

Demographic convergence and economic divergence? Revisiting demographic transition in developing countries

Convergenza demografica e divergenza economica?

Una rilettura della transizione demografica per i Paesi in via di sviluppo

Silvana Salvini

Dipartimento di Statistica, Viale Morgagni, 59 Firenze,
e-mail:salvini@ds.unifi.it

Riassunto: La convergenza del comportamento demografico in popolazioni caratterizzate da diverse condizioni socio-economiche presenta interessanti prospettive di analisi, sia dal punto di vista teorico, sia per la valutazione degli scenari demografici futuri. In questo contributo, dopo avere brevemente ricordato i presupposti della teoria della transizione demografica, descriverò l'evoluzione recente della fecondità dei paesi in via di sviluppo, cercando di sottolineare sia gli aspetti di avvicinamento ai modelli occidentali sia le differenze e le eterogeneità interne. Sulla base dei dati stimati dalle Nazioni Unite e dalle indagini DHS, analizzerò i diversi livelli di fecondità alla luce di fattori individuali (istruzione) e di contesto (residenza). Alle analisi quantitative accosterò alcuni casi di studio con l'obiettivo di interpretare le determinanti dei processi di convergenza e divergenza.

Keywords: Developing countries, Demographic convergence

1. Introduction

The convergence of demographic behaviour in populations with different socio-economic conditions is a very interesting area of inquiry for the scholar. Arguably one of the most interesting aspects of this phenomenon is the occurrence of similar levels of fertility and mortality at different stages of economic and social development. From a theoretical point of view, it is clear that this process raises some questions about the validity of a classical approach to demographic transition theory.

In this paper, after a brief description of the theoretical approach of convergence and a revisiting of demographic transition theory, we will turn our attention to the socio-demographic conditions of developing countries with the aim of investigating the globalisation of behaviours. The paper employs the most recent demographic data (in particular fertility and infant mortality data) of developing countries along with socio-economic characteristics, taking into account several sources in an effort to synthesise the relationships among the social and demographic indicators. Finally, we turn to some case-studies in order to exemplify convergence or divergence processes.

2. Social convergence and demographic transition

The idea that societies move toward a condition of similarity is a common feature of various theories of social change (Coughlin 2001). The notion that differences among societies will decrease over time can be found in many works of eighteenth- and nineteenth-century social thinkers (Inkeles 1999). More recently, the study of "post-industrial" society and the debate over "post-modernist" aspects of contemporary society also reflect to some degree the idea that there is a tendency for broadly similar conditions or attributes to emerge among a range of otherwise distinct and dissimilar societies.

In sociological discourse since the 1960s, the term *convergence theory* has held out a more specific connotation, referring to the hypothesized link between economic development and concomitant changes in social organization, particularly as regards work and industrial organization, class structure, education, the role of government in assuring basic social economic security and, most relevant for the present study, the trends of demographic behaviours and of characteristics of the family toward similar patterns.

The core notion of convergence theory is that as nations achieve similar levels of economic development they will become more alike in terms of these (and other) aspects of social life. In the 1950s and 1960s, predictions of societal convergence were most closely associated with modernization theories, which generally held that developing societies will follow a path of economic development similar to that followed by developed societies of the west. These assumptions, in a more specific way, are also the basic hypotheses of demographic transition theory. Sometimes there is an inversion in the cause-effects links, but the description of the parallel processes is quite similar (Inkeles 1999).

The theory of demographic transition provides one of the most straightforward examples of convergence. The essence of the demographic transition holds that fertility and mortality rates covary over time in a predictable and highly uniform manner. Moreover, these changes are directly linked to broad developmental patterns, such as the move from a rural, agriculturally-based economy to an urban-industrial one, increases in per capita income, diffusion of education and female empowerment. This model works remarkably well in accounting for demographic patterns observed among all industrialized societies starting with the end of 19th century and during the 20th century, giving way to declining rates of fertility ending with a nearly uniform pattern of zero population growth in the 1970s (Coale, Cotts-Watkins 1986).

Generally considered, the transition from a high fertility and mortality situation to another one characterized by low vital rates, may be seen as an example of "convergence", that describes a world going towards a new "demographic equilibrium" (Wilson 2001). On the other hand, fertility in developed societies is currently well below replacement level of two children per woman, that in the classic approach of demographic transition represents the equilibrium threshold. In many countries (Italy, Spain, Germany and Japan) and in many population sub-groups total fertility rate is assessed around 1.2 children per woman. In the short term, these countries must face substantial economic problems related to the high level of population that is aging, in particular with reference to the workforce (McDonald, Kippen 2001). But the persistence of this situation over the long term may represent a risk for the future survival of whole populations. Instead of a new equilibrium, this stage may exemplify a

new form of chaos, following the rapid increase of population of the past centuries (McDonald 2002).

And what about the application of the paradigm to the evolution of developing countries? The reformulation of a coherent theory of demographic transition from high rates (six-seven children per woman) to intermediate rates (three children per woman) or low rates (two children or even lower) represents one of the central challenges in population studies.

Some developing countries have already achieved fertility levels similar to the more developed countries: e.g. Brasil, 2.15 children per woman; China, 1.80 and Tunisia, 2.10 children per woman (UN 2003). Others experience a phase of stasis in fertility decline that is unexplained. This is the case of some South-Mediterranean countries (such as Egypt) and of South Asian countries (India and Bangladesh), but also some Latin American countries present this characteristic. Moreover, within these countries a great variability in reproductive behaviour continues to exist depending on ethnic group, religion, race, level of education and income. In close proximity to some groups where the fertility level is quite similar to that in developed countries, other groups may show traditional nuptiality and fertility models, with a low prevalence of contraception.

If the concept of convergence is related to the concept of equilibrium, the persistence of fertility well below cohorts replacement in industrialized countries and the standstill on high levels in developing countries, introduce the concept of demographic disorder (Egerö 2001)

Recently, more comprehensive approaches agree on the importance of both cultural and economic factors of demographic transition (Piché, Poiries 1995). In this framework, explicitly “... *divergences et convergences dans les discours et théories de la transition démographique*” are underlined. Therefore a focus on convergence/divergence also concerns theoretical issues and not merely the “facts of demography”, but also the “interpretation of behaviours”.

In synthesis, demographic transition may be seen as a convergence process, and consequently demographic transition theory may be described in terms of convergence theory. Exceptions among the developing countries on the road to transition induced by economic globalisation may then be interpreted as examples of divergence. Is a rapid decline of fertility (and infant mortality) without socio-economic development a sign of a lack of generalization of transition theory or not? On the other hand, what does the diffusion of education or the improvement of economic conditions mean without a “convergence” of fertility levels to the values of TFR typical of advanced societies? Is lack of convergence a “*défaillance*” of demographic transition theory? And finally, does convergence in demographic behaviour of the large majority of world population call into question the “castle” built by demographic transition theory?

Wilson's (2001) recent review of what he calls the growing demographic convergence in the world reconfirms the need to go beyond either economic development or special policy inputs in the search for understanding. Well aware of the state of pervasive poverty, high levels of illiteracy and gender inequities in many regions, he states: “...it is clear that social and demographic change has progressed far more rapidly than economic development”. However, in terms of what kinds of social change are relevant for the process, we may only have reached the understanding that “...there are many demographic transitions, each driven by a combination of forces that are ...institutionally, culturally and temporally specific” (Greenhalgh 1990). In terms of their individual forms, the inter-relation between fertility and mortality dynamics, and

the time-shape, there are bound to be many demographic transitions. This in itself does not preclude the workings of common factors, if not on the whole process then perhaps at the onset (Livi Bacci 1995; Salvini 1995).

3. Convergence or divergence in fertility and in mortality patterns

In 2002 Revision of World Population Prospects (UN 2003) convergence between less developed and more developed countries is considered the “natural” scenario of the future of world population. Nevertheless, some important questions remain unresolved. Do developing countries (each one considered as an homogeneous unit) converge to replacement level or, as it appears in many cases, do developing countries remain on a different “threshold” well above 2.1 children per woman? Do developing countries adopt *in toto* attitudes and behaviours of developed ones? If the response is “yes” to the predictive approach of the theory of demographic transition, the problem is represented by time: how many years are needed to reach this scenario? The increase in population depends on the duration of the convergence process. In other words, if the variable time is not included in the model, all societies are living the process of convergence in a demographic context, but if the level of 2.1 children per women will be achieved in 2200 (to establish a very long period of projection) the consequences in terms of people added to the world might be unsustainable.

The present study begins by underlining the process of convergence of the fertility rate in the/among the world populations. Table 1 reports the percentiles of the distribution of countries according to the value of TFR. Similarly, Table 2 shows the percentiles of the distribution of countries according to the value of life expectancy at birth (Wilson, 2001).

Table 1 - Percentiles of the distribution of countries by TFR

Percentiles	1950-55	1975-80	2000
10 th	6.7	6.7	4.8
25 th	6.1	5.3	3.2
50 th (Median value)	5.4	3.6	2.3
75 th	3.4	2.1	1.7
90 th	2.5	1.8	1.4

Source: Wilson, 2001

Table 2 - Percentiles of the distribution of countries by life expectancy at birth

Percentiles	1950-55	1975-80	2000
10 th	34.3	47.0	54.3
25 th	37.7	53.4	64.5
50 th (Median value)	44.8	62.5	68.1
75 th	64.3	69.3	72.5
90 th	69.0	73.2	77.1

Source: Wilson, 2001

The change over time is striking, and the percentiles confirm this pattern. Turning one’s attention to fertility trends one observes that in the period 1950-55 a large proportion of the world’s population experienced very high fertility. At that time, the median individual lived in a country where the total fertility was 5.4 children. Relatively few populations presented an intermediate level of fertility, while a large part of

industrialized world population experienced quite low fertility rates. In short, in the early 1950s there were two distinct fertility regimes: developed and developing. By the end of the 1970s, change was already substantial: the median individual lived where total fertility was 3.6.

After two more decades of demographic transition, the distribution of countries according to fertility level had been transformed. Today the median individual lives in a country in which total fertility is 2.3. It is also noticeable that the lower limit of TFR is nowadays a single child, and not two: almost 40 percent of humanity lives where the TFR is below two. The median is now close to the replacement level and the lower quartile (3.2) is actually below the value for the upper quartile half a century earlier. Only ten percent of people live in areas where the TFR is above 4.8, compared with 63 percent in the early 1950s.

Today it is difficult to make any clear distinction between developed and developing countries in terms of their fertility, and many developing country populations are to be found intermingled with the developed nations. For example, fertility in the Indian states of Kerala and Tamil Nadu, in Tunisia, in Iran and in much of China is below that in the United States. It is widely held that the overwhelming trend is for low fertility to become a general feature of both poor and rich countries alike.

Wilson (2001) interprets the trend as one of growing demographic convergence in the world. He summarizes: "*A large majority of the world's population is (or soon will be) demographically 'modern' by any definition*". However, the 2002 UN World Prospects report prefers to emphasize the opposite trend, namely the growing signs of polarization in the world (Egerö 2001). In fact we must not forget that even in 2000 a significant portion of world population lives in high-fertility regimes. While most of the developing world has moved rapidly towards convergence with the developed world, a significant minority remains with much higher fertility. By far the largest contributions to this group come from Sub-Saharan Africa and northern parts of the Indian subcontinent. In 2050 as nowadays, the European population will amount to around 700 million people, while Africa, which today has a population similar to Europe's, will grow to 1400-1500 million. The 48 countries classified as least developed have a very rapid population growth. If current trends continue, the combined populations of these nations will almost triple by mid-century, from 658 million to 1.8 billion. Among the 16 countries with extremely high fertility rates (seven children or more per woman) are Afghanistan, Angola, Burkina Faso, Burundi, Liberia, Mali, Niger, Somalia, Uganda and Yemen. For these countries – among the poorest in the world – economic divergence is joined to the persistence of a traditional demographic regime (Rutstein 2002; Zlidar *et al.* 2003).

4. Socio-economic differences and reproductive behaviour

4.1 Differences among countries

Fertility levels of countries according to income in developing countries (<http://unstats.un.org/unsd/demographic/social/default.htm>) describe both the persistent heterogeneity in reproductive behaviour (at the same level of income) and the negative relationship between fertility and income at an aggregate level. Nevertheless, when income increases, variability in TFR diminishes. If we look at the values of standard

deviation, we see that the poorest countries that present a very high mean fertility, present also the highest level of standard deviation (almost 1.5 children per woman). When we look at the groups of countries characterized by a higher level of income, both level of fertility and variability diminishes, even if marked differences remain: standard deviation is still around one child per woman. Outliers have a considerable weight on this average (Table 3).

Table 3 – Mean and standard deviation of TFR in developing countries by income level

	Income				
	Low	Middle-low	Middle	Middle-high	High
N. countries	43	14	19	15	11
TFT mean	5.10	3.66	3.26	2.90	2.94
St. deviation	1.46	1.48	0.95	0.98	1.02

Source: Our elaboration of UN data

These differences among developing countries have led to the study of similarities through cluster analysis. Again we have used data reported in the website of the UN (2004) referring to numerous series of social indicators for 102 developing countries. Variables considered in the analysis are the percentage of people living in urban versus rural contexts, the rate of growth in urban versus rural contexts, TFR, level of income, male and female expectation of life at birth, infant mortality, and male and female proportion of illiteracy in the 15-24 age-group. In Table 4 we report some statistics and the results of cluster analysis in terms of the four final groups.

Table 4 - Results of cluster analysis (four final groups): some statistics

	Cluster			
Variables	1	2	3	4
% Urban	43.4	33.0	34.4	73.4
Rate of incr. (Urban)	2.4	4.6	4.0	2.4
Rate of incr. (Rural)	0.7	1.7	1.2	-0.3
Total fertility rate	3.0	5.8	4.9	2.7
Exp. of life (Male)	65.1	47.9	46.2	70.0
Exp. of life (Female)	69.8	49.7	48.5	75.0
Infant Mortality (per 1,000)	38.9	98.1	82.6	22.5
% Illiteracy 15-24 (Male)	7.2	38.9	14.8	5.7
% Illiteracy 15-24 (Female)	10.9	61.4	21.3	7.1
Number of countries	28	22	25	27

Source: Our elaboration of UN data

The groups are characterized by different levels of income. On average, the first cluster may be defined at an intermediate level of income (in this cluster we find South Africa, Syria, Thailand and some former Soviet Republics). The fourth cluster may be defined by the highest level of income and survival (many Latin American countries belong to this group, together with some Mediterranean countries and some oil-producing countries). The second and third clusters are characterized by the lowest level of income. The second cluster includes countries with the highest level of fertility, such as a large part of sub-Saharan countries (Ethiopia, Chad, Ivory Coast, Gambia, Guinea Bissau, Liberia, Malawi, Mali, Mozambique, Niger). Moreover the second and third clusters present the highest level of mortality as many of the countries in these groups are influenced by the HIV/AIDS epidemic. The main difference between these groups is in their rate of illiteracy, which is much lower for the third cluster, and which

includes sub-Saharan countries such as Namibia, Tanzania, Zimbabwe and Botswana where, before the spread of AIDS, demographic transition was joined to the onset of social improvement and at least partial female empowerment.

Regression models run according level of income reveal different relationships among level of TFR and independent socio-demographic predictors (female expectation of life at birth, level of urbanization, percentage of female illiteracy in the 15-24 age-group), confirming heterogeneity among the countries. In countries characterized by a middle or high level of income only the rate of urban population growth (with positive sign) and female expectation of life at birth (with negative sign) are determinant in explaining fertility; but female illiteracy is not significant, while in low income countries this factor is positively related to fertility. It is so confirmed that different stages of transition are characterised by different series of determinants of fertility.

4.2 Heterogeneity among countries

On the basis of the most recent data deriving from DHS surveys (www.measuredhs.com), it is possible to distinguish the differences of reproductive behaviour and infant mortality inside the countries according to some contextual aspects (residence) and according to some individual socio-economic characteristics (education). The aim of this analysis is to underline that even though we speak about convergence, often we are observing a “convergence on average” but there are many differences inside the countries depending on several factors. Some descriptive statistics deriving from DHS data reveal the great variability of total fertility rates and infant and child mortality rates by residence and level of female education (Table 5). The first considerations regard fertility. Mean values are extremely variable: differences among people living in urban and rural context are equal to 1.7 children but the standard deviation in both cases is more than one child. Differences according to level of education are even more greater: women with a secondary school education have on average 3.2 children while women without education have 5.7 children, with a higher variability shown by standard deviation. Mortality also presents a higher heterogeneity: the ratio between standard deviation and the mean value is larger than that of fertility rates, in some cases more than 40% with respect to 20%.

The final groups obtained by cluster analysis using the above listed parameters synthesise these considerations (Table 6). The first group, characterised by the “best” conditions in terms of lower infant mortality and fertility, comprises many Latin American countries (such as Brazil, Colombia, Dominican Republic, Guatemala 1998-99, Nicaragua and Peru), some Asian countries (Indonesia, Philippines, Thailand, Turkey, and Vietnam) and finally some African countries. This latter group has improved its demographic and health situations during the period in which the DHS project was conducted beginning in the mid-1980s. This is true, for example, of Egypt 2000 which had previously belonged to cluster 2, or of Kenya and Zimbabwe which have each experienced a rise in mortality from one survey to the next as a result of the worsening AIDS crisis.

Table 5 – *Total fertility rates and infant and child mortality rates by residence and level of education: descriptive statistics*

Indicators	Minimum	Maximum	Mean	Std. Dev.	Coeff. Var.
TFR	1.7	7.7	4.7	1.4	29.8
TFR (Urban)	1.5	6.4	3.7	1.2	32.4
TFR (Rural)	2.1	8.2	5.4	1.4	25.9
TFR (No education)	0.9	8.1	5.7	1.4	24.6
TFR (Primary)	0.7	7.4	4.8	1.4	29.2
TFR (Secondary)	1.6	5.8	3.2	0.9	28.1
Infant mortality (0-1 years)	24.4	152.5	76.8	28.2	36.7
Q0 (No education)	26.9	162.7	91.5	27.6	30.2
Q0 (primary)	24.2	255.6	75.3	29.4	39.0
Q0 (secondary)	17.9	112.5	48.8	18.3	37.5
Q0 (Urban)	21.3	140.4	61.9	22.3	36.0
Q0 (Rural)	23.4	160.7	83.4	29.5	35.4
Child mortality (0-5 years)	28.0	326.2	122.6	60.8	49.6
Q0-5 (No education)	28.8	334.2	147.8	57.4	38.8
Q0-5 (primary)	28.5	255.6	116.3	51.5	44.3
Q0-5 (secondary)	20.6	176.1	68.3	31.5	46.1
No. of countries	115				

Source: Our elaboration of DHS data

Table 6 – *Results of cluster analysis (four final groups) carried out on TFR and mortality according to residence and education: some statistics*

Indicators	Cluster			
	1	2	3	4
TFR (Urban)	3.0	3.4	4.5	5.6
TFR (Rural)	4.6	5.3	6.5	6.9
TFR (No education)	5.1	5.5	6.6	6.8
TFR (Primary)	4.2	4.4	5.9	6.4
TFR (Secondary)	2.9	2.9	3.8	4.3
Q0 (no educ.)	62.4	94.0	108.8	141.6
Q0 (primary)	48.1	72.8	91.3	116.8
Q0 (secondary)	30.5	48.3	61.3	72.7
Q0 (Urban)	38.6	63.0	79.5	99.2
Q0 (Rural)	50.8	86.5	103.9	141.1
Q0-5 (No education)	88.5	143.3	191.7	263.1
Q0-5 (Primary)	64.4	103.9	158.5	215.9
Q0-5 (Secondary)	37.4	63.5	95.6	121.1

Source: Our elaboration of DHS data

Cluster 3 and cluster 4 present higher mortality. Cluster 3 includes, almost entirely, sub-Saharan countries: Ethiopia, Cameroon and Chad, for example belong to cluster 3 so as did Ghana in the oldest surveys. Finally cluster 4 includes the worst situations: Malawi and Mali in the early 1990s belong to cluster 4, and cross over to the cluster 3 in the last phases of DHS.

Fertility declines on average as one moves from cluster 4 to cluster 3, from cluster 3 to cluster 2 and finally to cluster 1. In every group the most educated women present the lower fertility: in cluster 1 and 2 TFR is 2.9 for women with secondary school education and 5.1 for less educated women. Values are much higher in clusters 3 and 4.

In conclusion this classification analysis shows on one hand the differences still present in infant mortality and fertility; convergence to the common features

experienced from industrialized societies still seems to be a distant prospect for most developing countries. On the other hand the path towards the transition of various population groups (according to education and residence) inside developing countries is sometimes interrupted by catastrophic events such as AIDS epidemic.

5. Convergence toward fertility models of industrial countries: some examples

To interpret the process of convergence, quantitative analysis may be integrated by a qualitative approach, carried out by means of examining two case studies: the evolution of the state of Kerala in India and the Mediterranean countries.

Kerala had one of the highest marital fertility rates in the country before family planning became popular in the state. From about 6 children per woman in 1947, the TFR declined to 1.7 by 1993 and it remains more or less at the same level now. Fertility transition in Kerala took just about a generation to reach significantly below the replacement level. This makes the fertility transition in Kerala a unique event in the demographic history of India (Zachariah 1998). Cohort fertility rates of women who were married after the introduction of land reforms and other redistribution policies, which coincided with the introduction of the strengthened family planning programme, were markedly lower than the cohort fertility rates of those who were married before this period. This could also be taken as an indication of the crucial role which land reforms and family planning programmes played in the fertility transition of this state.

Fertility differentials also underwent significant transitions. In the beginning, when fertility rates were determined by biological factors, socio-economic differentials were not very marked and whatever differences, did exist, could be explained by health related factors. In the 1960s and 1970s socio-economic differentials became very marked. Fertility declines were larger among the middle level socio-economic groups. For example, fertility decline was highest among neither the most, nor the least educated but among women with 1 to 4 years of schooling. This was a reflection of the differentials in the acceptance of sterilization as a family planning method. Statistical analysis conducted on the second Indian National Family Health Survey (NFHS-2) in 1998-99 confirms both that Kerala is one of the states with the higher proportion of women characterised by innovative behaviours in terms of contraception and that the decline of fertility is verified through a diffusion process starting from the innovators (Di Cesare 2003). By the early 1990s, when fertility rates had reached near replacement level, socio-economic differentials in most of the southern districts of Kerala had practically disappeared, an indication of the universal acceptance of family planning in these districts. In the case of Kerala, education occupied a significant position among the socio-economic factors affecting fertility and mortality. In the early period changes in fertility took place mainly through increases in age at marriage, which in turn was affected mainly by increases in the years of schooling. As a result, marital fertility remained fairly stable (Zachariah 1998). A new stage in fertility transition came when governments entered the field of population planning. Socio-economic factors began to lose some of their importance and government policies in family planning began gaining importance. Government efforts decreased the amount of time period required for fertility transition to less than a generations. The importance of the role of family planning programmes in Kerala's transition makes clear that demographic

transformation of developing countries cannot be explained by the “toolkit” used in the history of developed countries.

A total different example is described by the comparison among Northern and Southern Mediterranean countries. Fertility transition is now underway in almost all the countries of the southeastern shore, and the prospect of convergence in the long run with the demographic course of the northern shore countries is no longer improbable. Widely available education (particularly for females) and urbanization have influenced reproductive behaviour. Despite the limited presence of women in the labour market, the irreversible drop in fertility seems to prefigure considerable social transformations such as the erosion of patriarchy and the modification of the status of women in society (Fargues 2000).

Similar to the fertility transition in Kerala, when comparing the North-South fertility transition path by education level, an important role may be played by family planning programmes. The rapid diffusion of family planning in the southern countries, even amongst less educated women, due to ad hoc campaigns may “flatten out” differential fertility levels. Moreover the diffusion of education may act to increase age at first birth and to influence timing of fertility. Trends in period fertility are, then, the net result of modifications in timing and intensity. The question is: how will this postponement effect continue in the future? We believe that the trend will continue, if only as a result of the ongoing trend towards greater education amongst women. Education is related to a later entry into both married life and reproductive life. In the short run, in demographic forecasts for the Mediterranean region made by Courbage (1999), the proportion of educated women is expected to grow and this fact in itself, given the same differential fertility for groups, will continue to signify an increasing average age at marriage and at first birth, and therefore a decreasing period TFR. What the quantum of fertility will be when the rise of timing indicators ends in the long run and that particular fertility-depressing effect stops is of course impossible to say (Mencarini, Salvini 2002).

In southeastern Mediterranean countries the role of women may represent one of the key factors in the process. Even if at the present moment women have a low participation in the labour market, we can hypothesize that in the future, with the increasing enrolment in higher levels of education, this commitment will increase. Courbage (1999), for example, states that only university and professional education ensure active participation in the labour market, and that fertility seems more sensitive in the transition from inactive to active women (even if they belong to the blue-collar sector) than between uneducated and primary educated women.

On the other hand, what Reher (2001) has to say about the social realities considered also seems reasonable, when he talks about the “*changing role of women more as a consequence of demographic change rather than its cause.... there are countries [such as Morocco] that have experienced sharp fertility decline in recent years where women continue to play only marginal social roles*”.

Even if the demographic characteristics of Mediterranean countries seem generally to favour the current process of convergence, one area presents marked divergences among population groups. In the Palestinian territories, divergences may be explained by political factors. “*Nowhere else in the world are populations at the two extremes of fertility transition found side by side in such a small territory, with TFRs ranging from barely above the replacement level among Jews born in Europe and among Christian Arab Israelis (2.13 and 2.10 respectively in 1992-96), to the highest level recorded in*

today's world among Palestinians of the Gaza Strip (7.73 in 1991-95)". These extreme contrasts of fertility are a corollary of the long-lasting state of belligerence between Arab Palestinians and Israeli Jews. From the beginning of the conflicts, population has been central in the struggle: for one side, settling the highest possible proportion of world Jewry in Israel; for the other side, maintaining the status quo or regaining a status quo ante. The regrouping of the Jews and the dispersion of the Palestinians affected the courses of their respective fertility transitions (Fargues 2000).

6. Some concluding remarks

Globalisation and convergence of demographic regimes seem to characterize the world in recent decades, but very high fertility rates persist for many sub-groups of populations, specifically for the poorest and the least educated. Most people living in sub-Saharan countries reveal high fertility and, where the diffusion of AIDS is large, expectation of life at birth is one half that of developed countries. On the other side, many industrialized countries present under replacement fertility, and decrease and aging of populations characterize their demographic future. In synthesis, we observe "clusters" of ever-similar countries and completely different "clusters" of countries that evidence an ever-increasing socio-economic and demographic divergence so we must ask whether we are witnessing a tendency to equilibrium or to global disorder? The future depends on the diffusion of education and on the valorisation of human capital, in particular as it regards female empowerment, as it is suggested by the above considerations. Probably this is the keystone of convergence to an harmonic demographic trend. I want to conclude referring to some considerations of Sen (2000). Today the extreme poverty and the larger socio-demographic inequalities are concentrated in well-defined parts of the world: Southern Asia and sub-Saharan countries. These regions present both the lowest levels of income pro-capita and the lowest individual "capabilities", using the Sen's word to identify the impossibility to choose one's life, to improve the standard of life, to plan one's future. There are regions in Northern India where survival is equal to the poorest countries of sub-Saharan countries where every day-life is a "bet". And the poorest among the poor people are women that, according Sen (2000), have in their hands the future of population and of sustainable development, through the building of healthier and more educated future generations.

References

- Coale A. J., Cotts Watkins S. (Eds.) (1986) *The Decline of Fertility in Europe*, Princeton, Princeton University Press.
- Coughlin R. M. (2001) Convergence Theories, in: *Encyclopedia of Sociology*, Borgatta E. F., Borgatta M. L. (Eds.).
- Courbage Y. (1999) *Nouveaux horizons démographiques en Méditerranée*, Travaux et Documents n. 142, INED-PUF, Paris.
- Di Cesare M.C. (2003) Determinanti della scelta del metodo contraccettivo in India, Tesi di Dottorato di ricerca in Demografia, XV Ciclo, Dipartimento di Scienze demografiche, Università di Roma "La Sapienza".

- Egerö B. (2001) Global disorder: an important agenda for 21st century population studies, *IUSSP General Conference of Population 2001* (Salvador de Bahia).
- Fargues P. (2000) Protracted National Conflict and Fertility Change: Palestinians and Israelis in the Twentieth Century, *Population and Development Review*, 26, 3, 441-482.
- Golini A. (2003) *La popolazione del pianeta*, Il Mulino, Bologna.
- Greenhalgh S. (1990) Toward a political economy of fertility: anthropological contributions, *Population and Development Review*, 16, 1, 85-101.
- Inkeles A. (1999) *One World Emerging? Convergence And Divergence In Industrial Societies*, Hoover Institution, Stanford University, Westview Press.
- Livi Bacci M. (1995) Transizione e transizioni, in: *Continuità e discontinuità nei processi demografici*, *Atti del Convegno della SIS*, Università degli Studi della Calabria, 20-21 aprile, 25-44.
- Livi Bacci M. (2001) *A concise History of World Population*, Blackwell pub. Inc., USA.
- Mc Donald P., Kippen R. (2001) Labor supply prospects in 16 developed countries, 2000-2050, *Population and Development Review*, 27, 1, 1-32.
- McDonald P. (2002) Low fertility: unifying the theory and the demography, Paper prepared for session 73, *Future of fertility in low fertility countries*, Meeting of the Population Association of America 2002, Atlanta, 9-11 may.
- Mencarini L., Salvini S. (2002) Mediterranean fertility: towards a South-North convergence?, Paper presented to the Seminar *Lowest-low fertility in Southern Europe*, Max Planck Institute for Demographic Research, Rostock, Germany, June 27-28 (presented to be published in *Popolazione e Storia*).
- Piché V., Poiries J. (1995) Divergences et convergences dans les discours et théories de la transition démographique, *Chaire Quetelet 1992, Transition démographique et sociétés. Des faits aux idées et politiques*, Louvain-la-Neuve.
- Reher D. (2001) The demographic transition revisited, paper presented at IUSSP Conference *The History of World Population in the Second Millennium*, Florence.
- Rutstein S. O. (2002) Fertility levels, trends, and differentials 1995-1999, *DHS Comparative Reports*, n. 3, ORC-Macro, MeasureDHS, Calverton, Maryland, USA.
- Salvini S. (1995) Modelli evolutivi della fecondità occidentale. Approcci interpretativi e strumenti di analisi, in: *Continuità e discontinuità nei processi demografici*, *Atti del Convegno della SIS*, Università degli Studi della Calabria, 20-21 aprile, 249-261.
- Sen A. (2000) *Lo sviluppo è libertà. Perché non c'è crescita senza democrazia*, Arnoldo Mondadori Editore, Milano.
- United Nations (2003) *World Population Prospects. The 2002 Revision*, New York.
- United Nations Statistic Division (2004), Social indicators, in: website <http://unstats.un.org/unsd/demographic/social>
- Wilson C. (2001) On the scale of global demographic convergence 1950-2000, *Population and Development Review*, 27, 1, 155-171.
- Zachariah K. C. (1998) Models of Development and Demographic Change A Case Study of Kerala, *Demography India*, 27, 1, 71-89
(<http://www.hsph.harvard.edu/Organizations/healthnet/ASia>)
- Zlidar V.M., Gardner R., Rutstein S.O., Morris L., Golberg H., Johnson K. (2003) *New Survey Findings: The Reproductive Revolution continues*, *Population Reports*, Series M, n. 17, Baltimore, John Hopkins Bloomberg School of Public Health, the INFO Project, available online: <http://www.populationreports.org/m17>.