

Draft Only: Cite only with permission of United Nations, ESCWA

THE CRITICAL CONTRIBUTION OF YOUTH TO SUSTAINED DEVELOPMENT IN AN ERA OF RAPID POPULATION TRANSFORMATION

By

Ian Pool

**Emeritus Professor of Demography,
University of Waikato**

October 2010

**Background Paper for Panel Discussion, 12th November 2010, Beirut
Prepared for United Nations: Economic & Social Commission for Western Asia**

***14th Meeting of the Regional Coordination Mechanism (RCM) 11-12 November 2010,
Beirut, Lebanon,***

**Session 6: “High Level Panel: Identifying Key Gaps and Challenges for Regional
Youth Development”.**

INTRODUCTION: OVERARCHING ARGUMENT OF THIS PAPER

This note is a background paper for participants at the *14th Meeting of the Regional Coordination Mechanism (RCM) 11-12 November 2010, Beirut, Lebanon*, Session 6: “High Level Panel: Identifying Key Gaps and Challenges for Regional youth Development”. It backgrounds a Video-presentation by Ian Pool, and the tele-conference that follows.

The paper argues that “Youth Development” is a component of all development, not a separate question. Thus,

1. That the Youth Ages comprise what is merely a transitional phase passed through in a cohort’s life-span (for a definition of the word cohort and some other terms see Appendix A);
2. but that these ages constitute a critical “make or break phase” for any society and economy, and the families and communities that actually drive the population’s social and economic life;
3. that, for the rest of its life span the cohort currently passing through the youth ages, if it has been exposed to effective social and economic programmes designed to the specific needs of youth, will bring its productive, fiscal and familial capacities to play in the wider society’s development; or, conversely, if the programmes have been inadequate, or if policies and markets squander this “window of opportunity” (WO) -- and many countries do – this will generate social and economic burdens that are a drag on development, now and into the long-term future;
4. that programmes of development must be predicated on meeting the goal of exploiting the WO; and
5. that this is particularly critical for the Arab countries as they face a “youth bulge”.

To elaborate this argument, this paper must focus on age-distributions, and on youth as the pivotal grouping. In meeting their needs, but also in attempting to provide a framework for sustainable development overall, it will synthesize the World Plan of Action for Youth (WPAY) with other development paradigms covering all ages, but redesigning the foci of these frameworks so as to recognize better the importance of age-distributions, as outlined above.

RATIONALE & BACKGROUND: AGE-DISTRIBUTIONS & DEVELOPMENT

The paper’s main arguments outlined above are underpinned by recent (late 1990s/2000s), leading edge research on population and development. This is on what is termed the *Demographic Dividend*, or *Window of Opportunity*, the term adopted here¹. [Appendix B cites a recent paper, “What is the Demographic Dividend?” by two major

¹ The term demographic dividend is more deterministic; window of opportunity more contingent. The contingencies are very important and underlie all that is being argued here: that governments and markets must be pro-active in formulating and implementing effective programmes in order to ensure that the WO is not squandered.

practitioners – Ronald Lee and Andrew Mason²: -- to provide further details on this paradigm]. This body of research has taken a very different tack from what had been the convention prior to then. There has been a shift from a populationist perspective – size and numbers – to recognizing that structures (especially age and geographical distributions) play the most important role in driving demographic change and thus development. As Bloom *et al*³ note, in a study that shows how central age-distributions are to economic development (and my paper will argue that they are critical also to social and cultural development),

[The utility of the debate on population and development] has been hampered by its almost exclusive focus on population size and growth. Little attention has been paid to a critical variable: the age structure of the population (that is, the way in which the population is distributed across different age-groups) and how it changes when populations grow’.

The explanation for how age-structures have this effect -- why the dividend/WO occurs-- is very simple. As fertility declines (see below), the child dependency ratio (Population aged 0-14 years/Population aged 15-64 years)⁴ decreases, and public, household and other expenditures that have been directed to social programmes (eg education; health) can be redirected to investment in the productive sectors, infrastructure and institutions, and to household savings and asset accumulation. But once structural ageing (% of the population aged 65+ years) sets in, then expenditures will need to be redirected to social sector expenditures, this time to health care, home care, institutional housing and income support. The WO may last as long as 50 years, but could be more contracted in duration⁵.

The significance of age-structural changes, and thus the WO, for development is a result of changes occurring during the *Demographic Transition*. It has produced declines in population growth in most of the world’s regions, and certainly in the majority of Arab countries, as is clear in ESCWA documentation such as *Demographic Profiles*. These data show that the percents at youth and older ages have risen between 1980 and 2010 as fertility declined rapidly in the Arab region as a whole -- in all but its poorest member-states -- to half its level in 1980-85 (Total Fertility Rate from 6 births per woman to 3). This reflects what has occurred in most other parts of the developing world, where fertility has declined very significantly since *circa* 1970, in some cases (eg in much of east Asia) to levels below replacement⁶.

² Lee, R and Mason, A 2006 “What is the Demographic Dividend”, *Finance and Development: A Quarterly of IMF*, 43,3

³ Bloom, D, Canning, D and Sevilla, J 2003 *The Demographic Dividend*, RAND, Sta Monica CA

⁴ Economic demographers explain this by using “support ratios” (employed/those outside the labour force), whereas this paper refers to dependency ratios. It does so because the use of dependency data (available in every census) has some practical advantages over support ratios – in Latin America the two yield almost the same results. Age data are available in every census and are standardized, and are less prone to definitional- and reporting-errors (eg how to define labour force participation).

⁵ Ibid; also Lee and Mason op cit. My own observations, which are not technically exact, suggest that the more rapid the decline in fertility the shorter the WO. See some of the case-studies in Pool, I, Wong, L and Vilquin, E (eds) *Age Structural Transitions: Challenges for Development*, Paris, CICRED

⁶ ESCWA 2009 *The Demographic Profile of Arab Countries*, United Nations, E/ESCWA/SDD/2009/ Technical Paper 9

As a result of fertility declines, the proportion of the total population of the Arab countries' population who are children has dropped from 45% to 34% – a massive structural change. While the total population, and the youth age-group have both doubled in size since 1980, the child population has grown by only 53 %. But, simultaneously, infant and early childhood mortality rates have also decreased, the Infant mortality rate to 50% of the level it was at in 1980. Whereas only 87% of each Arab birth cohort was reaching youth ages in 1980, today it is 95%, and this improved survivorship has occurred for the large cohorts born in the past when fertility was still high. Thus there is a “youth bulge” in the Arab countries; around 20% of the population fall into this very narrow 10-year age-band, compared with 13% in the More Developed countries, or 43 % in the much wider 25-64 year age-group. But from 2020 the proportion at this age-group will start to fall⁷.

The population dynamics that drive the WO are presented in Appendix C for the World, the Arab Countries combined, and two polar examples within this grouping: Lebanon and Yemen. This shows the relatively turbulent pattern of age-structural transition being played out in the Arab countries by comparison with the World as a whole. It also highlights the constraints that momentum effects place on the Arab transition (to be discussed below).

The importance of fertility declines and the ensuing age structural changes for all development is underlined by Bo Malmberg and Thomas Lindh⁸:

‘...due to fertility decreases poor countries of today will start to catch up with developed economies...’

But, as will be stressed below, a key strategic issue will be recognizing and exploiting the impact of these changes on the youth age-group, the incipient age-structural change that marks a major shift from high dependency to low dependency. This recognition will need then to be accompanied by efficiently managing the youth bulge, as a prelude to exploiting the WO that will appear in the future in the Arab Countries. To realize on the demographic dividend -- to ensure that these countries catch up with developed countries -- it will be necessary to anticipate the longer term WO by implementing effectively programmes that will first mobilize and integrate youth better into the wider society.

A WO that is well managed produces a “Second Dividend” way off into the future(see Appendix A), but it is of less interest to this paper as it coincides with long term ageing. Nevertheless, its eventual occurrence reinforces the main message of this paper:

what happens successfully at youth ages translates into trends that aid the long-term development of the country.

And the Second Dividend is indeed a valuable reward to work towards: “The Second Dividend -- increased capital accumulation – is larger than the first...” (see data in

⁷ *ibid*

⁸ Malmberg, B and Lindh, T 2006 ‘Forecasting Global Income Growth using Age-structural Projections’, in Pool, Wong, and Vilquin (eds) *op cit*: 59-82

Appendix B). But as Ronald Lee and Andrew Mason stress it all goes back to the WO, and especially to the success of policies directed to youth,⁹

“How much the first Dividend is realized during this demographic window of opportunity hinges on key factors in the economic life-cycle. The productivity of *young adults* depends on schooling decisions, employment practices, the timing and level of childbearing, and policies that make it easier for young parents to work”

Age-structural redistribution is not the only set of rapid demographic structural changes that are also occurring. There are others, such as urbanization, especially the growth of conurbations, realignments for family structures and shifts in the sectoral distribution of the labour force, each of which is of significance for any society. But, except in passing, this paper cannot pay attention to these other factors. That said, it must be recognized that they are all intimately interrelated with the age-structural changes that will be the paper’s central concerns: the urbanizing youth are likely to be better educated/skilled; in some countries the reproductive potential for the population has now shifted from rural areas to these young urbanites, but in the More Developed Countries or China, for example, they have very low fertility rates.

The remainder of this paper pursues the arguments raised above by addressing three points:

1. It attempts to resolve the paradox that, globally, there is recognition that youth are a pivotal age-group for all development, yet to date the frameworks formulated to address this have not responded adequately to the needs of youth.
2. It outlines an alternative, cross-sectoral, comprehensive framework that allows policy makers to elaborate strategies for the more effective integration of youth into development programmes. It attempts to situate this framework within the main axes of development as these are highlighted in leading-edge research.
3. But in doing so, it also proves necessary to re-align the architecture of this emerging framework away from the focus on vulnerability and failed development (eg poverty in the MDGs) that dominates the design of a number of existing frameworks. It also questions the pervasive focus on fiscal probity in much of recent development economics; it calls for a return to an interest in people-centered development, and less on the financial and fiscal mechanisms that must be brought into play to achieve this. It is not just that the recent “economic” crisis makes it necessary to reassess recent development paradigms, but that two mechanisms for development, savings and investment, are, in turn, a demonstrable outcome of the population-driven WO. Without a focus on people, there will be less chance of generating investment.

The paper comprises a text, plus appendices, one of which defines terms and concepts used in the paper with the aim of supporting this argument technically, another provides more details on the demographic dividend, and shows its impacts economically for different regions. A third looks at population dynamics in the Arab world.. Defined in Appendix A are terms such as youth, development, and concepts such as age-structural

⁹ Lee and Mason *op cit*

transitions and windows of opportunity that are employed in the arguments addressed by each of the objectives of the paper. That appendix also makes a methodological note about population numbers, versus rates, and projections.

YOUTH, THE PARADOX INHERENT IN DEVELOPMENT PARADIGMS

While most observers agree that youth are a pivotal age-group, paradoxically there has been little real attempt to address their needs; the WPAY is a partial exception as will be discussed below. Policy analyses and initiatives have

1. Given youth only limited attention, and then more in terms of statements of principle than in formulating effective programmes, or to identifying adequately their overall contribution to development.
2. Not been able to address youth successfully through policies; that is, to address their endogenisation into the society and into development.
3. Focused on vulnerabilities and social pathologies experienced by some, often a minority, at these ages, but not paid attention to the normative (= modal) experiences affecting most youth, and how to make sure that these behaviours operate effectively and contribute to development, to investment, not disinvestment in welfare or maintenance of security.
4. Seen youth as almost exogenous to the wider society.
5. Perhaps inadequately recognized the range of changes passed through during youth ages – as Ronald Rindfuss has said, this is an age-group with “high demographic density”¹⁰.

In part, the lacunae in the existing frameworks are a function of the fundamental point that policies must address -- that youth are in a transitional stage of high demographic density between early socialization and full participation in development. Thus, any policy must be built around exploiting this transition so that youth will complete it prepared to make a real contribution to social (by definition including cultural) and economic development. Young adults leaving the youth ages are not only producers and consumers, but also must play a major role in the organization, and the family and cultural life of the society in which they live. Their “high demographic density” includes a bewildering range of situations to which they are exposed and transitions they are going through. But it is worth emphasizing that most of these situations are *normative* for their life-cycle stage, and thus must be the focus of youth programmes such as those to be suggested below:

- Bio-socially they are physically maturing – this is inexorable and is taken as a given in the rest of this paper, so is not discussed further;
- Educationally they finish off their basic schooling and often then undertake post-basic education;
- Training may involve gaining of other skills by apprenticeships or on-the-job experience, sometimes gained in work-study programmes;

¹⁰ Rindfuss, R 1991 ‘The Young Adult Years: Diversity, Structural Change and Fertility’, *Demography* 28: 493-512.

- They are likely to take up their first employment, part-time while studying, or as the first step in a career;
- For many a first job will be in the informal sector, often in work situations which impart basic technical or business accounting skills;
- Most will become sexually active; many will be leaving their family of orientation which has socialized them, and some will be setting up their own families of procreation;
- This is a life-cycle stage in which many of them will become active at least as citizens, and often as political activists;
- Many will move from their parents' homes and a significant minority will undertake long-distance migration, typically into cities in their own countries, often internationally and inter-continentially;
- Migration will be linked to a search for employment and general betterment, so is also correlated with gaining an education -- the better educated and skilled are represented disproportionately among the more mobile. But migration also has implications for the source region of flows – above all there are negative impacts on the ages, sizes and skill-levels of source-region active labour forces – as well as often having an inverse positive effect at destinations;
- Finally, youth is a life-cycle stage at which leisure-time activities and access to information and communication technologies assume a relatively important role, but one which, if exploited appropriately, may impart life-time skills; again this is an issue that will be taken as a given and not explored further here.

Alongside these normative experiences shared by most people aged 15-24 years, some youth, often a minority, but typically a high profile minority, are in situations which render them vulnerable to exploitation, and social or physical risk. Among these are: the unregulated job markets they may be forced to enter because of their circumstances; their exposure to sexual experiences, which may put them at risk of HIV/AIDS or other STDs; risks associated with drugs and alcohol; being tempted (or forced because they face hunger or poverty) into juvenile delinquency and more serious forms of crime; and voluntarily or involuntarily becoming implicated in civil or political unrest, or even violent conflict. Thus, youth face special social and health risks, added to problems of nutrition and financial wellbeing, and risks of exploitation which may expose them, at least to poor working conditions, and at worst to physical danger.

Most of these situations are addressed at length in programmes of action such as the WPAY, and are not elaborated further here except to make an introductory contextual comment. All that follows below assumes that countries try to limit the scope and intensity of internal or external conflicts, accepting that this is extremely difficult and may be well off into the future in unstable polities. Many if not most countries, however, will attempt to achieve relative political stability and to maximize the institutional structures of civil society, both of which are important if youth are to be integrated into development. These would include – and again these are assumptions that underlie much of what follows – regulatory and welfare regimes that protect the rights of workers,

minimize poverty and hunger, improve survivorship and health at these ages, provide minimal shelter, and promulgate other related measures. But beyond this, to ensure that youth are really integrated into the development process, there is a need to intervene more pro-actively in a wide range of sectors that are essential for development, notably in the labour market and education.

The perpetuation of the paradox noted above risks undermining not only the improvement of the wellbeing and life-chances of youth within a society, but also the entire long-term development of all of any such society. This holds true not only for countries within the ESCWA region but for most countries worldwide. But attempts to resolve the paradox encounter two generic problems:

- (i) Broader programmes, such as the MDGs (Millennium Development Goals, 2000) and the ICPD (Programme of Action of the International Conference on Population and Development, Cairo, 1994) , have not specifically incorporated youth needs into their frameworks, or have viewed these needs as mainly being driven by their vulnerability, and even a high exposure to the risk of pathologies such as criminality, or HIV/AIDS and STDs;
- (ii) This, in turn, is driven by a wider issue – the way that development has been viewed in the dominant paradigms applied to it over the last few decades, and even in the most recent declarations of civil society such as the MDGs. Too often these programmes are formulated in such a way that they give the impression that the onus is on youth, not the wider society, to resolve the problems they face. Yet, in reality, these are often situations in which youth themselves are not instrumental actors, yet which may play a major role in their lives -- eg civil unrest or inadequate protection of workers' rights. An underlying principle must be that it is first and foremost the responsibility of the country and its policy-makers to provide a reasonable environment in which youth can safely and effectively make a transition to full adulthood, bringing with them the skills, experiences and positive feelings that will allow them to contribute fully to development.

WPAY: This framework covers a wide range of youth issues, but the majority of its “priorities” are directed at issues where youth are seen as a “problem” or as vulnerable. About three or four priorities look at youth in terms of a contribution to the economy or the burdens they impose: education, employment, globalization, and, negatively, hunger and poverty. Intergenerational issues are also raised, but, surprisingly, migration and mobility, demographic trends that are the hallmark of youth more than at any other age-group, and which are related to every aspect of their social and economic lives, are not seen as a priority area. The other areas just noted provide some specific and useful targets, although sometimes, as in the case of globalization, the recommendations for action are so vague and platitudinous they provide few meaningful guidelines.

The Arab Region has taken the pro-active approach towards the WPAY aimed at stimulating member-countries to implement its recommendations. In ESCWA's documentation concrete targets are set for some priority areas that would both integrate

youth into the society and also provide the potential for economic development in the region. This documentation of ESCWA sets out clearly defined targets to eradicate poverty and hunger, in line with the MDGs, to increase education and to maximize employment opportunities for youth. The education targets emphasize post-secondary education, vocational and technical education and skills training.

The employment targets are particularly important as they encapsulate what are major arguments in the present paper

“Objective 6.1: halve between 2005 and 2015, the proportion of youth who are neither in education nor employment;

Objective 6.2 : halve... the proportion of employed youth in vulnerable employment;

Objective 6.6 : by 2015, reduce the gap between youth and adult employment rates”

To date, as a 2008 inquiry showed (cited in document footnoted here), an appreciation of the issues and attainments towards reaching these targets have been rather limited¹¹. Thus the present meeting is particularly timely, above all to initiate anticipatory programmes that will maximize and exploit the WO once it occurs.

A caveat is that all programmes should have the enhancement of gender equity among their long-term targets: the WPAY specifically documents the needs of girls and young women (Priority Area I), and guidelines in the ICPD (see below) reinforce this. This will require sensitive attention to cultural development issues that interact with gender.

ESCWA’s *Demographic Profiles* take a more pro-active direction towards enhancing the normative dimensions of youth noted above. Nevertheless, even there this is predicated on concern about “youth bulges” (more than 20% at youth ages) that produces a potential for political instability. The possibility of this may well be supported by statistical evidence, but pro-active policies focused on the normative aspects of youths’ lives are needed so as to make this less likely. It is not the possibility that turbulence might occur that is disputed here, but rather the primary emphasis given to negative potentials before turning to positive potentials, such as the fact that

“the youth bulge implies a rising share in the working age group, which in turn can trigger economic growth...”¹².

ICPD: The Cairo Conference virtually ignored youth, except for their sexuality, to which it devoted quite a deal of attention, especially for teenage childbearing. The remaining elements of their lives were not really given much attention despite the fact that in 1994 20% of the world’s population were youth. They were lumped together with children – in total comprising 30-50% of the populations of most countries. Nor, were youth accorded a special section in the Programme of Action, except for two very vague paragraphs on actions for youth. This contrasts very significantly with the attention paid to the much smaller 6% of the world who were older at that time. That said, the more general

¹¹ ESCWA 2010 *Policy Issues within the ESCWA Region: National Youth Policies within the Framework of the World Programme of Action for Youth*. E/ESCWA/26/4 (Part 1)

¹² ESCWA *Demographic Profile* Op cit

comments in the ICPD on human rights and reproductive choice provide useful guidelines for action.

MDGs: These are very important because they represent civil society achieving a broad consensus on the major failings of development. But, that said, they are a-demographic, and certainly do not address youth *per se*. More importantly, what starts as a holistic principle has been placed in inconvenient sectoral silos – how can one separate hunger from infectious and other diseases for example?

Poverty has come to be the poster child for the MDGs and to dominate all others, while the MDGs as a whole have overshadowed other development frameworks. But most significantly and critically, the MDGs focus not on development but on the failings of development (eg not on wealth generation and redistribution, but on poverty).

In sum, all three frameworks of civil society have shortcomings, albeit that they each contain important seeds for any development initiative. And they are not synthesized but float along in almost parallel universes. Moreover, none of the three is based on a coherent and cohesive body of theory.

This meeting thus can play an instrumental role in eliminating some of these constraints. Its focus is on youth because not just because this is a focal group in UN deliberations for 2010, but because the potential for development rests in how development can effectively build on the capacities found in this group to the advantage of the entire society.

RESOLVING THE PARADOX

To build on the potential of youth, and to put the paradox just outlined resolutely behind us, it is essential to emphasize the positive, and thus the normative, aspects of the lives most youth lead, particularly in the economic spheres so critical for all development. This strategy is not only the most appealing socially, but also has another major advantage: all of these normative aspects can be integrated into, and managed positively as a part of, the quotidian life of the country. Moreover, these aspects are relatively concrete and measurable (eg post-basic education rates; employment rates; sectoral distribution of the labour force), and can be responded to with policies that are relatively concrete. To add to this, a number are already set out as recommendations in documents such as the WPAY.

Building on and strengthening the capacities of youth in terms of identifiable normative aspects of their lives will ensure that the cohorts passing through youth ages merge seamlessly into the wider society as they reach early adult ages and then go on to contribute to long-term development. All of the factors concerned, to be discussed later, are either prerequisites to entering the wider society and economy (eg education; training) or are central to the first steps in a career (first job) or family and community life (eg marrying; parenting). In contrast, some of the more pathological factors that the WPAY outlines may be age-specific and transitory (obviously juvenile delinquency) and of less importance at older ages.

Moreover, by successfully implementing strategies that focus on normative behaviours, countries' would also be implementing policies that would comply with the overriding conclusion of all authors dealing with the WO. They are unanimous in stating that WOs will indeed remain merely windows of opportunity unless seriously addressed; that, to ensure that the society and economy develop harmoniously and effectively, the WO must be well managed. The remainder of this paper focuses on the normative aspects of the life of youth, seeing how it may be enhanced and fitting it into broader development.

As it happens, population does matter in very significant ways. Not only is the WO determined by demographic forces, as has been explained already, but also a seamless programme of integration of youth into development can be designed by reference to the demographic forces that will play out over the rest of the lives of each cohort after it has left the youth ages.

An age-structural focus has another immediate pragmatic advantage for policy makers – it enhances targeting. Each sector addresses a specific age-group – eg basic education deals with children, the labour force and housing with people at working and family-building ages, pensions with the elderly. But youth often sit in a “no-man’s land”, which some sub-sectors address in passing, but often as a sideline to what they see as their core business: eg tertiary education and training, as a sideline to basic education; pro-active labour-market activities to foster entry of young newly-trained job-hunters into the permanent workforce, as a sideline to a labour ministry’s major prescribed tasks. But such sub-sectors do exist already, and their role needs to be identified more formally than is often the case. Let us restate that policies for youth are attempting to address 20 % of the population; by contrast policies on pensions in Arab Countries will have to deliver to only 4-5% of the population well into the 2020s.

By tracking youth as they pass through the youth ages and combining this age-structural focus with a cohort perspective (see Appendix A), there is yet another pragmatic advantage for policy makers. They will know the capacities and the size of each cohort as it leaves the youth ages, and this can be projected into the future as the cohort moves through subsequent life-cycle stages.

To resolve the paradox noted earlier it is necessary to attempt to formulate alternative, cross-sectoral, comprehensive frameworks that allow policy makers to elaborate strategies for the more effective integration of youth into development programmes. Many of the key planks on such frameworks exist already in the extant programmes so there is no need to suggest totally new ideas. But there is a need to restate them so that they address the normative, and modal, life of youth, and to synthesize the different frameworks to exploit the best elements in each.

The MDGs are a useful starting point as they prescribe some major targets for the reduction of poverty and hunger, the provision of basic education and the reduction of disease. Against this, the focus on the reduction of poverty, which is reiterated in the WPAY, is a recognition that it is widespread among youth, and is a realistic goal, but only if its flipside – meaningful employment and income generation – can become the

key target rather than poverty *per se*. Similarly WPAY elaborates programmes and strategies relating to the priorities of Education and Employment.

The Demographic Dividends or Window of Opportunity approach represents a useful way of engendering a synthesis between these different frameworks. This approach has the following strengths

1. It emphasizes the normative processes of development.
2. It is centered on the processes of economic development – this is both a strength and a shortcoming (see below).
3. It not only recognizes the relationship between population and development, but, as noted already, the whole idea is that demographic changes produced by an age-structural transition are the most important determinant of development.
4. This draws on a coherent and cohesive – and ultimately very simple and almost self-evident -- body of theory. More importantly, the theory is derived from hard empirical research carried out down to the grassroots' level (eg in Indonesia and in Ethiopia, and in some Latin American studies).
5. This body of empirical research has identified three mechanisms for the WO, two of which are demographic, and which are critical factors at youth ages: **human capital** and the **labour force**. The third, **savings**, is very much an outcome of changes effected on the other two.
6. Its methodologies are simple and almost every country has data that allow its application.
7. They can be morphed into a new research paradigm, National Transfer Accounts (NTAs), which go far beyond traditional fiscal accounting, as NTAs include *inter alia* recognition of cohort effects and non-formal sector, notably intra-family, economic transfers.
8. The WO approach also fits very well with the limited but rather practical sets of priorities for youth development outlined by the World Bank¹³:

“-Learning as adolescents and young adults;
-Beginning to work;
- Taking risks that impact on health;
-Forming families;
-Exercising active citizenship”.

A possible weakness in the Bank's list is that it still tends to put the onus on youth, rather than on the society. In a sense, then, there is a need to turn around John Kennedy's famous dictum (I paraphrase here): “Ask not what the country can do for you, but what you can do for your country”. The society is dependent on youth for its own future and thus it should as a priority provide the institutions that will ensure better the contributions of youth to development . Youth must be incorporated into these processes; they cannot be expected to initiate them – they lack the modalities and power.

¹³ World Bank 2006 *World Development Report 2007: Development and the Next Generation*, Wash DC, World Bank Publications, published 2006: Introductory remarks Part II. There, they also provide a very interesting figure on the % of each cohort, at each youth age, affected by each of the factors they identify (see text).

The fact that the WO is so heavily directed to economic factors is, however, a potential shortcoming. Not only is development much broader than this, but as the NTAs have shown “social development” (eg intra-family transfers particularly of a financial or physical capital sort, but also services) have significant economic flow-on effects. The work on the NTAs also raises a fundamental issue: that burdens and capacities are not just vested in the fiscal system, but also in families and communities.

There are other issues that must be built into the analysis. First, technically analysts focus on rates, but for policy makers the critical variable is the number of people who can contribute to fiscal capacities and/or will generate fiscal burdens (see Appendix A). Secondly, age-structural transitions are far more than ageing: ageing as popularly defined (eg % aged 65+ years) is merely the end phase of an age-structural transition. In Arab countries it is a long-way off, and, if a first dividend is managed well, they might well be the beneficiaries of a second dividend that would go a long way to meeting the needs of future aged populations.

There is yet another problem that must also be resolved as it stands in the way of the approaches that are being suggested here. Financial and fiscal probity (eg debt reduction through the downsizing of public services including health and the provision of free education), at the expense of social equity and income distribution within societies, has been a key feature of agency-driven “development” programmes for the last three decades. No one would oppose such probity as a principle, but the problem has been the singular focus on it as the central core of development, and, worse still, the actions taken to achieve this goal. An emphasis on the fiscal and financial sectors as against enhancing production and strengthening the social sectors reflects the perspective of much of the late 20th century theory in the field. To paraphrase Robert Cassen¹⁴:

‘[Economic development has focused on] the progress of growth in per capita income, but very much more about the income than the capita’.

It lost sight of what was the overall objective of development: to improve the wellbeing of ordinary people. As Diane Macunovich points out¹⁵:

“Sometimes we lose sight of the fact that an economy is just people – working, playing, eating, sleeping, loving, learning, and dying – because of our tendency to focus on mergers, acquisitions, IPOs, dot coms, and the stock market”.

Unfortunately, in development circles this tendency has been reified by the “market fundamentalism or neo-liberalism” of the “Washington Consensus”, which favours privatization and the downsizing of the state¹⁶.

¹⁴ Quote from Cassen, R 2001 “Rear Cover”, of Birdsall, N, Kelley, N and Sinding, S (eds) *Population Matters*, OUP. The chapters in this book, by distinguished contributors to the field of population and development, provide a very comprehensive coverage of thought in this area right at the cusp of WOs becoming a higher profile approach than had been the case before this.

¹⁵ Macunovich, D 2002 *Birth Quake: The Baby Boom and its Aftershocks*, University of Chicago Press, Chicago

Finally, policy makers are also faced with the problem that the WO will be realized only when the percents of the population at childhood ages decline below a particular level and before aged dependency burdens start to increment – using Thailand as an example elsewhere¹⁷, I have suggested less than 30% at childhood ages. Here I use 10 % at ages 65+ as a cut-off point (Appendix C). The first figure is about to be reached in the Arab region, but the second is far off. Thus this region is on the cusp of entering a WO; but the demographic change that alerts policy makers to the imminent onset of the WO is a youth bulge.

The remainder of this paper sees the passage of this bulge as something that should be viewed positively, rather than with panic. It has the potential to be a dividend in its own right, in which potential capacities can be enhanced, albeit only a precursor to a much longer and broader WO. But it will become a dividend rather than a burden only if immediate, pro-active policies are formulated and implemented. As is seen in Appendix B the contribution of demographic dividends to GDP per effective consumer per year for the Middle East and North African region (unfortunately Lee and Mason¹⁸ use a different classification from that employed by ESCWA, so these data are merely indicative) is below that seen in Latin America or East Asia. Thus the section below suggests a more targeted approach which highlights the youth life-cycle phase as one in which the investments that will accompany the WO and drive the economy are anticipated by laying the rail-bed, as it were.

SYNTHESIZING THE WPAY, MDGs AND ICPD BY EXPLOITING THE WINDOW OF OPPORTUNITY

It is useful to view the Window as an *investment strategy* unfolding through a series of stages each of which must draw on different development sectors. To a degree these will be life-cycle stage-specific. The most important stage for this paper is the first, which requires actions immediately, so that, when the WO, properly speaking, opens up at stage 2, the preparatory stages will already have been launched. [To reiterate, key terms are defined in Appendix A.]

Some of the major ideas from the MDG cross-cut those of the WO in a useful, but generally salutary way: typically these are factors in the MDGs that are impediments to development or that represent its failures. This means that meeting the targets set by the MDGs prescribes essential pre-conditions to real development, but the MDGs are not sufficient in themselves to attain this. Take poverty and hunger as an example: generous cash gifts from donor countries could decrease poverty in some country, but, apart from increased consumption of basic needs, would not play a fundamental role in development, let alone take on problems such as market manipulation or inequitable

¹⁶ Bloom *et al op cit* citing Jeffrey Williamson who coined the term, but now recognizes that current use (as employed here) is different from his more technical notion.

¹⁷ Pool, I 2007 “Demographic Dividends: Determinants of Development or merely Windows of Opportunity?” *Ageing Horizons* (Oxford University Inst. Of Ageing), 7: 28-35 (also on line at www.ageing.ox.ac.uk/ageinghorizons/.)

¹⁸ Lee and mason op cit

wealth distribution. A \$/day is a superb marketing tool and attaining this will rescue many communities from dire poverty, but it is not a development programme. Again, food security programmes are essential if populations faced with starvation because of climate change, pressures on land or conflict are not to die, but they are not development of more enduring means of ensuring food security. To take another case, donor-driven measles vaccination campaigns rapidly reduced child death-rates in some countries, but without changing the basics of infrastructure development – the teams would go to slums, or villages, or groups of nomads, line up and vaccinate the children, perhaps share a cup of tea with the community, then head off in their utility trucks. This is not to criticize or trivialize the excellent relief programmes of WFP or the fundamental work being done by WHO and other agencies engaged in improving levels of health through such dramatic methods – they are much needed and one can only admire the dedication of the teams involved, but their *raison d'être* is humanitarian not developmental.

To add to this, the reduction of poverty and hunger will be country-wide objectives that apply to all ages, and, in any case, are already incorporated effectively into the economic recommendations of the WPAY. This is true also for the goals on the environment.

In contrast, MDG goals relating to education, the empowerment of women, maternal health, child health, the epidemic diseases and HIV/AIDS are all age- and gender-specific, and a number of these are important for policies at youth ages; this is also true for other STDs. But education, with its MDG-focus on basic primary schooling, and child health, both very important goals in their own right, are more a preparation for adolescence and young adulthood than a target at these ages *per se*. Childhood mortality, $(5)q(0)$, is one of the most sensitive and powerful indices of overall development, as is recognized in the UNICEF country rankings each year. Most -- although not all -- Arab countries are approaching or have probably passed a critical barrier beyond which $(5)q(0)$ is no longer as dependent on GDP/capita. But, the average health of a country is measured by more than mortality. The achievement of overall health among children is important for deepening the quality of the stock of human capital (see below), because disabilities or chronic disorders arising then may continue into the youth ages.

Youth as an age-group, become implicated more specifically in the MDGs for HIV/AIDS and STDs. The risks of being exposed to these diseases are probably highest among the most mobile youth. This may generate counter effects for sustained and sustainable development, particularly for sectors such as food production: experience from southern Africa shows that migrants, especially those engaged in circulatory mobility, on returning to source areas often introduce these diseases to more isolated populations. This in turn increases the dependency burden on rural labour forces already depleted at the most active ages by the emigration of youth and reduces production of basis foodstuffs.

Most of the great epidemic diseases are age-specific in incidence, but with the heaviest force falling on children. Tuberculosis, however, can well be contracted at youth ages and make a recrudescence at later adult ages. The living conditions of the young may be critical, and again migrants living in slums may be more at risk.

The ICPD has a number of platforms that interrelate with what is needed for the WPAY and for WOs, although in the WPAY these tend to be highlighted for their negative impacts rather than being seen as having resonance for normative behaviours and life-styles. For example, the ICPD placed great emphasis on reproductive choice for people of all ages; it actually did point teenagers and young adults as the sub-populations to which this strategy should be primarily directed. Yet, in the WPAY this comes under reduction of risks of HIV/AIDS, a priority with very negative connotations.

Instead, as stressed earlier in this paper -- including in citations from agencies such as the World Bank -- forming families will be something many youth (in some countries most young men and women) will become involved in. Probably, most youth will be exposed to intercourse, and many to the possibility of conception, although whether or not these take place purely within marriage will vary greatly from country to country. Conception for young women may also make it difficult to pursue higher education or careers, or place intolerable burdens on them because of their attempting to seek an adequate work-life balance.

The ICPD has other generic platforms that are rather less age-specific but which have resonance for the WPAY. Most prominent among these are gender empowerment and equity, and human rights.

In sum, then, the WPAY and the WO must always be in partnership with the MDGs and the ICPD. But even together they do not provide a comprehensive and cohesive set of guidelines for youth development.

A MODEL FOR DEVELOPMENT PIVOTED ON YOUTH

Passage through the Youth ages is governed by a set of experiences typical for one life-cycle stage. Some of these experiences, such as completing education, will be deterministic and life-time achievements; others will be more transitory, even though they may have consequences for subsequent stages. As a consequence, it is necessary to view the stage “youth” as a phenomenon that is multi-dimensional (aspects of this are graphed for Arab countries in Appendix C).

- (i) There are experiences, which, as of any given period, are happening to people who are at youth ages;
- (ii) But these youth are members of a cohort, which has flowed into this age-group from childhood, but which subsequently will move through other life-cycle stages, carrying forward with them the values, skills and material assets they have accumulated or failed to accumulate at youth ages. These cohorts will typically vary in size, they are population waves and ebbs, and in the wealth of values, skills and material assets they bring to the youth stage and/or carry with them to later stages. Thus these cohorts generate planning problems for markets and policy – services implemented to meet peak demands will be often followed by a downturn. Some of these problems are demographic, termed momentum effects: eg large cohorts born in the past reaching parenting ages may have lower fertility rates than their

- predecessors, yet still produce large birth cohorts (see Appendix C – this will be true for Arab countries). This, of course, means that child dependency rates go up or stay high, and thus reaching the WO is delayed.
- (iii) Demand on services to meet the needs of youth, and, more importantly, to set them up to drive development over the rest of their working lives, may meet competition for demands that other generations have for services. In More Developed Countries this competition may be between youth and groups in late middle age, but in the Arab countries meeting the child population's needs will generate the most competition. This comes from the momentum effects noted above (also see Appendix C).
 - (iv) The Youth stage is merely part of a wider, very significant phasic change that sees a shift in the population from (a) having high child dependency ratios, (b) to very high proportions at working ages (when the WO will occur), (c) to an ageing population when dependency rates go back up. At first the weighting of the population at working ages will be at youth ages, but gradually this weighting will also move up in age, until the working ages become much older on average.
 - (v) This means that as cohorts of various sizes flow across the working ages and the weightings by age change (as just noted), the comparative advantage of having a younger working age population may be lost – it is often argued that the young bring in more innovative ideas.

Stage One: Anticipating the investments needed to realize WOs. At this stage youth start to accumulate assets, skills and values. It thus becomes a critical stage for the rest of their working lives. Without a successful passage of each cohort across the youth ages the WO will remain just this, and the Dividend will not be realized. Clearly then, policies that aid this accumulation should be given priority. The argument here is that governments and markets cannot afford to wait until the WO opens up fully – as Appendix C data suggest, this may be into the future. Instead, there is a need to anticipate the occurrence of the WO by developing the institutions and infrastructure, and, even where necessary, seeking the financial capital that will make the WO successful. In this last regard, it should be recognized, as Matthew Higgins and Jeffrey Williamson showed 15 years ago in what is now a classical paper, that, when it occurs, the WO bestows a further benefit: it lessens dependence on foreign capital, including in countries that were poor at that time (India)¹⁹.

Above all, this is when any cohort is likely to gain the post-basic education and skills that equip them for the workforce, plus the work experiences and training they will need. The WPAY in sections 5-6 gives some very specific targets for this, all of which infer significant investments by governments and markets, some investments requiring financial capital, some physical capital, and others governmental intervention and regulatory regimes. But there are likely to be disjunctions between the outflows of newly trained or graduated young people from educational institutions and labour market

¹⁹ Higgins, M and Williamson, J 1996 “Age Structure Dynamics in Asia and Dependence on Foreign Capital” *Population and Development Review*, 23: 261-93.

demands. The WPAY specifies this problem and suggests strategies by which its effects can be minimized.

Basic to success at the youth stage is the “widening” of the human capital base coming from the expansion both of the labour force, and of possibilities for on-the-job experience of young workers in those segments of the workforce that may be less skilled yet essential for many industries. More conventionally, much attention must be paid to the “deepening” of human capital through education and training. In this regard, there is a need to see employment opportunities as opening not just in the productive sectors but also in the social sectors; there is also a need to see skills as not just depending on university and other forms of tertiary education, but also apprenticeships and job-experience skills (eg for “unskilled” workers in caring industries). In this regard the informal sector may also impart skills (eg technical, accounting).

A synthesis between the WO, WPAY and the ICPD also provides strategies for what are critical problems for many youth. These revolve around family formation, which as noted is likely to be a major issue for many youth.

Less clear are strategies to integrate youth into the socio-political life of communities. And least clear in this age of increasing youth mobility is how to resolve the major problems associated with migration. Much attention needs to be paid urgently to this issue. Unfortunately, much of the current dialogue is oriented towards problems of controlling the flows and less to how their effects can be subsumed into more general development processes.

The remaining stages flow on from Stage One. Their success, to a large degree, is dependent on how pro-active programmes addressing youth have been. The subsequent stages can be dealt with far more briefly.

Stage Two: Making the investment: Empirical studies of the WO show that at this stage there will be a shift away from expenditure on sectors such as basic education (because decreases in child dependency free up the financial capital previously directed towards social sectors) to productive sectors, infrastructure and institutions, and families will move discretionary income to savings and familial wealth creation. This will allow the gains achieved in terms of factors such as the widening and deepening of human capital at Stage One to be realized.

Stage Three: Drawing on the investment At this stage some aspects of development will become more institutionalized . This may mean that the need for a constant infusion of innovation from a young labour force will be less of a problem than it was.

Stage Four: Perpetuating the investment Here it is necessary to talk about the Second Demographic Dividend, which is dependent on how well the initial WO is managed. The most recent papers have shown that this phase, which happens to coincide with ageing, is not just an issue for More Developed Countries, but has implications for the Third World as well.

This paper would be incomplete if it did not talk about “widening the investment portfolio”, especially at Stages 1 and 2. This is to allow for the high demographic density noted earlier. It thus goes back to a number of the 15 priorities noted for the WPAY, such as those relating to being an effective member of civil society. It can also be argued that this includes imparting of non-economic skills and knowledge: eg on families; on religion – not just its dogma, but also its implications for daily life, some of which factors have implications for the purely economic aspects of development (eg deeply rooted and culturally sanctioned familial and religious obligations may affect disposable income and thus affect risks of poverty). This could be extended to other cultural factors, especially those that should be passed down the generations and to civics, etc. All of these are covered, at least in passing, in the WPAY.

CONCLUSION: RECOMMENDATIONS

This paper has had to deal with complex issues that are cross-sectoral, age-bound, yet also with both cross-sectional and temporal dimensions. Nevertheless, one singular factor – its constant reference to youth -- provides a central, cohesive focus for the paper and for recommendations flowing from it. Although the paper projects possible long-term effects of a focus on youth, the recommendations necessarily must be more modest and immediate in effect. As inferred earlier in this paper, the WPAY recommendations, especially those relating to education and employment, provide a useful set of potential targets for both governments, and the United Nations and other development actors to work towards.

Recommendations to Governments

1. That governments, as a matter of priority, analyze the future age-structural patterns in their country in relation to development, and particularly the investment stages outlined here.
2. That governments pay particular attention to the emerging demographic trends of youth, particularly the numbers involved, the cohort flows and the distributions within the youth ages.
3. That governments study the range of regulatory and policy targets outlined in the WPAY, especially those relating to post-basic education, training and on-the-job experience, and to employment conditions as these affect youth.
4. That governments formulate policies to develop the institutions in which these targets will be met, and seek budgetary support for the necessary physical capital, and deepening of human capital.

Recommendations to the United Nations and Other Development Actors

1. That, as a matter of priority, the United Nations and other development actors for the Arab region, when building development frameworks, focus on their application to the narrow age band of just 10 years, 15-24, but which comprises 20 % of the Arab region’s population; it is no longer appropriate to lump youth in with children (as was done in the ICPD), nor with young family-building age

groups at 25-39 years²⁰ (see survey of responses to WPAY programmes ; the needs of youth do comprise helping their passage from childhood to the family age groups, but are also different from the needs at each of these age-groups.

2. That, the United Nations and other development actors formulate frameworks for youth development and development in general, which emphasize the normative aspects of the youth years and see development, not reducing the failures of development, as the prime directions for policy and market interventions.
3. That such frameworks for youth focus on deepening human capital resources, maximizing employment opportunities for youth and on issues relating to the initiating of family building, drawing on targets drawn from the WPAY and ICPD programmes.
4. That, the United Nations and other development actors, as a matter of priority, explore means of mobilizing the financial resources necessary to underwrite these programmes for youth; it is clear that some countries will have difficulties finding such resources, but that others might be able, in the spirit of the WO to re-allocate resources from child-oriented to youth programmes.

²⁰ ESCWA 2010 *op cit*

APPENDIX A: SOME DEFINITIONS AND CONCEPTS

This appendix supports the text by defining some terms used in the text. It also at the end makes a brief methodological note.

Youth: The United Nations convention of seeing this population as people aged 15-24 years is generally followed here. In one set of graphs, however, 15-29 is used simply to have age groups of an even size: 0-14, 15-29, 30-44, etc.

Cohort: A group of people born at the same time (say over a five-year period), and then followed throughout their lives, as they pass through different life-cycle phases, referenced always to the common birth date. This allows us to change the emphasis from seeing youth cross-sectionally, when at that age, to viewing the longer-term impacts of programmes on their contribution to development later in their lives, say at middle working ages.

Generation: A number of cohorts which have some common experiences over the life span. This concept is important also because it highlights the issue of inter-generational competition for resources.

A cohort (or generational) perspective: This approach highlights the numbers of people reaching any given life cycle phase, and thus allows analysts to infer the capacities (numbers * skills) they bring and the burdens engendered by their passage through that stage of their lives. It also allows us to document what are the shared experiences at various stages that they carry with them to later phases; for example, exposure to epidemic diseases may not only affect mortality rates, but have a long term negative effect on the health of those exposed but who survived – the classical rheumatic fever → heart disease link is a good example. But this goes well beyond health into social, political, cultural and economic experiences, such as the proportion of each cohort gaining a tertiary education at their youth ages. There is yet another use for these data: for example, most children born alive in the Arab countries, except the poorest, will reach youth ages (95% in 15 of the 22 countries and overall; but only 75% in East African Arab states). Thus, there is an indication years in advance of how many people will require education and training in future. Once they have been through training and education we have a broad idea of the number entering the labour force, and the size of the workforce, including those in service as well as productive sectors, into the future; equally, this gives a far more accurate picture of their employment needs than the classical net figure of “exits minus entries” often used in labour force economics. Cohort analyses provide the key data for a number of the factors defined below. For example, Macunovich (2002 above) shows that ‘changing relative cohort size’ has both wide and profound effects on almost every aspect of the economy, ‘first-’, ‘second-’ and ‘third-order’ effects, from micro-economic factors, such as for households, to macro-economic, including ‘slumps’, GDP growth, ‘inflation’ and savings.

Ageing: In English, the word ageing poses a semantic problem as it has two very different meanings: (i) the process of an individual or cohort surviving through sequential age-groups and life-cycle phases (an age-structural transition); and (ii) for an individual reaching old age, or, at a population level, when an increasing proportion of the population reaches older ages.

Age-structural transition (AST): The first meaning of “ageing”; the second (say % of the population aged 65+) is at an end phase of a transition. The phrase AST incorporates shifts in the age-specific, cohort and generational structures of the population, particularly as used in the rapidly growing literature on “demographic dividends”.

Demographic Dividend (see Bloom et al cited above) (*also called “Bonus”, or “Window of Opportunity”*): A Dividend occurs when the proportion of the population at childhood ages declines, but before ageing (increased %s at ages 65+) sets in. This allows a shift in fiscally-based

or family expenditures from catering for the needs of children (eg education, health) to national and household savings, and investment in physical capital, infrastructure and institutions, without having to meet expenses coming from looking after the aged. To be realised in this way, the dividend must be managed successfully with efficient policies. For that reason the more contingent “Window of Opportunity (WO)” is often used rather than the more deterministic term “dividend”. This paper uses WO.

Second demographic dividend: If a first dividend is exploited successfully, then there will be a flow on effect termed a “*Second demographic dividend*”. It is dependent on cumulated savings and established institutions rather than demographic change per se, but coincides with ageing and thus ensures a better quality of life for the elderly.

Mechanisms driving the Demographic Dividend: Bloom et al show that the mechanisms for the dividend are human capital, labour force and savings; the first two are generated demographically, but the third is dependent on the first two being successful. Studies, across south and east Asia, Latin America, and historically in Europe, have shown that the dividend is a major explanatory factor for trends in development, as measured by conventional indices.

National Transfer Accounts (NTAs): An emphasis on age and cohort structures in the demographic dividend has led to a more recent attempt to incorporate these factors more powerfully into national accounts. NTAs do this, but also attempt to take account of intra-family as well as inter-family (most typically from public, social sector programmes) transfers. CELADE is carrying out NTA studies systematically for all member countries.

Human Capital (Deepening): Most analyses of human capital focus on this aspect, involving the education, training and perhaps health and societal well-being of each cohort. In this paper it remains a very significant aspect, yet its emphasis on identifiable academic and technical skills may obscure other important attributes, that are more difficult to enumerate, yet needed for comprehensive development. For example, caring capacities, based around experience and qualities of compassion, as well as skilled health personnel, can be very important, especially in looking after the elderly or those who are bed-ridden in those societies where this is not able to be done by families.

Human Capital (Widening): This is akin to what Bloom et al call labour force. To exploit the stock of human capital properly it is essential to have enlarged cohorts reaching labour force entry ages. But it also carries the connotation of expansion in the segments of the workforce which may be less skilled yet essential for many industries.

Development: In this paper it includes social and cultural, as well as economic change. The emphasis will be on human and other forms of capital as conventionally analysed by economists. But there is also recognition that for successful development there is a need also to build the cultural and social capital assets. This is not just for social-emotional reasons, but also because all these spheres of life interact

Sustainable Development: A long term goal of development must be that the wellbeing of the population is improved and sustained. But for this to be achieved development must also occur in ways that do not have major long-term negative impacts on the environment. Sustainable development therefore will be a process in which attempts are made to maintain harmony with the environment.

Finally, it is important for the argument in this paper to make a methodological note:

Numbers: Typically in economics and demography analyses are based around rates, which provide important insights on trends. But for policy makers the numbers of people, say in any age-group or generation, are likely to be a far more important indicator of burdens and capacities than are rates.

Projections: In looking at age-structural transitions, changes in numbers at any age-group in the foreseeable future yield the most robust projection statistic available, simply because a cohort will have been enumerated at one or more census, and cohort-attrition can occur only through death (likely for a small %) and migration, which varies from country to country. Countries can project with a degree of certainty how many there will be at the labour force entry ages in 2025, how many will be at labour force ages in the 2030s, and even how many elderly they will have in 2050. Therefore, numerical ageing (growth in numbers at the older ages is a relatively robust statistic. In contrast, projecting the child population of the future is far less certain because that depends on the reproductive choices of couples, many of whom are not yet married. Consequently, projections of structural ageing, the % at older ages, is less robust, certainly so beyond about 10-15 years; but they still more robust than economic forecasting, which at best has a 3-5 year shelf-life, and, worst of all financial forecasting with a shelf-life measured in weeks or even less.

APPENDIX B: CITATION FROM A PAPER BY RONALD LEE AND ANDREW MASON²¹

Demographic Dividends: Contribution to Growth (%) in GDP per Effective Consumer per Year (GDP/N)

| Region | 1st Demog Div | 2nd Demog Div | Total Effects GDP/N | Actual Growth GDP/N |
|--------------------------------|---------------------------------|---------------------------------|----------------------------|----------------------------|
| E & SE Asia | 0.59 | 1.31 | 1.90 | 4.30 |
| South Asia | 0.10 | 0.69 | 0.79 | 1.88 |
| Lat Amer | 0.69 | 1.08 | 1.70 | 0.94 |
| Mid East & N Africa | 0.51 | 0.70 | 1.21 | 1.10 |

The difference between the third and fourth columns comes from exogenous factors that constrain or enhance development. Oil production might be such a case for MENA

²¹ Lee and Mason op cit

APPENDIX C: AGE-STRUCTURAL TRANSITIONS, DYNAMICS²²

The graphs on the following pages raise a number of substantive issues:

- Cohort flows in the Arab Countries (AC) will more turbulent than for the world as a whole, and this has implications for planning.
- Because of their very different histories, each AC will follow a different age-structural transition (AST), as the cases of Lebanon and Yemen show.
- Focusing on the periods 1980-95, 1995-2010 and 2010-25 in figure 1a (AC), the cohort flows change pattern dramatically, with major consequences for policy. At first the growth of the child population dominates, then youth, but over the next 15 years the growth of the early-middle-aged becomes important, and elements of the WO come into play.
- Unfortunately, as figures 1 and 2, taken together, show, the youth bulge morphs into a bulge at the central family-building ages producing an increase in the number of births because of momentum effects outlined in the text. In Yemen's case this is exacerbated by the continuation of high fertility rates.
- Figure three looks at the percents of the total population at 0-14 years and 65+ and plots in, using very conservative criteria, when the WO might occur. It lies ahead for most AC, but in Lebanon's case is already on the country and requires pro-active policies to exploit it. In contrast, for Yemen, unless fertility declines dramatically over the next few years, the WO is a far distant prospect; a lesson learnt in demography is that recent fertility declines have been more precipitate than those historically.

²² See also Pool, I 2006 "Mapping Age-Structral transitions: A Comparative Perspective" in Pool et al (eds): 21-58

Catherine --- graphs to come here