

# **The quantity and quality of children in low fertility countries**

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## **Extended abstract (paper outline)**

### **Introduction**

The reach of very low levels of fertility in industrialized countries in recent decades has raised much concern; especially in terms of future trends in labor force supply and possible labor force shortages (European Commission 2005; McDonald and Kippen 2001). The future quantity of workers is however only part of the problem. Equally, if not more important, for economic growth are also the productivity and skills of the labor force (European Commission 2002). Inequalities in the training and education of the labor force continue however to be very large despite overall increases in human capital. For example, an estimated 15 to 20 percent of adults aged 16 to 65 in Canada and the United States were found to possess only the minimum level of literacy skills, meaning that they have difficulty understanding and using textual information in everyday situations (OECD and Statistics Canada 2005). In the context of the new knowledge economy, such statistics are worrying. But perhaps even more worrying is the fact that similar inequalities are also observed in children, that is, in the next generation of workers (Unicef 2007). The persistence of inequalities in children's knowledge, skills and well-being suggests that a non-negligible proportion of children may be ill-prepared to make the transition from school to work and to become productive workers. In this paper, I focus on the 'quality' of children as indicator of the quality of the next generation of workers. The objective is to draw attention, document, and discuss the overall trends in the quality of children in the context of low fertility, but especially in their underlying inequalities. This is not only an important topic from an economic and labor force perspective: the topic of the quality of children also raises the whole issue of social justice and private vs. public responsibility. Following the recent work of economists and political scientists (Heckman and Masterov 2007; Esping Andersen 2007), I argue that larger societal investments in children are needed today in order to increase the overall 'quality' of the future labor force as well as decreasing its inequalities.

The paper is divided into five sections. In the first one, I briefly discuss the concept of child quality from both a theoretical and methodological perspective. I discuss the assumption of quality-quantity tradeoff in the new home economic theory, and review various initiatives aimed at measuring the quality of children. I then review trends in the overall well-being of children since the 1960s in the second section of the paper, and its underlying inequalities in the third section. While consistent time series in inequality indicators are scarce, the available data reveal persistent and even increasing inequalities in some domains of children's well-being. The correlates of these inequalities in children's outcomes are then discussed in the fourth section including family and community characteristics. The policy implications of these inequalities in children's outcomes are discussed in the final section of the paper.

## **1. The concept of child quality**

This section will start with a discussion of the reasons why we should be concerned about child quality including a review of the evidence showing the long-term impact of various dimensions of child quality. This section of the paper will also introduce the notion of social gradients and will review the literature on this topic. This literature will also be situated by reference to the context of low and very low fertility, and by reference to the increasing economic inequalities observed in various countries in recent years.

The paper will then turn to the quality-quantity trade-off assumption in the new home economic theory of fertility (Becker 1981). In a nutshell, the theory argues that while an overall increase in household income may be expected to increase the demand for children (i.e. the quantity of children), it may instead lead to an increase in the cost of children (i.e. the quality of children) (Becker and Lewis 1973; Becker and Tomes 1976). In other words, parents have to choose between a large number of children and a smaller number of children of better 'quality'. This theory therefore predicts that the decrease in fertility observed in industrialized countries since the 1960s should have been accompanied by an increase in the quality of children.

Finally, the text will turn to empirical attempts at measuring child quality. It will rapidly review various initiatives related to child well-being indicators including work by the International Society of Child Indicators, and will discuss various dimensions of child quality as suggested in the literature (e.g. the Child and Youth Well-Being Index developed by Land and colleagues (2001)). The paper will also stress the fact that consistent time-series on these various dimensions of child well-being are however scarce, especially when the aim is to analyze trends for specific subgroups of the population. This fact will restrict the empirical data that will be possible to present in section 3.

## **2. Overall trends in the quality of children**

This section will discuss various trends in the quality of children: some of which showing an overall increase since the 1960s (e.g. enrolment into secondary education, infant mortality rate), others a decrease (e.g. overweight and obesity), and others a mixed picture (e.g. poverty). Because several of these trends are well-known, this section of the paper will be kept relatively short.

## **3. Inequalities in the quality of children**

This section is the backbone of the paper and will discuss socioeconomic (SES) differences in a wide range of children's outcomes. Whenever possible, the data will show trends over time in these SES differences. Various sources of data will be used for this section of the paper including official vital/health statistics as well as data from the Program of International Student Assessment (PISA). The discussion of these data will be centered around the concept of social and economic gradient in children's outcomes.

[Examples of inequalities in children's outcomes: across the OECD countries, on average, 21 percent of 15-year old students appear not to possess basic mathematical skills, and 8 percent have levels of reading literacy so low as to place them at risk of experiencing serious difficulties in their transition from school to work (OECD 2004).]

#### **4. Wider inequalities in family and community characteristics**

This section will examine possible correlates of inequalities in children outcomes including SES and income differences in parental investments into children (e.g. parental time; number of books in the home; parental educational support; home cultural capital). It will also examine SES and income differences in non-familial contexts (e.g. relationship between neighborhood income and infant mortality rate; neighborhood income and low birth weight; school resources and children's educational achievement).

#### **5. Policy implications**

In this final section of the paper, I will discuss the policy implications of the above data, especially the persistence of inequalities in children's outcomes. More specifically, the text will cover (a) Investments into early childhood education; and (b) Poverty reduction. The paper will conclude by discussing the possible (positive) indirect effects of societal higher investments into children on fertility.

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