Regular Session No: S 43 | Title: The Demography of sub-Saharan Africa

Title of Paper: Africa's emerging population, and last power asset: ageing inevitable but possibly far into the future

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AFRICA'S EMERGING POPULATION, AND LAST POWER ASSET: AGEING INEVITABLE BUT POSSIBLY FAR INTO THE FUTURE

An invited basic paper for Poster Session S43: The Demography of sub-Saharan Africa, to be held at the IUSSP General Population Conference, Salvador, Brazil August 18-24, 2001.

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ABSTRACT

Dreaded doomsday ageing consequences in, particularly European countries and Japan, a result of past protracted fertility decline, provides a pivotal lesson. High fertility Africa is perceived being in a unique historical opportunity, not only to avoid ageing but as some solution to the ageing world also.

The paper therefore reviews consequences of ageing in Europe: a predicament, particularly with the impossibility of low fertility reversal. In contrast Africa is argued as continuing with a young age structure, even with fertility conservatively put at replacement as early as Year 2035 to reflect relevant young generations' lower desires. With Europe allowed replacement fertility in the long-run, population projections are made. Resulting world regions' population shares show Africa's increasing, with AIDS argued as insignificant; similarly, the state of the art pointing to population growth as never been deleterious.

Attention however is directed to trends in Africa's young age structure, hence her historical unique opportunity: avoiding ageing and possible lending its labour force to ageing Europe. Challenges of maintaining Africa's fertility above replacement, and labour export acceptance to Europe, are realised, but argued as positively surmountable.

Introduction

Developed countries (DCs) have experienced protracted fertility decline to the extent of having, by their own account, a dangerously doomsday situation. Fertility levels, by measure of total fertility rate (TFR) in major world regions are currently, i.e in 1995, 5.0 in Africa, 3.5 in Asia and Oceania, with China at 1.9, 3.0 in Latin America, 2.0 in North America, and 1.5 in Europe. This is demonstrated in two main aspects: increasing ageing with a complement of fewer entrants into the labour force; secondly, and related, decline in population size; all two are already happening. Worse still are slim chances of reversing the situation. Africa is a latecomer in demographic transition. It is the long-run implication of these trends that makes one see the overall decline of the developed world, particularly Europe, and the rise of developing countries, possibly Africa in the forefront, because Asian populations have experienced rapid fertility decline, the fastest so far. For example Thailand halved its fertility in only 15 to 20 years in the 1965-80's period (Knodel et al., 1984). This has brought them into even more rapid ageing than DCs, a situation they are very much worried about: frequent meetings about it is a case in point (see JOICFP, 1997 'Ageing: An Update'). It is these interesting scenarios that are a concern of this paper, for which a plan follows.

First review is made of:

- (a) the impending doomsday to developed countries, especially Europe and Japan, and possibly the rest of Asia, as a lesson for Africa;
- (b) Africa's demography, focusing on prognosis for postponement of ageing, thus fertility remaining much above replacement level;
- (c) the effect of continued population growth on especially economic development, in view of even moderately high fertility trends in Africa in the immediate future.

Prognosis shows a long-run (youthful) young age structure in Africa due to the momentum in the age structure, and a continued pronatalist culture of universal marriage and such desire, both that can be nurtured. Thus fertility is likely to stay much above replacement. Resulting population growth should not be worrisome, it will be argued, especially relative to negative effects of unbridled fertility decline, because the state of the art is that there is no evidence of deleterious effects on development.

Second, on the basis of the above, population projections are made for the next 110 years, showing:

- (a) the changing world population share of each region: increase in Africa and decline in North America, Europe, China, and possibly Asia and Oceania, and Latin America;
- (b) differences in age structures, pointing to possible attraction of labour from young, e.g. Africa, to old population countries. These are the elements that will make one see Africa's (population) power asset, the focus of this paper; on a wider perspective, to a great extent in some regions, the Africanisation of the world in the Third Millenium,.

1.0 Dire consequences of ageing: lessons from countries undergone fertility decline

Economic and possibly social stagnation are the consequences, and difficulty of coping, and irreversibility of low fertility, as aspects of ageing.

1.1 Economic stagnation due to shortage of labour and the burden of care of the elderly population

Rather than speculate, the experiences of developed countries (DCs) provide us enough lesson. Countries of Europe and afterwards other developed countries, experienced fertility transition from a high of 5-6 children per woman, so to speak, about 1870, with France starting even earlier, to lows of 2 in the 1970's (Coale and Watkins eds., 1986); and now down more to below replacement level (2.1 for moderate and low mortality countries). As its demographic effect was explained above, fertility decline invoked ageing of their populations.

For example Germany had nearly 16 percent of its population at old ages of 65 years and above, about equal to children under age 15, at 16.2 percent (United Nations, 1996). (As fertility is unlikely to have changed from the 1995 low of 1.24 total fertility rate (TFR), my projection for today 2000 for Germany, on this basis, shows a worsening situation: about 17 percent old versus 15.2 for children). This is because even though a lot of people in the old cohort have certainly died since birth, but having been born many, when fertility was high, they are still a 'strong force' (indeed politically also as will be discussed later). Right now (2001) things may be alright because the rest of the population, over 67 percent, is in the labour force ages of 15 to 64 years. It is the medium and long-term future that stirs grave concern.

It is when these bigger cohorts will enter retirement ages, while fewer and fewer youngsters enter the labour force, that problems begin. (Japan, though she has similar of the above proportions, has the worst problem as its fertility fell much faster, in 40-50 years since the 1940's; faster decline has meant faster ageing). In general it will be fewer people at young ages, resulting into what Mr Fulgence Kazaura, Tanzania's one time Principal Secretary to the President's Office's Planning Commission, termed in 1990, 'a pyramid standing on its head'. Germany by as early as Year 2020, like the rest of the DCs, will have achieved this doomsday characteristic. Why a doomsday prognosis for the countries with ageing populations, the clinching point of the lesson, can be seen. The DCs provide a lesson: Japan, Europe, the United States and China.

The country, Japon Nihon, (The Land of the Rising Sun, commonly known as Japan), has demonstrably achieved material development very fast, particularly after the Second World War. She has simultaneously undergone rapid decline in fertility. It is a phenomenon that one enthusiastic African representative of a donor in the population area always, but as we will argue and real evidence will show, uninformedly always refers to with words like, 'the evidence is before us', for the simultaneous high development level and low fertility in Japan. However, Carl Mosk's review of a 1991 book by Robert W. Hodge and Naohiro Ogawa, on effects of Japanese demographic trends, and official Japanese reactions, are at variance with that.

Carl Mosk's evaluation goes as follows:

A demographic specter hangs over Japan's future. The product of the country's extremely low fertility and mortality, ... it threatens to curtail what is perhaps the greatest economic success story of the century. The Japanese population is rapidly ageing. The economic burden of supporting an increasing proportion of dependents will almost certainly slow the engine of Japanese growth in the next few decades.

(Mosk, 1992: 365; emphasis here and subsequently is mine).

This was not the first time this shock was expressed. For example,

In 1989, the Japanese total fertility rate plunged to a postwar low of 1.57 children per woman. Dubbed "the 1.57 shock," the news literary sent shock waves through government offices and the business community. At the center of this controversy was a debate about Japan's economic future and what effect the falling birthrate would have on the country's ability to maintain economic potency and provide welfare support for a much larger aged population.

Serious discussion among government officials about heading off the ageing process, and the taxation and pension crises that are expected to follow in its wake, began in earnest ... with talk of "birth incentives."

(JOICFP News No. 201, March 1991: 7).

And fertility continued to fall: the latest report is a total fertility rate (TFR) of 1.4 (United Nations, 1996: 147).

Recently, budget implications of ageing in the future of Japan is reported in JOICFP's annual, Ageing-An Update, 1996. By Year 2020 Japan will be spending over half of its gross domestic product, just to take care of the old population, even though the latter will be only 25 percent of the population. 'New taxes were introduced in 1997, taxes that were meant to pay for the ageing society of the future, and this helped to stall the economy', it is reported in JOICFP News No. 291 (1998: 4).

Indeed the Japanese government has taken the low fertility threat even to panic level, as fertility had declined further to 1.39 by 1996 (**ibid.**): for example, JOICFP NEWS reports this desperate contemplation by the government:

Yet the key issue really remains, how to convince ordinary Japanese couples to have more babies? In 1990 the Finance Minister, Ryutaro Hashimoto, suggested that a solution might be to abandon policies that led women to higher education. Presumably they would want to stay at home and have children, instead of trying to improve themselves. (JOICFP News, 1998: 4)

All Europe, except Turkey that has 'a totally different' demographic regime, is in no less position of the demographic quagmire. Ratnasabapathy (1994), in a United Nations Population Fund (UNFPA) monthly magazine, Populi, with a title dubbed, 'Á grey matter', reports results of a high powered study by a Vienna based International Institute for Applied Systems Analysis (IIASA), thus:

.... One-fourth of Europe's population is likely to be over 60 years of age by the year 2020, and the proportion of working age will dwindle Europeans older than 60 the proportion will increase to 31 percent by 2030,

.... The report warns that low fertility rates and longer life expectancy will have many dire social consequences, not least because a shrinking workforce will have to pay more in social-welfare contributions to care for the increasing proportion of older people. (ibid.: 8-9).

Paul Johnson and Klaus Zimmerman (eds, 1993), in their editorial overview of contributers' chapters of a book, 'Labour Markets in an Ageing Europe', expect labour supply to reach a peak in 1990-2000 and then decline; they have this to say:

Other things being equal, ageing will increase labour costs, reduce labour supply and reduce the endowment of modern skills in the workforce. (**ibid.**: 23).

The mighty United States of America, so called for it is viewed by the Americans themselves as the richest country on earth, but doubtful, to me at least, as it has also a substantial proportion of her population, worst, its real natives, the Sioux, Appache etc nations so called Red Indians, living not only below the poverty line but in actual absolute poverty, is not insulated from effects of low fertility. As early as 1989 the ageing problem was already expressed in official circles, under the theme, Economic and Demographic Trends and International Security' (see Population and Development Review, 1989: 587-600).

Thus prognostically China's one child policy planted a seed for a path to doomsday. Its resulting age structure can be dramatically envisaged at the micro household level: David Phillips (ed., 1993), in an overview of issues in a book, 'Ageing in East and South-east Asia', paraphrasing one 1991 writer, Chan, points out, 'China would evolve a 4-2-1 population structure: four grandparents, two parents and one child', '.... with concomitant economic and caring burdens on the sole child' (**ibid.**: 6-8). Thus China, as Paul Kwong and Cai Guoxuan (1993) have though moderately noted, '... her age structure will evolve from a 'pyramid' shape to an 'inverted cross ..." (**ibid.**: 109). '... the Chinese people will, in about

30 years time, have to prepare for one of most rapid and massive population-ageing processes in human history. It '.... makes the second decade of the next century particularly worrying because the massive cohorts of baby 'boomers' will, by the time they retire, find much smaller cohorts of their children to support them.' (**ibid.**: 125).

The United Nations, thus the whole world, has not been behind in pointing out the inevitable predicament associated with ageing. For example it held an International Symposium on Population Structure and Development, in Tokyo, 10-12 Sept, 1987 (United Nations, 1988). Currently new additions to the ageing world are Asian countries that have had faster fertility declines: meetings in the region is now a regular phenomenon, reported in JOICFP News.

The life of the elderly will not be rosy either: low income due to the fewer supporters in working ages; loneliness from the double barrel of few relatives and individualism associated with modernisation, thus ultimately ones property taken by whoever will have managed to implant themselves as heirs. Isn't it doomsday proper one would predict!

At the level of the individual, among the aged is increasing isolation. In Japan, in spite of the traditional culture of filial piety and reverence for elders, common now, reported as early as 1989, are the old praying for "quick death" and suicide (Populi, 1989: 45). This is because the family, which the aged could fall back to, and the government is reportedly planning to shift the burden of care to the offspring of the elderly and local government (JOICFP News, 1997), has been eroded by modernisation; thus a decreasingly viable option. For example, one of the leading scholars on the topic on Japan, Naohiro Ogawa and Robert Retherford (1997), basing on survey evidence, cite a number of causal problem areas to this effect. They succintly conclude:

Both theory and evidence suggest ... efforts to shift some of the responsibilities for caring for the elderly from the social security system back to families will not be very successful. Rapid population aging, declines in coresidence, increases in women's education and full-time paid employment, increases in the ratio of impaired elderly to available caregivers, and weakening values of filial piety **all point to a continuing decline in the ability and willingness of the Japanese family to provide care for the elderly (ibid.**: 91)

Thus one of the world's highest longevity may be only a statistical record, with years lived after retirement having no meaning but misery. Similarly for China, Paul Kwong and Cai Guoxuan (**op. cit.**) explain that as help from the state is usually not adequate while at family level a smaller number of children, and due to economic changes leading to migration and secularisation, care is not certain.

In sum, the ageing scenario has perhaps better been described by the legendary French economic demographer Alfred Sauvy: a nation of old people living in old houses ruminating over old ideas (reported in Teitelbaum and Winter, 1985).

If lower fertility is destined to cause this far-reaching quagmire, couldn't it be avoided by policy measures encouraging and actually effecting higher fertility, and other ameliorating measures one could ask? It is highly uncertain, as exploration in the following section will indicate.

1.2 Uncertainty of coping with the problem

A lasting solution, as concluded in the IIASA study is that '.... Only high immigration together with replacement-level fertility would result in a stable or steady increase in the working-age population,' (Ratnasabapathy (**ibid.**: 9). The possible effectiveness of the two demographic measures is highly uncertain.

1.2.1 Immigration

Recent rises in racism due to not only existing unemployment (**ibid.**) but perhaps more so fear of migrants as 'diluting European culture' (Ratnasabapathy, 1994: 9), massive

immigration that is needed to rejuvenate the population seems a non-viable option, at least in the short-run. Even scholars e.g. in the session on 'Demographic Issues in Developed Countries' at the IUSSP 1989 New Delhi Conference (I was a participant) showed reluctance, just for reasons of social and possibly racial problems of assimilation. Indeed Andorka (1989) concluded favouring, in order of priority, '.... pronatalist policy ... plus immigration plus ...' increase in women and elderly labour force participation (**ibid.**: 311). In the long run however, as I expressed it in this session, one sees empty Europe (few Europeans in the world, I specifically stated) whereby people from LDCs would just walk in! (This raised apparently irate but vain attempts asking the chairman to stop me!)

1.2.2 Fertility irreversibility

The long-term solution is nothing else but increase in fertility: inevitably because it has been the cause underlying most of the problems arising from ageing. Indeed, due to revealed discomfort with especially non-European immigration, it is a favoured option, even by IUSSP scholars (Andorka (**op. cit.**)! It is however seemingly mistaken to have immediate effects; but, too late 'mate'! Two factors one is likely to be up against: (a) loss of momentum in the current age structure, and (b) virtual improbability of reversing the low fertility trend. It is perhaps mass immigration that can do it; even that may be impossible in the immediate term due to socio-political resistance in Europe, hence the qualifying word, perhaps.

Past declines in fertility planted a poison seed indeed, the root of which is not easily uprooted for two reasons: ineffectiveness of pronatalist policies and first and foremost, the negative momentum in the age structure. Understanding of this, points to the contributions of the field of demography in the study of social phenomena.

It is that the momentum for a broad-based pyramid desired, and even for a positive growth rate of the population, has been lost by decline in fertility that in effect brought in smaller cohorts. Consequently, even if fertility could by any remote chance be increased, the resulting number of children would be small to have a substantial effect at the base, due to the past fertility decline having induced small cohorts in childbearing ages of 15 to 50. The

small cohorts, and their latter effects, have first to fizzle out of the age structure. It would therefore be only in the long run that the desired age structure would emerge. Thus Paul Johnson's prognosis of the European predicament is also correct: '.... and even rapid and abrupt increases in fertility rates will do nothing to alter this fact' (**op. cit.**: 30). Fertility reversal itself towards increase is fundamentally very uncertain. Europe provides a good lesson on the prognosis of fertility trends.

John Knodel and Etienne van de Walle (1979), reviewing the European record, report that once fertility starts to decline it is irreversible. An unbelievable puzzle to both laymen and scholars alike is that to date no one knows why fertility declined in Europe, except that it did. This makes design of policies virtually impossible. It is because of a variety of circumstances under which it occurred, as shown by various indices, developed economy, urbanisation, literacy etc or not, (**ibid.**). A probable general reason is that modernisation has meant life styles that compete with childbearing, 'an incompatibility, or tension, between the family on the one hand and the industrial economy on the other' (Davis, 1986: 59), similarly McIntosh (1986). Paul Demeny (1986) provides a summary of possible causes:

... There was ... the massive entry of married women into the labour force, the weakening of economic security provided by marriage for wives, the scramble for upward mobility, the resistance to sliding down the social scale, and the competition for "positional goods" ... and, for every member of the affluent society, the growing scarcity of time ... In coping with the social limits to growth, children increasingly became a liability. (ibid.: 346).

It therefore should not be a surprise that it has occurred. As Shigemi Kono (1986: 174) has noted, it (DCs low fertility) 'is a natural consequence of the social and economic conditions just described'.

These were fundamental changes that therefore today negate fertility reversal by even pronatalist policies, e.g. child allowances, which have been tried by almost every developed country. Demeny has reviewed various studies that confirm the difficulty of effecting policy-induced fertility increase, and reports:

An authoritative French analysis in the mid-1970s concluded with the **rueful observation** that fertility is a reflection of deep underlying currents that are both complex and powerful, leaving only a very narrow margin to the play of voluntaristic intervention ... Earlier analyses either came to the same conclusion or professed agnosticism, which suggests that the effects were too weak to be measurable.

Assessments published since the INED study just referred to confirm the picture of **general impotence attributed to pronatalist measures qua fertility policy**. (**ibid.**: 350).

The fertility effects (or efficiency) of various pronatalist policies, as reviewed by Paul Demeny, 'The modal finding is that the effects are nil or negligible', e.g. 10 percent or .02-.03 children per woman in France (Demeny, **op. cit.**: 350; Andorka, 1989: 307). In any case public opinion on policies directly intended to influence fertility is negative, seen as intrusion, and even Nazi likened. Thus child allowances are only projected by the government as just to help individuals (Demeny, **ibid.**; McIntosh (1986: 326-31). Further Swedish recent successes are regarded as only socio-culturally unique to that country (McIntosh, **ibid.**:325), so not easily emulated.

Therefore fears of population decline are now real (McIntosh, **ibid.**), though first falsely expressed following the inappropriate cross-section measure, the net reproduction rate (NRR) from the Great Depression's (1930) low fertility.

Asia, with the biggest population size, having started rapid fertility decline has set on the same path as Europe and Japan. All this augur for changing regional shares of the world population size. This is explored in the next section.

Ageing is not a problem of the industrial world alone however, making the christening of the problem with the prime word, Global, apt. Asia has experienced even faster fertility decline than the industrial nations. Examples are, about 20 years in Thailand and the Koreas in, respectively South East and East Asia, with China's one child policy the most severe; even in South Asia it is bound to be similar going by similar experience in even poor Bangladesh (Caldwell **et al.**, 1999). The region is therefore going to experience even incomparably faster ageing, though postponed initially till the existing momentum in the age structure from past high fertility filters out. Fear of ageing is already being expressed in the region: e.g. inter-country meetings as indicated in two Japanese semi-official bulletins, namely JOICFP News, and Ageing, An Update are a regular feature.

2.0 Africa and long-run fertility above replacement

Late fertility decline in Africa, and effects of possibly 1950/70's rises, make for her current younger age structure that, with the problem at hand, is being coveted; a potentially welcome blessing in disguise therefore. If well managed, and accepted of course, it provides a possible positive complement solution to old age structures and doomsday consequences of the industrial world seen earlier.

An ideal age structure, neither too young nor too old, being our objective, makes fertility the demographic variable of concern. Simulation, to be seen later, indicates the fertility trend that underlies this ideal as a decline of the TFR from the current 6 children per woman to 2-3 by Year 2035, and remaining at that level thereafter. The challenge therefore is effecting this trend. A start of the decline in fertility is not a problem, for its onset is underway. It is the pace of the decline and arresting it at 2-3 that are at issue. The danger is rapid decline as has happened in Asia and it is causing ageing of populations there fast.

Zeroing in on the real problem shows two sets of factors one is likely to be up against: directly, little effectiveness of policy to raise fertility as the experience of Europe has shown; uncertainty as to popularity of a natalist policy and not infringing on personal freedom; incentives bound to be expensive (Demeny, 1986). The second set of factors, importantly, are what 'makes people tick' so to speak: the underlying factors that make people want to have a certain number of children. One should take cue from the fact that up to today no study has been able to explain the causes of fertility transition in both developed countries and later in Asia, except that it occurred. The latest confirmation is Tim Dyson's (1998) review of the latest attempts by a variety of scholars.

However, as seen above in looking at possibilities for fertility reversal, we know current low fertility in Europe was brought about by general emancipation of women, virtually mutually exclusive with marriage, childbearing and home making; rewards being in the market place rather than indulgence in the latter spheres. Even in Asia, notably least developed Bangladesh, fertility has declined with significant social and economic transformation. However, just as the uniqueness of Sweden managed a fertility rise, so is Africa even in a better situation for keeping it well above replacement.

The particularity of the African situation is a pronatalist culture demonstrated in two aspects: the universality of marriage (mating, so to speak), a prime 'proximate determinant' of fertility, and desire for, and actually bearing of many children. Almost all women in Africa have ever married by age 29. Even people's psychic: a woman in Africa considers and declares herself so, e.g. in a survey interview, as married, even if she is divorced or widowed, or had ever cohabited only. This is in sharp contrast to the erosion of the institution in the industrialised world, when women became economically independent on men (Westoff, 1985: 159). In any case Europeans had a traditional culture of celibacy where pre-modern levels were significantly below African levels, the so called 'nuptiality valve' (Hajnal, 1965; Smith, 1981, 1993; Birdsall, 1993; Coale, 1986).

The second perhaps more important African pronatalist asset, is a desire for many children, even though the era of fatalist 'up to God' attitude, is over. For example as late as 1996 in Tanzania observation in the TDHS report is that people still want large families: over five children, stated by more than half of the respondents (Tanzania, 1997: 92), though a decline from 6.1 observed in the 1991/2 TDHS (ibid.). Pertinently, of prognostic value, is that,

although younger generations below age 30 show to have lower desires, averages of 4-5 children, and similarly among them those with higher education: 4.4 with complete primary education, and 3.6 for secondary and above (**ibid.**: 93, Table 6.5), these are comfortably well above replacement levels. Importantly, with no roots of anti-natalism in Africa, these levels are likely to be realised in the immediate short-run of 20 to 30 years that matter for the age structure momentum into the future.

However this does not in any way suggest complacency. Just as anti-natalist culture developed in the industrial societies, i.e. erosion of the institution of marriage, then childbearing, there is every indication that Africa may follow suit. As has just been noted, desired family size has gone down overall; it may reflect a downshift across generations. A global village that the world has become, with easy transport and communications that has seen to permeation of goods, ideas and styles to the remotest of areas, is there for anybody to see. At the heart of this is modernisation, which by and large is westernisation. Policies that build upon and cultivate the above African traditional social assets, to create a natalist 'enabling environment', pertinently housing (nests for mating), and once married, making it easy for couples to bear and rear children, will be crucial. Further discussion about this will come in the conclusion. Worry could be put on continued population growth and its effect on development; these are however unfounded, as is argued next.

3.0 Africa and effect of population growth on development

Continued relatively high population growth in Africa would result from the desired slow fertility decline. That in itself would not be a problem however. It is even more true compared to doomsday consequences of ageing from fertility decline, that the industrial nations, as clearly observed above, dread now. Contrary to neo-malthusian depiction, high powered studies have confirmed over time, of hardly any evidence of deleterious effects. Notable are two Review Symposia, one on the World Bank's 1984 World Development Report (PDR, 1985: 113-138), and the other on the (US) National Academy of Siences/National Research Council (PDR, 1986: 563-585) and the debate continues. Actually for Africa, the labour intensive stage she is at, large families show on average to be

less poor (Kamuzora, 1999a, b). The Julian Simon (1981, 1996) ever (long term) positive power of population growth provides some light: as Denis Ahlburg (1998) has stated in appreciation of Simon,

'.... Economics does not *conclusively* show that a greater number of people implies slower economic development or a lower standard of living. ...' (**ibid.**: 324). Given strong neo-malthusian appeal of slow population growth, it is important to note that for a long time scholars have pointed out the fallacy, relevantly in a critique of Simon.

Prominent scholars, pointing out flaws in Simon's argument and half truth-like 'sound bite' evidence, have rightly criticised Simon, but at the same time, they have fairly considered both sides, thus recognised Simon's contribution. For example Preston (1982) who takes note of notable scholarly allies of Simon, notably Simon Kuznets, renowned for positive historical relation between economic and population growth, and Theodore Schultz (ibid.: 174), assesses that '... Simon has made a good case that population growth has not been and will not be in the immediate future the disaster that some extremists (including some who have been in influential positions) would have us believe' (ibid.: 176); equally Timmer (1982) has seen in Simon 'lessons' e.g. that population growth has not been the root cause of today's 'critical social issues ... air pollution, soil erosion, energy costs, even hunger and food availability' (ibid.:167-68). This is not to speak of Boserup's (1965) classic of population pressure as having been behind improvements in indigenous agricultural systems.

All these scholarly treatises counter Coale and Hoover's (1958) neo-malthusian portrayal of fertility decline as promising economic growth. Though appealing, it has been argued to be laden with false assumptions, e.g. savings in a largely subsistence already impoverished, increasingly foreign controlled African economy (Kamuzora, 1991, 1999). They allay the fears about, hence give a sound basis for the good to come out of continued high fertility in Africa, for both Africa itself and particularly as a solution to the ageing world at large. A look at future world regional population trends is therefore of interest.

4.0 World regional population trends and increasing Africa's share

Below replacement fertility levels in DCs and rapid fertility decline in most of Asia was shown in the introduction. This triggered ageing, with its pace determined by the speed at which fertility has declined. With the uncertainty of reversibility, also shown above, eventual decline of populations is inevitable. In this exercise some optimism is put in the population projections, of the possibility of return of fertility to at least replacement level for DCs, and Asia not to decline below replacement. It is done to observe the minimum share of the world population that Africa is certain to have. Further, in this vein, and reality put in the projection for Africa, fertility is set to decline a bit faster to replacement level by Year 2030. Mortality for all is put to decline to low levels of beyond life expectancy at birth of 79 years. The following, in Table 1 are population projections and shares of the total population for the world major regions for Years 2050 and 2105.

('000s) 1995 2050 2060 2105 Population Population Share Population Share Population Share Share (%) (%) (%) (%) North America 296,000 5.2 302,613 3.2 298,780 3.0 285,917 2.6 Europe (2105) 728,000 12.8 496,337 5.74 455,042 5.32 352,395 4.6 Asia + Oceania 2,248,380 39.5 4,585,137 48.2 4,794,754 48.6 5,315,437 48.0 (exc.. China) China (2030) 1,217,925 21.4 1,491,132 15.7 1,468,086 14.9 1,524,170 13.8 477,000 Latin Amer 8.4 1,031,247 10.8 1,138,901 11.6 1,647,064 14.9 Africa (2035) 1,632,901 1,797,438 720,000 12.7 1,559,559 16.4 16.6 16.2 WORLD TOTAL 5,687,304,864 100.0 100.0 100.0 11,080,815 100.0 9,515,831 9,858,293

Table 1 Populations for major regions of the world and share of the total

Source for 1995 population is United Nations (1998).

The first observation is the validation of these projections: the ultimate world total population, 11 billion, is what also the United Nations arrived at: '... by the end of the twenty-first century ____ the UN's "medium" forecast foresees a nearly stabilised global population of just slightly above 10 billion, bracketed by "high"and "low"projections of 17.5 billion and 5.6 billion ...' (Smil, 1998: 620). Of course now, pertinent to this paper are changing regional shares of the world population.

Significant is the decline of North America and Europe. Their shares of the world population will decline from 1995 levels of 5.2 and 12.8 percent respectively, to as low as 2.6 and 4.6. China's one child policy and general fertility decline will see her share fall from 21.4 to 13.8 percent in Year 2105. Latecomers to the decline therefore will have this advantage: latest comer Africa will have its share rise from 12.7 to 16.2, a modest rise. Latin America could see a rise also, with Asia, saved by its current growth momentum, to see a

rise from 39 to 48 percent share. One could point out optimism for Africa, for, rightly, the effects of the AIDS epidemic are ignored. It is because of the insignificant effect it will have (Kamuzora, 2000), as even the United Nations, and other scholars have estimated.

Independent estimates by Zuberi and Mbacke (1999), though sympathetic to the lives that will be lost in Africa, show little effects of the epidemic. Thus McNicoll's report of recent United Nations projections are not surprising. He shows Africa's share of the world population, though having declined from 8 to 6 percent in 1800-1900, continues to rise, from 8.8 in 1950 to 13 and 20 per cent in years 2000 and 2050 respectively, in spite of the AIDS assumption in the projections. The dreaded depletion of the critical variable, the population in labour force ages, due to the epidemic seems to be unfounded. Accompanying annual entrants into the labour force, say the age group 20-40 years, have never been greater: 16 million in year 2000, a rise fom 4 and 8 million in 1950 and 1975 respectively; it is estimated to increase to 26 and 29 in years 2025 and 2050 respectively. Thus the increase over the 1975-2000 and 2000-2025 periods is estimated at 117 and 196 million in Africa. The rest of the world will experience a decline: from 669 to only 202 million (McNicoll, 1999: 412-15).

Therefore estimates for Africa in Table 1 are conservative, as her share in the world population are lower compared to those reported by McNicoll. This is because faster fertility decline is assumed (to reach replacement level of 2.1 in Year 2035) to reflect a highly possible reality of current lower desires by the relevant younger generations. Still, a key asset for Africa, indeed for the ageing world also, will be her young age structure.

4.1 Africa's age structure advantage for her and the ageing world

Africa's age structure and that of Europe from the same projections as above are shown in Table 2. The most telling period is in the short-run than going to the long-run, e.g. the ultimate structure over 100 years from now; after all the acute ageing problem are already being felt, as seen above. Let us take the period around 2050.

	100	2000	
Age group	Africa2		Difference (Afro-Euro)
0 - 4 5 - 9 10 - 14 15 - 19 20 - 24 25 - 29 30 - 34 35 - 39 40 - 44 45 - 49 50 - 54 55 - 59 60 - 64 65 - 69 70 - 74 75 and over	7.7 7.5 7.2 7.3 7.7 7.9 7.6 7.1 6.2 6.2 4.7 3.7 2.4 2.2	4.7 4.8 4.9 5.1 5.4 5.7 5.8 5.9 6.0 6.5 7.2 6.8 7.2 6.4 5.4 12.4	3.0 2.7 2.3 2.2 2.3 2.2 2.1 1.7 1.1 0.2 -1.0 -0.6 -2.5 -2.7 -3.0 -10.2
Total	100.0	100.2	
0 - 14 15 - 64 65 and over	22.4 69.3 8.3	14.4 61.6 24.2	
Index of Dissimilarity	/		19.8

Year 2050

Table 2 Age structure of Africa compared to Europe in Year 2050

Africa's advantage, e.g. in the third column, positive differences at younger ages, can be seen clearly: not only higher percentages of the total population i.e. 69.3 against 61.6 in the labour force ages of 15-64 (and the elderly, ages 65 and above, at, respectively, 8.3 only against 24.1 percent), but also a broader base i.e. 22.4 against 14.3 percent below age 15, for continued advantage into the future. This is because, as the ageing regions will be struggling to 'hang in there', as the problem consequences of ageing described above increase with time, Africa will take this advantage. Not only will her young labour force boost the

economy, but she will have an historical opportunity to export manpower to her immediate neighbour Europe that will be suffering from both manpower shortage and population decline. This will ease any pressure that may be there in Africa, especially initially.

5.0 Conclusion

The demography of the world regions is set for at least the next half century. Those who have experienced significant fertility decline will be suffering the consequences of ageing: economic decline from labour shortages and the burden of care of an increasing elderly population. Africa being a latecomer will take this advantage to enhance herself. All will depend on not only the viability of export of manpower to countries with shortages, but also how much she faces up to the challenge of preventing rapid fertility decline.

With increase in labour demand in industrial countries, arrangements mutually agreeable to the parties concerned, in contrast to illegal immigrations, can be made. It is maintaining African fertility on a desirable trend that is more difficult, but it can be done.

Policies that build upon and cultivate still prevailing African traditional social assets, namely early and universal marriage and desire for many children (at least three as e.g. shown in Tanzania's DHS 1996 (Tanzania, 1997: 92-93)) should be designed. These should create a natalist 'enabling environment', pertinently housing (nests for mating: marriage in social terms), and making it easy to bear and rear children, will be crucial. One is however aware of prohibitive factors e.g. fiscal cost alone, and as Demeny (**op. cit.**) and McIntosh (**op. cit.**)) have indicated in the case of Europe, people are loath to especially government intrusion into affairs considered most intimate and in their private domain. Research for factors and ways of cultivating voluntary behavioural response is imperative: we have the scholars, advantageously mostly indigenous, who can do that. Refining the critical population issues (earlier identified in Kamuzora, 1989), Kamuzora (1991) has noted:

The unique position, therefore importance and perhaps indispensability of indigenous scholars, who understand their societies better couldn't be expressed better than for example the population issues presented above. (**ibid.**: 86).

The only problem is that African politicians, hence governments, have shown only token appreciation of scholarly work and advice. To be fair to our public servants, from whatever the initiative has come, they are now showing some signs of the need to consult scholars.

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