

UNICEF
Innocenti Research Centre

Report Card 8

The child care transition

**A league table of early childhood education
and care in economically advanced countries**

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Full text and supporting documentation, including two background papers to this report, can be downloaded from the UNICEF Innocenti Research Centre website: www.unicef-irc.org

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UNICEF Innocenti Research Centre
Piazza SS. Annunziata, 12
50122 Florence, Italy
Tel: (+39) 055 20 330
Fax: (+39) 055 2033 220
florence@unicef.org
www.unicef-irc.org

UNICEF
Innocenti Research Centre

A great change is coming over childhood in the world's richest countries.

Today's rising generation is the first in which a majority are spending a large part of early childhood in some form of out-of-home child care.

At the same time, neuroscientific research is demonstrating that loving, stable, secure, and stimulating relationships with caregivers in the earliest months and years of life are critical for every aspect of a child's development.

Taken together, these two developments confront public and policymakers in OECD countries with urgent questions.

Whether the child care transition will represent an advance or a setback – for today's children and tomorrow's world – will depend on the response.

Fig. 1 Early childhood services – a league table

This *Report Card* discusses the opportunities and risks involved in the child care transition, and proposes internationally applicable benchmarks for early childhood care and education – a set of minimum standards for protecting the rights of children in their most vulnerable and formative years.

The table below shows which countries are currently meeting the suggested standards, and summarizes this first attempt to evaluate and compare early childhood services in the 25 OECD countries in which data have been collected.

Benchmark		1	2	3	4	5	6	7	8	9	10
	Number of benchmarks achieved	Parental leave of 1 year at 50% of salary	A national plan with priority for the disadvantaged	Subsidized and regulated child care services for 25% of children under 3	Subsidized and accredited early education services for 80% of 4 year-olds	80% of all child care staff trained	50% of staff in accredited early education services tertiary educated with relevant qualification	Minimum staff-to-children ratio of 1:15 in pre-school education	1.0% of GDP spent on early childhood services	Child poverty rate less than 10%	Near-universal outreach of essential child health services
Sweden	10	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Iceland	9		✓	✓	✓	✓	✓	✓	✓	✓	✓
Denmark	8	✓	✓	✓	✓		✓	✓	✓	✓	
Finland	8	✓	✓	✓		✓		✓	✓	✓	✓
France	8	✓	✓	✓	✓	✓	✓		✓	✓	
Norway	8	✓	✓	✓	✓			✓	✓	✓	✓
Belgium (Flanders)	6		✓	✓	✓		✓			✓	✓
Hungary	6		✓		✓	✓	✓	✓		✓	
New Zealand	6		✓	✓	✓	✓	✓	✓			
Slovenia	6	✓	✓	✓		✓	✓				✓
Austria	5		✓		✓	✓		✓		✓	
Netherlands	5		✓	✓		✓	✓	✓			
United Kingdom*	5		✓	✓	✓	✓	✓				
Germany	4		✓		✓		✓	✓			
Italy	4		✓		✓	✓	✓				
Japan	4		✓		✓	✓					✓
Portugal	4		✓		✓	✓	✓				
Republic of Korea	4		✓			✓	✓				✓
Mexico	3		✓			✓	✓				
Spain	3				✓	✓	✓				
Switzerland	3					✓		✓		✓	
United States	3			✓			✓	✓			
Australia	2			✓			✓				
Canada	1						✓				
Ireland	1						✓				
Total benchmarks met	126	6	19	13	15	17	20	12	6	10	8

*Data for the United Kingdom refer to England only.

THE CHILD CARE TRANSITION

A great change is occurring in the way in which children are being brought up in the world's economically advanced countries. After centuries of being a predominantly private, family affair, the care of very young children is now becoming, in significant degree, an out-of-home activity in which governments and private enterprise are increasingly involved. Today's rising generation in the countries of the OECD* is the first in which a majority are spending a large part of their early childhoods not in their own homes with their own families but in some form of child care.

The change is far from complete and its pattern varies from country to country. But there is no doubting the overall scale and direction of the transition. Approximately 80 per cent of the rich world's three-to-six year-olds are now in some form of early childhood education and care. For those under the age of three, the proportion using child care is now approximately 25 per cent for the OECD as a whole and more than 50 per cent in individual countries (Fig. 2). Across the industrialized nations, out-of-home child care is a fact of life for ever more children at ever earlier ages and for ever longer hours.

* The Organisation for Economic Co-operation and Development, the international organization of the industrialized market-economy countries.

In the last decade many OECD countries have also begun to see sharp rises in the numbers of infants – those under the age of one year – being cared for outside the home. Statistics for this age group are few. But in the United Kingdom,** for example, a majority of mothers are now returning to full or part time work within 12 months of giving birth.ⁱ Similarly in the United States, more than 50 per cent of under-ones are in some form of child care – three quarters of them from the age of four months or earlier and for an average of 28 hours per week.ⁱⁱ In Flemish Belgium, more than a third of infants are entering some form of child care within the first year of life.

Fig. 2 provides the best available nation-by-nation snapshot of the current picture. For four-year-olds, 16 out of the 24 countries for which data are available have passed the 75 per cent mark for pre-school enrolment. In Belgium, France, Italy, and Spain, enrolment of four-year-olds is now virtually 100 per cent. For children under the age of three, Denmark and Iceland have the highest rates of enrolment (around 60 per cent).

These data should be interpreted with care. The percentages given reflect

** Unless otherwise stated, data for the United Kingdom refer to England only.

neither the quality nor the availability of the services offered. The figure for the United Kingdom, for example, refers to children using free early childhood education centres for two and a half hours per day (available for nine months of the year); the figure for Sweden, by contrast, refers to full working-day services (available, should parents wish, for 11 months of the year). It should also be emphasized that these data freeze what is in fact a rapidly changing picture.

Driving change

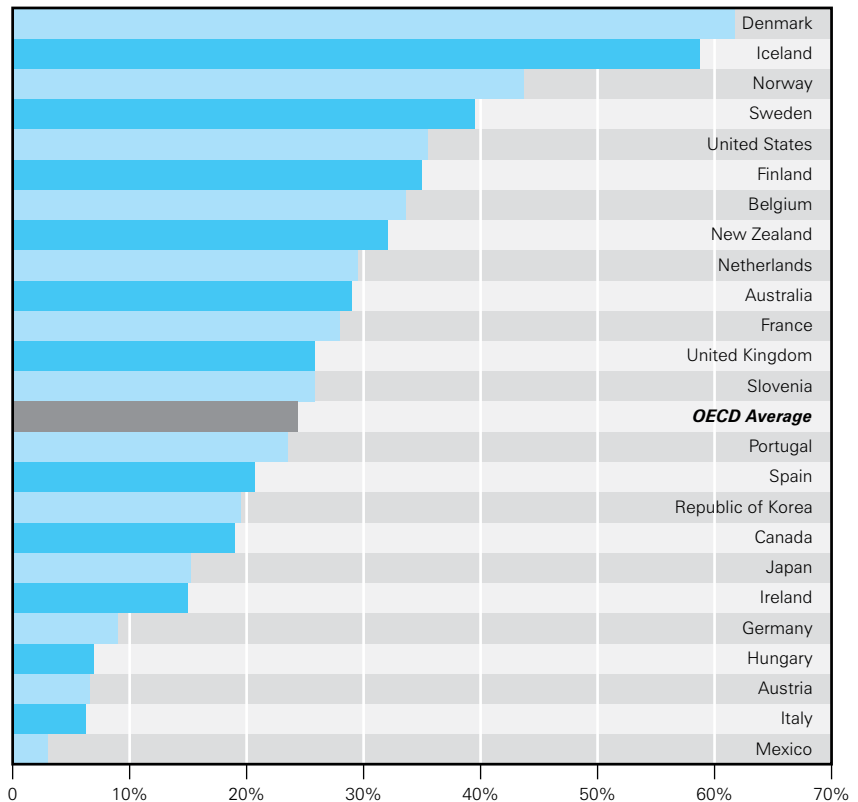
The forces driving the child care transition are as evident as the change itself.

First, more than two thirds of all women of working age in the OECD countries are today employed outside the home. Many are postponing childbearing by a decade or more compared with mothers of previous generations and many have well-established careers to take into consideration. In as much as this reflects progress towards equality of opportunity for women, it is cause for celebration. But in as much as it represents mounting economic pressures, it is cause for concern. Even among the well-paid, two incomes are often necessary if housing and other expenses are to be met. Among the low-paid, a family of two adults and two children will usually need a

Fig. 2

The child care transition, an overview

Figs. 2a, 2b, and 2c provide the best current picture of the transition to child care in those OECD countries for which data are available. Unfortunately, no internationally comparable data are available for enrolment under the age of one year.

Fig. 2a Enrolment of 0-3 year-olds in child care

Source: OECD Family database and OECD Education database (2004).

minimum of one full-time and one part-time job (at the minimum wage) just to stay above national poverty lines. Most single parents need a full time job plus benefits. And the poorer the family, the greater the pressure to return to work as soon as possible after a birth – often to unskilled, low-paid jobs. For many millions of mothers, therefore, rising employment pressures reflect not new opportunities but new necessities.

Second, this great change in childhood is being driven by economic pressures on governments; more women in the workforce boosts GDP, increases income from taxes, and reduces welfare costs.

Third, an increasingly competitive, knowledge-based global economy is helping to convince both governments and parents that pre-school education is an investment in future academic success and employment prospects (Box 2).

Fourth, some OECD countries have come to see child care services as a prop to falling birth rates. “If Europe is to reverse its demographic decline,” noted the European Commission in 2005, “families must be further encouraged by public policies that allow men and women to reconcile family life with work.”

For all of these inter-related reasons, the child care transition is everywhere being facilitated by public policy. All countries in the European Union, for example, now guarantee at least two or three years of pre-school. European Union leaders have agreed that by 2010 they should be providing free or subsidized full day-care for at least 33 per cent of children under the age of three and for 90 per cent of those aged three-to-six.* In the United States there is at the moment no statutory right to pre-school education before the age of five, but in practice more than 60 per cent of America’s 10

* Targets already met by Belgium (Flanders), Denmark, Finland, Iceland, Norway, and Sweden.

million pre-school children are in some form of early childhood programme. “Pre-school enrolments,” says the US National Research Council, “are large, growing, and here to stay.”

These, in brief, are some of the forces pressing both governments and families in OECD countries towards radically new patterns of child care. And despite significant differences in policy and practice, it is clear that the industrialized nations as a whole are moving not only towards out-of-home care for a significant percentage of infants and toddlers but also towards systems of universal education that begin not with formal schooling at the age of five or six but with early childhood education beginning at the age of three.

Given such pressures, there is a clear danger that the child care transition may follow a course that is determined by the needs and pressures of the moment, uninfluenced by long term

Fig. 2b Enrolment of 4 year-olds in early education

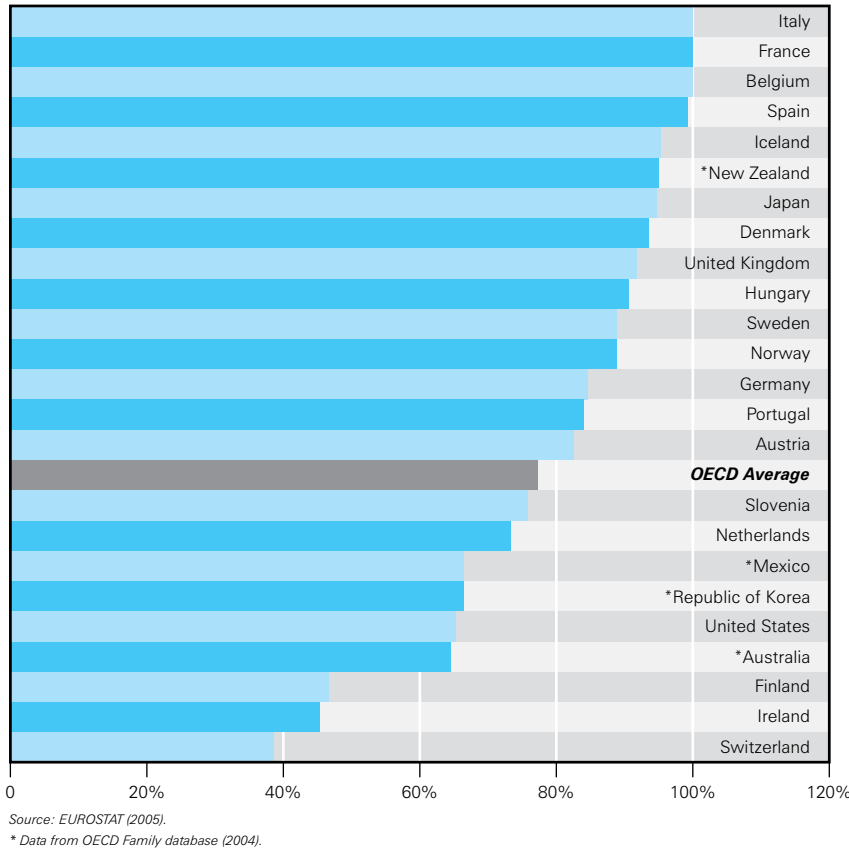
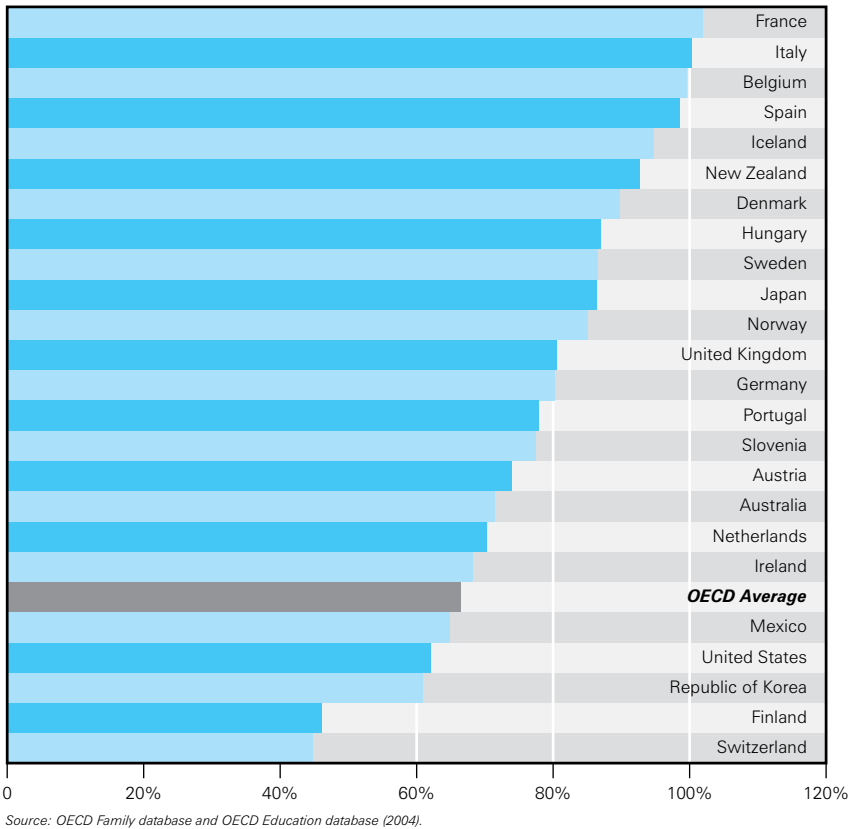


Fig. 2c Enrolment of 3-6 year-olds in early education



vision or choice. This *Report Card* therefore attempts a broad view of the changes coming over child care in the industrial world and highlights some of the longer-term opportunities and risks inherent in changing, on such a scale, the way in which a majority of our children are being cared for in their most formative years.

In particular, it looks at this great change from the one point of view that is in danger of being neglected and that is so clearly set out in article 3 of the Convention on the Rights of the Child – that in all actions concerning children “*the best interests of the child shall be a primary consideration.*”

A parallel revolution

At the same time as this great change in childhood has been stealing across the industrialized world, a parallel revolution in understanding the importance of early childhood has been quietly unfolding in the less public arena of neuroscientific research.

Box 1 summarizes some of the key concepts to emerge from this research. They include: the sequence of ‘sensitive periods’ in brain development; the importance of ‘serve and return’ relationships with carers; the role of love as a foundation for intellectual as well as emotional development; the fostering of the child’s growing sense of agency; the ways in which the architecture of the developing brain can be disrupted by stress; and the critical importance of early interactions with family members and carers in the development of stress management systems. New technologies and new research tools are beginning to illuminate these processes in more detail, and have led to a widespread conviction that what is now known to the neuroscientific community should be made more widely known to politicians, press and public.

For present purposes, the chief import of such findings is that it is the child's early interactions with others, and particularly with family and caregivers, that establishes the patterns of neural connections and chemical balances which profoundly influence what we will become, what we will be capable of, and how we will respond to the world around us. Working within the potential of genetic inheritance, it is early experience that is the architect of the human brain, putting in place both the foundations and scaffolding

for future development. *"All aspects of adult human capital, from workforce skills to cooperative and lawful behavior, build on capacities that are developed during childhood, beginning at birth,"* concludes a recent report by the US National Scientific Council.ⁱⁱⁱ

In other words, neuroscience is beginning to confirm and explain the inner workings of what social science and common experience have long maintained – *that loving, stable, secure, stimulating and rewarding relationships*

with family and caregivers in the earliest months and years of life are critical for almost all aspects of a child's development.

In relation to the change currently coming across childhood in the economically developed world, the significance of these findings can hardly be overestimated. This report will argue that it is the coming together of these two different developments – the mass movement towards out-of-home child care and

Box 1 Neuroscience: serve and return

At the heart of recent research into the development of the human brain is something that seems about as far away from hard science as it is possible to get. The way that most parents respond to babies – the baby-talk, the back-and-forth smiling and gurgling, the repeating of sounds, words, gestures, the besotted rejoicing over every small step in the infant's progress – all this does not lend itself easily to scientific analysis. Yet it is exactly this kind of intimate, loving one-to-one interaction that, along with adequate nutrition, constitutes the essential input to the child's emotional, physical and cognitive development.

In an attempt to describe this process in more scientific terms, researchers have developed terms such as 'maternal/paternal sensitivity/responsivity', 'mutuality' and 'reciprocity'. They also frequently employ analogies such as 'the dance of mutual responsiveness' or 'the serve and return process'. This last, for example, is described in *The Science of Early Childhood Development* by the Center on the Developing Child at Harvard University:

"'Serve and return' happens when young children naturally reach out for interaction through babbling, facial expressions, words, gestures, and cries, and adults respond by getting in sync and doing the same kind of vocalising and gesturing back at them, and the process continues back and forth. Another important aspect of the 'serve and return' notion of interaction is that it works best when it is embedded in an ongoing relationship between a child and an adult who is responsive to the child's own unique individuality. Decades of research tell us that mutually rewarding interactions are essential prerequisites for the development of healthy brain circuits and increasingly complex skills."¹

A second core concept is the identification of 'sensitive periods' in the sequential development of the human brain. Each of these periods is associated with specific areas of neurological circuitry and with specific human abilities. And each builds on the circuits and skills laid down in the previous period. It is this process that sets the stage for all future cognitive and emotional development – a stage that is either sturdy or shaky depending on the kind and quality of interactions with primary caregivers in the earliest months and years of life.

Related to this is the finding that care and education are not separate processes. The close emotional interaction between parent and child is as essential for intellectual as for emotional development. Purely didactic efforts – aimed at developing a child's cognitive abilities – are likely to undermine what they seek to promote if emotional needs are neglected. The study *Eager to Learn*,² for example, concludes that *"Care and education cannot be thought of as separate entities in dealing with young children. ...Neither loving children nor teaching them is, in and of itself, sufficient for optimal development."*

Research has also drawn attention to the importance of stress levels in the early months and years of life. According to Professor Jack Shonkoff, Director of Harvard University's Center on the Developing Child, excessive levels of stress hormones *"literally disrupt brain architecture."*

Too much or too prolonged stress at this time – and the lack of a familiar, trusted adult to provide the prompt, intimate reassurance that helps bring stress hormones back to baseline levels – can result in a mis-setting of the

today's greater understanding of what is happening to the human brain in the early months and years of life – that now present public and policymakers with large and urgent questions. Whether the child care transition will represent an advance or a setback – both for today's children and tomorrow's world – will depend on the wisdom of the response. That response must begin with increased concern for, and closer monitoring of, this great change as it gathers momentum

and begins to spread to other parts of the world.*

Benchmarks

As a contribution to this process, this *Report Card* advances the idea of an internationally applicable set of minimum standards by which the rights of young children might be protected as the transition to child care gathers momentum.

* It should be noted that the former centrally-planned economies of Eastern and Central Europe invested heavily in child care facilities in the decades before 1990.

The 10 benchmarks suggested, drawn up in consultation with government officials and academic experts and from OECD countries in Asia, Europe, and North America, with additional input from both UNICEF and the World Bank,** represent a first attempt towards evaluating and comparing early childhood services in

** The cooperation of governments in this initiative is much appreciated. It is recognized that governments can accept no responsibility for the interpretation of the information supplied or for the selection of the benchmarks themselves. The information provided by governments is complemented by official data supplied to the OECD, and by further discussions with academic experts at national level.

Core concepts

"Four core concepts important to devising sound social policy toward early childhood have emerged from decades of independent research in economics, neuroscience, and developmental psychology. First, the architecture of the brain and the process of skill formation are influenced by an interaction between genetics and individual experience. Second, the mastery of skills that are essential for economic success and the development of their underlying neural pathways follow hierarchical rules. Later attainments build on foundations that are laid down earlier. Third, cognitive, linguistic, social, and

emotional competencies are interdependent; all are shaped powerfully by the experiences of the developing child; and all contribute to success in the society at large. Fourth, although adaptation continues throughout life, human abilities are formed in a predictable sequence of sensitive periods, during which the development of specific neural circuits and the behaviors they mediate are most plastic and therefore optimally receptive to environmental influences."

Heckman J. J, 'Skill Formation and the Economics of Investing in Disadvantaged Children', *Science*, vol. 312. no. 5782, pp. 1900-1902, 30 June 2006.

brain's stress levels. In particular, the persistent elevation of the stress hormone cortisol is known to be damaging to the delicate architecture of the developing brain, and is related to stress-related illness in later life. Mental health requires stress management systems that boost the level of the stress hormones in response to perceived threats and reduce them again when the challenge has passed. Beginning even before birth, it is in early childhood that these chemical balances are set.

Finally, research has also drawn attention to the child's emerging sense of 'agency' – the feeling of being able to influence events and situations. If this is encouraged by adult responses, then motivation, confidence and competence will tend to flourish. If it is not reinforced, or if it is actively discouraged by negative reaction or punishment, then these essential aspects of psychological development are likely to be compromised.

For all of these reasons, the relationship between infants and parents or primary caregivers is critical to the child's emotional, psychological and cognitive development. Developmental and behavioural problems – often

continuing into later life – most commonly arise from disturbances in that relationship.³

All of this has clear implications for the care and upbringing of very young children. And in the transition towards early childhood education and care, it is essential that findings such as those described here should become part of political and public awareness.

1 National Scientific Council on the Developing Child, *The Science of Early Childhood Development: Closing the gap between what we know and what we do*, Center on the Developing Child at Harvard University, Cambridge MA, 2007, p. 6.

2 National Research Council, *Eager to Learn: Educating our pre-schoolers*, Committee on Early Childhood Pedagogy, Bowman, B. T., M. S. Donovan and M. S. Burns (eds.); Commission on Behavioral and Social Sciences and Education, National Academy Press, Washington, D. C., 2001, p. 2.

3 National Research Council and Institute of Medicine, *From Neurons to Neighborhoods: The science of early childhood development*, Committee on Integrating the Science of Early Childhood Development, Shonkoff, J. P. and D. A. Phillips (eds.), Board on Children, Youth and Families, Commission on Behavioral and Social Sciences and Education, National Academy Press, Washington, D.C., 2000, p. 28.

the 25 countries in which data have been collected. The resulting benchmarks table (Fig. 1) shows which of those countries are currently meeting the suggested standards and which are not.

Overall, Sweden tops the table by meeting all 10 benchmarks, followed closely by Iceland which meets 9, and by Denmark, Finland, France, and Norway which meet 8. Only three countries – Australia, Canada, and Ireland – meet fewer than 3.

At this stage, there is an inevitable crudeness about such a table, born of the fact that the selection of indicators and the evaluation of country performance are circumscribed by the availability of data. A number of important caveats are therefore necessary:

- The benchmarks represent basic minimum standards rather than a guarantee of high quality early childhood services.
- They relate, for the most part, to out-of-home, centre-based child care rather than to informal, home-based or neighbourhood day-care centres.
- They take no account of other significant services such as social welfare programmes, home visiting programmes designed to reach out to children at risk, or programmes aimed at supporting good parenting.
- They offer no measure of parental involvement in early childhood services.
- They are directed towards what governments can do to ensure that the child care transition is managed in the best interests of both children and their societies' futures.

This last point is particularly important. It is parents who carry the

main responsibility for the education and care of their children, and in the OECD countries today parents are making use of a wide variety of informal and often unrecorded child care arrangements (Box 3). Those arrangements are largely beyond the scope of this report – except to note that that new knowledge about the importance of the early childhood period applies to all forms of early childhood education and care; today, care without education is not care.

Common standards

Despite these limitations, the proposed benchmarks represent an initial step towards an OECD-wide monitoring of what is happening to children in the child care transition. If this process can be continued, and refined through better definition and data collection, then there is much to be gained.

First, the benchmarks begin the process of establishing a common core of minimum standards for early childhood services. In fields such as health care, employment law, and the education of older children, common standards have stimulated and supported sustained progress. Backed by good data, cross national monitoring can: highlight the strengths and weaknesses of individual countries; illustrate what can and should be expected from advanced economies; show what leading countries have been able to achieve in practice; and direct attention towards the importance of managing the child care transition rather than allowing its course to be determined only by short-term pressures.

Second, the establishing of benchmarks is a step towards monitoring the Convention on the Rights of the Child as it applies to very young children (Box 6). Child rights do not begin at the age of five;

yet the rights of very young children have often been overlooked and accountability is not possible without a clear set of minimum standards for early childhood services.

Third, the proposed benchmarks may increasingly become useful to non-OECD nations in which the child care transition is already underway. The indicators proposed are likely to be relevant for most countries, although the particular values attached to such indicators might need to be recalibrated in order to reflect different economic levels and different stages in the development of early childhood services.

The positive potential

Despite the concerns that will be raised in this report, it should be said from the beginning that the move towards early childhood education and care brings with it an enormous potential for good. Box 2 briefly summarizes several of the studies that demonstrate this potential.

For the children themselves, child care can mean enjoying and benefiting from interaction with other children and with child care professionals. Cognitive, linguistic, emotional, and social development can be enhanced, and the effects appear to be long-lasting. For immigrant and 'second language' children, good quality child care can help with integration and language skills and reduce disadvantage on entry into the formal education system (Box 5). For many millions of women, child care can erode one of the last great obstacles to equality of opportunity. For many millions of parents, child care can help reconcile the competing demands and pleasures of income-earning and family life. For national economies, the availability of child care that allows parents to return to work can increase GDP and public revenues, cut poverty rates, reduce

welfare budgets, and boost returns on public investments in education.

Most important of all, early childhood education and care also offers an opportunity for societies to attempt a further significant reduction in poverty, inequality, and disadvantage.

As previous reports in this series have shown, educational disadvantage is strongly associated with home background and becomes measurable even before formal schooling begins. Three-year-old children of more educated parents, for example, often have double the vocabulary of children from poorer, less educated homes and are significantly more likely to achieve higher qualifications by the age of 15.^{iv}

Potentially, the transition to early childhood education and care could help to break this cycle; it could help to give all children, not just the winners in the lottery of birth, a strong start in life. And in so doing, it could help to reduce the educational, developmental and behavioural problems that are so often faced by disadvantaged children and their societies.

Common sense – and a significant body of research – supports the idea that extending the benefits of good quality early education and care to *all* children tends to reduce disadvantage. In a detailed review of the costs and benefits in OECD countries, for example, Canadian researchers Cleveland and Krashinsky found that: *“Although early childhood education and care benefits all children, much of the evidence suggests that the largest benefits flow to children from the most disadvantaged families...good childcare can compensate, at least partially, for a disadvantaged home life.”^v*

Similarly, a report by the US National Research Council concludes that child

care can *“protect children from family-based risk”* and from *“the detrimental effects of both poverty and maternal depression”* as well as domestic conflict. Carefully designed interventions, says the report, *“have been shown to influence the developmental trajectories of children whose life course is threatened by socioeconomic disadvantage, family disruption, and diagnosed disabilities.”^{vi}*

The same conclusion has been reached by the 2006 review of early childhood services by the OECD: *“Research from a wide range of countries shows that early intervention contributes significantly to putting children from low income families on the path to development and success in school.”^{vii}*

Disadvantaged children can be identified by the *accumulation* of well-established warning signs. Individual ‘at risk’ signals include: a home in which there is persistent poverty and unemployment; or in which parents have little education; or in which there is a history of substance abuse, mental illness or depression; or in which families are struggling to be integrated into the prevailing language and culture. Identification of the at-risk child is therefore not the primary problem. And if the child care transition is to narrow rather than widen inequalities of opportunity, then it is at-risk children who must be given priority in the planning of early childhood services. As a recent (2007) report from the Center on the Developing Child at Harvard University puts the case: *“The need to address significant inequalities in opportunity, beginning in the earliest years of life, is both a fundamental moral responsibility and a critical investment in our nation’s social and economic future.”^{viii}*

The practical difficulties of realising this potential are formidable. Home background is and will continue to be

the single most powerful influence on a child’s development, and even high quality early childhood education and care cannot be expected to compensate fully for poverty or poor parenting. But if disadvantaged children are given first call on early childhood services, if those services are of sufficiently high quality, and if services also reach out to communities with parenting support, then countries undergoing the child care transition have a rare opportunity to mitigate the effects of poverty and disadvantage on the futures of many millions of children.

In practice this will be a long and difficult road. But no challenge makes a more legitimate claim on societies’ ingenuities and resources than the task of using what is now known about early childhood development to ensure that all children have the best possible start and the best possible chance to become all that they are capable of.

Nor can it be convincingly argued that it cannot be afforded. Cost-benefit analyses of early childhood interventions have shown, in different settings, that the returns on early childhood education and care can be as high as \$8 for every \$1 invested. The conclusions from such studies are perhaps best summed up by James Heckman in a landmark article in *Science* (2006):

“Investing in disadvantaged young children is a rare public policy initiative that promotes fairness and social justice and at the same time promotes productivity in the economy and in society at large. Early interventions targeted toward disadvantaged children have much higher returns than later interventions such as reduced pupil-teacher ratios, public job training, convict rehabilitation programs, tuition subsidies, or expenditure on police. At current levels of resources, society over invests in remedial skill investments at later ages and under invests in the early years.”^{ix}

Box 2 Benefits: the evidence

Evidence for the advantages of high quality early childhood education and care is accumulating as long-term evaluations become available. Some examples:

Sweden

One of the first long-term studies of the effects of early childhood services was conducted in Sweden in the early 1990s. Based on an assessment of children in 128 low and middle income families in two of Sweden's largest cities, the study concluded that early childhood education and care was associated with an improvement in academic performance at the age of 13. Study director Bengt-Erik Andersson concluded: *"early entrance into day-care tends to predict a creative, socially confident, popular, open and independent adolescent."*

France

A study of more than 20,000 pre-school children found that the longer the child attended pre-school, the more positive the results in all grades of elementary education. Positive effects were lasting – being greater in fifth grade than in first – and the benefits were greatest for children from disadvantaged homes.

United States

A 2005 study of the effectiveness of the *Early Head Start* (EHS) programme in the United States, based on a random sample of over 3,000 families in 17 EHS programmes, has shown that participating children have better cognitive and language development, are more capable of sustained attention, and behave less aggressively towards others.

Surveying all of these and other long-term studies, Canadian researchers Cleveland and Krashinsky conclude:

"Overwhelmingly, these studies have found that good child care can have very positive effects on these children and that these advantages can be long-lasting. In particular, good child care can compensate, at least partially, for a disadvantaged home life."

North Carolina, United States

A generation ago, the North Carolina *Abecedarian Project* enrolled 112 disadvantaged children in a five year, full day, five days a week programme of child care beginning, in some cases, when the children were only three months old.

Those selected for the programme were judged to be at 'high risk of developmental problems'.

Researchers have since followed their progress through school and into adult life. Compared to similar children who did not have the benefit of the programme, the *Abecedarians* showed higher levels of intelligence and school achievement, higher earnings (an additional \$143,000 when projected over a working lifetime), better health, and less dependence on welfare.

With staff-to-children ratios of 1:3 for infants, 2:7 for toddlers, and 1:6 for four and five year-olds, the costs of the project were high (\$14,000 per child in 2002 dollars – higher than the equivalent costs for secondary education). Nonetheless, the experiment is estimated to have yielded a return of \$4 to every \$1 of public money invested.

Ypsilanti, Michigan, United States

The *Perry Pre-school Project* ran from 1962 to 1967 and brought pre-school education to African-American three and four year-olds from poor backgrounds. Most of the children, who were judged to be at high risk of school failure, participated in the project for one year, attending each weekday morning for two and a half hours. Afternoon visits by teachers to the homes of participating children were also a regular part of the programme.

Comparing 64 children who participated in the project with 64 similar children who did not, a long-term evaluation found that the *Perry Project* children had higher IQs, averaged almost a year extra in education, had a 44 per cent higher chance of graduating from high school, and spent an average of 1.3 fewer years in special education services.

Followed up at age 27, they were found to have had a 50 per cent lower rate of teenage pregnancy and were almost 50 per cent less likely to have spent time in jail (with a one third lower arrest rate for violent crime).

Monitored again at age 40, they were found to have a median income that was 40 per cent higher than the control group. They were also more likely to own their own homes and 26 per cent less likely to have received welfare payments.

The *Perry Pre-school Project* was intensively managed and well-resourced. Staff-to-children ratios averaged 1:6, with all staff educated to degree level and trained as public school teachers. Staff also made regular once-a-week home visits to support mothers and to invite their involvement in reinforcing the pre-school curriculum at home. Overall, the cost was approximately \$11,300 per child per year (in 2007 dollars). A 1995 evaluation suggested that the returns – mainly in the form of reduced welfare and reduced costs for coping with crime – amounted to approximately \$7 for every \$1 invested in the project. A further evaluation published in 2006 calculated the benefit-cost ratio (the ratio of the aggregate project benefits over the life of the child to the input costs) at more than \$8 for every \$1 invested.

California, United States

The 2005 report *The Economics of Investing in Universal Preschool Education in California* found that children who attended pre-schools were more likely to graduate from high school, earned higher salaries as adults, and were less likely to become involved in crime. The authors claim that even if only 25 per cent of California's children benefited from universal pre-school education, the state could still expect a return of \$2 for every \$1 invested.

New Zealand

The latest (2004) survey of the *Competent Children Project* in New Zealand shows that 12 year-olds who participated in high quality early childhood education performed better in reading and math. The differences remained even after family income and parental education were taken into account.

United Kingdom

The *Effective Provision of Pre-school Education (EPPE)* is a long-term study of young children's development. Based on a random sample of the UK's child population, the 2003 *EPPE* report concludes that pre-school enhances children's cognitive and social development and that the effects are greatest for disadvantaged children – especially if pre-schools bring together children of mixed backgrounds. Benefits are positively correlated with measures of programme quality and staff qualifications.

Summing up

In a presentation to the United States Congress in 2003, Jeanne Brooks-Gunn, Professor of Child Development at Columbia University, New York, summarized the benefits of early childhood education as follows:

- High quality centre-based programmes enhance the school-related achievement and behaviour of young children.
- These effects are strongest for poor children and for children whose parents have little education.
- Positive benefits continue into late elementary school and high school years, although effects are smaller than they were at the beginning of elementary school.
- Programmes that are continued into primary school, and that offer intensive early intervention, have the most sustained long-term effects.
- If properly linked to other services, early childhood services can be expected to deliver additional outcomes, such as enhanced maternal employment, less family poverty, better parenting skills and greater family and community cohesion.

These and other studies on the effectiveness of early childhood education and care are summarized and referenced in chapter III of the background paper to this report – Early Childhood Services in the OECD Countries, *Innocenti Working Paper 2008-01* (www.unicef-irc.org).

The potential for harm

Alongside the potential for good, it will be equally evident that the transition to child care also brings with it the potential for harm.

Box 1 shows that, for babies and infants, a lack of close interaction and care with parents can result in the mis-setting of the body's stress management systems in ways that can make it more difficult for the child to regulate his or her responses to the world. In some instances, and for some children, the long-term effects may include depression, withdrawal, inability to concentrate, and other forms of mental ill health. In a larger number of less obvious cases, the result is likely to be less than optimal cognitive and linguistic development and underachievement in school.

Concern has also been expressed about whether child care may weaken the attachment between parent and child, and whether it may not be putting at risk the child's developing sense of security and trust in others. Doubts have also been raised about possible long-term effects on psychological and social development, and about whether the rise of child care may be associated with a rise in behavioural problems in school-age children.

Today, a number of long-term studies are beginning to clarify these issues. The earliest of these – initiated in 1991 by the US National Institute of Child Health and Human Development (NICHD) – has monitored the child care experiences and later outcomes of over 1,300 children in the United States. Overall, the study found that child care was associated with relatively small differences, negative or positive, on either abilities or behaviours. However, it noted among its conclusions:

“The more time children spent in child care from birth to age four-and-a-half, the more adults tended to rate them...as less likely to get along with others, as more assertive, as disobedient and as aggressive.”^x

This negative association appears to be related to the length of time spent in child care and holds good whatever the quality of the care experienced; but it is worth repeating that the effects recorded were not large and that the quality of parenting was found to be a far more significant influence than time spent in child care (indeed negative effects were not found at all in children who benefited from good parenting).

Some have argued that the effects noted in the NICHD study are too small to be significant. Others have countered that even a small but widespread rise in aggressive and disruptive behaviours could have significant effects on classroom ethos, on the difficulties faced by teachers, and on the learning environment for all children.

Europe's first major long-term study was launched in 1997 in the United Kingdom with the aim of tracking the progress of over 3,000 children from age 3 to age 7. In its final report – *Effective Provision of Pre-school Education* – the study found that pre-school education for three and four year-olds improved both cognitive and social skills, but noted that *“high levels of ‘group care’ before the age of three (and particularly before the age of two) were associated with higher levels of anti-social behaviour at age 3.”^{xi}*

The degree to which such findings are relevant to countries other than the United Kingdom and the United States is debated. But as yet, few other countries have conducted long-term studies on the effects of child care.

Penelope Leach, child care specialist for more than four decades and co-director of another large-scale UK study – *Families, Children and Child Care* – offers the following overview of the evidence to date:

“It is fairly clear from data from different parts of the world that the less time children spend in group care before three years, the better. Infants spending as little as 12 hours a week in day nurseries... showed slightly lower levels of social development and emotional regulation (less enthusiastic cooperation, concentration, social engagement and initiative) as toddlers. ... Somewhere after two years, as the children begin to relate more to each other than to the adult, then high-quality, group-based care becomes an unequivocal benefit.”^{xii}

At present, therefore, the most important generalization to be made is that the younger the child and the longer the hours spent in child care the greater the risk. In particular, long hours of child care for those under the age of one year is widely regarded as inappropriate. Inadequate care at this most critical of all stages may result in weak foundations and shaky scaffolding for future learning; and what is true of cognitive and linguistic skills is also true of psychological and emotional and development.

Overall, there is a broad consensus that child care that is ‘too early and for too long’ can be damaging.

Responses of governments

In sum, the two-way potential of the large-scale movement to out-of-home child care poses a challenge to all parents and to all countries currently going through the child care transition.

Most OECD governments have responded by formulating policy and investing public resources in the provision of early childhood education

and care. In almost every industrialized country, support for parents in the bringing up of children is now regarded as a duty of governments and is explicitly recognized as such by the Convention on the Rights of the Child which almost all OECD countries have ratified (Box 6). Article 18 of the Convention states, for example, that governments should “render appropriate assistance to parents and legal guardians in the performance of their child-rearing responsibilities and shall ensure the development of institutions, facilities and services for the care of children.” The Convention also calls on all governments to “take all appropriate measures to ensure that children of working parents have the right to benefit from child-care services and facilities for which they are eligible.”

The approach to the task, however, varies considerably from country to country. In some, early childhood services are as well established and well funded as primary schools. In others, they are often muddled in purpose, uneven in access, patchy in quality, and lacking systematic monitoring of access, quality, staff-to-children ratios, or staff training and qualification. According to the 2006 OECD review *Starting Strong* for example: “Much of the child care sector is private and unregulated, with staff training and pedagogical programming being particularly weak. ... Early childhood services are particularly important for children with diverse learning rights... however, programmes for their benefit are often irregular, under-funded and non-inclusive.”

From the point of view of the child, this is clearly unsatisfactory. And from the point of view of society as a whole, the stakes are simply too high for the mass movement towards out-of-home child care to be seen as just another shake of the kaleidoscope in the rapidly changing lifestyles of advanced industrial economies.

It is therefore a clear responsibility of OECD governments to monitor the child care transition. The results of that monitoring are an essential input to the debate that should be taking place on this issue among political leaders, child care professionals, press and public in all economically developed societies.

Action at the national level is the most important part of this process. The benchmarks proposed, discussed in more detail below, seek to make a contribution to this process from a cross-national perspective.

The benchmarks

The benchmarks set out in Fig. 1 have been selected to represent key attributes of early childhood services. Inevitably, the choice of such indicators is influenced by the likely availability of unambiguous, internationally comparable data. For each indicator, a value has been chosen as a minimum acceptable standard for OECD countries. While attempting to keep the rights of children front and centre, the values selected attempt to recognize the realities facing both parents and governments.

Existing data were then used to part complete a questionnaire for 24 OECD countries plus Slovenia.* The questionnaire was then sent to the relevant departments of the 25 governments for review, feedback, and further analysis. The result of this process is presented in Fig. 1.

The 10 benchmarks fall under the broad headings of policy framework (1 and 2), access (3 and 4), quality (5, 6, 7 and 8), and supporting context (9 and 10).

* Slovenia is not yet a member of the OECD. Along with Chile, Estonia, Israel, and the Russian Federation, it has been given the green light for the accession talks to begin. Other references to ‘25 OECD countries’ should also be interpreted as ‘24 OECD countries plus Slovenia’.

The benchmarks are:

1. A minimum entitlement to paid parental leave

The minimum proposed standard is that, on the birth of a child, one parent be entitled to leave of at least a year (to include pre-natal leave) at 50 per cent of salary (subject to upper and lower limits). For parents who are unemployed or self-employed, the income entitlement should not be less than the minimum wage or the level of social assistance. At least two weeks parental leave should be specifically reserved for fathers.

2. A national plan with priority for disadvantaged children

All countries going through the child care transition should have undertaken extensive research and evolved a coherent national strategy to ensure that the benefits of early childhood education and care are fully available, especially to disadvantaged children (see discussion below). This dimension of early childhood services cannot currently be assessed and compared in a satisfactory way. Rather than omit such a critical factor, benchmark 2 records, as a proxy measure, whether governments have at least drawn up a national plan for the organization and financing of early childhood services.

3. A minimum level of child care provision for under-threes

The minimum proposed is that subsidized and regulated child care services should be available for at least 25 per cent of children under the age of three.

4. A minimum level of access for four-year-olds

The minimum proposed is that at least 80 per cent of four-year-olds participate in publicly subsidized and accredited early education services for a minimum of 15 hours per week.

5. A minimum level of training for all staff

The minimum proposed is that at least 80 per cent of staff having significant contact with young children, including neighbourhood and home-based child carers, should have relevant training. As a minimum, all staff should complete an induction course. A move towards pay and working conditions in line with the wider teaching or social care professions should also be envisaged.

6. A minimum proportion of staff with higher level education and training

The minimum proposed is that at least 50 per cent of staff in early education centres supported and accredited by governmental agencies should have a minimum of three years tertiary education with a recognized qualification in early childhood studies or a related field.

7. A minimum staff-to-children ratio

The minimum proposed is that the ratio of pre-school children (four-to-five year-olds) to trained staff (educators and assistants) should not be greater than 15 to 1, and that group size should not exceed 24.

8. A minimum level of public funding

The suggested minimum is that the level of public spending on early childhood education and care (for children aged 0 to 6 years)

should not be less than 1 per cent of GDP.

These eight proposed benchmarks are supplemented by two further indicators designed to acknowledge and reflect wider social and economic factors critical to the efficacy of early childhood services.

9. A low level of child poverty

Specifically, a child poverty rate of less than 10 per cent. The definition of child poverty is that used by the OECD – the percentage of children growing up in families in which income, adjusted for family size, is less than 50 per cent of median income.

10. Universal outreach

To reinforce one of the central tenets of this report – that early childhood services should also be available to the children of disadvantaged families – this last benchmark attempts to measure and compare demonstrated national commitment to that ideal. As no direct measure is currently possible, the suggested proxy measure is the extent to which basic child health services have been made available to the most marginalized and difficult-to-reach families.

Specifically, the benchmark of ‘universal outreach’ is considered to have been met if a country has fulfilled at least two of the following three requirements: a) the rate of infant mortality is less than 4 per 1,000 live births b) the proportion of babies born with low birthweight (below 2,500 grams) is less than 6 per cent and c) the immunization rate for 12 to 23 month-olds (averaged over measles, polio and DPT3 vaccination) is higher than 95 per cent.

Critical issues

The 10 benchmarks have been drawn up with a core of critical questions in mind:

- At what age can out-of-home education and care begin to benefit children?
- If today’s knowledge suggests that children under the age of one are best cared for by parents, what policies can best support today’s parents in that task?
- What should be the underlying aims and priorities of early childhood services?
- How is quality in early childhood education and care to be defined and monitored?
- What systems can make available high quality services to all and ensure that disadvantaged and at-risk children are included?
- Is the wider social and economic context supportive? Or are early childhood services being asked to row upstream against powerful currents of child poverty, persistent disadvantage, and family-unfriendly policies in the economy and workplace?

Parental leave

The question of the appropriate age at which early childhood education and care can be of benefit to children is one of the most controversial issues in the child care debate. Many see nothing wrong with out-of-home child care beginning at three months – providing that the care is of an acceptable quality. Others consider that the critical developmental needs of the first year of life demand nothing less than the constant, loving, one-to-one interaction of parental care. And for millions of working parents in OECD countries, this is a question that must be answered under pressure of career demands and household budgets. It is

therefore a question that is almost inseparable from the issue of parental leave entitlement (Benchmark 1 and Box 3).

All but two OECD countries – Australia* and the United States – currently provide an entitlement to some form of *paid* leave to employed parents following the birth of a child. The average duration of that entitlement in OECD countries, at varying levels of pay, is now approaching one year (including pre-natal and maternity leave).

But within individual countries, different views on the ‘age question’ have been one factor contributing to very different policies and practices.

In the United Kingdom and the United States, for example, a majority of children under the age of one year are now in some form of child care for a substantial portion of each working day. Australia also appears to be moving in the same direction. By contrast, in Finland, Norway, and Sweden, out-of-home care is now a rarity during the first year of a child’s life.

Where parents themselves have the choice – and the support to make that choice real (Box 3) – they have tended to vote with their feet. In the Sweden of 20 years ago, for example, infant care was heavily subsidized and widely used. But with the introduction of 12 months parental leave at 80 per cent of salary,** the use of nurseries declined steeply and child care is today rare for Swedish children under the age of 18 months (fathers and mothers are each

entitled to 60 days parental leave with a further 360 days available to either parent.)

Box 1 summarizes recent neuroscientific support for extended and well remunerated parental leave entitlements. In brief, such entitlements, in addition to supporting breastfeeding, help to create the conditions for the constant, intimate, reliable, reassuring, one-to-one interaction with parents that all infants need. It may be argued that it is not only parents who are able to meet such needs; but even if this point were to be conceded in principle, there are clearly enormous practical and financial difficulties in recruiting, training, remunerating, retaining, and supervising the large numbers of skilled staff that would be needed to guarantee adequate care and stimulation for the under-ones. And in countries where out-of-home infant care is becoming the norm, it is impossible not to question whether today’s knowledge of the critical developmental needs of the very young child is being fully taken into account.

In the light of both neuroscientific advances and recent experience, it would therefore seem that the interests of the very young are best served by policies that make it easier for at least one parent to care for the child during the first 12 months of life. Accordingly, the value of the first benchmark – parental leave entitlement – has been set at a level of one year’s leave at 50 per cent of earnings (subject to a floor for low-income parents and a ceiling for the more affluent).

In line with the Convention on the Rights of the Child, which states that governments “*shall use their best efforts to ensure recognition of the principle that both parents have common responsibilities for the upbringing and development of the child*”, several OECD countries have brought in an additional ‘fathers only’

entitlement to parental leave. Usually short and paid at 100 per cent of salary, such leave is available on a ‘use it or lose it’ basis. In support of this, benchmark 1 is not considered to be met unless at least two weeks of paternal leave is also specifically provided for.

As Fig. 1 shows, the parental leave benchmark is currently met by 6 of the 25 OECD countries for which data are available. Iceland is the only Nordic country to fall short of the required standard.

Box 3 offers a more detailed picture by attempting to compare *effective* parental leave entitlements in OECD countries (weighting the length of leave by the proportion of salary paid).

Unfortunately, even generous parental leave entitlement may fail to benefit many of the OECD’s most vulnerable children. New parents on low incomes are usually under severe economic pressure to return to work. And those whose employment is informal and unregulated are of course ineligible for parental leave entitlement. In part, this deficiency is compensated for by benchmark 9, which reflects efforts to support low-income families.

Finally, generous parental leave entitlements and return to work guarantees need to go hand-in-hand with support for employers, and especially for small businesses, which may otherwise be reluctant to employ or promote women of childbearing age.

Defining aims

Most experts and most long-term studies agree that the effects of early childhood education and care, for most children, become unequivocally positive at some point between the ages of two and three – providing that the hours are not too long and that

* Under Australia’s Workplace Relations Act (1996), permanent employees who have 12 months continuous service with an employer have a minimum entitlement to 52 weeks of shared unpaid parental leave following the birth or adoption of a child. In practice, many employed parents in both Australia and the United States have the right to paid parental leave under the terms of their employment. In addition, all new parents in Australia are entitled to a one-off birth payment which is currently the most generous in the OECD.

** The period of parental leave entitlement in Sweden qualifies as employment in the calculation of retirement and pension rights.

Box 3 Effective parental leave: a league table

The table (right) presents a more detailed comparative picture of parental leave entitlements for those in formal employment. Its measure is the level of ‘effective parental leave’ – calculated by weighting the duration of leave by the percentage of salary offered.

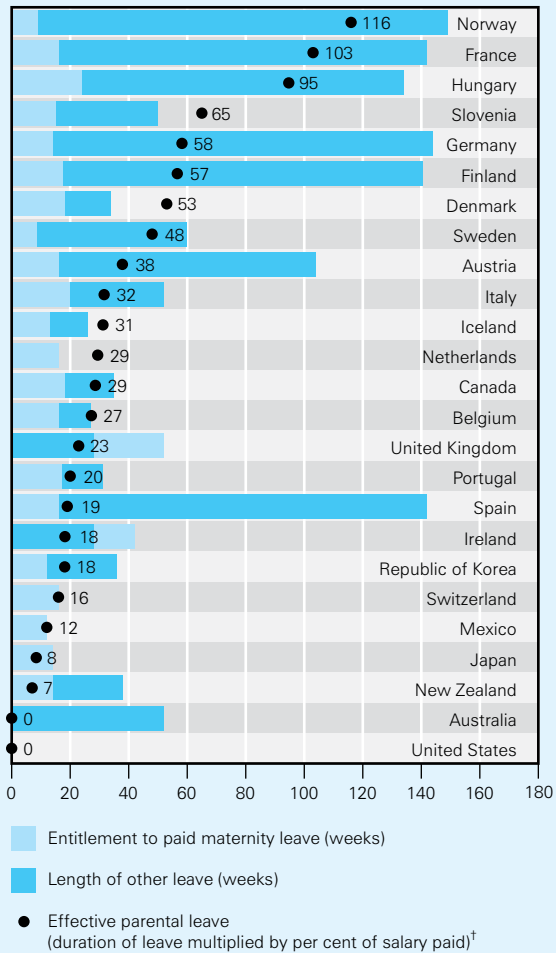
The resulting league table reveals striking differences between countries, with the index running from a high of 116 in Norway to a low of 0 in Australia and the United States. Overall, the level of effective parental leave entitlement in Norway and France, for example, is more than five times higher than in Australia, Ireland, Japan, Mexico, New Zealand, Portugal, the Republic of Korea, Spain, Switzerland, and the United States.

The weighting in the table takes into account that countries adopt different approaches. New mothers in the United Kingdom, for example, are entitled to a year’s maternity leave at tapering rates of pay: the first six weeks are paid at 90 per cent of salary (after which a further 33 weeks are available at a flat rate of €133 (\$202)* per week followed by an entitlement to 13 weeks of unpaid leave. In Iceland, by contrast, parental leave entitlement is shorter (39 weeks)** but divided equally between maternity leave, paternity leave and parental leave (available to either parent); each of these 13 week entitlement periods is paid at 80 per cent of earnings up to a ceiling of €6,000 (\$9,112) per month with a minimum of €630 (\$957) per month (which is also paid to women taking leave from part-time work).

Other countries offer even longer entitlements to parental leave at lower levels of pay. Finland, France, Germany (paid for one year only), Hungary, Norway, and Spain (unpaid), for example, offer leave entitlements until the child’s third birthday if parents choose not to use early childhood services (these leave entitlements are included in the above table).

In sum, remuneration as well as duration is critical to the impact of parental leave entitlements on the childbearing and child caring decisions of parents. Although in some ways a means and measure of continued progress towards the goal of equality of opportunity for women, leave that is ‘too long and too maternal’ can undermine progress towards gender equality, as extended leave may make the return to work more difficult for both mothers and employers.

Effective parental leave



Source: Bennett (2008), updated from Moss & Wall (2007).

† Effective parental leave = duration of leave multiplied by per cent of salary paid. For example, 40 weeks replaced by 100 per cent of earnings has a coefficient of 40; at 50 per cent of earnings, a coefficient of 20.

Please note that the calculations are approximate as some countries offer a percentage of salary while others offer only a percentage of average or minimum wage.

These figures must be interpreted with caution. In Canada and the European Union, for example, the figures reflect statutory rights to parental leave; in Australia and the United States, on the other hand, there is no legal entitlement to paid parental leave and the ratings given are a reflection of what usually happens in practice. In the case of the Republic of Korea, the figure reflects entitlements which, in practice, are not taken up by the majority of mothers.

* Based on the €/ \$ exchange rate as at 4 March 2008.

** The extension of parental leave to one year is currently under discussion in Iceland.

the quality of care can be assured. But before looking at the critical issues of access and quality, important differences in the underlying aims of early childhood education and care should be made explicit.

In most OECD countries it is now widely accepted that the earliest years of life are a time of extraordinary opportunity, a time when skill builds on skill and the foundations are laid for future cognitive and social development (Box 1). The older and narrower concept of child care as a means of liberating parents for employment is therefore giving way to a more child-centred approach and an emphasis on the quality of care available.

Nonetheless, quality is being interpreted in different ways.

In France, the United Kingdom, and the United States, for example, early childhood education and care tends to be seen primarily as preparation for success in school. In countries such as Denmark, Finland, Norway, and Sweden, more ambitious aims are being embraced. The prevailing view in the Nordic countries is that the earliest years of life are a critical opportunity not only for the development of cognitive and linguistic skills but also for the social skills of self-regulation and a developing awareness of the emotions, needs, and rights of others. The planning of early childhood services, including the training of staff and the development of curricula, reflects these concerns. Early childhood education and care is therefore conceived as an investment not only in success at school but in society and citizenship.

No clear correlation can yet be established between different systems of early childhood education and later outcomes. But it is worth noting that a

broader approach to early childhood education does not appear to disadvantage the Nordic countries when it comes to later academic achievement. Finland and Sweden, for example, despite rejecting the ‘schoolification’ of the early years and delaying the beginning of primary school education until the age of seven,^{*} regularly top international league tables for academic achievement at age 15. Finnish 15 year-olds outperform the students of every other industrialized country in average levels of proficiency in maths and science and are outperformed in literacy only by pupils in the Republic of Korea. It is also worth noting that educational disadvantage – whether measured by the proportion of students who fail to reach a certain minimum standard or by the gap between the lowest achievers and the average – is lower in Finland than in any other OECD country.^{xiii}

These differences in fundamental approach to early childhood education and care do not easily lend themselves to measurement. Benchmark 2 therefore adopts a less ambitious approach. It asks whether countries have researched and published a national plan for early childhood services, and whether that plan includes a strategy for ensuring that the benefits of early childhood education and care are available to disadvantaged children. Perhaps unsurprisingly, 19 of 25 OECD countries are able to answer ‘yes’ to this question, though not Australia, Canada, Ireland, Spain, Switzerland, or the United States.

Targeted services

Beyond these fundamental considerations, OECD governments are also faced with a wide choice of strategies and systems for financing and

* At age six, Finnish and Swedish children begin a ‘transition’ or preparatory school-readiness year. Until then, early education focuses primarily on social and emotional development and play-based learning.

delivering early childhood services that are accessible to all at an affordable cost. Should services be targeted or universally available? Free to all, or subsidized according to family income? Delivered by government agencies or private providers? Financed directly by funding providers or via vouchers or cash benefits to enable parents to purchase child care in the market place?

To promote equity while containing costs, many OECD countries have decided that public spending on early childhood education and care should be concentrated, at least initially, on the poorest families. Otherwise, it is argued, resources will be spread too thinly and the benefits, instead of promoting equity, will accrue largely to the better off. For these reasons, large scale programmes such as *Head Start* in the United States and *Sure Start* in the United Kingdom are targeted towards disadvantaged groups (and include both centre-based care and parental support programmes).

There are, however, arguments against basing early childhood services only on targeting particular groups of children.

First, universal early childhood services have many of the same advantages as universally available education for older pupils; in particular, universal services tend to bring together children from different backgrounds rather than reinforcing concentrations of disadvantage. This is widely recognized as being of significant benefit to all children, and is regarded by many governments as means of preventing social exclusion.

Second, universally available services usually command broader and more sustainable public support and engender greater public concern for quality. Too often, services for the poor have meant poor services.

Third, universal systems can still give priority to disadvantaged children by channelling additional funds to child care centres that serve low income children or children with special educational needs. Incentives can also be provided to help steer the most capable teachers to the most disadvantaged children.

Fourth, children at risk of developing behavioural or learning problems are to be found in all socio-economic groups rather than being confined to certain geographical areas. Programmes targeted only on the basis of income or geography may fail to reach the smaller proportion – but often larger absolute number – of vulnerable children who fall outside the target area. It has been estimated, for example, that the *Head Start* and *Sure Start* programmes in the US and the UK are currently reaching only about a third to a half of their intended target groups (though this is in part a result of inadequate funding rather than targeting strategies *per se*).

These arguments suggest that where possible the way forward lies down the road adopted by countries such as the Netherlands – universal services, but with flexible financing systems that can give priority to the disadvantaged by increasing per capita expenditures where need is greatest.

Private provision

Basic differences in approach are also evident in the strategies by which different OECD governments fund and deliver early childhood services, whether targeted or universal.

A mix of private and public child care services is available in most countries. But some governments lean towards free or subsidized services run directly by government or government-funded providers, while others favour private provision of child care services

subsidized either directly by government or indirectly by vouchers or tax breaks to enable parents to purchase child care from private providers. In many OECD countries, the not-for-profit sector is also a major provider of early childhood services and in many cases has led the way in promoting community involvement and investment. It is clearly important that such services meet the quality standards laid down by governments; but given that proviso, the not-for-profit sector will continue to be critical in increasing availability, affordability, choice, and quality in the provision of early childhood services.

There are also strong arguments for partnership with private enterprise in the provision of early childhood services: it can inject competition, encourage innovation, reduce bureaucracy, widen parental choice, attract investment, and reduce the cost to the taxpayer. Private providers also tend to be quicker to launch services and to respond to parents' wishes. In principle, private services can be made affordable to all via vouchers or other forms of subsidy. Licensed private providers of child care services can then be monitored to ensure compliance with standards of access, quality, training, and staff-to-children ratios (for example requiring private child care centres to accept all children from a given geographical area, including those with special needs). Finally, it can also be argued that parents are more likely to be able to decide what is best for their children than governments.

For all of these reasons, the culture of public-private partnership has become established in many OECD countries, and many private providers of child care offer high quality services.

There are also arguments against the private provision of early childhood

services. Consistent monitoring and enforcement of standards can be both expensive and fallible. Some private providers are tempted to reduce less visible costs such as training, pay, and conditions of work. And staff turnover in for-profit services tends to be higher (a factor which, from the child's point of view, translates into instability of care).

Furthermore, what is offered by private providers of child care is not a consumer product but a child's once-in-a-lifetime opportunity to pass successfully through critical stages of cognitive, emotional, and social development. As UNICEF has argued for many decades and in many contexts, the child's name is 'today'.

This gives rise to two particular problems, both of which have to do with the information available to the consumer. First, the quality of early childhood education and care being provided may not always be evident to parents – either because they have insufficient knowledge of what constitutes 'quality' or because providers fail to communicate adequately the quality of the services they offer. This problem of 'imperfect information', it may be argued, applies to all transactions in the marketplace, it being the responsibility of consumers to keep themselves informed and make correct decisions. But here a second danger arises; poor quality early childhood education and care is not a product that can be returned, repaired, exchanged, or refunded. It may take years for the lack of quality to show its effects; the cause may never become apparent; and the consequences are likely to fall not only on the child but on society as a whole.

No one delivery strategy can be signposted as the ideal way forward. The one clear and common

Box 4 The critics: concerns about child care

Concerns about the child care transition have been voiced by child psychologists and child rights activists in many countries.

One of the most influential critics is Australian psychologist Steve Biddulph, whose books on parenting have sold more than 4 million copies worldwide. Arguing that child care is inappropriate for under-threes, Biddulph centres his attack on the gap between the theory and practice of child care in the many different day-care centres and nurseries he has visited:

"The best nurseries struggled to meet the needs of very young children in a group setting. The worst were negligent, frightening and bleak: a nightmare of bewildered loneliness that was heartbreaking to watch. Children at this age – under three – will want one thing only: the individual care of their own special person.

"It is a matter of balance, of getting the timing right. The first three years of life are those when children are too vulnerable, too much in need of intimate care and all it can offer, to be left to group care by strangers."¹

Oxford psychotherapist Susan Gerhardt, co-founder of the Oxford Parent Infant Project, has also spoken out against child care for the very young.

"What seems to be most crucial for the baby is the extent to which the parent or caregiver is emotionally available and present for him, to notice his signals and to regulate his states

"The baby's mother is primed to do these things for her baby by her own hormones, and is more likely to have the intense identification with the baby's feelings that it is needed, provided she has the inner resources to do so.

"Babies come into the world with the need for social interaction to help develop and organise their brains. If they don't get enough empathetic, attuned attention – in other words, if they don't have a parent who is interested and reacting positively to them – then important parts of their brain simply will not develop as well."

Gerhardt also comments:

"It is not popular these days to spell out how great the responsibilities of parenthood are, since women have struggled desperately to establish themselves as men's equals in the workplace and do not want to feel guilty about keeping their careers or pay cheques going while someone else takes care of their babies."²

The same point has been supported by other commentators, including the Australian human rights lawyer Cathleen Sherry:

"No one has an absolute right to a career – men or women. If you choose to have children, your major responsibility is to care for them properly, and if that affects your career, it affects your career. But no one wants to acknowledge this reality.

"Child care allows men to avoid responsibility for their children. Women have to pay others to look after the children because men aren't willing to cut back on their work hours to do their share of the parenting. If women go back to work, it should be men, not children, who alter their lives accordingly.

"In maternity hospitals, it is no longer the done thing to have newborn babies lined up in a nursery with a couple of nurses looking after them. That is seen as terrible. Mothers are strongly persuaded to have their babies with them 24 hours a day. Yet six weeks later it is OK to put ten of them in a nursery with just two carers. It doesn't make sense."³

1 Biddulph, S., *Raising Babies: Should under 3s go to nursery?*, HarperThorsons, London, 2006.

2 Gerhardt, S., *Why Love Matters: How affection shapes a baby's brain*, Brunner-Routledge, Scarborough (Canada) and New York, 2004.

3 Biddulph, S., op. cit., pp. 32-34.

requirement – whether services are targeted or universal, state run or privately provided – is that significant public subsidy, supervision, and support is necessary if services of the right quality are to be made available to all, and if priority is to be given to disadvantaged and at-risk children.

Overall there would seem to be strong arguments for focusing public policy and public funding on diversely delivered but universally available early childhood services funded and supervised by governmental agencies. This is the broad strategy that has been adopted by almost all OECD governments in response to the educational needs of older children, and there is no reason in principle to pursue a different strategy for early childhood services. *“The evidence suggests,”* says the 2006 OECD *Starting Strong* review of early childhood services, *“that direct public funding of services brings more effective governmental steering of early childhood services, advantages of scale, better national quality, more effective training for educators and a higher degree of equity in access.”*^{xiv}

Nonetheless, publicly funded and universal early childhood services are not a panacea, and do not in themselves guarantee either equitable access or high quality services. Progress towards these key goals needs to be regularly assessed and monitored – regardless of the strategy being pursued. The next group of benchmarks has therefore been selected, within the limits of the available data, to record and compare progress in access and quality in early childhood services across the countries of the OECD.

Access

As has already been seen, governments of OECD countries are approaching the issue of access to early childhood education and care in different ways.

In Europe, many governments provide free and universal pre-school from the age of three (though with considerable differences in hours per week). New Zealand and the Republic of Korea are also rapidly broadening access to early childhood services as, to a lesser extent, are Australia and Japan. Mexico is making significant efforts and has become the first OECD country to make enrolment obligatory from the age of three.

In North America, Canada postpones substantial public investment in education until children reach the age of five. In the United States, where early childhood services are the responsibility of individual states, the picture is changing rapidly. In response to mounting evidence that high quality early education and care can bring significant long-term benefits – from improved school performance and higher earnings to a reduced likelihood of involvement in crime – many states have decided that pre-school programmes should be expanded. The result has been increased funding pressure on the federal government, and a commitment to increased support for pre-schools in 2008.

For children under the age of three, the differences between countries are even more marked. In Finland, Norway, and Sweden, services are organized at community level and are highly subsidized, with parents usually paying no more than 10 per cent to 15 per cent of the costs (with fees waived completely for very poor families). By contrast, the English-speaking countries have generally adopted more market-oriented approaches; parents in Ireland, the United Kingdom, and the United States, often have to meet the full financial cost for children under three.

It should again be stressed that while this report is concerned with governmental responsibility for early

childhood services, the ‘child care gap’ is also being bridged by a myriad of informal and unrecorded arrangements involving grandparents, friends, neighbours, local childminders, and other forms of home-based or neighbourhood group care for young children. Fig. 3 attempts, by an indirect method, to give some idea of the scale of such arrangements. It shows, for example, that in Austria, Canada, Germany, and Ireland about 60 per cent or more of women with young children are in work but that the level of enrolment of children under three in licensed child care is less than 20 per cent.

Overall access to early childhood education and care is therefore difficult to measure and compare. Should ‘access’ be defined only as access to accredited child care centres? Or should other forms of child care such as family day-care, playgroups, and after-school services be included? Should it mean ‘half day’, ‘full day’, ‘all year’ or ‘school year’? And is access free and open to all or fee-paying and subject to eligibility criteria?

The under-threes

For present purposes, these questions are cut through rather than answered by the extremely limited availability of internationally comparable data.

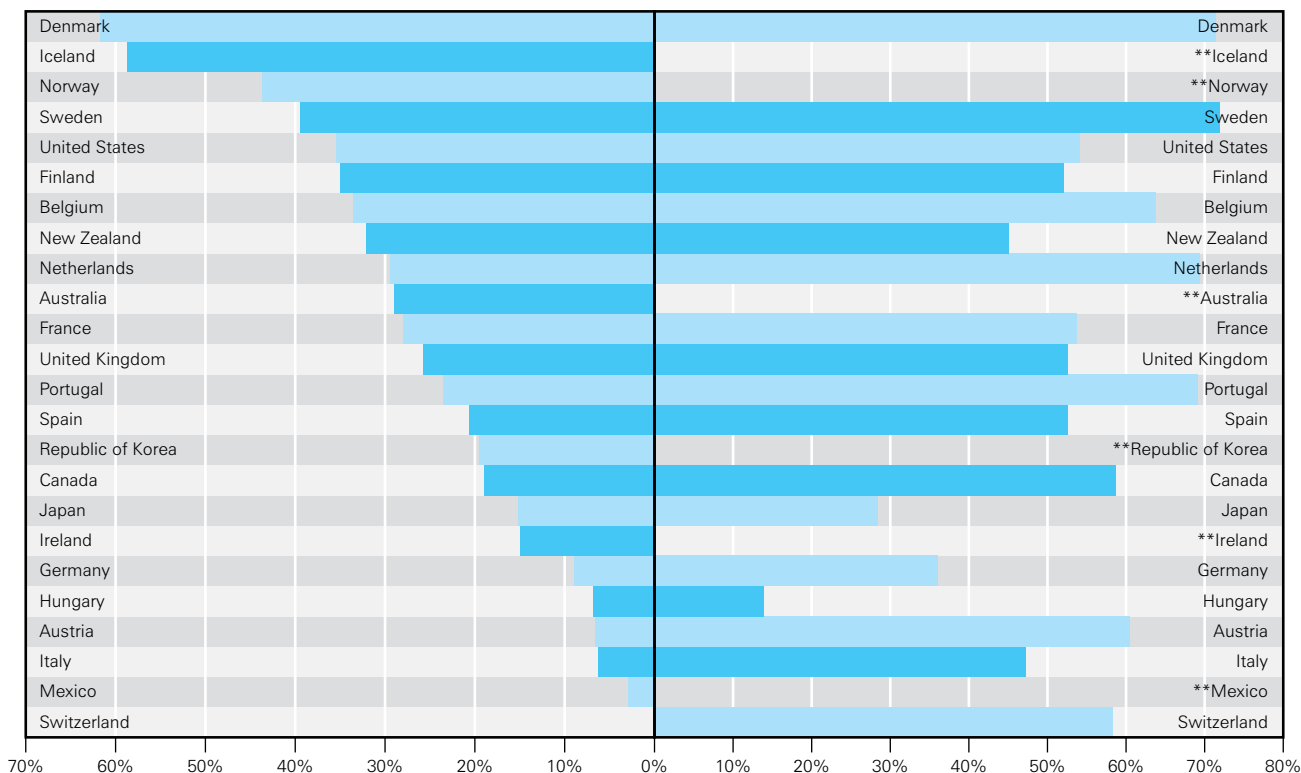
Under the heading of ‘access’, benchmark 3 suggests that *publicly subsidized and regulated* child care services should be available for a significant proportion of children under the age of three. The value attached to this indicator has been set at 25 per cent – a benchmark currently met by just over half of the OECD countries for which data are available. Austria, Canada, Germany, Hungary, Ireland, Italy, Japan, Mexico, Portugal, the Republic of Korea, Spain, and Switzerland all fail to meet this standard (Fig. 1).

Fig. 3 The child care gap

The table allows comparison between the proportion of women with young children who are in work and the proportion of children under three who are enrolled in licensed child care. The 'child care gap' revealed is an approximate indication of the use made of informal child care arrangements.

Enrolment of children 0-3 years in licensed child care, 2004

Employment rates for women with youngest child under the age of 3, 2005



** No data available.

Source for enrolment of children 0-3 years in licensed child care: OECD Family database and OECD Education database. Note: Data for Canada, and Germany, concern 2001; data for France reflect 2002; data for Iceland, Mexico, and Norway concern 2003; and data for Australia, Denmark, the Republic of Korea, and the United States concern 2005.

Source for employment rates for mothers with youngest child 0-3 years: OECD (2007) Babies and Bosses – Reconciling Work and Family Life (Vol. 5); Babies and Bosses (Australia, Australian Bureau of Statistics (2005); 6224.0.55.001 FA2 Labour Force Status and Other Characteristics of Families; Statistics Canada (2001 data), Statistics Denmark (1999 data), Statistics Finland (2002 data), Statistics Iceland (2002 data for women age 25-54), Japanese authorities (2001 data), Swiss LFS (2006 2nd quarter data), UK Office of National Statistics (2005 data), and the US current population survey (2005 data); all other EU-countries, European Labour Force Survey (2005 data), except for Italy which concern 2003).

Many will consider the 25 per cent level too low. First, because it is less than the proportion of under threes currently in licensed child care in the OECD as a whole (if non-subsidized, private child care services are taken into account). Second, it is lower than the 33 per cent target already agreed by leaders of the European Union. But it is important to note that the suggested 25 per cent access benchmark for children under the age of three is not intended as a measure of gross enrolment levels (or as a reflection of labour market needs) and does not include access to unlicensed services, family day-care, or non-subsidized private child care services. It is proposed, rather, as an indicator of

government commitment to *publicly subsidized, well-regulated, high quality child care services that are accessible and affordable to all*. It recognizes that early childhood services for the under-threes are a necessity in countries where a high proportion of women are in work; but it also reflects a respect for parental choice and a recognition that in many countries parental leave entitlements are making it increasingly possible for parents to exercise that choice. Ideally, parental leave entitlements would enable all children to be looked after at home for at least the first 12 months of life, at which point there would be the option of gradually

introducing children to subsidized, high quality child care until the age when formal schooling begins.* The suggested benchmark figure of 25 per cent is intended to reflect government commitment to this ideal. While being a useful basis of comparison, benchmark 3 also has clear limitations. The fact that services are subsidized by the state does not in itself guarantee quality, though experience suggests that the quality of care is likely to be higher if governments finance, monitor, and enforce basic standards of staff training, introducing children to subsidized, high quality child care until the age when formal schooling begins.* The suggested benchmark figure of 25 per cent is intended to reflect government commitment to this ideal. While being a useful basis of comparison, benchmark 3 also has clear limitations. The fact that services are subsidized by the state does not in itself guarantee quality, though experience suggests that the quality of care is likely to be higher if governments finance, monitor, and enforce basic standards of staff training,

* This option is currently available in several of the Nordic countries where children also have a legal entitlement to a place in a local authority early childhood service when parental leave ends.

Box 5 Germany: the children of immigrants

In principle, the transition to out-of-home child care is an opportunity to reduce the disadvantages faced by the children of immigrant families. By promoting integration and the development of language skills, early childhood education and care ought to be able to reduce the barriers that face many immigrant children on entry into the formal education system.

No cross-national comparison of services for the children of immigrant families is yet possible. Even within individual nations, there are wide differences between different kinds of immigrants and between the kinds of disadvantage faced. Some OECD countries, however, are attempting to monitor the progress of children from immigrant families, and to evaluate the contribution of early childhood education and care.

In Germany, for example, several recent studies have attempted to define the issue more clearly.

Among the chief findings:

On average, children of immigrant families:

- Are at higher risk of growing up in poverty (in one study, the risk of poverty for immigrant children was found to be approximately double that of children with German citizenship).
- Have less knowledge of the German language – a critical factor for social integration and success at school.
- Start school significantly later than German children.
- Obtain (on average) worse grades at primary school.
- Fall further behind in secondary school.
- Are twice as likely to face problems with other children, for example being teased or bullied.
- Have less space and more people in the home and are less likely to have somewhere to study undisturbed.¹
- Are four times more likely to have to repeat grades 1 to 3 of primary school.
- Are more likely than children with German citizenship to be recommended, at age 10, to the *Hauptschule* and less likely to enter the *Gymnasium* or *Realschule*.²
- Are less likely, on leaving school, to enter into vocational training.
- Are more likely to be overweight.
- Make less use of medical services.
- Are less likely than German children to be enrolled in pre-school.

Studies of children from immigrant families who were enrolled in pre-school have shown that:

- The longer immigrant children attend pre-school, the narrower the gap between their German language skills and those of non-immigrant children.
- Attending pre-school improved the school record of immigrant children to the point where they could be considered to have the same educational opportunity as the children of low-income German families (who, in the study concerned, were not found to have benefited significantly from pre-school education).
- Children of immigrants are less likely to be proficient in German if they attend pre-school with a high proportion of children of the same ethnic group.

A number of important caveats:

- Some of the studies drawn upon are small and may not be nationally representative.
- School performance may reflect the poorer homes, poorer neighbourhoods, and less educated parents of many immigrant families. Early childhood services and the efforts of primary schools cannot, acting alone, compensate fully for these structural problems.
- The kinds of schools attended by immigrant children may also reflect their socio-economic and residential status.

Note: Information from: Clauss, S. and B. Nauck, 2008, *The Situation of Immigrant Children in Germany, a Literature Review*, a report prepared for the UNICEF Innocenti Research Centre on *Children in Immigrant Families in Rich Countries*, edited by D. Hernandez (forthcoming).

1 When children in Germany were asked to rate their own housing situation on a seven-point scale from 'very bad' to 'very good', the average score for immigrant children was 6.1, little short of the 6.5 average score recorded by non-immigrant children.

2 At the age of 10, children in the German education system are selected for one of three different kinds of secondary school – *Gymnasium*, *Realschule*, or *Hauptschule*. The *Gymnasium* provides the most academic education and has a near monopoly on university entry. The *Realschule* traditionally leads to white-collar training and jobs. The *Hauptschule* has the lowest status, yields the fewest options for further education, and is the usual route to blue-collar work. Few children change track after the initial selection is made.

qualifications, group size, and staff-to-children ratios. Informal child care arrangements, however well intended, may not meet such standards; and the probability is that unsubsidized private services must either charge fees that exclude poorer families or seek economies in staff numbers and training.

Secondly, a 25 per cent access benchmark for the under-threes does not reflect whether or not provision is being made for disadvantaged and vulnerable children – children from the poorest homes, children from immigrant and ‘second language’ backgrounds (Box 5), children whose parents face exceptional problems and pressures, and children who have diagnosed disabilities and special needs. At present, very few countries have national data for benchmarking or comparing this critical factor. This lack of statistics, and of any agreed standard by which access for the disadvantaged might be monitored, therefore remains a salient deficiency in this initial attempt to construct an internationally comparable set of minimum standards for early childhood services.

Older children

For older children, those aged four-to-five, the indicator chosen (benchmark 4) is the level of enrolment in publicly subsidized and accredited pre-schools for a minimum of 15 hours a week.

This is the age, the fifth year of life, when the benefits of pre-school are not in doubt. It is also an age at which almost all parents feel it is right that their children should be in some kind of regular group learning activity that helps prepare them for the beginning of formal schooling.

For these reasons, the value proposed as a minimum standard is an enrolment rate of 80 per cent for children age four-to-five. As Fig. 1 shows, this

benchmark is met by 15 of the 25 OECD countries for which data are available (though, surprisingly, not by Finland)

Most European governments already guarantee a pre-school place to all four year-olds, though the number of hours per week is variable. Other OECD countries are moving at different speeds in the same direction. Ideally, enrolment of four year-olds would be virtually 100 per cent, and there is again a concern that an 80 per cent benchmark might disguise or sanction the fact that the 20 per cent who may not be served are likely to be children from disadvantaged backgrounds. Another obvious inadequacy of the benchmark is that it does not reflect the hours-per-day availability of the services offered – a critical factor for many millions of parents in full time employment.

Benchmark 4 should therefore be read as a signpost rather than a destination.

Quality and staff

Access is of little merit without quality. All OECD governments therefore face a difficult challenge in defining and monitoring quality in early childhood services. Ideally, this is a task that would involve parents and communities as well as child care professionals and academic institutions.

The available research is consistent in finding that the quality of early childhood education and care depends above all else on the ability of the caregiver to build relationships with children, and to help provide a secure, consistent, sensitive, stimulating, and rewarding environment. In other words, good child care is an extension of good parenting. Or, as the already cited US National Research Council report puts it, *“If there is a single critical component of quality, it rests in the relationship between the child and the teacher/*

caregiver, and in the ability of the adult to be responsive to the child.”^{xv}

This, then, is the essence of ‘quality’ – but it is an essence that is patently difficult to measure.

It is, however, possible to measure some known preconditions of quality – principally the availability of sufficient numbers of well trained, well supervised, and well remunerated early childhood professionals. Benchmarks 5, 6, and 7 therefore set out minimum standards for, and compare current national performance against, three of the key, measurable aspects of quality in early childhood education and care.

In general, the picture is not encouraging. The 2006 OECD review *Starting Strong* concludes, for example, that there is often *“a wide pay gap between child care staff and teachers, with child care staff in most countries being poorly trained and paid around minimum wage levels. Not surprisingly, staff turnover in the child care sector is high.”*

In many countries, child care professionals stand at the bottom of the wages ladder and have little in the way of either job security or opportunity for career development.

In some, including Australia, the United Kingdom, and the United States, employment in nurseries and day-care centres is often seen as suitable for those who are very young, unqualified, transient, or all three.

Where pay is low, staff turnover rates tend to be high (30 per cent per year among child care employees in the United States, for example, compared to under 7 per cent for school teachers). *“Such high staff turnover rates,”* comments the US National Scientific Council, *“currently undermine the relationships that young children have with the adults who provide much of their daily care.”*

This is child care on the cheap. And it will not serve.

As a rule of thumb, approximately three quarters of the costs of providing early childhood services are accounted for by salaries. As there is substantial evidence that staff with higher levels of education and more specialized qualifications provide more stimulating and supporting interaction with children, the scope for cost-cutting is therefore limited if quality is to be maintained. Moreover, services that

fall short of the required quality will not deliver benefits and may do harm; they are therefore a waste of money no matter how inexpensive they may be. Worse, from the point of view of the best interests of the child, they squander an opportunity that will not come again.

Benchmark 5 asks that all staff should have at least initial training before taking up employment in early childhood education and care. The suggested 80 per cent value currently

attached to this benchmark applies to all staff working regularly with young children, including neighbourhood and home-based caregivers. If untrained staff have to be employed to cover short-term needs, then an approved induction course in early child care and education should be a statutory obligation. Benchmark 5 also attempts to address the issue of staff quality and turnover by stipulating that pay and conditions in line with those of the teaching or social care professions are at least envisaged.

Box 6 Child rights: in early childhood

“The education of the child shall be directed to the development of the child’s personality, talents and mental and physical abilities to their fullest potential.”

Article 29, Convention on the Rights of the Child

The Committee on the Rights of the Child is charged by the United Nations with promoting and monitoring progress towards world-wide implementation of the 1989 Convention on the Rights of the Child.

Since the Convention came into force in 1990, the Committee has adopted eight General Comments to guide governments in fulfilling their obligations under the Convention. One of these – General Comment No. 7 on Implementing child rights in early childhood – is of particular relevance to early childhood education and care.

General Comment No. 7

General Comment No. 7 stresses that young children have rights from the beginning of their lives. It also acknowledges the special vulnerability of the very young to poverty, discrimination and other adversities that can compromise their rights and undermine their capacities and well-being.

Early childhood is therefore a critical period for children’s rights. All governments are therefore encouraged to work towards fulfilling the rights of the very young through comprehensive policies, laws, programmes, practices, and professional training and research. In particular, the right to education during early childhood is interpreted as beginning at birth.

General Comment No. 7 makes the following points:

- Young children in general must not be discriminated against on any grounds, for example where laws fail to offer equal protection against violence for all children, including young children. Young children are especially at risk of discrimination because they are relatively powerless and depend on others for the realization of their rights.
- Discrimination may take the form of reduced levels of nutrition; inadequate care and attention; restricted opportunities for play, learning and education; or inhibition of free expression of feelings and views. Discrimination may also be expressed through harsh treatment and unreasonable expectations, which may be exploitative or abusive.
- Potential discrimination in access to quality services for young children is a particular concern, especially where health, education, welfare and other services are not universally available and are provided through a combination of State, private and charitable organizations.
- As a first step, the Committee encourages States parties to monitor the availability of and access to quality services that contribute to young children’s survival and development, including through systematic data collection, disaggregated in terms of major variables related to children’s and families’ background and circumstances. As a second step, actions may be required that guarantee that all children have an equal opportunity to benefit from available services.

This benchmark too has obvious weaknesses, being unable to capture the extent or duration of the training required, or the depth of in-service training and support that personnel in early childhood services need, or the determination of governments to implement rather than 'envisage' an upgrading of the child care profession.

Nonetheless, it is significant, and disturbing, that only 17 of the 25 OECD countries surveyed were able to measure up to this relatively

undemanding benchmark. It is also surprising that Denmark and Norway, with otherwise well-regarded early childhood services, fail to reach the 80 per cent minimum level for the initial training of child care staff.

Benchmark 6 reinforces the training dimension of 'high quality care' by stipulating that a minimum of 50 per cent of staff in early education centres, including classroom assistants and all advisers and teachers, should have a minimum of three years tertiary

education, with specialist qualifications in early childhood studies or a related field. As Fig. 1 shows, 20 out of 25 OECD countries were able to meet this standard, the only exceptions being Austria, Finland, Japan, Norway, and Switzerland.

This benchmark, too, has obvious limitations and has had to be interpreted somewhat liberally in order to admit a) countries in which the qualification required is a two year college diploma and b) countries such

- States parties should at all times aim to provide programmes that complement the parents' role and are developed as far as possible in partnership with parents, including through active cooperation between parents, professionals and others in developing "*the child's personality, talents and mental and physical abilities to their fullest potential*" (article 29 of the Convention on the Rights of the Child).
- Early childhood professionals – in both the State and non-state sectors – should be provided with thorough preparation, ongoing training and adequate remuneration. In this context, States parties are responsible for service provision for early childhood development. The role of civil society should be complementary to – not a substitute for – the role of the State. Where non-state services play a major role, the Committee reminds States parties that they have an obligation to monitor and regulate the quality of provision to ensure that children's rights are protected and their best interests served.
- Respecting young children's evolving capacities is crucial for the realization of their rights, and especially significant during early childhood, because of the rapid transformations in children's physical, cognitive, social and emotional functioning, from earliest infancy to the beginnings of schooling.
- Evolving capacities should be seen as a positive and enabling process, not an excuse for authoritarian practices that restrict children's autonomy and self-expression and which have traditionally been justified by pointing to children's relative immaturity and their need for socialization. Parents (and others) should be encouraged to offer 'direction and guidance' in a child-centred way, through dialogue and example, in ways that enhance young children's capacities to exercise their rights, including their right to participation (article 12) and their right to freedom of thought, conscience and religion (article 14).
- In order to ensure that young children's rights are fully realized during this crucial phase of their lives (and bearing in mind the impact of early childhood experiences on their long-term prospects), States parties are urged to adopt comprehensive, strategic and time-bound plans for early childhood within a rights-based framework. This requires an increase in human and financial resource allocations for early childhood services and programmes.
- States parties are encouraged to develop strong and equitable partnerships between the government, public services, non-governmental organizations, the private sector and families to finance comprehensive services in support of young children's rights.

as France, Ireland, and the United Kingdom where a primary school teaching qualification, with no special training in the developmental needs of pre-school children, is all that is required.*

Benchmark 7 focuses on group size and staff-to-children ratios. Specifically, it sets a minimum of one member of staff to every 15 four-to-five year-olds, and a maximum group size of 24. As Fig. 1 shows, only 12 out of 25 OECD countries currently meet this standard.

In many of the countries that fall short of the standard set, significant increases in funding will be required to bring staff-to-children ratios up to 1:15 and group sizes down to a maximum of 24. Mexico, for example, has much to do if it is to meet this benchmark as it rapidly expands pre-school education to its entire child population. But significant increases in spending will also be necessary in some wealthier OECD countries such as Ireland where the youngest children are often assigned to classes with the least favourable staff-to-children ratios.

Acceptable staff-to-children ratios will, in practice, vary with circumstance, including the number of hours per day in child care. But the research shows overwhelmingly that young children need a great deal of one-to-one attention and support – relationships rather than group instruction. It is widely acknowledged that infants and very young children are not ready for group activities; but even in the case of four and five year-olds, smaller groups make it possible to plan activities that are more stimulating and more attuned to each child's interests and stage of development.

* This is one reason why early childhood services in these countries lean towards the 'schoolification' of early childhood education and care, which often means teaching in large groups with little attention given to individual children and their readiness for particular kinds of learning.

Overall, these three 'quality' benchmarks (5, 6, and 7) represent no more than a minimum 'floor' of inputs that are known to be associated with the kind of stimulating, supportive staff-to-children relationships that are the core of quality and good practice in early childhood education and care. Currently, only five OECD countries – Iceland, Hungary, the Netherlands, New Zealand, and Sweden – measure up to all three. Six countries – Australia, Belgium (Flanders), Canada, Ireland, Japan, and Norway – meet only one.

In the nations that fail to meet the minimum quality standard for early childhood services, it may be that a prerequisite of rapid progress is a change in public attitudes. In some countries, it is still widely assumed that little or no training is required for looking after infants and toddlers, that slightly more training may be required for those entrusted with three-to-five year-olds, and that higher level qualifications are necessary only for teachers of older children. Such views are now dangerously out of date.

In practical terms, improvements in pay and working conditions would be an obvious step towards changing attitudes and upgrading the profession, as would integrating early childhood care into the wider teaching and caring professions (as is already happening in Denmark, Finland, and Sweden where child care assistants have the opportunity for further training leading to higher qualifications.) The availability of academic opportunities and qualifications in early childhood education and care would also help to raise the status of the profession and to anchor practice in research and evidence-based policy making.

Finally, it should be noted that higher levels of staff training, improved staff-to-children ratios, and smaller group sizes are of special importance in

centres serving at-risk children and children with special educational needs. Without the extra resources that this requires, it is much less likely that early childhood education and care will make a significant difference to the lives of disadvantaged children.

Budgets

Overall, the level of national commitment to the quality and availability of early childhood education and care is also reflected in the level of public investment in early childhood services.

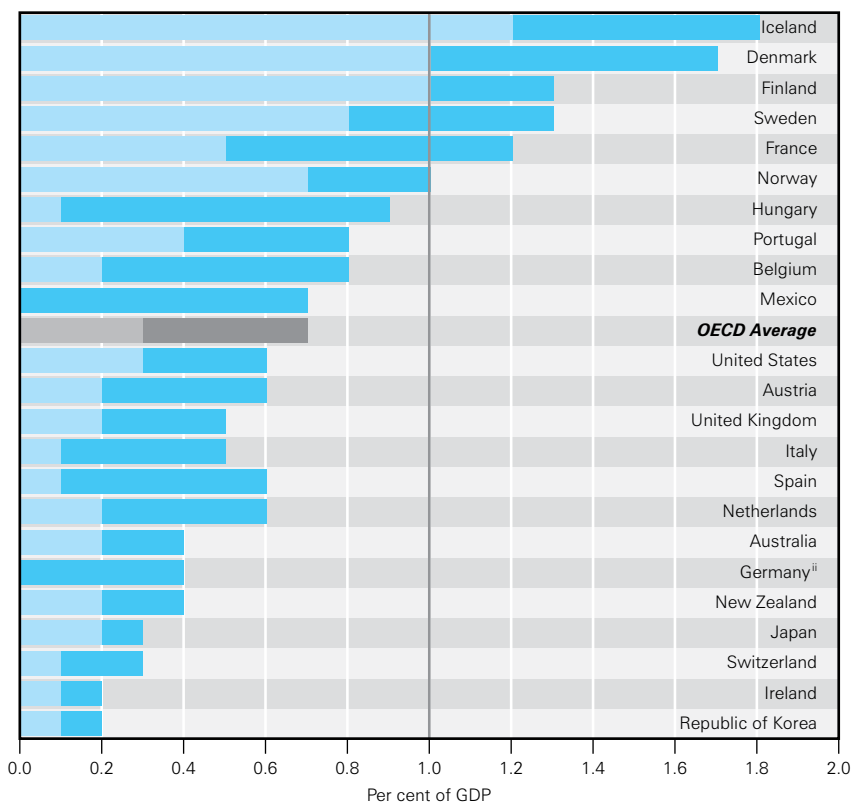
Fig. 4 shows the current level of such spending in the 25 OECD countries for which data are available (not including family benefits or the costs of parental leave entitlements).

Once again, such figures need to be treated with caution; official statistics are not always either clear or uniform in recording what is and is not included under early childhood services.** The figure of 1.3 per cent of GDP given for Sweden, for example, is almost certainly an underestimate (given that pre-schools in Sweden are of high quality and available for many hours per day throughout the working year). An additional concern is that in some cases state and local authority expenditures may be excluded from national level figures. Fig. 4 also fails to capture how quickly the child care picture is changing; in the Republic of Korea and in the United Kingdom, for example, government expenditures on pre-school education, have quadrupled over the last decade.

Overall, Fig. 4 shows that the governments of OECD countries are currently spending an average of

** For specific recommendations on what should be included in government expenditure on early childhood services, under different funding models, see Chapter III of 'Benchmarks for Early Childhood Services in OECD Countries', *Innocenti Working Paper 2008-02*, available at www.unicef-irc.org

Fig. 4
Public expenditure on child care and pre-school education services, per cent of GDPⁱ, 2003



Source: OECD (2007), Social Expenditure database 1980-2003.

ⁱ Not including family benefits or the costs of parental leave entitlements.

ⁱⁱ Germany's low ranking reflects the fact that expenditures on children aged 0 to 3 years are listed at 0 per cent in the OECD Family database from which the data is taken. Federal funds to the Bundesländer are not earmarked for early childhood services; investment is therefore at the discretion of each Land. The new Bundesländer (former East Germany) attain among Europe's highest participation rates (37 per cent) for young children in child care services. In the old Bundesländer (former West Germany), there is significant public investment in child care services, reaching over €10,000 per child per year in some of the larger cities.

0.7 per cent of GDP on early childhood services. More revealingly, it shows that the countries at the top of the overall benchmarks table are spending approximately double the OECD average. Only six OECD countries meet eight or more of the benchmarks (Fig. 1) and they are the same six countries that top the table of government expenditures on early childhood services (Iceland, Denmark, Finland, Sweden, France, and Norway).

The broad conclusion to be drawn from the available data is therefore that many OECD countries need to almost double current levels of expenditure on early childhood services if minimum acceptable standards are to be met.

The same broad conclusion may also be arrived at from the opposite direction – by asking how much high quality early childhood education and care is likely to cost per child. Although few data are available,

experience in the United States suggests that the cost is in the region of \$5,000 per child per year for half-day school-year programmes, rising to approximately \$9,000 per year for full-day school-year programmes.^{xvi} For children younger than three years, requiring higher staff-to-children ratios, the costs will be greater still.

Such figures suggest that the costs per child are likely to be more than is typically spent on the early years of compulsory education. Nonetheless, the overall message of such studies is that programmes that deliver measurable benefits require high levels of staff and training and that there will be little or no benefit from early childhood services that fall below a certain threshold of cost and quality.

There is therefore strong evidence from both macro and micro levels to support the idea that many OECD countries need to double current levels of expenditure if minimum standards for early childhood services are to be met.

In most countries, the extra investment is needed in the critical areas of outreach to disadvantaged children, more extensive staff training, and increases in the hours-per-day availability of early childhood services in order to meet the needs of both children and parents. In countries where the private sector is the major provider of child care services, extra investment will also be needed for setting and enforcing standards and for enabling parents – via subsidies, tax breaks, or voucher schemes – to choose and pay for accredited child care services.

Attempting to take current realities into account, Benchmark 8 sets the required level of government expenditure on early childhood services at a minimum of 1 per cent of GDP. Only 6 of 25 OECD countries for which data are available reach or surpass this mark. Expenditures have not yet exceeded half of this benchmark level in Australia, Ireland, Japan, Netherlands, New Zealand, the Republic of Korea, Spain, and Switzerland.

The wider context

Finally, the adequacy of early childhood services must also be evaluated in the context in which those services operate. However good such services may be, they cannot be expected, acting alone, to break the grip of poverty and social exclusion. Only long-term policies dealing with employment, housing, skills, discrimination, social transfers, and minimum wage levels can reduce entrenched disadvantage. That is why a report from the US National Research Council on early childhood development makes the striking recommendation:

“...Congress should assess the nation’s tax, wage, and income support policies...with regard to their adequacy in ensuring that no child who is supported by the equivalent of a full-time working adult lives in poverty, and that no family suffers from deep and persistent poverty, regardless of employment status.”^{xvii}

The precise mechanisms by which low family income tends to compromise children’s futures are not fully understood. In addition to the strong associations between disadvantage for children and parental education and income, there are also well established links between economic stress and the incidence of depression, mental ill health, poor self-image, and substance abuse (all of which are themselves associated with inadequate, detached, and sometimes harsh parenting). Overall, it is a consistent finding of research, in many different countries, that poverty in childhood is associated with negative outcomes in adolescence and adult life. More than any other variable, it is low family income that is the most reliable predictor of educational, psychological, and behavioural problems.

This makes it impossible to ignore the wider issue of child poverty in any attempt to suggest minimum standards for early childhood services.

Benchmark 9 therefore suggests that child poverty rates need to be brought to a low level if early childhood services are to fulfil their potential. The child poverty rate is here defined as the percentage of children growing up in families whose income, when adjusted for family size, is less than 50 per cent of the median income for the country concerned.^{xviii}

Specifically, it is suggested that the child poverty rate should be lower than 10 per cent. This is in line with *Report Card 6* in this series, which advocated that levels of child poverty in OECD countries should be progressively brought down to below 10 per cent by means of time-bound targets supported by a broad public and political consensus (so that the commitment can be maintained over the long term rather than being dependent on particular political parties).*

Fig. 1 uses the latest data (2008) to show which OECD countries currently meet the proposed benchmark of ‘fewer than 10 per cent of children growing up in poverty’. Of the 25 countries for which data are available, only 10 meet the required standard. Fig. 1 also shows that the ‘low child poverty’ benchmark is met by 8 of the 10 countries at the top of the overall benchmark league table.**

Inclusion

The transition to out-of-home child care represents a major opportunity to

weaken the links between poverty and poor outcomes for children. Extending the benefits of high quality early childhood education and care to all could be and should be a manageable ideal as the child care transition unfolds.

The greater likelihood – and the currently prevailing pattern in many OECD countries – is that the transition to child care will sharpen existing inequalities. In fact such an outcome may be considered inevitable if the transition is managed in such a way that children from disadvantaged backgrounds receive lower quality early childhood education and care. All other things being equal, low-income families are under the greatest pressure to make child care arrangements at the earliest possible time and at the lowest possible cost. In the absence of specific and well resourced policies to bring high quality services to vulnerable children, the movement towards out-of-home child care is therefore likely to add a new twist to the spiral of disadvantage. And if this possibility is not to become a reality, governments will need to plan, deliver, and monitor early childhood services in such a way as to guarantee the inclusion of the disadvantaged. In most cases, this will imply high quality, universally available services subsidized by governmental agencies with flexible budgets and greater concentration of resources, staff and skills in areas of greatest need.

No internationally comparable data are available to measure progress towards such a goal. But in order not to omit this critical factor, benchmark 10 proposes a proxy ‘outreach’ measure. As a guide to each OECD country’s commitment to providing essential services to *all* children, including the poorest and most vulnerable, it looks at the current outreach of basic health care services for children.

* *Innocenti Report Card 6* also suggested that countries which have already achieved the ‘less than 10 per cent’ child poverty target should aim at a figure of 5 per cent or less.

** Unfortunately, data for children of different age groups is not available; the figures given therefore apply to all children and young people up to the age of 17. Further refinement of the benchmarks would be assisted by the availability of data that is specific to children under the age of six.

Fig. 5 Outreach of essential services (benchmark 10)

There is at present no direct way of measuring and comparing the commitment of OECD governments to providing high quality early childhood services for the most disadvantaged families. Benchmark 10 offers a proxy guide by measuring the outreach of essential mother-and-child health services. Setting the bar deliberately high – an infant mortality rate of less than 4 per 1,000 live births, a low birthweight rate of less than 6 per cent, and an average immunization rate of more than 95 per cent – it reveals those OECD countries that are succeeding in reaching even the families who are hardest-to-reach by virtue of poverty, cultural isolation and social exclusion.

Countries in **blue** meet at least 2 of the 3 outreach criteria.

Fig. 5a
infant mortality rates (2005)

Deaths per 1,000 live births	
Iceland	2.3
Sweden	2.4
Japan	2.8
Finland	3.0
Slovenia ⁱⁱ	3.0
Norway	3.1
Portugal	3.5
France	3.6
Belgium (Flanders) ⁱⁱⁱ	3.9
Germany	3.9
Ireland	4.0
Spain	4.1
Austria	4.2
Switzerland	4.2
Denmark	4.4
Italy	4.7
Netherlands	4.9
Australia	5.0
New Zealand	5.1
United Kingdom	5.1
Canada ⁱ	5.3
Republic of Korea ⁱⁱ	6.0
Hungary	6.2
United States ⁱ	6.8
Mexico	18.8

Fig. 5b
low birthweight (2005)

% of births below 2,500 grams	
Iceland	3.9
Finland	4.1
Sweden ⁱⁱ	4.2
Republic of Korea	4.3
Norway ⁱⁱ	4.8
Denmark	4.9
Ireland ⁱⁱ	4.9
Canada ⁱⁱ	5.9
Slovenia ⁱ	6.0
New Zealand ⁱⁱ	6.1
Netherlands	6.2
Australia ⁱⁱ	6.4
Italy ⁱⁱ	6.7
Austria	6.8
France ⁱⁱ	6.8
Germany	6.8
Belgium (Flanders) ⁱⁱⁱ	6.8
Switzerland	7.0
Spain ⁱⁱ	7.1
Portugal	7.5
United Kingdom	7.5
United States	8.1
Hungary	8.2
Mexico	8.8
Japan	9.5

Fig. 5c
immunization coverage 12-23 months (per cent, 2005)

	Measles	Polio 3	DTP 3	average
Hungary	99	99	99	99.0
Japan	99	97	99	98.3
Mexico	96	98	98	97.3
Netherlands	96	98	98	97.3
Sweden	94	99	99	97.3
Finland	97	97	97	97.0
Republic of Korea	99	96	96	97.0
Belgium (Flanders) ⁱ	94	98	98	96.7
Spain	97	96	96	96.3
Slovenia	94	96	96	95.3
France	87	98	98	94.3
Denmark	95	93	93	93.7
United States	93	92	96	93.7
Iceland	90	95	95	93.3
Italy	87	97	96	93.3
Portugal	93	93	93	93.0
Australia	94	92	92	92.7
Canada	94	89	94	92.3
Germany	93	94	90	92.3
Norway	90	91	91	90.7
Switzerland	82	95	93	90.0
Ireland	84	90	90	88.0
United Kingdom	82	91	91	88.0
New Zealand	82	89	89	86.7
Austria	75	86	86	82.3

Source: 2005, OECD Health Data 2007 – Version: October 2007.

Note:

i 2004, OECD Health Data 2007.
ii 2005, World Health Statistics 2007.
iii 2005 Kind en Gezin, Child in Flanders.

Source: 2005, OECD Health Data 2007 – Version: October 2007.

Note:

i 2001, Social Monitor 2003.
ii 2004, OECD Health Data 2007.
iii 2005, Kind en Gezin, Child in Flanders.

Source: UNICEF/WHO estimates 2005.

Note:

i 2005, Kind en Gezin, Child in Flanders.

In order to identify those countries that have demonstrated sustained determination to ensure that even the children of the most marginalized families are reached, benchmark 10 sets the bar high. Specifically, it proposes an infant mortality rate of less than 4 per 1,000 live births, a low birthweight rate of less than 6 per cent, and an immunization rate of more than 95 per cent for 12 to 23

month-old children (for immunization against the major vaccine-preventable diseases of childhood). Countries fulfilling two of these three minimum standards are considered to have met benchmark 10. At present only 8 out of 25 countries do so (Fig. 5) – Finland and Sweden (which meet all three outreach criteria), plus Belgium (Flanders), Iceland, Japan, Norway, the Republic of Korea, and Slovenia.

Many wealthy countries have excellent child health services and extraordinary progress has been made in reducing infant mortality, low birthweight, and vaccine-preventable disease to unprecedentedly low levels. But for the purposes of benchmark 10, what counts is not progress in health services per se but the commitment to reaching *all* children, and particularly those at most risk by

Box 7

The data: a weakness for children

Report Card 8 aims to address an important gap in *Report Card 7 – An overview of child well-being in rich countries* – which compared overall levels of child well-being in 21 industrialized countries. Though deploying a total of 40 separate indicators of well-being, the report carried almost no data on pre-school children and acknowledged that “a particularly important omission is the level of participation by three and four year-olds in early childhood education.”

For the present report, a determined effort was therefore undertaken to begin closing this ‘data gap’.

Nonetheless, difficulties continue, and the selection of benchmarks in this report is heavily circumscribed by the availability of internationally comparable data.

In part, the weakness of the data, even at national level, can be put down to the often private and informal nature of out-of-home child care, and of the decentralised and rapidly changing nature of early childhood services. But in part, also, it reflects a lack of recognition of the importance of the early childhood period and of the need to monitor the services on which millions of young children increasingly depend.

At present, Ministries of Health and Social Affairs typically collect data only on all children under 15, while Ministries of Education collect data on children only when formal schooling begins. Data that relate specifically to pre-school children is much less common.

More broadly, the available data reflect an assumption that children younger than four or five need care as opposed to education – an unhelpful distinction which, institutionalised, tends to downgrade early childhood services. Staff qualifications and training, teaching methods and curriculum, monitoring and evaluation – all are as important in early childhood education and care as they are in education systems serving older children.

virtue of poverty, cultural isolation and social exclusion.

Reducing disparity

The 10 benchmarks proposed should be regarded as a first step towards establishing a common core of minimum standards for early childhood services. Further refinement will depend on commonly agreed definitions, more sensitive indicators, and better data.

At present, no outcome indicators are proposed. Concern and controversy surround currently available methods of evaluating the progress and attainments of the very young, and most authorities question the value of intensive testing for children as young as three.* Further down the line, however, it would be valuable to have a widely agreed means of measuring the extent of the disparities between children’s abilities *at the point of entry into the formal education system*. It would then be possible, in principle, to measure the overall efficacy of early childhood services by the extent to which they succeed in reducing such disparities. This would be difficult, but there is nothing impossible about it. Disparities of this kind have been measured in research projects and pilot studies;^{xix} and what can be measured for the few can be monitored for the many. In recent times, a great deal of effort has been devoted to the monitoring of educational inequalities both within and between OECD nations; but the considerations raised in this report would suggest that such efforts have placed too much emphasis on the finishing line and too little on the starting line.

The question now is not whether early childhood education and care *can* reduce disadvantage and inequality

* Sweden, with long experience of early childhood services, rejects the testing of young children, preferring instead the regular evaluation of child care centres.

of opportunity, it is whether countries will apply what is known in order to achieve this. As the report *From Neurons to Neighbourhoods* concludes:

“The overarching question of whether we can intervene successfully in young children’s lives has been answered in the affirmative and should be put to rest. However, interventions that work are rarely simple, inexpensive, or easy to implement. The critical agenda for early childhood intervention is to advance understanding of what it takes to improve the odds of positive outcomes for the nation’s most vulnerable young children and to determine the most cost-effective strategies for achieving well-defined goals.”^{xx}

This will not be easy. Seeking to support disadvantaged families, and to counter the effects of poverty and risk in the home, is a formidable and expensive task. Any progress will be hard won. Nonetheless, improving the quality of early childhood education and care remains the most potent of all available opportunities for resisting the entrenchment of disadvantage. And without new ways to measure progress towards this goal, the opportunity is likely to be missed. The collection of basic data on such issues as health, educational, and economic trends has for some time been harmonized across the countries of the OECD. It is now time for essential data on early childhood services to be included in standardised data sets. Without definitions there can be no measurement; without measurement there can be no data; without data there can be no monitoring; and without monitoring there can be no evidence-based policy, effective advocacy, or public accountability.

Generating commitment

It will be clear from this overview that early childhood services in many OECD countries are falling short of

what is needed. It is equally clear that if the movement towards out-of-home child care is to fulfil its potential for benefit rather than harm, then the level of debate and investment in availability, quality, and equity will have to be increased not marginally but substantially. In many OECD countries, as performance against benchmark 8 suggests, successfully managing the transition to out-of-home child care will require at least a doubling of current investment levels.

In many of those countries it may be argued that such a significant increase in public spending is not politically feasible. But this may be too pessimistic.

First, there is already a large and growing public demand for high quality, subsidized early childhood education and care.

Second, high quality care – and only high quality care – offers long term benefits to society in the form of increased productivity and incomes and higher returns on investments in education (Box 2).

Third, there is widespread recognition that many of the social, educational and behavioural problems that affect the quality of life in economically developed nations have their origins in poor parenting and disadvantaged backgrounds. As several long-term studies have demonstrated, high quality early childhood education and care can help to prevent or mitigate such problems. The savings to be made for society as a whole – in remedial education, in coping with social exclusion, in responding to antisocial and criminal behaviour, and in the treatment of long-term mental ill health – are likely to be many times greater than the amounts needed to increase investment in high quality early childhood service. In the cost-benefit studies conducted so far,

benefits have commonly been found to outweigh costs by as much as eight to one.

Fourth, there is today no convincing reason for spending less on early childhood education and care than on the educational needs of older children. When children reach the age of five or six, all countries accept high levels of public expenditure on education because the public benefits clearly justify the public costs. Yet in the light of today’s knowledge it is clear that the same case can be made even more convincingly for investments in younger children. Indeed as understanding of early childhood development increases, present patterns of educational investment are coming to seem increasingly anomalous and old-fashioned: where the impact could be greatest, investment is least.

Conclusion

What we are now witnessing across the industrialized world can fairly be described as a revolution in how the majority of young children are being brought up. And to the extent that this change is unplanned and unmonitored, it could also be described as a high-stakes gamble with today’s children and tomorrow’s world.

The trend towards early childhood education and care has enormous potential for good – for giving children the best possible start in life, for limiting the early establishment of disadvantage, for advancing progress towards equality for women, for boosting educational achievement, and for investing in citizenship. Poor quality care, on the other hand, has the potential for both immediate and long-term harm.

Some OECD countries have engaged closely with this issue and put in place policies and investments designed to

realize the potential benefits. In others, the mass movement towards out-of-home child care is proceeding in an ad hoc way with minimal assurances of quality. In such cases, it is the potential for harm that is more likely to be realized.

Ultimately the issue of whether today's children will benefit or suffer from these changes will come down to the availability of effective parental leave and to the availability, affordability, and quality of early childhood services. At the heart of the quality question are child care staff who are well trained, well motivated, well remunerated and well respected in their communities. The evidence from OECD countries to date suggests there are no short-cuts or bargain-basement options that do not compromise children's futures.

In practice, there is a clear danger that the potential benefits of early childhood education will be reserved for children from better off and better educated families while the potential for harm will be visited mainly on children from disadvantaged homes. It is in the poorest families that the pressures for the earliest possible return to work are felt most acutely and in which resources for securing high quality child care are least likely to be found. In the absence of specific

and large-scale action to give special emphasis to high quality early childhood services for at-risk children, 'double disadvantage' is likely to become the norm and the child care transition will become a new and potent source of inequality.

If this is allowed to happen, then an historic opportunity will be lost. Beginning more than a century ago, publicly financed primary and secondary education brought accelerated progress towards equality of opportunity. But in more recent decades, progress towards this ideal appears to have stalled. And it is clear that if further significant gains are to be made then the theatre of action must shift to early childhood. In other words, the rise of early childhood education and care offers a chance to re-accelerate past progress towards a world in which the opportunities of life are not circumscribed by the circumstances of birth. As it has become clear that disadvantage becomes established in the earliest years of life, so it has become necessary to focus our concern on what happens in those early months and years. It is here that action can be taken that will enable all children to become all that they can be. And it is here, if at all, that the self-perpetuating cycle of disadvantage will be broken. ■

NOTES

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Sources and references are provided in the background papers.

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UNICEF Innocenti Research Centre advisors

Marta Santos Pais
Director

David Parker
Deputy Director

Eva Jespersen
Chief, Social and Economic Policies Unit

Marco Kools
Programme Officer

External advisors

Ms. Bea Buysse
Senior Advisor
Kind & Gezin
Brussels, Belgium

Ms. Päivi Lindberg
Senior Planning Officer
STAKES
Helsinki, Finland

Mr. Hans Eirich
Director
Bavarian State Ministry for Labor and Social Affairs, Family and Women
Munich, Germany

Ms. Marta Korintus
Research Director
National Institute for Family and Social Policy
Budapest, Hungary

Ms. Sachiko Kitano
Associate Professor
Fukuoka University of Education
Fukuoka, Japan

Ms. Mugyeong Moon
Research Fellow Director
Korea Institute of Child Care and Education
Seoul, Republic of Korea

Dr. Myunglim Chang
Research Fellow, Director
Korea Institute of Child Care and Education
Seoul, Republic of Korea

Mr. Lars Olof Mikaelsson
Deputy-Director
Education and Culture Department
Division for Schools
Stockholm, Sweden

Ms. Sandra Griffin
Executive Director
National Collaborating Centre for Aboriginal Health
University of Northern British Columbia
Prince George, BC, Canada

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Director of School Education Service
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Lisbon, Portugal

Prof. Hirokazu Yoshikawa
Harvard Graduate School of Education
Cambridge, MA, USA

Ms. Erika Bernacchi
Technical Coordination
ChildONEurope Secretariat
Florence, Italy

Dr. Mary Eming Young
Child Development Knowledge
Lead Specialist
World Bank
Washington D.C., USA

Dr. Nurper Ulkuer
Senior Adviser, Early Childhood Development
UNICEF
New York, NY, USA

External reviewers

Dr. Simon Chapple
Economist, Child Well-Being Project
Organisation for Economic Co-operation and Development
Paris, France

Prof. Patrice Engle
Department of Psychology and Child Development
California Polytechnic State University
San Luis Obispo, CA, USA

Prof. Hirokazu Yoshikawa
Harvard Graduate School of Education
Cambridge, MA, USA

Dr. Joan Lombardi
Chair, Birth to Five Policy Alliance
Washington D.C., USA

Mr. Mark Pearson
Head of Social Policy Division
Organisation for Economic Co-operation and Development
Paris, France

Dr. Nurper Ulkuer
Senior Adviser, Early Childhood Development
UNICEF
New York, NY, USA

Dr. Gerlinde Ziniel
Research Manager
European Foundation for the Improvement of Living and Working Conditions
Dublin, Ireland

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