

Forever young? The demographic transition in Southern Africa and its socio-economic implications

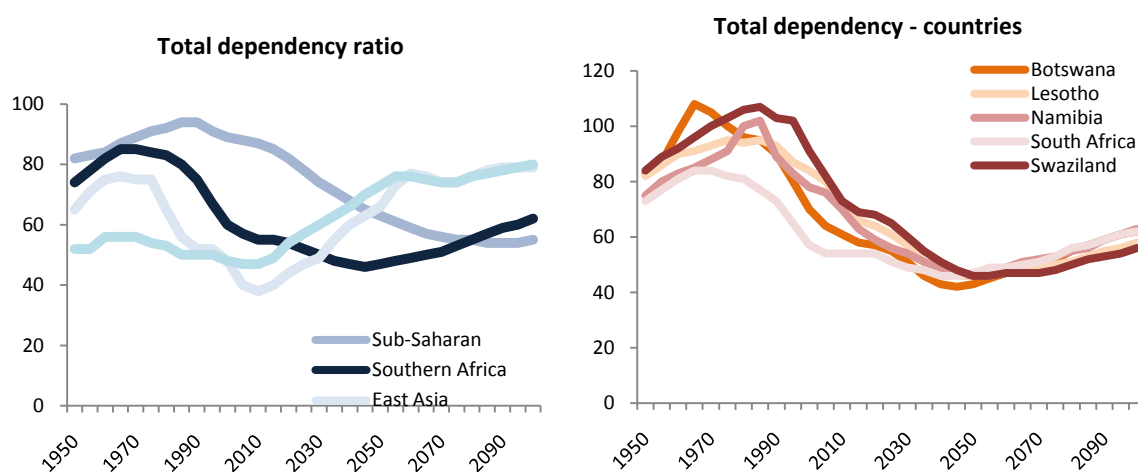
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A unique demographic transition

Southern African countries (Botswana, Lesotho, Namibia, South Africa, Swaziland) present a common, peculiar demographic pattern which is very different from the one observed in the rest of the African region. On one hand, fertility rates have started declining much earlier and faster compared to the rest of the continent. In South Africa for example, large decreases in fertility were observed already in the 1950s, whereas the other countries showed important changes only starting from the 1970s and much more in the 1980s. On the other hand, the demographic transition has not been linear nor continuous in these countries, as mortality surged again in the 1990s due to the dramatic prevalence of pandemics such as tuberculosis and even more importantly HIV/AIDS.

With the steady fall in fertility, the dependency ratio in Southern Africa has been declining rapidly since the 1980s, and is now considerably lower than that in the rest of Sub-Saharan Africa (Figure 1)¹. In 2015, the dependency ratio in Southern Africa will be 55, much closer to that of Europe (49) and East Asia (40). The latest UN population estimates predict that the dependency ratio in Southern Africa shall continue to decline until about 2050 (though at a lower pace than before), when it will slowly start picking up (Figure 1). In the rest of Sub-Saharan Africa, total dependency will only reach in 2070 the level held in 2015 by Southern Africa.

Figure 1: Projected Demographic Trends: A window of opportunity for Southern Africa



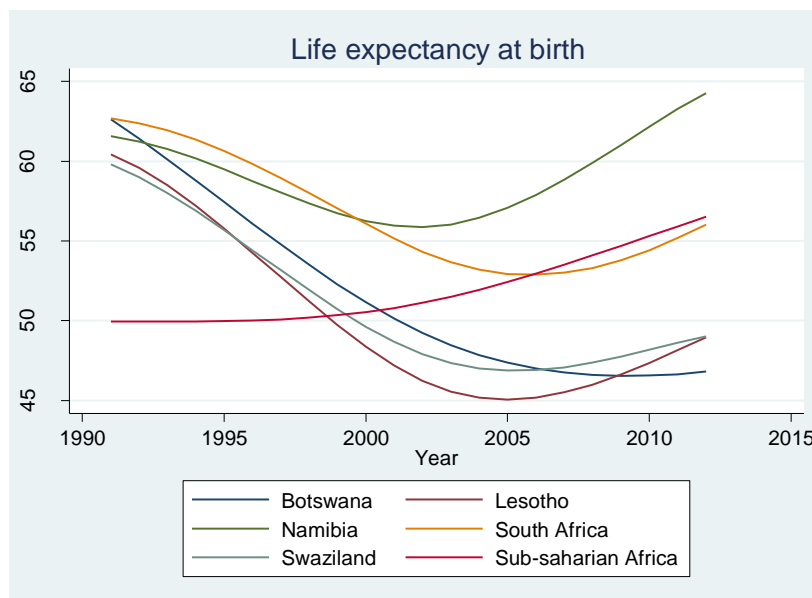
Source: Authors elaboration using UN Population data, 2012 Revision

The HIV/AIDS pandemic has impacted the demographic profile and trends of Southern Africa. Southern Africa is the region that has seen the highest prevalence of HIV-AIDS in the world. The impact of the HIV/AIDS epidemic can be best seen through the dramatic drops in life expectancy at birth in the early 2000s. As of 2012, and in spite of being much wealthier, life expectancy in South Africa is close to the

¹ The dependency ratio here is defined as the proportion of people outside of working age (0-14 and 65+ years) to the population aged in working age (15-64 years).

average of Sub-Saharan Africa. The spread of the disease has severely impacted the current cohorts of working age, and especially women between the ages of 20 and 40 years and men between 30 and 44 years at present. To be sure, the relatively successful efforts to prevent the further spread HIV/AIDS have meant that the demographic effects of the pandemic have been more limited than what was predicted at its height. Nevertheless, its effects may have long lasting consequences for growth and shared prosperity.

Figure 2: Life expectancy at birth



Source: Authors elaboration using WDI data

On the edge of the demographic window of opportunity

As a consequence of the demographic transition, each country enjoys a window of demographic opportunity in which the dependency ratio is historically low and, conversely, the proportion of the working age population is high. Other things equal, the higher share of the working-age population will lead to an increase in output per capita, a condition identified by the literature as the first demographic dividend². While the first dividend arises mainly because of increased labor supply, demographic forces may also lead to a second demographic dividend through higher savings and investment in both physical and human capital per capita³. Indeed, an increasing number of researchers suggests that the largest economic gains from the demographic transition will materialize if this is accompanied by an educational transition, that is, an increase in the country's educational level⁴. All this can in turn fuel further economic growth as well as improves the standard of living of the general population. In other regions (most notably East Asia), such demographic transition has indeed been found to bring about considerable economic improvements: the literature suggests the demographic dividend accounted for over 20% of economic growth between the late 1960s and the 1980s in East Asia, when per capita income rose annually by more than 6 percent.⁵

Southern Africa is indeed experiencing the low levels of dependency that can bring about a period of economic opportunity; however, the HIV/AIDS pandemic has represented a demographic shock that

² Bloom, D.E., Canning, D. & Sevilla, J., 2003. The Demographic Dividend - A New Perspective on the Economic Consequences of Population Change. RAND.

³ Mason, A., 2005. Demographic Transition and Demographic Dividends in Developed and Developing Countries.

⁴ Lutz, W., 2014. A Population Policy Rationale for the Twenty-First Century. Population and Development Review.

⁵ See among others Bloom and Williamson (1998), and Bloom et al.(2000).

altered population dynamics; moreover, despite the favorable dependency ratios, the region's economy does not yet show signs to be reaping its benefits to the same extent that other regions have.

Figure 3: GDP growth and unemployment

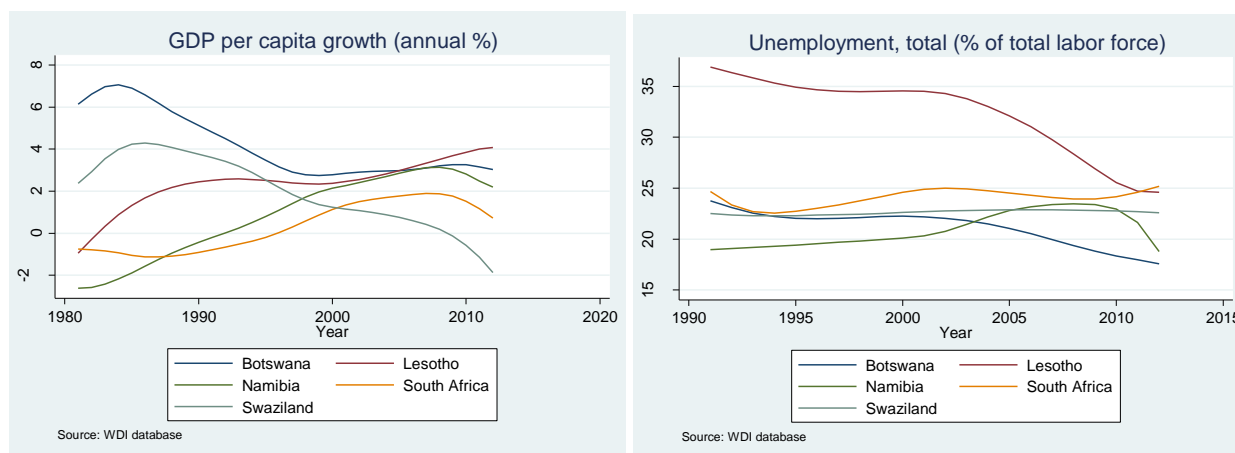


Figure 3 shows the evolution of GDP growth and unemployment for each of the five countries in the sub-region. Annual per capita GDP growth has been on average modest, ranging between 1 and 4 percent since the two thousands, and has not been near the levels experienced by East Asia during its transition. Unemployment levels are also very high (on average, more than twenty percent), suggesting that labor markets are struggling to absorb new entrants into the labor force.

According to the UN definition, South Africa is currently entering the window of demographic opportunity⁶, that is, the most favorable period in its history to generate a demographic dividend. Instead, in Botswana, Lesotho, Namibia and Swaziland the opportunity for the demographic dividends is projected to open around 2030. As Southern Africa approaches this "sweet" demographic spot, governments in these countries should make sure to have the right policies in place to eliminate potential barriers to the realization of the demographic dividend, and to actively promote the potential economic and social gains that the window of demographic opportunity can offer.

Methodology

This article collects and describes country-specific evidence for Botswana, Lesotho, Namibia, South Africa and Swaziland, in order to inform the discussion on how to best take advantage of the demographic, social and economic opportunities ahead, as well as overcoming the potential challenges.

In particular, the study is structured around three pillars:

(i) Formulation of an in depth demographic profile of each of the five countries. The work starts with a review of the relevant empirical literature on demographic trends in southern Africa. It draws mainly on UN Population data and employs a set of simulations to discern the key drivers of demographic changes. The diagnostic attempts to establish a policy-relevant time frame for demographic changes in each country of the five countries. In the literature, the "advance investment window" is the period during which in-advance investment in health, education, and economic sector is needed to capitalize an economically

⁶ As defined by United Nations (2004), the window of demographic opportunity opens when the proportion of the population under the age of 15 is less than 30 percent, and the proportion of the population aged 65 and over is less than 15 percent.

favorable age structure in the future, while the “low dependency rate window” is the time in which a country can potentially benefit from the economically favorable age structure with a low dependency ratio. The progress through the window of opportunity appears to be slower in Southern Africa as compared to East Asia the one experienced by East Asia; furthermore, the shock resulting from the HIV/AIDS pandemic has likely further delayed such progress. As the duration of the demographic transition and window of opportunity has implications for the economy and policy, this setting up of a timeframe for the transition is a useful exercise for later stages of this task.

(ii) Impact of demographic changes on economic activity, poverty and shared prosperity. The study reviews the literature on demographic change and economic growth, and investigates the possible effects of demographics on the economy through the LINKAGE dynamic simulation and GIDD household micro-simulation models developed by the Bank’s Development Prospects Group. This analysis attempts to give an idea of the direction of the effect of the demographic evolution on GDP per capita, savings, poverty, and shared prosperity given the current policy environment and projected demographic trends. The model simulations are used to discern, for a given demographic dynamics, what the levels of growth, poverty and inequality could be under different demographic and labor market scenarios (participation rate/unemployment rate/productivity). While the model gives a flavor of the possible direction and magnitude, the study also draws on the existing empirical literature as well as a labor market analysis. The latter uses labor force (and/or household survey) data to look at the labor force age composition, derive a meaningful definition of “dependency ratio” for the five countries, and look at how age-income profiles may evolve over time.

(iii) Impact of demographic changes on the demand for health, education and social protection services, and related fiscal implications. This pillar aims to address the following questions: What changes in the demand for social services from different segments of the population can be expected over the next few decades? What could be the implications of an evolving demographic profile for the cost, financing and provision of services in health, education and social protection? The National Transfer Account is the key methodology used. The NTA methodology identifies the income and consumption age-specific profiles of each country, and matches them with National Accounts, allowing for consistent assessments of intergenerational transfers across countries and time. Additionally, the analysis makes use of existing literature on the evolution of sectoral spending with demographic change.

On the basis of the above analysis, the article seeks to draw implications that can help guide governments in formulating policies to respond to demographic changes in a timely and effective manner.