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African Power in the 21st Century and Beyond

Summary: The paper examines the concept of international power in connection with demographic trends as forecast by the United Nations. It focuses its attention on the situation of Africa, a region projected to become the second largest in terms of population by the turn of the century. The argument to be developed is that the large number of new entrants to labor markets of African countries will likely be deprived of the labor skills necessary to allow them earn a livelihood. The "demographic dividend" will thus be denied and the consequences will be felt not only in Africa but in the world at large, most acutely in Europe. To prevent the rise of this "disruptive" power in Africa the paper offers some novel ideas on how to redesign Official Development Assistance (ODA) so as to promote human capital investment.

Key words: Power in international relations, Africa, Official development assistance, Economic development, Human capital.

JEL: F59, J24, O15, O19.

The main goal of this paper is to analyze the challenges and opportunities presented by the huge expected increases in the population of the African continent until the end of this century.

It has long been recognized that population plays an important role in power relations. According to United Nations (UN) projections Africa's share of the world population is set to more than double. Whether African nations will be able to manage this sort of population growth is an important issue for the entire world. The answer to this question clearly revolves around the ability of African societies and governments to vastly increase investment in the human capital of incoming population cohorts.

These prospects provide the main theme for the paper. The next two sections provide a brief discussion of the concept of power in international relations and review the projections of the UN and some of its implications. After a discussion of possible scenarios for Africa as these prospects unfold, some policy suggestions related to the design and scope of ODA programs directed towards Africa are presented.

1. Power and Population in International Relations - Related Literature

As noted by most authors in the field, power is a notoriously elusive concept of international relations. Its importance has, however, been well recognized from the times of Thucydides, the Athenian general and historian. Despite controversy over its precise meaning, there seems to be consensus on the general notion that, as noted by David A. Baldwin (2013, p. 177), power involves the capacity of "one agent inducing or making another agent do something it would not otherwise do". This is also stressed in Kosta Josifidis and Alpar Lošonc (2012, p. 513) when, in their discussion of the relation between power and value in economics, they assert that power entails that "certain economic agents influence other agents so that they provoke particular activities". It is also generally acknowledged that power is a stronger concept than influence and a weaker one than control. There seems to be also agreement on the fact that power does not simply "grows out of the barrel of a gun", as the famous quotation of Mao Zedong (Stuart R. Schram and Nancy J. Hodes 1995, pp. 31-36) would have it, although military power is certainly an important component of national power. In this vein, the exercise of some forms of power, certainly the case of "soft power", a concept introduced by Joseph S. Nye Jr. (2004), this distinction vanishes.

The classic reference of Hans J. Morgenthau (1948) distinguishes a variety of *elements of national power*, namely geography, natural resources, industrial capacity, military preparedness, population, national character, national morale, and the quality of diplomacy. Each one of these elements, by it alone, may not be sufficient to ensure national power. It is usually a combination of sufficient levels of a number of these elements that will generate that effect.

More recently, other authors (see a good review in Chapter 2 of Brian Nichiporuk 2000) have stressed the relation between demographic trends and security, especially in connection with the security outlook of developed countries. Paul Demeny and Geoffrey McNicoll (2006) have also introduced the term "political demography" to refer to the effect that evolving population patterns are bound to have in the world distribution of power.

For the sake of the development of our argument, we will single out the population element. It is important to bear in mind that, as noted by Morgenthau, a nation may have a huge population and its power be quite small. Such was the case of China during most of the 19th century and the beginning of the 20th century when it was, indeed, being progressively subdued by Russia, Japan and Western powers. Its similarly large population did not prevent India from falling prey to an expansionist Great Britain. On the other hand, as Morgenthau also observed, it is hard for a nation to achieve enduring power without a sufficiently large population.

2. A Review of Population Trends to the Year 2100

The latest iteration of the UN population forecasts (UN 2011) provides a detailed picture of the evolution of the world population through the year 2100 under a number of scenarios or "variants". The UN considers four different "variants" for their forecasts. They are, with increasingly high rates of growth of populations, a "low variant", "medium variant", "high variant", and a "high-fertility variant". We will limit here ourselves to discussing briefly some of the most important results of the "medium variant", considered to be the most likely to take place. According to these forecasts the world population will increase from some 7 billion in 2011 to around 10.1 billion in 2100. Little of this increase will take place in the developed world,

whose population will go from 1.2 billion in 2011 to 1.3 billion in 2100. On the other hand, the population of the developing areas will go from 5.7 billion in 2011 to 8.8 billion in 2100. Were it not for migration flows, the population of the developed world would actually decrease during this period.

Regarding age structure, the proportion of children (less than 15 years of age) will remain higher in developing regions than in developed regions, although the difference will narrow (see Table 1). A symmetric effect takes place in regard to the aged population (65 years or older): their share of the total population is higher in developed than in developing countries throughout the entire period, although that difference keeps decreasing. Of course, these differences are due to asymmetric fertility rates, much higher in the developing than in the developed regions. Interestingly, the projections indicate a convergence in those rates towards a common range around 2.0 in 2100, close to the replacement rate. This convergence underlies the narrowing in differences pointed out before and also explains the general aging of the world population. The share of aged population for the entire world increases from 7.7% in 2011 to 22.3% in 2100 while that of children decreases from 26.6% in 2011 to just 17.9% in 2100. As the increase of the aged population is higher than the decrease of the young population, the proportion of working age adults decreases, from 65.7% in 2011 to 59.8% in 2100. That proportion is projected to become higher in developing regions (60.3%) than in developed regions (56.1%), thus reversing the current situation.

	Total population 2011			Total population 2060			Total population 2100		
	0-14	15-64	65+	0-14	15-64	65+	0-14	15-64	65+
World	6 974 036			9 615 189			10 124 926		
	26.6%	65.7%	7.7%	19.7%	62.0%	18.3%	17.9%	59.8%	22.3%
More developed regions	1 240 380			1 310 345			1 334 786		
	16.5%	67.3%	16.2%	16.8%	57.0%	26.2%	16.9%	56.1%	27.0%
Less developed regions	5 733 657			8 304 845			8 790 140		
	28.7%	65.4%	5.9%	20.2%	62.8%	17.1%	18.1%	60.3%	21.6%

 Table 1
 Evolution of World Population and Age Structure: 2011-2100 (Millions and Percent)

Source: Data processed by author from UN (2011).

These projections are striking and, as we shall see in a moment, they become more so when we get down to the regional and country level. It is rather amazing that most discussions about their potential geopolitical and economic implications have remained at a rarefied level and have yet to enter the domain of public debate. Given that the goal of this paper is to discuss the outlook for Africa, I will privilege forecasts for that region. Asia remains of course the largest region of the world with 45.4% of the world population in 2100. However, Africa surges into second place with 35.3% compared with just 15% in 2011. Its population becomes more than five times larger than that of Europe (including Russia) and it dwarfs other regions as well. As a matter of fact, less than one in five of the world's inhabitants are forecast to live outside of Asia or Africa in 2100, compared with more than one in three in 2011 (see Figure 1).



Figure 1 Distribution of Population by Major Region: 2011 to 2100

African population growth, at 240% over the entire period, is unevenly distributed across countries and, as a result, some of them exhibit phenomenal growth in their population. Thus, the population of Tanzania increases by a factor of ten over the period, while those of Niger and Malawi rise by a factor higher than eight. Of the 24 countries projected to have a population larger than 100 million in 2100, 10 are located in Sub-Saharan Africa (SSA). As of now only one country in Africa, Nigeria, has reached that level.

Nigeria is a good example of the transformation the region is forecast to experience over the remainder of this century. With a projected 730 million in 2100, Nigeria is poised to become the third largest country in the world, its population larger than that of Europe, Latin America or North America. Transformations in age structure lead to even more striking results. If we look at population of working age (from 15 to 64 years of age), Nigerian population in this group becomes comparable to that of China and 75% higher that of the United States (see Figure 2).



Figure 2 Working Age Population of Four Major Countries: 2011 to 2100

These figures should not be dismissed lightly. For the fact is that they correspond to the medium variant of UN projections, with moderate assumptions about the evolution of fertility rates. According to them, and as explained before, fertility rates would converge across regions towards a value close to the replacement rate. The latter implies, in particular, that the regional distribution of the world population would remain relatively stable into the 22^{nd} century.

3. The African Conundrum

The figures just discussed for the evolution of African population throughout the remainder of this century are startling and, as said before, their implications have yet to enter the domain of public discussion. Even if we take into account the cautionary words of Morgenthau about the significance of population for the sake of power it seems rather clear that these developments are bound to affect international power relations, not the least those among Africa and its closest neighboring region, Europe.

Two extreme possibilities arise as we think about the way in which this evolution will occur over time. The positive one is that rising populations in Africa will receive the education they deserve, acquire the skills needed to sustain themselves and to contribute to society, and meet an economic environment where sufficient demand for labor exists. Under this rosy scenario the economic size of Africa grows together with its population and the region will indeed become more powerful. How this power is exercised and projected is of course another matter, not to be discussed here, but presumably African power would not take a very different form than that of other nations or regions. The second extreme, negative possibility is that African countries are unable to manage the tide of growing population cohorts. Poor education for the children, insufficient skills for the young adults entering the labor force, and disorganized markets convert the "demographic dividend", always a promise rather than a hard reality, into a "demographic nightmare". Under this bleak scenario the economic size of Africa would not increase commensurately with its population. thus denying the region of the economic element of power. However, the region would still possess what I would call a "disruptive" power, that might even be higher than that under the first scenario and whose projection would be definitely alarming to its neighbors and beyond. The huge population numbers and their dire situation would pose a continuing challenge to other countries, especially in Europe, and constitute a threat to their stability in a variety of ways.

These polar scenarios are useful in helping us to visualize the range of possibilities that may arise as demographic, social and economic processes unfold in the continent. It is of course impossible to ascertain the course that Africa will take within this very long time horizon and we can only, based upon the observation of recent trends in Africa and the world, provide some comments on whether the situation will evolve towards a positive or a negative state.

On the one hand, Africa has made reasonable progress during the last decade or so, as attested by the figures from the World Bank (WB 2013a). Real GDP for SSA increased by a yearly average of 4.8% during the first decade of this century, which compares well to the yearly average of just 2.1% over the previous two dec-

ades. Similarly *per capita* real GDP rose by an annual average of 2.2%, much better than the average decline of 0.75% observed over the previous two decades. These progressive trends, basically continued during the more recent years, have led some to express a high degree of enthusiasm about the long-term future of the continent. Exemplary of this mood is the recent publication by Charles Robertson et al. (2012), an articulate analyst of the Renaissance Group, a Russian-owned investment group with extensive interests in the region. In the same vein, and in a recently published tract, Justin Y. Lin (2012a), a former Chief Economist of the WB, has also argued vigorously that Africa, were it to adopt the right policies, could follow the way of East Asia in the post-war period. Both authors emphasize their conviction that Africa should be able to achieve high growth rates without help from other nations. Those views are broadly shared by other authors, such as Kingsley Y. Amoako (2005), Edward A. Miguel (2009), and Theodore H. Ahlers et al. (2014).

On the other hand, there are many other facts justifying a skeptical view or, at the very least, a more balanced stance. The daunting challenges that most African countries facing in taking advantage of the "demographic dividend" are well illustrated in the recent contribution by Jean-Pierre Guengant and John F. May (2013). Moreover, a second look at the figures from the WB (2013a) reveals that the average per capita real GDP for the region in 2010 was only US\$ 653 in dollars of 2000, and just US\$ 458 when South Africa is taken out of the measurement. That represents an increase of slightly less than 10% during the entire 30-year period starting in 1980 (23.1% if we exclude South Africa). Another noteworthy fact is that the relatively robust growth of the past decade has taken place in the context of an ever-increasing demand for raw materials originating from China. As noted by a recent study from the WB (2013b), this is unlikely to continue and, inasmuch as African growth has been largely dependent on high prices and high demand for the commodities they produce, the medium-term outlook for their economic growth is not very positive. The same study also observes that the effect that recent African growth has had on poverty reduction ("growth elasticity of poverty") is much lower than in other developing regions of the world, an effect that they ascribe to the still very unequal distribution of income. These arguments point towards the fact that Africa is still coping with a situation of extreme backwardness and that their economies are vulnerable to whatever variations take place in the world economy. We also need to keep in mind that any comparison with East Asia in the post-war period should take into account the widely different historical backgrounds and institutional heritages. As we are reminded by Carlos Aquiar de Medeiros (2011) there is an important link between the buildup of institutions and the creation of economic structures crucial to economic development. Abdelkarim Yahyaoui and Atef Rahmani (2009) also emphasize this point, especially in connection with financial structures.

Placing the preceding discussion against the background of the UN projections under the "medium variant", it is not farfetched to assign a significant probability to an outcome close to the second scenario described above.

4. A Role for ODA and Human Capital Investment

The entire world, developed countries in particular and especially those in Europe, have naturally every reason to wish for a virtuous combination of population increase with economic and social development in Africa. As it has been argued by a number of authors (see, for instance, the blog posting by Lin 2012b), there are at least two important conditions that will have to be met by African countries for this to take place. First, invest sufficiently in the human capital of the young, and thus ensure that they will become employable and productive. Second, improve the quality of governance and the necessary institutions to that end in such a way that an environment of political participation and economic freedom is assured.

Both conditions require hard work on the part of African nations although it seems that outside assistance would be most helpful for meeting the first one. Without belittling the importance of the first condition, I will limit the following discussion to ways in which ODA can be refashioned and used to that end.

It is necessary to keep in mind that as of 2011, net disbursement of ODA by member countries of the Development Assistance Committee (DAC) of the Organization for Economic Co-operation and Development (OECD) to African countries south of the Sahara was some US\$ 29 billion. Including flows from multilateral agencies raises it to US\$ 43.8 billion (see OECD 2013, p. 252). This amounts to slightly less than US\$ 50 *per* inhabitant of SSA countries. There are additional ODA flows from other sources, in particular from China. Although their levels are not as well recorded, it is unlikely that these flows will dramatically raise the figures quoted. It also bears in mind that only a portion of development assistance flows is allocated to items related with social development, such as the expansion and improvement of education and health services. Moreover, given that most of these funds are channeled through central and local government bodies, they are prone to be exposed to various inefficiencies and corruption in such a way as to be considerably diminished before reaching their intended beneficiaries.

This background suggests rather forcefully that if the developed world wants to support a positive route for Africa as its population grows it needs to reform considerably the way it provides ODA to the region. In what follows I outline a set of recommendations in that direction.

These recommendations are based on the recognition of the need to tackle three points. First, ensure the provision of sufficiently large flows so as to finance investment in human capital for all new born (*universality*). Second, maintain these flows until countries become able to take charge of that kind of investment by themselves (*consistency*). And third, target the flow of funds directly to its final beneficiaries (*minimal intermediation*). A consequence of the first two points is that the grant component of these flows should be minimal; the magnitude of the necessary funds to be transferred also implies the need to attract the interest of international financial markets. Official aid, both bilateral and multilateral, would in this case take mainly the form of the provision of guarantees to private investment in the human capital development of African nations. The third point suggests that the flow of funds would go towards the purchase of securities issued by individuals that would be associated with their expenses related to investment in their own human capital.

Taking account of these observations, and borrowing extensively from Neantro Saavedra-Rivano (2012), where a related idea was discussed in a different context, we outline a new system to organize and supervise investment in human capital as well as the flow of funds that would finance it. The main elements of this system, involving the close cooperation of national and international authorities, would relate to the issuing of securities by individuals, their packaging into assets to be placed in the international financial markets, and the repayment of incurred debts by beneficiaries over the course of their adult life. In what follows the main processes of the operation of this system are described:

(i) The main institution necessary to the implementation of the system is the *Central Registry and Repository* (CRR for short), an agency charged with keeping records of all relevant transactions and with the regulation of the secondary market for assets originating from these transactions. Operation of this agency would involve the participation and cooperation of national authorities and those of multilateral aid authorities;

(ii) Starting from initial time, each newborn is automatically endowed with an *Individual Capital Account* (ICA) and becomes entitled to charge selected expenses related to his/her human capital development to that account. Limitations on the use of the account will include, most importantly, the *limit age* (say, for the sake of argument, 15 years) and a *spending profile*. The former establishes the age beyond which expenses can no longer be charged to the ICA. The latter is a time path of estimated costs normally required for the upbringing of an individual that will set quantitative and qualitative constraints to the use of the account through time;

(iii) Providers or sellers of goods or services will be registered at the CRR and properly certified;

(iv) Each purchase of a good or service by an ICA holder will give rise to a triangular transaction between the ICA holder, the provider of the good or service, and the CRR. This transaction, much as a credit card transaction, will credit the provider (with the amount of the transaction) and will create an asset (for the CRR) and a liability (for the ICA holder) of equal value;

(v) The CRR will conduct at this stage a process of *anonymization* whereby anonymous securities, backed by the named securities, are issued and sold to primary financial institutions. As a result of this process the named securities become assets for the CRR and the anonymous securities its liabilities (to the financial institutions, who will keep them as assets);

(vi) The primary financial institutions will then proceed to package the now homogeneous securities (HC) into financial products of suitable size and maturity that will be offered to the financial markets. We will call these securities HC *securities*;

(vii) Although interest rates on HC securities would most likely have to be initially set by the regulator, the markets will ultimately determine them;

(viii) Once individuals reach the limit age, and allowing for a grace period to be specified, they must initiate repayment of the accumulated debt plus interest;

(ix) Repayment will be automatically deducted from earnings or income and collected by the CRR. The CRR uses, in turn, these sums to buy HC securities in the financial markets, so that both assets and liabilities in its balance sheet are reduced by the same amount.

Figure 3 below provides a graphical illustration of these steps and of the economic flows associated with the scheme. The population is broken down into two functional groups or cohorts: young and working adults. The other boxes represent the productive sector, the international financial sector and the central agency (CRR). Earnings of the working population, consisting in this simplified model entirely of wage income, are spent in one of two ways: their own consumption, and repayment of their own debt to the CRR. The diagram also shows the transactions between the CRR and the financial system, both the creation of HC securities and their redemption, and the triangular transactions associated with purchases of goods and services by the young.



Figure 3 Flows Associated with the Creation and Circulation HC Securities

Such a transformation of ODA, from a system that provides a small stream of subsidized loans and grants to another providing a robust stream of private and publicly guaranteed funds targeted to finance human capital development, would also transform relations between the emerging African powers and the rest of the world. It would help not only in deflecting the "nightmare" scenario but, by binding together Africa and other regions in the common goal of development, might be instrumental in persuading the emerging giant to exercise wisely its newly acquired power.

5. Concluding Remarks

This paper has discussed the implications of projected demographic trends for the future of Africa and its relative position in the world order. If UN population projections are taken seriously, and undoubtedly these are the most authoritative existing forecasts, already by mid-century Africa's population will surpass that of all other regions combined except Asia. Its most populous country, Nigeria, will become the third largest in the world and by the turn of the century its population will exceed that of Europe (including Russia). Despite a relative surge in growth observed during the past decade or so, the extreme backwardness of the region, its vulnerability to changing external conditions, and the fragility of its institutions, justify a considerable anxiety about the kind of power that Africa will come to project in the world, especially in Europe, by the end of this century. Fortunately, there seems to be scope for the world community to cooperate with African authorities in coping with population trends and their many implications, and this paper has discussed some suggestions that go into that direction. Of course, any action by the world community requires recognizing the existence of this trend and acknowledging its urgency. We hope that this paper has contributed to raising that awareness.

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