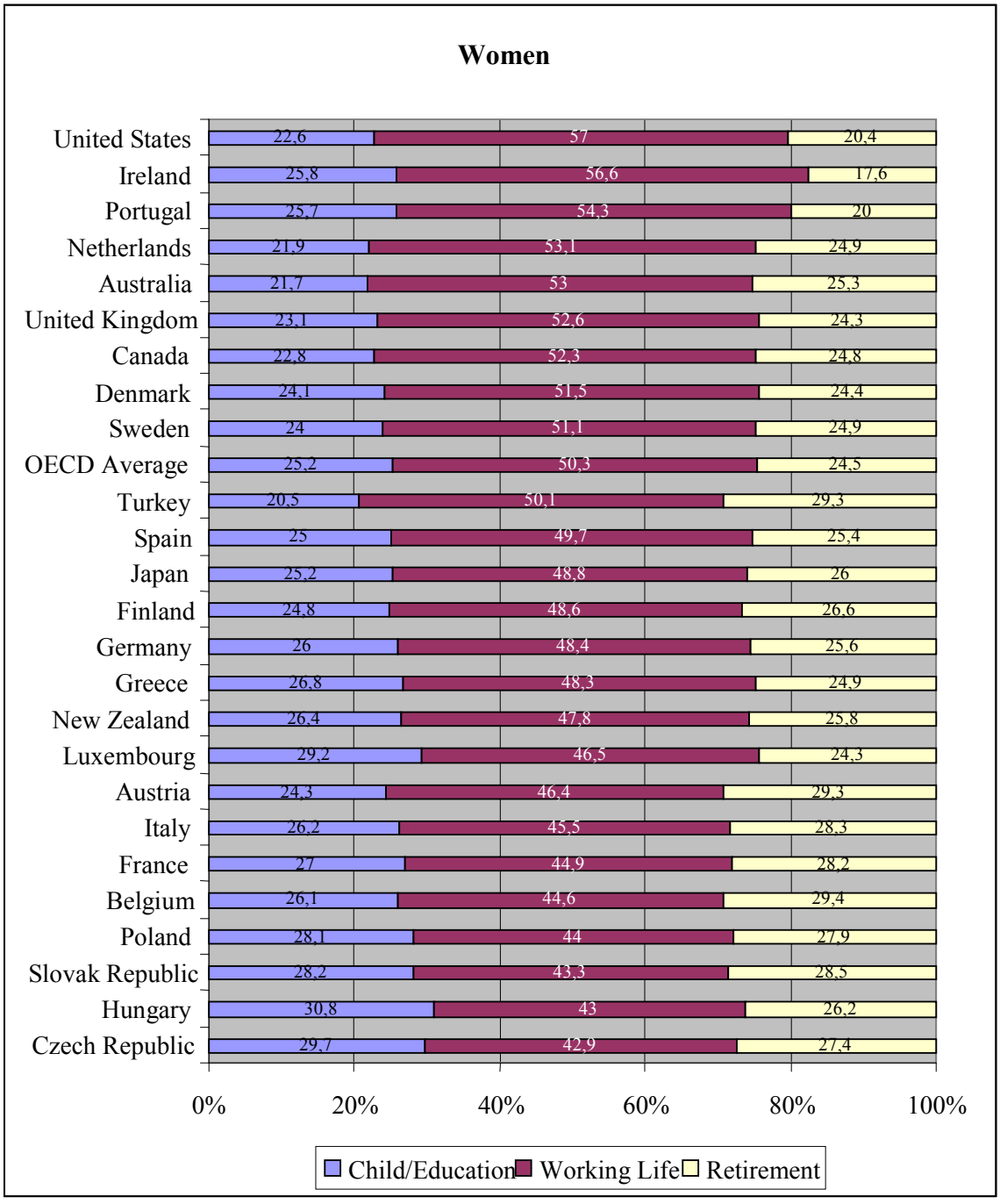


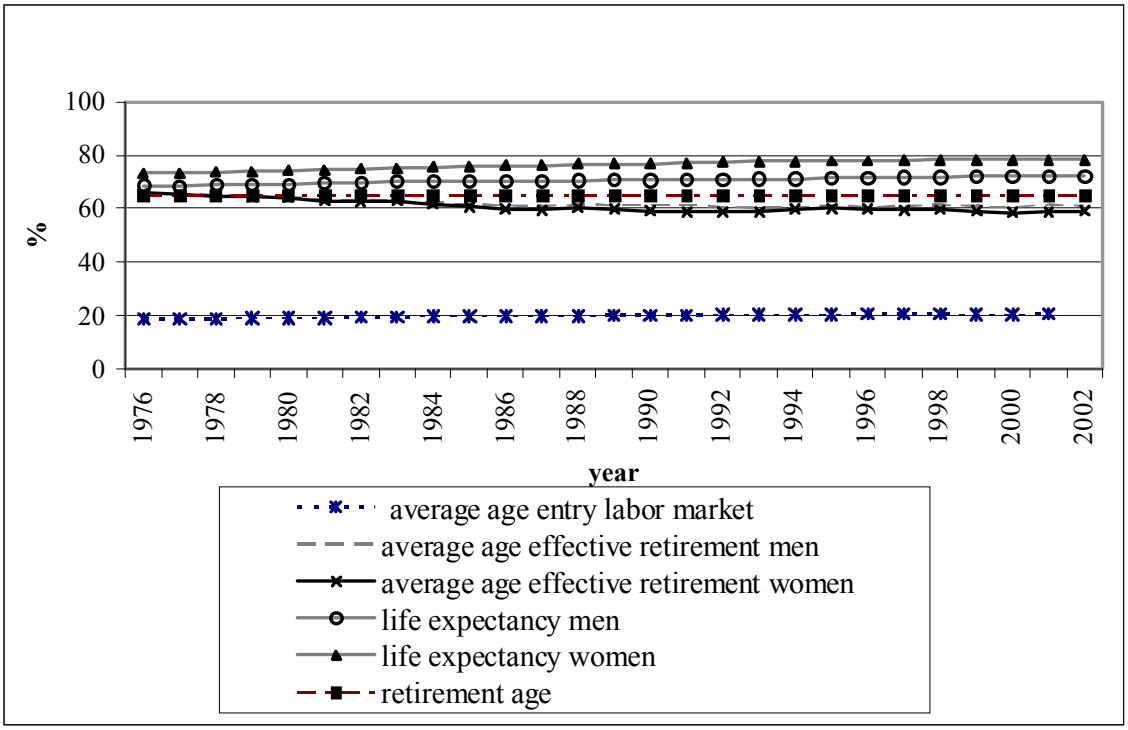
Figure 2.5. Lifetime allocation of labour and leisure, 2000[1] *(cont.)*



1. Based on average expected ages of entry and exit in 2000. The three periods (child/education, working life and retirement) amount to 100. Countries are ordered in increasing lifetime share of working life.

Source: Burniaux *et al.* (2004).

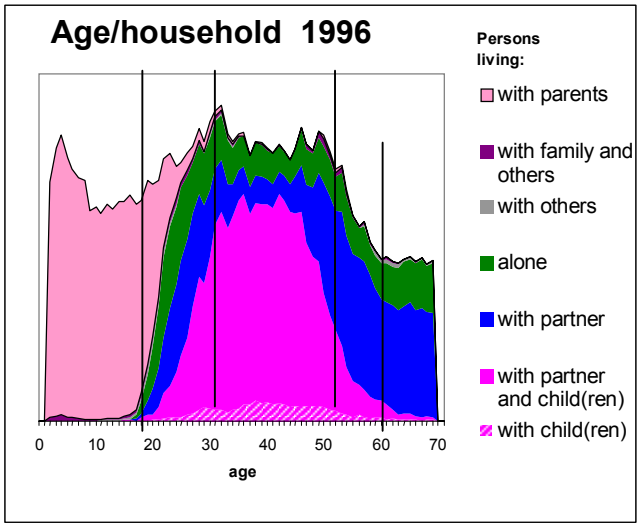
Figure 2.6. Learning, working and resting years in the Netherlands, 1950-2002



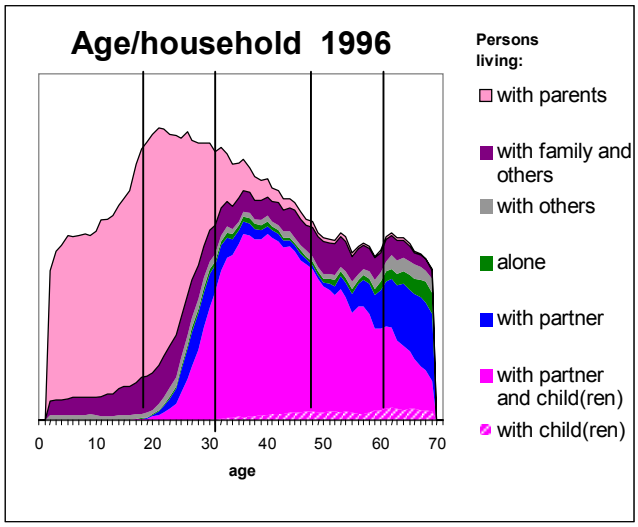
Source: OECD (2005); CBS (2004).

Figure 2.7. Age and household composition, 1996

Denmark

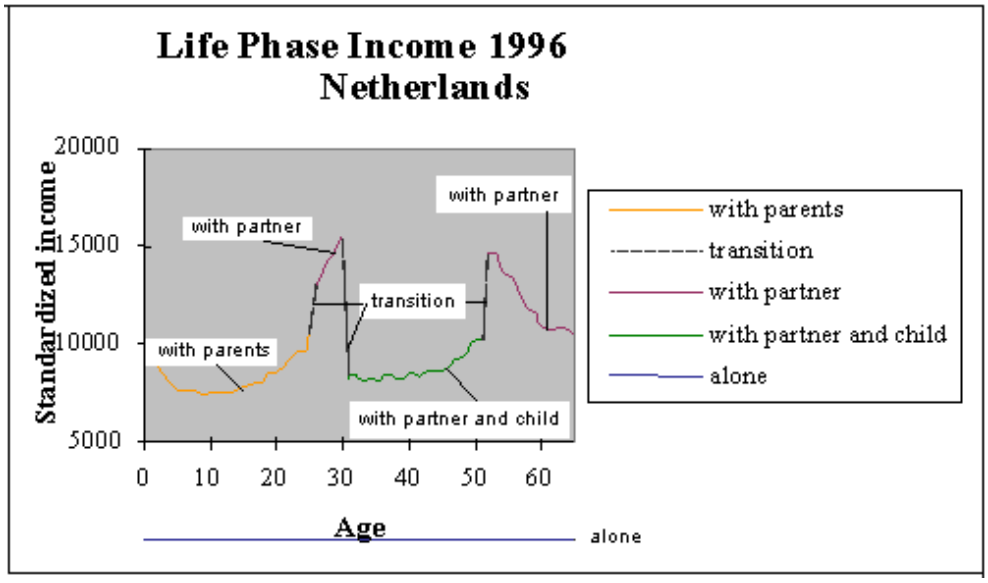


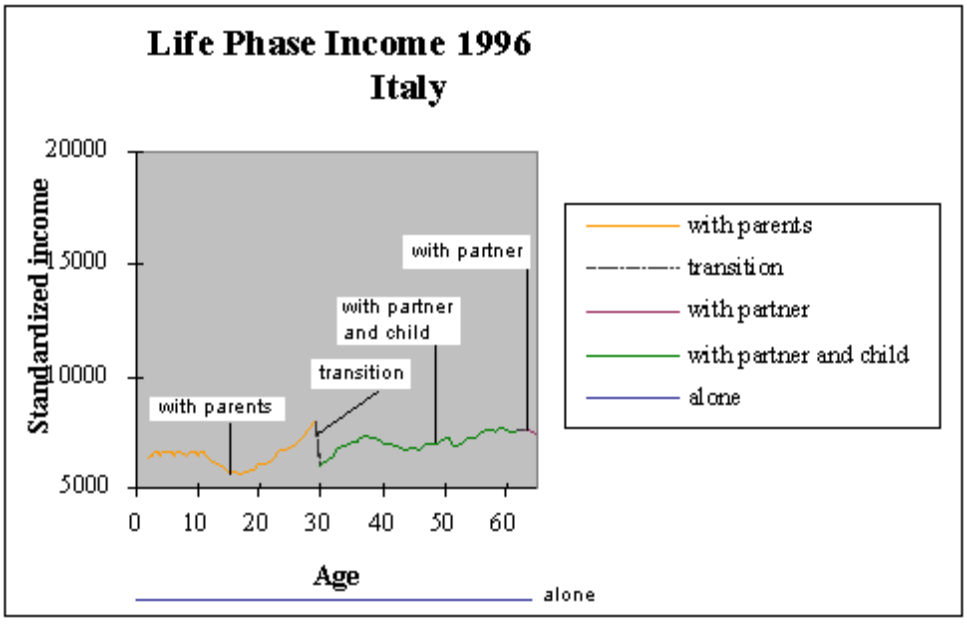
Spain



Source: Kalle *et al.* (2002).

Figure 2.8. Age and standardised income, 1996





Source: Kalle *et al.* (2002).

Chapter 3.

The Role and Effectiveness of Time Policies for Reconciliation of Care Responsibilities

Colette Fagan and Pierre Walthery[1]

The purpose of this chapter is to review the available evidence on the role and effectiveness of different approaches to time-based policies designed to assist individuals in their role as carers (children and dependent adults) by enabling them to adjust the distribution of their work-time across the life course.

1. European Work and Employment Research Centre (EWERC), University of Manchester, United Kingdom.

1. Introduction

The purpose of this chapter is to review the available evidence on the role and effectiveness of different approaches to time-based policies designed to assist individuals in their role as carers (children and dependent adults) by enabling them to adjust the distribution of their work-time across the life course.

Time policies which contribute to the reconciliation of domestic care responsibilities with those of employment include the following:

- Maternity leave (and associated paternity leave periods for fathers which are usually much shorter) at the time of birth.
- Parental leave and other family leave options (*e.g.* care for sick children).
- Part-time/reduced hours – where an important distinction to bear in mind is between those situations in which individuals are able to adjust their work hours in their existing job vis-à-vis a situation where part-time hours are secured via a job switch (internal to the firm or external via the labour market) with the risk that the vacancies open to them are in lower status, lower-paid positions.
- Other working-time adjustments – including flexitime and working time accounts, compressed working weeks, options for working from home.

The other part of the jigsaw is childcare (and elder care) services – they are not "time policies" as such but their availability or otherwise influences how employees with care responsibilities make use of the above time policies.

In this chapter we focus on parental leave and on part-time hours (particularly the "right to request" reduced/flexible hours which exists in a few countries), but we also mention the relevance of other working-time adjustments in the course of the discussion. We discuss the implications of extended leave and reduced hours working for individuals' careers and income across their working life and for aggregate (and firm-level) labour supply. We argue that appropriately designed social policies in this arena enhance the capacities of individuals, families and communities to deal with life events and risks (arrival of children, care needs of fragile elder parents, labour market uncertainties and future job security/career progression, income security) and for societies to progress a range of social and economic objectives (raising the female employment rate and optimising the use made of women's skills; sustainable fertility patterns; enhanced child welfare and family cohesion; family capacities to provide informal care for the ageing population, etc.).

2. The impact of care responsibilities on women's employment over the life course

Women's labour market participation across their working lives has increased substantially over the past three to four decades in most OECD countries, eroding the gender gap in activity and employment rates. However, there are still pronounced national differences in the female employment rate, and the rate of part-time employment.

A key supply-side factor behind the gender gap in employment is that women still do most of the care work in households.[2] Care responsibilities – for children and or incapacitated adults – impact on the employment patterns of many more women than men at different stages across the life course. The time and energy demands of care responsibilities typically reduce labour supply, career progression and lifetime earnings of more women than men. One indicator of the proportion of the workforce with care responsibilities can be taken from a 2004 survey of 27 European countries (EU15 + Norway). This recorded that 38% of employed women have daily responsibilities for childcare and 9% have daily eldercare responsibilities.[3] The proportion with eldercare responsibilities is higher for older workers, and is likely to become a growing reconciliation concern given demographic ageing on one hand and the policy emphasis on prolonging working life in many countries to finance public welfare.

2.1 Country differences in the impact of care responsibilities on women's employment participation

National "work-family" policy provisions in conjunction with wider labour market measures (*e.g.* equal treatment provisions for part-time workers, regulatory limits on full-time hours) play a major role in shaping how care responsibilities (time, energy, financial demands) are managed by those women who become mothers or take on caring for dependent adults. Such policies also shape the gender division of care responsibilities by either creating incentives and support for men to increase their time contribution to care tasks or by reinforcing a traditional and separate demarcation of women as "carers" and men as "breadwinners".

For example, among European countries it is possible to identify different national models of maternal engagement in employment over the life course. A high and continuous level of participation across the life course has developed for women in the Nordic countries; supported by combinations of developed parental leave systems, options for part-time or flexible working and public childcare provision. The policy package varies among the Nordic countries, for example there is more emphasis on flexible leave entitlements in Sweden than Denmark (Leira, 2002). In Finland the options for voluntary part-time working are more limited and less often used as a reconciliation strategy by parents. In contrast, temporary reductions to part-time hours while children are young is common for Swedish mothers but they work longer part-time hours than is the case for mothers employed part-time in many other countries; typically a Swedish mother with a child aged under seven years is employed, and is working an average 33 hours a week (Anxo *et al.*, 2007a).

In the central eastern European countries a high and continuous pattern of full-time employment across the life course was established as the norm for mothers under state socialism, with reconciliation policies centred on extended leave and public childcare and very little use made of part-time or flexible working arrangements. The economic instability and unemployment of the transition to market economies has reduced employment rates, but full-time employment is still the usual activity for mothers with young children.

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2. Women also constitute the majority of the employed care workforce (childcare, eldercare, healthcare, and domestic service).

3. Author's own calculation using the *European Foundation's Fourth Working Conditions Survey*.

In some countries employment patterns have become more continuous for recent cohorts of mothers with young children achieved predominantly via a reduction to part-time hours at the onset of care responsibilities. Thus, mothers are resuming employment more quickly following maternity/parental leave in the Netherlands and the United Kingdom but it is common to switch to part-time hours. Similarly in Germany mothers typically work part-time if they resume employment after taking parental leave. Having made the switch, in these countries few mothers move back into full-time working when their children are older.

In some other European countries mothers divide between two or more routes across the child-rearing years. In France, for example, many mothers have a continuous and largely full-time employment profile when they have children, but a sizeable proportion exit employment (Anxo *et al.*, 2007a). Those who exit are mainly lower-qualified women who then face re-integration problems given the high female unemployment rates. Similarly, among Italian and Spanish women it is mainly the highly-educated mothers who pursue full-time employment. Labour market insecurities, high unemployment and the limited options for part-time working in these economies mean that women are faced with a choice of either remaining in full-time employment if they have it or making an exit after which re-entry is hard to achieve.

In a few other countries, such as Greece the arrival of a young child frequently precipitates a labour market exit for most mothers; particularly where there are limited maternity and parental leave entitlements and shortages of affordable and good quality childcare.

While we can distinguish typical national profiles it should also be remembered that differentiation between higher and lower qualified mothers is found in most countries. The higher qualified are more likely to be in a position to pursue a continuous employment profile, and in most cases are also more likely to continue in full-time hours. This is because not only do they face lower risks of unemployment; the jobs they have make it more worthwhile to pursue continuous employment – they are usually better-paid and more secure, childcare is thus more affordable and the opportunity costs of not pursuing a continuous (and full-time) career are higher in terms of foregone prospects for promotion and earnings progression.

2.2 The economic case for promoting the employment integration of those with care responsibilities

Some economists assess the traditional gender division of labour in households – whereby women specialise in domestic responsibilities and men in market work – as an optimal arrangement in terms of efficiency gains through specialisation as well as reflecting private preferences and choices (Becker, 1981). However, this is erroneous when evaluated from a life-course perspective (Fagan and Rubery, 1996). When women "over-specialise" in domestic care responsibilities through labour market exits or long periods of part-time working not only do they forgo current earnings and human capital accumulation in the short-term; over the longer term they risk erosion of some of their occupational skills, slower career progression and reductions in their future earning capacity and pension accumulation. This labour market "care penalty" exposes carers to increased risks of economic hardship and poverty across the life course for example, if they become lone parent households; or if the main earner in couples loses (his) job through unemployment or ill-health; or as they retire.

Furthermore, there are macroeconomic gains to be had from policies which facilitate individuals' employment when they have care responsibilities (Fagan and Rubery, 1996). Work-family policies enable employers to retain and develop experienced staff; the so-called "business case" rationale for firm-level voluntary provision. There are also macroeconomic reasons for introducing economy-wide regulation rather than relying on individual firm "business case" assessments. Firstly, such measures help to redress the aggregate under-utilisation of women's skills in the economy. Secondly, economy-wide rather than voluntary provision by companies means that the costs can be spread across all firms, and not just borne by those with a female-dominated workforce. Thirdly, it means a more even provision across the workforce that facilitates an economy-wide retention and development of the skills of those with care responsibilities. Fourthly, it helps to ensure a stable provision across the business cycle for firm-level provision is prone to cut-backs in times of recession yet curtailing work-family provisions can contribute to skill shortages when the economy picks up. A fifth reason is that promoting an "adult-worker" model can reduce pressures on public expenditure and wage settlements compared to the "male breadwinner" model of family life which increases the risks that households are exposed to poverty or that male-dominated sectors contend with bargaining for a "breadwinner" wage supplement.

Finally, there is also a public interest in ensuring that workers are supported in their efforts to combine employment with care responsibilities: to promote sustainable fertility rates; enhance children's well-being, and to enable individuals to provide informal care to fragile elders and other dependent adults. This embraces broader concerns than just economic arguments about the returns from mobilising women into employment. It is about a broader conception of the value of care; a recognition of the time and physical presence of "being there" involved in providing care and a broader conception of gender equality which requires changes in they way that employment is organised so that men as well as women can take on the time-demands of care responsibilities (Lewis, 2006).

3. Parental leave

Parental leave is a care measure which gives parents the opportunity to spend time caring for a young child. It is generally made available in principle to fathers as well as mothers; either as an individual entitlement per parent or as a family entitlement that parents divide between themselves. Usually it is defined as a separate provision which parents are eligible for once the mother has finished her maternity leave (and the father his shorter paternity leave around the time of the childbirth); although in a few countries the boundary between the different types of leave is less distinct.

Whereas most OECD countries have introduced broadly similar statutory rights to paid maternity leave,[4] the development of parental leave is more recent and more variable in design. Sweden introduced the first scheme, followed by the other Nordic countries in the 1970s. Hungary also began to develop this type of leave during the same period (Moss and O'Brien, 2006). Most OECD countries now have some form of parental leave but in some countries this has only been introduced within the last few years. For example, some of the EU member states, such as the United Kingdom and Ireland, only

4. In most OECD countries the statutory maternity leave period is between 14-28 weeks with an earnings-related payment (70-100%). Australia and the United States are exceptions where there is no entitlement to paid maternity leave (Moss and O'Brien, 2006).

introduced parental leave following the EU's 1996 Directive which required all member states to provide a minimum of three months unpaid parental leave per parent. Typically, the primary policy objectives are to promote child well-being and gender equality, but concerns to address fertility decline, unemployment or the long-term sustainability of the welfare state and pension system also feature in some national policy debates.

With regard to child well-being, Kamerman (2006) concludes that several studies have shown that leave periods of up to one year following birth have positive impacts on the health and development of children. An importance pre-condition is that the leave is job-protected and paid; otherwise the leave entitlement has no significant effect on behaviour. These policy features are important for creating economic security and for encouraging fathers to take leave, both of which are important elements of the "care package" for promoting children's well-being (O'Brien, 2006). There is a lack of research evaluation on the relative impact on child well-being of leave periods which are longer than one year; or the impact of full-time versus part-time working hours on the resumption of employment (Kamerman, 2006). The optimal length of leave is likely to vary depending on the fit with other reconciliation policy elements, including the quality of childcare services and the options parents have to adjust their working hours.

Leave policies play an important role integrating women into employment across the life course. The positive impact of paid, job-protected maternity leave on women's subsequent employment is clear-cut (Fagan and Rubery, 1996; Blau and Ehrenberg, 1997; Waldfogel *et al*., 1999; Moss and Deven, 1999; Gornick and Meyers, 2003). For example, the introduction of paid maternity leave in Britain in the early 1980s produced a pronounced increase in the proportion of mothers who resumed employment with their previous employer following childbirth, including increased rates of return on a full-time basis (Mc Rae, 1991; Ruhm, 1998; Waldfogel *et al*., 1999). Parental leave enables mothers to prolong their absence when their children are young but a net increase in female labour supply can be expected for two reasons. First, women may be encouraged to enter employment and/or work full-time up to the birth of a child in order to build up their entitlement (OECD, 1995). Secondly, leave provides some protection of job position and earnings level, in contrast to the situation faced by women who are forced to quit when they want time-off for child-rearing and then re-enter the labour market with all the job search risks that entails.

However, while parental leave strengthens women's labour market attachment it may also reinforce their "second-earner" status in couples, depending on the detail of the scheme and how it interacts with the societal and economic context. There are four main considerations: the level of financial support; the length and flexibility of the leave entitlement; whether it is complemented by childcare provision and whether men also take leave for care responsibilities.

Where parental leave is unpaid or has only a low earnings replacement rate this reduces the proportion of households which can afford to take extended leave (all other things being equal). It also creates a financial logic in couples for the lowest-paid parent – typically the mother – to take the leave. This reinforcement of the gender division of care-giving is exacerbated when the leave is allocated per family rather than per individual, for there is no incentive for fathers to take part of the leave unless an individual entitlement is reserved for them. Hence, a decent replacement rate is important so that families can afford to use parental leave, and an individual entitlement is needed to promote fathers' take-up.

Lengthy leave periods can create problems of re-integration, erosion of human capital and fuel sex discrimination given that it is mainly women who take extended family leave. The consensus which seems to be emerging is that while leave periods of about a year strengthen women's labour market attachment, the effects of longer leave periods can be more problematic (Gornick and Meyers, 2003; OECD, 2001). A more optimal arrangement from a life-course perspective are schemes which give parents flexibility to use their leave entitlement to work reduced hours or fractioned into several shorter periods during early childhood years rather than in one long block immediately following maternity leave. The design of parental leave must also be developed in conjunction with complementary childcare services (pre-school and out-of-school) for unless parental leave is coordinated with childcare services it may simply serve to postpone the point at which women exit the labour market.

3.1 Parental leave arrangements in selected OECD countries

The main characteristics of the parental leave arrangements in selected OECD member countries are presented in Figure 3.1. The figure illustrates the significant national variations in the maximum duration of parental leave, the time frame within which the leave can be taken and the form of financial support. While most countries have a formal distinction between maternity, paternity and parental leave this is rather weak in three Nordic countries (Norway, Iceland and Sweden). In the United States and Australia there is no distinction in practice because there is no statutory maternity or paternity leave, only an unpaid parental leave entitlement. A more detailed description of national provisions is presented in Annex 3.A1, which also contains detail about the flexibility for taking leave part-time or in more than one block and additional leave provisions to care for sick children or other relatives.

Duration and income replacement

A broad distinction can be drawn between countries according to whether they offer relatively generous earnings-related benefits for a shorter period of time or smaller benefits over a longer period, with Sweden standing out with a high earnings-related benefit and a long leave entitlement.

The Swedish parental leave system is the most generous: it provides 480 days of leave per child to be taken until they are eight years old (or complete their first year of school), supported by a high earnings-related payment for most of the leave period followed by a flat-rate lower allowance. Sixty days of the leave paid at the higher rate are reserved for each parent and the remaining joint allowance can be divided between the mother and father as they choose. There is also a great deal of flexibility to use the leave in more than one block or on a part-time basis (see below). The other Nordic countries also have parental leave schemes which offer flexibility and a high earnings-related replacement rates – from an average 66% of earnings in Finland to 80-100% in Norway – but for shorter periods than in Sweden.[5] Once parental leave is exhausted it is possible to take additional leave supported by a much lower flat-rate allowance until the child is

5. Outside the OECD, Slovenia is an example of another parental leave system which provides a long leave period (260 days) at 100% earnings replacement rate for insured parents. This is a joint entitlement for the parents to share as they choose, but in addition fathers have an entitlement to 90 days paternity leave supported by a low flat-rate payment, and 75 of these days can be taken after maternity leave has ended until the child is eight years old (Anxo *et al*., 2007b).

three years old in Finland and Norway on condition that public childcare is not used during this period.

In some European countries the leave period extends until the child reaches a certain age rather than being measured in terms of the number of days or weeks. In such systems the leave period is quite long, typically until the child is three or four years old. This applies in Hungary, the Czech Republic, Germany – until the recent reform – and France. In these systems the replacement rate is low for some or all of the period. The most generous of these systems is Hungary, where insured parents receive the 70% earnings-replacement benefit (GYED) for the first two years, followed by a low level flat-rate allowance (GYES) for the third year. Uninsured parents can claim the GYES for three years. In the Czech Republic, the parental benefit represents only a small fraction of the average income, even though it is paid until the child is four years old.

Until recently in Germany, parental leave was supported by a low flat-rate allowance for six months followed by an income-tested benefit for 18 months for which only a small proportion of households qualified. This was reformed in 2007 to provide a shorter period of financial support but at a higher rate for those who qualify: 12 to 14 months benefit amounting to 67% of the previous earnings with EUR 300 and EUR 1 800 as lower and upper thresholds. As under the previous system, this can be combined with part-time work for no more than 30 hours a week. In France, both the *Allocation Parentale d'Education* (APE – in force for children born before 2005) and the *Complément de Libre Choix d'Activité* (CLCA – introduced in 2005) represent less than half average earnings, even though the latter provision requires one parent to stop working in order to qualify.[6] Alternatively, parents who are employed may also receive a benefit designed to help cover the cost of formal childcare – the *Complément de Libre Choix du Mode de Garde* – if their income is under a certain threshold.

Other countries typically specify shorter durations of leave with replacement rates that are generally less generous than the ones in force in the Nordic countries. For example, of the other European countries shown in Figure 3.1, Belgium gives each parent three months leave supported with a modest flat-rate allowance, Italy a total of ten months per child with a benefit for six months at 30% of earnings, while the statutory leave is unpaid in the United Kingdom and the Netherlands. Of the non-European countries shown Canada has the most generous leave system which exceeds that available in many European countries: most provinces provide at least 35 weeks of parental leave paid at 55% of the previous earning, with Quebec offering a slightly more generous replacement rate. Japan offers ten months leave at 30% of earnings while statutory parental leave is unpaid in Australia and the United States.

In some countries where the statutory leave provides limited or no financial support during leave there are important enhancements for some parts of the workforce via collective bargaining or federal policies. This is pertinent for the Netherlands, where a large proportion of the workforce are entitled to paid parental leave via collective agreements, such as public sector workers who are paid on leave at 70% of previous earnings (Fagan and Hebson, 2006). By contrast, a much smaller proportion of the UK workforce are protected by collective agreements, and here one fifth of private sector workplaces and 47% of public sector workplaces offer some form of paid parental leave

6. The amounts may be raised if parents are not eligible for the family benefit – Allocation de Base de la Prestation d'Accueil du Jeune Enfant – PAJE.

or special paid leave for parents (Kersley *et al*., 2006). In the United States, the State of California provides an earnings-related insurance scheme comparable to that of Continental European countries (Gornick and Meyers, 2003).

Flexibility and options for taking leave on a part-time basis

The degree of flexibility in when and how parental leave is taken varies between countries on three dimensions: whether there is scope to vary when during the child's life the leave is taken, whether the leave can be taken in more than one block, and whether it can be "fractioned" and combined with part-time work. Where this flexibility exists it provides parents with options to adapt their working-time across part of the life course as family circumstances change. Sweden has the most flexible leave system on all these dimensions (see Annex 3.A1), although across Europe the direction of reforms in recent years has been to increase the range of options parents have for how they use leave (Fagan and Hebson, 2006).

In the Swedish scheme parental leave can be taken in up to three blocks per year until the child is eight years old and on a full-time or part-time basis. In addition to the provisions of the parental leave system parents are also entitled to reduce their hours to part-time until the child has completed the first year of school. There is also up to 60 days a year of temporary parental leave for children under 12 years old to care for sick children or to cover childcare problems.

In most countries the leave is concentrated on the pre-school years but a few provide options for some leave to be taken later. In Denmark the bulk of the leave is to be taken before the child is four, but between eight and thirteen weeks out of the total 39 weeks of parental leave can be reserved and used in one block anytime until the child is nine. In Finland, parents can negotiate with their employer to take the home care leave on a part-time basis following parental leave until the child starts the second year of school. In Italy parental leave can be taken any time until the child is eight years old, and in Germany it is possible to defer one year of parental leave to be taken before the child is eight years old subject to the employers' agreement.

Some countries provide parents with the option to take a relatively long period of leave but this must be taken before the child is two or three years old. This applies in France, Hungary, the Czech Republic and Germany; although in Germany the third year of leave can be deferred if the employer agrees (discussed above). The shorter, better financed, parental leave entitlements in Norway and Finland are also concentrated on the early years. In Norway the paid leave must be used before the child is two years old, although each parent also has a right to one year of unpaid leave which can be used beyond this age threshold. In Finland parental leave and home care leave also extend until the child is three unless the employer agrees to allow the latter to be taken part-time.

Other countries provide shorter leave entitlements concentrated on the pre-school years but with more flexibility as to when the leave is taken. Belgium permits the paid leave to be taken in more than on block of at least two months, the detail of which depends on whether the leave is taken full-time or part-time. In the United Kingdom the unpaid leave can be taken in blocks of one or more weeks but limited to four weeks per year and can only be used until the child is five years old. The longer unpaid leave entitlement in Australia is also taken in blocks of one or more weeks until the child reaches five years old.

Most of the European schemes permit parental leave to be combined with part-time work, or for parents to work reduced hours following parental leave until the child enters school. The Swedish leave can be taken full-time, half-time or quarter time. Many mothers in Sweden use parental leave to obtain part-time work, typically working longer average weekly hours than those worked by worked by mothers in other European countries where maternal employment is typically part-time, such as the Netherlands, Germany or the United Kingdom (Anxo *et al.*, 2007c). In Norway leave can be taken in various part-time fractions in conjunction with a time account system. However, leave is mainly taken on a full-time basis in Norway, which may indicate that the part-time options are not practical for parents to use for a range of possible reasons (Plantenga and Remery, 2005) even though part-time employment is quite widely established for mothers in the post-leave period. Options for taking leave part-time are also central to the design of the Dutch and Belgian leave systems. In the Netherlands the majority of leave is taken part-time and in Belgium, a 20% reduction (typically from a five to a four-day week) is the most popular option for those taking parental leave (Plantenga and Remery, 2005, Box 5). In some of the other European countries access to part-time parental leave is contingent on negotiating the employers' agreement (*e.g.* Denmark, Germany, Finland and the Czech Republic). This can be difficult to secure where part-time work is not an established work pattern, as in the Czech Republic. Hungary is an example of where the legislation provides only limited scope for combining part-time work with leave, part-time work in the French leave system is limited to a few hours per week/month[7] and Italy is one of a few European countries where the leave scheme does not include some measure to permit the option of part-time work while (see Anxo *et al.*, 2007b for more detail).

There are no explicit provisions for part-time parental leave in the unpaid schemes in the United Kingdom and Australia, but there are other legal measures which give parents the right to request part-time hours in negotiation with their employer. In Australia, parents have the right to request part-time work until their child reaches school age when resuming employment after parental leave. In the United Kingdom the "right to request" is not contingent on having taken parental leave and covers a wider range of care responsibilities. The UK "right to request" is discussed further in Section 4 below where it is compared with the employee "right to request" legislation which exists in Germany and the Netherlands.

Family-based or individual entitlements to leave – the question of "Daddy days"

If extended periods of parental leave are only used by mothers this can reinforce women's role as the main care-provider in the home and in turn fuel gender inequality in the workplace. If there are incentives for fathers to take parental leave this may contribute to a more gender equal pattern of labour market engagement as well as enhancing family

7. In France, employees (with at least one year tenure with a company) can ask for a parental leave that may be part-time, but they have to work at least 16 hours per week. Fathers and mothers are eligible until the child is three years old. In addition, employees who are parents of a handicapped or a seriously ill child under 20 years old are eligible for leave that can also be taken part-time (*i.e.* "congé de présence parentale") for a duration of four months which can be re-granted twice up to a maximum of 12 months. The employees can receive an allowance from the Family Policy Fond. Furthermore an employee with a parent, a child or a relative nearing the end of their lifetime is eligible for leave (*i.e.* "congé de solidarité familiale") which can be taken part-time. The shift from full-time to part-time work requires the agreement of the employer with the leave duration for a maximum of three months which may be re-granted once.

well-being. The available evidence from a series of mainly Nordic qualitative studies conclude that if fathers take leave this promotes their involvement in childcare in the short-term, closer relationships with their children, and produces emotional benefits for both parents (O'Brien, 2006).

Sweden, Norway and Iceland have periods of parental leave reserved for fathers – so-called "Daddy days" – which are supported by a high earnings replacement rate (80-100%): 60 days in Sweden, six weeks in Norway and three months in Iceland. In Sweden and Norway this is small relative to the longer leave periods which women can take if they use all of the couples' additional joint entitlement,[8] while in Iceland each parent has three months and they can decide how to split a further three months. In Denmark each parent has an individual entitlement to 32 weeks, however parental leave benefits are only paid for 32 of the total 64 weeks available to couples and no portion of the paid leave is reserved for fathers. Denmark abolished "Daddy days" in 2002.

In a few countries the total leave period is extended by "bonus days" if the father takes a certain portion of the original joint leave entitlement. Of the countries shown in Figure 3.1 this includes Finland, Italy and Germany. In all three the leave payment is earnings-related but at a lower rate than the Nordic countries discussed above. In Finland if the father takes 12 days this earns a modest bonus of 12 days, in Italy the leave is extended by one month if fathers take at least three months of the original ten months and the recently reformed German scheme now provides a two month bonus if the father takes at least two months of the long joint entitlement.

Other countries have adopted equal individual entitlements for men and women which are not transferable. These include Belgium and Japan where there is a flat-rate or modest earnings-related benefit paid to those who take leave, the Dutch system where payments are widespread via collective agreements and the mainly unpaid leave provisions in the United Kingdom and the United States.

By way of contrast, leave schemes which are family-based without an individual entitlement or reserved "Daddy days" exist in Hungary, France, the Czech Republic, Canada and Australia.

The articulation of parental leave with childcare provision

The way that parental leave is used is also influenced by the availability of childcare. In countries where childcare services are limited, expensive or the opening hours of services are incompatible with working hours this creates an incentive for mothers to prolong leave periods. This may mean that extended leave becomes an exit route rather than a bridge for resuming employment. For example, in the European Union only a limited number of member States have reached the common Barcelona target[9] of making childcare services available for 33% of children under three years old and 90% of children between the age of three years and school age. The Nordic countries, Belgium, France have the most comprehensive public childcare systems (Plantenga and Remery, 2005).

8. Sweden has formalised the transfer of parental leave days between the mother and the father so that transfers have to be confirmed in writing. This process may encourage couples to consider modifying the traditional concentration of leave days on the mother. A similar requirement exists in Slovenia.

9. These targets were set by the Barcelona European Council in 2002 as part of the European Employment Strategy (EES) and mMember States are expected to reach these targets by 2010.

In a few countries, part of the parental leave provision is explicitly intended as an alternative to using public childcare. In such cases parental leave benefits can not be claimed if the child attends formal childcare, or uses it for more than a minimal number of hours per week. There has been a move in that direction in some Nordic countries where the supply of public childcare has been traditionally strong – in Finland, Norway and most recently in Denmark following the 2002 reform. This has been introduced partly in response to pressure from some quarters that this increases parents rights to care for their children themselves and receive a compensation for not using public childcare, and partly to reduce childcare expenditure pressures (Ellingsaeter and Leira, 2006). Similar types of eligibility conditions are in place in the Czech Republic and Hungary.

3.2 Take-up of parental leave

No harmonised data on the individual take-up of parental leave are available for OECD countries. Existing statistics are limited and usually cover either the number of claimants or the number of days taken by families without a gender breakdown. Where take-up rates are recorded for fathers these are usually expressed as the proportion who take leave which should preferably be complemented with indications about the number of days actually taken. Finally, the data available is not always very recent and it is often difficult to draw reliable comparisons across countries as a consequence of differences in eligibility conditions (Bruning and Plantenga, 1999). Table 3.1 provides a comparison of household and paternal take-up rates for selected countries.

Household take-up rates

In eight of the 15 countries, the take-up of parental leave per eligible household was high, an estimated 90% or more. This applies to the five Nordic countries, Germany,[10] the Czech Republic and Hungary.

The Nordic countries have a long tradition of high household take-up rates of parental leave. In Sweden, most parents use parental leave provisions: 97% of the parents of children born in 1991-93 used the earnings-related leave, 90% the flat-rate leave, and 60% took the full 480 days of parental leave (Nyberg, 2004). Research has shown that in Sweden parents tend to opt for a period of full-time leave until the child is 18 months old; the age at which formal childcare services become available (Moss and O'Brien, 2006). Take-up was similarly high in the other Nordic countries, although in Norway eligibility conditions mean that about a quarter of households do not qualify for the paid leave. In Finland the take-up of parental leave is high but that of the extended home care leave is much lower.

In Germany – prior to the reform of 2007 – 85% of eligible households and 73% of all households with newborn children took leave (Plantenga and Remery, 2005). Take-up is reported to be higher for those employed in the public sector or large private companies, and for those who were working more than 19 hours a week (Moss and O'Brien, 2006). No data is available yet on the new parental leave introduced in 2007.

In Hungary there are twice as many claimants of the flat-rate benefit which is available to uninsured parents, than the earnings-related benefit where eligibility is restricted to insured parents.

10. Before the reform introduced in 2007.

The take-up rates appear to be more moderate in Canada, France and the Netherlands and low in the United Kingdom, Belgium, Australia and the United States. In Canada, the reform introduced in 2001 increased the duration of the parental leave, and subsequently take-up by eligible new mothers grew from 54% in 2000 to 65% in 2003. The average duration of leave among mothers grew similarly, from six to ten months in 2001 (Evans, 2007). In the United Kingdom, parental leave is seldom taken by parents of children under two years old: among them, only 11% of mothers and 8% of fathers had taken days of parental leave since the end of the maternity or paternity leave. In most cases, the leave was taken for a short period of time *i.e.* one week or less – by both parents. Take-up of other unpaid leave for dependents is also small, less than 30% (Moss and O'Brien, 2006).

In Australia take-up has been low historically. For example in 1999-2000 only 0.3% of employed women took parental leave compared with 3% of employed Danish women on parental leave (OECD, 2002, p. 130). A more recent study found that the majority of mother in employment before giving birth combined various paid and unpaid leaves entitlements during the first year after the birth of their child. However, no distinction was drawn between maternity and parental leave (Australian Institute of Family Studies, 2006).

Gendered patterns of take-up and the impact of fathers' quotas

The overwhelming majority of parents who take parental leave are mothers. In many countries no more than 5% of fathers take some parental leave days (Table 3.1). However, the rate for fathers is notably higher in Sweden, Norway, Iceland and Denmark; and to a lesser extent in Canada and the Netherlands.

In Sweden, 90% of fathers take some parental leave.[11] The majority take it when their children were aged 13-15 months, whereas mothers tended to take the leave before the child is aged 12 months (Nyberg, 2004). However, fathers take much shorter leave periods. It was estimated that fathers of children born in 1999 had taken an average of 43 days of parental leave by the time their child was four years old, against 338 days taken by mothers in the same time frame. Fathers are more likely to take days paid at the more generous rate rather than the flat-rate allowance, which is usually attributed to the breadwinning role significant numbers of men are still playing in families. Norwegian fathers have a similarly high take-up but for fewer days than Swedish fathers, with only 16% taking days beyond the "Daddy" quota. In Denmark take-up by fathers is lower, an estimated 62% take an average of 25 days leave, which as in Sweden and Norway is much shorter than that of mothers. By contrast under the Finnish parental leave system while almost all mothers take parental leave, only 2.6% of fathers took it in 2002 (Stella, 2004). The recently reformed Icelandic system (Moss and O'Brien, 2006) produces the most gender equitable pattern of leave taking, particularly given that the number of days mothers take includes their maternity leave.

It is in the Nordic countries and Canada that take-up of parental leave by fathers has increased the most since the beginning of the 1990s. A notable exception is Denmark where the upward trend in take-up by fathers has been suppressed – by the introduction of a transferable allowance replacing the reserved portion of paid leave for fathers (Borchorst, 2006).

11. The figure might be slightly overstated since the Swedish system does not draw a distinction between paternity and parental leave.

In Finland, the number of fathers taking the leave, even if small, has risen since the introduction of a father's bonus in 2003. Take-up among fathers thus tripled between 2002 and 2004, but at the same time, the average number of days taken decreased. In Sweden, prior to the introduction of the 30 days quota in 1995, just over half of fathers used no days of paid parental leave. In Sweden, as in Finland, the average numbers of days dropped initially as take-up rates increased (Nyberg, 2004), but this has now recovered and exceeds the 1995 average. Other research found a clear impact of the daddy month by comparing the number of days of leave taken by fathers of children born immediately before and after the reform (Ekberg *et al*., 2005).

There is no "Daddy day" quota in Canada, but since the increase in the replacement rate of the parental benefit in 2001, take-up by Canadian fathers tripled from 5.3% in 2000/2001 to 14.2% in 2004/2005. As elsewhere, as more fathers took the leave, the difference between men and women in the average duration of the leave also increased, showing that there is a threshold most fathers seem reluctant to trespass (Evans, 2007).

In the Netherlands fathers and mothers each have an individual leave entitlement. Fathers who take leave, like mothers, usually use it to work reduced hours. The rate rises to 40% for fathers who get paid parental leave via collective agreements, which is further evidence of the positive impact of financial support for raising fathers' take-up (Bruning and Plantenga, 1999).

In contrast, fathers' take-up of leave is much lower in the other countries examined, even if it has been increasing slowly in some places. Australian men, typically take only a few days around childbirth (OECD, 2002, p. 130). In Hungary it is estimated that less than one percent of the parents on leave were fathers (Fodor, 2004). In the Czech Republic, the ratio of men to women receiving the parental benefit is tiny, and grew slightly to 1.39% in 2005 (Moss and O'Brien, 2006). By 2003, take-up among eligible fathers in Germany was estimated at 5%, up from 1.5% previously (Plantenga and Remery, 2005).

Germany provides a clear illustration of the pronounced gender disparity that is associated with long leave systems that provide few incentives for fathers to take leave. In 2001 (prior to the recent reform), 56% of the women who used parental leave took it full-time for more than one year, and nearly 30% took it for more than two years. In contrast less than two per cent of fathers took any leave. The typical household arrangement among households taking up parental leave was for the father to be employed full-time and the mother on full-time leave (60%) and in another third of households the father was full-time employed while the mother was part-time employed, usually for less than 15 hours a week (Plantenga and Remery, 2005).

In sum, the evidence suggests that where a portion of leave is reserved for fathers in conjunction with a high replacement rate this stimulates increases in the take-up rate by fathers, even if the share of days to date remains small in comparison to the length of leave taken by mothers. Hence, these policy elements may by key if societies are to advance towards more balanced time inputs into caring roles between women and men; even if the rate of progress is likely to be slow.

Differentiated take-up by social class

Women are less likely to take leave, or to do so for shorter periods if they have high levels of qualifications and earnings. The picture is reversed for men.

In Sweden, fathers' take-up is linked to their educational attainment and that of their partner: it is lowest in families where both parents did not have any higher education. Similarly, fathers with a higher income are more likely to take leave, but above a threshold take-up decreases again (Nyberg, 2004). Take-up is also lower among fathers born outside Sweden as well as fathers with a more fragile situation on the labour market – *i.e.* unemployed or on low incomes.

In Finland, take-up is higher among middle-income men with white collar jobs in healthcare, or manufacturing industries, or whose partner is highly educated and also in a white collar position. Fathers in their thirties more likely to take longer leave than younger and older fathers (Moss and O'Brien, 2006). So far, only a very small number of parents have taken the new joint part-time leave; the main reason parents give is that it would not have been financially possible (Sutela, 2004).

Childcare costs vis-à-vis earnings shape mothers use of parental leave. For example, in Germany women are more likely to be on leave if they have more children, and one causal factor are problems with the quality and availability of childcare, which seems to be a problem in the former West Germany (Plantenga and Remery, 2005).

The Hungarian parental leave produces a distinct polarisation according to labour market position. Insured parents are entitled to the shorter, more generous, earnings-related GYED benefit. By contrast, other parents may take the lesser paid, GYES or GYET and they take longer breaks from the labour market. Women in professional occupations took shorter leaves (3-9 months) than those in blue collar or routine occupations who tended to take the full three years (Plantenga and Remery, 2005). Similarly in France, although there are no statistics on take-up of leave, indirect evidence suggest that the parental benefit – APE, received by 563 000 recipients in 2003 – is used more by women with lower qualifications and occupational position or whose working conditions were more demanding, often serving as a labour market exit route (Moss and O'Brien, 2006).

Employers' experiences of parental leave

Not surprisingly in light of the previous discussion, a 2004-05 survey of companies in 21 European countries revealed marked national differences in whether companies had had employees on parental leave in the previous three year period. This ranged from 80-90% of firms in Sweden and Finland down to less than half of countries in five countries (Ireland, Netherlands, Poland, Portugal and Spain). Swedish and Finnish firms were also more likely to have had fathers taking parental leave than in most other countries (Anxo *et al.*, 2007b; Riedmann *et al.*, 2006). Controlling for country confirmed that large private sector establishments, those in the public sector and those with a large presence of women in the workforce were the most likely to have experience of employees taking parental leave.

Overall, only 11% of companies with experience of parental leave reported operational problems relating to parental leave; although the proportion varied across countries. The main problems that employers reported were finding replacement staff, continuity of cover and uncertainty about if and when those employees on leave will return. The main strategies for managing leave were new temporary hires or redistributing work among existing employees (Anxo *et al.*, 2007b).

3.3 Other types of care leave

Aside from parental leave provision, some countries provide paid leave for the care of sick dependents. These arrangements vary significantly from one country to another. Some restrict the leave to the care of children while a few include the care of adults.

A number of OECD countries provide a relatively generous number of days leave to care for sick children at a high earnings replacement rate. Examples includes up to 60 days per year for each child under the age of 12 in Sweden; in Hungary 84 days per child aged 1-3 years tailing off to 14 days when the child is aged between six and twelve years; and in the order of ten days per year or per child in Norway, Germany and the Netherlands (see Annex to this chapter).

Examples of extended paid care leave for adult care responsibilities are rare. The Czech Republic and Finland are two examples of countries which provide paid leave days to care for sick relatives: up to nine consecutive days in the former and repeated blocks of two to four days in Finland. A few countries provide for "emergency leave" for various reasons, which can include care for sick adults. In the Netherlands, an emergency leave "for a reasonable amount of time", paid at 100% of the salary is available to employed workers for various reasons, including care for a sick child or adult. Similar but unpaid provision exists in the United Kingdom (Gornick and Meyers, 2003; Moss and O'Brien, 2006).

In Belgium, there are statutory time credit and "career break" schemes. The parental leave system is one component, but leave can be taken for other reasons, including care responsibilities for adult dependents. Eligible employees can take paid extended leave of up to one year when conditions are met. However, only employees with a relatively long employment history with the same employer (five years) are entitled to the scheme, and the right is subject to a threshold of 5% of employees taking the leave within the same company in any given year. It is also possible to reduce to part-time hours for a finite period (either a 50% or 20% reduction).[12]

Some countries have developed systems that permit employees to make working-time adjustments compatible with a life-course approach to time policies which can be used in principle by employees with care responsibilities for children and usually also adult dependents. These types of policy are discussed in the next section.

4. Different forms of part-time and reduced hours working arrangements

Part-time work or reduced working hours can make it easier to combine employment with care responsibilities for children or dependent adults. Currently it is mostly women who switch to part-time employment because of care responsibilities, and women constitute the majority of all part-timers in most countries.

There is evidence that many of the workforce would like to work part-time work at some stage during their life course. Surveys of individual preferences across

12. The Belgian career break scheme was introduced in 1985 for the public and private sectors. In 2002 the private sector career break scheme was replaced by a broader and more flexible time-credit scheme which includes the right for employees to a 20% working-time reduction for a maximum of five years. The 2005 National Reform Programme for Belgium details the intention of the government to restrict the duration of time credits from five to one year to prevent older employees saving their credits to use for early retirement from the labour market.

industrialised countries reveal that a sizeable proportion of full-timers would prefer part-time work and vice versa (Fagan, 2004). For example, a 1998 survey of 16 European countries (EU15 + Norway) found that one third of full-time employed women and just over one fifth of full-time employed men would prefer part-time hours accompanied by a pro rata earnings reduction, often for a finite period of between two and five years. Conversely part-timers also want to adjust their hours: one fifth had been unable to find full-time employment and many others wanted to remain part-time but increase their hours, for example because their care responsibilities had become less intensive as their children grow up (Fagan, 2001). Individuals also want more scope to adapt their work schedules via flexible working-time options, such as flexitime or working-time accounts (Fagan, 2004; Anxo *et al*., 2006; European Foundation for the Improvement of Living and Working Conditions, 2007).

The problem is that it is not always possible to switch to part-time work, or that a switch usually incurs penalties (aside from a pro-rata earnings reduction). It can mean downward mobility if it entails changing jobs, or job stability but with reduced prospects for career advancement. This is because in most countries part-time jobs are concentrated in a narrow range of low-paid female-dominated service jobs and some intermediate clerical positions (O'Reilly and Fagan, 1998). Opportunities for part-time working are more limited in professional and managerial positions, and are usually confined to the lower grades. Even in countries with a high level of part-time employment in the economy, such as the United Kingdom, the amount and type of part-time employment varies across sector and firm type, and eligibility can be restricted to limited occupational levels and job areas (Kersley *et al*., 2006). Hence, an expansion in part-time employment can reinforce or even widen gender inequalities if it channels women into low-paid jobs or confines them to the lower rungs of professional career ladders.

Where employees are able to negotiate reduced or flexible hours in their current job this enables them to retain their current position. This provides them with some protection against downward mobility, although they may still face reduced prospects for subsequent career advancement unless the principle of equal treatment of full-timers and part-timers has been widely implemented in relation to training and promotion criteria.[13] It may also mean that they are able to secure part-time working in an occupation, grade or workplace where such an arrangement is uncommon, which may help in the long run to make part-time work available in a wider range of jobs across the economy.

Before focussing upon policies that permit employees to switch to reduced or part-time working hours one other type of time policy should be mentioned. Some carers may also be able to make use of informal or formal flexitime systems to make some day-to-day adjustment to their start and finish times to better synchronise their work with care responsibilities. This may mean they can work reduced or part-time hours on some days compensated for longer hours on other days. Data for Europe and the United States shows that it is mainly white-collar employees who have this form of flexibility (Fagan, 2004). However, there are also important national differences in the overall coverage and type of formal flexitime systems, revealed for example in European cross-national surveys (Riedmann *et al*. for the European Foundation, 2007; Parent-Thirion *et al*. for the European Foundation, 2007). Here an important distinction is between standard flexitime systems which require any time debts to be erased within a relatively short period of

13. The principle of equal treatment is detailed, for example, in the ILO convention on part-time work or the European Union's Part-time Work Directive.

several weeks, and the more recent development of working-time accounts which in principle provide employees with the scope to "save and spend" their time across the life course to accommodate changes in their domestic situation; including shifts in the extent and type of care responsibilities they have. Working time accounts have begun to be established under collective agreements in some sectors in some countries, particularly in Germany and Sweden (Anxo and Boulin, 2005; Anxo *et al.*, 2006). Such time policies have some potential for improving the reconciliation of employment and care responsibilities across the life course without an overall reduction in working hours.

4.1. Possibilities for switching from full-time to part-time working hours in European countries

In some European countries it is possible for individual employees to switch from full-time to part-time hours at their existing workplace. It is possible for employees to negotiate a switch to part-time or reduced hours for a finite period in a number of parental leave schemes, or in the period following parental leave until the child reaches a certain age. So, for example, since 1978 parents in Sweden have had the right to reduce their working time to a six-hour day until their child is eight years old, and the Belgium time credit and "career break" scheme is an example of leave which can be used for adult care responsibilities (see Section 3).

These options within parental leave systems mean that leaver-takers are able to resume employment while still having time to spend with young children, while also securing higher earnings and some protection against skill depreciation and re-integration problems relative to a longer period of full-time leave. For the employer there may be a range of operational benefits from leave being taken on a part-time rather than full-time basis: continued access to the skills and knowledge of experienced staff; leave-takers who are more able to maintain and develop their skills and knowledge of developments in their area of work; opportunities for other staff to gain news skills via temporary part-time cover. Similar potential benefits for the employee and employer may apply if employees are able to adjust their working hours in order to continue in their job while taking on care responsibilities for adult dependents.

In some firms it is also possible for individual employees to switch from full-time to part-time hours or vice versa under certain circumstances; for example because of vacancies and turnover within the firm or because of provisions in collective agreements. In a few countries this has been underwritten by recent legislation which gives employees an individual statutory "right to request" reduced or flexible hours which is not directly tied to the period of parental leave or the child's pre-school years. This type of law has been introduced over recent years in the Netherlands, Germany and the United Kingdom (discussed further in Section 4.2 below). This is a potentially important mechanism for expanding the opportunities for good quality part-time employment in a wider range of occupational positions and levels and for facilitating working-time transitions over the life course.

In a survey of establishments in twenty-one European countries managers were asked how easy it would be for a full-time employee to switch to part-time hours and for a part-time employee who wanted to move into full-time employment.[14] Overall, in about one

14. The managers were asked how quickly an employee would be able to obtain "an appropriate job" generally in their establishment. We interpret this as implying an adjustment to their working hours in

quarter of establishments managers said it was generally possible to move in one direction, and only 9% said it was possible to move in both directions (European Foundation for the Improvement of Living and Working Conditions, 2006). The results show such transitions are much more possible in establishments where part-time employment exists anyway (Table 3.2). However, even in establishments where part-time employment is part of the operating practices more than a quarter of managers say it would be rare or impossible for an individual to be able to negotiate a transition.

Managers were significantly more likely to report that it was possible to make a switch in one direction if they were responsible for establishments with certain characteristics. Such moves were more likely to be possible in large establishments, and somewhat easier in service sector ones. They were also easier in companies where part-time employment has been introduced mainly in response to the preferences of the workforce for this form of working-time rather than because of other economic or organisational needs. In companies where at least 20% of the workforce is part-time this makes it easier to switch to part-time hours but more difficult to move from part-time to full-time hours; and employee representation increases the possibility for transitions from full-time to part-time (but has no significant effect on possibilities of movements from part-time to full-time working) (Riedmann *et al*., 2006).

Reversibility (adjustments in either direction) was possible in more establishments in Sweden, the United Kingdom, France and Austria – albeit in less than one fifth of establishments – than the other countries surveyed (Figure 3.2). It was least common in establishments in the Central Eastern and Southern European countries; which reflect the fact that part-time employment is generally rare for both men and women in these countries (see Parent-Thirion *et al*., 2007, Table 1.1).

Multivariate analysis showed that reversibility is more common in certain service sectors (hotels and catering, finance and business services), in large firms, in firms where the workforce has been expanding, firms where at least one fifth of the workforce was part-time and increased with the proportion of women in the firms' workforce. The broader ethos of the companies' working-time policy was also important: firms were significantly more likely to offer reversibility if they also offered working-time accounts and considered that promoting work-life balance was an important personnel issue in their company. The likelihood is also higher where the workforce is younger and more skilled (Anxo *et al*., 2007c).

These survey data provide some indication of the amount and type of establishments which provide some possibilities for employees to adjust between full-time and part-time working. They do not, however, provide any detail about where these options were open to all or only part of the workforce, or how widely they are used within the company. Even where there is a statutory entitlement to request an adjustment the implementation is likely to be uneven; for example, line managers may be more willing to tolerate or even

their existing or a broadly similar job; although some managers may also have considered that a move to a lower occupational level also met the criteria of "appropriate" if it provided the employee with the hours they requested. The representative survey was conducted in 2004-2005 in the 15 "old" member States of the European Union (EU15) and six of the new member States (the Czech Republic, Cyprus, Hungary, Latvia, Poland and Slovenia). In more than 21 000 establishments personnel managers and – where available – formal employee representatives (*e.g.* shop stewards, works councils) were interviewed about working time arrangements and work-life balance issues in their companies (for further detail see Riedmann *et al.*, 2006, pp. 55-66).

encourage such adjustments for employees in certain occupations or operational divisions than others, in a similarly way part-time work more is generally seen to be more applicable in some jobs and harder to implement in others – usually the more male-dominated and more senior managerial and professional grades (Fagan *et al.*, 2006). This is explored in more detail in the next section with a focus on the recent policy developments in the Netherlands, Germany and the United Kingdom.

4.2 Legal frameworks which provide employees with the individual right to reduce their hours: a comparison of the provisions in Germany, the Netherlands and the United Kingdom

In recent years new statutory rights for full-time employees to request part-time hours have been introduced in the Netherlands, Germany and the United Kingdom. All employees in Germany and the Netherlands, except those in small firms or who have not satisfied the minimum employment tenure, have the right to request reduced contractual working hours. Employees can also request an increase to full-time hours, although in the German case this is more narrowly defined as preferential consideration for a full-time vacancy. More recently the United Kingdom has introduced a similar form of provision except that the right is restricted to employees with care responsibilities for young or disabled children or dependent adults (see Box 3.1).

In each country the request implies a permanent change to the employment contract and the employer can reject the request for business and operational reasons. However, the United Kingdom has the weakest legislation because it provides the least legal scope for challenging the employers' case if a request is rejected and it does not include a right to request an increase from part-time to full-time contractual hours.

Another difference is the industrial relations context. The Dutch and German legislation was introduced into employment systems where there is a pre-existing and sustained history of widespread collective agreements on working-time which has secured shorter full-time hours and more employees are covered by flexibility agreements that take account of employees' needs. In the United Kingdom, by contrast, a much smaller proportion of the workforce is covered by collective agreements and there is a higher proportion of full-timers working very long hours (see Fagan *et al.*, 2006 for further details). Long full-time hours in the United Kingdom are mainly found among managers and some professional occupations, fuelling a "long hours culture" as the occupational norm in these areas of employment.

The level of part-time employment in all three countries was already relatively high prior to the legislation: in 2005 the Netherlands ranks first among European countries with 46% of the workforce and 75% of the female workforce employed part-time in 2005, followed by a group which includes the United Kingdom, Germany, Sweden, Norway, Denmark, Belgium, and Austria where at least one fifth of the workforce and one third of the female workforce are part-time (Parent-Thirion *et al.*, 2007). A comparative evaluation showed that in all three countries a significant number of employees have successfully requested a change under the legislation (Fagan *et al.*, 2006; Hegewisch, 2005a, 2005b). The highest rate of request was in the Netherlands, split broadly equally between requests for full-time and for part-time working. The lowest rate of requests was in Germany, which in part is due to the poor state of the economy and record high levels of unemployment, but nearly all requests that were made were successful. The success rate was broadly similar in the Netherlands and the United Kingdom; with around 60-69% of requests fully accepted and 10-12% partly accepted, but it is worth noting that

the proportion of employees who made a request was almost twice as high in the Netherlands. The evidence suggests that in each country the legislation has led to a greater acceptance by employers of individual rights to request working-time changes and, in the case of the United Kingdom, it has reduced the proportion of refusals compared to applications made prior to the introduction of the legislation (comparable data is not available for the other two countries).

Box 3.1. Recent extensions of employees' entitlements to flexible working hours in the United Kingdom, Germany and the Netherlands

In the ***United Kingdom*** the Employment Act 2003 introduced a new "right to request" reduced or flexible hours for employees with children under six years old or disabled children under 18 years old. From April 2007 this right was extended to employees caring for dependent adults. This was introduced in the context of the extension of maternity, paternity and parental leave rights; an expansion of public childcare initiated by the government's 1998 National Childcare Campaign; the introduction of childcare tax credits for working parents and a government "Work-Life Balance" campaign to persuade employers of the business case merits of work/family policies, including efforts to encourage employers to increase opportunities for part-time work in more senior positions and a wider range of occupations. The Sex Discrimination Act and the Part-time Workers Regulations (2000) also establish rights for part-time workers which can help mothers who want to negotiate reduced or flexible working arrangements because of care responsibilities.

In ***Germany***, all employees with a minimum of six months tenure had right to reduce their working time in companies with more than 15 employees (which accounts for 75% of all workers) providing there is no internal company reason to prevent such a reduction. Subsequently a law on parental leave and childcare payments cam into force in January 2001 which raised the number of hours that can be worked part-time while on parental leave from 19 to 30 hours per week, with the right to return to full-time work after parental leave. Both parents can now take parental leave at the same time, and the 3rd year of parental leave can now be taken any time up until the 8th birthday of the child. These new entitlements for parents in Germany have been introduced into an institutional setting where there are additional provisions which give employees' opportunities for flexible working hours: in particular the development and coverage of "working time accounts" is more developed in Germany than in most other countries (Anxo *et al*., 2006). The development of working time accounts in Germany coexists with a pattern of shorter full-time working hours secured through a combination of working-time legislation and collective agreements.

In the ***Netherlands*** the Adaptation of Working Hours Act (July 1st 2000) built upon the 1996 Working Time Act, which was designed to promote both working-time flexibility for organisations and a better reconciliation of work and care responsibilities for workers. Under the Adaptation of Working Hours Act all employees have the right to request the shortening or lengthening of their working hours (*i.e.* adjustments between full-time and part-time hours) and this can only be refused if the employer can present sufficient operational reasons. The new law brings together various existing and new leave provisions and seeks to facilitate the reconciliation of work and family responsibilities: the right to adjust working hours due to personal circumstances; paid paternity leave (two days), paid leave to care for sick children (ten days), adoptive leave; increased flexibility in the six-month part-time parental leave scheme so that it can now be taken in three blocks of one month. Like Germany, the Netherlands also has a working-time regime in which long full-time hours are much rarer than is found in the UK economy.

Source: Fagan (2003), updated.

This type of policy tool can, then, increase employees' ability to adjust their working-time across the life course. However, some potential limitations must be noted. Firstly, the results in the previous section (see Section 4.1 above) suggest that this instrument is likely to be easier to introduce into economies where part-time employment is already in use in a sizeable proportion of establishments since it will be building on something which is already in use, and in establishments which are already more "open" to the idea of giving employees more personal flexibility to enhance work-life balance. Secondly, even in countries where part-time employment is established it may still be difficult for employees to make a request if they work in areas where part-time employment is not acceptable because it does not fit with the organisation's existing workplace culture. For example, data for the Netherlands and the United Kingdom show that many employees

are still deterred from making a request because they think it will be rejected or will have an adverse impact on their career, and in the UK employees full-timers who work long hours are less likely to have their request accepted than those working less than 40 hours a week (Fagan *et al*., 2006). Many full-timers who would prefer part-time hours in other countries are similarly deterred (Fagan, 2001). Thirdly, although this policy instrument may help increase men's time adjustment for care responsibilities it is still likely to be mainly women who make such requests. This is illustrated by the UK data, where mothers were three times more likely than fathers to make a request. Worryingly, fathers were more likely to have their requests rejected. This suggests that organisational cultures and norms as to what is considered appropriate behaviour for men makes it less acceptable for fathers to try and negotiate reduced or flexible hours.

Hence, to improve the efficacy of individual "right to request" policies several features need to be built into the design (Fagan *et al*., 2006). Firstly, it is important that the details of the legislation provide a clear definition of the procedure and "business grounds" on which a request can be turned down. The UK legislation provides very little redress if the employer rejects the request, in contrast to the Dutch and German legislation where the grounds for rejecting a case are narrower and the courts have the right to scrutinise and evaluate the "business case" evidence presented by the employer. Legal provisions for trial periods of new arrangements also help employers and employees reach agreement; following the example set by judgements in New South Wales in Australia when employees with family responsibilities have requested alternative work schedules (Bourke, 2004). An option to request a move from part-time to full-time hours is also a necessary policy feature to facilitate time adjustments across the life course.

Secondly, such a policy tool is more likely to succeed if it is part of wider initiatives to promote personal flexibility and a life-course approach in working-time through workplace agreements and through resources and training for personnel departments and line managers to devise and implement flexible working arrangements (*e.g.* training, good practice manuals, budget lines and financial incentives). Thirdly, it also means that social protection systems may require reform so that periods of part-time employment are possible rather than penalised.

5. The impact of parental leave and part-time working hours on career progression and earnings over the life course

The data available on parents' labour market participation following taking up family leave are scarce, and this is even more the case for cross-country comparative information. In addition, there may be a significant time lag between the impact of existing leave arrangements and the "time stamp" of the most recent available statistics.

Maternity leave promotes women's integration and usually has a neutral or positive impact on women's future labour market outcomes. As an example, a review of recent research in the United States revealed a consensus that short-term leaves – the threshold being usually put at one year – after the birth of a child have a positive impact on women's subsequent labour market participation and earnings (Gornick and Meyers, 2003). However, the impact varies across countries in terms of women's subsequent employment, post-leave earnings, the "density" of their employment records, or gender segregation (Blau and Ehrenberg, 1997). This is because of a combination of the details of the scheme and the broader economic and social context in which the leave scheme operates.

At one extreme, are countries where the provision of public childcare is limited; where parental leave arrangements are meant to be taken as a single block for a few years, and the leave period is neither well paid nor flexible. In this set-up the main positive gain from parental leave is that it secures a job guarantee or the right to return for women who would probably have interrupted their employment trajectory anyway, and provides them with some – often limited – additional income.[15] Thus it provides a mechanism which may facilitate women's employment integration following a period of intensive child-raising provided she is able to secure appropriate childcare and working-time arrangements. However, since few countries provide incentives for fathers to take parental leave the likely outcome is to perpetuate an "asymmetric dual earner/single carer" type of family arrangements, as opposed to the dual earner/dual carer models promoted in a gender equality perspective (Haataja and Nyberg, 2006).

At the other extreme, the "Nordic" model of parental leave arrangements coupled with high income replacement rates, flexibility in the way the leave may be taken, and complemented by public childcare provision are associated with high female economic activity rates. In these countries, the trade-off of using parental leave has less to do with employment integration per se; rather the question is whether it contributes to the continued gender segregation of employment such as the greater concentration of women in public sector occupations where it is more acceptable to take long leave periods.

5.1 Patterns of return and employment for mothers following parental leave

Three aspects of women's post-parental leave returns to the labour market are usually examined in the literature: whether mothers return at all to their job afterwards, whether this return is part-time or full-time, the duration of the leave and the timing of returns to work in case of full-time leave.

According to a survey carried out among companies in twenty-one European countries in 2005 (Riedmann *et al*., 2006; Anxo *et al*., 2007b) employers reported marked differences in the prevailing employment patterns of mothers before and after they have taken a parental leave. In just under half (44%) of the establishments surveyed the typical pattern was that women who took parental leave returned to exactly the same job, in one third (34%) of establishments the women reduced their working time on resuming employment and in 10% of establishments the majority of female leave-takers did not return to their jobs (Riedmann, 2006).

There were marked national differences in the typical patterns reported by managers, which can be grouped into four broad categories. In the first the majority of establishments reported that mothers who take leave typically resume the same job with the same number of hours. A large number of countries fell into this group, but it is perhaps best exemplified by Denmark or Finland. In a smaller group of countries a pattern of resumption with reduced hours was almost as common, or more common, than resuming without a reduction in hours: for example in Sweden, the Netherlands, the United Kingdom, Belgium and Ireland. The third country group comprised Austria and Germany where in around half of establishments with recent experience of mothers taking parental leave the mothers typically resume on part-time hours but this coexists with a sizeable proportion of establishments – nearly one fifth – which reported that

15. This may be improved by the fact that in some countries the time spent caring for children might count against future pension or social security entitlements through credits for care periods.

mothers usually did not resume their job after parental leave. In a fourth group the typical pattern was for full-time resumption but with a similar pattern of around one fifth of establishments reporting that mothers typically left after leave; exemplified by Hungary and the Czech Republic.

Aside from the national context, establishment characteristics were also found to shape mothers' employment patterns post-leave (Anxo *et al*., 2007b). Women employed in large companies were the most likely to return to the same job and the most likely to request reduced working hours. Establishments in education, public administration or private firms with a large proportion of employees working part-time were more likely to report that women requested reduced hours following leave. These different patterns of post-leave employment between types of establishments may contribute to the horizontal dimension of gender segregation (*i.e.* by firm and sector rather than occupational level).

One influential reason why mothers do not resume at the end of the leave period is lack of suitable childcare; for example in many Central Eastern European countries the number of childcare places fell with the collapse of state socialism. In Germany before the 2001 reform of parental leave, there used to be a sharp drop in the employment rate of women after the birth of children. Most mothers took parental leave on a full-time basis for more than one year; around one in three took the full three years, and the legislation made it difficult for leave to be taken on a part-time basis (Maier, 2004). This pattern was related to the limited availability of public childcare for children under three years old, especially in the former Western Germany with a ratio at that time of around 2% of full-time places per children under three, against 37% in the former East Germany. There is some indication that the situation has changed to some extent in recent years, with more mothers of dependent children being in employment, linked to a sharp increase in the proportion of women working part-time, an increase in pre-school childcare places and also more women reporting "family friendly" policies at their workplace.

In France, although the parental leave and benefit provision creates incentives for women's retreat from the labour market in the short term – especially among less qualified mothers – the fact that there is a relatively large supply of affordable public childcare available improves women's labour force participation when children grow older, as well as for women in professional occupations who take shorter leave periods (Plantenga and Remery, 2005). However, the introduction of the *Allocation Parentale d'Education* (APE) had a significant negative impact on the activity rates of lower qualified mothers for it permits them to stay out of the labour market for five years (Meulders and Gustafsson, 2003, p. 117).

Another influential factor on whether mothers are able to resume employment following leave is that poor economic conditions may create reintegration problems and fuel sex discrimination. For example, a 2003 Hungarian study revealed that the poor economic conditions faced by many firms was preventing many mothers from returning after leave: 45% of previously employed mothers declared they were unable to return to their previous jobs and 32% that their companies were unwilling to reemploy them (Fodor, 2004). Similar problems were reported in the former East Germany during the economic disruption of the post-unification period of widespread company closure and high rates of unemployment. Likewise in Finland only a quarter of mothers resume employment right after parental leave and around half are still caring full-time for their child two years after the birth. This longer *Home Care Leave* is mostly taken by women in a less advantageous position on the labour market, acting as an alternative to unemployment, especially during the nineties, where employment plummeted in Finland.

In 2003 42% of mothers benefiting from the HCA did not have any job to return to (Ellingsaeter and Leira, 2006).

Options for reduced hours working following leave are also clearly pertinent. In Sweden, the comprehensive parental leave system has a positive impact on women's labour market participation. There is also some evidence that this acts as an incentive for women to work full-time *before* having children but following parental leave it is common for mothers to use the options available to reduce their hours. A study carried out in 2005 by the Swedish Trade-Union Confederation found that 47% of mothers worked full-time after leave, compared to 75% before leave; whereas almost no change was discernible among men. The difference between these proportions was higher for women in professional occupations (EIRO, 2006). In the United Kingdom while most eligible mothers take maternity leave few use the limited parental leave scheme. It is common for mothers to switch to part-time hours, and since the right to request reduced or flexible working time was introduced mothers have had more leverage to negotiate working-time adjustments; with the result that the proportion of mothers who changed employer after maternity leave has halved. Over the same period the proportion of mothers working flexitime has almost tripled from 17% in 2002 to 47% in 2005 (Smeaton and Marsh, 2006).

These national examples illustrate how the efficacy of parental leave for the re-integration of mothers is affected not only by the design of the parental leave system, including the duration of leave and whether it can be combined with part-time employment (see Section 3 above). The impact of the leave is also shaped by its articulation with other public childcare and other reconciliation measures, economic conditions (unemployment, job insecurity), and the characteristics of their workplace – including whether the employer resists or supports the re-integration of leave-takers.

5.2 Longer term impact of leave and/or periods of part-time work on women's life-course employment and earnings

Very little evidence is available about the direct impact of parental or family leaves on subsequent labour market outcomes. However, there are indirect indications in countries where longitudinal data is available, that spells of economic inactivity or part-time work act as traps where women remain confined for a substantial amount of time and/or there is a durable impact on their subsequent labour market outcome as measured by their earnings. These penalties may be in part a consequence of a significant loss of human capital; but processes of discrimination in recruitment and promotion are also operating.

Econometric research carried out in Germany between 1984 and 1999 tended to confirm that the longer the parental leave, the bigger the loss in earnings, with a cumulative effect increasing over time, whereas return to the same employer attenuated the negative impact of the leave (Ziefle, 2004). Furthermore, in Germany family-related absences have a more negative impact on women's earnings than periods of unemployment, even if the leave was taken several years previously (Beblo and Wolf, 2002). Micro-simulation suggests that the recent reforms of the German parental leave system are likely to improve the situation – provided that there is also a sufficient increase in the supply of childcare places (Spiess and Wrohlich, 2006).

A survey of women in professional occupations in Sweden found that a clear majority thought they had missed either a wage increase or a promotion, as a result of their being

on leave (Nyberg, 2004). This is born out by Swedish panel studies which show that women's earnings are depressed by extended parental leave, although there is some recovery later in the life course and the penalty is less than the negative impact of periods of unemployment (Sundstrom and Stafford, 1994; Albrecht *et al*., 1998). Interestingly, in Sweden the negative impact of a leave period is greater for men than women (Albretch *et al*., 1998), which suggests that men who following a "non-traditional" route are more heavily penalised in the workplace.

Other research carried out in Sweden and Denmark found that the consequences of parental leave were a flattening the wage profile during child bearings age for all women, not just mothers (Datta Gupta *et al*., 2006). The authors of the study argue that this is possibly a result of "statistical discrimination – the reluctance among employer to hire women as a result of their being more likely to take leaves, and hence their channelling into lesser paid, "family-friendly" public sector jobs. As a result, in the Nordic countries, more than half of women work in the public sector, against less than a quarter of employed men. The rather inflexible opening time of most public childcare service was seen as another factor contributing to the wage gap via horizontal segregation.

Sustained spells of part-time employment may enhance women's employment integration but the risk might be little or no earnings progression or career advancement across the life course. The United Kingdom provides a vivid illustration of this risk. It has one of the largest gender pay gaps in the European Union, and the gap is even wider for women if they are employed part-time (Manning and Petrongolo, 2005). Longitudinal data shows that employment interruptions as well as periods of part-time work play a significant role in the construction of the gender pay gap in the United Kingdom. Among women the highest wage gap was between those who have worked full-time the first 15 years of their careers, and those who worked part-time during the same period. The same research also found that women's wages never really recovered from the loss incurred during spells of part-time work. Between 1991 and 2002, women who had a part-time job for one year at the beginning of their career then worked continuously full-time had a 10% gap with those who never stopped working full–time, rising to 22% for those who worked part-time for four years. Part of the explanation for the large penalty for part-time working in Britain is the loss of in-work experience and training – part-timers are 40% less likely to receive training than full-timers (Francesconi and Gosling, 2005).

However, the human capital argument has to be nuanced because other studies of women employed part-time show that occupational downgrading is widespread for women who switch to part-time work after they have children; particularly if they interrupt employment after maternity leave or switch employers to secure part-time hours. For example, one study conducted among women working part-time in the United Kingdom found that more than half of them had previously been working in jobs requiring either more qualification or responsibility than in their present jobs (Grant *et al.*, 2006). The introduction of the "right to request" part-time or flexible working in the United Kingdom can be expected to help reduce the risk of downward occupational mobility and the pay penalty of working part-time. However, this does not rule out the risk of slower career and earnings progression.

Furthermore, the UK case can be contrasted with the Dutch model of part-time work. In the Netherlands there are fewer penalties incurred from part-time work indicated by the fact that there is no discrepancy in the average hourly pay rate for full-timers and part-timers, there is a better representation of part-timers at higher occupational levels, as well as a system of labour law and social protection which offers more protection for periods

of part-time work (Fagan *et al.*, 1998). This can be traced to the different approaches to flexibility pursued by government and the social partners in these two countries over the 1980s and 1990s (Fagan *et al*., 1998; Yerkes and Visser, 2006).

Hence, the penalties on lifetime earning from extended leave or reduced working hours are mediated by other policies and institutions: the amount of wage dispersion between high and low-paid jobs, training and employment systems, social protection systems. Thus, the returns on human capital and the magnitude of the penalty for employment discontinuity or periods of part-time work vary nationally (Blau and Kahn, 1992; European Commission, 2003; OECD, 2001). Measures to improve the re-integration of leave-takers and the quality of part-time work options (including transitions back to full-time hours) are important for mitigating the impact on subsequent career progression and lifetime earnings.

6. Conclusions

National institutional arrangements exhibit a "time policy" orientation which shapes individual working-time options and the gender division of labour in households across the life course (Anxo *et al*., 2007a). In this chapter we have focused upon care-related policies for extended leave or working-time adjustments.

Parental leave was first developed in Sweden in the 1970s, and parental leave now exists in all EU countries; although in some the development was quite recent and triggered by the 1996 Parental Leave Directive. The detail of the leave schemes in Europe vary in terms of the duration, flexibility, level of financial support for leave takers, whether the leave is a household or individual entitlement, and if household-based whether a portion is reserved for fathers' use. Outside of Europe there are a few countries with statutory parental leave provisions; including an unpaid entitlement in Australia and the United States, a low-paid arrangement in Japan and a somewhat more generously financed scheme in Canada (Gornick and Meyers, 2003).

The evidence suggests that parental leave has a positive impact on the employment integration of women providing certain elements are built into the design: the system is flexible so that the leave can be used in more than one block or on a part-time basis, there is a reasonable level of earnings-replacement and the leave is complemented by the provision of childcare services. Leave periods in some countries extend to two or three years and this can create reintegration problems; particularly when childcare services are limited or when the economy is in recession.

It is still mainly women who use parental leave, even in countries where fathers have an individual entitlement or a reserved potion of a household entitlement. This means that while parental leave can improve the employment integration of women over the life course it perpetuates the practice whereby it is still mainly women who adjust their working patterns for care responsibilities. Fathers' take-up has improved in some countries, and the level of financing and flexibility are important pre-conditions for promoting this shift in men's behaviour.

Options for periods of part-time work can also enhance work-family integration across the life course. However, in many countries there is a labour market penalty or scarring from a period of part-time work in terms of reduced occupational advancement or even downward mobility and an associated loss of earnings progression, which also impacts negatively on pension accumulation. The development of individuals' "right to

request" reduced or flexible hours offers potential for some employees to secure an hours adjustment in their existing post and this may help to reduce the penalties for seeking part-time hours by opening up part-time opportunities in a wider range of positions. This is pertinent for the reconciliation needs of carers of adult dependents as well as parents with young children; and may become increasingly important in policy debates concerned with raising the employment rate of older workers and prolonging working life given that the likelihood of having elder care responsibilities increases sharply among the workforce aged 50+. As for the impact of parental leave systems, the efficacy of this policy instrument depends on the detail of the policy design, procedures and grounds for requests and appeals, and the broader working-time policy within which it is introduced. It is also important that there are measures to permit "reversibility" back into full-time employment and for the social protection system to accommodate rather than penalise periods of part-time employment if this type of time policy is going to contribute to facilitating working-time adjustments as care responsibilities change across the life course.

For a complete policy package to enable women and men to reconcile their care responsibilities with employment across the life course is that "time policies" such as parental or other family-related extended leave and options for part-time employment need to be complemented by affordable and good quality care services. Furthermore, the role and relevance of part-time employment within national reconciliation policies is likely to vary across countries. In countries where full-time employment has become the established norm for women then reductions to part-time hours may not be affordable or desirable for many households.

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Figure 3.1. Typical characteristics of statutory parental leave provisions in a selection of OECD countries

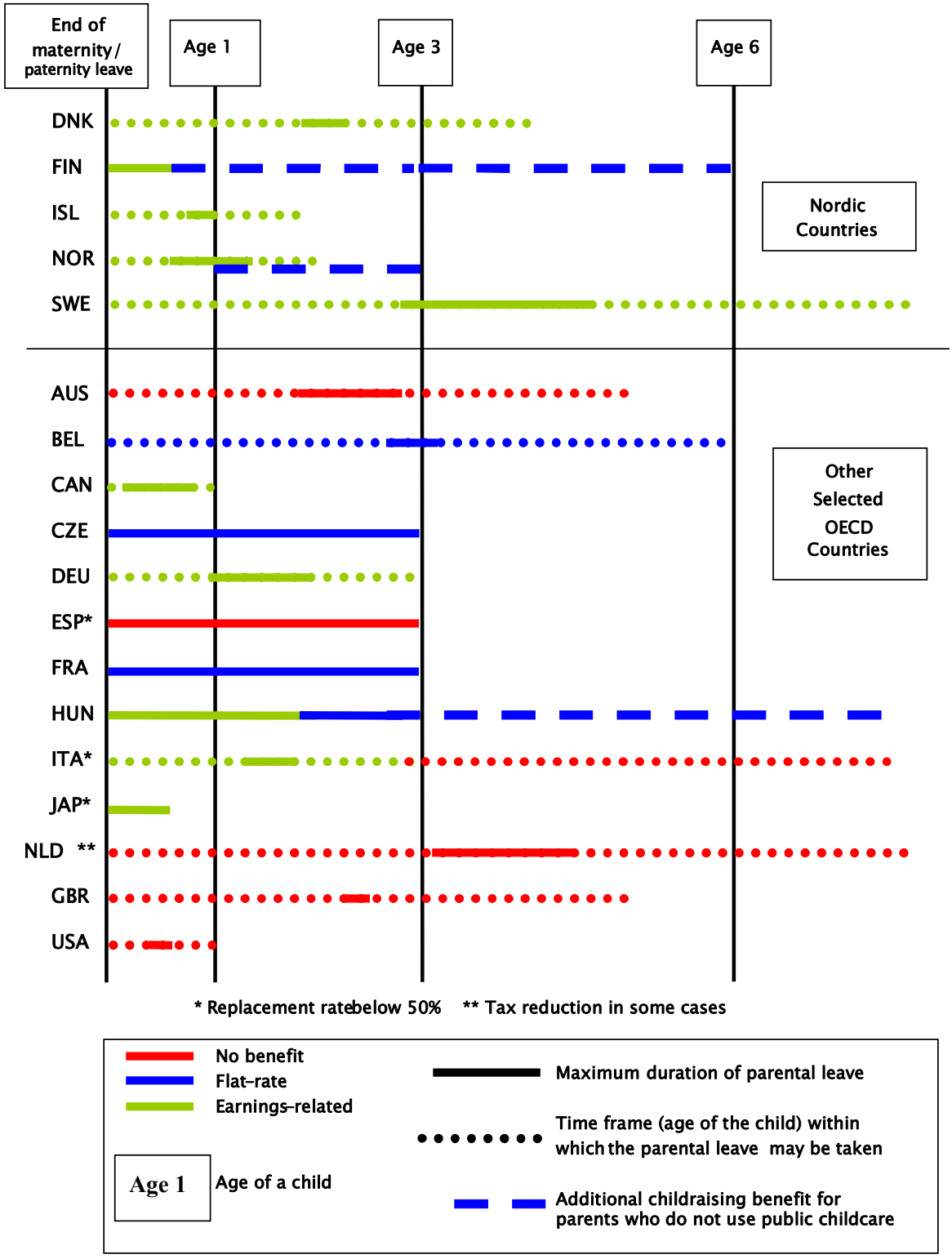


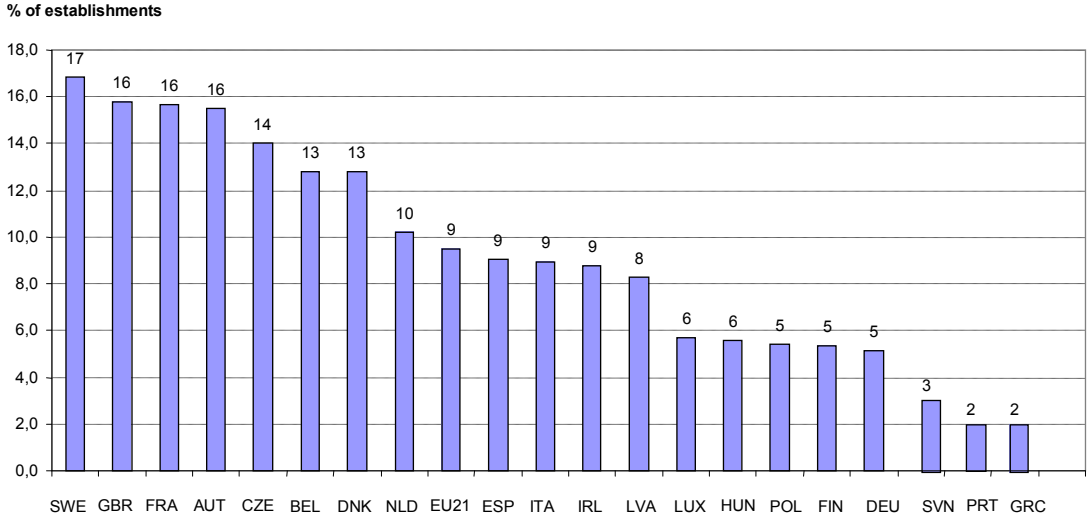
Table 3.1. Estimated take-up of parental leave among parents in selected OECD countries

Overall coverage (take-up and eligibility)	Overall household take-up (eligibility where available)		Take-up by fathers of at least one day
Very high >90%	Denmark	93%[1] (351 days)	62%[1] (25 days – 7% of the days taken)
	Finland	Very high (parental leave), less than 53% (childcare leave)[2]	2-3%[3]
	Iceland	99%	84% – a third of all leave days taken. Only 20% took less than their three month entitlement
	Sweden	97%[4] (338 days)	90%[4] (43 days – 17% of the days taken)
High 70-90%	Germany	Close to 90% (14.2-25.5% not entitled)[5]	4.9%[6]
	Czech Republic	High among mothers	1.45% (2005)[7]
	Hungary	Twice as many claimants of the flat rate benefit than the earnings related benefit (2004)[8]	Very small
	Norway	High (3/4 of mothers in 2003 entitled)	89% (20 days). Only 16% of fathers took days beyond the quota (2004).
Moderate 40-69%	Australia	68% of eligible mothers[9]	30%[9]
	Canada	65% of mothers in 2003, average 30 weeks (about 35% of new mothers not eligible)	14.2% (2005). Average 14 weeks (incl. paternity leave). Higher in provinces where benefit is more generous.[10]
	France	Between 33-66% of eligible women	1% – (2002)[11]
	Italy	About 40% of eligible mothers with children under eight in 2005.	5% of eligible fathers with children under eight in 2005[12]
	Netherlands	42% of eligible parents (on average, eight months/12 hours a week)	16% (on average, ten months/eight hours a week)
Low <40%	Belgium	7% of eligible parents	Only 19% of the minority of claimants in 2005 were fathers
	Spain	Less than 6% of parents who had a new child in 2005 (24% eligible)	4.5% of those who took at least one day in 2005 (50%)[11]
	United Kingdom	No precise figure available. About 30% of parents of children under 11 took days for sick children in 2003. ¼ of employees with children have requested flexible working conditions	10% (2002)
	United States	Low (low eligibility)	Very low

1. Parents of children born in 2003; no clear distinction between parental, paternity and maternity leaves.
2. Proportion of mothers in 2003, two years after a birth.
3. Parental leave and childcare leave.
4. Parents of children born in 1998.
5. Parents of children born in 2003.
6. Proportion of fathers in 2003 who took the leave and received the benefit.
7. Number of men receiving the parental benefit in 2005.
8. Number of parents claiming the benefits in 2004 was 163 440 for the flat-rate GYES; 83 678 for the earnings-based GYED; and 47 069 for the child-raising support GYET. See Annex to this chapter for more detail.
9. Mothers/fathers of children born between March 2003 and February 2004 who were employed 12 months prior to the birth of the child; no distinct data for parental and maternity/paternity leave; includes paid and unpaid leave.
10. Take-up among fathers was 22% in the Quebec Province and was said to have increased to 40% after an increase in the income threshold of parental leave insurance in 2006.
11. There were about 10 000 eligible fathers taking the APE benefit in 2002 (Boyer, 2004).
12. Of those employed parents with children under eight having taken the leave, 86% were women, against 14% of men.

Source: Anxo, Fagan *et al*. (2007b); Australian Institute of Family Studies (2006); EWCO 2006; Escobado (2007); Moss and O'Brien (2006); Moss and Wall (2007).

Figure 3.2. Proportion of European establishments offering full reversibility between part-time and full-time working, 2004-05



Base: All establishments (management interviews).

Source: European Survey on Working Time (2004-05); Anxo *et al*. (2007c).

Table 3.2. Possibility[1] of switching between full-time and part-time hours in establishments in 21 European countries

Managers report that:	% of establishments with part-timers	% of establishments with no part-timers
It is possible[1] to move from…		
Full-time to part-time – for skilled employees	55	19
Full-time to part-time – for low-skilled or unskilled employees	49	22
Part-time to full-time hours (all skill levels)	53	-
It is difficult or impossible[1] to move from…		
Full-time to part-time – for skilled employees	25	52
Full-time to part-time – for low-skilled or unskilled employees	28	42
Part-time to full-time hours (all skill levels)	36	-

1. Possible = includes those who responded it was possible "quickly" or after a "wait for some time"; Difficult/impossible = those who responded that it would be possible "only exceptionally" or there is "practically no chance" the only response options were "it has never happened" or "not applicable".

Source: Riedmann *et al*. (2006), Figure 11.

Annex 3.A1. Statutory parental leave arrangements in selected OECD and non-OECD countries

	Eligibility	Entitlement	Benefit	Flexibility	Additional leave provisions
Australia	All parents who have been employed for at least one year (part-time and casual employees qualify)	**Long** Joint: 52 weeks in block of one week from ten weeks before birth until the child is five.	**Unpaid** Parental leave is not paid, but most single parents receive the Family Tax Benefit: 6% of previous average earnings. Paid parental leave available in some large companies /industries with a larger proportion of highly qualified women: 15 to 23% of private sector workplaces with more than 20 employees	Parents have a right to request part-time work until the child reaches school age when resuming work after parental leave	Ten days per year may be taken as leave for sick relative, provided all personal leave have not been taken.
Belgium	All employees with at least one year of employment in the last 15 months.	**Short** *Ouderschapsverlof/Congé parental* may be taken until the child is six **Father:** three months per child **Mother:** three months per child	**Low** Monthly flat rate benefit EUR 671 in case of full-time leave. Additional EUR 160 top-up for parents living in the Flemish Region	**Moderate** May be taken either: Full time; half-time over six months or in blocks of at least two months; one day a week over 15 months or in blocks of at least five months; Sequence one month FT + two months half time + five months 1/5 time	***Tijdskrediet*/Crédit temps**: employees since at least five years with the same employer are entitled up to one year leave paid EUR 547 (2005). Duration/benefit may be increased according to seniority, or marital status. Ten days of leave allowed for "urgent reasons" – *i.e.* serious illness of a relative.
Canada	**Leave:** residents **Benefit:** employed parents who have at least worked 600 hours in the 52 weeks prior to the claim Quebec Province: parents who have earned at least CAD 2 000, in the last year, allowing self-employed to be covered	**Moderate** **Joint:** 35 weeks, to be taken after the maternity/paternity leave.	**Average/low** 55% of previous earnings up to a CAD 39 000 yearly ceiling. Quebec Province: ceiling is CAD 59 000	**Variable according to province.**	**–**
Czech Rep.	**Parental leave –** *Rodicovska dovolena*: residents **Benefit –** *Rodičovský příspěvek:* family including grandparents when in charge of day care of children under four. Children under three cannot attend public childcare for more than five days a month – four hours a day when the child is three.	**Long** **Leave:** individual, until the child is three	**Low** **Joint:** Monthly flat rate EUR 121 (2005) until the child is four.	**Low** Parental benefit may be combined with full-time or part-time work	Time off for sick relative: nine days at a time. No limits over the number of times. Paid 69% of gross daily wage, with a EUR 20 ceiling.

Annex 3.A1. Statutory parental leave arrangements in selected OECD and non-OECD countries *(cont.)*

	Eligibility	Entitlement	Benefit	Flexibility	Additional leave provisions
Germany	**Parental leave –** *Elternzeit*: all parents employed at the time of birth; **Earnings-related benefit –** *Iterngeld:* all families.	**Long** **Joint**: until the child is three. Duration can be extended by collective agreement	**Average** 67% of previous earnings max EUR 1 800 childrearing benefit (*Elterngeld*) for 12-14 months if the father takes at least two months. Minimum payment is EUR 300, with additional benefits for parents whose income is under EUR 1 000 a month. *Elterngeld* includes the two months of compulsory paid maternity leave. Additional means testes benefits in some *Laendern*	**Moderate** May be taken half-time with benefit reduced accordingly and may be combined with up to 30 hrs a week paid work. Employers agreement is required in companies with less than 15 employees. May be taken in two blocks. The last year of the leave may be taken until the child is eight.	Leave for dependent children can be taken up to ten days a year per child, max 25 days a year per family. Paid 80% of the previous earnings
Denmark	**Leave** – *Forældreorlov*: residents **PL benefit:** claimant must have worked 120 hours in the 13 weeks preceding the leave. Specific rules for unemployed, students, and self employed. **Education allowance (in some communes)**: parents of children aged between 24 months and six years; resident in seven out of the eight last years; not cumulable with paid work or other benefits; max three times per household.	**Moderate** **Individual:** 32 weeks of leave. Up to 40 weeks **–** 46 weeks if both parents are employed/self employed. **Joint**: PL benefit for 32 weeks	**High:** 90% of the previous income for 32 weeks – joint entitlement; weekly ceiling of EUR 447. **Education allowance**: **Low** Eight weeks to one year; max 85% of the net public childcare costs in the commune. Collective agreements increase the number of weeks postponed/ supplement the PL benefit in some cases.	**Moderate** Until the child is four. 8-13 weeks of the leave may be taken in one block until the child is nine. Part-time PL is possible subject to agreement with the employer. A reduced benefit may be paid over 40/46 weeks instead of 32 if requested by parents.	No statutory entitlement to sick days for relatives. Provided for in most collective agreements.
Finland	**Parental leave –** *Vanhempainvapaa* Resident for at least 180 days; Earnings-related benefit: being employed before the birth of the child, and earning at least EUR 6 513 (2005)	**Long** (both leaves combined) **Fathers:** 12 bonus days if take 12 days of the family entitlement. **Joint:** 158 working days – about 26 weeks per child	**Average** Parental allowance: **between 43 to 82%** of the previous earnings – on the average 66%. Non eligible parents are paid EUR 15.20 (2005) per working day.	**Moderate** Can be taken: in two blocks of at least 12 days, by each parent; part-time, with up to 40-60% of a full-time job, but only if the two parents take the part-time leave, with the employer's agreement.	Leave for sick child under 10: between two and four days a week, without limit on the number of times it can be taken. Usually paid 100% of the income. Regulated by collective agreement.
	Home Care leave – *Hoitovapaa* Resident for at least 180 days;	From the end of PL until the child is three	**Home care allowance: flat rate monthly benefit of EUR 294** (2005), with supplement for additional children in certain local authorities, or in case of low income, the latter being means tested. Average payment in 2004 was EUR 337 a month.	**Moderate** May be taken in two parts which have to be at least one month long.	Leave for sick child 2-4 days at a time generally at full pay by collective agreement. **Partial childcare leave** from the end of PL until the child is in second year at school, subject to negotiation with the employer. Entitlement to a EUR 70 daily allowance.

Annex 3.A1. Statutory parental leave arrangements in selected OECD and non-OECD countries *(cont.)*

	Eligibility	Entitlement	Benefit	Flexibility	Additional leave provisions
France	**Leave –** *Congé parental*. The parent taking the leave must have been employed for at least one year. **Benefit –** *Allocation Parentale d'Education* – APE: all families with at least one child under three born before 2004 and whose income is under a – relatively high – threshold. No previous employment condition. *Complément de libre choix d'activité* (**CLCA**)/ *Compléments Optionnel de libre choix d'activité* (**COLCA**): families with children under six. The claimant has to have worked the equivalent of eight quarters in the last two years (1st child), four years (2nd child), five years (3rd child) and have either reduced her/his working time or stopped working in order to care for a child.	**Long** **Joint**: three years CLCA: varies according to the number of children: six months – 1st child until the child is three – from the 2nd child onwards.	**Childrearing benefit** – APE: monthly flat rate EUR 513 in 2005 per family. Paid until the child is three, or six months after the end of maternity leave in case of an only child. **Child care benefit –** CLCA: means-tested flat-rate benefit, from at least EUR 232 – half-time working parents – or EUR 360 – economically inactive parents of up to two children under three. Higher if parents do not qualify to family benefits. COLCA is paid for a shorter period to parents of at least three children. Parents who work at least part-time or who do not receive CLCA may be paid a *Complément de libre choix de mode de garde* – intended as a childcare benefit for those using privately provided childcare.	**Low** Parents taking PL may work between 16 and 32 hours a week. APE may be combined with part-time work, but payment is reduced. CLCA: one parent has to stop working	All employees are entitled at least three days of unpaid care leave for sick children. This number of days is increased by some collective agreements.
Hungary	**Child Care Fee –** *Gyermekgondozasi dji – GYED:* parents who were employed at least 180/240 days prior to the birth of the child. **Child Home Care Allowance –** *Gyermekgondozasi sagely – GYES*: all parents resident who were not previously employed. Grandparents if right transferred by parents. **Child Raising Support –** *Gyermeknevelési támogatás – GYET*: all parents resident when the child is three to eight provided the child is raised at home.	***Long*** **Joint:** **GYED***:* until the child is two **GYES:** until the child is three	**Average** **GYED**: 70% of previous earnings, with a weekly ceiling of EUR 346 **GYES, GYET:** flat rate EUR 102 monthly Additional tax-credit system targeted at low income families.	**Low** **GYES** may not be combined with paid work until the child is one. Thereafter may be combined with full-time work. **GYED** may not be combined with paid work. **GYET** may be combined with part-time/home work. Until the child is 2/3:	**Extended leave in order to care for sick children.** The length depends on the age of the child: from 84 days when the child is 12-35 months to 14 days when the child is 12 years old. Paid 70% of previous earnings.
Iceland	**Leave** – *faedingarorlof* :resident **Benefit**: parents who have been economically active at least 24 months before the birth.	**The Icelandic scheme is unusual** – it provides each parent with a three month maternity/paternity leave plus a joint three month to be taken in the 18 months following the birth	**High** The total nine months are supported at 80% of previous earnings up to EUR 6 000 (2005) per month. At least EUR 830 for full-timers; EUR 630 for part-timers who were working between a quarter and half of a full-time job.	**Moderate** May be taken part-time, and in several blocks until the child is 18 months	***Foreldraorlof*** – unpaid childcare leave: 13 weeks per year, until the child is eight

Annex 3.A1. Statutory parental leave arrangements in selected OECD and non-OECD countries *(cont.)*

	Eligibility	Entitlement	Benefit	Flexibility	Additional leave provisions
Italy	**Leave** – *Congedo Parentale:* employed parents.	**Moderate** **Individual**: six months per parent, with a maximum of ten months for the two parents –11 months if the fathers take the optional post-birth leave. Self-employed parents are entitled to shorter periods of parental leave	**Low** 30% of previous earning until the child is three; unpaid thereafter except for parents whose yearly income is lower than EUR 13 000 (2005).	**Moderate** May be taken until the child is eight, in one or several blocks	**Unpaid** care leave for relatives unlimited until the child is three. Five days per year when the child is between three and eight.
Japan	All workers under open ended contract who have been employed more than a year, and whose partner is employed more than two days per week.	**Short** Ten months	**Low** 30% of previous earnings for ten months. Flat rate benefit of 10% of previous income for six months when the worker resume her/his job.	–	–
Netherlands	**Leave**: all parents who have been employed for at least one year with the same employer.	**Short** **Individual:** 13 times the number of weekly hours: *i.e.* 13 weeks for a full-time job.	**Unpaid.** Tax reduction up to one half the amount of the monthly statutory minimum wage per month when taken full time, for parents who are part of the "life course saving scheme"	**High** May be taken until the child is eight. May be taken in several blocks, or on a part-time basis with the duration prolonged accordingly, subject to the employer's agreement.	Up to ten days per year in case of sick relative, paid 70% of the salary.
Norway	**Leave** – *Foreldrepermisjon*: residents **Child-raising allowance** – *fødselspenger:* employed in the last 6/10 weeks prior to birth and have earned half the minimum basic income. ¾ of mothers were eligible in 2003 **Parental benefit** – *kontantstøtte:* residents. Parents of children aged 12-36 months subject to limited use of public childcare facilities. No employment condition	**Short** **54 weeks** of which nine are reserved for the maternity leave and six for the fathers' quota. **Joint:** 29-39 weeks	**High** ***Child-raising allowance***: 100% of previous earnings – ceiling of EUR 46 230 for 29 weeks. Specific rates for single parents, unemployed, students, and self employed. ***Parental benefit***: monthly benefit of EUR 405 (2007) for parents of children aged 12-36 months who do not use public childcare.	**Moderate** **Leave, together with the child-raising allowance** may be taken: – for 39 weeks paid at 80% of the previous income; – in various blocks by full-time parents after the first six weeks; – on a part-time basis; – before the child is three. Partial payments of the Parental Benefit to parents who use public childcare on a part-time basis only.	Each parent is entitled to one year unpaid PL. Sick children under 12: ten days per year if one child, 15 if more, 2/30 if single parents

Annex 3.A1. Statutory parental leave arrangements in selected OECD and non-OECD countries *(cont.)*

	Eligibility	Entitlement	Benefit	Flexibility	Additional leave provisions
Slovenia[1]	**Leave –** *dopust za nego in varstvo otroka* **Full benefits:** parents insured to the Parental Insurance – *i.e.* contributing to social security. **Reduced benefits:** mothers not insured but who have been insured in the last 12 months before the birth.	**Moderate** **Fathers**: in addition to the paternity leave, may take up to 75 unpaid days until the child is eight. **Individual:** 130 days, reserved to each parent. Transfers are possible. Planned use of the leave must be formalised in a written document signed by both parents.	**High:** *Max* 100% of average earnings, min 55% of the minimum wage. In case of unused leave, unpaid benefits may be paid in up to five instalments. Reduced benefit: to 52% of the minimum income, subject to her previous insurance records.	**Moderate** Half-time leave can be combined with part-time employment. Up to 75 days can be taken at any time, full-time or part-time, or on a "day-by-day" basis until the child is eight.	Leave for sick family member of the household: up to seven working days at a time – 15 if the child is less than eight. Paid 80% of the earnings in the last 12 months.
Spain	*Excedencia por cuidado de hijo* **All employed parents.** Parents on temporary jobs enjoy reduced entitlements. Full right of return to the same job is only granted for one year. Subsequently, a right to an equivalent job is granted.	**Long** Until the child is three	**Unpaid,** except for the Basque Country and Castilla-la-Mancha. Limited payment of social security contributions for parents on leave in some cases.	**High** No limits on the number of blocks of leave nor their duration	Two days a year per worker in case of a seriously ill relative, paid for by the employer.
United Kingdom	One year continuous employment with the same employer	**Short** 13 weeks full time Extended by collective bargaining in 11% of the workplaces	**Unpaid.** Paid parental leave is available in 3% of the workplaces as a result of collective agreements.	**Low/moderate** No more than four weeks of leave a year May be taken in block of minimum one week. Until the child is five.	Unpaid contingency leave for dependents in some cases.
United States	No statutory leave. **In some cases:** **Unpaid parental leave –** Family and Medical Leave Act – FMLA: for parents who have worked at least one year /1 250 hours for an eligible employer: approx 58% of the employees in the private sector. Paid provision in a few states – such as California or companies: Temporary Disability Insurance – TDI	**FMLA:** 12 weeks within one year **TDI:** 10-12 weeks, four weeks before and six weeks after birth	**Unpaid**	–	–

1. Slovenia is a non-OECD country but it is included here because the system is of interest because it is relatively generous.

Source: Fagan and Hebson (2006), extended with Moss and Deven (2006); Anxo, Fagan *et al.* (2007c); European Commission (2006).

Chapter 4.

Ageing and Life-course Issues: The Case of the Career Break Scheme (Belgium) and the Life-course Regulation (Netherlands)

Stephanie Devisscher and Debbie Sanders[1]

Phased retirement systems are considered to contribute to the policy objective of longer working careers. There are a wide range of instruments that enable the gradual transition between work and retirement such as the change of job content or a working time reduction. The impact of these systems on the effective retirement age is however still under investigation. In this chapter we present the Belgian career break system, a system that provides financial incentives for 50+ workers to reduce their working time by one fifth or by half. In order to assess the performance of the system against the objectives criteria like the coverage of the scheme, its costs and direct and indirect effects are considered. Besides the Belgian scheme the Dutch life-course scheme and some other types of phased retirement schemes are briefly described. We find that in general working time reduction is a valuable tool for experienced employees in order to keep them active. It is however clear that the policy implementation especially in case of the Belgian career break scheme needs to be reinforced in order to improve the results in terms of coverage (biased profile of participants) and in terms of increasing the effective retirement age of persons participating to the scheme.

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1. Introduction

This chapter on ageing and life-course issues will focus on the end of the career as a crucial element in the life course of employees. In many OECD countries increasing the labour market participation of persons over 50 is an important policy challenge. The reasons are well-known: the growing share of elderly people in the population is expected to lead to a growing ratio of older inactive persons per worker and a decline of the active labour population. In turn, this could put pressure on social security expenditure and have consequences for economic performance in terms of innovation capacity and productivity growth (De Koning, 2005; OECD, 2005).

There is however a great deal of variety in type and urgency of the older (non)-worker problem. Taking the employment rate of older workers as an indicator of the magnitude of the problem, we see that this rate varies between less than 50% to over 80% in OECD countries (OECD, 2005). Studies showed that this variety can be explained by factors like the way pensions rights are acquired, the existence of generous early retirement systems, the age dependency of the wage structure, participation to education and training, the type of labour demand, the economic climate. Also the availability of possibilities enabling the combination of work and other activities like part-time work could be a determinant (Schmid, 2006).

Policy makers have become susceptible to the problem, and initiatives have been taken to reform early retirement systems, to create incentives for employers to recruit older person and to stimulate age aware HR management, etc. The policy initiatives can take the form of a holistic strategy, a complete programme covering several aspects or can be more dispersed through a set of different measures. They can be implemented at different levels (national, regional, local) and involve different actors (government, social partners, individual companies) (Wilthagen and van Velzen, s.d.).

In this chapter, we would like to explore the way specific policy measures at national level can contribute to the objective of a more active work force in the age group of 50+. To this purpose we selected measures stimulating flexible working conditions for older workers, by means of part-time work or phased retirement. They support the hypothesis that the possibility for career modulation in function of life-course episodes will contribute to a longer career.

In what follows we will present a detailed analysis of two policy measures focussing on part-time work and phased retirement in Belgium and the Netherlands. Apart from this, information is added from other OECD countries like Finland, Sweden, the United States and Japan.

2. Phased retirement and part-time work for older workers

2.1. Use of phased retirement systems

A study on early and phased retirement in European companies revealed that phased retirement is more likely to be used as a work-life balance tool by older workers, whereas early retirement is used as a staff adjustment tool in case of mergers or economic restructuring. Phased retirement was defined as a reduction of working time (numerical flexibility) with the purpose to promote the employment of older people. Early retirement is more frequently offered than phased retirement. Also the take up of early retirement is

higher. Phased retirement, which is a more recent instrument compared to early retirement and less institutionally embedded, is mostly used in Dutch and Belgian companies. Although less than in the Netherlands and Belgium, Austria, Slovenia, Germany and Denmark have a relatively high percentage of working time reductions of older workers in companies.

Whether a company offers the option to reduce working time to its older workers depends on the size of the establishment, the sector, the experience with part-time work and the management attitude towards older workers. Since there are only a few operational elements influencing the take up of phased retirement, it seems that the decision regarding the take up is based on the employees own choices. In addition to work-life balance interests, financial aspects regarding the income out of work and the future income out of pension seem to play an important role (European Foundation for the Improvement of Working and Living Conditions, 2006).

Another study (Bredgaard and Tros, 2006) studied the effects of policy changes in the early retirement pathways on company level. The authors analysed the availability and use of flexibility instruments for older workers like part-time contracts, reduced working time, dispensation from inconvenient working hours, part-time retirement, and reduction of work load. Four countries were studied: the Netherlands, Belgium, Denmark and Germany. Overall, there seems a relatively low availability and use of this type of instruments. Reduced working time and part-time retirement are the most common instruments. They are *available* in 50% of the sample companies but the use is lower than the availability. The study conclude that in the Netherlands and Denmark a more proactive and preventive approach is used than in German and Belgian companies where the legalistic and centralised approach prevails. In all countries however managers seem aware of the fact that strategies towards older workers are needed.

We can conclude from this that in a European context the Netherlands and Belgium have a relatively high experience with part-time work and other flexibility instruments for older workers but the type of flexibility instruments used is different. Policy changes in the Netherlands to promote the employability of older workers have been more radical *e.g.* a more complete reform of the early retirement system and have started earlier than in Belgium.

In the next section, we provide more information on the policy context as an introduction to the analysis of two specific policy measures to promote flexibility among older workers: the "end of career break" in Belgium and the life-course scheme in the Netherlands.

2.2. Overview on time credit/career break in Belgium and life-course scheme in the Netherlands

2.2.1. Active ageing and life-course policy in Belgium and the Netherlands

Belgium

Already in the eighties, a system of a partial interruption of the career has been introduced in Belgium which gave the employees the possibility to reduce the number of working hours for a maximum of five years without losing their social security rights *e.g.* pension benefits of a full-time work regime. They were partially compensated for

the income loss by a remittance of the government. Initially the employer had to replace the employee by a full-time unemployed person entitled to benefits. At the end of 1990s, this restriction was somewhat loosened, to be finally abolished in 2001. In 2002 this measure has been replaced by the time credit system, with extra possibilities for employees aged 50 years or older (Devisscher, 2004; OECD, 2003). This measure will be discussed hereafter.

At the same moment the time credit system was introduced, the *Fund for the Promotion of Quality of Working Conditions* was established that grants subsidies to employers that take specific actions to improve the working conditions for their employees older than 55 years (OECD, 2003). A regulation was also introduced creating the obligation for employers to provide *outplacement for 45-plus employees* that are made redundant.

The Belgian government has recognised the fact that the current regulation financially promotes early retirement both from the point of view of the employee as the employer (Flemish Government, 2005). Therefore, financial stimuli have been introduced to stimulate the older people to find work or stay at work and employers to recruit and keep them (OECD, 2003).

- With the *Activa Plan* partial reductions of social security are given to the employer if he recruits persons aged 45 years or older who were unemployed for at least 18 months and an activation premium is given to the unemployed (up to EUR 500 for a full-time job), which can be deducted from the net-wage by the employer.
- A loan can be acquired with the Participation Fund by persons of 50 years or older to start up a business
- The employers' contributions on the wages of employees older than 58 years are reduced by EUR 1 600 per year.

The *Generation Pact*, approved in 2005 by the Council of Ministers, introduced a framework for far going reforms concerning the end of career debate. This has lead to a loosening of conditions for employees over 50 years of age to enter the time credit system. Another proposal was the possibility for older workers that carry out a physically hard job to be able to shift to a lighter function, within or without the same company, and if necessary, temporary compensated for the income loss. Next to that, the age limits for early retirement have been raised from 58 till 60 years including the requirement regarding the number of years in employment that will be increased up to the level of 35 years in 2012 (both for men and women). Current exceptions, for example for physically hard jobs, will be maintained.

Initiatives have also been taken on the regional level to promote the employment of older workers. Flanders has created a complementary system to the federal time credit system by financially supporting the oldest workers in the social profit sector who want to work part time (*landingsbanen*) (OECD, 2003). Wallonia gives financial benefits to employees in bottleneck functions aged 50 years or older and that take time credit at the end of their career. In addition, the *Tandem Plan* gives the older workers the possibility to reduce their working hours by half and keeping 85% of their wage. Again this measure gives priority to bottleneck functions (Devisscher and Van Pelt, 2006).

Netherlands

The Netherlands have been *transforming the pension system* since the late nineties. It started with shifting from a pay-as-you-go funding of early retirement, the so-called VUT schemes, to pre-pension schemes based on individual capital savings. These actuarially neutral schemes have lead to a substantial delay of the effective exit rate. In 2004 the social partners have come to the decision to abolish the purely early retirement schemes in due course and abandon the favourable measures for pre-pension schemes. As an alternative, the life-course scheme would make it possible for workers to save for early retirement (OECD, 2005). This scheme will be discussed hereafter.

As in Belgium, *financial measures* are being taken to make it more attractive for employers to employ and retain older workers and for older employees to stay at work. A reduction in social security contributions is granted for employers that keep workers of older than 55 years old, and that recruit workers over 50 years. Next to that, a deduction in the personal taxes is granted according to age. If an employee decides to change to a part-time or lower-skilled job within ten years before the regular retirement age of 65, the pension will be calculated based on the previous higher wage.

Next to the life-course scheme that will be discussed later, *part-time pension* is also possible. Pension payments can be received while the employment is partly continued, while pension can still be accrued over that part.

The Dutch government provides financial support for *experiments* that encourage (inter)sectoral mobility for older workers who carry out physically demanding of monotonous work and that want to be transferred (temporarily of permanently) to other branches of industry (Dutch government, 2005).

2.2.2. Focus on two life-course policy measures in Belgium and the Netherlands

We present and compare the two systems mentioned above: the time credit/career break scheme in Belgium and the life-course scheme in the Netherlands. Their final objective is to improve the quality of the life course of working persons by offering better possibilities to combine work and personal life throughout the career. The two systems contribute to active ageing in a direct and an indirect way:

- Directly, they provide incentives for persons over 50 to choose a part-time work as an alternative for early exit through early retirement or alternative exit routes (disability pensions, unemployment, and inactivity).
- Indirectly, they provide the possibility for a better distribution of the workload over the life course, which in theory could lead to longer careers.

Table 4.1 gives an overview of the main characteristics of the two measures.

In the *Dutch life-course scheme* every employee can save up to 12% of gross income per year with a maximum of 210% in total. When the maximum amount is reached, they can take three years of full-time leave receiving the saved amount under the form of a monthly income of 70% of their wage. In this way employees can save for up to 3 years of early retirement.

In the transitional phase, it has been made possible for 51-55 year olds to save more than allowed to be able to save the maximum allowed in a shorter period of time. Employees of 56 years or older, can keep saving in the pre-pension scheme. However, it

has been made possible to shift the pre-pension savings to the life-course saving account (*http://home.szw.nl*).

In the *Belgian time credit system,* every employee can take time credit for up to one year full or half time and maximum five years for one fifth reduction if working full time before. He is compensated for the income loss by the government. Next to that, extra credit time has been created for employees of 50 years or older. If they have had a working career of at least 20 years and at least three years of seniority within the same firm, they can reduce their working time until their retirement with half or one fifth (Devisscher and Van Pelt, 2006).

A collective labour agreement in a sector or company can raise the possibilities for time credit up to five years full time (National Employment Office, 2007).

In principle, there are two major differences between the two systems. We focus on the possibilities for older workers.

1. *The way the time credit is financed*: In the Dutch system the employee decides to reallocate a part of his wage. The Dutch government delays tax on the gross income saved on the life-course account till the employee is remitted. However, an income tax reduction is granted per year that one has saved on the life-course account. Next to that, the capital gains are exempted from taxes. In Belgium, the employee does not have to save income and gets a partial compensation of the government for the income loss during the leave.
2. The flexibility for the employee: In the Dutch system an employee can save throughout his life and take leave for maximum 3 years in one time and can choose for one up to five days leave per week. In Belgium an employee has a standard right of one year leave during the whole of his career, next to that from the age of 50 until retirement the employee can take only half-time or one-fifth reduction. However, in both systems the employer has to give his consent.

3. Effectiveness of policy measures for part-time work and phased retirement

This third chapter will analyse the effects of the policy instruments discussed in Section 2. In order to assess the effectiveness, we use the following criteria: the coverage and the use of the measures, the direct and indirect effects and the interaction with other policy measures. We highlight some aspects regarding the cost-effectiveness of the programmes. The evaluation criteria can be defined as follows (Wadensjö, 2006; EC, DG Regional Policy/GHK, 2007):

- *Coverage*: the evolution of the number of participants or beneficiaries, their profile;
- *Direct effects*: effects of a public intervention on its direct beneficiary, excluding all repercussions on other groups. In the case of working-time reduction/part-time work, examples of direct effects are the decrease of numbers of hours worked by the beneficiaries, the number of beneficiaries in employment, higher effective retirement age of beneficiaries, evolution of the number of companies where the measure is applied;
- *Indirect effects*: effects which spread throughout the economy and the society or environment, beyond the direct beneficiaries of the public intervention. We also include effects on the beneficiaries that are uncertain or not necessarily related to the intervention under examination. Examples: prevention of early exit (number

of persons in employment that would have been out of employment, number of persons working part time that would have continued to work full time), prevention of illness, effects on wages, on recruitment behaviour of companies, and on the labour market supply of persons younger than 50;

- *Total effect:* aggregation of direct and indirect affects taking into account the trade-off between positive and negative effects. Examples: increase in labour supply of 50+ measured by the amount of hours worked by 50+ employees and the total number of 50+ persons in employment (part time versus full time);
- *Cost-effectiveness:* relating the effects of the intervention to the financial inputs needed to produce those effects.

3.1. Time credit/career break system in Belgium

Coverage

The number of participants to the Belgian career break system has grown strongly. In 2006 nearly 211 000 persons were entitled to compensation from the career break scheme. Compared to the total number of employees in Belgium about 5.9% of the employees participated in the career break scheme in 2006. With respect to the type of career break, the 1/5 working time reduction has become the most popular form. The introduction of the 50+ career break has not missed its effect: there has been a remarkably rise of the share of 50+ employees in the total number of beneficiaries (47% in 2006). Considering only the 50+ persons, the share of participants rises to nearly 15% (RVA, RSZ, 2006).

Career breakers have a specific profile. A large share of them belongs to a two earner family with relatively high wages. Among the younger age groups women dominate strongly but among 50+ persons men represent about 47% of the users. The career break is used relatively more in services sectors (public administrations, health, private services, education, financial sector) than in the industry. Employees of larger companies make more use of career breaks than employees in smaller enterprises (Devisscher and Van Pelt, 2005/2006). Although all employees can in principle benefit from a career break under the time credit/career break scheme, it is clear that its use has until quite recently been limited to a rather privileged group of persons.

Direct effects and indirect effects

When analysing the effects of the time credit/career break scheme we further disaggregated the direct and indirect effects into positive or pull effects and negative or push effects. The concept of pull and push effects is used in accordance with the transitional labour market theory (Schmid, 1997). The results are based on the analysis of career paths of career breakers before, during and after their career break, on a survey among career breakers and on relevant literature. The career paths of career breakers were compared with those of a control group of employees without a career break. The main findings with respect to the effects of career break system in Belgium are summarised in the Table 4.2.[2]

2. See also IDEA Consult, OSA/Steunpunt WAV (2006).

Total effect

When assessing the total effect of the career break measure, we come back to the main objective of the system, namely to lengthen the careers of employees by offering an alternative end of career pathway and by redistributing the workload over the life course of the individual.

On a macro-level the effects on labour supply measured in full-time equivalents and in number of person in employment (part time, full time, employee or self-employed) have been estimated. There is no evidence that the activity rate of over 50 persons with a career break is higher (one to three years after the career break) than that of a control group of 50+ employees, rather on the contrary. One of the explanations is that in many companies, 50+ persons started to reduce their working time as a preparation for their early retirement or official retirement (as a complement) but not as a substitution of the early retirement. This is possible since the duration of the 50+ career break is not restricted.

In general, it is a problem that many career breakers do not return to the labour market after the career break. The share of persons becoming inactive (ill, staying at home, pension, unknown, etc.) is considerably higher among the career breakers than among a control group of employees. Once inactive, it is much harder to reactivate the individuals for the labour market especially for the over 50. Remarkably, it seems that for women over 50 the "inactivity trap" is smaller than for men. Women over 50 may indeed temporary reduce their working time to take care of parents or for grand children.

We believe however that a more positive result can be found among the younger age groups, where we see that persons – mainly women – return to the labour market to full-time jobs or part-time jobs. The system enabling workload redistribution over a longer period in an individual career seems to work well for women that build in a career break after some years of work. They can choose either a full-time or a part-time break but for a relatively short period (maximum one year) (Román *et al.*, s.d.).

Postponing the early exit from the labour market remains a challenge given the more reactive and legalistic approach of Belgian companies towards the organisation of the end of careers, and given the fact that there are still relatively generous (early) retirement possibilities. However, according to Eurostat figures the effective retirement age in Belgium shows an upward trend. This may be a first indication that not only the attitude towards retirement is changing but also that the retirement decisions are being influenced. There are pertinent changes in policy measures like the increase of the early retirement age, the discouragement of alternative exit through time credit, incentives for age aware policies. There is a significant increase in the use of part-time career break for 50+: in 2006 about 15% of employees aged 50 or over is participating.

On a micro-level we can conclude that there is a need for this type of policy instrument. Persons taking a career break are very satisfied. The only negative consequence is that the workload may increase for part-time workers. It happens often that the number of tasks and responsibilities is not sufficiently adapted to their working time reduction. A survey also showed that the career break can be a first step in a change of the career path, mostly by reducing the number of hours worked.

Cost-effectiveness

As mentioned before, the cost-effectiveness considers the relation between the costs of the measure and the results of the measure. Let us first have a look at the factors influencing the costs of the career break measure. We focus on the direct expenditure,

including the amount spent on the allowances for the career breakers. This amount is influenced by the number of beneficiaries, the type and the duration of their career break. The direct costs increase each year. In 2006, the cost of the career break system amounted to approximately EUR 607 million. The expenditure in 2006 was 23% higher than in 2004 (RVA, 2007). The weight of the career break measure in the total social benefit expenditure is about 10% (FPS Budget and Control, 2007). The budget represents approximately 0.2% of GDP (2006).[3]

Other costs are not included in the direct expenditure. These are related to the administration of the measure. The administrative burden is rather heavy given the complexity of the regulation. Different rules apply according to sector (public, private, social profit) and moreover, sector agreements can create additional conditions for career breaks (social dialogue process). Another type of costs is caused by the financial implications for the social security system since pension rights are accrued as if one remains working with the same intensity as before the career break. Finally, regional governments have an additional budget on top of the federal budget for their supplementary allowances. In 2005, the budget for the incentive premiums of the Flemish government attained 3.4% of its total expenditure on labour market policies.

We are not convinced that the career break scheme is the most cost-effective way to reach the objectives of a better work-life balance and longer active careers given the mixed effects described in the preceding sections. The alignment with other mechanisms that influence the extent to which employees have an active end of career until retirement age needs to be improved *e.g.* through social dialogue, good practice promotion in sectoral programmes.

3.2. Life-course scheme in the Netherlands and evidence from other OECD countries

The Netherlands

Since the 1st of January 2006 employees can participate to the life-course scheme by opening a life-course saving account offered by one of the financial institutions. Until now, the number of users is lower than expected. About 5% of all employees participated in 2006. Several explanations can be given. First of all, it takes some time before the stakeholders become familiar with the system. Secondly, since 1994 there is a "saving wage" scheme that is financially more interesting especially for low and middle income earners. The wage saved under that scheme can also be used to finance periods of unpaid leave. If the two schemes would be integrated, the cover would increase substantially. Thirdly, the recent reform in the health insurance system seems to be a higher priority for employees. Occupation with this reform may delay the entrance into the life-course scheme (Statistics Netherlands, 2007, Caminada and Goudswaard, 2006).

Several experts have already proposed modifications to the scheme, *e.g.* integration with the saving wage scheme. The big difference between the life-course scheme and the saving wage scheme is that it is an entitlement for all employees whereas the saving wage scheme was not automatically accessible for all employees. It was designed as a company based initiative (Caminada and Goudswaard, 2006).

3. Expenditure for early retirement benefits amounts to 0.5% of GDP in 2006.

In an international perspective, the life-course scheme is very innovative for at least two reasons. If successful, it should contribute to a life-course approach throughout the career of an employee. It is also expected that many employees will save for early retirement. From a governance perspective, the scheme is innovative since it is a combination of a saving mechanism and a fiscal instrument in collaboration with the private financial markets. The direct cost for the government does not exist of expenditure on allowances but in the fact that tax incomes are postponed in the time, and that they are lower because of the tax credit provided when the amount saved is used for remuneration during the leave.

Other OECD countries

Although life-course schemes like in Belgium and the Netherlands are rather unique, many other OECD countries have experience with instruments facilitating phased retirement. We briefly introduce interesting mechanisms in Finland, Sweden, the United States and Japan. When analysing the effects of the different schemes, the evidence is rather ambiguous. Some mechanisms facilitating a gradual transition between work and retirement through part-time work seem to contribute to the objective of prevention of early exit and longer working careers, others do not.

In Finland, employees have the possibility to choose their pension age between 63 and 68. Moreover, they can opt for a part-time pension from the age of 58. This option is conditional on the approval of the employer. The part-time pension benefit compensates for half of the income loss due to part-time retirement. The old age pension is not negatively affected by the part-time pension. The system is quite often used: in the age group 60-64 about 25% of employed persons participate to this scheme. A study based on retirement intentions of persons that took a part-time pension (or not) concludes that the possibility for part-time pensioning does not lengthen the careers (Ilmakunnas and Ilmakunnas, 2006). This increasingly popular instrument seems to contribute rather to the satisfaction of individual needs than to the sustainability of the pension system. Although the employment rate among the 60-64 age group has risen sharply in Finland, other factors than the part-time scheme seem to be responsible.

In Sweden, part-time pension was subject to many reforms and was eventually abolished in 2001. In its latest form, the eligible age was 61 years old. 55% of the income loss was compensated. The employee needed to work a minimum of ten hours per week. However, study results highlight a positive effect of this system on the total labour supply of older workers with the part-time pension. The effect may be larger for women than for men (confer the Belgian career break scheme). Also other effects were mentioned: effects on the health status and the future take up of disability pensions. Also the number of hours worked before the part-time scheme and the number of hours worked during the part-time retirement play a role. The system was abolished mainly because it was considered to be too expensive but recently some form of part-time pension has been reintroduced (Wadensjö, 2006).

Finally, we would like to discuss a type of phased retirement that is a combination of working time reduction, work load reduction and internal or external job mobility. The so-called bridge jobs occur both in Japan and the United States, countries with a high employment rate among older workers. These jobs allow older workers to continue to work until the ordinary retirement age and in some cases even longer (Wadensjö, 2006). Facing the ageing of the workforce both countries seem to have also taken an interest in end of career and life-course instruments. In the United States there is a general interest

of employees for phased retirement. Surveys indicated that many workers aged 50 and over are hoping to phase into retirement (Sloan Work and Family Research Network, 2005). The Japanese government is considering the introduction of a kind of career break scheme as a way to increase the attractiveness of the labour market.

4. Conclusions

Finally, we will draw conclusions from the preceding analysis paying attention to the usefulness and relevance of the phased retirement programmes in relation to the end of career challenge that is present in many OECD countries. The results should however be put into a broader perspective since many factors influence the transition into retirement: the institutional context, the prevailing policy strategy towards ageing and employment, the social security model, the demographic situation, etc.

The conclusions can be summarised in the following way:

- First of all, it is clear that a wide range of instruments promoting a gradual transition from work to full-time retirement is available: part-time pension, part-time work, bridge jobs, job rotation, mentoring programmes, etc. The instruments can be characterised according to the type of financial incentive, the link with the pension system, the entitlement conditions, consequences for pension rights, type of actor responsible for coordination and implementation, thematic focus (*e.g.* care, training) or not, etc. Until now, the actual use of these instruments is rather limited. There seems to be room for expansion since there is a growing awareness among governments and in companies. Employees are also willing to consider a change in their work regime.
- Life-course schemes are rather unique. Belgium has a system of part-time and full-time career breaks since 1985. The Netherlands introduced a very innovative life-course saving scheme in 2006, but was experimenting with wage saving accounts since 1994.
- Whatever the type of gradual retirement incentive, there seem to be a common objective: their implementation should lead to an increase in the labour of supply of older worker by keeping persons at work and by avoiding early exit. Through a reduction of the work load, it should be more feasible for older workers to stay working but at the same time have more time for other activities like care tasks, leisure or voluntary work. The possibility to combine a reduction in work load with a change of job content could also work in a positive way. The question addressed in this chapter is the extent to which such systems do indeed contribute to the objective. Therefore, we have looked at the effects found in research.
- Detailed research on the effects of the Belgian career system revealed that is difficult to calculate the total impact since we have a range of direct and indirect effects produced by the scheme. The direct and indirect effects can have both positive and negative consequences for the labour market supply of older workers. However, the balance seems positive at a micro-level and especially for persons younger than 50, taking relative short periods of working time reduction. For 50+ persons however, there is no evidence that the possibility to reduce their working time leads to a postponement of the retirement. On a macro-level, the effect is ambiguous. Many persons do not return to the labour market and the share of persons in employment is much lower among career breakers than among

persons of the control group. This is of course a negative outcome. Studies on the Dutch career break show that it is expected that persons will save mainly for financing early retirement.

Despite all of this, we are inclined to conclude that the systems are valuable and relevant tools supporting the policy objective of active ageing. Taking into account evidence from other OECD countries (Finland, Sweden, United States and Japan), we derive a number of conditions that are needed to enhance the effectiveness of the tools. The first condition is that the set of social and labour market policy programmes, measures and legislation is *consistent* towards the stimulation of the labour market position of older workers. There needs to be coherence between unemployment schemes for older workers, retirement systems (early retirement and old age pensions), invalidity schemes, policies to stimulate flexible working conditions and also life-long learning.

Secondly, the policies need to be delivered through a multi-stakeholder model taking into account objectives, needs and preferences of government, intermediary actors (sectors), individual companies and employees. In order to achieve the objectives related to active ageing policies should stimulate pathways for older workers that are both attractive for the employees (in terms of flexibility and security), the employers (productivity) and the government (active older workforce). Intermediary organisations can play a role in providing extra incentives or promoting good practice in the field.

Thirdly, the systems should be checked on their relevance for target groups. Especially the participation of persons in low skilled and or low/middle paid jobs to the schemes we discussed seems rather limited.

Finally, it is important to decide upon the most appropriate type of financial incentives that are needed to induce a positive effect on the participation of older workers. Subsidy schemes like the Belgian career break system are relatively costly and offer many rights without obligations. Further investigation into the factors influencing the behaviour of companies and employees with respect to the end of the career may be useful.

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Table 4.1. Description and comparison of time credit/career break and life-course scheme

	Belgium	Netherlands
Name of policy measure **Date of creation**	Time credit/career break 2002/1985	Life-course scheme 2006
Target group	All employees, specific conditions for 50+ with career of minimum 20 years	All employees
Entitlement conditions	Right for all employees after consent employer	Right for all employees to participate, but take up of leave must be approved by employer
Financial incentive	Lump sum monthly allowance	Reallocation of wage
Type of incentive	Subsidy for full-time or part-time (1/2 or 1/5) career break, 1/5 reduction for 50+	Saving account for the individual employee (max amount 210% of gross annual wage), 3 to 4% "interest rate", employee takes up savings as full-time or part-time leave, tax reduction
Implementation	RVA (government institution for labour provision	Private financial institutions
Cost for government	Number of beneficiaries * allowance	Tax delay and reduction
Relation with pension system	Career breaks count as work for establishment of pension rights, 50+ career breaks precede (early) retirement	Interaction with pre-pension system Leave period can be used as (partial) pre- pension leave
Period of use by employee	Max. one year full-time or half-time reduction; max. five years 1/5 reduction For 50+ persons: extra part-time reduction (1/2 of 1/5) unlimited until retirement	Max. three years of full-time leave (except for prolonged care leave of max. 18 weeks)

Source: RVA/Ministry of Social Affairs NL.

Table 4.2. Effects of the time credit/career break system

	Positive/pull (increase of labour supply, attraction towards labour market)	**Negative/push (decrease of labour supply, stimulating exit from labour market)**
Direct	• Number of persons in employment remains stable during career break • Some part-time workers increase their number of hours worked after break	• Decrease of number of persons in employment and in number of hours worked after career break • Some workers decrease number of hours worked after break
Indirect	• Replacement of career breakers by unemployed persons • Prevention of early exit by creating possibility for career break • Making labour market more attractive, especially for women • Creating possibilities for entrepreneurship and self-employment	• Some persons stop working or reduce working time but would have continued to work or to work full time in absence of the scheme • Alternative pathway to early retirement, no postponement of retirement age
Other indirect effects	• Career breakers have a more transitional career path compared to the average Belgian worker • Before the introduction of the time credit, career breakers used to take a career break during several years (up to five years), with negative effects on their career (job content, promotion, earnings, productivity)[1] • Mixed effects on company level: additional organisational costs, uncertainty about the return of the employee on one hand, positive effects like employee satisfaction, image building, part of compensation and benefits scheme on the other hand	

1. It is possible that this trend changed during the last years but recent information is not available on this point.

Source: IDEA Consult, OSA/Steunpunt WAV (2006).

Chapter 5.

Ins and Outs of the Dutch Life-course Savings Scheme

Lei Delsen[1]

*In Europe, creating diversity and extending workers' freedom of choice is a policy argument of increasing importance. On 1 January 2006 an individual voluntary Life-course Savings Scheme for employees (*Levensloopregeling*), unique in Europe, was introduced in the Netherlands. This chapter reviews the background, the aims and the ingredients of this new system, confronts expected results with actual results, and pictures future prospects.*

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1. Introduction

In Europe, extending workers' freedom of choice over their working hours is a policy argument of increasing importance. Surveys in Europe indicate a clear interest of employees in greater flexibility and control over their working hours. Recent legislation in the European Union and at national level, together with initiatives developed by employers, unions and governments, are in favour of providing employees with more choices over their working time (Bettio *et al*., 1998; Hogarth *et al*., 2000; Latta and O'Conghaille, 2000; Webster, 2001; European Foundation, 2003, 2005; Anxo and Boulin, 2006). More "time sovereignty" makes it possible for employees to organise their working time more in line with their individual needs and interests. Part-time employment plays an important role in combining working, training and care responsibilities in the various phases of the life cycle. On balance this will increase both the quantity and the quality of labour supply and safeguard an adaptable labour force generating substantial productivity growth (Delsen, 1995 and 1998; Bovenberg, 2005).

On 1 January 2006 the Dutch government introduced a new and for Europe unique individual voluntary life-course plan: the Life-course Savings Scheme (*Levensloopregeling*).[2] The scheme offers employees the opportunity to save funds to finance periods of unpaid leave. The system is fiscally facilitated. The Dutch Life-course Savings Scheme (LCSS) is based on the holistic life-cycle approach (Heinz and Marshall, 2003) and lends shape to individualisation, to tailor-made employment conditions. The scheme also fits the transitional labour markets approach (Schmid, 2006).

This paper reviews the major ins and out of the LCSS and is structured as follows. In Section 2 the background, aims and ingredients of the Dutch life-course plan are pictured. In Section 3 an overview is presented of the expected results prior to introduction of the scheme and a number of hypotheses are formulated concerning the expected results. Section 4 addresses the actual participation in 2006. In Section 5 conclusions are drawn and future prospects of the LCSS are pictured.

2. Background and ingredients of the Dutch Life-course Savings Scheme

In the Netherlands, the male breadwinner model is losing ground. There is a clear shift from one-earner households towards two-earner households and towards single-person households. It is better to talk about one-and-a-half-earner households, because the wives of a lot of breadwinners are working part-time and spend the remaining hours on care. This shift not only means more income at the household level, but also changes in preferences in relation to work and working hours, for example a greater need for part-time employment and more control over working hours (Delsen, 2002, pp. 47-48). The traditional three phased course of life has changed into a five phased life course (SZW, 2002; Bovenberg, 2005). The first phase of early youth concerns socialisation, learning and receiving care (0-15 years old). The second phase is new: the phase of young adulthood situated roughly between 15 and 30 years of age. Young adults experience with relationships and jobs and only have few care responsibilities. The third phase – the peak hour of life – combines work, care and to some extent continued

2. In the European Union, only the Belgian Career Break System offers a similar right for all employees to full-time or part-time leave (Román *et al*., 2006).

learning, and is the family season between 30 and 60-65 years of age. Financial and time pressures are high in this third phase. The fourth phase roughly between 60-65 and 75-80 years old is mainly a phase of leisure (active old age) and in the final fifth phase of life people suffer from serious health problem and receive more intensive care. The new LCSS that increases the freedom of choice of employees concerning the spread of activities over the life course is an answer to these developments. Two effects are expected from the LCSS by the Dutch government (Keuzenkamp, 2004, p. 15):

1. Generally combining tasks will be easier and notably the "rush hour of life" less hectic.
2. Employment participation will increase, fewer people will stop working because of care tasks, and people will work more years before retirement.

The LCSS also represents recognition by the Dutch government of the social costs accompanied by a policy to increase labour participation of partners. Box 6.1 summarises the LCSS.

Box 5.1. Ingredients of the Dutch Life-course Savings Scheme

- Employees have a legal right to participate in the LCSS.
- Employees may save a maximum of 12% of gross salary per annum income tax free to finance periods of unpaid leave for various purposes; the maximum saving amounts 210% of the last earned gross salary.
- Under certain conditions employers are allowed to contribute to an employee savings.
- Taking leave is only possible during employment.
- Taking leave is not a right; leave can only be taken in consultation with the employer. This does not apply to parental leave and long-term care leave, which are provided by law.
- Contributions to and returns on the savings fund are tax free. Taxation is deferred until the time when the saving is drawn down. There is no minimum savings amount requirement for tax relief.
- Employees receive a tax credit of EUR 185 per year of participation in the LCSS when taking up leave, independent of the annual contribution made.
- Employees who participate in the LCSS and who take up unpaid parental leave, receive an additional tax credit equal to 50% of the gross minimum wage per unpaid day of leave.
- Participation in both the Salary Savings Scheme (*Spaarloonregeling*) and the LCSS in the same calendar year are not permitted.

The LCSS requires employees to take personal responsibility for the funding of longer periods of unpaid leave. The LCSS offers employees the opportunity to save funds to finance periods of unpaid leave for various purposes, such as caring for children or ill parents, education leave, travelling, sabbatical or (partial) early retirement, while continuing the original employment relationship. The basic idea is that people can reserve a portion of their income to offset losses of income in the future. It is assumed that employees are able to estimate their future needs for leave and have good insight in the pros and cons of the use of the LCSS. Employees are allowed to save a maximum of 12% of their gross wage per annum, up to an accumulated maximum amount of 210% of their latest annual gross wage. This means, that after saving 12% over 17.5 years, the maximum saving account is reached (17.5 x 12 = 210%). This period may be shorter because of returns on the accumulated fund. Holidays and compensation days can also be

"cashed in" and added to the savings. If a worker takes a leave, he/she can subsequently build up a full balance again upon returning to work. As employees have a legal right to participate in the LCSS, all employers have to offer such a scheme. Taking leave is only possible during employment; it is not a right and can only be taken in consultation with the employer. This does not apply to parental leave (13 weeks for father and mother) and long-term care leave (six weeks full time), which are provided by law. It is assumed that employers are willing to honour the wishes of employees at different moments of their life course. If employees do not use the accumulated credits during their working career, these credits will be added to their old age pension. Under certain conditions, employers are allowed to contribute to the employee savings. Employers may not stipulate extra conditions for taking up leave and contributions must also apply to employees who do not participate in the LCSS.

Initially, the proposed life-course plan by the government focussed on the rush hour of life. The introduction of the LCSS is closely related to the abolishment of the fiscal facilitation of early retirement (VUT) and the pre-pension arrangements to increase the labour market participation of older employees. As a result, VUT and pre-pension plans were expected to disappear. However, the trade unions opposed. A compromise was worked out, including an increase in the maximum savings amount, the introduction of (partial) early retirement as an option within the LCSS and the relaxation of the transitional arrangements by the government. Accrued rights will be honoured. The premia paid into the early retirement funds or pre-pension funds may be used for the LCSS.

As of 1 January, 2006, following the law on fiscal treatment of early retirement and introduction of the Life-course Savings Scheme (*Wet aanpassing fiscale behandeling VUT/prepensioen en introductie levensloopregeling*), tax deductions for early retirement schemes were abolished for people who were younger than 57 years of age on 1 January 2005. Employees who were aged 57 or over on 1 January 2005 will remain entitled to current tax benefits and may continue to participate – fiscally facilitated – in the early retirement or pre-pension schemes offered by their employers. If the employer does not offer these schemes, this group may participate in the LCSS and save up to 12% of gross salary per annum. In addition a transitional regulation is applicable to employees between 50 and 57 years on 1 January 2005. The maximum savings limit of 12% per annum does not apply to this group, thus enabling them to save 210% of their last gross salary in a shorter period of time and build up their pension more quickly by contributing up to maximum amount.

State support of the LCSS is limited to fiscal support. The contributions to the savings fund are tax free. Taxation is deferred until the time when the saving is drawn down. This delayed taxation is called the "reversal rule". Also the returns on the fund are untaxed. Moreover, the LCSS is supported by a number of tax deductions. When taking up leave, employees receive a tax credit of EUR 185 (in 2006; for 2007 the amount is EUR 188) for each year in which money was paid into the LCSS, independent of the annual contribution made. For employees who participate in the LCSS and who take up unpaid parental leave, an additional tax discount applies, equal to 50% of the gross minimum wage per unpaid day of leave. In 2006 this is about EUR 30 per day for a full-timer taking full-time parental leave. According to Bovenberg (2005) the tax favoured LCSS can be viewed as a self-insurance device against unemployment risk and human capital risk over the life cycle. If individual bear financial responsibility for their own employability they face a better incentive to work and train than under regular unemployment insurance.

In the *Budget Memorandum 2003* the Dutch cabinet announced to abolish the Salary Savings Scheme (*Spaarloonregeling*) by 2003 and proposed a new Life-course Savings Scheme. The voluntary Salary Savings Scheme (SSS) introduced in 1994 offers the opportunity of saving the maximum of EUR 613 per annum, tax-free. The savings amount has to remain with the bank for four years. For specified purposed it can be withdrawn within this four years' period, for instance to buy a house or to conclude an annuity. After four years, the saved amount can be cashed in tax-free and used to pay for a variety of things. The original aim of the SSS was to stimulate capital formation, *i.e.* building up financial assets by the lower paid employees and to create flexibility in the wage formation and collective labour agreement negotiations. However, all income groups, notably the higher income groups, benefit from the fiscal facilitation (De Mooij and Stevens, 2002). There was social resistance against the abolition of the SSS. A compromise was made: participation in both the new LCSS and the existing SSS in the same calendar year is not permitted. Employees can choose each year again between saving through the SSS or through the LCSS. Initially the last date for choosing one of the two schemes was set on 31 December 2005; however, to offer extra time to make a choice it was decided that employees have the opportunity of making a choice until 1 July, 2006. The Ministry of Social Affairs and Employment has launched an extensive publicity campaign to promote the new LCSS and a special internet site has been set up to help people calculate how much they have saved towards taking unpaid leave.

The LCSS can be covered in collective bargaining agreements. For instance, the LCSS will be integrated as an option into the collective agreement *à la carte* in the Dutch universities. In some of the collective labour agreements conditions related to the right to take leave (duration) and criteria for refusal of taking leave by the employer are stipulated. Another issue addressed in the collective labour agreements is the choice of the provider of the LCSS. Banks, insurance companies and subsidiaries of pension funds may offer the personal life-course saving product. The latter may be a banking product (savings account or investment product) or an insurance product (in most cases it will be a life insurance). The social partners can make collective arrangements with banks or insurance companies in the collective labour agreements. These collective agreements will not be mandatory for workers. They are allowed to shop around for a better deal or choose not to participate at all. Dutch trade union confederations FNV and CNV are in favour of a collective scheme with subsidiaries of pension funds. Some collective labour agreements address the employer contribution to the individual savings.[3]

3. Expected results

In 2004 the Dutch government expected that the average annual participation in the LCSS will increase from 1.9 million employees in 2006 to 3.0 million employees in 2009. This corresponds with a participation rate of 20 and 33% of the employed labour force (Tweede Kamer, 2004, p. 12). Also survey research by insurer Avéro Achmea and by the Dutch trade union confederation FNV (among young people) found expected participation of one third of the respondents (cited in Groot and Korteweg, 2005a, p. 10). Research by insurer Interpolis shows that 3% of the employees will certainly participate, while 23% will probably participate in the LCSS (cited in Groot and Korteweg, 2005b, p. 3).

3. For example, in 2006 most public sector collective labour agreements included employers' contribution. The agreed employer's contribution varied between 0.45% and 1.5% of the gross annual salary.

There are theoretical and empirical grounds to expect that the actual participation will be lower than expected by the Dutch government, that only certain groups of employees will participate in the LCSS, and that the scheme is only used for specific purposes. Survey research may suffer from selection bias because potential participants having a higher response rate than non-participants. The SSS is fiscally more advantageous than the LCSS (Goudswaard and Caminada, 2006; Keuzenkamp, 2004).[4] Jongen and Kooiman (2004) have estimated that because of this, the take up rate of the LCSS will be low; only about 17 000 employees (0.1% of the workforce) will participate. Also the employer's permission for taking leave makes the scheme unattractive; employees have no guarantee to be able to take leave in the future. Moreover, in the long run, the government may change the conditions. In this respect the SSS is more certain and hence more attractive than the LCSS. From this we expect that the number of people that will switch from participating in the SSS to the LCSS will be limited. Participating employees who wish to take up leave, but do not get permission from their employer are "forced" to use the LCSS to retire early. Dutch employees are very much in favour of early retirement. Taking into account the steep age-wage profiles with wages above productivity level at older age, employers will only approve when there is economic gain in allowing taking up saved leave, representing an additional incentive to use the scheme for early retirement. This tendency is emphasised by adverse selection resulting from offering workers greater choice and thus greater sovereignty (Delsen, 2002, 2003). Due to budgetary constraints, only certain categories of employees can afford to materialise their leave and working time preferences. Especially workers who are well-off and highly productive are expected to be able and willing to opt for early retirement. Lower paid workers will have less opportunity to choose; certainly when conditions are increasingly individualised and made actuarially fair, like in the LCSS. The less well-off and less productive workers will (have to) choose for working more years.

The individual LCSS only considers interdependencies between activities *within* the life course of a single individual. It does not consider interdependencies *between* life courses (Fredericks *et al*., 2005, p. 44). Related to working time and part-time work, it seems more informative to take the household as the basic decision-making unit rather than the individual. If both wife and husband are substitutes in the household *production* of commodities (Becker, 1965), one spouse's increased labour supply to the market may tend to decrease the supply of labour of the other. In case both spouses are complementary in the *consumption* of household commodities they may take leave together. Theory cannot predict whether the spouses are substitutes or complements in household production and consumption (Killingsworth, 1983; Hamermesh, 2000). The growth in the number of female workers and in the number of Dutch households with two incomes (one-and-a-half-earner households) increases the financial scope to participate in the LCSS and partners may use the savings to retire early, to stop working, or to work part-time for a limited period. The LCSS may stimulate leisure time at younger age and reduce the income drop when taking up leave. The LCSS does not offer an incentive to labour participation at older age. Hence, the LCSS runs counter to the policy of stimulating labour participation (De Mooij and Stevens, 2002).

Following Simon (1957) two classes of people may be distinguished: maximisers and satisficers. Maximisers are people who always try to select the best option from the

4. Korteweg *et al.* (2003) found that about 60% of the employees participate in the SSS. According to Statistics Netherlands 41% of the employees participated in the SSS in 2003 (CBS, 2005).

available options. Maximisers are a small minority of employees. The majority of people are satisficers, who simply look for a choice that is good enough. Being a satisficer may be rational, because of the information costs involved. As a result, most people may choose not to choose. Postponing decisions, choosing not to choose, is also related to the increase in the freedom to choose. According to the theory of framing and the theory of goals (Lindenberg, 2001a, 2001b), in the case of options the strive for instant satisfaction and a good feeling may prevail. For short-term goals are directly tight to emotions and to the improvement of the conditions of self and not save money for leave in the future by participating in the LCSS. Hence, myopia is not just a matter of information. Finally, because the LCSS is a new arrangement there may be an initial hesitation from the side of the employees to see how things work out. Also, unknown, unloved applies. Research by TNS/NIPO (1 June 2006) among 1 339 employed found that only 5% will participate in the LCSS. For 59% of the employees it was clear what the LCSS could mean for them. December 2005 this was 45%. From this we expect that only a small minority of the employees will actually participate in the scheme in 2006.

Fiscal treatment may also be an important explanatory factor of the overall participation rate as well as the age, gender and salary distribution of participants in the LCSS. The delayed taxation (reversal rule) only offers limited tax advantage. The difference between the deduction applied when the savings are made and the tax charged at withdrawal is usually minimal and may even turn negative when there is a considerable increase in income. The exemption from equity tax may be considerable for high income earners; but lower income earners will in most cases not be able to profit from this facility (Goudswaard and Caminada, 2006). The flat tax credit of EUR 185 is relatively attractive for the lower income groups. After 15 years of participation this tax credit amounts to EUR 2 770. However, single persons on minimum wage pay little income taxes and cannot profit from this tax credit. Moreover, the absence of a minimum savings amount requirement may induce employees to participate while saving only a very little amount money annually, just to benefit from this flat tax credit, representing a deadweight loss. The additional tax credit of about EUR 30 per day in case of parental leave is considered a significant financial facilitation for people with low incomes (Fredericks *et al*., 2005, p. 43). Women and men who earn up to approximately twice the minimum wage will not have to pay any income tax when using the LCSS for parental leave. The scheme will still be unattractive to people with a low income because the tax discount is not paid while the saving is done.

Dutch experience with offering choices in the collective labour agreements *à la carte* (Delsen *et al*., 2006) and in the individualised Salary Savings Scheme (SSS) (De Mooij and Stevens, 2002; CBS, 2005a) shows that the participation rates are higher for male relative to females, older workers relative to young workers, employees with high salary level relative to employees with low salary level and for full-time employees relative to part-time employees. In line with this experience the contribution to facilitating life-course choices is expected to be limited; only some employees will be able to participate in the LCSS (Keuzenkamp, 2004; Plantenga and Remery, 2004; Fredericks *et al*., 2005; MinBZK, 2006). It is expected that the main users will be employees on higher salary, men, older employees, couples without children and full-timers. These groups will be able to set aside money to invest in the LCSS. The LCSS mainly offers financial benefits for employees with a higher salary. For single parent households and young people who are at the start of their career it will be difficult to save money and to build up a substantial account. They may use it for parental leave, but have little time to save. If women use the scheme, they will probably use it mostly to fund parental and/or care

leave. As a result, they may lose the opportunity to use the credits for early retirement or other forms of leave. Only few men are expected to use the LCSS for parental leave; men will more frequently use LCSS to fund pre-pension arrangements. The time to save for early retirement is relatively long. It is a well established fact that the income level changes over the life cycle. Data for 2003 from Statistics Netherlands show that annual salary increases with age, with a peak in the 46-55 years category. For young people the income increase is strong, because they find a (better) paid job or their wages increase related to seniority and more experience. At older age an increasing number of people stop working partially or fully, as a result their average income drops. The highest average income is in households with a breadwinner between 50 and 55 years of age (CBS, 2005b). Combined with pension consciousness these data suggest that the LCSS will mainly be used to finance early retirement.

The contribution of the present LCSS to the objectives of transitional labour markets is expected to be poor for several reasons. There is no provision that supports the use of leave for continuous training or for upgrading low-skilled. It is to be expected that the present scheme will be used mainly for compensating income loss at early retirement and less for other forms of leave. There are three reasons for this: first, in case of short-term leave (less than three months or less than one year) the SSS is more advantageous; second, older workers have more financial leeway to save for leave than younger workers; third, in existing schemes more is saved for pre-pension than for other forms of leave (CPB, 2004; Jongen and Kooiman, 2004). Also because employees have to save first, the contribution to the objectives of transitional labour markets is limited. Pressing needs of women for parental leave and for care leave and early retirement for men will prevail (Fredericks *et al*., 2005, pp. 45-46; Keuzenkamp, 2004).

Also the number of hours worked have their influence on the participation in the LCSS. For part-time employees the financial scope to save is limited relative to full-time employees. Because most Dutch part-time employees have voluntarily chosen the number of hours they usually work (Delsen, 1995; Buddelmeyer et al., 2004), their work-life balance may be better than the ones of full-timers; they will have less need to adapt there working hours by participating in the LCSS. Therefore, we expect to find a lower participation rate among part-timers than among full-timers. For the same reasons – because in the Netherlands most part-timers are female and most full-timers are male – we also expect the participation rate among female employees to be lower than among male employees. The choices made most likely also are influenced by care responsibilities. As care responsibilities in the Netherlands (as elsewhere) are still primarily a female domain, their influence will most likely be reflected in the (expected) lower participation rates in the LCSS by women. From this we expect the contribution of the LCSS to improved work-life balances to be limited.

4. Actual participation

Survey data show that mid-June 2006 in the government sector (6%) the participation rate was higher than in the private sector (5%). Most employees in the government sector want to use it for early retirement. The participation rate of temporary employees in the LCSS as well as in the SSS is about half of permanent employees. Participation increases with salary level and with age. Over 54% of the employees in the government sector participated in the SSS (MinBZK, 2006). Actual participation rates in the collective life-course contracts based on survey data in February 2006 for the private sector vary from 5% to 10%. This applies to insurers, Aegon, Delta Lloyd,

Nationale-Nederlanden, Reaal, as well as to banks, ABN Amro and Rabobank (*Assurantie Magazine*, 2006).

In Table 5.1 the actual participation rates of employees in 2006 divided by selected characteristics are presented. The results refer to people who belong to the employed labour force (*i.e.* have a paid job of at least twelve hours a week) and have a contract of employment. The actual participation of 5.6% is lower than was expected on the basis of the stated preferences. Our expectation that only a minority of the employees will participate in the LCSS is supported. This does not imply that most employees are satisficers; it mainly suggests that only relatively few employees switched from SSS to LCSS. According to CBS (2007) two-thirds of the participants in the LCSS in 2006 participated in the SSS in 2005. The limited switch is related to the fact that participation in the competing SSS is more interesting and less risky, and the fact that choices are more influenced by short-term rather than long-term considerations. With a participation rate of 43% of employees, the SSS indeed was much more popular than the LCSS in 2006 (CBS, 2007). As expected the participation rate of men (6.3%) is higher than of women (4.6%). The participation rate increases with age. The limited number of young adults that participate may use the LCSS for parental leave in the next phase, the rush hour of life. To what extent this contributes to reduced hectic depends on the available amount of savings and time to save. The low participation rate indicates that the contribution of the LCSS to a less hectic rush hour of life is limited. The results are also in line with our expectation that older employees have more financial leeway than young employees. It may also point towards the LCSS mainly being used for early retirement in the future. Pension consciousness plays an important role in explaining the relatively high participation rate of this age group, because these employees are closer to retirement age. Moreover, the people in this age group – borne between 01/01/1950 and 31/12/1954 – are allowed to save 100% of their salary per year in the LCSS as part of the transitional regulation. Other employees participating are only allowed to save 12%. Employees aged 57 and over may continue to participate in the fiscally facilitated early retirement and pre-pension schemes, when offered by their employer. It may be concluded that the design of the present LCSS does not induce employees to work more years after retirement; it actually is an incentive to retire early. As expected, participation rates rise with the education level: 8% of higher educated employees participate in the life-course scheme, compared with less than 4% for those with lower education levels. The expected adverse selection by the LCSS is confirmed. In line with our expectations, the participation rate increases with the number of weekly working hours; full-timers (6.4%) participate almost three times more than short part-timers (2.2%). The participation rate of employees with a permanent contract is above average. Finally, as expected, partners participate more than singles, and parents less than non-parents. For in individualised savings systems singles and parents have less opportunity (purchasing power) to participate. From these results it can be concluded that the contribution of LCSS to extending free choice of individuals to plan their life course is poor: only certain employees are able to participate.

Table 5.2 shows that early retirement is the most important reason for participation in the LCSS for both male and female employees. Early retirement is a more important reason to participate among men (53.7%) than among women (44.5%). For men this was expected. For females this is not in line with the expectations. These results run counter to the aims of the LCSS. As expected the early retirement reason to participate increases considerably with age and applies to two thirds of the employees in the age group 45-65 years. As expected parental leave is more important for females (10.2%) than

males (3.2%); at a lower level this also applies to sabbatical leave. Unlike our expectations parental leave is not the most important reason for females. Education leave is very limited as a reason for participating in the LCSS, confirming the expected poor contribution of LCSS to the objectives of transitional labour markets. Note, however, that a considerable portion of the participants (29.1%) does not yet know the purpose. Notably the younger employees (47.1%) have not yet decided on the purpose of the savings.

5. Conclusions and outlook

The Dutch LCSS aims at increasing labour market participation of women and older workers. It supports combining employment and family responsibilities by enabling employees to cope better with stressful periods. It can be concluded that in 2006, the first year of operation, the LCSS was not very popular among the Dutch male and female employees. Actual participation is lower than expected by the government for various theoretical and practical reasons, including the design and fiscal facilitation, myopia, the fact that LCSS is a recent innovation and the more favourable competing scheme, the SSS. The LCSS lends shape to the individualisation; it enables an employee to vary his/her working time over the life cycle according his/her personal situation. Starting from heterogeneous employees preferences, offering options will result in high levels of participation and may imply that differentiation will occur. Lack of differentiation of actual choices and low participation rates point towards a gap between preferences and choices offered or that the options only match the preferences of a sub set of employees. Some categories of workers are not able to choose and to participate in the LCSS. Purchasing power turns out to be the core explaining factor. The LCSS, the fiscal facilitation in particular, mainly offers financial benefits for employees with a higher salary and explains why certain groups of employees (still) have limited opportunity to participate in the LCSS. The contribution to continued employment participation is limited, or may even be negative. The LCSS induces early retirement that conflicts with the aim of the scheme. Also the contribution of the present LCSS to facilitating the free choice of individuals to plan their life course, and to balancing the work-life balance over the life cycle is limited, due to the low take up rate in 2006 as well because certain employees are not able to participate. Investment in human capital over the life cycle is not addressed in the present LCSS explaining why its use to finance education leave was very limited in 2006 and hence why the contribution of the LCSS to the objectives of transitional labour markets is very poor.

Although the LCSS performed poorly in 2006, the future of the LCSS looks bright. The spread of employers' contributions to the scheme as well as the inclusion of the LCSS in more collective agreements *à la carte* will have a positive impact on the participation rate in the years to come. Recently announced government policy will also contribute to the participation rate of the LCSS. The Coalition Agreement (2007) between the three political parties of the present government includes plan to expand the LCSS and to redesign it to support continuous employment over a person's entire working life (more than it does now) and to enable people to start a company, bridge the gap between two jobs or switch to part-time work. Moreover, in consultation with the social partners, the government will examine whether and, if so, how the Salary Savings Scheme (SSS) can be incorporated into the life-course savings scheme and be made available to self-employed people and business owners without personnel. Some of the shortcomings of the present design of the scheme mentioned in this paper will be addressed in the near future. Study entitlements for education and training facilities and saving towards longer

parental leave will be linked to the life-course savings scheme. Use of the scheme to finance early retirement will be geared more towards part-time retirement. People on lower incomes will be given better access to the scheme. Finally, the Coalition Agreement states that parents need to be able to combine work and care, employment and child-rearing in a satisfactory fashion. People in the prime of life should be able to take a time-out, and the LCSS scheme helps make that possible. The statutory right to parental leave will be lengthened from 13 to 26 weeks per employee and is non-transferable. The LCSS will be adapted accordingly. Not only the participation rates, also the effectiveness of the LCSS are expected to benefit from these announced changes in the design of the scheme.

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Table 5.1. Participation rates of employees in the Dutch Life-course Savings Scheme by selected characteristics, 2006

	Participation rate (%)
Total	5.6
Males	6.3
Females	4.6
15-25 years	2.3
25-35 years	5.3
35-40 years	5.8
40-45 years	6.5
45-50 years	6.2
50-55 years	8.3
55-60 years	4.9
60-65 years	1.6
Lower education	3.6
Intermediate education	4.8
Higher education	8.0
Permanent contract and fixed hours	6.0
Other	1.4
12-19 hours per week	2.2
20-27 hours per week	4.0
28-34 hours per week	5.9
35 hours or more per week	6.4
Single	5.2
Single parent	3.6
Partner	6.4
Partner, not parent	6.5

Source: CBS (2007).

Table 5.2. Reasons for participating in the Dutch Life-course Savings Scheme, 2006

Percentages

	Early retirement	Parental leave	Sabbatical	Leave to care for sick relative	Education leave	Other or unknown	Do not know yet
Total	50.3	5.8	4.7	0.6	0.3	9.0	29.1
Males	53.7	3.2	3.7	0.5	0.5	8.8	29.2
Females	44.5	10.2	5.5	0.8	0	8.6	28.9
15-25 years	29.4	5.9	5.9	0	0	11.8	47.1
25-45 years	39.5	10.5	5.8	1.1	0.5	7.9	35.8
45-65 years	67.9	0	2.9	0	0	10.2	17.5

Source: CBS (2007).

Chapter 6.

Life-course Policies and the Labour Market

Christine Erhel[1]

Life-course policies have become a major concern for international organisations and national governments. This trend is related to some common labour market problems experienced by many industrialised countries, especially the low employment rates of the senior population (over 55 or even 50), and work/family reconciliation problems following the compression of working careers in the age 25-50.

Our presentation of these issues relies first on a theoretical analysis of life-course policies, which shows that these schemes are based on three major paradigms, namely life cycle and transitional labour markets in economics, and the life-course approach in sociology.

A comparative study of policies then leads to two main conclusions, and some policy recommendations.

First, social protection and employment regimes have differentiated effects on life course. In a global perspective, the Nordic model appears to be the most favourable in terms of flexibility in time allocation over the entire life cycle, and thus it is associated with a better conciliation between work and family life. Nevertheless, some inequalities remain between men and women.

Second, beyond country differences, there is a general trend to an individualisation of time management, and to an extension of the time period concerned, for instance through time saving programmes.

However, this trend remains limited, and should be further developed in order to ensure a wider coverage and to build new rights for people on the labour market (for instance through a better transferability).

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1. Introduction

The dynamic "life-course" approach has been the subject of major developments in recent years, at both academic level and that of public policies, especially policies for the regulation of working hours. From the academic point of view, the inclusion of the dynamics of choice and of the role of time has progressed in several disciplines, whether it be economics (standard analyses of the "life cycle" and also from the standpoint of "transitional markets", see Schmid and Gazier, 2002), sociology (approaches based on the life course, see Mortimer and Shanahan, 2003; O'Rand and Krecker, 2000) or law (see, for example, Supiot, 2001).

In the work and recommendations of international organisations (OECD and European Union) there has been a notable revival of the question of working hours, with the debate shifting towards life spans taken in their entirety. This evolution is the result of several concerns.

In the first place, the persistence of low employment rates for seniors in numerous countries, which do not appear to be compatible with the existing models for the financing of social protection (and in particular pension systems), cannot be reduced to a question of incentives for continuing active work. In the countries concerned, it brings in numerous other factors, including a deficit in terms of in-career training and incorrect anticipation of the consequences of arduous working conditions, in other words questions that bring in the labour market aspect of the life course.

Moreover, the age-cohort patterns of employment rates in most developed countries show a tendency to a concentration of tasks in the median age group, which combines the highest employment rates and the strongest family constraints. This concentration makes it difficult to reconcile the different spheres of life (in particular, family life and professional life) just when most employees are increasingly aspiring to improved reconciliation (OECD, 2004).

Faced with these concerns, life-course policies are starting to be developed in the OECD countries. They constitute one of the integrated guidelines in the European Employment Strategy for 2005-2008 ("Promote a life-cycle approach to work") and a major thrust of the renovation of policies for the regulation of working hours in certain countries (for example, the Netherlands). These policies modify the traditional public policy approach, centred on certain phases of life or certain age groups, by introducing a global approach, consisting of giving individuals certain rights, resources and services enabling them to be the authors of their own life courses, especially concerning the allocation of working time (market and domestic) and leisure throughout their lifetime.

In this chapter, we shall recall first of all the theoretical foundations of this global life-course approach, before demonstrating the implications for the labour market. An analysis of the existing policy levers and of their limitations with respect to the implications of economic policy will make it possible to identify the main possible thrusts of reform and improvement.

2. Life-course policies at the intersection of several theoretical approaches

The analysis of life-course policies and their incidence on the labour market is situated at the intersection of several different approaches and even of several disciplines. In fact, it concerns jurists and sociologists just as much as economists. It is possible to

identify three types of paradigm capable of providing the foundation for a life-course-centred approach.[2]

2.1. Analyses of the life cycle in economics

In the field of economic analysis, it was mainly the introduction of the life-cycle hypothesis by Modigliani in the 1950s and the development of human-capital-based approaches (Becker, 1975) that made it possible to introduce the role played in individual decisions by time and by agents' expectations within the horizon of their whole lifetime.

This research programme led to the development of dynamic labour supply models and models of inter-temporal choice in which individuals maximise their well-being and exercise trade-offs between different activities (leisure, market work, domestic work, voluntary or charity work, for example) under a time constraint. These models are based on several strong hypotheses.[3]

First, it is generally assumed that individuals' preferences are exogenous and stable over time, with the consequence that present choices, for example regarding the supply of labour, are independent of past behaviour. On the other hand, they depend on the well-being expected from the current and future income associated with a given decision. Seen in this light, the heterogeneity of individual choices is solely a matter of differences in preferences and not of past experience.

Second, in most cases the assumption is made of preference for the present, in other words the assumption that the well-being associated with future consumption or future leisure is less than that associated with present consumption or leisure. This "time preference" is also exogenous and can vary from one individual to another, which explains the observed heterogeneity of choice, for example regarding investment in human capital.

Third, most models assume perfect information and absence of uncertainty.

From this standpoint, taking preferences as given (including the preference for the present), one arrives at a representation of behaviours in which present choices depend on the future and on expectations regarding the life cycle, in other words on the stream of future income and other possible receipts (inheritances, for example). Individual decisions therefore depend heavily on the gains and losses they generate. The time-horizon of the choices also influences the decision, so that life expectancy or expectations regarding the duration of working life also have an influence. The impact of public policy therefore operates through these two channels: first, its effect on expected gains and losses associated with a given decision and, second, its impact on the time-horizon of individual choices (retirement age, for example). It acts as a distorting factor in

2. These distinctions transcend interdisciplinary differences, even though the analyses of the life cycle are found mainly in economics and those of the life course in sociology. The concerns addressed by the work on "transitional markets" bring together economists and sociologists but are also of considerable interest to jurists.

3. These assumptions are often relaxed in the most recent work. It is relatively common to take into account the role of uncertainty or imperfection of information. The extension of the notion of preferences to factors such as habit all personal and social capital make it possible to make a link between the heterogeneity of preferences and the past (Becker, 1996). We limit ourselves here to the standard versions of the inter-temporal choice model.

choices (notably, the supply of labour and investment in human capital) and can lead to non-optimal situations.

These models lead, in addition, to a representation of life in a threefold sequence – education, employment and retirement – that corresponds to an optimal allocation of activities throughout life. Investment in human capital shows decreasing returns with age and hence has to take place early in life. The concave profile of the supply of labour results from the profile of productivity and income during a lifetime.

This analytical framework has been widely applied in the analysis of older workers' behaviour as regards exit from activity. In a neo-classical perspective, the choice whether or not to continue working depends on three major determinants. First, the legal retirement age (or age of access to early retirement) operates inasmuch as it creates market distortions (liquidity constraints, legal constraints on the labour market or even social constraints). Second, the generosity of the incomes received during inactivity (retirement pensions, early-retirement pensions, unemployment benefits) has a direct effect on the supply of labour. Last, retirement pensions schemes imply a marginal tax or a marginal subsidy: working an additional year modifies an individual's wealth, *i.e.* the present value of the stream of future income received during retirement. This effect depends, on the one hand, on the costs associated with an additional year of work (subscriptions paid and allowances not received) and, on the other hand, on the impact of one additional year of work on the level of the pension received. Life expectancy also enters into the calculation of anticipated wealth. If the effect induced by an additional year of work is negative, then the pension system does not meet the condition of actuarial neutrality and acts as an incentive to inactivity. From this perspective, it then creates a distortion and a sub-optimal situation.

This perspective is central to an economic life-cycle approach. It nevertheless has difficulty in explaining the variety of choices observed, notably in an international comparison perspective, and tends to reduce the incidence of economic policy to financial factors only.

2.2. The "life-course" approach

The "life-course" approach is more recent and is linked to sociological or socio-economic research (Mortimer and Shanahan, 2003; Anxo and Boulin, 2006b).

The notion of "life course" defines a field of research and constitutes a heuristic concept making it possible to analyse individuals' trajectories over time. Unlike the neo-classical approach, which remains centred essentially on choices relating to the labour market (supply of labour, investment in human capital, etc.)[4], these trajectories and hence the "life course" include all spheres of life (including family life, children's education, help for relatives, social life, and so on).

The existing work adopts two fundamental hypotheses that differentiate it from the neo-classical inter-temporal paradigm.

4. Recent developments in microeconomics, and notably the economics of the family, tend to place this conclusion in a broader context by including a broader set of decisions (marriage, fertility, etc). However, a certain degree of articulation with the labour market is still maintained (*cf.* decisions concerning work and child rearing within the couple).

First, individual trajectories are shaped by both individual *and* social factors. Taking a Durkheimian perspective, the analysis regards institutions, social norms, values, etc. as having a direct effect on the unfolding of the life cycle, its formalisation into different phases (education, employment, marriage, etc.) and hence on the collective representation of time. However, it also takes into account the role of individual choices, making it possible, among other things, to explain the increasing heterogeneity of observed trajectories.

Second, the perspective adopted is "holistic" (*cf.* Anxo et Boulin, 2006b), in other words it covers not only specific phases or population groups but entire lives, which then become a subject for empirical analysis and evaluation of public policy.

As a consequence, this approach recognises the importance of trajectories and of the consequences of the past and of previous experience for present or future situations. Certain events, some of them occurring early in life such as the level of education attained, the conditions of insertion into the labour market or union formation and/or parenthood have consequences for the entire lifetime. Past experience comes into account and affects an individual's opportunities with respect to the future.

The consequences of previous choices depend also on existing institutions and policies. For example, an advanced system of in-career training and intensive active employment policies can reduce the social costs of early exit from the education system. The effect of the past is not automatic and possibilities exist for the reversal of trajectories, possibilities that life course policy must encourage.

2.3. The "transitional markets" approach

The approach in terms of "transitional labour markets" developed by Schmid and Gazier (2002) also takes individuals' trajectories as a subject of analysis and in this respect resembles the previous perspective. Moreover, it also recognises the role of institutions and social norms in explaining the dynamics. However, its originality lies in its apprehension of these trajectories through "transitions" that individuals experience or are liable to experience throughout their lifetime.[5]

These transitions comprise all the intermediate situations involved in employment. Five types of transition are identified: transition between the education system and employment; transition between the family or private life and employment; transition between employment and unemployment; transition within employment (between full-time and part-time working); and, finally, transition between employment and inactivity at the end of a career (retirement). These various transitions may be more or less favourable from an individual or collective point of view, depending on whether they increase opportunities and open up scope for choice during a lifetime or, on the contrary, reduce them. As in the "life-course" approach, previous experience in fact has consequences for present choices and irreversibility phenomena are to be observed both at individual level (choice of training, for example) and at the level of public policy itself.

From a methodological point of view, it is a matter of relating existing policies and institutions to the transitions that they influence and of identifying the institutional arrangements that favour "good" transitions. In conformity with the institutionalist tradition, the analyses carried out in this theoretical framework adopt the idea that

5. Moreover, in the transitional markets approach, employment is central, since one of the objectives of this approach is to conceptualise "new full employment" (Gazier, 2003).

different institutional combinations can lead to good performance, complementarities between the arrangements being of essential importance.

From a theoretical point of view, the point to note is that public policies are therefore liable to influence individual trajectories and positions on the labour market throughout a lifetime. Unlike the economic life-cycle approach, the sociological approach and the transitional-markets approach lead to regarding the diversity of the observed trajectories and transitions as resulting not only from the heterogeneity of preferences but also from the impact of the past and of national institutional systems. Moreover, from the point of view of the role played by time and by the dynamics of individual choices, these approaches complement one another, since the neo-classical theories place the emphasis mainly on expectations of gains or losses and hence on the future, while the life-course and transitional-markets approaches stress the importance of the past and of previous experience.

3. The implications of life-course policies for the OECD countries

Empirical research shows a strong relationship between the positioning of individuals in the life cycle and their situation on the labour market, with some features that are common to all the OECD countries but at the same time substantial differences among them. The determining factors are age, gender and family situation (especially the number of children).

On the whole, this perspective linking the life cycle and the labour market leads to emphasis on the emergence of new risks, both at individual level and at the more general level of social protection systems.

3.1. The position in the life cycle and the situation on the labour market: the role of "national models"

This section will take a set of comparative statistics supplied by the OECD and Eurostat in order to characterise the role of age and then of gender and family situation in the positioning of individuals on the labour market. These aggregated statistics are supplemented by certain results emanating from the exploitation of the European Community Household Panel (ECHP) (Anxo and Erhel, 2006; Anxo *et al.*, 2007), making it possible, first, to incorporate a more dynamic perspective of the functioning of the labour market through analysis of transitions and, second, to refine the analysis of position characteristics in the life cycle.[6]

The role of age on the labour market

In all the OECD countries, employment rates reach their peak in mid-life, whereas they turn out to be low for youths, on the one hand, and for seniors, on the other. The average employment rate for the 15-24 age group was 75.7% in 2004, compared with 43% and 50.8% for the 15-24s and the 54-65s (Table 6.1). The lower participation of youths is explained by education and by an increasingly long process of insertion on the labour market, while for the seniors it is the result of a relatively low average age of retirement (61.3 years in Europe in 2003, see Table 6.2).

6. In view of the availability of data and research, this analysis concentrates on EU countries, although it is widened where possible to other OECD countries (the United States, Australia, Canada, and Japan).

This situation is found again in the transitions by age group in 2000-2001 observable in certain European countries (Table 6.3): flows to inactivity are highest for the 55-64s, whereas the younger age group turns out to have the highest probability of experiencing transitions of any kind and, in addition, the greatest likelihood of experiencing a transition to employment. During the median period (25-54), transitions between employment, unemployment and inactivity remain relatively high, but lower than for youths, indicating stabilisation as regards employment.

There is therefore a tendency towards compression of careers, with employment concentrated on the years between 25 and 54.

This general observation masks substantial divergences between countries, however. Ever since increasing the employment rate of seniors became an objective of the European Employment Strategy (50% in 2010), these differences have become familiar for ageing workers in the European Union (*cf.* for example, European Commission, 2005; Courtioux and Erhel, 2005). This research reveals a contrast between two groups of country. In the Nordic countries, as well as in Portugal and the United Kingdom, employment rates are above the EES target (even exceeding 60% in Sweden and Denmark). By contrast, another group of countries is very far from attaining the objective: these are Belgium, Luxembourg, Austria, France and Italy. In these countries the average age of exit from the labour market is below 60, as a reminder of the substantial recourse to arrangements for early retirement or equivalent measures (unemployment benefit without the requirement to look for a job, incapacity benefits, etc.). The United States, Australia, Canada and Japan are closer to the first group, despite fairly marked diversity among them (seniors' employment rates of 52% in Australia and 63% in Japan).

It must be stressed, however, that the differences do not concern only the seniors. If this comparison of the role played by age on the labour market is generalised, one obtains an initial picture of the heterogeneity of life-course structures between European countries.

Table 6.1 reveals the existence of four groups of country. In the United Kingdom, Ireland, Denmark, the United States and Australia, employment rates are high for all age groups. In Belgium, Greece, France, Italy, Germany and Luxembourg, employment is heavily concentrated on the middle of the life cycle, with low employment rates for both youths and seniors. Observations available for two further country groups show asymmetric situations: Austria and the Netherlands have relatively high employment rates for youths but low rates for seniors; by contrast, in Sweden, Finland, Portugal and Japan, they are relatively low for youths and high for seniors.

These life-course structures tend to coincide with the usual typologies of social protection models (Esping-Andersen, 1990) or capitalism models (Amable, 2003). In the so-called "liberal" countries, the relatively low level of social protection and the more limited role of education and training create incentives to work throughout a lifetime, while the Nordic countries favour better equilibrium between training (education and in-career training) and employment. Note that the case of Denmark is special in this respect: youth employment rates are high in the country but this mainly reflects the employment of students, compatible with continuing education. In the "continental" and southern countries, the concentration of employment between the ages of 25 and 54 is the result of the lengthening of the period of education and the highly selective nature of the labour market (both as regards youths in the insertion phase and seniors). This situation therefore aggravates the financial constraints on social protection systems, since the burden of

financing, which is provided mainly by social contributions, is concentrated on a more restricted group, with careers that are briefer on average.

The role of gender and family situation

One of the notable facts concerning the developed economies is the feminisation of the labour force, accompanied by a shift away from the "single male breadwinner" model towards a dual-earner model and, more broadly, a diversification of household structures.

Despite these shared tendencies, which are reflected in a marked reduction in the difference in employment rates between men and women over the past 20 years (Figure 6.1), there remain substantial differences regarding the modalities of the integration of women on the labour market and regarding the nature of the transitions between the labour market and the domestic sphere.

These differences are partly linked to a generation effect. Although Table 6.4 does not permit a distinction to be made between the age effect and the generation effect, it does bring out differences in the gap in employment rates, depending on the age group being considered. The higher the age, the greater the difference in employment rates between men and women. Some work has shown that this correlation is indeed the result of a generation effect (European Commission, 1995).

There is also considerable heterogeneity among the Southern countries (Spain, Greece, Portugal), where the gender employment rate gap is wide for all age groups, indicating low female participation on the labour market. At the opposite end of the scale, it is in the northern countries (Sweden, Finland) that the gender differences are smallest. France and Germany, but also the United Kingdom, the Netherlands and the United States, are in an intermediate position, with small differences in employment rates in the case of youths and larger differences for the highest age groups.

Comparison between the transition matrices for the total population (Table 6.3) and for women (Table 6.5) provides additional analytical elements. On average, the probability of transition to inactivity (from either unemployment or employment) turns out to be greater for women, especially in the 25-54 age group. This particular feature remains on a small scale in France and Denmark but is more important in Spain, Italy and the United Kingdom. Germany is in an intermediate position. These differences in the transitions observed for the median age group reflect the impact of childbearing on the employment of women, which turns out to be substantial in the Southern countries (with the exception of Portugal), but also in the United Kingdom and Germany, where exits from the labour market are common in the case of women, although often only partial (to part-time working) and/or transitory.

From a gender perspective, therefore, despite a general tendency for the employment of women to increase, there are still substantial differences between countries.

In order to supplement these highly aggregated results and to obtain a broader picture of the differentiation by gender of employment structures throughout the life cycle, it is also possible to draw on recent work analysing the links between these employment rate patterns, the flexibility of working time and the composition of households (*cf.* for example, Anxo *et al*, 2007). This analysis is based on the processing of individual data (provided by the ECHP for 2000-2001), making it possible to reconstruct the categories of household corresponding to different stages in the life cycle (single; young childless couple; couple with child; couple without child and with the woman aged

between 40 and 59; couple without resident child (the "empty nest"); couple without resident child and in which both the man and the woman are over 60). This typology makes it possible to simulate a life cycle in the absence of a long-period panel, using cross-sectional data. Despite the adoption of strong hypotheses (notably concerning the succession of these phases in the life cycle, whereas in real life there is much greater diversity of situations), this type of analysis makes it possible to make inter-country comparisons of (simulated) typical trajectories.

The comparison shows that the differences are to a large extent linked to the characteristics of the welfare state, as well as to employment and working time regimes.

According to this research, the social democratic regimes of the Nordic countries are characterised by generally higher employment rates, stronger incidence of the dual-earner household model and smaller gender differences. In contrast to other countries, cohabitation and founding a family are positively linked to the female employment rate. One explanation for this may be the existence of a flexible and generous system of parental leave, combined with a highly developed and publicly financed childminding system that makes it easier for parents to reconcile employment and family life. The working time regimes show only a low degree of polarisation between men and women, although working time for women with young children is tending to become lower than for childless women, whereas for men it remains stable.

In the "liberal" countries, participation in the labour market is also high but working time turns out to be much more polarised between men and women. Entry into cohabitation and childbirth are accompanied by an increase in the employment rate and working time in the case of men (including long hours), whereas there is a tendency for working time to diminish in the case of women.

The "continental" countries (France and Germany, but also the Netherlands) differ from the previous group in having generally lower employment rates and more marked gender differences. However, this group of countries turns out to be very heterogeneous: in France, the polarisation of working time between men and women remains very limited, in contrast to Germany and the Netherlands. This may be explained by the existence of a highly developed system of childminding in the case of France.

Lastly, the Mediterranean countries (Italy, Spain) show the lowest female employment rates and the "single male breadwinner" model remains very important. Cohabitation and the birth of children have a distinctly unfavourable and lasting impact on the employment of women, which may be explained by the lack of childminding systems, a restricted system of parental leave and a relatively rigid working time regime (little possibility of part-time working).

In combination, analysis of the functioning of the labour market based on employment rate data and also data on transitions, broken down by age and gender, shows the differentiation to be a function of the position in the life cycle (age, family situation) and of gender. To sum up, it can be said that "the life course matters". However, a second conclusion is that these differences are not identical as between countries and show a link with certain social protection arrangements (parental leave, childminding systems) or employment policies (measures facilitating the exit of seniors from activity). The link between the life course and the labour market is therefore shaped by national public policies and institutional systems, in conformity with the hypotheses derived from the theoretical analyses described earlier. This is the point it is desirable to

examine further, identifying the principal levers of what can be very broadly described as "life-course policies".

3.2. Life course and risks

The life-course perspective makes it possible to identify new risks that can be analysed at individual level and at the level of social protection systems, calling for an overhaul of public policies.

A first risk is related to the compression of careers in the median age group, a phenomenon that can be observed in numerous countries and especially the continental countries. This is accompanied by difficulties in reconciling professional and family life that turn out to be substantial, notably for women, on the evidence of several enquiries. For example, in France almost 39% of active workers in employment consider that their work makes it difficult to organise their family life (Garner *et al.*, 2004). In addition, European surveys show the importance of this question of reconciling work and family life: according to the results of the European Social Survey (ESS),[7] 70% of Europeans consider the possibility of reconciling work and family life to be an "important" or "very important" criterion in choosing a job and this criterion is in gross terms more important than obtaining a high income or the existence of good promotion opportunities.[8] Note that the gender gap in this appreciation of the importance of reconciliation is small. Eurobarometer results, for their part, make it possible to capture the gap between the opinions expressed by workers in the European Union regarding their wishes as regards time use over the life course and the reality of the options available to them (Groot and Breedweld, 2004). For example, 59% of those questioned would like to modulate their working hours as a function of their needs, but only 44% are able to do so; 24% would like to have access to smoothed early retirement (part-time work) but this is possible for only 12% of them. Finally, on the basis of an analysis of the Dutch case, Baaijens and Schippers (2007) show that the majority of employees are dissatisfied with their working hours and their organisation of time, despite the widespread existence of part-time work.

Moreover, this compression of careers is accompanied by increasing discontinuities (Schmid, 2006), whose impact on entitlements to social protection, and particularly retirement pensions, is very substantial. These discontinuities are linked to the growth in part-time working and short-term contracts (fixed-term contracts and temporary agency work) seen in all countries. The risk of an inadequate retirement pension is therefore increased by the combination of the shortening of careers and the reduction in stable full-time employment. It is further aggravated by the existence of the non-negligible risk of early exclusion from the labour market in the event of job loss at ages of 45 and more, since the likelihood of finding another job diminishes with age.

The level of education appears to be a variable capable of aggravating or reducing these risks. The level of unemployment and, in particular, the risk of long-term unemployment are closely correlated with the level of training. This is in fact a criterion for which the irreversibility phenomena are very numerous. In many countries, access to in-career training is beset by substantial inequalities, with the best trained workers having the best access to professional training (Gazier, 2003).

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7. 2004 calculations by Lucie Davoine (CEE).

8. Regarded as "important" or "very important" by 67% and 54% of those questioned, respectively.

Note that the heterogeneity of national systems applies also to the level of incidence of these various risks, which are lower in the northern countries.

The functioning of the labour market therefore reveals new individual and social risks during the life course (from the initial training phase, through the concentration of time in the median age group to the access to retirement). These risks seem to be highly interdependent and marked by problems of irreversibility. Taking charge of these risks calls for the development of global policies making it possible to enhance the rights of the individual throughout the life course.

4. The levers available under existing policies

Among the policies having an incidence on the life course, a distinction has to be made between those that target a particular phase of the life course (or a particular type of transition, to use the transitional markets vocabulary) and those whose aim is to facilitate the freedom to allocate time throughout the life span. The former are more numerous and also more traditional, whereas the latter correspond to an innovative approach that provides a better response to the need to take charge of the new risks related to the labour market, in a perspective giving the individual the possibility of controlling his working career.

The analysis presented here is intended to be synthetic and attempts to provide a typology of existing policies without claiming to be exhaustive. Two limitations on the analysis of life-course policies from an international perspective have to be noted:

- A large number of measures are recent and have not been much researched. From a comparative perspective, we have drawn essentially on the work commissioned by the Dublin Foundation (Anxo and Boulin, 2005, 2006a), which deals with just six countries (Germany, Spain, France, the Netherlands, the United Kingdom and Sweden), and on the work carried out in the framework of research networks dealing with transitional markets (TLM.net, Anxo, Erhel and Schippers, 2007);
- Measures of this type are implemented at several different levels. Apart from statutory provisions, certain measures are organised through collective bargaining at the level of the branch or the firm. The empirical studies available show, in particular, that firms' human resource management strategies are increasingly including instruments for the individualisation of working time (Anxo and Boulin, 2005).

However, for reasons of access to information, and also because it is governments that provide the impetus in this field (Anxo, Boulin, 2006b), we have concentrated on measures of a general scope (mentioning bargaining activity when this is important).

4.1. Targeted policies

Public policies are applied to various phases of the life course. At the beginning of working life, they attempt to ease the transition between education and employment and, during working life, between work and family life, especially at the time of the birth of a child, and, at the end of working life, between employment and retirement.

A wide range of policies is involved. These include both measures that are explicitly focused on the labour market (labour law, especially concerning working time, but also active and passive employment policies, including those relating to early retirement, and training) and measures falling in the domain of social protection (maternity or paternity

leave, retirement). Figure 6.1 provides a synthetic representation on the basis of the typology of transitions as defined in the transitional-markets approach. It can therefore be assumed that a very wide range of actors is involved in their definition and implementation: government, social partners, and firms. However, as noted by Anxo and Boulin (2006b), there are substantial differences between countries in the manner of regulating life-course policies. The comparative analysis mainly distinguishes between countries where regulation is essentially contained in legislation or collective agreements covering a large proportion of workers (France, Sweden, Germany, and the Netherlands)[9] and those where most of the options available are set at the level of the firm (the United Kingdom).

This group of arrangements helps to shape the choices made by individuals during the life course, through financial incentives (encouraging or discouraging withdrawal from activity at certain stages) or the opening up of room for manoeuvre, for example the modulation of working time (moving to part-time work, phased early retirement, opportunities for training, etc.).

Without going into the detail of the existing policies, it is possible to indicate certain shared tendencies on the basis of the study of six European countries co-ordinated by Anxo and Boulin (2006a):

- The development of long leave, such as parental leave, which now exists in all the countries analysed for the purpose of this study.
- The strengthening of guarantees concerning return to employment for those benefiting from such leave, either to the same job through the maintenance of the work contract or to a similar job.
- A distinct modification of the arrangements concerning the transition between employment and retirement, which are now in all countries aimed at maintaining workers in activity, notably through financial incentives forming part of the retirement system but also through the development of formulas involving partial retirement (or part-time early retirement) or even employment policy measures targeted on seniors (subsidies on hiring). This constitutes a major redirection of policy, notably for the "continental" countries, where, on the contrary, the policies applied in the 1980s and 1990s encouraged seniors aged over 55 to withdraw from activity, through early retirement and/or unemployment benefit or incapacity pensions.

As regards the policies targeted on different phases of the life course, we are therefore seeing a far-reaching change in the system of incentives: public policy is now encouraging long careers, with retirement taken later (and possibly in partial form, since the reforms carried out in most countries open up the possibility of combining work with a pension), while at the same time offering possibilities of withdrawal from the labour market during working life. This reorientation is both the result of the tendency towards "activation" of employment policies and social policies since the 1990s, as well as of the beginnings of an easing of the time constraints affecting people aged between 30 and 45.

9. An important special feature of France compared with the other countries grouped together in this category is the role played by legislation (as compared with collective bargaining), which remains very important.

However, they run up against substantial limitations, first, as a result of the marked irreversibility of the phenomena of exclusion of seniors from the labour market and, second, because of the consequences for life courses of temporary exits from the labour market,[10] notably in the case of women. In addition, the opportunities opened up are of a targeted nature only and do not provide broader possibilities of modulating working time throughout the life course.

4.2. General policies

This heading covers the options offered to individuals regardless of age or particular phase of the life course. Four types of instrument can be identified as existing in European countries.

- *Temporary modulation of working time, i.e.* transition from full-time to part-time work: given the development of part-time working in all the OECD countries over the past 15 years, this option is increasingly available to workers. However, the modalities of its implementation differ very widely from one country to another, between those where the move to part-time work constitutes a guaranteed right (Sweden, Germany, the Netherlands) and those where it is simply an option opened up by legislation or collective bargaining but requiring the agreement of the employer (Spain, the United Kingdom, "chosen part-time working" in France). It should be noted that these entitlements are in most cases restricted to certain groups of worker (parents in Sweden and in the United Kingdom) or certain types of firm (those with more than ten employees in the Netherlands, more than 14 in the United Kingdom). Access to part-time working is also easier in the public sector (for example, in France, in accordance with the 80-20 principle). Moreover, if part-time working is to be guaranteed to correspond to a genuinely chosen modulation, it is important to see that the return to full-time working is also guaranteed, as is the case in the Netherlands. Finally, the impact of part-time working on professional trajectories is also highly dependent on the broader context in which it occurs. In particular, an individual reduction in the length of working time for the purpose of reconciling work and family life is in many cases a response to a constraint imposed by a shortage of childminding structures. It then tends to be concentrated on women, with unfavourable effects on their careers (and even their social protection entitlements).
- *Sabbaticals and career breaks*: few countries guarantee workers this possibility. In Germany, a worker can request leave, subject to the agreement of the employer. In principle, the leave is not paid, but in cases where the worker has been "saving up" in a working time account, it can be financed through the redistribution of his own time. In the Netherlands also, the request is subject to the agreement of the employer, but can be remunerated (up to a ceiling of EUR 490 a month) on condition that the worker is replaced by a jobseeker. Note that this principle of "job rotation" was very considerably developed in Denmark during the 1990s, on advantageous financial conditions (indemnity equal to 80% of unemployment benefit for the worker taking the leave) and enjoyed very

10. This harks back to the behaviour of firms and employees and to the existence of a "culture" of early retirement, but also to the choices made at an earlier stage in the life cycle, such as the absence of in-career training.

considerable quantitative success (13 000 beneficiaries in 1994). Because of its high cost, this system was tightened (reduced indemnity and requirement that the employer hire a long-term jobseeker) before finally being abandoned at the end of the 1990s. Similar arrangements were introduced in Sweden by 12 municipalities. In France, the principle of financed sabbatical leave exists (for example teachers in higher education).

- *Training leave*: only in Sweden, France and Spain is there a universal entitlement to request training leave. This leave can be accompanied by financing – maintained salary in Spain (but with a very small number of places), remuneration out of specific funds (financed by a contribution from employers) or by utilisation of the working time account since 1994 in France, allowances in Sweden. In the other countries the entitlement to training leave has no universal character but exists in certain regions (Germany), in certain collective agreements (Netherlands) or forms part of employers' policies (United Kingdom).
- *Working time accounts*: this is a particularly interesting instrument from the life-course perspective since, in principle, it permits greater flexibility in the allocation of time, corresponding to the worker's own choices. However, it is not widespread (entitlement to a working time account exists only in Germany, France and the Netherlands) and considerable differences can be seen to exist from the operational standpoint. These concern, in particular, the horizon of the time saving. In Germany, the accounts are in most cases short-term, corresponding in fact to an annualisation of working time rather than falling within a life-course perspective. In the Netherlands, workers can save up to 10% of their salary or their time in order to take leave at a later date, either for training or for leisure purposes. In France, the working time account is provided for by law since 1994, but its implementation has to be the subject of a collective agreement at the level of the branch or the firm. It can be supplemented by up to ten days' leave entitlement a year, by days made available through the agreements on the reduction of working time, or by money (bonuses, premiums, overtime, etc.). It can be used for taking leave, but generally within a limited period (in most cases five years, sometimes ten years) after the opening of the account. It can also be transformed into remuneration. In Denmark, Sweden and Belgium, the working time account is not a universal right, but can be arranged under certain collective agreements. A point of discussion that sometimes arises concerning these working time accounts is whether or not early retirement possibilities can be incorporated in exchange for the time accumulated. In the Netherlands, this possibility was introduced in 2006.

Empirical analysis of the existing levers pertaining to life-course policies leads to two types of conclusion.

It shows the emergence of innovative measures permitting an individualisation of choices regarding working time. These measures have in most cases been developed on the initiative of governments, and through legislation, even though their implementation thereafter is the subject of collective bargaining. The type of regulation varies widely between countries, in liaison with the more general features of employment policies or, more generally, the particular models of capitalism. It is the Nordic countries that have gone furthest in developing measures favouring the adjustment of working time to the life course. A greater possibility of individualisation can be seen in the case of the

Netherlands, while the weakest level of regulation is to be found in the United Kingdom. The continental countries are in an intermediate position.

However, quite apart from the diversity of national situations, the development of life-course policies runs up against substantial limitations:

- The time-horizon of the arrangements is often limited and rarely extends to the whole of working life.
- The transferability of acquired rights (working time account, entitlement to training) is not guaranteed (or inadequately guaranteed) in the event of job mobility.
- The reversibility of choices (for example, of a move to part-time work) is rarely ensured.
- The broader context is inadequately taken into account. For example, the possibilities of reconciling working and family life depend just as much on the possibilities of childminding, including timing and cost, as on the opportunities for modulating working time. Incentives for in-career training after the age of 40 have to be strengthened, since such training is often an essential condition for the employability and maintenance in employment of people aged over 55, whereas training efforts for this age group usually decrease after the age of 55, in parallel with the maintenance of incentives for withdrawal from the labour market.

5. What paths for reform?

The adoption of a life-course perspective constitutes one thrust of a major overhaul of employment policies and also of social protection in the developed countries. Quite apart from the improved allowance for individual preferences, it can enhance the sustainability of social protection and the fluidity of the labour market.

The general proposals for a reform incorporating such a perspective, like those of Supiot (2001) or that of the transitional markets (Schmid, 2006), converge in several respects.

First of all, it is desirable to consolidate laws that genuinely pertain to transitions and life courses, as the present legislation exists only in fragmented form. This consolidated legislation must permit the application of "social drawing rights" giving the individual the possibility to organise his future. Working time accounts constitute a first step along these lines and should be generalised. However, the notion of "social drawing rights" goes beyond individual time saving and inter-temporal allocation of time and involves also the collective financing of certain transitions (for example, training), which turn out to be of a priority nature. Here again, the principle already exists in many countries, but equality of access to this entitlement has to be strengthened.

For these measures to be effective, two crucial and delicate conditions, both of them achievable, need to be met (Gaudu, 2007).

First, the transferability of entitlements has to be ensured, in order to avoid the loss or monetisation of working time accounts at the time of layoff or resignation. A system should be organised making it possible to uncouple time saving (and, more generally, entitlement to special leave and training) from the firm and the work contract.

Second, it is desirable to unify the mechanisms relating to the taking in hand of activity and transitions, from both a financial and an institutional standpoint ("one-stop shopping"), including not only active employment policies and unemployment indemnification, but also training, financing of leave, etc. The existing *Sécurité Sociale Professionnelle* proposals in France are a move in this direction.

The analyses in terms of transitional markets stress the following additional points (Schmid, 2006):

- The need for all workers to be covered, including those on temporary contracts, working part-time, etc., in order to avoid life courses that entrap people in precarity.
- The importance of provisions for the surmounting of critical phases that occur in a life cycle (unemployment, but also family problems, etc.), especially in the form of policies for assisting the return to employment.
- In order to facilitate mobility, individuals' aversions to risk have to be taken into account, for example, by ensuring the reversibility of a choice within a given period (return to the firm after leave, to full-time work, etc.).

Finally, stress must be laid on the need for public policy to combat inequalities, and in particular the persistent effects of a temporary deviation from the standard working career. Even in the Nordic models, women's professional life courses are disadvantaged by the reduction in their working time following childbirth (Anxo and Boulin, 2006b).

6. Conclusions

Life-course policies have major implications for OECD countries. Such policies attempt to facilitate the reconciliation of several objectives, in particular a high level of participation in the labour market throughout life, raising the training levels of the workforce, financing social protection systems and, finally, improving the well-being of workers.

Comparative analysis of existing policies brings out two principal conclusions.

First, the different social protection models and employment regimes have widely differing effects in terms of the life course. In general, the Nordic model turns out to be the most favourable in terms of flexibility in the allocation of time throughout a life span, facilitating the reconciliation of working and non-working life. However, it is still marked by certain inequalities in life courses, especially between men and women.

Second, looking beyond the differences between countries, there exists a general tendency towards individualisation of the management of time and to an extension of the period during which it takes place, via arrangements such as working time accounts. This tendency remains highly fragmented, however, and is most often limited to certain firms or certain categories of worker. Life-course policy provisions therefore require to be improved in order to permit the constitution of new workers' rights.

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Table 6.1. Employment rates by age group in some OECD countries, 2004

	15-24	25-54	54-65
EU 15	40	77.6	42.5
OECD	43	75.7	50.8
Australia	62.4	77.4	52
Austria	51.9	82.6	28.8
Belgium	27.8	77.3	30
Canada	57.8	81.3	54.8
Denmark	62.3	83.7	60.3
Finland	39.4	81	50.9
France	30.4	79.6	37.3
Germany	41.9	78.1	41.8
Greece	26.8	73.5	39.4
Ireland	47.7	78.8	49.5
Italy	27.6	72.2	30.5
Japan	40	78.6	63
Luxembourg	21.4	78.7	30.8
Netherlands	65.9	82.5	45.2
Portugal	37.1	81.1	50.3
Spain	35.2	72.7	41.3
Sweden	39.2	82.9	69.1
United Kingdom	55.4	80.8	56.2
United States	53.9	79	59.9

Source: Labour Force Survey, Eurostat, and OECD (2006).

Table 6.2. Average exit age from the labour force in the European Union, 2003

EU 15	61.3
Austria	58.8
Belgium	58.7
Denmark	62.2
Finland	60.4
France	59.6
Germany	61.6
Greece	62.7
Ireland	62.9
Italy	61
Luxembourg	58.2
Netherlands	60.5
Portugal	62.1
Spain	61.5
Sweden	63.1
United Kingdom	63

Source: Labour Force Survey, Eurostat, and European Commission (2006).

Estimated average age of withdrawal from the labour market, based on a probability model considering the relative changes of activity rates from one year to another.

Table 6.3. Transitions by age group in some European countries, 2000-2001

15-24		EU	DNK	GBR	FRA	GER	ITA	ESP
U=>	N	42%	12%	54%	40%	54%	25%	53%
	I	15%	88%	6%	6%	28%	18%	12%
I=>	N	17%	33%	31%	9%	17%	8%	15%
	U	6%	4%	8%	4%	4%	11%	5%
N=>	U	6%	4%	3%	10%	6%	6%	13%
	I	7%	26%	6%	4%	10%	7%	6%

25-54		EU	DNK	GBR	FRA	GER	ITA	ESP
U=>	N	34%	47%	44%	27%	37%	25%	43%
	I	14%	10%	21%	6%	11%	13%	17%
I=>	N	13%	25%	28%	0%	3%	8%	1%
	U	4%	4%	2%	1%	2%	4%	1%
N=>	U	2%	2%	1%	2%	3%	2%	4%
	I	2%	2%	5%	1%	4%	2%	2%

54-65		EU	DNK	GBR	FRA	GER	ITA	ESP
U=>	N	8%	20%	27%	3%	4%	18%	9%
	I	30%	48%	27%	20%	36%	11%	25%
I=>	N	2%	1%	4%	0%	0%	2%	0%
	U	1%	1%	0%	0%	0%	0%	0%
N=>	U	3%	4%	1%	2%	9%	1%	3%
	I	11%	9%	12%	15%	8%	15%	12%

Observed probability of transition from one status (ILO definition) to another between 2000 and 2001.

I: Inactivity, N: Employment, U: Unemployment.

Source: ECHP, Anxo and Erhel (2006).

Table 6.4. Gender employment gap by age group in some OECD countries, 2004

	15-24	25-54	54-65
EU 15	5.8	18.8	19.4
OECD	8.4	22.1	21
Australia	0.2	17.4	18.9
Austria	9.2	14.2	19.6
Belgium	5.2	17.2	19.1
Canada	-1.1	9.3	16
Denmark	3.9	8.9	14.4
Finland	0.9	4.4	2.7
France	6.9	15.1	8
Germany	2.4	12.9	16.6
Greece	11.1	32.9	33.2
Ireland	6.1	22.2	31.5
Italy	9.1	31.6	24.3
Japan	-1.2	27.1	29.5
Luxembourg	1.4	26.7	18.2
Netherlands	1.1	16.2	24.9
Portugal	8.7	13.5	19.7
Spain	11.3	29.3	35.9
Sweden	-1.7	3.6	4.5
United Kingdom	3.2	13.8	18.5
United States	55.5	86.3	66

Source: Labour Force Survey, Eurostat; OECD (2006)

Table 6.5. Transitions by age group for women, 2000-2001

15-24		EU	DNK	GBR	FRA	GER	ITA	ESP
U=>	N	42%	25%	69%	34%	51%	25%	54%
	I	18%	75%	5%	10%	45%	20%	15%
I=>	N	16%	32%	29%	9%	16%	6%	15%
	U	5%	5%	7%	3%	4%	4%	4%
N=>	U	7%	6%	3%	14%	5%	9%	15%
	I	8%	41%	10%	3%	6%	7%	7%

25-54		EU	DNK	GBR	FRA	GER	ITA	ESP
U=>	N	30%	55%	43%	25%	36%	20%	36%
	I	20%	14%	38%	8%	17%	23%	24%
I=>	N	12%	15%	24%	0%	4%	1%	1%
	U	4%	3%	2%	1%	1%	0%	1%
N=>	U	3%	3%	1%	2%	4%	2%	5%
	I	4%	3%	8%	2%	6%	3%	5%

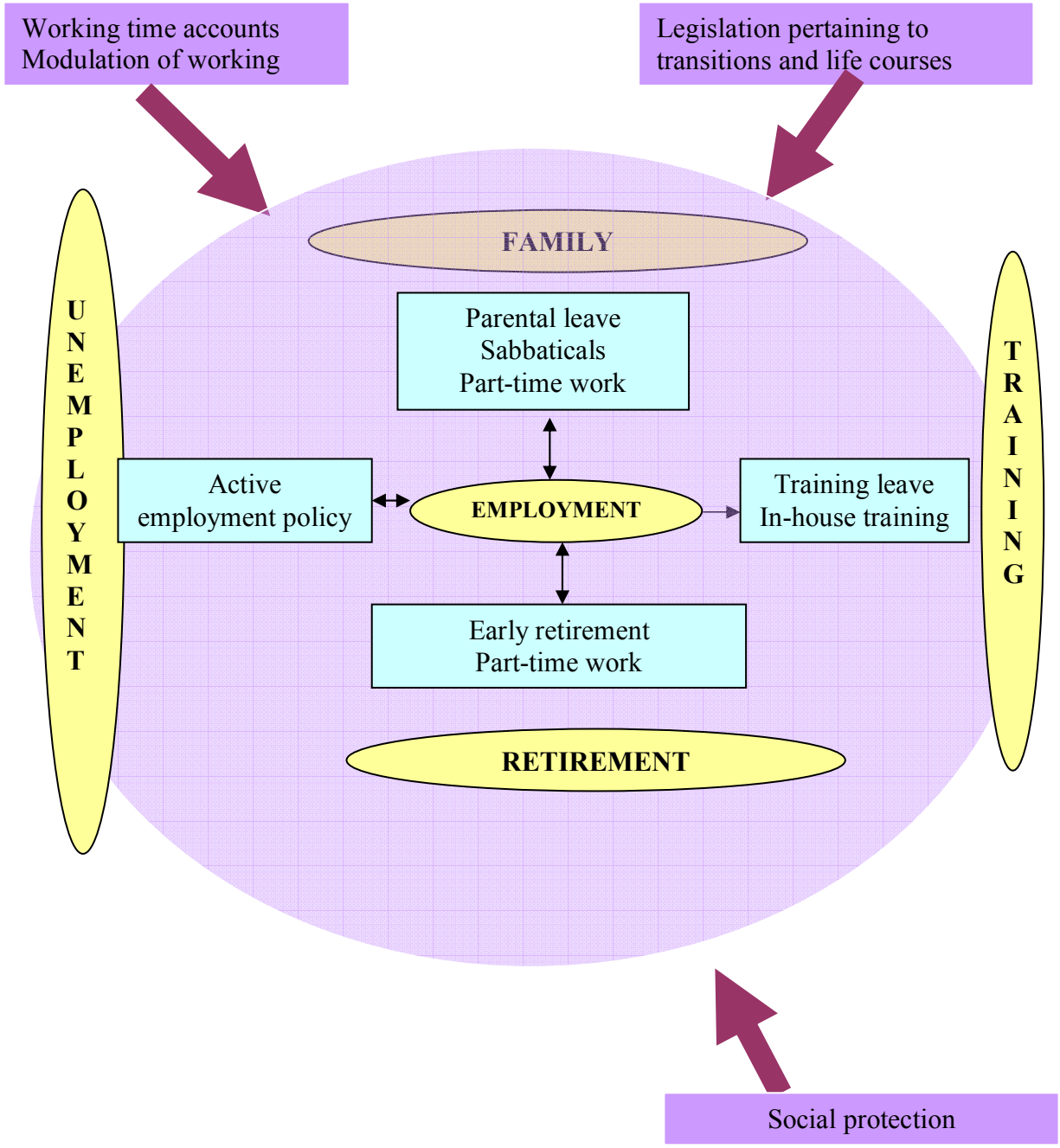
54-65		EU	DNK	GBR	FRA	GER	ITA	ESP
U=>	N	6%	0%	26%	5%	2%	0%	11%
	I	29%	64%	55%	10%	34%	23%	22%
I=>	N	2%	1%	2%	0%	0%	0%	0%
	U	1%	1%	1%	0%	0%	0%	0%
N=>	U	4%	0%	0%	3%	12%	1%	1%
	I	13%	5%	18%	16%	8%	19%	20%

Observed probability of transition from one status (ILO definition) to another between 2000 and 2001

I: Inactivity, N: Employment, U: Unemployment.

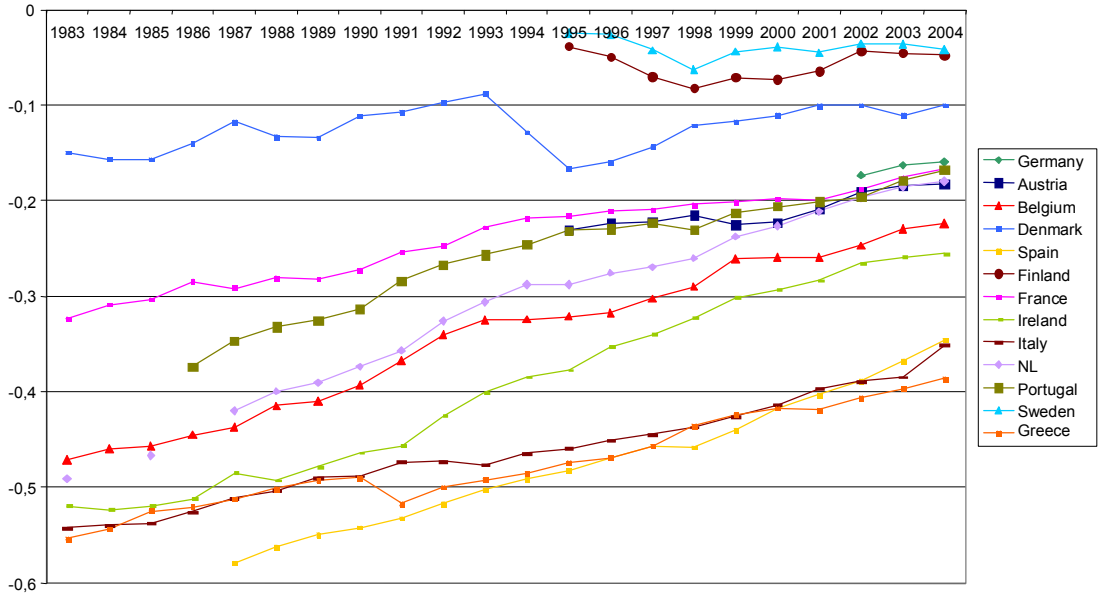
Source: ECHP, Anxo and Erhel (2006).

Figure 6.1. Life-course policies and transitions on the labour market



How to read the figure: elements in the circle signify policies targeted on a transition; elements in boxes outside the circle signify general policies pertaining to the whole life course.

Figure 6.2. Employment rate by gender



Source: Labour Force Survey, Eurostat.

Chapter 7.

Asset-based Social Programmes: A Critical Analysis of Current Initiatives

Michael Mendelson[1]

This chapter reviews the current status of asset-based programmes, defined as programmes intended to assist low income households to increase their financial assets. Among OECD countries, only Canada, the United Kingdom and the United States are identified as having such programmes. Two programmes in Canada, one of which is a randomised control trial (RCT) with Individual Development Accounts (IDAs), and the other an education savings plan, are reviewed. The RCT is yet to report, but preliminary results are mixed. Canada's education saving plan is promising, but it is experiencing low take-up. In the United Kingdom, the Child Trust Fund and the Savings Gateway programmes are reviewed. While the Children's Trust Fund appears popular, there are some troubling potential counter-redistributive long-run implications. Savings Gateway 2 was set up as a study with control groups. Although there is a rush to judgement in the United Kingdom, the results have still not been adequately analysed. Finally, the chapter finds that there are only about 20 000 IDAs in the United States, a surprisingly low number given the attention to this type of programme in the United States. The results of the one IDA controlled experiment in the United States were mixed, with troubling high administrative costs amounting to about USD 3 for each USD 1 of recipient benefits. The chapter concludes that an asset-based perspective is an important way to view social programmes, but no panacea. Asset-based programmes need to be carefully designed and evaluated, as any other type of social programme.

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1. Introduction

Although several more or less expansive definitions may be possible, here we define the term "asset-based social initiatives" narrowly to refer to programmes intended to assist lower income households to increase their financial assets. For the most part, this chapter concentrates on programmes for households of pre-retirement age that do not involve preparation for retirement. However, some asset-based programmes do not create fully liquid financial assets, in that the programmes may impose conditions requiring funds to be spent on a dedicated purpose – usually education, housing or small business. Alternatively, the financial asset may be unconditional after some time or some savings goal has been achieved. Both conditional and unconditional asset-based programmes are discussed here.

Much of the current interest in asset-based social initiatives was inspired by Michael Sherraden's groundbreaking 1991 study, *Assets and the Poor* (Sherraden, 1991). Since 1991 the potential for new asset-based approaches to social policies has been the subject of much policy discussion, with dozens of conferences around the world, and the creation of a substantial body of literature.

With all the talk (and paper) being generated it would be reasonable to assume that many billions of dollars are now being directed towards this new asset-based approach to social policy in OECD countries. But this assumption would be incorrect. A search for examples of asset-based social programme initiatives reveals only a scattering of programmes in a few countries. The United Kingdom seems to be alone in introducing a large new country wide asset-based programme. The United States has many relatively small, individually-oriented savings programme. Canada has introduced one new asset-based programme and is in the process of concluding a large, social experiment with a randomised control group. These are the main initiatives that an internet-based search has identified. Although there are undoubtedly other asset-based initiatives in OECD member countries which have escaped this search, sixteen years after Sherraden's study the sum total of asset-based programmes remains modest indeed.

While the bulk of material about asset-based social policies has been produced by enthusiastic advocates, there have been fewer rigorous analytic evaluations. Here we are interested in as "neutral" an assessment as is possible of programmes that now exist – or, mainly, an evaluation of the evaluations since we are not undertaking any original review of data.

To this end, this chapter describes each of the existing asset-based initiatives already under way in Canada, the United Kingdom and the United States, and then reviews the extent to which we can discern their success or failure in achieving their objectives. But measuring success or failure against a programme's objectives, requires first a description of those objectives. Often programmes do not have explicitly stated objectives, and sometimes even when the objectives are stated, they do not fully reflect implicit objectives that become evident upon further analysis. To provide a framework for analysing programmes in the context of broader possible objectives for income security programmes, we first outline a "typology" of the kinds of general objectives that asset-based social policies could be designed to achieve.

2. Possible objectives for asset-based social policies

2.1. Efficiency

Assuming for the moment that assets are better able to promote well-being than income, a "pure" asset-based welfare policy could, in theory, convert an expected future stream of income into a lump sum payment which is less than 100% of the net present value of the anticipated income stream, and achieve equal or better welfare outcomes by paying recipients the lump sum rather than the income stream, while spending less or at least no more.

For example, if a recipient of social allowance would have had a flow of benefits of, say, USD 10 000 for the next 30 years, then the net present value of the income stream at some appropriate discount (interest) rate would be some amount less than USD 300 000 (in constant dollars); say, USD 200 000 just to pick a number. If assets have a unique and superior capacity to improve lives of recipients, then it follows axiomatically that there is some lump sum payment *less* than USD 200 000 that the recipient could instead be given, say USD 175 000 just as an example, and eventually be at least as well off as otherwise. For example, the recipient might use the money to get an education and find a well-paying job, or start a small business. At the same time, in this example, government would save a net present value of USD 25 000.

The above theoretical conclusion follows automatically from the assumption that a lump sum benefit has characteristics which make it more capable than an equivalent income stream of producing "welfare". Thus, in its purest and most extreme form, an asset-based social policy might make a claim of *efficiency*; that is, a claim that for an equivalent or lesser cost a lump sum (the asset) is more effective in improving the well being of recipients than continuing to pay a social allowance year after year.

Of course, this is a theoretical conclusion, in the worst sense of the word "theoretical". Even if the theory had merit, it would be difficult and likely impossible to put into practice. First, any such programme of lump sum benefits confronts extraordinary risks of what is called "moral hazard" in that it would provide a mega-incentive to become an anticipated recipient of social allowances so as to avail oneself of a large lump sum payment. As well, there is no reasonable way to predict with any exactitude which potential recipients will be collecting social allowances for how long, leading to a programme paying everyone a maximum, and thereby losing any budgetary savings, or paying many people too little and thereby failing to meet welfare goals. In other words, there are big information costs inherent in any such programme, should it be attempted in reality – and it may be that some of the information is not knowable in advance, making the programme more like a lottery.

There are also political fault-lines in converting an income stream into a lump sum benefit. If a lump sum recipient failed to make good use of their money and did not go on to become gainfully employed, would the recipient be disentitled to any future assistance? In many OECD countries (though not all) this would be unacceptable. Moreover, while the public may with varying degrees of reluctance accept the need to pay relatively small amounts of regular income to ensure that everyone has some minimal living conditions in our wealthy countries, there is no way at all that the public would accept huge lump sum payments – no matter how tied to what conditions.

No advocate of asset-based programmes actually advances a programme based upon this theoretical argument. Quite the reverse: most advocates of asset-based programmes

are abundantly clear that they do not see an asset-based policy as a substitute for an income-based policy, but instead as an add-on. Nevertheless, despite the impracticality of a programme substituting a lump sum benefit for an income stream, and despite its not being actively pursued by advocates of asset-based programmes, it is in any case useful to make the theoretical argument explicit, for at least three reasons:

1. The theoretical argument may have enough merit that it could be applicable in some specialised instances: for example, in providing a lump sum grant to assist long term renters of publicly subsidised housing to become owners instead (and there is a programme in some US states which more or less does this by allowing residents of rent-geared-to-income social housing to save the additional rent they would have had to pay when their income increases and use the savings to purchase a home).
2. The literature on asset-based programmes sometimes reflects an implicit, if not explicit, expectation that the need for future social benefits might be reduced and thereby offset the cost of an asset-based programme. Furthermore, while it may not be possible to design a programme based solely on the singular objective of efficiency gains, it is reasonable to anticipate some gain in "efficiency" as one possible benefit from asset-based initiatives, and therefore should not be dismissed.
3. Notwithstanding the disavowal of any wish to replace income stream with assets, the question is begged: if assets are indeed a more effective tool for creating social welfare, given constraints on total government budgets, should not some of the money used to finance current income benefits instead be used to finance asset-based programmes? In short, if it does work, why not partly replace income? Perhaps more importantly, in assessing asset-based programmes it is necessary to look at the benefits of alternative use of funds. Alternative uses may include an income stream, but the salient alternative might instead be enhanced programmes such as educational bursaries and social housing. In other words, the question of what is the most efficient use of public funds cannot, or perhaps should not, be avoided.

2.2. Behavioural

If asset-based programmes are not meant to replace, at least in part, income-based programmes, what are they meant to do? Asset-based programmes may more modestly be seen as one more in a range of tools designed to enable low income households to enjoy better living conditions. In this respect, asset-based programmes may be seen in the same vein as "working income credits" or "child care subsidies": one more type of programme among many programmes for low income households. Advocates might argue that asset-based programmes are all-too-often missing or insufficiently developed and improving these programmes will fill a missing niche in our social programmes.

This approach might be thought of as using an "asset-based lens" to review existing social policies and see what can be added or adjusted to reflect better the fact that assets as well as income play an important role in household well-being. An asset-based perspective might contribute to reforms such as permitting higher levels of allowable assets in social allowance programmes (as has occurred in the United Kingdom and in some provinces in Canada), an allowance for savings plans for children with disabilities (as in Canada) or similar adjustments to existing programmes. As well, programmes that seem to fit this category include assisted individual savings vehicles, such as Canada's Learn$ave and the US Individual Development Accounts, as is discussed further below.

While this describes a type of programme, it does not describe the programme's objectives. In his report of a previous OECD conference on asset-based policies, Cornell (2003) summarises Sherraden's list of possible objectives of asset-based programmes:

- Improve household stability;
- Create an orientation toward the future;
- Promote development of human capital and other assets;
- Enable focus and specialisation;
- Provide a foundation for risk-taking;
- Increase personal efficacy;
- Increase social influence;
- Increase political participation;
- Increase the welfare of offspring.

This list is mainly about subjective personal attitudes and behaviour changes expected as a consequence of obtaining some increase in financial assets. None of the list is about redistribution of wealth: all are instead about improving the well-being of low income households through the instrumentality of asset holding. In their review of studies of the effects of asset-holding, Page-Adams and Sherraden (1996) also describe mainly effects on personal well-being and behaviour. In general, we here call these sorts of objectives "behavioural" for lack of a better term.

2.3. Redistribution

An asset-based programme could be designed as a vehicle primarily to redistribute wealth (and behavioural effects may be unintended or, more likely, tolerated). For example, were the Child Trust Fund in the United Kingdom much larger (say GBP 25 000 to GBP 50 000 rather than GBP 250 to GBP 500) and financed by a swingeing inheritance tax, it would have significant redistributive effects. It is also possible to imagine an asset-based policy as an attempt to redistribute wealth from one type of household to another – for example, from families with no children to families with children (Emmerson and Wakefield, 2001).

Explicit attempts to redistribute income through tax-transfer policy are out of fashion in the Anglo-American countries where asset-based social programmes are found, so it is no surprise that redistribution is rarely explicitly mentioned as a goal of any of the existing programmes. Yet, the need for redistribution of wealth is often cited as a rational for asset-based policies. As one good example among many, in their report on asset-building programme options, in the United States, the Finance Project appeals to the need for wealth redistribution in advocating asset-based programmes:

> *"The lack of assets among low-income families is especially pronounced. Wealth inequality in the United States is greater now than it has been at any time during the past 75 years. The top 20% of households command 83% of the nation's wealth, while the bottom 40% possesses less than percent of the nation's wealth. In recent years, the wealth gap between rich and poor has widened, as the top earners have vastly increased their assets and lower-income Americans have seen only modest changes"* (Lind, 2006).

2.4. Fairness

A final type of objective for asset-based programmes is fairness. Asset-based programmes are sometimes advocated for low income households because these households do not have access to the tax assisted savings vehicles used by other households. For example, most countries have some form of tax-assisted retirement savings plan (such as a 401K in the United States), but because these are structured as non-refundable tax credits and their value is usually dependent on having taxable income in the first place, these savings vehicles are of little or no value to those with low incomes.

The fairness rational is often cited in asset-based advocacy and reports. In its summary of a conference on asset-based social policies, the Canadian Policy Research Initiative exemplifies this perspective: "A large and growing number of government policies in OECD countries actively support and promote asset accumulation. These include home ownership tax benefits, investment tax benefits, retirement accounts with tax benefits (RRSPs), and other savings accounts with tax benefits…However, these policies are usually not easily accessible for low–income individuals who are less likely to own homes, or have investments or retirement accounts" (Policy Research Initiative, 2004).

An assisted savings programme which offers matching grants for savings by low income families may be advocated on the grounds that it merely provides similar benefits to those who cannot take advantage of other programmes.

3. Canada

Canada has several asset-based initiatives, at least three of which fit the definition of asset-based policies used here. Two of these – the Canada Learning Bond and the Canada Education Saving Grant – are of general application to the whole population and are discussed further below. However, the Canadian initiative which is likely of most interest in respect of evaluation of the effectiveness of asset-based programmes is a social experiment designed to provide quantitative and reliable data respecting the consequences of an individualised savings account type of asset-based programme. This experiment is known as Learn$ave.

3.1. Learn$ave

The Canadian Learn$ave project is modelled after US Individual Development Accounts (IDA) in providing matched savings for persons meeting specific criteria. The experiment is designed to answer critical policy questions. Will the financial incentives be attractive to low-income Canadians? Will the Learn$ave programme result in a statistically significant increase in savings? Will the provision of financial management training and case management prove important? Will those participating in Learn$ave actually open businesses and up-grade their education? Over the longer term, will participants have higher earnings and better jobs? Will the benefits of the programme justify its expense?

The Canadian project consists of ten sites across Canada, three of which are "primary" sites and seven of which are "secondary" sites. The primary sites are part of a rigorous experimental design, while the secondary sites do not have control groups and for the most part were already delivering some IDA type of services. The evaluation of

the secondary sites will consist of the same kind of retrospective survey and qualitative analysis undertaken for most similar projects in the United States. Here we focus on the primary sites. There was also one randomised control trial of IDAs in the United States (which is discussed extensively below) and the Canadian experiment has had the benefit of learning from that experiment to ensure it can answer relevant policy questions. The following descriptive material is derived from Kingwell *et al.* (2005).

About 3 600 participants were recruited for the primary sites. The recruits were randomly assigned to one of three groups:

- *Learn$ave-plus:* treatment group receiving savings credits plus financial management training and case management.
- *Learn$ave-only*: treatment group receiving only matching savings credits; and
- *Control group*: comparison group receiving no savings credits, training, or case management.

The recruits had to meet various eligibility requirements. Participants income had to be less than 120% of Statistics Canada Low-Income Cut-Offs (a measure of low income widely used in Canada as a poverty measure), they had to have a low level of liquid assets, be between 21 and 65 years of age, and they had to be neither a full time student nor on social assistance. Participants in the treatment group were offered a CAD 3 matching grant for every dollar saved over a three-year period, up to a maximum of CAD 250 in any one month and CAD 1 500 over the whole three years (*i.e.* maximum matching grants of CAD 4 500).

Participants could withdraw money from their Learn$ave accounts at any time, but were not allowed to withdraw matched credits until they made net deposits of not less than CAD 10 in at least 12 different but not necessarily consecutive months, and then could only access the matched grants if they used the withdrawn money for the approved purposes: an education programme or other skills up-grading or a small business start-up. The matched grants savings had to be cashed-out no more than one year after the end of the three year period. Participants had to choose between the education and the business streams at the start of the project, but those selecting the business stream were also allowed to use their savings for education. There was a limit of 20% of participants in the business stream.

Participants in the Learn$ave-plus group were required to attend five three-hour financial management training sessions. These participants were also "case managed", with active monitoring of their savings and intervention when the case manager thought that savings goals were not being met.

Although the Learn$ave project did eventually reach its recruitment targets, recruitment proved challenging. In the pre-implementation stage officials had the opposite expectation; namely that the limited numbers allowed in the project would prove problematic as too many people would clamour to be included in the experiment (to obtain generous matching grants). In the event, active recruiting, including media campaigns, became necessary to achieve the numbers required for the experimental design and the recruitment phase had to be extended in a number of sites. The final enrolments took place in February 2004, so the final withdrawals will not occur until February 2008.

An analysis of the recruits has shown that participants do not represent a random cross-section of Canada's low income population; instead they are younger, more likely

to be living alone and renting, more likely to be formally educated at a higher level, more likely to be working and, especially important in Canada, more likely to be recent immigrants. However, the control group shares the characteristics of the treatment groups so the non-representative nature of the sample does not threaten the validity of the results: just their applicability to all of the low-income population.

Learn$ave has undertaken an evaluation of its implementation process and has drawn a number of lessons from this first stage of the project. This report on implementation has been peer reviewed and published (Kingwell *et al.*, 2005).

One of the main "lessons learned" was that there is no massive over-whelming demand among low-income groups for a matched savings project. Participants tend to be non-typical among the eligible population. Recruitment requires active measures varied for target groups. Consequently, the analysts have concluded that a maximum take up rate of about 5% could be expected for a generally available programme among the eligible low income population under "ideal conditions" (Kingwell *et al.*, 2005). As well, the applicability of the financial management training curriculum, especially the prior learning assessment element as it was applied to recent immigrants who were often highly educated, was seen as being questionable.

The full evaluation of the outcomes based on the randomised control group versus the treatment groups has, of course, not yet been completed and is still several years away. A preliminary report with some comparative information (*e.g.* do the treatment groups actually save incremental amounts compared to the control groups?) based on the first 18 months of data is being prepared now and will be completed soon, but is not yet available. Early indications are that the treatment group has saved significant incremental amounts and is also using their matched credits in the prescribed manner. The treatment group is also significantly more likely than the control group to maintain a household budget and to have a positive attitude towards education. Surprisingly, it appears that the financial management training and case management may not be having much of an impact on savings, although this might be as much related to the particular curriculum as financial management training *per se*. However, these preliminary indications are based only on oral comments from researchers and so should be treated with caution: a peer-reviewed written analysis is still some months away.

So we are still awaiting results from the Canadian experiment, but it does promise to provide some good quantitative data about the possible effects of a matched grant savings type of programme. However, if we take a step back from the specific questions being asked in the experiment, how would this project fit within the four broad types of objectives outlined in the first section of this chapter?

Learn$ave is clearly not designed as a redistributive vehicle given its small size and its appeal only to a narrow range of those with low incomes. Individualised matching grant programmes are by their very nature relatively modest programmes in size and therefore cannot be seen as having substantial wealth redistribution as their goal. What about the other three objectives?

The Learn$ave programme is not designed to achieve better results by diverting spending to asset acquisition from income programmes, but it could in any case offer some longer-term insight in respect of efficiency objectives. If the treatment and control groups are tracked long enough it should be possible to show whether there is a reduced reliance on government transfers among the treatment groups and an increase in government tax revenue which could offset the costs of the project (in net present value).

To this extent an efficiency case, strictly in respect of government expenditures, could be made for a Learn$ave type of programme. A more general assessment of efficiency would also include both private benefits, such as increased employment income, and public benefits. If total private plus public returns in combination out weigh government costs, even if the benefits are concentrated in the private hands of the beneficiaries, there should in principle be some way to capture some of these benefits for the public sector such that everyone is better off and there are still budgetary savings in the long run.

One of the issues in making any case based on efficiency is the cost of administration, which has turned out to be very high in similar programmes in the United States, as is discussed further below. If this turns out also to be the case in Canada, it will be difficult to sustain an efficiency argument for IDA types of programmes.

The Learn$ave type of programme, however, even if its benefits outweigh its costs, will never amount to more than a minor contributor to improvements in income security programmes because of its small potential target audience and its relatively modest size. It is at best a good programme initiative that is justified on a cost-benefit basis, but does not amount to a fundamental change in income security policy. In other words, this type of asset-based programme cannot deliver the kind of revolutionary reform in our approach to income security that has sometimes been implied by the rhetoric of advocates.

The Learn$ave matching grant programme may therefore be seen as best fitting into the "behavioural" category of objectives, since it is designed to induce behavioural change – initially in respect of savings and in the longer term acquiring better education or self-employment, and potentially improved money management skills. As such, the Canadian experimental project is well-designed to provide an evidence base for these types of matching grant programmes.

Finally, the Learn$ave programme may also be advocated on the grounds of fairness, providing those with low-incomes government assisted savings similar to those enjoyed by middle and upper income Canadians. But if "fairness" is the objective of the Learn$ave model, it is designed too restrictively with more covenants on use and lower ceilings on savings than would be anticipated if its goal was to provide an equivalent assisted saving mechanism for those with low incomes as for those with higher incomes. Furthermore, there is no attempt to replicate the incentives inherent in existing tax-assisted programmes for those with higher incomes. In fact the incentives in the Learn$ave programme are much higher than the value of tax exemptions to those with higher incomes. In other words, Learn$ave does not appear to be set up to achieve "fairness" of this kind.

In sum, Learn$ave (and similar IDA programmes) is most appropriately seen as a potentially valuable "niche-product" to add to the array of programmes meant to assist low-income individuals to improve their incomes and, possibly, acquire more adaptive modes of behaviour. We do know about some of the limitations of the programme – principally its limited appeal and audience – but we have still to obtain reliable data on its costs or its benefits. The good news is that we will within the next few years get some answers: the bad news is that we do not yet have those answers.

3.2. Canada Education Savings Grant (CESG) and Canada Learning Bonds (CLB)

Canada offers a tax-assisted education savings plan called a Registered Education Savings Plan (RESP). Anyone can open a RESP and contribute up to CAD 42 000 in total. Contributions are made with "after-tax" income, but the income earned within the

plan is not taxed. RESPs are administered by financial institutions, but the investments may be self-directed by RESP holders. A RESP can be invested in equities, bonds, savings certificates or almost any other investment vehicle at the direction of the RESP holder. If the RESP is used for education the interest that was earned (but not the original contributions) will be taxed upon withdrawal as income of the beneficiary. Since the beneficiary is usually a student, in practice there is often little or no tax paid upon withdrawal. Many OECD countries have similar registered education savings plans.

The RESP cannot be described as an "asset-based social policy initiative" according to the definition being used in this chapter since it is not designed for low income households; indeed it is an example of the type of tax-assisted programme which benefits those with significant taxable income and largely excludes those with low incomes. However, Canada does have two programmes that build on the RESP which can be viewed as asset-based social policy initiatives: the Canada Education Savings Grant (CESG) and Canada Learning Bonds (CLB).

The CESG pays a credit (matching grant) of up to 40% of the value of RESP contributions for low-income households, which is added to the RESP. The credit is 30% for middle income households and 20% for higher income households. The maximum CESG is CAD 500 a year and CAD 7 200 in a lifetime. The credit is not taxed if it is used for an approved educational programme.

The 40% credit was a relatively recent addition to the CESG in an effort to achieve more take-up and attractiveness for low income families. The CLB is a further effort to attract low income families to set up a RESP by paying a government grant of CAD 500 into the RESP of any child in a low-income family (below about CAD 37 000 household income in 2006 – median income for couples is about CAD 65 000) born after 2003, upon application. Further as long as the household's income remains low, the government will add an additional CAD 100 a year to the CLB, until the child reaches the age of 15. This is not a matching grant. No contributions are required from the household to get the full CLB, but once they have set up a RESP in order to become eligible for a CLB, households may add on to their RESP just as they would for any RESP/CESG.

The CESG and the CLB are budgeted to spend CAD 575 million and CAD 45 million respectively in the 2007-08 fiscal year (Human Resources and Social Development, 2007). This is a non-trivial amount in the context of post-secondary education in Canada; one researcher calculated that the CESG could have paid tuition fees for 21% of full time university students in Canada (Milligan, 2002). The CESG and the CLB are both built on the RESP. Not surprisingly, the take-up rates for the RESP are very much skewed towards those with higher incomes, as can be seen on Table 7.1. It seems that the CESG may not be all that much better. A rough estimate of CESG expenditures by income group suggests that about a third of expenditures are going to low income households (below CAD 40 000) and only about 10% to those with very low incomes (under CAD 20 000).

The CLB began in 2004 so it is too early to make more than a preliminary assessment of its effectiveness. The CLB will be effective in accomplishing its goals if many more low income families open up a RESP, but indications to-date are that it has had extremely low take-up. In the 2005-06 fiscal year budgeted spending for the CLB was CAD 85 million, while actual spending turned out to be CAD 2.2 million. However, the government also reports that CLB demand is increasing and that "there were more CLB payments in August 2006 than in all 2005" (Human Resources and Social Development Canada, 2006-2007 Reports on Plans and Priorities). A recent report

(University of Alberta, 2006) claimed that out of an estimated 422 048 eligible children only 19 259 were reported to have a CLB. This represents a take-up rate of about 5%, coincidentally the same estimated "ideal" take-up rate for a matching grant type of programme. If take-up remains at 5% it will not be successful in correcting the distributional imbalance in the RESP/CESG programme.

In Canada's complex federal system, it is likely that provincial governments will eventually become proactive in signing up social assistance recipient families, since the CLB is fully paid by the federal government. Indeed, provinces could make signing up for a CLB a requirement for social assistance for families with new born children. If so, the take-up rate is likely to increase, although perhaps not in quite the way initially anticipated.

The problem of low take-up is encountered everywhere in the world in every programme meant for low income working people that requires the target population to self-identify as "poor" and apply for a separate programme for "poor" people. The CLBs encountering this problem should have been anticipated. However, the problem with take-up is easily avoidable in Canada, since almost all families who are eligible (*i.e.* over 99%) do now collect the relevant Child Tax Credits. If, as in the United Kingdom, the CLB was automatic upon receipt of the applicable level of Child Tax Credits, which would be easily feasible administratively, the take-up problem could be solved.

Looking at the programmes from the perspective of our four over-arching possible objectives, the CESG/CLB is not an attempt to improve the efficiency of government programmes, nor is it an attempt to redistribute wealth. It seems reasonable to assume that the CESG/CLB was probably designed with a "fairness" objective in mind: to make the seemingly unfair RESP fairer by getting more of the total funds into the hands of low income households. The jury is still out on whether it shall be successful in doing so, but it will obviously not succeed in this respect unless the take-up problem is solved. The fact that the take-up issue has not been solved may imply that the government views the programme more as a symbolic gesture than a real attempt to provide an asset to low income Canadians.

However, the stated aim of the CESG programme is to encourage Canadians to save for the post-secondary education of children; the stated aim of the CLB is to help low-income Canadian families to acquire education savings for their children. Presumably the goal of encouraging this saving is to get more children into post-secondary education. In other words, the stated aim of the CESG/CLB programmes fit into the behavioural category among the four goals, while the implicit aim fits into the fairness category. In respect of behaviour, the relevant question to asses the programmes is: how many incremental young adults attend post secondary education as a consequence of the savings that were accumulated in the CESG/CLB (and how much is the cost per post-secondary student)?

The data to answer this question does not exist but, as in any attempt to induce behavioural change through an incentive for a behaviour that many people already undertake anyway without the incentive, there is undoubtedly an extremely large "deadweight"; meaning that most of the children of CESG/CLB savers who end up going to post-secondary education would have gone anyway. Evaluation must look at the incremental and not the total number of "results". This is one of the reasons that control groups are used in randomised trials. The cost per unit of output is not the total cost divided by the number of beneficiaries, but the total cost divided by the *incremental* number of beneficiaries induced to this behaviour just as a consequence of the programme. As such, loosely targeted programmes of general application, such as,

especially, the CESG, can turn out to be surprisingly expensive, remembering that 30 and 20% credits also go to those with middle and higher incomes. This is particularly important in respect of assessing an asset-based policy, because the cost per unit of incremental outcome can then be assessed against a direct service investment model. For example, given the very large cost of the CESG would a much more generous bursary programme instead be more effective in inducing post-secondary attendance among those who would not otherwise attend, for the same expenditure?

A bursary programme too has deadweight, but it could be more carefully targeted and not so dependent upon what parents decide to do. After all, one of the odd aspects of asset-based programmes meant to increase enrolment in post-secondary institutions is the fact that the variable which best predicts whether a child will go to university or college is the education of the parent. If the objective is to get children to attend post-secondary education who would not otherwise do so, it does not seem entirely logical to design programmes that depend upon the child's parents making an informed decision about their children's future education.

4. United Kingdom

4.1. The Child Trust Fund (CTF)

The CTF is the only universal and by far the largest asset-based initiative in the three countries in which we have identified asset-based policies. The United Kingdom introduced the CTF in 2003. It provides every child born after August 2002 with an initial endowment at birth of GBP 250 and an additional GBP 250 for children in families with household income less than less than GBP 14 495 (income level for the 2007-08 fiscal year). The 2006 budget announced that all children eligible for the CTF will receive a further payment at age seven of GBP 250 with children from lower-income families again receiving an extra GBP 250.

The government endowment must be used to set up a locked-in fund that can be withdrawn only by the child at age 18, except for a very few emergency situations such as a child's imminent death. In addition to the government endowments, contributions can be made by parents, other family members, or anyone else, up to an annual limit of GBP 1 200. There is no restriction on the young adult's use of his or her CTF at age 18 (including rolling it all over into another savings product as one potential use).

CTF accounts are provided by approved financial service providers on a competitive basis. Parents are sent a CTF voucher which can then be used to open an account with an approved provider. Parents can open one of three types of CTF accounts for each eligible child: a savings account, a "stakeholder" account or an equity account. The stakeholder account is an account that invests in a range of equities and other instruments, following government imposed risk minimisation rules and timed according to the age of the child (*e.g.* shifts towards capital preservation as the child gets closer to 18). If parents do not take steps to set up their own fund, a stakeholder account is opened and maintained for them. All income and capital gains in the CTF are exempt from tax.

The CTF is, according to media reports (*e.g.* "Child Trust Funds Hit Not So Terrible Twos" *BBC News* 4 April 2007), proving popular in the United Kingdom, although that should not come as much of a surprise given that it is handing out money to all families with young children. The most significant complaint appears to be that children born before September 2002 are left out, resulting in potentially unequal treatment of siblings.

As of May 2007, 2 486 000 CTF vouchers had been issued, and 1 654 000 CTF accounts had been opened, for a rate of about 66%. Total cost to-date is more than GBP 800 million. Among children born before 6 April 2005 (all of whose parents would have gotten their certificate more than a year ago) the rate of accounts being opened appears to be about 75%. (*CTF Monthly Statistical Report*: *www.hmrc.gov.uk/stats/child_trust_funds*). Since those who do not open an account on their own have a stakeholder account opened for them, these families are not especially disadvantaged (except for up to one year of income or capital gain – or capital loss), but the failure to open an account could mean that some families do not understand the CTF and may therefore be less likely to make their own contributions.

The government (HM Treasury and Inland Revenue, 2003) has stated that the CTF has three objectives:

- *Security*: in future all children will have the backing of a stock of financial assets at the start of their adult lives, helping to cushion the impact of unforeseen circumstances;
- *Opportunity*: funds can be used to take advantage of opportunities throughout adult life, enabling individuals to play a more confident and continuous role in their communities;
- *Responsibility*: development of the saving habit will promote independence and financial education will help individuals to make better financial choices throughout life.

It is difficult to see the relation between the CTF programme that actually exists today and these stated objectives.

As was argued by Emmerson and Wakefield (2001), if "security" provided by financial assets at the start of adult lives is the goal, then it would be more logical to provide an equivalent payment at age 18 rather than a locked-in endowment at birth. The actual discount rate for government is the prevailing interest rate on marginal public debt, which is likely higher than that paid in savings account although likely less than the effective interest rate earned (on average over time) through investments in equity. The cost to government of providing an equivalent payment at age 18 (equivalent to the average amount that would be available through government contributions alone at birth and age seven plus any investment or interest gains) should therefore be more or less equal to the cost of the current plan. Unlike the CTF there would be no risk of loss of capital due to poor investment – and no chance of extra gains due to well-performing investments.

There will, with certainty, be a distribution of investment winners and losers through the current 18 year investment model of the CTF. Quite aside from their parents' on-going contributions, some children will get little or nothing at age 18 because their investments have gone sour, while others will have large windfalls. The extent of the distribution in 18 years time is unknown, as is the on-going distribution in future years. There may also be large losses through inadequate protection from inflation, especially for funds that remain in savings accounts. Preliminary surveys indicate that about half of accounts will be savings accounts (Kempson *et al*., 2006). The CTF could then end up as a transfer of funds to financial institutions as the real value of savings accounts is nibbled away due to the gap between inflation and the interest rate paid on savings, net of management fees.

A time-adjusted equivalent payment at age 18 would therefore much better meet the stated "security" objective at the same cost to government. Furthermore, the goal of "opportunity" as stated is not distinguishable from that of security. It seems to be saying much the same thing with different words. Overall, there is no obvious relation between the security and the opportunity goal and the CTF programme as it is designed.

This leaves the stated goal of "responsibility"; defined as development of the saving habit and financial management capability. It will be many years before there is good evidence that the CTF has either succeeded or failed to increase savings and financial capability. The measure of success with respect to this objective would, presumably, be the incremental increase in savings through personal contributions to CTF accounts (not government endowments) beyond what would have been saved in any case. Increased financial capability might be measured by the number of incremental bank accounts, or the incremental number of households with budgets or long term financial plans.

If the number of default stakeholder accounts remains at 25% and if, upon analysis, it turns out that these are predominantly among those with lower incomes, this would indicate that the CTF is not meeting the "responsibility" goal very well. Similarly, CTF accounts that remain as savings accounts may also demonstrate a lack of improved financial management capability. Indeed, if a sizable portion of CTF holders find their investments wiped out by inflation or poor investment, the whole exercise might teach exactly the opposite lesson – namely, spend your money while you can rather than lose it trying to save. This is a lesson that has been thoroughly taught many times before in many nations.

These are mere speculations. It is too early to tell what will be the effects of the CTF, but even if the CTF is fully successful in inspiring a good deal of additional saving and improved financial capability, could this goal alone possibly be worth the cost of the programme, which has already been considerable and will continue to increase over time? There will necessarily be huge deadweight costs in the CTF programme, as most of the households setting up CTF accounts will already have had ISAs or other savings accounts, and will already be capable financial managers. For these households the programme is not much more than a windfall with no stated public purpose.

If the goal is "responsibility" surely a much different more targeted programme would have made more sense? For no additional government cost, it would have been possible to pay about double the amount (*i.e.* two instalments of GBP 1 000) for each child in the poorest third of households, had the programme simply offered the considerable benefit of a tax exempted registered child savings account and no government endowments for those with higher incomes. Such a programme would have had a much better chance of efficiently meeting stated government objectives.

How does the CTF look in relation to the four larger possible goals set out in the beginning of this chapter? The CTF is not meant to improve the efficiency of government programmes, nor is it designed to redress an imbalance in savings opportunities for those with the lowest incomes, since it is not targeted and those with upper incomes have the same tax-assisted savings opportunities as those with lower incomes, except for GBP 500 of initial endowment. If it is meant to affect behaviour – namely inducing additional saving for children – the discussion above regarding the "responsibility" objective applies. We shall need to wait and see what the incremental savings are and at what cost. This leaves the redistribution objective. Could the CTF be seen as an effort to redistribute wealth?

While the CTF is universal, it does give an additional two endowments of GBP 250 each to households with low income. Table 7.2 below shows the value of funds at maturity under different assumptions. Table 7.2 is a simplistic calculation, in that it projects in a straight line with no variation in each year. With so many possible variables and so much unknown it is not possible to know what the value of CTF accounts will be 18 years from now. Nevertheless Table 7.2 likely presents a reasonable ballpark comparative estimate of the average differences in the minima and maxima of mature CTF accounts, and the gaps between them.

On Table 7.2, all households contributing GBP 400 or less are assumed to get the additional low income GBP 250 contributions, and all those at or above GBP 600 annual household contributions are assumed not to get the added endowments, but only the two GBP 250 endowments. As can be seen, the added government contribution does little to outweigh the effects of added household contributions, with a significant gap evident even between the GBP 400 and the GBP 600 households. The overall result is likely to mean that children from wealthy households will have impressively large funds awaiting them at age 18. Their mature CTF account could be enough to pay for a full undergraduate education including tuition and all living expenses for three or four years. This outcome is especially realistic to anticipate in those households in which savings are already substantial so that the CTF becomes merely another way to shelter an existing savings stream from taxes.

On the other hand, the mature accounts of households who cannot or do not make a contribution will likely be only a tiny fraction – 4 to 5% – of the mature value for households that can make the full contribution every year. For these unlucky young adults, their CTF might be large enough to pay one year's tuition fee and perhaps buy a few books. The CTF will doubtless provide many young adults with some savings who might otherwise have had none, but at the same time it will provide many young adults who would otherwise had plenty with plenty more. When CTF accounts start to mature about a decade and a half from now there may be some significant perceived inequalities between the "stock of financial assets at the start of their adult lives" available to some compared to that available to others.

Table 7.3 takes the results in Table 7.2 one step further and attempts to provide some rough and ready estimate of the comparative value of the tax shelter – or to put the same thing in another way, the cost to government of foregoing the tax on the earnings in the CTF accounts. This is based on a simple progressive tax as set out in the table, and is not an attempt to model the UK personal tax system in any way. These tax rates are therefore only illustrative, as are the results, but with a progressive tax system it is unavoidable that the largest costs will be incurred for those who have the highest incomes and can shelter the most income; *i.e.* build the biggest CTF accounts. In these examples, even if we add on the extra GBP 500 going to low income households, the highest costs to government are for the highest income families.

Given these results it is difficult to see the CTF as redistribution from higher to lower income households: instead it seems to be the reverse. If the tax system is less steeply progressive this effect is ameliorated, but it still remains a counter-redistributive programme if there are larger CTF accounts in higher income brackets.

Where the CTF *is* redistributive is to households with children born after the start of the CTF programme from those households without children or with children born earlier. If the CTF programme were to exist for many decades (so as to outgrow the start-up effects of excluding older children) it could be said to be a classic horizontally

redistributive programme, from those without children to those with children. If so, it is a modest horizontal equity programme. Assuming a total government cost on average of GBP 2 000 per CTF account, the equivalent annual benefit payment for every child would be in the order of GBP 120 to GBP 180 or so depending upon discount rates.

In other words, the CTF cost to government all translated into net present value and discounted at appropriate rates would be more or less equivalent to an increase in the universal Child Benefit of about GBP 10 to GBP 15 a month. This would have the same horizontal redistributive effect, but a more progressive vertical redistribution. Of course, an increase in Child Benefit would not create a financial asset, but, as noted in the introductory section, a comparison to the effects of an equal cost income-based programme needs to be undertaken to evaluate adequately asset-based policies – whether or not they are "meant" to be replacing an income stream.

4.2. The Savings Gateway

The Savings Gateway is a pilot project in the United Kingdom. The first Savings Gateway pilots matched savings pound for pound up to a limit of GBP 375. Accounts were open for a maximum of 18 months, during which time the account holder could withdraw any funds, so long as at least GBP 1 remained in the account. However the maximum deposit in any month was GBP 25 so if funds were withdrawn there was no way to replace the amount by making deposits above and beyond regular monthly savings. The matching grant was added at the end of the 18 months, equal to the maximum balance in the account at any time during the 18 months in which the account was open. Participants have no restrictions on how they can spend the money from their accounts.

Eligibility for the Saving Gateway pilots was limited to applicants meeting the following criteria:

- Of working age (between 16 and 65, or 60 for women);
- Have children and household earnings of less than GBP 15 000 a year; or
- Have a disability and household earnings of less than GBP 15 000 a year; or
- Do not have children or a disability, but have individual earnings less than GBP 11 000 a year; or
- Are out of work and receiving benefits.

The first Savings Gateway pilots took place in East London, Cambridge, Cumbria, Manchester and Hull. The first of these five pilots began operation in 2002 and the last ended operations in late 2004. In four of the sites, the financial incentives were combined with active recruitment and "high-touch" assistance in opening accounts, as well as some financial management education. In one of the sites, the recruitment was more passive, just through letters to eligible participants identified through social benefits programmes. In total, there were a little less than 1 500 accounts in the five sites. Although there was no formal randomised control group, a "reference group" was recruited that had similar characteristics as the Savings Gateway participants, and the reference group was used as a comparator.

Evaluation has now been completed of these first five pilot projects (Kempson *et al.*, 2005). This evaluation was based on questionnaires and analysis of the actions and attitudes of participants, mainly pre and post programme, as well as the reference group.

It showed that participants had managed to save and that most of the savings were "new" and not a diversion from other savings. Very little was borrowed money. Early indications are that participants in Savings Gateway had a much higher continuing propensity to save and were better able to manage their financial affairs than the reference group. Most of the participants were positive about the experience and reported that it had a beneficial effect on them. However, this follow up was less than a year after the conclusion of the programme so it is not known whether these effects are retained over the longer term.

A second set of six pilot projects was initiated in 2005 in Cambridgeshire, Cumbria and North Lancashire, East London, East Yorkshire, Manchester and South Yorkshire. Unlike the first five pilots, these had differing matching rates and contribution rules among the pilots, to test the effects of these variables on savings. These pilots are much larger in scale than the first five, with about 21 500 accounts as of July 2006 (Institute for Fiscal Studies and Ipsos MORI Social Research Institute, 2006). The main elements of the second round of Savings Gateway pilots are:

- Participants must be between 16 and 65 either working with individual earnings of less than GBP 25 000 and household earnings of less than GBP 50 000, or out of work receiving one of the major social benefits for the unemployed.
- Like the first pilot projects, each account is open for 18 months.
- The matching rate varies from 20p for every GBP 1 saved to GBP 1 for every GBP 1 saved, with one pilot having a GBP 50 bonus once the first GBP 50 is saved.
- The maximum limit on savings varies from GBP 25 to GBP 125 per month, and from GBP 375 to GBP 2000 over 18 months. Note that the limit on savings per month means that funds withdrawn cannot easily be replaced. This is meant to encourage savings to be retained.
- The rules for what is matched are more complex than in the first pilots. The government does not just match the highest balance: rather the government matches the maximum savings in each month with up two months unmatched. Withdrawals are allowed but will automatically reduce maximum matching funds unless they fall within the "two month" limit.
- As in the first pilots, participants have no restrictions on how they can spend the money from their accounts.
- Financial education was made available to all participants.

In the six second round pilots there were several different methods of recruitment: random telephone calling, random letters, and letters to benefit claimants on Department of Works and Pensions (DWP) records as well as smaller numbers through continuation from the first pilots and participants in an adult learning programme. The telephone group has a randomised matching control group which met the criteria for the programme but was not offered participation. A quasi-control group for the DWP enrollees was constructed using administrative data. Like the Canadian Learn$ave experiment, the second round of Savings gateway pilots should provide some reliable data upon which to base future programme design, at least based on the randomised telephone portion.

Unfortunately – again like the Canadian projects – the six pilots have not yet concluded and been evaluated so we cannot here report on the results. An interim report has been

completed from the first few months of the second round of Savings Gateway (Institute for Fiscal Studies and Ipsos MORI Social Research Institute, 2006). It so far appears that participants are saving more as a consequence of the programme, and are for the most part managing to maximise their contributions into their accounts. However, it is not yet clear whether net assets are increasing, indicating that at least a portion of the contributions may be diverted from other savings, although when the accounts were opened only about one tenth said they would derive their contributions only from existing savings.

It will be interesting and potentially quite instructive to compare the findings from the Savings Gateway second round, especially the telephone sample, with the Canadian experiment. The sample sizes are coincidentally similar. One difference is that the United Kingdom apparently experienced much less difficulty recruiting participants. This may be due to more aggressive mass recruiting techniques, while the Canadians were initially constrained by fear that they would have too many applicants. It might also be due to much higher limits on incomes and, in general, less targeting of the UK pilots to those with lowest incomes. On the other hand, the Canadian project had substantially more generous matching at 3:1 compared to a UK maximum of 2:1. Presumably more generous matching should make recruitment easier.

It will also be useful to compare administrative costs between the experiences in the IDA-type programmes in the United States, Canada and the United Kingdom. In the United States, administrative costs were very large compared to funds paid out to participants. Although administrative costs are a mundane topic, they can pose a real barrier to the implementation of a programme. In the United Kingdom, administrative costs are being absorbed by HBoS Bank, which is administering the accounts. If the administrative costs per case are anything like those in the United States, HBoS will be encountering high costs, and these may be difficult to contain within acceptable fee levels. If indeed administrative costs are high the private sector might not be so able to administer accounts in a national scheme in which management expense ratios are kept to a minimum. Comparing these three countries' experience will shed needed light on the issue, if Canada and the United Kingdom are both careful to collect good data on this topic.

Like Learn$ave and other Individual Development Account (IDA) types of programmes, the Savings Gateway appears to be a potentially useful addition to the range of programmes available to assist households in reducing economic hardship. But, as in Canada, it would be good to have some evidence-based results upon which to design a national programme *before* a big new programme is actually put in to operation, as novel as this concept might be. While all indications are that matched savings programmes result in increased savings, so does an increase in interest rates. Does Savings Gateway create any longer term effects? How are the benefits of the Savings Gateway programme distributed by household type and income, and will benefits actually get to households with lower incomes? What are the effects of the various matching and other rates?

These are the sorts of questions that the Savings Gateway experiment may answer, or at least provide some good indications of the range of plausible answers. This information will be invaluable in deciding whether to go ahead with a national programme and, if so, deciding upon how it should be designed.

In respect of the broader objectives of Savings Gateway, unlike both the United States and the Canadian IDA types of experiments and programmes, there is no restriction on the use of the funds by recipients. In this regard, the Savings Gateway looks more like a "mainstream" registered savings account, and less like a modified social benefit. In the United Kingdom, the matching rates are also more in line with those found in other

registered savings plans. Indeed, the lowest experimental matching level (20 pence to the pound) seems to be less than the net benefit of a tax exempt plan for those with higher incomes, ignoring matching on the first GBP 50. In this respect, the UK Savings Gateway appears designed primarily to meet the fairness objective outlined in the introductory section of this chapter.

5. United States

The promotion of asset-based social initiatives began in the United States in the early 1990s and remains the subject of intense policy discussion. Among institutes active in promoting or analysing asset-based policies are: the Center for Social Development, Washington University (where Michael Sherraden is located); the New America Foundation which sponsors a web site called assetbuilding.org; the Institute on Assets and Policy at Brandeis University; and others as well. In respect of actual programmes – as opposed to discussions or proposals – there is a multiplicity of mainly local or state initiatives throughout the United States. However, despite the policy fervour and the number of agencies delivering some form of asset-based programme, it seems that the actual extent of programming is modest, especially compared to the United Kingdom.

At the federal (*i.e.* national government) level, the New America Foundation's Asset Building Programme provides an annual consolidated up-date of federal activities. According to their February 2007 up-date (Cramer *et al.*, 2007) the only concrete federal asset-based initiative taken in the last year was to maintain federal funding of USD 24 million for the Assets for Independence Program, which supports community level matching grant IDAs. In addition, federal financial support for state asset-based programmes has also been available since 1996 through using part of state TANF (Temporary Assistance for Needy Families) funding to pay for IDAs (Edwards, 2005). Since 1998 states have also been able to obtain funding for asset-based programmes through the Assets for Independence Act and other federal grant programmes, including Community Services Block Grants (Mills *et al.*, 2004).

There was a step away from asset-based federal programming in 2006-07: the President eliminated a proposed IDA tax credit from his budget. Previous budgets had included a USD 1.7 billion proposal for a matching tax credit IDA savings programme, which would have matched savings up to USD 500 for eligible participants. Nevertheless, this proposal is included in a bill currently before the Congress, so it is perhaps not entirely impossible to see some movement towards such a nation-wide programme this year (although it is not likely).

There is also a national initiative now underway called "Saving for Education, Entrepreneurship and Downpayment" (SEED). SEED is designed to "develop, test and promote matched savings accounts and financial education for low-income children and youth. A total of 1 325 accounts will be established with children of differing age and with varying savings incentives" (Venner, 2006). SEED began operation in 2004 and is planned to end its evaluations in 2012. As of June 2006 there were 1 171 participants in SEED. To-date the average deposits from participants is only about USD 183 so SEED remains in its early stages and as of yet is quite small.

SEED also includes an experimental project (SEED for Oklahoma Kids), with a randomised control group, paying a universal child grant at birth similar to the CTF in the United Kingdom or the CLB in Canada (except that the CLB is not universal). This experimental project will eventually provide valuable insight into the costs and benefits

of a universal assets-based programme. SEED for Oklahoma Kids is still in the start-up stage and has not yet begun to enrol participants (Reyes Mason *et al.*., 2006).

In addition to national initiatives, there are many developments at the state level, some supported by federal financing and some supported by the state government without federal assistance, sometimes combined with charitable support. According to Stevens (2006) the following states have some form of state-wide planning or policy review process to consider asset-based approaches to social policy: the Ho'owaiwai Asset Policy Initiative of Hawaii; the Asset Policy Initiative of California; the Illinois Asset Building Group; the Arkansas Assets Coalition; the Asset Building Coalition for Michigan; the Asset Building Coalition for Michigan; Alaska's Asset Building Coalition; and the Washington State Asset Building Coalition.

Aside from planning and processes there are also many actual programmes operational in the various states. The most common asset-based programme among the states is an IDA type of programme.

Perhaps the most well known of the IDA projects in the United States is the now completed American Dream Demonstration (ADD). The ADD selected thirteen agencies in a competitive process which designed and delivered local IDA initiatives. The ADD operations ran from 1997 through 2001 and the final evaluations were completed in 2005. Approximately 2 000 IDA accounts were set up under the ADD. One of the sites, Tulsa, included an experimental design with a control group (Adams, 2005).

In respect of the current status of IDA programmes in the United States, Warren and Edwards (2005) surveyed all states and found that "22 state-supported IDA programmes, plus the District of Columbia and Puerto Rico, are either currently being implemented or currently winding down from the implementation phase". Parrish *et al.* surveyed existing IDA programmes in the United States in 2006 and found that "more than 20 000 people have opened IDAs to save for a home, education, small business, or other assets" (Parrish *et al.*, 2006). However, the estimate of 20 000+ refers to the numbers who have taken part in an IDA at some point in time and not the number of active accounts today, which presumably would be fewer. In sum, there are lots of programmes in the United States but relatively few participants.

In addition to IDA programmes there is a scattering of other asset-based programmes in various states. For example, eight states have some form of matching grant contributions to a 529 education savings plan made on behalf of a beneficiary in a low income household. These grants range from USD 200 to USD 500 for each beneficiary (Venner, 2006). However, until such time as results start becoming available from SEED, the main programmes of interest in the United States are the IDAs, and especially the Tulsa IDA as it had a rigorous experimental design. In the following assessment we therefore look more closely at the Tulsa IDA, as an example of the main findings from the United States in respect of the experience in that country with asset-based programmes.

5.1. The Tulsa Experimental IDA

The final evaluation report (Mills *et al.*, 2004) of the Tulsa experimental IDA provides a summary of the design characteristics of the programme:

> *In the Tulsa experimental IDA programme, the allowable account uses were home purchase or repair/improvement, post-secondary education, microenterprise startup/expansion, or retirement. Authorised withdrawals were matched at 2:1 for home purchase and at 1:1 for all other allowable uses. To be*

eligible for the programme, participants had to be employed, with family income below 150% of the federal poverty guideline.

Prior to a matched withdrawal, participants were required to take 12 hours of general financial education and (in most instances) additional training specific to the type of intended asset purchase. Participants were expected to make a minimum monthly deposit of USD 10 in at least nine months of each year. Under the programme design, matching funds accrued to the accountholder for all IDA deposits made within 36 months after the account opening. The accountholder then typically had up to six additional months within which to make final matched withdrawals. Any remaining account balance could then be rolled over (with 1:1 match) into a Roth individual retirement account (IRA).

*For each account year (measured from the month of account opening), up to USD 750 in deposits was subject to match, when withdrawn for an allowable use. Over the three-year savings period, the maximum matchable savings amount was thus USD 2 250. Participants making full use of their accounts over three years could accumulate USD 6 750 for home purchase (USD 2 250 in savings plus USD 4 500 in match) or USD 4 500 for other allowed uses (USD 2 250 in savings plus USD 2 250 in match). At the time of a matched withdrawal, the match was provided in the form of a check made out to the vendor (*e.g. *a home mortgage lender).*

The Tulsa experiment assessed three types of results: those related to the specific savings objectives of the programme design (*e.g.* home ownership, education, business start-up or retirement saving); secondary outcomes related to overall net worth (assets less liabilities); and tertiary economic outcomes related to overall financial well-being including items such as employment earnings. These may be considered to be the stated objectives of the Tulsa IDA.

Like all IDA-type programmes, the Tulsa IDA demonstrated that low income households can indeed save money in their IDA accounts when provided with substantial incentives. The final evaluation was based on the fourth year follow-up, which included 840 participants that completed the survey (412 in the treatment group and 428 in the control group). In respect of the primary objectives of the programme, the main outcome was a statistically significant 6.2% increase in home ownership over and above the rate of the control group (49.1% versus 42.9%) after four years. The only effect of education was an increase in short non-degree courses. There were no significant effects on business start-up or retirement savings. With respect to the secondary and tertiary objectives there were also very little or no effects. There were some important differences within some sub-groups within the sample. Notably, African-Americans were much more likely to invest in a home (Mills *et al*., 2004; Mills, 2005).

The Tulsa participants were actively recruited to the project (like the Canadian Learn$ave project), not randomly chosen within the population. Therefore we can assume that there were a disproportionate number of participants who were interested in saving and especially interested in saving for home ownership – and that many in the control group were consequently disappointed not to have the opportunity. This does not diminish the validity of the comparison to the control group (which would have had the same predisposition), but it does mean that the it is not possible to project these findings onto the low income population at large; *i.e.* a Tulsa like programme would not result in a 6.2% increase in home ownership among the low income population. (The SEED for

Oklahoma Kids is planning to sample randomly from the population at large, so it will give scalable results for the population as a whole.)

The overall summary of lessons from the Tulsa results with respect to programme design are that a programme providing a large incentive for saving towards low income home ownership will attract some low income households which take advantage of the programme and buy a home. This does not, of course, tell us about the costs and benefits of the programme, since there is no quantification of the pubic and private benefits versus the costs.

Canadian research (Mendelson, 2006) shows that the purchase of a home may be a dangerous investment for a low income household. Strictly from a financial perspective purchasing a house implies that a low income household has almost no diversification of its assets. Many housing markets are very volatile. A housing purchase is a single large lump-sum leveraged (because it is financed with a loan) investment made at one point in time, so it is unavoidably vulnerable to market timing. If a household is caught on the wrong side of a housing market turn, it can end up with extremely poor or even negative financial results. Unless there are intangible benefits from home ownership, for example in the form of family stability and up-keep of the home, home ownership may not be the best choice for a low income household. Research in the United States has also shown similar results, for example Belsky *et al*. (2005). The Tulsa home market appears to have remained buoyant, even in 2007, so that home owners from the Tulsa experiment have likely done well, but this does not apply to many other markets in the United States. In other words, there is no straight line from the primary to the secondary to the tertiary objectives of the Tulsa project.

Perhaps another follow-up four years hence could demonstrate that there are indeed intangible or financial benefits to the participants who were induced by the Tulsa experiment to purchase a home – or not. Unfortunately a longer term follow-up does not appear to be planned at this time.

What about the Tulsa experiment and, more broadly, the US IDA projects in respect of the three types of broader goals outlined in the beginning of this chapter?

As with Learn$ave and Savings Gateway and other IDA types of programmes, none are purporting to substitute for income benefits. Nevertheless, if it could be shown that there were savings in benefits as a consequence of IDA types of programmes, and these were worth more than the costs, a strong efficiency case could be made for these sorts of programmes. In measuring benefits against cost, it would be necessary to take into account the cost of matching grants for people who would have saved in any case – plus administrative costs, which are another form of deadweight cost.

It appears that the form of IDA offered by many US programmes, at least as exemplified by the Tulsa project, once extra costs of the random assignment experimental model have been removed, requires high administrative costs relative to programme expenditures. In Tulsa administrative costs were estimated at USD 3.06 for USD 1.00 of participant savings, or about USD 1.50 of matching grants (Schreiner, 2004, 2005). This is not all "pure administration" in that some of the cost was in the required four hours of financial education provided to each recipient and to other services and assistances, but in any case it can be seen that the current IDA model entails high administrative costs. As discussed previously, the Learn$ave experiment and Savings Gateway 2 may shed some additional light on the administrative costs of this sort of programme. If indeed the overhead is unavoidably as high as that experienced in Tulsa it is hard to see an efficiency argument for this kind of matching grant programme.

As discussed in the introductory section, wealth redistribution has sometimes been used as an argument for asset-based social policies – for another example see Lombe and Sherraden (2005). However, wealth redistribution would require much larger interventions than are imaginable or possible through matching grant programmes. IDAs as wealth redistribution are like throwing handfuls of pebbles into a river in an effort to create a dam. Wealth redistribution requires policies such as substantial progressive (and probably international) taxation on inheritance, greater equality of income, perhaps large endowment grants and, likely, more generous public provision of core services such as education and health care. IDAs are not a tool designed for this purpose.

IDAs have also sometimes been argued for as "only fair" given the tax breaks available to wealthier families. IDAs may partially address this concern, but it is difficult to see the relationship between this kind of goal and the actual design of the IDAs in the United States, unlike the Savings Gateway in the United Kingdom. For one thing, as mentioned previously, there are more constraints and less choice in US IDAs than there are on "equivalent" programmes that offer tax savings. For another, the tax savings for most registered types of accounts amount to say, 30 or 40% at most, depending upon tax progressivity. Yet the matching rates for low income households in a US style IDA are often 100% or 200%, and in the Canadian case are even higher. These high matching rates might be needed to stimulate savings for low income households, but they hardly seem to be designed to compensate for the tax savings experienced by higher income families in registered accounts. If this were the purpose, it would make more sense to design an IDA as a refundable tax credit, as is the design of the Canada Education Savings Grant and, doubtless, registered accounts in some other countries.

This leaves "behavioural" as the final possible objective for the US style IDAs, and this indeed seems to best accord with the stated goals and design of the IDAs. The IDAs are meant to develop the habit of savings, improve financial management and, perhaps, lead to the acquisition of some specific forms of asset – such as a house or a better education. We shall require more and better quality evidence before we can have reasonable certainty that IDAs are effective in achieving this goal at a reasonable cost.

6. Conclusions

We have here reviewed asset-based programmes in Canada, the United Kingdom and the United States. The evidence is consistent in each country: people with low incomes *will* save if they are offered incentives and if the institutional structures are available to encourage them to save. We also know that most people will feel empowered by saving and will see their experience as positive. Unfortunately we do not yet know much more beyond that. However there are projects underway today in all three countries that will add considerably to our knowledge of the effects of asset-based programmes and how they may be optimally designed.

In the meantime some of the rhetoric surrounding asset-based programme advocacy needs to be balanced with realistic expectations. Asset-based programmes are not the new great panacea for the poor. While there is without doubt much to be learned by employing an asset-based perspective to review our existing income security and tax programmes, this is not a technique which will radically alter our existing programmes; rather, it will add, adjust and modify.

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Table 7.1. Income distribution of Registered Education Savings Plans (RESP) in Canada, 2002

Approximate household income from all sources	RESP holders %	Non-RESP holders %	Take up rate %: proportion of contributors to a RESP between 1998-2001
< CAD 20 000	3	15	2.3
CAD 20 000-CAD 39 999	13	18	7.2
CAD 40 000-CAD 59 999	19	17	10.4
CAD 60 000-CAD 79 999	19	12	13.1
CAD 80 000-CAD 99 999	15	7	13.2
CAD 100 000+	23	11	22.2
N/A	9	20	-

Source: Human Resources Development Canada (2003, Table 5.3).

Table 7.2. Comparative values of CTF in constant dollars at end of maturity period*

Annual household contribution	Real rate of return (in GBP)		
	2%	3%	4%
GBP 0**	1 011	1 172	1 359
GBP 200**	5 093	5 655	6 288
GBP 400**	9 176	10 138	11 217
GBP 600	12 597	13 862	15 274
GBP 800	16 680	18 345	20 203
GBP 1 000	20 762	22 828	25 132
GBP 1 200	24 845	27 311	30 061

CTF: Child Trust Fund.

* Based on a straight line projection with a constant real rate of return and the same household contribution each year.

**Assumes additional endowments of GPB 250 at birth and at age seven.

Table 7.3. Illustrative comparative values of the tax shelter in the CTF in constant dollars

Annual household contribution	Assumed tax rate (%)	Value of tax shelter		
		Real rate of return (in GBP)		
		2%	3%	4%
GBP 0**	0	0	0	0
GBP 200**	10	49	106	169
GBP 400**	15	146	291	453
GBP 600	20	259	512	795
GBP 800	25	445	861	1 326
GBP 1 000	30	679	1 298	1 990
GBP 1 200	35	961	1 824	2 787

CTF: Child Trust Fund.

Same assumptions as Table 7.2. The value of the tax shelter is calculated as the tax rate times the total amount of investment income earned in the account (*i.e.* the total account less all government and household contributions).

Chapter 8.

Redistribution across the Life Course in Social Protection Systems: An Overview

Ann-Charlotte Ståhlberg[1]

Public social spending varies a lot across OECD countries. Its share of GDP is closely related to the degree of "universality", i.e. *the extent to which individuals receive benefits. The lowest figures are currently found in Anglo-Saxon countries, while the highest appear in the Nordic countries. This chapter highlights the fact that in countries with highly universal welfare state arrangements, most social spending generates intra-individual redistribution rather than inter-individual redistribution of lifetime income, in contrast to countries whose welfare systems have a strong element of targeting.*

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1. The redistributive effects of social protection

A central issue is how the distribution of income is affected by taxes and benefits in the public transfer system. This is a controversial issue and the perspective from which the public transfers are considered is highly significant: what may seem progressive from one perspective may appear regressive from another. This warrants a nuanced debate on distribution policy.

Each year the public sector redistributes large sums among different individuals and households, a redistribution carried out by means of taxes, transfers, benefits and publicly financed consumption. The various systems have widely differing motives, and in many cases the redistribution of economic resources may not be the primary objective. In the case of means-tested social allowances and wealth tax, for example, it is obvious that one of the primary objectives is the direct redistribution of income. Other systems, such as income-related sickness benefit and unemployment benefit, serve in the first instance to redistribute risk. Most people who work are covered by the social insurance system, but only those who become sick or unemployed, etc. receive any compensation. The cost is high if there is no insurance system in place, with all the insured parties sharing the risk in the same way as in a commercial insurance system. Pensions, child benefits and study allowances are examples of systems whose primary purpose is redistribution over the life course. The progressivity of taxes also acts as a source of income smoothing as individuals pay proportionally higher taxes during periods of higher income and vice versa. All of these mechanisms may be regarded as being redistributive, whether among individuals (inter-personal) or across an individual's life course (intra-personal).

The impact of socio-political measures on income distribution is frequently the subject of current research, but there are weaknesses inherent in most of these studies. One is that the comparison standard – what would happen to distribution without such intervention – is usually inadequately explained. Disposable incomes are certainly more evenly distributed than factor incomes, but many make the mistake of concluding from this that the public system has an income-smoothing effect. The situation is viewed such that income distribution "after" the transfers is more even than income distribution "before". But this is based on a highly questionable inference. For this to be correct, each person's disposable income, without the reported transfers, would have to be precisely equal to the factor income the person now actually has alongside these transfers. This assumption can be called into question for two reasons.

First, it is doubtful whether factor incomes are independent of public transfers. Rather, it is likely that people's labour supply, savings, etc., vary with these and that this in turn has repercussions for the wage and interest-rate structure. If the tax and benefits systems did not exist or were structured differently, individuals' choice of working hours, wage structure and yield requirements, etc., would be different. If this is the case then it needs to be incorporated into the analysis.

Second, it is doubtful whether the private transfer system is independent of public transfers. It is highly probable that people's purchasing of private pension policies, etc., varies with the scope and structure of public transfers. If this is the case then it must be taken into account. If the distributive effects of public transfers are to be specified, this must be based on reasonable assumptions of what would have happened to incomes in the absence of public transfers or if the transfers had been structured differently. Disregarding the impact of public transfers on factor income may be acceptable as a first step in the analysis, especially since the secondary effects are difficult to

determine. Still, it is difficult to understand the usefulness of an alternative for comparison which consists in a situation lacking transfers altogether. It is impossible to ignore the fact that some form of transfer is a necessary element in the social picture, especially if any claim to at least a minimum of realism is to be made. No one can live by their own labour in all stages of life. In the first place there are periods in everyone's lives when their capacity for work is inadequate: childhood, old age, periods of sickness and so on. Second, there are periods when the capacity for work certainly exists but cannot be utilised or provides only a low return: unemployment, crop failure. If studies of the effects of distribution policy are to be taken seriously, they cannot be based on comparisons with a situation where much of the population is left without income and means of support. The relevant alternative for comparison must be that children, the elderly, the sick, the unemployed, etc., have their means of support organised in a way other than by means of the public transfers studied. If we imagine that the alternative for comparison is a system of private transfers, then this could take many forms. Historically, private solutions have primarily been cooperative/collective schemes organised by local communities, guilds, trade unions and the like. Today, non-cooperative schemes/schemes offered at market terms by banks and insurance companies could also make a passable contribution to meeting the need for transfers. A study of the distributive effects of current public transfers does not necessarily require a private alternative for comparison. The means of comparison may also take the form of a public system which is neutral in some sense. What is important is that the alternative for comparison is not left blank. Although heavily criticised (Reynolds and Smolensky, 1977) the most commonly used reference point is the zero-government counterfactual.

Another shortcoming in studies of distribution policy is that the distributive effects are usually only calculated on the basis of disposable incomes and do not include other welfare components, for example the use of public services. A third weakness is that the distributive effect is mostly calculated on the basis of citizens' income for one or a few years, while it would often be more interesting to know the impact on citizens' lifetime incomes.

While it is clearly invalid to measure the redistributive effect of government against the original distribution of pre-tax and pre-transfer income, such an assumption is implicit in the following, simply because there is no data available to indicate how the annual and lifetime factor income would have changed if a policy alternative had been implemented.

This chapter focuses on redistribution over the life course in social protection systems. How do inter-personal and intra-personal distributions differ in countries that have chosen completely different principles for shaping social policy? Particular importance is attached to comparing a country, such as Sweden with its highly universal welfare-state arrangements, with countries, such as Australia and Ireland, whose welfare systems have a strong element of targeting.

2. Why is there an interest in intra-personal redistribution?

Based upon cross-section data, numerous studies of the income redistribution achieved by various government taxes and expenditures in industrialised countries have generally concluded that the net effect of such programmes is to successfully redistribute income from rich to poor. But do these conclusions still hold when a much longer time period, such as an entire life cycle, is considered? The accounting period used may influence the degree of redistribution measured; short accounting periods will tend to increase the degree of income inequality measured within a population. For example,

income distribution over a single year will be influenced by temporary factors. Individuals with high paid employment will be classified as poor during a short period of unemployment, but, over their lifetime, may be classified as rich. Pensioners will tend to be lower down the income distribution, but may have been higher up the distribution during their working lives. Study grants are a transfer to those who have low incomes for the year because they are students. This has a strong income-smoothing effect on an annual basis, but it is not particularly likely that university students as a group will be viewed as poor and that grants to this group will have a strong income-smoothing effect. Those with the means to study represent a privileged group in society, and real poverty is more likely to exist among young people who are not students. Hence, it is impossible to gain the correct perspective on who is rich and who is poor without extending the measurement period to cover the entire life course. Nonetheless, it must be noted that shorter accounting periods may be more appropriate as a measure of welfare when short-term concerns are more important, for example when considering the very poor who may be credit constrained.

The distribution of lifetime incomes may be assumed to be more even than the distribution of annual incomes, and the effect of the public sector may be assumed to be greater in any given year than over the life course. If the level of self-financing in public subsidies and transfers is significant and only a small part of the redistribution taking place via the public sector entails an actual redistribution of resources, it may be important to reflect on the public sector's undertakings in the light of expected future demographic trends and the problems inherent in financing the public sector, which may already be predicted today.

The existence of intra-personal redistribution in tax-benefit systems implies that such objectives might be achieved through private savings mechanisms. It would reduce total tax rates and related distortions created by the tax system. Another objective is that enforced state decisions about transfers over one's lifetime reduce individual choice and thus total welfare.

Scattered evidence suggests that voluntary private income insurance and social insurance are rather close substitutes. In particular, government-provided pension benefits tend to be topped up by occupational pensions in countries with only modest public benefits (Pearson and Martin, 2005). In Forssell *et al.* (1999) social insurance transfers to older people are compared with non-state employment-related (occupational) transfers in eight western European countries (Denmark, Finland, France, Germany, the Netherlands, Norway, Sweden and the United Kingdom). In Figure 8.1 public spending on old age pensions per elderly person in 1995 has been broken down into basic pensions, supplementary pensions and "contracted out" pensions. Denmark and the Netherlands have social insurance pension schemes that bear no relation to earnings at all, and in the United Kingdom social insurance pensions are only weakly related to earnings. These are the countries with the most comprehensive occupational pensions. Germany and France, with state pension schemes based on the corporate model, provide good standard protection with high replacement rates even for those who have had high salaries. Non-state employment-related pensions are less important in France and Germany than in the other countries in the study.[2] A comparison of the Nordic countries shows a varied choice of solutions to the problem of old age provision in spite of the fact that they are similar in many respects. All have a basic provision given to everyone irrespective of

2. Mandatory supplementary pensions in France have been defined as public provision.

income. Finland, Norway and Sweden, but not Denmark, have national supplementary pensions based on the principle of compensation for loss of income. However, as the replacement rate is higher in Finland than in the other Nordic countries, there is little scope there for occupational pensions, which are most comprehensive in Denmark.

Figure 8.2 shows that the average disposable income for the group of elderly people as a whole does not vary very much from country to country. This is in spite of the large differences in public spending on pensions and benefits, and in spite of the fact that the public pension systems follow completely different principles in linking the level of compensation to previous income. Low compensation from the public system is largely made up for by high payments from other compensation systems, while high compensation from the public system is complemented by other compensation systems to a lesser extent. However, the proportion of elderly people with very low incomes is lower in the countries that have guaranteed basic pensions.

It is also noticeable that total (public plus private) pensions are at least as large a share of GDP in the United States as in Western Europe despite the fact that the GDP share of public pensions is higher in Western Europe and that the population is younger in the United States. This is evident from Table 8.1. Another example is that *total* per capita sick-pay benefits do not vary much among six western European countries studied by Kangas and Palme (1993), in spite of quite different replacement rates in government-operated systems – although the substitution is not complete. It is the composition of sick pay, sickness benefits from social insurance and occupational insurance plans which varies. Similar results are to be found in OECD (2005). When considering net expenditure on social insurance together with private mandatory and occupational supplementary insurance, there is similarity in the overall income situation in the different countries.

3. Dynamic microsimulation

Inter-personal redistribution is what has been traditionally investigated in cross-section analyses, namely how much is redistributed from one category of individuals to another. Intra-personal redistribution on the other hand focuses on the redistribution which takes place over the life cycle from periods of wealth, such as at the height of one's earning ability, to periods of need, such as when bringing up children.

To examine whether the welfare system results in greater lifetime intra-personal redistribution requires data for complete lifetimes. Methods to create income profiles of this type are either historical or hypothetical, the advantage of the historical method being that it deals with actual historical incomes and that all the observed correlations are true. Longitudinal data sets are required to carry out analysis of this kind. Panel data is one of the most useful forms of longitudinal data, but there are not many sources available. The main datasets are household panel surveys, which ask the same questions of households year after year. Detailed administrative data containing economic and social characteristics over their lifetime is available in some Scandinavian countries. It is rare, though, to find data with such a long-time horizon. An exception is Björklund (1993) who used a dataset, containing 39 years of Swedish income data taken from register information, to look at lifetime versus annual income distribution.

Therefore, an examination of such a distribution of income normally necessitates the use of simulation. Dynamic microsimulation models can be used to generate simulated life histories of individuals, in effect simulated panel datasets, so that these issues can be examined. The disadvantage is that the life histories are constructed and not necessarily

true, making validation of the model's characteristics vitally important for the credibility of the analysis.

Microsimulation models use data at the micro level, *i.e.* data on individuals, households, etc., and may be static or dynamic. In contrast to the static model, the dynamic model changes the characteristics of the model population on a continuous basis – dynamic aging. A dynamic microsimulation model ages a sample over time, modelling for individual agents, life-course events, such as demographic changes like marriage and giving birth, educational achievement or labour market changes, such as movements in and out of employment or changes in earnings. Events such as these are assumed to occur with probabilities that depend in turn on the characteristics of the individuals. The correlation between the individuals' characteristics and the likelihood of various events occurring is estimated with the help of statistical models. The estimated probabilities can then be used to randomise various events among the individuals in the model population. Statistical models are also used to simulate values for other types of variables, for example incomes, and in this way a simulated panel data set is generated for each individual in the base sample.

Some of the difficulties associated with microsimulation modelling are insufficient knowledge and weak economic behavioural components, large data requirements, large cost and effort and validation problems. The limited behavioural processes included in dynamic microsimulation models depend heavily on the micro-behavioural econometric studies and household datasets on which they are based. The data necessary for estimating behavioural processes for use in dynamic microsimulation models is quite limited at present. However, panel surveys are continuing so that, in the near future, panel surveys lasting ten years or more will be available in many developed countries. Scandinavian countries have developed models based on very rich, extensive and detailed register information, such as the MOSART model in Norway and SESIM in Sweden.

Microsimulation models were pioneered in economics by Orcutt *et al.* (1961) in the United States in the 1960s. Initially, the perceived benefits did not outweigh the very high costs of development and therefore dynamic microsimulation models were only built in a few countries. Panel data was also rare. However, the field has expanded as computing costs have decreased and as the availability of micro-data has increased. But the construction of a dynamic model is an enormous task, both in terms of understanding the types and forms of behaviour that take place over a lifetime and the effort in programming thousands of lines of code. However, there is now a critical mass of international expertise in this area. Many models are now in their second, third or even later generations. Each new model reflects a considerable amount of learning that followed from building the previous model.

According to O'Donoghue (2001b), about 30 dynamic microsimulation models have been constructed internationally so far, with approximately ten models in active use at present. Table 8.2, taken from O'Donoghue (2001a), summarises the principal uses of the different dynamic microsimulation models, classified into the headings: Projections, Evaluations of Public Policy, Designing Policy Reform, Studies of Inter-Temporal Processes and Behaviour, and Investigating Inequality and Redistribution. Studies using dynamic microsimulation models have concentrated on two types of investigation, lifetime income and intra-personal redistribution, and concern countries like Australia, Ireland, Italy, the Netherlands, Sweden, the United Kingdom and the United States.

A number of models (*e.g.* the HARDING model in Australia, LIFEMOD in the United Kingdom, O'Donoghue's model for Ireland and SESIM in Sweden) are simulated in

a steady state world in which the demographic characteristics, government policies, etc., for the base year are used for the entire modelled period. The advantage of the steady state approach is that the effects of regulatory systems are viewed in isolation. Utilising a steady state approach and focusing on just one system with unchanging behavioural patterns allows one to look at the actual forces within a particular tax-benefit system. Varying behaviour and systems over time can complicate the causes of various effects. Cohort models are typically run in a steady state world. A cohort may live its entire life within the framework of the economic and demographic circumstances prevailing at a specific time. Clearly, a steady state model would not be effective in examining the impact of changing demographic or labour market patterns, or changes in the wider economy. Dynamic population models age entire cross-sections and have focused on analyses of future populations, for example the impact of demographic changes on the income distribution. The disadvantage of this approach is that regulatory systems may change greatly over the period of analysis and it then becomes difficult to comment on the characteristics of the current systems. Some of the major models, such as CORSIM (United States) and DYNACAN (Canada), are simulated in non-steady state worlds; another example is NEDYMAS (the Netherlands). Doing this comes at a cost, as many more parameters need to be specified in the model and many more datasets may be required.

The remainder of this chapter focuses on steady state models that have been used to investigate life-course redistribution in tax-benefit systems and the degree of redistribution between life-rich and poor versus redistribution over one's life course.

The Australian HARDING model (Harding, 1993) uses what is known as a dynamic cohort model, which ages a single cohort over its entire lifetime, predicting each individual's major life-cycle events. The British LIFEMOD model (Falkingham and Lessof, 1992) is analogous to Harding (1993) but refers to a steady state approach based on the British situation. LIFEMOD "gives birth to" 4 000 synthetic individuals, whose sex and socioeconomic group are determined using probabilities and randomisation. The life course is advanced a year at a time until the individuals die according to the probability appropriate to their age, sex and socioeconomic group. Individuals are randomly allocated different forms of education during their childhood and youth, and a family history is created, with members getting married and divorced. During their working years, a decision is made each year as to whether the individual is part of the labour force. If this is the case, they may be full- or part-time employed, a business owner or unemployed. Incomes depend on sex, age, family type, labour force status and previous income, and are calculated using an estimated regression function. Each individual is also randomly allocated a specific talent factor. Greater talent, for those privileged enough to be accorded it, is assumed to have a positive impact on their income via a career factor. Based on the family's characteristics, the transfers received and the taxes and contributions payable are calculated for each year of life. At the end of the life course the accounts are closed and both gross and net lifetime salary are calculated, as is disposable lifetime income per unit of consumption. One of the difficulties in the model is that indirect taxes and government expenditures on services are not included. The impact of government is limited to the major cash transfers and the income tax and no account is taken of the underground economy and possible tax evasion.

SESIM (Swedish Ministry of Finance, 2003, Pettersson and Pettersson, 2007) is a dynamic microsimulation model for Sweden covering most of the transfer systems. The database (LINDA) comprises a sample of approximately 3.5% of the Swedish population in 1999, equivalent to approximately 308 000 individuals. Members of the households of the sample individuals have also been added, making a total sample of approximately

786 000 individuals for the year 1999. The individuals included in the sample are followed up on an annual basis, with data collected from various administrative registers and incorporated in the database. Registers contain individual information on income, taxes, salary, education, sickness, parental benefits, pensions, pension points and unemployment benefits. Information on past periods is also collected. The database thus has a longitudinal structure such that the individuals included can be observed repeatedly. SESIM's basic population comprises a random sample of approximately 104 000 individuals extracted from the 1999 LINDA database. The various statistical models forming the basis for SESIM have in most cases been estimated with the help of LINDA data. Most models that describe dynamic processes based on information from a continuous period of two or more years require access to longitudinal data. SESIM generates an income distribution largely conforming to that observed in reality.

The income concept in SESIM includes publicly financed private consumption, and indirect taxes in the form of VAT and specific taxes paid by households (taxes on alcohol, tobacco, etc.) are calculated and also included in the model. Data on households' utilisation of public services is used to calculate the subsidy value of the public services that may be related to a specific individual. Examples of public services included in the analysis are childcare, elderly care, schools, health and medical care and labour market measures. The subsidy value of health care and elderly care, for example, is assumed to be equal to the premium for an equivalent hypothetical insurance policy the recipient would have needed to take out if the service had not been subsidised. Indirect taxes in the form of VAT and specific taxes paid by households cannot be observed directly in LINDA but have been estimated using data from Statistics Sweden's survey of households' consumption habits.

O'Donoghue (2001a) has used a dynamic microsimulation model to generate a set of simulated life histories for a single cohort in Ireland. The model covers most of the transfer systems and studies the level of self-financing in the Irish transfer systems. The source of data is the four waves of the *Living in Ireland Survey*, a cross-section survey of Irish households carried out as part of the European Community household panel survey for collecting information on incomes, labour market status, illness, education and demography. The primary source of data is the 1994 survey, with 4 048 responding households and a response rate of 57.1%. In some cases, especially for education and demographic processes, official statistics are used to specify the processes.

Behaviour is simulated according to a steady state world, assuming that all individual behaviour takes place in the mid 1990s. Disposable income is market income after taxes, contributions and benefits. Not considered are social insurance contributions paid by employers, as it is not clear to whom they are actually incident.

The characteristics of these four dynamic microsimulation models are summarised in Table 8.3.

4. Lifetime redistributive impact of the social insurance system is smaller than the annual incidence suggests

How do inter-personal and intra-personal distributions differ in countries that have chosen completely different principles for shaping social policy? In the following we compare a country such as Sweden with its highly universal welfare-state arrangements, with countries such as Australia and Ireland, whose welfare systems have a strong element of targeting.

4.1. Sweden

Sweden is an interesting case because social expenditure as a share of GDP is higher than in most countries. Sickness benefit insurance, unemployment insurance, occupational injury insurance, pensions, parental insurance, etc., are income-related and financed by a proportional contribution based on salary formally paid by the employer. The level of compensation is relatively high for those in low- and middle-income groups. But the social insurance system does not pay compensation for loss of income above the social insurance ceiling, which is equivalent to slightly more than the average salary. For those with low or no income, for example, there is uniform basic protection in the form of a minimum compensation payment for unemployment insurance, retirement pension, early retirement pension and parental insurance. There are also means-tested benefits, such as housing allowances, and social allowances. One might predict that a social-insurance system such as Sweden's, with its emphasis on income-related benefits and contributions, would result in a high degree of intra-personal redistribution.

This is indeed the case. According to calculations in SESIM, inter-personal redistribution (how incomes are redistributed among individuals) is only 18%. Intra-personal redistribution, *i.e.* the proportion of self-financed transfers and subsidies, therefore amounts to 82%. This means that just over eight out of every ten Swedish kronor received by the average individual in transfers and subsidies over the life course has been financed by the individual himself at some point.

Table 8.4 shows the calculated Gini coefficient for annual and lifetime incomes for various income concepts. The Gini coefficient is a common measure for inequality of income, and a value of zero corresponds to perfect equality, with everyone having the same income, while a value of one means total inequality, with one person receiving all the income. In SESIM the disposable income is defined as the household's income from labour and capital plus transfers minus (direct) tax paid and study allowances repaid. Study allowances are viewed as a transfer. Disposable income is supplemented by the value of the individual's public consumption (see previous page) while indirect tax paid in the form of VAT and specific taxes is deducted from disposable income. A so-called equivalence scale, giving each household a certain consumption weighting depending on how many adults and children are living together, is used to obtain comparable incomes. The lifetime income is calculated as the individual's mean value of the annual amounts. Mean values, rather than aggregates, are used to correct for variation in the length of life of different individuals. Different taxes and benefits have different effects on income distribution. However, only the direct effects are considered here.

The distribution of the incomes generated in the market is very uneven. If the value of subsidised public consumption is added to disposable income, this reduces the inequality in income distribution, measured using the Gini coefficient, from 0.217 to 0.189 from a cross-sectional perspective. Inequality of income is thus reduced by approximately 10%. This fairly moderate effect is explained to some extent by the inclusion of indirect taxation, which has a regressive effect and cancels out some of the income-smoothing effect of public consumption.

Changing the time perspective and analysing lifetime incomes instead of annual incomes has an even greater effect. The Gini coefficient falls from 0.189 for annual incomes to 0.086 for lifetime incomes, *a reduction of almost 60%.* The fact that the distribution of lifetime incomes is more even than the equivalent distribution of annual incomes is due to the individuals' position in the income distribution varying from year to year, for example, low incomes in one given year are often compensated for by high

incomes in other years. The higher the income variation, the greater the smoothing-out. The inequality is less than half that found when analysing cross-sectional incomes, which corresponds well to a previous Swedish study which used a different type of microsimulation model based on statistical matching (Hussénius and Selén, 1994). This obtained a reduction of just over 60% in the Gini coefficient for disposable income per unit of consumption by shifting the perspective from annual to lifetime incomes. The Gini coefficient was 0.221 for disposable income per unit of consumption and 0.086 for average disposable income per unit of consumption over the lifetime.

Björklund (1993) too used Swedish data to calculate the smoothing-out effect of moving from annual to lifetime incomes, but using actual data. He found that the dispersion in lifetime incomes is approximately 40% lower than in annual incomes. One explanation for the smaller effect may be that Björklund studied aggregate net income at individual level, an income concept which is fairly remote from disposable income per unit of consumption and total income. The study was based on actual data on individuals over 39 years of age, from 1951 to 1989, and was as such time-limited and did not include any whole lifetime incomes.

Most of the transfer systems in SESIM impact income distribution in the same direction over the lifetime as over one year. For example, social allowances and housing allowances are progressive from a cross-sectional perspective but also have a smoothing-out effect from a life-cycle perspective. The force of the effects is, however, influenced by the time perspective. A transfer system that demonstrates the opposite effect over the lifetime compared with over one year is the retirement pension, which is progressive over a year but regressive over the lifetime. Recipients of a retirement pension, who have a relatively low total income on average as they do not have any other sources of income, show a progressive effect in a cross-section. A high pension generally does not provide an income at the top of the distribution but somewhere between the middle and the top. Those with high pensions had high incomes when they were economically active, which is why they are found at the top of the lifetime income distribution. Retirement pensions therefore have a regressive effect over the lifetime. Note, however, that this analysis refers solely to pensions received and does not take into account contributions paid.

Calculation of the inter- and intra-personal redistribution components is carried out in accordance with a method used in Falkingham and Harding (1996). Each cohort is assumed to balance itself out financially over the life cycle, *i.e.* the sum of taxes and contributions paid is exactly equal to the sum of transfers and subsidies for public services received. By allowing each cohort to achieve financial balance, the method disregards any public financing deficit or surplus (for a given cohort over its lifetime) arising during the period of analysis. In the simulation the cohorts' total taxes paid will exceed the sum of transfers and subsidies because the taxes will also be used to finance certain items of public expenditure not included in the analysis. A certain adjustment to the total tax burden is therefore required to achieve financial balance over the life cycle for each cohort. In one method public sector expenditure is financed by total social insurance contributions and as large a proportion of direct and indirect taxes as is required to balance the cohort.[3]

3. According to a different method, all indirect taxes and as high a proportion of social insurance contributions and direct taxes as is required are used.

Individuals may receive transfers and subsidies for public services at the same time as paying taxes and contributions. If an individual receives more in transfers than he pays in taxes, he has a positive net balance with respect to the public sector for that year. Conversely, a negative net balance is the result of an individual paying more in taxes than he receives back in the form of transfers. The sum of the individual's annual net balances over the lifetime is equal to the individual's lifetime net balance. The sum is equivalent to the funds redistributed among individuals (inter-personal redistribution) within the cohort. As each cohort is assumed to pay an amount of tax equal to what it receives in transfers over the life cycle, the sum of the positive lifetime net balances is equal to the sum of the negative lifetime net balances.

If an individual receives transfers in a specific year at the same time as he is paying tax, the transfers can be seen as being financed by the taxes paid, called here the "yearly give-and-take". An individual with a positive lifetime net balance with respect to the public sector may nevertheless have negative net balances for specific years, *i.e.* when taxes paid exceed transfers received. These taxes can then be assumed to finance transfers received in other years in the individual's life, called here the "life cycle give-and-take". Taken together, the yearly and the life cycle give-and-take provide a measure of how much of the transfers received is self-financed, *i.e.* via taxes paid by the individual himself at some point in his life.

If taxes exceed transfers, the latter are financed in full by the taxes paid, *i.e*. the yearly give-and-take is equal to the transfers. If transfers exceed taxes, only that part of the transfers which does not exceed taxes is financed, and the yearly give-and-take is then equivalent to the taxes paid.

The inter-personal and intra-personal redistributions of lifetime income are shown in Table 8.5.

The yearly give-and-take represents 45% of the total funds redistributed. The inter-personal redistribution is calculated to be 18%, which means that the proportion of self-financed transfers and subsidies is 82%. Just over 8 out of every ten Swedish kronor received by the average individual in transfers and subsidies over the life course has therefore been financed by the individual himself at some point. Only 18% of the redistribution via taxes, transfers and public consumption is genuine redistribution among individuals. Leaving the yearly give-and-take out of the account, the inter- and intra-personal redistributive components amount to 32% and 68%, respectively. Overall, these results show that, in the main, the public systems in the Swedish welfare state bring about a matching of resources over the life cycle.

Hussénius and Selén (1994), in similar calculations, point to a somewhat higher level of inter-personal redistribution, approximately 24%. Leaving the yearly give-and-take out of the account, inter-personal redistribution here too is 32%, which is wholly in line with the results of SESIM.

The lifetime net balance with respect to the public sector, *i.e.* the sum of all subsidies and transfers received over the lifetime minus corresponding taxes, is, on average, positive for those with a low lifetime income and negative for those with a high lifetime income. This means that the public sector also achieves a smoothing-out of lifetime incomes. Over the life course an individual from the highest lifetime income quintile registers on average a net loss of approximately SEK 3.3 million and an individual from the lowest quintile on average a net gain of approximately SEK 2.5 million. The redistribution is achieved in the first instance via public subsidies and other transfers and

not via the retirement pension system. The level of self-financing of transfers and subsidies increases with individuals' lifetime income, but individuals with lifetime incomes in the lowest 20% still finance over 60% of their transfers and subsidies themselves at some point in life.

4.2. Australia and the United Kingdom

Redistributive characteristics in *Australia* and *the United Kingdom* in 1986 and 1985, respectively, were compared on the basis of two dynamic cohort models with some aspects of their model structure in common (Falkingham and Harding, 1996). A number of the transfer system's redistributive characteristics were analysed from both annual and lifetime income perspectives. Both models ignore benefits in kind and indirect taxes and are limited to the major cash transfers and income taxes administered by the central government. During the 1980s the British government pursued a policy of shifting the tax burden from one of tax as you earn to tax as you spend, and this had obvious implications for redistribution.

In the 1980s Australia undertook a radical reform of its social insurance system that left it with perhaps the purest social security system in the industrialised world. The system principally consists of income-tested payments that are available to those with particular characteristics. The British system entitlement to benefits within the British social security system, which had its foundation in the Beveridge Report (1942), depends on an individual's national insurance contribution record. A primarily social assistance-based system, such as Australia's with its emphasis on poverty alleviation, results in a greater degree of inter-personal redistribution of income. Conversely, a system such as Britain's, with its link between contributions and benefits, results in a greater degree of intra-personal redistribution. The calculations in the HARDING model show that approximately half of the lifetime income redistribution in Australia takes place among individuals. Inter-personal redistribution is between 48 and 62% for Australia and between 29 and 38% for the United Kingdom, depending on the method used to determine the tax burden (see footnote 3).

4.3. Ireland

In *Ireland* 45% of the lifetime income redistribution is among individuals, as shown by O'Donoghue's (2001b) calculations. One of the main distinguishing features of the Irish tax-benefit system, relative to other European tax-benefit systems, is the minor role of insurance in the benefit system. The primary role is one of poverty alleviation. Although the largest benefit instruments are normally called insurance benefits and depend on the payment of insurance contributions, the objective of these instruments is primarily redistribution rather than income replacement. For longer term contingencies, such as old age, the provision for income replacement is left to the private sector.

The Irish personal tax-benefit system is in many respects typical of an Anglo style of welfare state, with relatively insignificant social insurance systems, where means testing and progressive income taxes are more important. For single persons, replacement rates in general are quite low by European standards. There are a number of important differences between the UK and Irish tax-benefit systems. Firstly, means testing tends to be more important in the Irish case. Social insurance is less well developed than in the United Kingdom, with benefits payable at a flat rate and with no earnings-related components. Although flat rate benefits tend to be of higher value than in the United Kingdom, the absence of an earnings-related old age pension results in lower

social insurance contributions. Having a larger self-employed population, the coverage of social insurance tends to be lower. Structurally, means tested benefits are designed differently to the United Kingdom. Instead of almost universal coverage for a common means tested benefit, Income Support, Ireland has a set of categorical instruments covering contingencies such as unemployment, old age, disability, lone parenthood, etc., with different means tests and eligibility conditions, but similar levels of benefit. All in all, though, the system covers the same set of contingencies as in the United Kingdom. Housing benefits are less important, but growing in importance with the high house price growth in the country (O'Donoghue, 2001a).

Overall, the entire tax-benefit system in Ireland is less redistributive when one considers the entire lifetime compared with a point in time. The system is more progressive when the annual accounting period is used instead of the lifetime one. The principal reason for this is that social insurance benefits are much less redistributive over the lifetime than at particular points in time. It is found that the lifetime rich (top quintile) are on average net contributors to the system, while the poorest in the bottom are net beneficiaries of the system over their entire life course. Overall, intra-personal redistribution is found to be less important than for the United Kingdom, but more important than for Australia, highlighting the targeting nature of the Irish tax-benefit system.

4.4. The Netherlands

The analyses in Falkingham and Harding (1996), O'Donoghue (2001a) and the Swedish Ministry of Finance (2003) refer to a steady-state situation. The disadvantage of this approach is that it gives limited information when it comes to the situation of the current population. Owing to, for example, the aging of the population, the lifetime incidence will differ from generation to generation and the steady-state annual incidence will differ from all observed ones.

In Nelissen (1998) a dynamic cross-sectional microsimulation model, NEDYMAS, has been used to examine both the annual and lifetime incidences of the social security system in the Netherlands. This approach makes it possible to derive results for specific generations, which is not possible with the longitudinal microsimulation model used by, for example, Falkingham and Harding (1996).

One can distinguish two types of social insurances in the Netherlands, namely general insurances and employee insurances (Nelissen, 1998). Flat-rate benefits, normally about 70% of the net minimum wage, cover all residents and the premiums are proportional to income. The starting-point is the solidarity principle, not the insurance principle. The insurance or equivalence principle is the point of departure for the employee insurances. Benefits are related to income (up to a ceiling).

Nelissen compared the redistributive impact of the Dutch social security on an annual basis with the lifetime redistributive impact. The lifetime incidence is considerably smaller and there are also differences between generations and schemes. The lifetime income of the Dutch cohorts under consideration is about 35% less unequally distributed than annual income.

Table 8.6 summarises the redistribution of lifetime income in the four steady state-models above.

The relatively low level of inter-personal redistribution in Sweden can be explained by the fact that a high proportion of transfers in Sweden comprises social insurances linked to the insured's incomes. Another explanation is that a higher proportion of

pensions in Sweden is paid for by the public sector, resulting in a higher level of public intra-personal redistribution over the life course. Calculations show that the Swedish retirement pension system accounts for approximately 56% of all transfers. Another important difference leading to higher yearly giving and taking is that transfers in Sweden are to a greater extent taxable, thus contributing to intra-personal redistribution (*i.e.* a higher yearly give-and-take).

5. Conclusions

Public social spending varies a lot across developed OECD countries. Its share of GDP is closely related to the degree of "universality" of public social spending, *i.e.* the extent to which benefits are received by individuals. Broadly speaking, the lowest figures are currently found in the Anglo-Saxon countries, while the highest appear in the Nordic countries. In countries with highly universal welfare-state arrangements, most of the social spending consists of intra-individual redistribution rather than inter-individual redistribution of lifetime income, in contrast to countries whose welfare systems have a strong element of targeting. The universal character of public social spending in Sweden and Italy explains the high shares of aggregate social spending that constitute intra-individual redistribution over the individual's life cycle in these countries (82 and 76%, respectively, according to the Swedish Ministry of Finance, 2003; and O'Donoghue, 2001a). By contrast, the Australian social system has a strong element of targeting, which explains its rather modest share of public social spending that consists of such intra-individual redistribution (38–52%, according to Falkingham and Harding, 1996). As pointed out above, in countries with large intra-individual redistribution over each individual's life cycle, what remains of public social spending (and its financing) is often sufficient to generate considerable inter-individual redistribution of yearly income.

Though it is clearly invalid to measure the redistributive effect of government against the original distribution of pre-tax and pre-transfer income, such an assumption is implicit in the studies referred to above. There are, nonetheless, examples of studies where the alternative for comparison has not been left blank. In a study of the direct distributive effects of the Swedish public pension system (before the 1998 reform) from a life-cycle perspective, I (Ståhlberg, 1989, 1995) was unable to demonstrate any clear smoothing-out effect of the Swedish retirement pension. The chosen social policy alternative was a public system with identical benefits, but neutral in a distributive sense. It meant that those who gained (lost) from a change in policy regime were those who paid more (less) than the proper actuarial price for their pensions. It was found that the progressive tendency in the national basic retirement pension was virtually neutralised by the regressive tendency in the national supplementary pension scheme (ATP). There is a similar study by Söderström (1988), but his analysis is largely conducted in qualitative terms and does not include any empirical investigations. In order to analyse the annual redistributional aspects of Swedish social policy (pensions, sickness benefits, unemployment assistance, and family assistance) the policy alternative in Söderström's study is a non-controversial social policy. In general terms, such a social policy can be said to consist of the non-controversial political interventions that are made to remove the "market-imperfections" that exist in private insurance markets. Söderström's conclusion is that Swedish social policy has a progressive effect on income distribution, but that this progressive tendency is being gradually eroded by the increasing priority given to the principle of a standard of living guarantee at the expense of the objective of securing a minimum standard of living.

In reality, this does not seem to be inconsistent with the results of the calculations in the dynamic microsimulation models, but it must nevertheless be emphasised that these do not reveal the overall effects of distribution policy, but only show the partial effect of the respective transfer. In assessing the actual effects of distribution policy it is impossible to disregard what is happening to factor incomes and transfers in other respects.

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Table 8.1. Composition of total public expenditures, 2001

(% of GDP)

	United States			Western Europe*		
	Public	Private	Total	Public	Private	Total
Cash transfers	7.9	4.3	12.2	14.2	1.8	16.0
Pensions	*6.1*	*3.8*	*9.9*	*8.5*	*1.0*	*9.5*
Human services	11.9	7.2	19.1	15.1	0.9	16.0
Health	*6.2*	*5.0*	*11.1*	*6.4*	*0.4*	*6.8*
Education	*5.1*	*2.3*	*7.3*	*5.4*	*0.4*	*5.8*
Active labour market programmes	*0.1*		*0.1*	*0.9*		*0.9*
Total social expenditure	19.8	11.6	31.3	29.3	2.7	32.0

* Unweighted averages have been calculated for Austria, Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, the Netherlands, Norway, Spain, Sweden and the United Kingdom. Note that the private health spending figures only cover private insurance programmes and exclude individual private health costs.

Source: Lindbeck (2006).

Table 8.2. Uses of dynamic microsimulation models

Model	Country	Uses
DYNAMOD I and II	Australia	Potential areas, such as superannuation, age pensions and education, long-term issues in labour market, health, aged care housing policy, broad long-term distributional issues within the population and across generations, asset accumulation retirement incomes, future characteristics of the population or the projected impact of policy changes.
HARDING	Australia	Analysis of lifetime tax-transfer.
Melbourne Cohort Model	Australia	Analysis of income inequality in a lifetime context.
FAMSIM	Austria	Demographic behaviour of young women.
Pensions Model	Belgium	Analyses and forecasts the medium term impact of a change in the pension regulations.
DYNACAN	Canada	Models Canada Pension Plan and its impact on the Canadian population.
LifePaths	Canada	Health care treatments, student loans, time-use, public pensions and generational accounts.
DEMOGEN	Canada	Distributional and financial impact of proposals to include homemakers in the Canadian pension plan.
DESTINIE	France	Public pensions and intergenerational transfers.
Sfb3	Germany	Analyses of pension reforms, the effect of shortening worker hours, distributional effects of education transfers, inter-personal redistribution in the state pension system.
Dynamic Model	Ireland	Inter-temporal issues relating to the degree of redistribution in the tax-benefit system.
DYNAMITE	Italy	Examines household level microeconomic questions and the impact of macroeconomic and institutional changes on distribution of resources.
ANAC	Italy	Examines the effect of demographic changes on the Italian saving rate and the reform of the pension system in Italy.
Italian Cohort Model	Italy	Analyses lifetime income distribution issues.
Japanese Cohort Model	Japan	Looks at the impact on household savings of changes in the demographic structures.
NEDYMAS	Netherlands	Intergenerational equity and pension reform, the redistributive impact of social security schemes on lifetime labour income, demographic projections, annual versus lifetime income redistribution by social security, lifetime income redistribution by old-age state pension, vertical and horizontal lifetime redistribution, pension reform.
MIDAS	New Zealand	Wealth accumulation and distribution.
MOSART	Norway	Modelling the future costs of pensions, carrying out micro level projections of population, education, labour supply and public pensions and incorporating overlapping-generation modelling in a dynamic microsimulation framework.
MICROHUS	Sweden	Studies the dynamic effects of changes in the tax-benefit system on the income distribution.
SESIM	Sweden	Analysis of income inequality in a lifetime context. Modelling budget estimates of student grants and loans, analyses of other intertemporal policy issues, such as labour supply, savings decisions and pensions.
SVERIGE	Sweden	Human ecodynamics (the impact of human cultural and economic systems on the environment).
LIFEMOD	United Kingdom	Modelling the lifetime impact of a welfare state.
Long Term Care Model	United Kingdom	Modelling long-term care reform options.
PENSIM	United Kingdom	The treatment of pensioners by the social security system, the regulations and coverage of private pension schemes and performance of pension funds, investment portfolios, projected demographic movements and movements in aggregate variables, such as unemployment and interest rates.
CORSIM	United States	Changes occurring in kinship networks, wealth accumulation, patterns of intergenerational mobility and whether individual paths depend on aggregate conditions in society, the progressivity and the life course of the current social security system as well as potential reforms, household wealth accumulation, socioeconomic mobility, health status, interstate migration, and international collaborations.
DYNASIM I & II	United States	Forecasts of the population to 2030 employing different assumptions about demographic and economic scenarios. An analysis of the cost of teenage childbearing to the public sector under alternative policy scenarios and linking with a macro model.
MINT	United States	Forecasts of the distribution of income of the 1931–1960 birth cohort in retirement.
PENSIM/2	United States	Analyses lifetime coverage and adequacy issues related to employer-sponsored pension plans in the United States.
PRISM	United States	Evaluation of public and private pensions.

Source: O'Donoghue (2001a), Table 4.1, pp. 118–119.

Table 8.3. The model characteristics

Model	HARDING	LIFEMOD	O'Donoghues' model	SESIM
	Australia	United Kingdom	Ireland	Sweden
Year of study	1986	1985	1994	1999
Sample size	4 000	4 000	4 000	104 000
Source of data	Synthetic	Synthetic	Four waves of panel data	Longitudinal register
Coverage	Cash transfers, income tax	Cash transfers, income tax	Cash transfers, income tax	Cash transfers, publicly-financed private consumption, income tax, indirect taxes

Table 8.4. Gini coefficient for annual and lifetime incomes for various income concepts: the SESIM model for Sweden

Type of income	Annual income	Lifetime income	Change
Factor income	0.490	0.196	-60%
Equivalent disposable income	0.217	0.102	-53%
- indirect taxes	0.224	0.104	-54%
+ public consumption (*i.e.* total income)	0.189	0.086	-55%

Source: Swedish Ministry of Finance (2003).

Table 8.5. Redistributive components (average amount per individual): the SESIM model for Sweden

Component	Thousands of SEK	Proportion (%)	Proportion, excl. yearly give-and-take (%)
Interpersonal redistribution	1 194	18	32
Annual intrapersonal	3 024	45	
Lifetime intrapersonal	2 540	38	68
Total	6 758	100	100

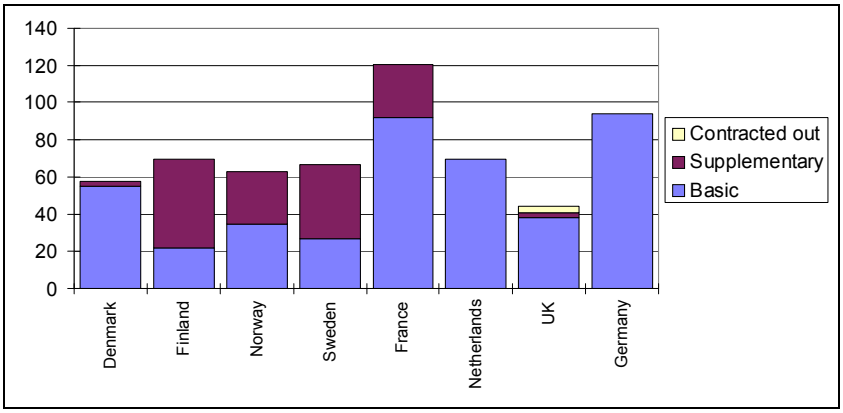
Source: Swedish Ministry of Finance (2003).

Table 8.6. Redistribution of lifetime income

	Welfare state programme	Intra-personal redistribution (%)	Inter-personal redistribution (%)
Australia	Strong element of targeting	38 - 52	48 - 62
Ireland	Strong element of targeting	55	45
United Kingdom	In between	62 - 71	29 - 38
Sweden	Highly universal	82	18

Figure 8.1. Net public spending on old age pensions per elderly person, 1995

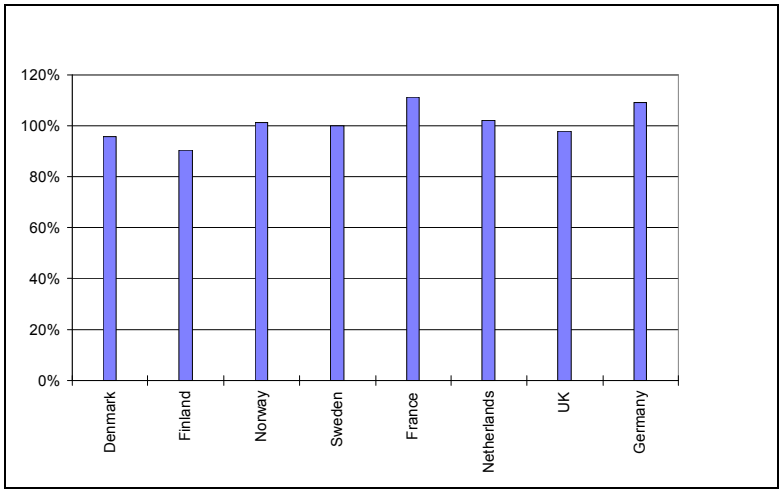
Thousands of SEK (corrected for purchasing power)



Source: Forssell *et al.* (1999).

Figure 8.2. Average disposable income of elderly people in 1994, as a percentage of that in Sweden

Values corrected for purchasing power



Source: Forssell *et al.* (1999).

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Modernising Social Policy for the New Life Course

For many decades, social policy interventions were limited to assist and insure against a limited number of well-defined risks. As a result of diverse and ongoing social trends, however, the social order based on standard employment relations, the male breadwinner model and social security in defined but exceptional circumstances, has changed. New social risks have emerged and are often mutually reinforcing. Different groups of individuals are likely to respond to these risks differently. The development of new risks, or the additional complexity of those risks already existing, raises key questions for social policy. In order to address these issues, the OECD held a seminar in Paris on 31 May and 1 June 2007 to develop responses to these emerging challenges. The fundamental policy question addressed in the seminar was whether the current designs of social protection systems in OECD societies are well-suited to contemporary life-course realities. The seminar looked in detail at recent policy developments in OECD countries to develop more flexible time-based social policies, as well as related issues, such as asset-based welfare programmes, as well as policies to encourage redistribution of income and/or time over the life course and how these might be structured most effectively.

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