



# N e w s l e t t e r

NUMBER 05 – YEAR III

## Contents

[ Page 1 ]  
*Presentation*

[ Page 2 ]  
*How does AIDS affect child mortality?*  
**Giovanni Andrea Cornia**  
**Fabio Zagonari**

[ Page 3 ]  
*Who will take on the management of family farms?*  
**Alessandro Corsi**

[ Page 4 ]  
*The demand for sons: evidence from divorce, fertility and shotgun marriage*  
**Gordon Dahl**  
**Enrico Moretti**

[ Page 5 ]  
*Working Papers 2004 Conferences 2004*

[ Page 6 ]  
*Members*  
*Fellows*  
*Seminars 2004*

## PRESENTATION

The Centre is now in its fourth year of activity. CHILD members are engaged in several research projects.

The Turin unit participated in the third year of "The Rationale of Motherhood Choice" project financed by the European Commission and which involves teams from five countries (France, Belgium, the Netherlands, Greece and Italy) and Daniela Del Boca is Italian responsible. Another project will start in 2004 on "The Guaranteed Minimum Income: Evaluation and Simulations", supported by Compagnia di San Paolo and coordinated by Ugo Colombino.

In Florence Alessandro Cigno is bringing to a close the "Children and Pensions" project, financed by the Munich Society for the Promotion of Economic Research. He has also embarked with Furio Rosati on the preparation of an Oxford University Press book on "The Economics of Child Labour". In March 2004, Oxford University Press released a new book

edited by Giovanni Andrea Cornia on "Inequality, Growth and Poverty in an Era of Liberalisation and Globalisation". The book was presented at the World Bank, the United Nations, SOAS and the University of Sussex. Work has also resumed on the UNICEF project by Andrea Cornia et al., "AIDS, public policy and child wellbeing", available on [www.unicef-icdc.org](http://www.unicef-icdc.org).

The Unit of Bari is involved until 2004 in a network program financed by the EU called "Economic and Political Re-integration in an Enlarged EU: Implications for Regional Stability". CHILD members have also been active in organising and participating in international conferences. Two important conferences have been organised.

The "International Workshop on Research in Consumer Behaviour and Welfare: Implications for Policy" has been organised on May 14-16 in Garda (Verona) by Panayiota Lyssiottou (University of Cyprus),

Krishna Pendakur (University Simon-Fraser), Federico Perali (University of Verona). In Turin the CHILD COFIN conference on "Models of Household Economics for the Design and the Evaluation of Fiscal and Social Reforms" was organized by Ugo Colombino and Daniela Del Boca.

In July, Franco Peracchi (CHILD Tor Vergata) organised the fourth "Villa Mondragone Workshop in Economic Theory and Econometrics". This workshop offers a selected group of young researchers the opportunity to receive intense feedback on their work from more experienced economists. Also in July, Alessandro Cigno (CHILD Firenze), Pierre Pestieau and Ray Rees (both CHILD associates) organised a CESifo workshop in the island of S. Servolo (Venice) on "Taxation and the Family". The organisers are editing an MIT Press book containing a selection of the papers presented at the workshop.



## Editorial board

**Daniela Del Boca**  
([daniela.delboca@unito.it](mailto:daniela.delboca@unito.it))

**Vito Moscato**  
([vito.moscato@unito.it](mailto:vito.moscato@unito.it))

**Silvia Pasqua**  
([silvia.pasqua@unito.it](mailto:silvia.pasqua@unito.it))

**Alessandro Corsi**  
([alessandro.corsi@unito.it](mailto:alessandro.corsi@unito.it))

## HOW DOES AIDS AFFECT CHILD MORTALITY?

**Giovanni Andrea Cornia and Fabio Zagonari**

Most of the recent debate on the health impact of AIDS has focused on the surge in adult mortality but neglected the impact on the elderly and children. Because of this, the influence of AIDS on child mortality remains controversial. Thus, the HIV prevalence rate among adults might be unable to explain the trend in the under-5 mortality rate (U5MR) as other ailments such as measles, diarrhoea and malaria could still account for most child deaths. In Ghana, for instance, malaria remains the main cause of death among children. Furthermore, many AIDS-affected countries have experienced negative growth and a surge in conflicts and disasters, i.e. events that raise child mortality. This ambiguity is a source of uncertainty for any policy maker who has to allocate her resources among the cure of HIV-affected adults, fighting the traditional causes of child deaths and caring for HIV-positive children. The literature shows that child mortality depends on “traditional determinants” such as (i) female literacy; (ii) basic services for children, including the provision of fresh water, delivery care, child immunisation, oral rehydration therapy, breastfeeding and food supplementation. In AIDS-affected countries, these services were ‘crowded out’ by a growing demand for AIDS-related assistance or the introduction of user fees that reduced service utilization; (iii) family income per capita; (iv) income inequality. In addition to these “traditional determinants”, the growing number of armed conflicts, humanitarian emergencies and natural disasters leading to severe food shortages reaching famine proportions frequently recorded in Sub-Saharan Africa raise the risk of death among children. In AIDS-affected countries, U5MR was affected by a rise in adult HIV prevalence rate in three ways. First and foremost, infants borne to an HIV positive mother have a 30 percent probability of being infected by the HIV virus, contracting AIDS and dying in 1-2 years. This effect can be avoided by treating the new borne or pregnant mother with nevirapine (an antiretroviral) or instituting programs to prevent the mother-to-child transmission of HIV. Second, child mortality for infectious and waterborne diseases can go up if increasing demand for

AIDS-related hospital care by adults “crowds out” the supply of health services for children, or because of the decline in the stock of doctors and paramedics due to an AIDS-induced rise in mortality, out-migration and burnout among the medical staff. Third, mortality due to malnutrition may increase as incomes may drop up to 40-50 percent in families whose head died by AIDS in the prior year.

To disentangle the impact of the factors discussed above and provide some guidance for the design of health policies in AIDS-affected countries, we built a model of child mortality comprising the explanatory variables discussed above. The model was estimated on 200 data for five five-year periods (1980, 1985, 1990, 1995 and 2000) and 40 mostly African countries with an adult HIV prevalence rate greater than 1 percent in 2000. The explanatory variables include: (i) “traditional determinants” such as income per capita, female illiteracy, access to safe water supply, percentage of women giving birth in health facilities, immunisation rate, coverage of oral rehydration therapy, prevalence of breastfeeding; (ii) a dummy variable for conflicts and disasters affecting more than 5 percent of the population, (iii) prevalence of HIV among adults and a dummy variable for the HIV2 virus (that is more lethal than HIV1); (iv) a dummy variable correcting for data bias.

The results show that access to water, immunisation coverage and income per capita significantly decrease child mortality, while female illiteracy, HIV adult prevalence and frequency of disasters significantly increase it. The coefficient of the adult HIV prevalence rate implies that countries experiencing a (big) 20 points rise in HIV prevalence, would suffer an increase in U5MR by between 27 and 47 points per thousand. Given the value of this parameter, it would appear that the effect of AIDS on U5MR is not significant in countries where HIV prevalence is less than 3 percent. Finally, HIV2 increases child mortality by 22 points in relation to HIV1 countries.

Additional tests confirm the favourable impact of breastfeeding in reducing the greater risk of mortality due to diarrhoea and under nutrition. The coverage of delivery care and oral rehydration therapy are weakly significant. This means that an

ambitious expansion of 30 points in the coverage of these programs would reduce U5MR by only 5 and 2 points per thousands. The impact of such programs is considerably less pronounced than a similar improvement in female illiteracy (that would reduce U5MR by 40 U5MR points), coverage of fresh water supply (12 points) and immunisation rate (7 points). The impact of these programs increases visibly when it is interacted with the level of mother education.

In conclusion, the significant rise in child mortality that took place in most countries where the adult HIV prevalence rate exceeded 3 percent (especially if the initial coverage of health services for children was high) might be due to greater mother-to-child-transmission, and/or to the weakening of health services and/or to AIDS-induced impoverishment. Yet, it seems that at least half of the increase ought to be attributed to the first factor. This finding provides a strong rationale for stepping up programs to provide universal coverage of nevirapine to affected newborns. Second, ethnic conflicts appear to affect significantly but moderately child mortality while the usual health interventions in favour of children appear to have a perceptible effect, especially if they are carried out in countries with high maternal education. Third, while these programs have a clear effect on child mortality, this is more than offset by a rise in HIV-adult prevalence. For instance, a ten points rise in HIV adult prevalence rate more than offsets a similar expansion in the coverage of immunisation rate, fresh water supply, coverage of oral rehydration therapy, delivery care and breastfeeding. Greater protective effect is provided by an equivalent increase in maternal education though this variable changes little over the medium term. While waiting that antiretroviral programs targeted at infants expand, offsetting the negative effect of a ten percent rise in HIV prevalence requires an expansion of 15-20 points in child health programs. In poor societies, this is certainly a difficult task, but one that should be given top priority by the policy maker.

## WHO WILL TAKE ON THE MANAGEMENT OF FAMILY FARMS?

**Alessandro Corsi**

What will be the future of family farms? This is a serious problem, considering the ageing of agricultural working population. In Italy, for instance, the average age of farm operators is 56 years, 38 percent of them are older than 65 years, and only 17 percent are younger than 45. In a short period of time, many operators will be too old to operate a farm, and the destiny of their farms is at stake, if no successor will take on their operation. This is an issue of policy concern: when a farm ceases operating, this may have a beneficial effect for the general economy, since it allows an enlargement of the remaining farms and, hence, a greater efficiency; on the other hand, it can also have detrimental impacts on the territory, when the effect is abandonment and land degradation, which entail negative externalities.

Since most of the farms in developed countries (and, more generally, in the world) are family farms, changes in farm operation overwhelmingly take place within the household, with the farm handed over to children. A reason put forward for this is that the accumulation of farm-specific knowledge raises labour productivity, so that for an offspring having worked on the farm and having gained specific knowledge the land is worth more than for anybody else. Therefore, the children have an incentive to work on the farm when young at a lower wage than external labourers and to take on the farm from their parents (Rosenzweig and Wolpin, 1985). Nevertheless, technology changes rapidly, and in developed economies farm operation is increasingly based on scientific knowledge rather than on experience, which may reduce the effect of specific knowledge; on the other hand, heterogeneity of soils and weather conditions require that scientific knowledge be adapted to those specific conditions, which is more true for certain types of farming (e.g., animal and tree

production); and market trends in the last decades push towards an increasing quality diversification of food, which entails both location-specific technical and marketing skills, to exploit the particularities of the *terroir*.

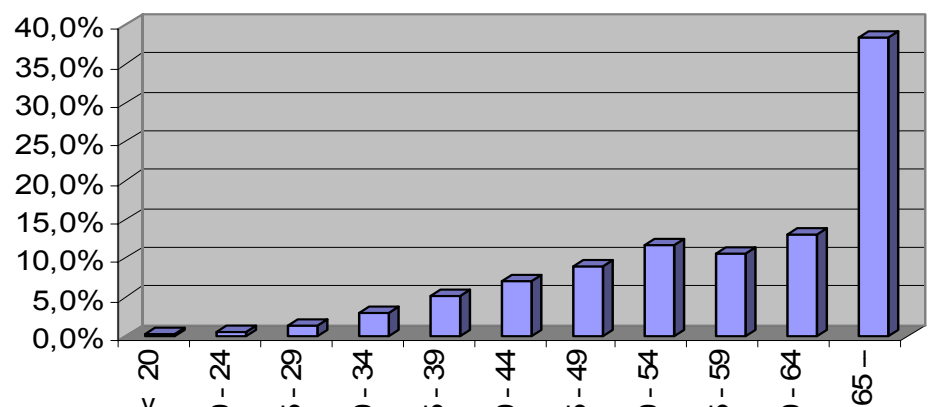
A forthcoming CHILD research (A. Corsi, Intra-family succession in Italian farms) explores the factors that influence the probability of family farms having a successor within the family, using a random sample drawn from the 2000 Italian Agricultural Census. The basic assumption is that if family members other than the farm operator are working exclusively or predominantly on the farm they are prospective successors, more so if they are operator's children; if in addition they live on the farm this possibility is reinforced. This is because if they work off the farm they accumulate human capital in that job, and coming back to farming becomes more and more difficult over time.

The results show that larger farms are more likely to have a successor, since they are more profitable and are preferred to alternative jobs by children. If the operator is a woman, a likely successor is less frequent: these are probably households with a low commitment to their farms (and, hence, low succession probability) that leave their management to women. The effect of operators' education, if any, is inversely related to the probability of

a succession: if more educated parents have also more educated children, they may more easily find off-farm high-wage jobs and give up farming. Farms specialised in fruits, quality vineyards, animal production are more likely to have a successor, which suggests that the accumulation of specific knowledge is important, since these are types of farming requiring higher skills, so that children working on the farm over time gain a higher productivity. The effects of off-farm work status of the operators is unclear, and probably complex decision-making processes between parents and children are involved.

The general picture that emerges from the results is twofold. On one side, it is comforting that a core of strong, specialised farms has good perspectives of going on with the new generation. On the other hand, in a large majority of farms there is no child working, so the prospects are gloomy. Moreover, though this point deserves more research, there is some evidence that children tend to stay more on the farm, all other things constant, when the local labour markets offers few job opportunities, which is negative both on efficiency and on equity grounds, though it can help keeping population in otherwise abandoned areas. Much more investigation is anyway needed on the topic, and more discussion on needed policies, since there does not seem to be a sufficient awareness of this issue in the political field.

Farm operators by age in Italy



## THE DEMAND FOR SONS: EVIDENCE FROM DIVORCE, FERTILITY AND SHOTGUN MARRIAGE

### Gordon Dahl and Enrico Moretti

In many developing countries, parents have preferences for sons over daughters. In Asia, for example, some researchers have argued that 80 million girls are “missing,” perhaps because they have been aborted, neglected, or directly killed. Because of a rising gender imbalance in India, the use of sonograms for selective abortions has been officially outlawed. While there are no “missing” girls in the U.S. or other Western countries, preferences for sons may take more subtle forms. In a recent Child working paper (01/2004), Dahl and Moretti find that preferences for sons have a significant effect on parental marital status and fertility behavior in the United States. Although declining over time, preferences for boys appear to be still quite strong among US parents.

Documenting parental sex bias is important for several reasons. First, such bias may have direct and indirect consequences on women’s socio-economic progress. Parents who prefer boys may devote less attention and nurturing to their daughters than sons. They may also devote fewer financial resources to their education and health. Evidence of parental gender bias is therefore related to the literature that documents an unequal intra-household allocation of resources. Moreover, evidence of preference for boys is related to the many studies that document a persistent gender gap in labor market outcomes, most notably wages. Because parental sex preferences are not easy to control for in wage equations, the finding of lower wages for women may in part reflect parental bias for boys that results in unequal intra-household allocation of psychological and material resources.

Understanding the magnitude of parental sex bias and the way it changes over time also has

important policy implications. Rapid progress in sex-selection technologies promises to make it increasingly possible for couples to choose the sex of their children. Although these techniques are still used by a negligible number of couples due to their costs, they are expected to become substantially cheaper and more reliable in the near future. High-tech sex selection poses a range of difficult policy dilemmas, and is currently extremely controversial. While it is legal in the United States, other countries (including some European countries) have outlawed it or are considering outlawing it. Obviously, the use of gender selection technologies becomes a more pressing issue if parents have strong preferences for one gender. As these technologies become more widely used, strong preferences for boys could, in the long run, lead to imbalances in the population gender ratio.

Dahl and Moretti find that parents with girls are significantly more likely to be divorced or separated compared to parents with boys. In addition, divorced fathers are much more likely to obtain custody of sons compared to daughters. By themselves, these divorce and custody results are not necessarily evidence of parental bias. It is possible that parents have unbiased gender preferences, but they decide to avoid or delay divorce if they have boys because they recognize the harmful effects of raising a son without a father present in the household (role model effect). Alternatively, it is also possible that the monetary or time costs of raising girls are different than the costs of raising boys.

Child gender composition affects also the probability of marriage. Women with only girls are substantially more likely to have never been married than women

with only boys. Perhaps the most striking evidence comes from the analysis of shotgun marriages using birth certificate data from California. At delivery, gender of the first child is not correlated with marital status for first-time mothers. This is reassuring, because for most parents in the sample, gender of the first child is unknown until birth. But if one tests whether gender of the child affects marital status at delivery when gender is known in advance because the mother has taken an ultrasound test during pregnancy, the results are really surprising: among women who have had an ultrasound test, mothers who have a girl are less likely to be married at delivery than mothers who have a boy. This evidence suggests that fathers who find out their child will be a boy are more likely to marry their partner before delivery.

Although these findings on marriage and shotgun marriage are consistent with the gender bias hypothesis, they do not rule out the possibility of the role model and differential cost hypotheses. Evidence on the effect of sons versus daughters on fertility stopping rules can provide an additional piece of evidence that can help separate the role model and differential cost hypotheses from the gender bias hypothesis. In families with at least two children, the probability of having another child is significantly higher for all-girl families than for all-boy families. The magnitude of the effect is larger for families with at least three children. This result would be hard to explain if parents were completely gender unbiased.

Is the demand for sons driven by fathers or mothers? This gender preference is largely driven by men. While women have only a slight preference for daughters in the population, men say they would rather have a boy by more than a two to one margin.

## Working Papers 2004

<b>CHILD 15/2004</b>	Time, Money, Peers, and Parents: Some Data and Theories on Teenage Behavior <b>P. Kooreman</b>
<b>CHILD 14/2004</b>	Wage Differentials and International Trade in Italy Using Individual Micro data 1991-1996. <b>A. M. Falzoni, A. Venturini and C. Villosio</b>
<b>CHILD 13/2004</b>	Collective and Unitary Models: a Clarification. <b>M. Browning, P. Chiappori and V. Lechene</b>
<b>CHILD 12/2004</b>	On the Identification of the Effect of Smoking on Mortality. <b>J. Adda and V. Lechene</b>
<b>CHILD 11/2004</b>	Optimal Unemployment Insurance, with Human Capital Depreciation, and Duration Dependence. <b>N. Pavoni</b>
<b>CHILD 10/2004</b>	Is There Such a Thing as a Family Constitution? A Test Based on Credit Rationing. <b>A. Cigno, G. C. Giannelli, F. C. Rosati and D. Vuri</b>
<b>CHILD 09/2004</b>	Efficient Allocations with Moral Hazard and Hidden Borrowing and Lending. <b>A. Abraham and N. Pavoni</b>
<b>CHILD 08/2004</b>	Employment and Fertility Decisions in Italy France and the U.K. <b>D. Del Boca, S. Pasqua and C. Pronzato</b>
<b>CHILD 07/2004</b>	The Supply of Child Labour <b>A. Cigno</b>
<b>CHILD 06/2004</b>	Population Ageing and Fiscal Sustainability: An Integrated Micro-Macro Analysis of Required Tax Changes <b>R. Aaberge, U. Colombino, E. Holmøy, B. Strøm and T. Wennemo</b>
<b>CHILD 05/2004</b>	New mothers' Labour Force Participation in Italy: the Role of Job Characteristics <b>M. Bratti, E. Del Bono and D. Vuri</b>
<b>CHILD 04/2004</b>	The Public Sector Pay Gap in France, Great Britain and Italy <b>C. Lucifora and D. Meurs</b>
<b>CHILD 03/2004</b>	High School Types, Academic Performance and Early Labour Market Outcomes <b>L. Cappellari</b>
<b>CHILD 02/2004</b>	Macroeconomic Effects of Reallocation Shocks: A Generalised Impulse Response Function Analysis for Three European countries: <b>T. Panagiotidis, G. Pelloni and W. Polasek</b>
<b>CHILD 01/2003</b>	The Demand for Sons: Evidence from Divorce, Fertility, and Shotgun Marriage <b>G. Dahl and E. Moretti</b>

## Conferences 2004

<b>September</b> 2004, 02-03	Danièle Meulders (organizer), Daniela del Boca, Siv Gustafsson, Jacques Le Cacheaux and Haris Symeonidou <b>"The Rationale of Motherhood Choices" , Sixth meeting of the EC Research Team MOCHO</b> Dulbea, Brussels - Belgium
<b>June</b> 2004, 25-26	Ugo Colombino e Daniela del Boca (organizers) <b>Models of Household Economics for the Design and the Evaluation of Fiscal and Social Reforms</b> Dipartimento di Economia, via Po 53 Torino - Italy
<b>May</b> 2004, 14-16	Panayiota Lyssiotou (University of Cyprus), Krishna Pendakur (University Simon-Fraser), Federico Perali (University of Verona) <b>International Workshop on Research in Consumer Behaviour and Welfare: Implications for Policy</b> Garda, Verona - Italy
<b>March</b> 2004, 01	Daniela del Boca (organizer), Danièle Meulders, Siv Gustafsson, Jacques Le Cacheaux and Haris Symeonidou <b>"The Rationale of Motherhood Choices" Fifth meeting of the EC Research Team MOCHO"</b> Dipartimento di Economia, via Po 53 Torino - Italy

## Members

### University of Torino

- » Ugo Colombino
- » Daniela Del Boca (*director*)
- » Maria Laura di Tommaso
- » Marilena Locatelli
- » Silvia Pasqua
- » Steinar Strom
- » Alessandra Venturini
- » Lorenzo Cappellari
- » Alessandro Corsi
- » Maristella Botticini
- » Claudio Lucifora
- » Chiara Pronzato
- » Vito Moscato

### University of Pisa

- » Alessandro Balestrino

### University of Roma Tor Vergata

- » Franco Peracchi
- » Furio Camillo Rosati
- » Vincenzo Atella
- » Andrea Brandolini

### University of Verona

- » Federico Perali
- » Giam Pietro Cipriani
- » Barbara Bernardi
- » Veronica Polin
- » Nicola Sartor

### University of Modena

- » Paolo Bosi
- » Tindara Addabbo

### University of Firenze

- » Alessandro Cigno (*president*)
- » Giovanni Andrea Cornia
- » Gianna Giannelli
- » Annalisa Luporini
- » Anna Pettini
- » Daniela Vuri
- » Massimiliano Bratti

### University of Bari

- » Giuseppe Celi
- » Maria Concetta Chiuri
- » Giuseppe De Arcangelis
- » Giovanni Ferri
- » Ernesto Longobardi
- » Vito Perugine

## Fellows

- » Rolf Aaberge (Research Department Statistics Norway)
- » Dan Anderberg (University of Stirling)
- » Patricia Apps (University of Sidney)
- » Andrea H. Beller (University of Illinois)
- » Sonia Bhalotra (Newnham College)
- » David Card (University of California, Berkeley)
- » Helmuth Cremer (Université de Toulouse)
- » Zvi Eckstein (University of Minnesota)
- » John Ermisch (ISER, University of Essex)
- » Christopher Flinn (New York University)
- » Marco Francesconi (ISER, University of Essex)
- » Reuben Gronau (Hebrew University, Jerusalem)
- » Stephen P. Jenkins (ISER, University of Essex)
- » Wilbert van der Klaauw (University of North Carolina)
- » Peter Kooreman (University of Groningen)
- » Valerie Lechene (University of Oxford)
- » Marco Manacorda (CEP and LSE)
- » John Micklewright (UNICEF)
- » Enrico Moretti (UCLA)
- » Nicola Pavoni (UCL and Carlos III, Madrid)
- » Gianluigi Pelloni (University of Bologna)
- » Pierre Pestieau (University of Liège)
- » Ray Rees (University of Munich)
- » Rocio Ribero (Universidad de los Andes, Bogota)
- » Paul T. Schultz (Yale University)
- » Alain Trannoy (University of Cergy – Pontoise)
- » Kenneth I. Wolpin (University of Pennsylvania)
- » Klaus F. Zimmermann (IZA and Bonn University)

## Seminars 2004

- |                   |  |
|-------------------|--|
| June 2004, 28     | L. Mencarini & M. L. Tanturri (Università di Modena)<br><b>"Allocation of Time and Fertility Choices"</b><br>Facoltà di Economia "M. Biagi", Aula Seminari, Via Berengario 51 Modena - Italy                 |
| April 2004, 21    | Steinar Strom (Università di Torino)<br><b>"Labor supply when tax evasion is an option"</b><br>Dipartimento di Economia, via Po 53 Torino - Italy  |
| March 2004, 12    | Melvyn Weeks (University of Cambridge)<br><b>Social interactions and reproductive externalities: an investigation of fertility behaviour in Kenya.</b><br>Dipartimento di Economia, via Po 53 Torino - Italy |
| February 2004, 05 | Anna Marenzi e Laura Pagani (Università dell'Insubria)<br><b>The labour market participation of "sandwich generation" Italian women.</b><br>Dipartimento di Economia, via Po 53 Torino - Italy               |
| January 2004, 19  | Antonio Filippin (University of Milan, EUI and IZA Bonn)<br><b>"Discrimination and workers' expectations"</b><br>Dipartimento di Economia, via Po 53 Torino - Italy  |