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DEMOGRAPHIC BONUS IN AFGHANISTAN

Jamal Abdul Nasir[*] & Sohail Akthar[Ψ]

Abstract

Among Central Asian countries Afghanistan reserves an important position because it has been under the war conflict and political instability during the past five decades and a limited research is available on different dimensions of population and economic development. Being involved in war conflict situation, Afghanistan age structure is changing. This paper empirically explores the demographic bonus timings and durations for Afghanistan. The study results revealed that Afghanistan demographic bonus may remained for forty five years long starting from year 2000 and seem to be shut between year 2040 and 2045. For the proper encashment of demographic bonus the key challenge for the Government of Afghanistan is to create the policy environment on labour, savings and human capital. Which policies need to be incorporated to extend the demographic bonus is an added dimension to be considered in Afghanistan.

Keywords: Age structure, Demographic bonus, Afghanistan,

Brief Theoretical Perspective

It is empirically observed that economic development of a country is dependent on its population growth. Globally , the relation between population change and economic growth took importance in recent times. Three main theories are in vogue for population growth effects on economic growth. These theories are termed as 'pessimistic', 'optimistic', and 'neutralist' approach. The researchers having pessimistic view believe that population growth would serve as the 'break' for economic development—excessive population growth would lead to starvation by quickly consuming

[*] Associate Professor, Department of Statistics, Government College University, Lahore. Email:

[Ψ] Chairperson & Associate professor in the department of Statistics, GC University, Lahore

food supplies and natural resources. The pessimistic view seemed stem from the Malthus theory of starvation. Globally, the pessimistic views were famous during 1940-1970s.

From early 1980s the optimistic theorists argued that 'famines' occurred but millions of people are not starved. Indeed a new dimension started to emerge with empiric support that large societies fasten the economic growth—growing developed economies need advanced technologies. The optimistic theory refutes the pessimistic theory of population growth. Turning our discussion, say for example a questionnaire is a tool designed in survey research to sought opinions of respondents, while drafting the questions, an option of 'don't know' or 'DK' response is provided to respondents to report their opinion in a neutralist way. The 'neutralist' theory of population growth is much similar to DK response among researchers. This theory is more adopted fashion in recent times. The neutralist theory was perhaps an answer to an historic question asked by Adam Smith (1776): 'why some countries richer than other?'. However over the past two decades the United Nations and United States limit to support population programme of different countries seemed to be supporting neutralist view of population growth.

Population Age Structure

Demographers well established the fact that population growth is dependent on its structure or simply called age distribution while the above mentioned theories have ignored population distribution in formulating the propositions. The 'demographic bonus' also known as 'demographic dividend[1]' or 'demographic gift' while laid by the changing age structure resulting from the demographic transition, is realized through the productivity of the labour force and human capital. The demographic dividend refers to changes in age dependency ratios during demographic transition results in a window that first opens and then closes. More explicitly, demographic dividend during the rapid fertility decline increases the size of the labor force when compared to dependent population. Among Central Asian countries Afghanistan reserves an important position because it has been under the war conflict and political instability during the past five decades and a limited research is available on different dimensions of population and economic development. In this paper we use the results of population projection to explore the demographic bonus implications in Afghanistan.

[1] From onward in the article the abbreviation DD is used in place of demographic dividend

Data

Data play an essential part for significant research. Census, surveys and vital registration are the main sources of data. Unfortunately no census activity held in Afghanistan during the past four decades[2]. Central Statistics Organization (CSO) in Afghanistan is the main data producing office of the country. Since 1990s CSO coordinated many surveys. Through these surveys the estimates of the population are provided. By keeping in view the political instability, continuous war conflict, and substantial international migration make to have a less believe on the estimates. The data collected from Afghanistan possess a lot of data quality issues. Keeping these constraints in view the main data source used in this article was: "Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat (2004), World Population Prospects New York: United Nations (United Nations Population Division 2004)". Age wise estimates of population with age specific fertility rates are calculated. In addition, the net international migration rates are taken from this data base. By this time point four revisions of the data base have been prepared: 2008 Revision, 2015 Revision, 2017 Revision. Keeping the base population of year 2000 in view, only 2004 data based is used for the present work. However, by selecting a different base population, the other data bases could be used. The latest 2017 data base is also used but the results are not shown here keeping the study objective in view (the results could be handed from first author).

Population Projection Technique

Two main types of approaches are in vogue for population projection: deterministic and probabilistic projection. This study uses the classic traditional approach namely **t**he cohort component method CCM). The computational details of CCM are available in major texts on demographic methods. Mathematical formula details are avoided by keeping the journal standards, however, these details if required can be handed from the authors. Five year interval projections are computed. For each projection interval CCM consist of three main steps. The first step projects forward the number of persons in each age subgroup that will still alive 5-year later by multiplying the base population with survivorship ratio provided no migration. Gender specific projections are made in the second step of CCM (sex ratio at birth is assumed as 1.05). In the final step of CCM age specific fertility rates are used. Fertility rates of year 2000 are assumed as the standard variant for projection. In addition to the standard variant, the fertility rates are decreased by 30 per cent point and these rates are termed as

[2] Last census was held in 1979.

'low fertility variant' and fertility rates are increased by 30 per cent point and these rates are referred as 'high fertility variant'.

Results

The results are based on population projection from 2005 to 2050 by employing the year 2000 population as the base population. Population projections are made on the basis of three fertility variants: standard or medium fertility, low fertility and high fertility assumption. In low fertility assumption the birth rates are assumed to be decreased by 30 per cent of actual or medium variant and an increase of 30 percentage points in birth rates are assumed for high fertility regime. Figure 1 is the display of population projection under three variants up to year 2050. All three variants confirm that Afghan population is growing in nature.

Subtraction between growth rates of working population to the total population is defined as the demographic bonus. This subtraction could be positive or negative. The positive differences[3] offered a onetime window of opportunity for Afghanistan. Figure 2 presents the behaviour of demographic bonus over time from year 2000 to 2050 in Afghanistan which ultimately leads to the overall duration of demographic opportunity under three different variants. Figure 2 also shows that Afghanistan 'window of opportunity' opened in year 2000 and is looked to be shut by year between 2040 and 2045. Forty or forty five year long bonus is observed to be closed in year 2045. An interesting finding is that the demographic bonus is observed to be negative between year 2015 and 2020. The key reason behind this negative value is that during 2015, 201400 Afghan refugees returned to Afghanistan.

[3] Positive differences means the working age populations outnumber the non-working age populations.

Figure 1: Projected Population of Afghanistan under different variants (2005-2050)

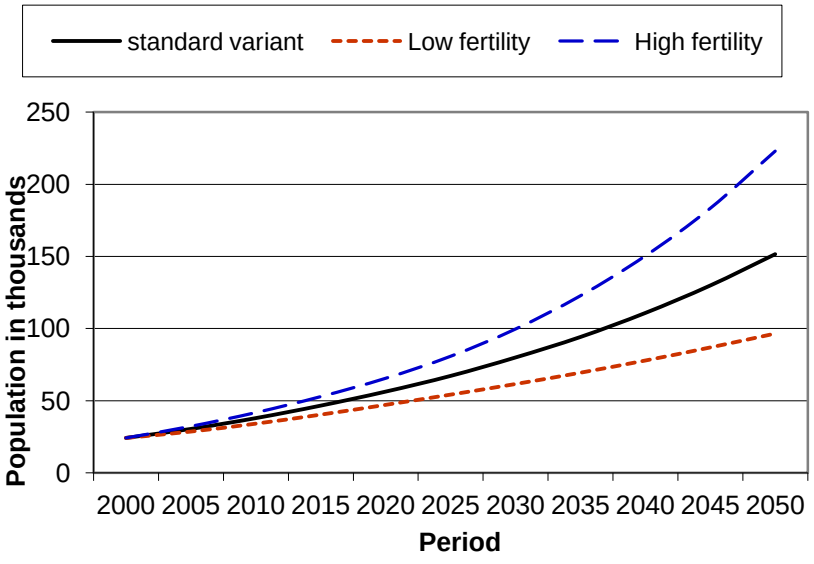
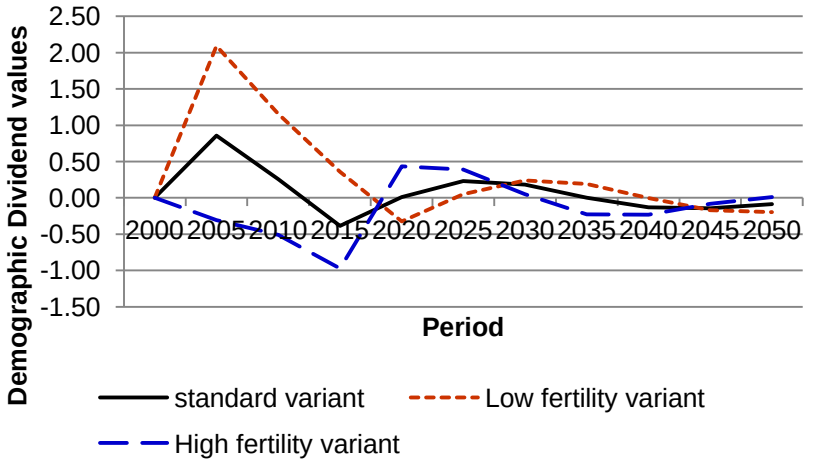


Figure 2: durations and status of demographic bonus in Afghanistan



Discussion And Concluding Remarks

For any country three factors namely *labour supply*, *savings* and *human capital* are most important for population and economic development. Labour supply or labour force consists on the working age individuals of the society or country. Savings are the monetary rewards of the labour. Higher life expectancy is the outcome of human capital. According to a latest World Bank report human capital accounts for 70 per cent of wealth in high-income countries. During 1940s-1970s many studies provided the space to pessimistic theory of population growth. Afghanistan population is growing this provide the empirics that fertility will not be lower in next three to four decades. If more children born in Afghanistan they would ultimately become the part of labour force. When there are more working people in Afghanistan it will ultimately reduce the burden of dependent people. Here the important policy dimension is the gender based labour force of Afghanistan. If opportunity of working environment is given to Afghan girls it will increase the development of Afghanistan in two ways: first, engaging the Afghan girls in work will suppress the fertility level for short duration, second the monetary outputs of these young workers benefits the country's economic growth. This dimension will strengthen the national savings of Afghanistan. Afghanistan is a country faces a challenge of high maternal mortality. Low fertility of Afghani women will result in less number of children. This lead to the improved health of Afghan woman would further strengthen the human capital of Afghanistan.

Substantial policy on labour supply, savings and human capital are mandatory of a country like Afghanistan where the local population is stanched with the religious beliefs and they would really be want to become the part of industry if installed by foreigners or they may find the other ways of their day to day living. We foresee the Government of Afghanistan need to be fully functional equally in all parts of the country and the providing the opportunities. This seems a key challenge for the Government of Afghanistan to adopt such strategies which will real time provide opportunities so that the demographic bonus is reaped in true spirit. One of the limitations of the study is that the findings of this paper should be viewed with close to migration assumption; a separate analysis is required while incorporating the net international migration with the population projection estimates.

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