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Children in the Welfare State. A Social Investment Approach

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Abstract

Children occupy centre-stage in any new welfare equilibrium. Failure to support families may produce either of two undesirable scenarios. We shall see a society without children if motherhood remains incompatible with work. A new family policy needs to recognize that children are a collective asset and that the cost of having children is rising. The double challenge is to eliminate the constraints on having children in the first place, and to ensure that the children we have are ensured optimal opportunities. The simple reason why a new social contract is called for is that fertility and child quality combine both private utility and societal gains. And like no other epoch in the past, the societal gains are mounting all-the-while that families' ability to produce these social gains is weakening.

In the following I analyze the twin challenges of fertility and child development. I then examine which kind of policy mix will ensure both the socially desired level of fertility and investment in our children? The task is to identify a Paretian optimum that will maximize efficiency gains and social equity simultaneously.

Keywords

Families, children, social policy, maternal employment

Note

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Introduction

Do we pursue the right family policies? Do we invest sufficiently in our children? Most parents would probably say no. European welfare states are generally slow to adapt to new circumstances and family policy is no exception. The reluctance to shed the traditional familiastic paradigm is perhaps most evident in the Mediterranean basin, but core attributes of familialism remain very present in all but a handful of countries.

Familialism reflects a traditionalist view of what pro-family policy means. Its roots lie in the subsidiarity principle that was enshrined in the Papal encyclical, *Rerum Novarum* (1891). In post-industrial society, familialism becomes counter-productive because women have redefined their life course, families are more unstable and fragile, 'a-typical' households become the norm, and the male breadwinner is no longer a credible guarantee of adequate living standards. The greatest irony of all is that familialism is now anathema to fertility and family formation.

Since 'family failure' is now to be expected, we need to redefine what family-friendly policy implies. Families face new and often more intense social risks while they increasingly lack the means to cope with them. This results in welfare lacunae unless market or government provision steps in. Market failure is the rule rather than the exception for social welfare. For one, the price of commercial services exceeds most families' ability to pay. Those that most need services are often those, like the poor and young child families, that least can afford them. For another, private welfare incurs serious information asymmetries. If families and markets fail in tandem, public support is, by definition, the last alternative. The basic question, therefore, is whether contemporary welfare states are up to the task.

Children occupy centre-stage in any new welfare equilibrium. Failure to support families may produce either of two undesirable scenarios. We shall see a society without children if motherhood remains incompatible with work. And if parents fail to invest adequately in their children, Europe can definitely say goodbye to its dream of becoming the World's most competitive knowledge economy. Skill requirements are rising rapidly and those with a poor start are likely to see their life chances severely impaired.

A new family policy needs to recognize that children are a collective asset and that the cost of having children is rising. The double challenge is to eliminate the constraints on having children in the first place, and to ensure that the children we have are ensured optimal opportunities (Livi Bacci, 2001; Esping-Andersen, 2002).

Government spending in favour of families varies tremendously across the EU, ranging from almost 4% of GDP in Denmark to half of one percent in Spain. See Table 1. Examining the purchasing power adjusted figures (from Eurostat), Danish per capita outlays are exactly 10 times the Spanish and 3 times the Dutch. Neither is there any coherent trend. Some, like Germany, have increased their efforts in the 1990s while others, notably the Netherlands, are retreating. Dutch per capita spending has

stagnated which implies that it lags behind GDP growth.¹ To be sure, this has been partially offset by more (tax-subsidized) private spending. And tax allowances do not figure on expenditure accounts. Were we to focus on total GDP use rather than solely *public* accounts, the EU nations would look far more convergent.

The simple reason why a new *social contract* is called for is that fertility and child quality combine both private utility and societal gains. And like no other epoch in the past, the societal gains are mounting all-the-while that families' ability to produce these social gains is weakening.

In the following I first examine the twin challenges of fertility and child development. In the second part I turn to the role of welfare reform, posing one basic question: can we identify an optimal policy mix that will ensure both the socially desired level of fertility and investment in our children? The task is to identify a Paretian optimum that will maximize efficiency gains and social equity simultaneously.

Table 1. Public Support in Favour of Families.

	Spending per head Of population In PPS Euros (2002)	Spending as Percent of GDP (2001)
Belgium	575	2.3
Denmark	1050	3.8
France	680	2.8
Germany	750	1.9
Italy	237	1.0
Netherlands	330	1.1
Spain	105	0.5
UK	450	2.2
US		0.4

PPS per capita spending is from Eurostat (ESSPROS) and Spending as a share of GDP is from OECD's SOCX data files.

The Child Deficit

Contemporary fertility falls way short of citizens' preferences. Young adults in all advanced countries express a desire for 2.2 – 2.4 children on average (van de Kaa, 2001; Esping-Andersen et.al., 2005). The preferred number does decline with age, but it is unclear whether this mirrors peoples' resignation to a *fait accompli* or,

¹ The Dutch spending on families fell from 2.5% of GDP in 1980, 1.7% in 1990, to only 1.1% in 2002 – moving the Netherlands from the top to the bottom half of the OECD

alternatively, a more mature and reasoned assessment of what is optimal (McDonald, 2002).

Turning the clock back 30 years, most advanced nations boasted fertility rates well above replacement level: Scandinavia occupied the low end with a TFR of 2.0, France and the Netherlands represented the mean with 2.6, and Spain led the group with almost 3.0. Subsequently, all countries began to slide, most bottoming out in the mid-1980s. The Nordic countries, France, and the US managed a recovery, while others moved to rock-bottom levels of 1.2 (Italy and Spain in particular). Denmark, France, Norway, and the UK are rare examples of stability at middle-range fertility (1.7-1.8). The EU-15 average is a stable 1.5, and the Southern European, a stable 1.2. The picture looks even more dramatic at the regional level. Veneto, Liguria, Galicia and Asturias all have TFR's well below 1.0.

Even fairly minute differences in TFR will have huge effects on long-run population growth. If it remains at 1.3, net population decline is about 1.5 percent per year, cumulatively producing a society that is 25 percent of its original size over 100 years. To illustrate, Spain's population at the end of the 21st Century would fall to 10 million. If, alternatively, the TFR is 1.9, the annual population decline is limited to 0.2 percent, resulting in an end-of-Century population that is 82 percent of its current size (McDonald, 2002).

Immigration can compensate but not much. To offset fertility below 1.6, the annual volume of immigration would need to quadruple (McDonald, 2000; Storesletten, 2000). To exemplify, Italy's annual immigration inflow must rise to 400,000 in order to guarantee a stable population size. Considering that most EU countries seek to limit immigration, such scenarios are not realistic. But even if they were, the compensatory effect of immigration may end up far smaller in the long haul because immigrant fertility eventually converges with that of the native population (OECD, 2000).

Very low fertility may have serious societal consequences. It produces a society of old people and it diminishes growth. Consider the contrasting dependency projections for 2050: in Spain the dependency ratio will jump by 138% (from 24 to 57 percent) and the Swedish by only 36 percent. The OECD estimates that demographic change will lower European per capita income growth from a present of 1.7 to a projected 1.1 percent by 2050 (Sleebos, 2003).²

The contemporary child gap correlates with a host of socio-demographic changes. There has been some rise in childlessness, especially among highly educated career women, and especially in countries where career-family reconciliation is difficult (Gonzalez and Jurado, 2005). See Table 2 below. But much more important is the postponement of first births, a trend that is quite similar across all advanced societies (Gustafsson, 2001). The average age of first births is now 28-29 with Spain edging up towards age 31! Postponed fertility normally implies fewer total births.

² EU (ECOFIN) estimates that aging alone will reduce long-term growth rates by 3/4ths of 1 percent (from a current EU average of 2% to 1.25%).

If delayed fertility were simply period-specific, we would expect a return to ‘normalcy’. But all data suggest otherwise. Delaying first births is part-and-parcel of the new female life course in which education and career-consolidation are *sine qua non*. The question, then, is whether a late start will inevitably thwart citizens’ quest for children. The answer is no, since in some countries women do manage to catch-up despite a late start. The Danish TFR is exactly 50 percent higher than the Italian (1.8 compared to 1.2) even though the average age at first birth is virtually identical. And Sweden’s spectacular fertility boom prior to the 1990s was mainly due to an acceleration of 2nd births (Jensen, 2002; Billari et.al., 2001). As Table 2 shows, women in Denmark, France, and the Netherlands are twice as likely to catch up as are German, Italian and Spanish women. Note, however, that Dutch childlessness is record high.

Fertility rates often average ‘apples and oranges’. In the US, for example, the Hispanic fertility rate is double the ‘white’; in Europe, immigrants boast far greater fertility than natives. There are often large differences between rural and urban women, and female education is usually associated with fewer children. Urbanization, the disappearance of the housewife, and women’s huge gains in education go a long way in explaining the fall in births. As the gender wage gap narrows, fertility may also decline.

Table 2. Childlessness and the Probability of Having a Second Child Within Five Years of the First (Kaplan Mayer hazard rate estimation)

	Percent Women Childless at age 40	Probability of 2nd Child within 5 years
Denmark	12	38
France	9	42
Germany	15	26
Italy	17	25
Netherlands	20	51
Spain	17	24
UK	17	43

Estimated from ECHP

Still, there are counter-tendencies. One, the ‘new’ woman is generally not a careerist but rather one who prefers the ‘dual-role’ model of motherhood and lifelong employment (Hakim, 1996). Both labour supply and child-preferences confirm this. Two, in some countries – notably in Scandinavia – the traditional education-fertility profile is being revolutionized. We now register the highest fertility rates (2+ children) among women with tertiary education, and the lowest among women with only compulsory schooling (Esping-Andersen et.al., 2005). Hence, more female education and employment do not necessarily imply fewer children.

Explaining the Child Gap

There is certainly no dearth of theories. One school of thought emphasizes the historical shift towards ‘post-materialist’ values (van de Kaa, 2001). In this view, children stand in the way of individual fulfillment and liberty. There is no doubt something to this story, at least in terms of portraying a general trend. Public policy would appear irrelevant if this were the *main* explanation,

The values-theory confronts too many empirical inconsistencies, not least the fact that actual fertility falls far short of peoples’ preferences. It is also difficult to reconcile the theory with observed variation. Why would post-materialist sentiments prevail far more in Spain than in Denmark or the United States? Why was low fertility in the 1930s followed by a baby-boom in the 1950s and 1960s? Does the dramatic drop of Swedish fertility in the 1990s reveal a sudden burst of post-materialism?

Values aside, most theories are policy relevant. A common core premise is that low fertility mirrors the tensions that mount when gender roles and family behaviour fail to adapt to the changing preferences of women (McDonald, 2002). In essence, low fertility occurs when women embrace a new life course in a world of traditional familialism. The tensions are related to the rising cost of children and to the barriers to family-work reconciliation. The twain are but different sides of the same coin.

There are direct monetary costs related to children’s consumption. A recent benchmark estimate suggests that the added cost of one child hovers around 20-22 percent on average. But the spread is quite large and educated mothers, especially, tend to spend substantially more (de Santis, 2004; Bianchi, 2004).³ The cost of conventional child consumption (food and clothes) is falling, but this beneficial trend is cancelled out since the cost of ‘new’ consumption items (childcare especially) is rising rapidly (Bianchi et.al., 2004). Family benefits may help offset the cost but since even the most generous benefits, like the Danish, are equal to only 4% of average earnings, the effect is at the margin. In the Netherlands, the benefit is a bit lower and in Southern Europe a pittance (OECD, 2002: Table A2).⁴ In any case, research shows that family cash transfers have no real effect whatsoever on fertility (Gauthier and Hatzius, 1997; Sleebos, 2003).

The really important cost of children is indirect, comprising two effects. There is, firstly, the implicit monetary value of parental time devoted to children. Attempts to cash out its monetary equivalent is wrought with difficulties. Klevemarken (1998), using rather conservative assumptions, has cashed out the equivalent value at around US\$ 22.000-29.000 for an average Swedish family. This implies that Swedish parents’ collective care for their children would add an equivalent of 20% to GDP. The second effect lies in the opportunity cost (or child penalty) of motherhood in terms of lost potential lifetime income. Considering women’s rising earnings power, work

³ Estimates based on the conventional Engel method arrive at substantially higher per child costs. Note that the 20-22% estimates lies very close to the elasticity used in the new OECD equivalence scale.

⁴ Since family allowances are usually a universal flat-rate benefit, their marginal effect may be somewhat higher for low-income parents.

interruptions and reduced labour supply can result in substantial income penalties. The penalty is the composite of foregone income during the years of interruption plus a long-term depreciation effect due to eroded human capital and experience loss. Applying the standard Mincer-Polacheck benchmark estimator to a woman who interrupts a total of ten years, the directly foregone income of the ‘missing 10 years’ will amount to about 5 percent of potential lifetime income, while the human capital depreciation effect is far more severe, equivalent to another 20 percent of potential lifetime income (Polacheck, 2003).

Women respond by shortening interruptions and delaying births.⁵ Sigle-Rushton and Waldvogel (2004) show a general decline in the lifetime income loss – but only for some countries. For medium-educated mothers with two children, the gross income loss up to age 45 ranges from 23-25 percent in Scandinavia and the U.S. to 40 percent in Germany and the Netherlands. Extending the estimate up to age 60 suggests that an important part of the child-penalty is eventually recuperated *if*, that is, women remain in uninterrupted employment until retirement. In this latter scenario, the Danish mother will have lost only 8 percent of her potential income, and the German and British about 25 percent.

The great difference between Scandinavia and elsewhere lies in the duration of interruptions and in subsequent work histories. Whereas British, Dutch and German women have long interruptions and then resume with reduced working hours, Scandinavian women return relatively quickly and usually opt for full-time work. In a recent British study, Rake (2000) identifies a polarizing trend because higher educated women now emulate the Nordic pattern while low educated women reduce even further their post-birth labour supply.

Since female employment accelerated in the 1990s, in particular in Southern Europe, one would expect some convergence towards the Nordic pattern among younger women.⁶ Data on birth-related interruptions can be used to make rough predictions of what will come to pass among those who are mothers today. Using the ECHP panels, 1994-2001, Table 3 compares two European extremes, Denmark and Spain. The simulated lifetime income penalty applies the Mincer-Polacheck coefficients to the empirically observed birth-related interruptions of all women (averaged) and of low educated women (less than upper secondary). The simulation assumes that mothers return to stable full-time work following the (average) interruption. The penalty would be far greater if this were not the case.

The interruption gap between low educated and average women is wider in Denmark than in Spain. But even low educated Danes interrupt relatively briefly and hence lifetime income losses are modest. In contrast, Spanish interruptions are uniformly longer and this produces far greater lifetime income penalties across the board.

⁵ This is the case for the Netherlands and the U.K., but in Germany interruptions have actually become longer (Gustafsson et.al, 2002). In the 1990s, the average number of interrupted months ranges from 32 in Germany to 10-13 in Scandinavia. The UK has undergone a dramatic change in just one decade since the average declined from 25 in the 1980s to 14 in the 1990s (Gustafsson et.al., 2002).

⁶ De Santis (2004) argues that the Italian child penalty is now around 30 percent.

Table 3. Simulated Lifetime Income Penalties for Women with Two Children in the 1990s.

	Average birth Interruption (months)	Total percent lifetime income penalty
<i>Denmark</i>		
All women	9	5.0
Low educated	20	9.0
<i>Spain</i>		
All women	46	20.0
Low educated	50	21.0

Estimated from ECHP panels 1994-2001. **Note that the estimates assume that mothers return to full-time employment subsequent to the average interruption period.**

This is where childcare matters. If access is limited to commercial care parents must dish out approximately 10.000 Euros for a full-time, full-year place in a quality centre in countries like Germany, Britain or the Netherlands.⁷ This implies, in essence, a *regressive tax* on mothers' labour supply and is in any case prohibitively expensive for most young families, not to mention low income and lone parents. If no cheaper alternatives are available families must choose between one of two evils: either forego children in the interest of the woman's career, or sacrifice the mother's career in the interest of family formation. The Netherlands is a prototypical example of this trade-off: a sizable share of women remain childless and another sizable share abandon their career.

Not surprisingly, fertility correlates with childcare (Kravdal, 1996; Esping-Andersen, 2002; del Boca, 2002; Aaberge et.al., 2005).⁸ There are three possible ways to make care more affordable: via familial support (the grandmother), via de-regulated product markets (the American way), or via generous government subsidies (the Nordic approach). Grandmothers have been the main solution in Southern Europe, but the reservoir of available carers is diminishing quite rapidly (Gonzalez and Jurado, 2005). The highly differentiated price structure in the US, coupled to tax deductions to parents, may meet demand, but the consequence is extremely uneven – and mostly low-quality – care (Mayers et.al. 2004). In the Nordic model, public subsidies defray the lion's share of costs. Considering that attendance is now *de facto* universal from

⁷ As the OECD (2002: Table 3.5) shows, the cost of one child in private, unsubsidized Dutch daycare is equivalent to 91 percent of wives' average wage.

⁸ There is even stronger evidence that mothers' employment is very sensitive to the price and/or availability of childcare. For the US, Anderson and Levine (2000) show that a 10 percent reduction in the cost of day care would raise employment by more than 3 percent. For Europe, Gustafsson and Stafford (1992), Kreyefeld and Hank (1999), and del Boca (2002) show that availability is decisive for participation.

age one onwards, the net parental cost is evidently affordable to all families. Some countries, notably the UK and the Netherlands, pursue a hybrid model that combines commercial provision with some public subsidies. I shall examine more closely the implications of either approach in the following section.

Childcare policies, however generous they may be, will not solve all problems alone. Their impact depends, firstly, on the length of paid maternity leave; if the latter is too brief, mothers are compelled to make a radical choice between returning to work or interrupting their careers. Low educated women are more likely to curtail their careers, while higher educated women will respond with reduced fertility.

Secondly, we know that much of the reconciliation problem lies buried in the labour market. Flexible time schedules and access to part-time are essential. Job security matters because women now insist on economic autonomy. Unemployment, unstable and precarious jobs all affect fertility very negatively. The fact that (young) women are hugely over-represented among the unemployed and those with temporary contracts – in particular in Southern Europe – helps explain pervasive low-low fertility (Bernardi, 2005; Esping-Andersen, 2002; Gonzalez and Jurado, 2005; McDonald, 2002). Seen from a different angle, Scandinavian research shows that high fertility among educated women is mainly found among public sector employees (Jensen, 2002; Datta Gupta et.al. 2003). Table 4 illustrates the importance of job status for women's decision to have children.

Except in Denmark, unemployment is everywhere a major obstacle to fertility. In Germany and the Netherlands it lowers the likelihood of a birth to almost half. Job insecurity, too, is clearly a major impediment. In the Netherlands and Spain, having a permanent contract raises the odds of fertility by a factor of 2.5. The coefficient for public sector employment, which undoubtedly offers more cushioned working conditions, is everywhere positive but only statistically significant in Germany and Spain.

As noted, low fertility reflects a disjuncture between the changed life course of women and the persistence of traditional gender roles. The first part of the disjuncture, namely women's changing roles, is clearly evident in the importance of employment conditions and career status: women undoubtedly hesitate to give birth until their careers are adequately assured.

The second part of the disjuncture has to do with gender roles. Reconciliation is easier when welfare states help 'de-familialize' the caring burden. This may, however, not suffice unless matched by a more egalitarian gender contract between spouses. Duvander and Andersson (2003) show that the decision to have a 2nd child in Sweden depends very much on whether the father took parental leave around the first birth. Esping-Andersen et.al. (2005) show that Danish fathers' involvement in caring for the first child also correlates strongly with the decision to have a second child. In other words, a more egalitarian division of paid *and* unpaid work may emerge as a bottom-line condition for future fertility.

Table 4. Employment Insecurity and Fertility. Logistic odds ratios. The regressions include controls for education level and full-time/part-time status.

	Denmark	Netherlands	Germany	Spain	UK
Unemployed	2.5***	.64*	.22**	.54***	.33**
Permanent					
Contract	1.4	2.6**	.30*	2.5***	1.9
Public sector					
Job	1.0	1.1	1.6**	2.2**	3.4

Estimated from ECHP (1995 wave)

Time use data show that men typically increase their share of domestic work when mothers work full-time, but perfect substitution occurs nowhere.⁹ Scandinavian and American males in full-time double earner couples are far more prone to pitch in. For example, the ratio of unpaid hours between women and men is now 1.4 in Denmark, and 1.7 in Sweden and the US). In Britain the ratio rises to 2.4, and in Italy to an embarrassing 3.6 ratio.¹⁰ The male contribution to childcare activities is also positively related to the level of education. As women's autonomy and educational attainment increase we might expect a further improvement in gender equality within couples.

The Quality of Children

Today's youth often face a hostile environment within which to maximize their life chances. The evolving knowledge economy raises the human capital 'ante' that is needed to ensure good job prospects. There is no clear consensus as to what skills, precisely, matter most (Bowles et.al., 2001). Formal education is obviously a *sine qua non*, especially for early career moves. Today's early school dropouts are likely to end up being the low wage and precarious workers of tomorrow. Remedial policy, such as 'activation' and adult training is generally an ineffective corrective (Heckman, 1999; Heckman and Lochner, 2000). The non-completion of upper-secondary level education provides one very good benchmark of our social exclusion problem in the decades to come.

Other human capital dimensions are gaining in importance. Modern companies put a premium on social skills and 'emotional intelligence', and social capital can be very important for getting ahead. Regardless, the reigning consensus is that strong cognitive skills are the first and foremost precondition; in part because cognitive abilities are

⁹ In fact, in the UK the male's share is smaller than when the spouse works part-time (for data, see OECD, 2001: Table 4.5).

¹⁰ The ratio in the Netherlands is 2.3 but refers to wives in part-time employment (OECD, 2002: Table 2.13). Scandinavian and American men's contribution has more or less doubled over the past 10-15 years. The Danish female:male ratio of household work fell from 1.7 in 1987 to 1.4 in 2001 (Deding and Lausten, 2004).

decisive for learning and hence for school completion and, in part, because –almost by definition – knowledge-intensive production assumes that people have the skills to understand, interpret and productively apply information. Key competences, like cognitive skills and the motivation to learn, are developed very early in life (Karoly et.al. 1998; Ramey and Ramey, 2000).

The continuous and powerful impact of social origins on children’s life chances that inter-generational stratification studies identify is very much due to the fact that children’s basic competences are implanted in the first childhood years, i.e. when they are mostly ‘privatized’. Inequalities in parental stimulus are subsequently transmitted to the schools that, in turn, are generally poorly equipped to rectify differentials in learning abilities.

Postwar reformers believed that social inheritance could be effectively diminished through free access to education. The guiding idea was that this would eliminate liquidity constraints and thus equalize chances across the social classes. Since the path-breaking Coleman report to the US Government, followed by a virtual mountain of research, we know that the design of education systems has only a very limited impact on inequalities of opportunity. Early tracking, under-staffing, and segregated schools no doubt worsen social inequalities, but the core mechanisms lie in the family of origin (Shavit and Blossfeld, 1993; Eriksson and Jonsson, 1996).¹¹ This view has received powerful confirmation in the PISA studies (OECD, 2003).

Explaining Inequalities in Child Outcomes

Parental investments in their children take two principal forms. One is monetary, the other is crudely speaking ‘cultural’. Although free education diminishes the role of income inequalities, money continues to crucially influence child outcomes. In most countries, participation in quality pre-school learning depends on household income. Well-off parents are far better positioned to invest in additional extra-curricular learning activities, be it ballet or language classes, and child health is generally also related to family income.

Far worse is poverty and income insecurity. US research shows that a poor child will, on average, have 2 years less of schooling and, subsequently, earn roughly 30 percent less when adult (Mayer, 1997; Haveman and Wolfe, 1995). Most troublesome, the poor child is far more likely to end up as a poor parent, thus reproducing the syndrome from generation to generation. European research identifies very similar – albeit somewhat less dramatic – poverty effects (Machin, 1998; Maurin, 2002; CERC, 2004).¹²

Since economic insecurity harms child outcomes, ongoing trends in income distribution must be of serious concern since young households and, in particular, child families are losing ground in a major way. With the sole exception of Scandinavia, child poverty has risen over the past two decades: in Germany by 4 percentage points, in the

¹¹ See Machin (2005) for an up-to-date review of the school-effect.

¹² The Nederlandse Gezinsraad (cited in OECD, 2002), finds that up to 15 percent of children from long-term low income families are at risk of poor developmental outcomes.

Netherlands and the UK by 5 (LIS data). The child poverty level is now around 9-10 percent in France, Germany and the Netherlands, 15 percent in the UK, and a whopping 22 percent in the US.

Put differently, as far as the income effect is concerned, most advanced nations are swimming upstream at the very same moment that the need to secure strong child outcomes is intensifying. It follows that any measure that effectively combats child poverty amounts to a key investment in children's life chances and in our collective future. This point is emphasized in Eriksson and Jonsson's (1996) analyses of why the Nordic countries boast far more egalitarian educational attainment than elsewhere. They stress, in particular, the effectiveness of public income support to child families and, indeed, as the data show, there has been no increase in Scandinavian child poverty notwithstanding that these nations, too, have witnessed rising income inequalities.¹³

The 'cultural' dimension is substantially more difficult to identify with any precision. To be sure, it is very multifaceted. One effect is represented by Bourdieu's (1983) notion of cultural capital, namely the ability of parents to inculcate their children with the kinds of middle class cultural norms, styles and expressions that prevail in most schools. This kind of cultural transmission is key to inter-generational class reproduction. A second effect, arguably far more important, has to do with the kinds of parental cultural and educational resources that ensure a strong cognitive stimulation and learning environment. One way to capture this dimension is through information about families' reading habits and possession of books (de Graaf, 1998; OECD, 2002; Esping-Andersen, 2004). Indeed, multivariate regression analysis shows that this cultural dimension is of far greater importance than is parental socio-economic status in explaining children's cognitive abilities (Esping-Andersen, 2004).

And, finally, 'culture' includes a third dimension, namely the intensity and quality of parent-child interaction and nurturing. Here we confront a rather controversial issue, namely whether mothers' employment outside the home has adverse consequences for child development. If so, we may again be swimming upstream considering that the majority of modern women insist on career continuity.

There is some evidence that the reduced intensity of parent-child interaction that results from motherly employment can be harmful (Ermisch and Francesconi, 2002; Ruhm, 2004). It is well-established that maternal employment can be harmful in the child's first 9-12 months (Waldvogel et.al, 2002; Ruhm, 2004; Gregg, 2005). But the effect thereafter depends very much on the quality of mothers' jobs and of outside care. Job-related stress and fatigue are demonstrably problematic. And there is ample evidence that high-quality childcare more than offsets any potential negative effects (Currie, 2001; Waldvogel, 2002). Indeed, evaluation studies of early intervention programmes uniformly conclude that children from problem families who participate in sponsored quality pre-school centres do far better in terms of school completion and a host of other variables, such as crime and teenage pregnancy (Haveman and Wolfe, 1995;

¹³ The effectiveness of the Scandinavian model is evident in comparative child poverty levels: in 2000, less than 3 percent in Denmark and Finland; 4 percent in Sweden (estimates from LIS and from the 2001 wave of the ECHP).

Waldvogel, 2002). A similar pattern emerges when we analyze the PISA data. In countries where access to quality childcare is scarce, as in Spain, Germany and the US, full-time employment does appear to have adverse effects (albeit not very strong) on children's cognitive development while in Scandinavia, where attendance is essentially universal, the impact of motherly employment appears in fact to be positive.

There are two important riders to this conclusion. Reduced interaction with mothers may be offset by more paternal dedication to children. In fact, the total number of parental hours with children in the U.S. and Scandinavia has actually risen since the 1960s; in part because of reduced working hours; in part due to fathers' greater involvement (Bianchi, 2000).

The second rider is that mothers' employment has distinct effects on boys and girls. In analyses of the PISA data, I find that the effect is, surprisingly, completely orthogonal: always positive for girls but often rather negative for boys (especially if the mother works full-time). The positive effect for girls has surely something to do with the role model of mothers (Esping-Andersen, 2005). If fathers increase their time with children, the negative effect on boys may diminish to the extent that boys are more influenced by the paternal role model

When we put together these different strands of evidence, we also have a ready-made explanation for why the Scandinavian countries are the only clear cases where the impact of social origins on educational attainment (and cognitive development) has declined in any significant way over the past decades (Esping-Andersen, 2005). On one hand, the income effect has been almost *de facto* eliminated via the eradication of child poverty. On the other hand, the 'culture' effect has been weakened because all children, irrespective of parental resources and social origin, benefit from identical quality care. The net effect is bound to be redistributive in the sense that children from the weakest families gain the most. It is telling that the combined effect of the socioeconomic status and parental cultural capital variables on child literacy performance is half as strong in Sweden as it is in most other OECD countries (Esping-Andersen, 2005).¹⁴ It is equally telling that the PISA data show that the Nordic countries exhibit unusually little variation in children's cognitive abilities.

Redesigning the Welfare State: A Social Investment Approach

The foremost objective of social policy is to secure citizens against risks. We live in a society in which rapid aging tends to monopolize policy debates. Aging implies substantial future spending commitments and also the rise of hugely expensive novel risks such as frailty and dependency. Many fear that the welfare state may prove financially unsustainable and such fears will undoubtedly mount if it is also called upon to invest seriously in our children.

¹⁴ The two variables, jointly, explain 11 percent of the variance in Sweden compared to an OECD average of 20 percent.

A myopic *categorical* focus on the elderly versus the young leads to poor policy because it fails to connect old age with peoples' life course. Today's retirees do well not solely because pensions are generous but in large part because they enjoyed good lives with stable employment and steadily rising wages. The magnitude of the demographic crunch that will climax at mid-Century will depend very much on the quality of our children's life course, on the quantity of young workers, and on their productivity.

Contemporary youth cohorts are historically speaking tiny and must shoulder an unparalleled demographic burden. They also confront a far more intense set of risks since life chances are more and more contingent on strong skills. Investing well in our children does not come at bargain basement prices but it will yield a double bonus by delivering individual and societal welfare gains at once.

It may be difficult to pinpoint the exact *net social value* of children. For one, the heterogeneity of children in terms of their potential skills, productivity and lifetime contribution is huge. US research suggests that a typical American child, over the life course, will yield a net social return in the neighbourhood of \$100.000 (Preston, 2004). The precise amount is not very important, but the fact itself alerts us to several core principles that a recast social policy must adhere to.

Firstly, if the social benefit of children is substantial while the parental cost of having children is rising, there is a ready-made case for redistribution in favour of child families. When we consider that social spending on families is nowhere greater than 4% of GDP, society is undoubtedly getting a good deal, and the childless in particular.¹⁵ Hence, there is a ready-made case for redistribution in favour of children and, logically, the level of taxation required should be commensurate with the collective returns. This leads me to the second principle. If it can be demonstrated that expenditures on children yield an increase in their lifetime net social value, the public outlays involved will have a clear investment character

Public Policy and Fertility

As discussed above, raising fertility requires that we help reconcile women's altered life course preferences with family formation. Even if our main goal must be to help citizens to have their desired number of children, the social gains from raising fertility will be substantial. Each additional child may be adding \$100.000 to our collective welfare. As to the 'quality' dimension, it goes without saying that any measure that improves children's life chances will yield substantial individual and societal returns.

The question is whether the welfare state can be made to produce such quantity and quality improvements. Policy makers in the past were often pro-natalist and in France, especially, generous income inducements were thought to raise fertility. We now know

¹⁵ Including also public spending on education would add another 4 or 5 percent of GDP.

that such incentives bear little fruit.¹⁶ Following the famous Myrdal report in the 1930s, the policy issue is primarily the reconciliation of family and work. Within the EU at large there now exists broad support for a basic package of ‘family-friendly’ policy. Although rethoric and practice are often at odds, the consensus boils down to a combination of adequate paid maternity-parental, affordable quality childcare, and mother-friendly employment provisions such as flexi-time. Can family friendly policies move us towards a superior Pareto frontier? What would such a policy package have to look like in order to do so? As we have seen in the previous section, scientific research may be helpful in answering such questions.

If fertility is now mainly related to the opportunity cost of motherhood, any measure that effectively diminishes the child penalty should help move the birth rate up towards social preference levels. Family allowances may not have much of an effect, but family-work reconciliation policies – and childcare in particular -- do appear to matter. Since nations’ reconciliation policies tend to evolve in synchrony it is very difficult to statistically separate the distinct effects of the main components (i.e. daycare, leave schemes and workplace measures). For Norway, Kravdal (1996) finds that doubling childcare raises the TFR by more than 0.1 point. Knudsen (1999), analyzing Danish data, estimates that fertility rose by 0.3 percentage points (from a TFR of 1.5 to 1.8) as a result of the expansion of daycare plus child leaves since the early 1980s. Del Boca also finds strong effects in Italy and, for the US, Blau and Robins (1998) show that both the cost and the lack of access to care reduces fertility.

It is especially provision for the under-3s that yields positive fertility responses (Esping-Andersen, 2002; Castles, 2003). Both Castles (op.cit) and Aaberge (2005) conclude that mother-friendly job measures, such as flexi-time, positively influence fertility. And, as mentioned, there is now also quite solid evidence that more gender equality in the division of household labour will raise the birth rate, at least among educated women. Hence, our policy considerations must include stronger childcare and leave incentives for men.

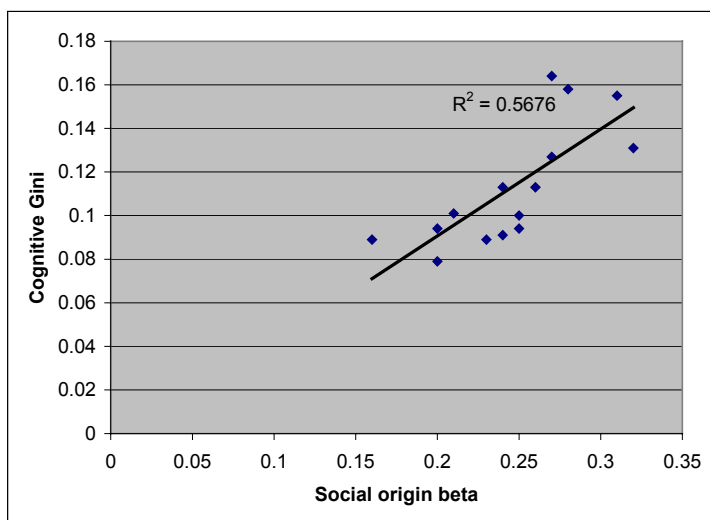
Overall, the *direct* fertility dividend of a family-friendly policy package is not likely to be of overwhelming proportions, but insofar as it also helps reconcile work with motherhood there is undoubtedly also a positive *indirect* effect. Its impact is no doubt also uneven across the population: arguably most effective among women who face the steepest opportunity costs of motherhood. And even if the fertility gains appear quite miniscule we must remember that even a small rise in the TFR (say by 0.3 points) amounts to a substantial individual and societal welfare gain. It means that parents come closer to their preferred family size and, as I mentioned earlier, it will have huge long-term consequences in terms of population growth.

¹⁶ The best – but still not very robust -- econometric estimates suggest that a 25% increase in family cash benefits may raise the TFR by 0.07 per woman (Gauthier and Hatzius, 1997; for an overview, see also Sleeboos, 2003). If, say, the Netherlands wishes to narrow the child deficit to a 1.9 TFR via cash inducements, the value of family cash benefits would have to be more than 9 times their present value. And since these estimates are quite shaky it is far from certain that the fertility response would be as expected. Ermisch (1988) argues that cash benefits affect the timing but not the volume of births.

Public Policy and Children's Life Chances

There is no simple ready-made formula that will guarantee good child outcomes. Since we know that cognitive abilities correlate with social origins, it comes as no surprise that the level of cognitive inequality among children depends on the overall degree of inequality between families. In highly inegalitarian societies, such as the UK and US, the share that falls in the lowest (essentially dis-functional) cognitive quintile is far larger than in egalitarian nations, such as Sweden, Norway or the Netherlands (approximately 20 percent compared to 8 percent in Norway and 11 percent in the Netherlands).¹⁷ Computing Gini coefficients for cognitive test scores provides a telling indicator: The Danish Gini is .08 compared to 0.16 for the US. In Figure 1, I regress nations' cognitive score Gini on a social inheritance variable (the strength of the association between children's and parents' educational attainment).¹⁸ The correlation would be even higher if we regressed cognitive Ginis on nations' income distribution Ginis. In fact, there is a very strong correlation also between inequalities of income distribution and inter-generational inheritance.

Figure 1. The Relationship between Cognitive Inequalities and the Strength of Inter-generational Social Inheritance.



Source: Esping-Andersen (2004: 123). The regression is based on 15 OECD countries.

¹⁷ Computed from the IALS data

¹⁸ For details, see Esping-Andersen (2004)

All told, this indicates that policy must focus primarily on those monetary and cultural mechanisms that link social origins to child outcomes. There can be very substantial gains from minimizing the effect of low income. Hence a policy that effectively eliminates child poverty would yield very positive results in terms of equalizing children's educational chances.

It is more difficult to see how policy might affect the 'cultural' mechanisms. How, for example, might we compel parents to read for their children, or to help them with their homework? Weak parental 'cultural' resources may translate into less cognitive stimulation which, in turn, may impair children's schooling. There is also a possible indirect effect since weak parents are disadvantaged in terms of navigating the school system on behalf of their children. Information asymmetries are likely to be especially accentuated among low educated parents and within immigrant communities.

Educational reformers have pursued numerous policies to remedy such inequalities and deficiencies. On this front Sweden may very well represent the vanguard, in particular with its emphasis on an anxiety-free and individualized learning environment. It is telling that between-school effects on children's cognitive skills are very small compared to just about any other country. But still, remedial programmes within schools, no matter how well designed and financed, have not proven very effective in eradicating the impact of social origins. This is primarily because the first 6 years in children's lives are decisive – and these years are, in most societies, shaped almost exclusively within the four walls of the parental home.

A major clue as to how social policy can effectively address socio-cultural handicaps comes from the vast amount of evaluation research of the US Head Start programme, one of the very few success stories from President Johnson's War on Poverty. Having now been in operation for 4 decades, we are also in a position to gauge the long-term effects of early intervention across a great part of peoples' lives. The gist of Head Start is to intervene in problem families where children's development is at special risk. The programme is highly targeted and reaches, at a maximum 3 percent of US children, providing a very full menu of interventions. Among these, the most successful has been to place at-risk children in high quality childcare centres. Summing up the principal findings, Head Start yields very positive results in terms of school completion, staying off crime, and later adult earnings and job attainment (Currie, 2001; Duncan and Brooks-Gunn, 1997; Haveman and Wolfe, 1995; Karoly et.al., 1998). It is tempting to speculate that if Head Start were to expand its target population to, say, 20 percent of American families the percentage youth with a dys-functional cognitive performance would decline to North European levels.

The magnitude of the 'cultural' problem is in any given country related to the size of the parental generation that lacks the resources to adequately stimulate their children's learning abilities. In some EU countries – like Spain and Italy – there remains a very large number of adults with only minimal education. Within the typical parenthood age bracket (35-44), 54 percent of Spanish mothers have no more than compulsory education – compared to only 12 percent in Sweden but a fairly high 33 percent in the Netherlands (OECD, 2003). The rapid growth in educational attainment will diminish this problem in the decades to come. In Spain, for example, the percent of women 10

years younger with no more than obligatory schooling has declined by 13 points, and in the Netherlands by 8 points. But we also face counter-tendencies that emanate from large waves of generally low educated immigrants that, in addition, face multiple cultural and educational disadvantages that can seriously jeopardize their children's chances. Even in Sweden, where the school system has most ambitiously sought to rectify immigrant children's learning disadvantages, the cognitive score gap between native and non-native children is one of the largest in the OECD, and the probability of school failure is roughly 5 times higher for immigrants than for natives.¹⁹

Many analyses of Head Start trace its success to the fact that it redistributes cognitive stimulation in favour of the most needy. A very similar phenomenon has, by *fiat* rather than by intention, unfolded in the Nordic countries as they expanded early childcare in response to women's rising employment rates. The policy deliberately emphasized uniform 'middle class' quality standards, perhaps more for electoral than other reasons.

The Nordic model has undoubtedly had a non-trivial impact on equalizing children's school preparedness.²⁰ Denmark, Norway and Sweden are the only advanced countries that show a substantial reduction in the effect of parental education, income, and also 'cultural capital' on children's educational attainment. To illustrate, the impact of parents' education on the likelihood of attaining upper secondary and tertiary education has been cut in half for the youngest cohorts –born in the 1970s and the first for whom childcare attendance became the norm. In countries like the US, UK or Germany, the parental impact remains as strong as it was for the cohorts born in the 1940s and 1950s. The equalizing potential of universal early care is also evident when we focus specifically on children of parents with very low education (obligatory or less). In Denmark, their chance of completing upper secondary education has doubled for the youngest cohorts and in Norway even trippled. Again, this stands in sharp contrast to other countries where by and large there has been no relative improvement in the fortunes of similar youth.²¹

There are two potential downsides to the childcare strategy. One, as discussed above, children may suffer from less intensive child-parent interaction, especially when mothers work full-time and return quickly to work after birth. Most of the evidence suggests that such adverse effects disappear if a) children remain with the mother during most of their first year, if b) mothers have quality jobs, and if c) childcare quality is high. The second is that the cognitive homogenization process built into pre-school (and by extension also into comprehensive school models like the Swedish) implies a lowering of standards, a move towards a low common denominator of learning. Analyses of the Swedish education system, as well as of Swedish PISA data suggest that this cannot be the case. But there are some indications that this may have been true for Denmark where, until recently, pre-school centres emphasized social integration at the expense of pedagogy and learning. While Denmark's performance

¹⁹ This evidence derives from the author's participation in an OECD mission to Sweden in February 2005.

²⁰ For an overview of research on the impact of childcare on child outcomes, see Waldvogel (2002)

²¹ For detailed analyses, see Esping-Andersen (2005).

in the PISA studies is internationally strong in terms of children's cognitive homogeneity (there is very little variance in test performance between children), the overall mean scores are rather unimpressive. Indeed, the lessons learned from the PISA analyses have been a major impulse behind current plans to strengthen the pedagogical content of childcare.

The key question is how social policy can be designed to address negative family effects. We are on solid terrain when it comes to the role of policy in upholding family incomes. Very few countries boast an income maintenance policy that *de facto* guarantees against child poverty, although the Nordic countries do come pretty close when we add together the impact of family benefits, housing allowances and social assistance.

The good news is that the additional public cost of eliminating child poverty is a bargain, financially speaking. Adopting the 50-percent of median poverty benchmark, it would absorb 0.26 percent of GDP in the UK – the EU country with the highest poverty rates (Esping-Andersen and Sarasa, 2002). In any case, the rise in mothers' employment provides a far more effective anti-poverty guarantee. When mothers work – in single parent and couple families alike – the probability of poverty falls by a factor of 3 or 4. Hence, improving the compatibility of motherhood and employment yields also a major pay-off in terms of child poverty risks.

In other words, we return once again to reconciliation policies. If, as most research concludes, maternal employment is problematic for child welfare during the first year there exists a clear case in favour of extending the mix of maternity and parental leave.

The EU has recently issued a directive that calls for a minimum of 3 months parental leave in addition to maternity leave. Still, the combined entitlement available to mothers (plus fathers) varies enormously across the EU, from a miserly 4 months in Spain to 12+ months in the more generous countries. Leaves that are either too brief can produce adverse effects in terms of reconciliation.

To minimize the career effects of short leaves, mothers will attempt to place their children with others. This, we know, can have adverse 'quality' effects. Very early childcare attendance is often the option among career-committed women, especially in the US where paid leave does not exist and where the career penalty of interruptions can be especially high (Waldvogel et.al., 1999). A combination of paid leave arrangements that cover *at least* the child's first 9 months would accordingly appear optimal. We know from Scandinavian experience that a) the standard paid leave period (now a minimum of 48 weeks) does not produce any appreciable lifetime income penalty, that b) the majority of mothers soon return to full-time employment, and that c) women come fairly close to having the number of children they actually desire.

Most EU countries have leave provisions on the books that appear consistent with these multiple objectives (and the EU directive) but appearances are deceptive since optional parental leaves often imply sharply reduced benefits. Formally speaking, the Netherlands and the UK provide for a total of 40 weeks of leave. The first 16 weeks

(18 in the UK) are fully compensated but the remaining 24 parental weeks provide a benefit that is less than 15% of the average wage.²² It is doubtful that women committed to employment will opt for extended periods of uncompensated leave and, hence, they will be driven back to work. It is revealing that 60 percent of Dutch mothers return to work within 6 months of birth – while another 25%+ disappear more or less permanently from the workforce (Gustafsson and Kenjoh, 2004). Even if most Dutch mothers return to part-time employment it means that a great part of children's first year is spent with a grandmother or in a centre.

Most EU countries pay lip service to gender equity in parental leave schemes, and Sweden is the only country where the father-share is seriously used. Feminists, unsurprisingly, lobby fiercely for more parity in the take-up of leaves. Their case is strengthened when we consider that fathers' contribution may induce more births and, turning to the 'quality' dimension, the sex of the parent that cares for the child must be of minor importance (Ermisch and Francesconi, 2002).

Designing a Childcare System

Early child intervention programmes may yield very positive results but they are usually narrowly targeted in favour of exceptionally needy children. There are very good arguments in favour of sponsoring high quality care to the most disadvantaged because there is unambiguous evidence that they will profit disproportionately. The problem is that the size of the 'at-risk' population is usually far larger than the realistic scope of such policies. The British Labour government's Sure Start, very much inspired by Head Start, seeks to widen its reach by intervening in deprived neighbourhoods rather than in specific families. The shortcoming here is that problem families do not necessarily live in such communities. There is a lot to be said in favour of special measures that address the really needy children. Still there is even more ammunition in favour of a global high-quality universal childcare approach (bolstered by additional targeted intervention) since this is simultaneously required in the pursuit of reconciling motherhood and work: childcare kills two birds in one throw.

If childcare emerges as centre piece of any child welfare strategy, we need to examine its policy ramifications carefully. It is immediately obvious that universal and affordable quality childcare does not come cheap. Worse, the inherent cost-disease problem of care services (due to lagging productivity) implies constantly rising financial pressures. Of course, this cost pressure will not disappear if childcare is financed privately or publicly.

Insuring quality implies pedagogically qualified personnel and small staff-child ratios. National quality norms for the under-3s range from a staff-child ratio of 1:12 in Spain to Denmark's exceptionally low 1:3 ratio -- but then most Danish daycare workers

²² Spain is an unusually deceptive case. Women are formally entitled to a full 128 weeks parental leave but with no benefits.

have no special pedagogical training.²³ The Dutch norm is about 1:5 (OECD, 2002: Table 90). Affordability boils down to the size of the subsidy and the parental co-payment. In turn, the level of childcare supply will depend directly on effective demand – again largely a question of subsidies and affordability.

I know of no country where early childcare *provision* is predominantly publicly provided. The Nordic countries pursue a mix of municipally run centres (about 70 percent in Denmark) and co-operatives, often established by parent associations. Commercial centres have no claim to public subsidies and, hence, basically do not exist. The model evidently succeeds in delivering broad access since 85% of 2 year olds now attend – 97 percent on a full-day basis (OECD, 2002). At the other extreme, the US manages also to achieve ample coverage with an almost exclusively commercially run system. Yet, only a minority of all centres are of certified quality standard (and are therefore expensive). In most EU countries public childcare for the under-3s is extremely scarce and largely of the social assistance type, i.e. income tested and targeted to families with special needs. Usually the only alternative is expensive for-profit care. Two countries, the UK and the Netherlands, pursue ample coverage by subsidizing commercial centres.

If quality standards are assured across-the-board, there is no particular reason why one might prefer either public or private unless, of course, there are associated equity or efficiency costs involved. In the Netherlands, the market strategy was preferred as a way to limit public spending and also to promote parental choice.

A private system will probably produce greater competition, innovation, and variety. Of course, a Nordic-style mixed model that does not discriminate against private non-profit initiatives may, in principle, reap similar benefits. A major problem with commercial welfare markets is that they easily provoke serious inequities due to information asymmetries and client creaming: choosing the best solution for one's children may require substantial resources (such as knowledge). Thus, less educated and, especially, immigrant families may find themselves handicapped – especially in an environment where demand exceeds supply. An indirect outcome is social segregation – as Sweden's ongoing 'privatization' of its school system clearly demonstrates.

As regards access, many EU countries boast high enrolment rates for children aged 3+. It is for the under-3s that the majority of countries fall far short of the EU's benchmark of 33 percent coverage. We can distinguish three sets of countries. The Nordic group has now achieved near-universal coverage, which is not surprising since access is legally guaranteed to all families and since municipalities are compelled to uphold the guarantee.²⁴ In a second group that includes Belgium and France, coverage hovers around 30 percent. Most EU countries fall in the third group, with coverage below 10 percent (Gornick and Meyers, 2003). Britain and the Netherlands (with a coverage rate

²³ The Danish government is now debating a reform that calls for a much stronger pedagogical profile.

²⁴ In some areas shortages remain. Still, there are only 4000 families on a waiting list in Denmark. In Sweden and, to a much lesser extent in Denmark, municipalities subsidize (licenced) childminders to help meet demand.

around 17%) are inching their way towards the EU benchmark, although there are several factors that suggest that progress may be slow.

The key to equity and adequacy lies, of course, in affordability. Undoubtedly, the British and Dutch failure to produce anything near full childcare coverage lies on the financial side. Despite public subsidies (via tax credits), British parents' co-payment is almost half the total cost, and there exist no exemptions for low-income families. This may explain why the ambitious plan to expand supply is faltering. Of the 600.000+ new places created between 1998-2003, more than half have subsequently disappeared because parents could not afford to enrol their children (Evers, et.al., 2005: 202). The Dutch strategy has been to stimulate expansion by subsidizing parents and by inducing firms to defray part of the cost. The latter's share of total costs is 25%. The lion's share of places (75%) are in commercial centres, but since supply falls far short of demand an estimated 50 percent of parents use informal care arrangements. There is one first reason why the Dutch strategy may falter, namely its reliance on employers. Employer participation appears limited to two-thirds of all workers. Since their financial contribution implies added fixed labour costs, small firms are undoubtedly loath to participate. The consequence is easily a double hazard: on one hand, the employer quota may lead to discrimination against women in hiring decisions; on the other hand, uneven employer participation provokes social dualisms.

A second reason why the Dutch model may falter is that the net parental cost of childcare is quite steep. A full-time place for one child amounts to 60% of the average wife's net earnings, and for 2 children it rises to 77% (special deductions for low income parents reduce the payment substantially). This is a *de facto* very steep 'tax' on mothers' employment and may be one reason (together with shortages) why a sizable number of mothers either abandon the workforce or limit fertility to only 1 child. The Dutch model, of course, is designed to cater to a part-time environment and, consequently, for most mothers – who require only half-time care – the cost is reduced to 41% of her earnings for one child. But we may here have double causality since the cost (and scarcity) of full-time care may induce mothers to opt for part-time employment.

Comparatively speaking, Sweden probably offers the most generous conditions with a parental co-payment equal to 10-15 percent of total cost. Neighbouring Denmark has a graduated pay scale. Families with less than 60 percent of median income go free and a full fee (equal to 30 percent of total cost) kicks in at median household income. Considering that participation is now *de facto* universal, one would conclude that this is an affordable system for all. The cost is bound to increase as the educational credentials of personnel are raised – unless matched by higher staff-child ratios. As it stands, a saturated supply of day care along the Danish model necessitates heavy public outlays – equivalent to roughly 2 percent of GDP – which is about 10 times the *public* cost in the Netherlands. Are childcare expenditures a good social investment? Would low spenders like Britain or the Netherlands reap additional benefits that can be justified if they were to emulate Danish or Swedish expenditure levels?

To answer such questions we must first of all do the right kind of financial accounting. To begin with we must remember that the effective overall cost of childcare remains pretty much identical whether it is financed through one pocket or another. If the political objective is to furnish quality care for all children, the total slice of GDP that we must dedicate will not change much however costs are allocated. If we accept that Denmark comes close to both objectives, then we should expect that total spending will end up around 2.7-2.8 percent of GDP. A Dutch public spending of only 0.2% of GDP gives the deceptive appearance of cost-effectiveness. If the Netherlands were to pursue universal coverage on a full-day schedule, total GDP use would end up like in Denmark. The choice of which pocket must be emptied may have efficiency or equity repercussions, but hardly any consequences for how much we really spend.

Rosen (1996), in a very controversial analysis, argues that the public expenditures destined to help reconcile motherhood and work in Sweden are inefficient, yielding a high *negative return* – which he estimates to be about half of the total. The calculations that underpin this conclusion compare the total public expenditures against the total earnings of the mothers of small children. This is, however, a fallacious analysis because it completely ignores how lifetime earnings (and thus also lifetime tax payments) are affected by mother-friendly programmes. A dynamic life-cycle method produces – unsurprisingly – different results.

In Table 5, I present estimates for Denmark using the standard Mincer approach to estimating lifetime income effects. To be on the conservative side, my model mother is a full-time low wage earner (2/3rds average wage) who, at age 30, will have 2 children. I assume she will interrupt for 5 years if she does not have access to childcare, whereas if she does make use of daycare, she will return to employment immediately after her standard maternity leave entitlement terminates. I also assume that she will remain employed until age 60.²⁵

Table 5 shows that (in 1995) the cost to government of providing pre-school care for a mother of two (over a five year period) amounts to little more than half million DKr. (roughly 67.000 euros). Since this allows the mother to return to employment she receives full earnings during the period plus she avoids substantial experience and human capital loss. Hence over her lifetime she will earn about 2.2 million DKr. (about 290.000 euros) more than if she has interrupted. This, in turn, implies that she will pay more taxes on a lifetime basis: an additional 770.000 DKr. (about 103.000 euros). Comparing the additional revenue dividend to the exchequer with the original government outlay on daycare yields a net return to government of 260.000 DKr. (35.000 euros) – what amounts to a respectable 50 percent return on the initial investment! The net return would have been far greater had we examined the case of a median wage earner.²⁶

²⁵ A very similar study conducted by Price-Waterhouse on behalf of the Blair government arrives at estimates that are very similar to those I present here.

²⁶ Only in the case of high income families might the net return be negative since we can assume that such families would purchase private care in the absence of subsidized public provision.

**TABLE 5. DYNAMIC ACCOUNTING
OF THE COSTS AND RETURNS FROM DAY CARE PROVISION**

Assumptions:

- Mother, at age 30-35, has two kids
- she does not interrupt employment (except one year maternity).
- Her wage is 67% of APW, and
- she will continue working until age 60.
- We apply 1.5%p.a. 'Mincer estimate' of cumulative loss for 5 year interruption

	D.Kr.
<i>Cost to government:</i>	
2 years in creche (x2)	=168.000
and	
3 years in pre-school (x2)	=342.000
Total	510.000
 <i>Gains to mother:</i>	
(a) 5 years with full earnings	=800.000
and	
(b) life-time wage gain from no interruption	=1.400.600
Total	=2.200.600
 <i>Gains to Exchequer:</i>	
additional revenue from (a)	=280.000
and	
additional revenue from (b)	=490.000
Total	770.000
 Net return to Exchequer	
On original outlay (770.000 – 510.000)	260.000

Note: the price and income data, derived from the Danish government, refer to 1995.

The Danish model is arguably optimal for reconciliation in an environment where the vast majority of mothers insist on returning to full-time employment.²⁷ And the initial high outlays will eventually be recuperated -- but primarily because Danish women do indeed work full-time for most of their lives.

In a context such as the Dutch where the employment rate of mothers is 10 percentage points lower, and where the vast majority remain wedded to part-time employment, both the expenditure and revenue side of the equation changes. The reconciliation

²⁷ The main weakness of the model is that it does not provide serious incentives for fathers to take up their share of parental leave and, as argued, this may have a negative impact on births.

policies – child leaves as well as day care – are designed with a part-time economy in mind (and probably create difficulties for women pursuing full-time employment). Does it make a difference in terms of facilitating ‘equilibrium’ fertility rates?

It is of course impossible to forecast future employment behaviour but if women in the rest of the EU will follow the Nordic pattern, we would expect to see a gradual shift from part-time to full-time job preferences in the decades to come – if for no other reason, because female educational attainment and earnings prospects are rising. The 10% participation gap between the Netherlands and Denmark is also likely to narrow with more childcare and longer maternal leaves. If so, public expenditure on affordable childcare plus adequate child leaves will, as in Denmark, constitute a social investment that is quite profitable and undisputably optimal in the Paretian sense.

The impact of family-friendly policy on child welfare cannot be easily monetarized. Nevertheless, if maternity leaves are inadequate or if coverage of childcare is incomplete there will inevitably emerge inequalities in child development. Infant children whose parents are compelled to work will suffer, as will those whose parents have insufficient income because they must remain home with their children. If there exist large lacuna in childcare coverage, those children that are enrolled will be given a major head start in life while those that remain excluded will not.

The core problem is not only that such dualisms are undesirable but, worse, that they are inevitably socially skewed. It is likely, indeed almost certain, that the children that would benefit the most from childcare are the ones most likely to be excluded. This is particularly the case if unaffordability is the chief reason behind non-participation. The largest marginal gain of early childhood stimulation will by definition go to children from socially, culturally and economically disadvantaged homes. It is for this reason principally that a universal strategy may yield a very high individual *and* social return.

During the decades of childcare expansion the Nordic countries learned these lessons the hard way. Subsidized childcare was, in the past, denied to unemployed mothers and to mothers on maternity or parental leave. Since unemployment correlates with low education, low incomes, and with multiple family problems it is evident that these children and mothers will benefit disproportionately from enrolment (caring for small children is also an obstacle to finding work). Similarly, long child leaves turn out to be very concentrated in immigrant families – again a group for whom early childhood enrolment is urgent. Also, our societies now include very large – and recent – immigrant communities that, for a host of reasons, have difficulties in integrating and ensuring that their children will. For all these reasons there is a strong case, indeed, in favour of special ‘affirmative action’ measures that will give children from underprivileged milieux an extra boost *as early as possible*. To exemplify, some municipalities in Denmark are experimenting with a busing system that will redistribute pre-school children so as to combat heavy ethnic or class segregation in childcare and kindergartens. Similarly one might favour the most at-risk children by placing them in top-quality care centres. And one may even contemplate a more elaborate ‘carrot and stick’ policy. In many immigrant communities husbands are loath to allow their wives to work and this indirectly also means that their children do not

attend pre-school institutions. If social assistance and other public transfers were made conditional on childcare attendance, one may help eradicate yet another source of social inequality.

Early childhood experiences may be the most crucial, but it is evident that a child investment strategy should not stop at age 6. This paper deliberately focuses on early childhood and this is therefore not the place to debate education policy, except to stress one detail. Mothers' reconciliation problems do not end once children begin in school and unwarranted differences in children's learning abilities continue throughout their school years. Exactly as insufficiently flexible (or too short) child centre hours pose major difficulties for parents, so does the part-day nature of school attendance. And we need to preoccupy ourselves also with the kinds of activities that children pursue after the formal school day ends. It is a pretty safe bet that children from culturally and income poor families are more likely to be parked in front of the TV. If so, offering 'after-hours activities', be they sports, music lessons or chess, in the school premises should produce an additional beneficial effect. Apparently only 3% of Dutch school children participate in such activities compared to 80% in Denmark.

Conclusions

Any discussion of welfare reform in the 21st Century must accept a number of givens, novel circumstances that no rational policy maker can pretend will disappear in future. The first is that women's embrace of lifelong employment is here to stay. The second is that success in life depends more and more on possessing adequate skills. The third is that the family is increasingly fragile and less equipped to shoulder conventional welfare responsibilities. And the fourth is that population ageing cannot be halted over the next 4 decades.

If our goal is to build a welfare architecture that better responds to the new realities there are compelling reasons to give first priority to children. First, and foremost, it is the obligation of social policy to ensure equal opportunities for society's children. Secondly, and virtually by definition, the task of social policy is to insure its future citizens against social risks. And today's children will face different and more intense risks than previous generations. Thirdly, for any nation that it genuinely committed to a future with minimal social exclusion and maximum economic competitiveness, investing in our children must come first. And fourthly, if we succeed in having many healthy kids today, you and I will have a better assurance of a good retirement in the years to come.

As we contemplate welfare reform we also need yardsticks of equity and justice, in particular because the kinds of policies that will help establish a positive equilibrium do not come cheap – and they will coincide with the heavy financial pressures that aging produces. A child-centred welfare strategy combines two elements that must dictate our equity fundamentals. It represents, on one hand, a substantial investment

component. Expenditures that benefit child welfare today yield a positive return over many years. On the other hand, it represents also a unique combination of individual private gains and positive social externalities. At the core of the new welfare edifice lies therefore a strong social investment component that logically requires redistributive financing.

If we desire to improve upon both the quantity and quality of children, my treatment suggests that – on either front – there exists no single ready-made policy remedy. The reasons why citizens have a sub-optimal number of children are multifaceted. Much of the child-deficit boils down to the problems of reconciling motherhood and careers and it is not difficult to demonstrate that a well-designed package of leave entitlements and affordable childcare is a first and necessary precondition. But there is also much evidence that suggests that such a package needs to be accompanied by factors that are usually ignored, such as the characteristics of female employment. It is also very likely that a new optimal fertility equilibrium will necessitate a fundamental change of the male life course.

When we examine contemporary life course change it is immediately evident that women have been doing the lion's share of the changing. Put crudely, women are adopting a life course pattern that is ever more masculine. In contrast, men have – except at the margin – hardly altered their life course behaviour. In the past, women's primary concern when contemplating maternity was their husbands' earnings power. This male role is losing relevance since women's concerns centre increasingly on their personal opportunity costs. Hence, the relevance of the male in the fertility equation will increasingly hover around his contribution to child care and domestic chores. It may be that a new fertility equilibrium requires that men embark on a 'feminization' of their life course. A major obstacle to this lies in the intensifying competitive nature of economic life. As Sweden exemplifies, policy cannot be effective if the incentives are strong enough. Since the Swedish earnings structure is unusually compressed, adapting the Swedish approach may be difficult or costly in other countries.

The pursuit of child quality is similarly multifaceted, but it is clear that our attention must focus on the family milieu. A first and necessary step is, without question, to minimize economic insecurity within families and, hence, some kind of public guarantee against child poverty would appear an urgent priority. But there is growing awareness that 'money' matters perhaps less than 'culture', something that would appear to paralyze policy making. And, yet, we have evidence that investments in children's early development via quality care and other intervention programmes yield very positive results. The key, in a way, lies in minimizing the parental impact among those children that are unluckily born. The US Head Start programme informs us that targeted intervention can produce excellent results, but then the beneficiary group ends up being far smaller than the truly needy population. Scandinavian experience suggests that we may reap a much greater benefit via universal and quality-invariant childcare.

Finance ministers are likely to oppose such reforms, pointing to the very high costs involved. Were we simply to take Danish practice as a yardstick of what kinds of financial requirements might be involved, we would have to convince the finance

ministry to come up with something equivalent to 4 percent of GDP. To give some perspective, this is only slightly less than what the Dutch government currently spends on all education (and about 2/3rds of what the Danish and Swedish governments spend). It is also slightly more than what it would cost for government to provide full service coverage against old age dependency.

Any cost estimate must, nevertheless, take two key considerations into account. Firstly, the kinds of expenditures that will foster more fertility are pretty much the same that will promote child quality and, hence, the same spending commitment kills two birds –indeed three -- with one stone. Affordable and accessible childcare helps raise fertility (maybe increasing the TFR by 0.3 points, as Danish estimates suggest), mothers' employment (again perhaps by 3 percentage points for every 10 percent reduction in price), and it benefits child development, especially for disadvantaged children. Secondly, the initial public spending on childcare – by far the heaviest spending item within the package – will yield a net positive return to government in the long haul – at least if *mothers embrace a full-time, full-life employment preference*. And thirdly, we will probably end up spending similarly, be it through the public purse or from peoples' own pockets. When we debate costs we should always remember that what is cheap for the government ends up more expensive for the citizen. The real issue is how the final financial allocation affects equity and efficiency.

To end, I emphasize the importance of the long haul for two reasons. One, there is in my opinion only one way to conduct good welfare policy analysis and that is to think in terms of the dynamics of peoples' life course. Two, policy making is myopically timed to the electoral cycle and will, accordingly, easily under-prioritize reforms – however urgently needed – that mainly produce rewards in the long run -- when we are all dead. Realizing how different phases of the life cycle are interconnected goes a long way in improving our ability to pursue the right kinds of welfare reform.

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