

EXECUTIVE SUMMARY

When the G20 gave permanent membership to the African Union in September, Zambia's President Hakainde Hichelma went to X (formerly Twitter) to announce that this "means [Africa] has been recognized as a key player in the world economic landscape." Can the continent of Africa—with its 54 diverse countries—be a new motor of sustainable development and economic growth? In the next two decades, as China rapidly ages and the rest of Asia follows close behind, 96% of the entire net increase in the world's prime working age population (ages 15–49) will come from the African continent. If Africa's leaders succeed in realizing the potential of their youthful populations as they pioneer clean energy growth, they will not only improve the lives of Africans, they will also deliver huge benefits to the entire world.

As China did before it, African growth can transform the global economy. China's GDP per capita was just half that of Ethiopia today at the beginning of its great boom. Urbanization, education (especially at the secondary level), and foreign investment drove China's remarkable growth. Africa possesses many of the same qualities.

The looming climate change crisis means that Africa's growth must be green, however. By 2060, Africa's 2.9 billion people will be as many as China and India combined. If its development depends on fossil-fueled energy, its increased carbon emissions will more than o set any CO2 reductions by Europe, the United States, and China. Fortunately, the continent boasts enormous potential for clean wind, solar, and geothermal energy, as well as its already plentiful hydropower. While the entire world will benefit from a green and growing Africa, its exceptional vulnerability to droughts and food insecurity means its citizens may reap the greatest benefits.

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Africa is more often viewed as a source of problems for the world than a place that o ers solutions, but nothing could be more mistaken. In fact, Africa's social and economic development likely holds the key to solving many of the problems facing other countries. If the continent's leaders can unite their people behind policies that drive economic growth, spur education, and create conditions attractive to foreign investment, Africa's youth can lead a global economic boom.

Other countries must pursue a course with African countries that values cooperation over competition. As the developed countries go "grey," young people will become the scarcest resource. African countries will need support to develop that resource through outside investments in health, education, and clean energy. Africa must succeed for the global economy to prosper.

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INTRODUCTION

In February and March of 2023, US Treasury Secretary Janet Yellen visited Senegal, South Africa, and Zambia, First Lady Jill Biden arrived in Namibia and Kenya, Secretary of State Antony Blinken visited Ethiopia and Niger, and Vice President Kamala Harris traveled to Ghana, Tanzania, and Zambia. In January and February, Russian Foreign Secretary Sergei Lavrov met with o cials in South Africa, Mauritania, Mali, and Sudan. These visits were intended to challenge the dominant role in Africa that has been taken by China. In January 2023 alone, Chinese Foreign Minister, Qin Gang, visited five African nations (Ethiopia, Gabon, Angola, Benin, and Egypt), as well as the Headquarters of the African Union in Addis Ababa.

The world's great powers are again seeking influence in Africa, just as they did in the 19th century. The earlier era saw these nations arrive to gain control of territory and extract resources. Today's great powers come to donate and invest, build markets and infrastructure, and seek partnerships with sovereign states.

To be sure, great powers also still seek access to resources—oil and gas, copper and gold, diamonds and platinum, cobalt and cocoa. But the export of raw materials will soon become secondary to Africa's real resource in the 21st century: the human capital of its youthful population. And African leaders already are seeking to guide the continent's leap forward into a clean energy economy.

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A WORLD TURNED UPSIDE DOWN

In 1900, the total population of Africa is estimated to have been 138 million people. Given that the African continent comprises about one-fifth of the total land area of Earth, its population density was staggeringly low: 4.5 people per square kilometer. By comparison, that is just one-hundredth of India's present population density.

Europe in 1900 was already swollen by the growth that followed the Industrial Revolution. In that era, its population of just over 400 million was three times as large as Africa's total. Thus, Europe outpaced Africa in sheer numbers, as well as in technical and economic development.

That past dynamic is now being turned upside down. Advances in global public health and medicine have reduced the ravages of disease, and the threats posed by both wild and human predators have also decreased. From 1900 to 2000, Africa's population went from one-third the size of Europe to being slightly larger in total. What had been the case in 1900 will be completely reversed by 2050. The United Nations Population Division forecasts that there will then be almost four Africans for every European (based on their

These observations are borne out by the shape of global economic growth in the last four decades. Despite all the incredible technological innovation that has taken place in the United States, Europe, Japan, and South Korea since 1980 (from cell phones and laptop computers to commercial solar and wind power and reusable space rockets), the largest portion of global economic growth came from the increasing volume and productivity of workers in an initially much poorer and technologically backwards country: China.

From 1980 to 2020, fully one quarter of the entire increase in global GDP was due to China's growth—a larger contribution than from the United States (22%), the European Union (12%), or Japan (4%). And from 2010 to 2020, when the United States and Europe were still in a slow recovery from the Great Recession, the world depended even more on China. That decade saw China's growth account for over 40% of the world's total rise in real GDP.

Where will the world find another motor of growth to play the role that China has played in the last forty years? The days of China's rapid growth are likely over. India is often touted as the "next China," but that too is unlikely.

The factors that drove China's growth engine are now stalling or going into reverse. The main driver of China's post-1980 miracle was a massive surge in the labor force. Plus, its burgeoning productivity was multiplied many times over by a shift from low-productivity rural agriculture to much higher productivity work in mining, construction, and factories.

Yet China's future promises no larger wave of far better educated workers. Decades of declining birth rates

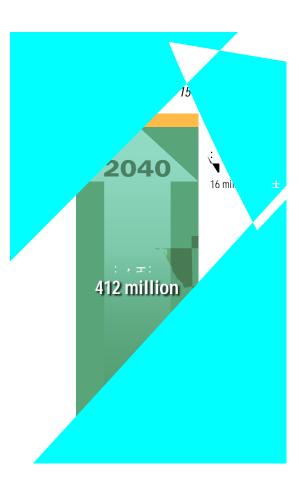
African family structure and education provide one compelling explanation. At present, in many African countries, too many families are unable to count on stable and e ective government or fair market exchange to help them meet their needs. In these conditions, one's family remains the most valuable resource to meet

as well as most of Africa's island nations, the portion of women enrolled in secondary school is over 70%. Many African countries, notably South Africa, Egypt, Ethiopia, Kenya, and Nigeria, are starting to develop a strong university sector, with diverse public and private institutions. Yet a stronger focus is needed on preparing secondary school teachers for the entire continent, not just professionals for governments.

While there are signs that Africa's exceptionally high fertility may be starting a stronger decline, the high fertility over the last several decades has made Africa the world's last great harbor of young people. This year alone, one out of every three children born in the entire world will be born in an African country. And, as a result, one of every three youths in the world aged 15–24 will be an African in 2040.

This growth extends across the board. By 2050, the prime-age working population of Africa will be five times as large as that of Europe, and larger than that of India and China combined. Another way to view the coming decades is to note that the entire world's age 15–49 population will increase by 428 million between 2020 and 2040. Of that increase, 412 million will be in Africa, with only a 16 million increase in that age group *in the entire rest of the world*. As the shrinking labor force in Europe, China, and the rest of East Asia o sets growth elsewhere, we have already entered an era in which African youth will account for 96% of all the net labor force growth in the world.

Africa's youth has the potential to transform the global economy. A glance backward gives a clue as to how it can do so.



WHY GROWTH IN AFRICA MUST BE DIFFERENT

Another characteristic of China's growth is that it followed the pattern of early industrialization in the West: grow dirty and clean up later.

Relying first on coal for energy, and then on liquid and gas fossil fuel combustion, China's economic growth was an environmental disaster. China has polluted the air, drained aquifers, turned rivers into sewers, and added more greenhouse gases to the air in recent years than any other country. (Fully one-quarter of global greenhouse gas emissions—twice the total created by the United States—come from China.)

China's growth also has made it far more dicult to achieve a "clean-up" in the time required to prevent the planet from heating to dangerous levels. If Africa's development were to produce another China-sized amount of greenhouse gas emissions over the next three decades, those emissions would eclipse global climate mitigation goals—even if China, Europe, and the United States all met their most ambitious targets for emission reductions.

As we have seen this past summer alone, as unprecedented waves of heat and fire struck the United States, Canada, Europe, Latin America, China (and even Antarctica), severe and costly climate shifts are emerging faster than ever. Poorer countries will be especially hard hit, as their people and economies lack the resources to be resilient to climate impacts. African nations are thus in a race to develop their economies before the e ects of heat, drought, floods, heat-driven insect infestations, and other climate impacts wreak further havoc on their economies.



Solar construction site with a boabab tree (Tukio / shutterstock.com)

Growth across the African continent must therefore be clean, both in terms of generating energy and not despoiling the continent's resources of rainforest and species diversity. Fortunately for Africa, the continent boasts plentiful hydro, solar, wind, tidal, and geothermal energy resources. It is also developing at a time when technological advance has lowered the price of clean energy by an order of magnitude from just a few decades ago. Indeed, in most places, renewable energy sources are now cheaper than burning coal. New methods of large-scale energy storage, from stored hydro and pressurized gas to improved batteries and capacitors and green hydrogen, also will soon make it possible to overcome the intermittency problems of solar and 10 o .itn1.3 a53 Tw ries

Providing African countries with the financing and technology to achieve a shared vision of clean and sustainable development is vital. Kelly Sims Gallagher of Tufts University has suggested establishing a Green Bank (similar to the World Bank) that would specialize in financing green energy projects in developing

require additional taxation or reduced benefits in just ten years,

after past surpluses are exhausted and when future revenues are expected to fall short of expenses. Many state pension funds are in much worse shape. The number of workers paying into pension funds has been shrinking for decades in rich countries relative to the growth of the older population. This trend is about to accelerate as the second, larger half of the baby-boom generation (born 1951–1961) enters retirement.

This problem is common to the entire rich world. In Europe, the over-65 population grew by 30 million from 1990 to 2010, but is set to jump by 70 million to 2040. China's change is the most dramatic: its over-65 population will explode from 116 million in 2010 to over 360 million in 2040.³

The ratio of younger people of working age (20–64) to those over 65 is also shifting. In the United States, in 2010 there were almost five people of working age for every senior; by 2040 that will be halved, at 2.5. In Europe, the support ratio in 2040 will be even lower, at 2.1. China in 2010 had fully 7.6 people of working age for every senior in 2010; by 2040 it will be just 2.3, roughly the same as the United States.

It might be thought that immigration would help solve this problem by bringing in more young workers. But immigration on a scale that would substantially alter these age ratios is

inconceivable. It will be di cult enough to simply bring in enough home care, hospital, and elder support workers for a senior 0 10 72 470.76 Te r7n0n w3ses9(w)19.920 (ers f)20 atw, gi20 (v)20 d[(t)-1 (sin muc[(w)20 (ork)20 (not)20 (not)2

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Achieving a modicum of political stability and security holds the prospect that countries such as Morocco, Tunisia, Kenya, Mozambique, South Africa, and Tanzania also could compete in this domain. In the next thirty years, Europe and the United States will have a combined 270 million people over age 65. If just one quarter of them found hospitable retirement abroad, and in doing so cut their medical and retirement costs by one-half, then based on average living and medical costs of \$65,000 per retiree per year, that would represent an annual savings of over \$2 trillion per year. That is as much as the United States spends today on Social Security and Medicare combined.

There is no reason African states cannot compete in this market, with the advantage of bringing not only well-o retirees, but also local employment for doctors, nurses, and other service workers to care for them. Rather than fearing migration from Africa as a problem, rich countries flooded with retirees should look at migration to African shores as a solution.

Again, this may seem a pipe-dream. But when thinking twenty years out or more, it is important to look at a nation such as Mexico. Americans once worried about immigration from Mexico to the United States. In the years before COVID-19, however, more people moved from the United States to Mexico than the number of Mexicans moving to the United States.

The southern border of the United States is stressed by migrants from Venezuela, Haiti, Honduras, Guatemala, and other countries where development has failed. The best antidote to immigration pressures on Europe and the United States is stable economic development in the source countries of immigration.

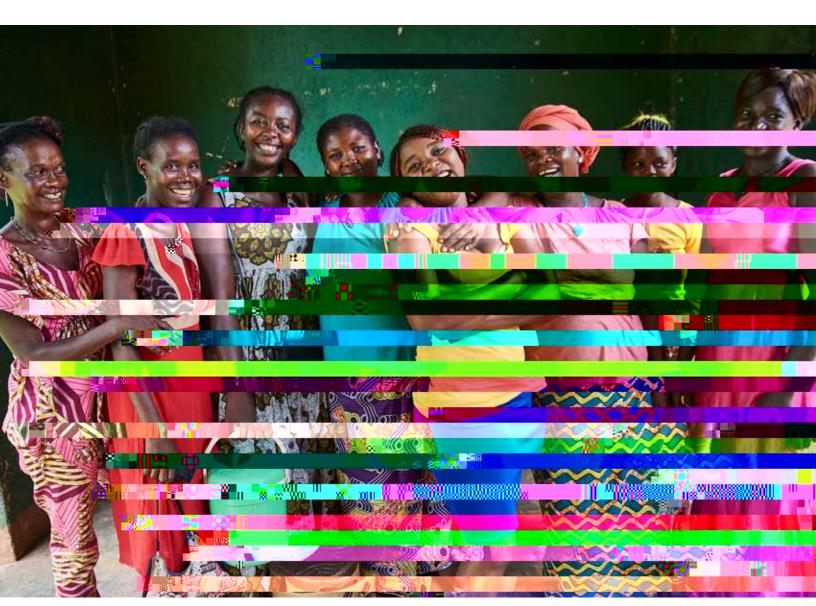
While Europe and the United States need immigration in moderation, they fear it in excess. A moderate flow of work migrants from Africa to the developed world will be necessary to help meet demands for labor but uncontrolled surges of refugees (like those from Syria, Libya, and Afghanistan to Europe in the 2010s in the wake of civil wars, or from Ukraine today) can undermine trust in government and generate nationalist xenophobia.

An additional 400 million young men and women seeking work by 2040 means that development failures and political instability in Africa could create immense pressures for migration abroad. One of the best investments that the world can make for its future stability and prosperity is supporting providing quality secondary education to young men and women in Africa. This investment would produce several global benefits: fertility would decline; more working men and women would lay a foundation for sustainable development and a higher return on capital investments; and outmigration pressures would be reduced.

Yet the word "education" is not mentioned even once in the White House statement on the Summit, and the <i>Vision Statement for the US-Africa Partnership</i> omits any role in supporting education and improving its

ENDNOTES

- The Africa population estimate for 1900 is from Massimo Livi-Bacci, A Concise History of World Population, 6th ed. NY, Wiley Blackwell, 2017, Table 1.3. All other population data and projections are from the UN Population Division, UN World Population Prospects, 2022 (latest) revision https://population.un.org/wpp/, using the most historically accurate projection for each region (the "high" variant estimates for Africa, "constant fertility" for China, and "medium" variant estimates for Latin America, the United States and Europe). Urban population data is from the UN World Urbanization Prospects, 2018 (latest) revision https://population.un.org/wup/publications/Files/WUP2018-Report.pdf.
- 2 For source of Chinese and Indian population data, see note 1.
- 3 Population Data as in Note 1.



Members of a local business association hold a meeting (USAID / CC BY 2.0 / flikr.com)

