Climate Change and International Finance: Toward the Creation of an African Green Bank

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Part I

Introduction

Introduction

- The entire planet has a climate change challenge
- In 2023, carbon dioxide concentrations reached 419 parts per million (ppm) and methane concentrations reached 1902 parts per billion (ppb), the highest levels in at least 2 million years.
- Globally, June through August, 2023 marked the world’s hottest three-month period in recorded history posing a direct threat to human health and wildlife, severe droughts, water shortages, and stressed agricultural systems.

Introduction

- Perspectives may vary on how Africa can be involved in a global solution to the climate challenge, but the need for Africa-based resources for most solution pathways is undeniable.
- A solar panel in Africa provides more energy, which translates directly into US dollars per day of output than the same solar panel, placed in the northern parts of the Asian, European or North American continents, as is the current norm.

Introduction

- The issue is not just new forms of infrastructure but the ability of Africa to manufacture the goods necessary to deal with the challenges of adaptation and mitigation.
- Hence in line with other speakers the problem is not just structural but financial.
- Finance and the structure of the global financial architecture has been a major obstacle to the transitions in Africa needed to cope with climate change.

Introduction

- To achieve a global green transition that includes Africa, we propose an African Green Bank that will support and stimulate the full range of activities needed for a transition to a renewable energy based sustainable economy.
- The bank would not just be a financial institution but a continental industrial policy organization that helps design and support activities that will range from mining and the industrial production of energy generation and storage equipment to low-carbon (or green) manufacturing in Africa.

Introduction

- One key advantage that derives from structuring the bank to support the full vertically/regionally oriented value chain of activities in the transition to a green economy; an approach that can help to address the perennial structural weaknesses that have held back African economies since political independence.

Outline

I. Introduction

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III. Existing Development Banks and the Exigencies of Industrial Development

IV. An African Green Bank : Preliminary Thoughts on a Proposed Structure and Purpose

V. Conclusions

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Part II

Critical Reflections on the African Proposals for Climate Change

African Proposals

- The 66-point Nairobi Declaration summarizes the main points to come out of the first African climate change summit in September 2023-
- 20) Africa-focused investment to catalyze new industries to transform the planet
- 24)leapfrogging the traditional progression of industrial development to foster green production
- 28)strengthen continental collaboration to enable and advance green growth including greater grid connections 29)expand energy intense industries to create a virtuous circle of green energy and green growth that adds value to Africa's natural resources

African Proposals

- The proposals of the Nairobi Declaration are to be accomplished mainly by channeling $100 billion through the African Development Bank.
- A key weakness of the proposal is that the AfDB is not a specialized climate finance institution, has a tendency to emulate the neoliberal agenda set by the World Bank and IMF and has a rather poor track record at promoting industrialization in Africa in part due to the heavy reliance on donor support including significant representation of Northern countries in voting rights.

African Proposals

- Clearly what is missing is an organization that can focus on coordinating finance and industrial policy in a manner that can create the goods and services capacities on the continent to deal with the adaptation to climate change while mitigating its impact.
- Green industrialization was the focus of a second round of meetings of African heads of state that took place a few months later on December 2, 2023 at COP28.

African Proposals

- One head of state suggested the solution might be to “restructure the international financial architecture’
- What does he propose?
- “We have to empower the World Bank and the IMF for more concessional funding to young and developing countries in Africa”

African Proposals

- I doubt anyone here thinks that it is how you restructure the international financial architecture
- The meeting highlighted the 2016 UNECA Economic Report on “Greening Africa’s Industrialization”.
- The report recognizes the importance of industrial policy, but is based solely on interventions to address market imperfections and failures using a neoclassical economic framework

African Proposals

- Given that in the real world, economies are shaped by wealth, power and ideas which tend to be excluded by neoclassical economics, industrial policy for greening industry needs to draw on more than one set of economic tools such as structural economics and original institutional economic theory.
- Taking narrow theory to a challenge as broad as green industrialization in Africa runs the risk of creating solutions that falter because the actions of governments, corporations and households do not match expectations based on models of individualized rational choice applied to collective action

African Proposals

- The 2016 report proposes a five-point plan of action at individual state levels, focusing on building a green industrialization vision and strategy, shifting government regulations, expenditures and fiscal measures, and building up the capabilities to deliver the policy agenda.
- It is challenging to imagine green industrialization rising from individual state-actions on the continent based on the recommendations of this report, given the stark variation in the capabilities, politics, natural endowments and financial resources across African countries including the paucity of country development banks dealing with industrialization

Theoretical Issues

- The institutional economist James Swaney (1987) points out that even if all imperfections were countered the market focused solutions based on individual pursuit of objectives would not work since “future generations have no votes in today’s marketplace.”
- It is time to stop thinking that resources can simply be modeled into chimerical neoclassical world.
- Instead, Swaney argues for the concept of co-evolutionary sustainability where environmental systems evolve interdependently with human development.

Theoretical Issues

- In this framework, natural goods, natural resources, and life-support systems flow into the social system and the economy.
- The natural environment also acts as a sink that receives undesirables disposed from the economy, which can overload the sink, threatening co-evolutionary sustainability and environmental flows.
- The framework calls for a duality of conceptions of socio-economic systems, the natural environment, and their interdependence.

Part III

Existing Development Banks and the Exigencies of Industrial Development

Development Banks

- National development banks including industrial banks were a central part of the policy apparatus of state-led growth and transformation in the 1960s and 1970s.
- The institutions failed, were closed down or privatized by structural adjustment initiatives.
- In some cases, they transformed into commercial banks.
- What are the remining development banks up to?
- One key issue is the lending period?

Development Banks

- Ndikumina et al, 2021 define an NDB as "government-sponsored financial institutions concerned primarily with the provision of long-term capital.'
- They use a Bankfocus data set to evaluate the lending practices and profitability of 49 national development banks compared to 543 private and public commercial banks.

Development Banks

- They find the share of medium and long-term loans are 22% higher for national development banks compared to the private commercial banks.
- Hence NDBs are fulfilling the role expected of them though we do not know from the article the actual length of the loans or their sectoral focal points.
- We can turn to other sources to answer these questions including the Beijing based Inst for New Structural Economics

Development Banks

- Of the 74 development financial institutions in 33 African countries in the data set of the Institute of New Structural Economics, only six focused on industrialization of which three were exclusively for small and medium size enterprises.
- Only one country listed a development bank dealing with the environment.

Part IV

An African Green Bank : Preliminary Thoughts on a Proposed Structure and Purpose

African Green Bank

- The expertise or institutional knowledge needed for unlocking the potential of an entire value chain tied to renewable energy is not the strong point of the regional development bank and international financial institutions serving African governments.
- Few of the key institutions currently offering loans and development assistance to African countries, are primarily in the business of industrialization.

African Green Bank

- The paucity of national and subregional development banking institutions specializing in industrialization makes the need for organizing a structure to generate green industrialization even more pressing.

African Green Bank-Key Attributes

- An African Green Bank has the potential to design transformative strategies at the national, regional and continental levels, secure financial resources, concentrate scarce capacities in engineering, organizational design, business management, environmental sciences, financial expertise, lawyers and economists that are not confined to a doctrinaire neoclassical economic approach but are open to a wide variety of theoretical and policy tools.

African Green Bank-Key Attributes

- 1)Partnership with the AU
- 2)Management, capital and voting structure completely controlled by African countries to avoid problems seen with other pan-African organizations
- 3)Capital contributions by individual African countries based on size of GDP which includes a mix of individual African countries currencies and hard currencies
- 4)Loans are based on a multiple of the capital base in local currency for local costs and foreign currency for imports in the project

African Green Bank-Key Attributes

- 5)Promised Paris Accord funds should be used in multiple ways including expanding the capital base
- 6)Issue bonds in and out of Africa to finance green projects
- 7)Eventually allow AGB loans to be paid back entirely in local currency to avoid forex exposure and downward pressure on currencies-reserve sets aside to cover the currency risk
- 8)Along Japanese main bank system lines AGB has option to take small ownership with board appointments in projects/companies that receive loans which allows for monitoring and income flows from partial ownership

African Green Bank-Key Attributes

- 9)At every opportunity the Green Bank will aim at building industrial capacity to accommodate green industrialization and green energy with an emphasis of building value chain on the African continent-as outlined by Gabor and Sylla (2023) the green hydrogen project in Namibia is simply reproducing the enclave economy-this must change

African Green Bank-Key Attributes

- 10)Bank will help with sales so countries supporting green manufacturing products can import products from other African countries e.g.solar panel importers from one African countries can purchase it from another using their own currency-hence can become a clearing house for currencies minimizing use of hard currency

African Green Bank-Key Attributes

- 11) High-income countries may be skeptical about handing climate finance funds to or through governments that they perceive as corrupt, or as less technically capable-the Green Bank provides a transparent channel for finance that can be accountable to the people affected by climate change and can report on climate actions undertaken to the global community of supporters and contributors-

African Green Bank-Key Attributes

- -bank can also provide monitoring services for delivering compensation payments meant to repair damage and losses, as agreed at COP 27
- 12)Like the Taiwanese manufacturing extension service, the AGB will have the largest concentration of experts in engineering and science and industrial policy on the continent available as a green extension service

African Green Bank-Structure

- General Divisions-The first unit could focus on green energy production. The unit's activities could include banking for wind, solar, geothermal or tidal energy projects as well as green energy related infrastructure.
- The second unit could focus on agricultural and related value chain activities that employ green technology- This unit could support the integration of agri-food processing across multiple African countries, (yielding the outcome expected from industrial policy initiatives).

African Green Bank-Structure

- The third unit is to support the downstream processing and manufacturing activities that flow from the mining of metals needed for a renewable energy transition-Notable examples include aluminum, cobalt and lithium, as well as rare earth metals like dysprosium and terbium-finally halting the export of unprocessed minerals
- A fourth area is related to the need to develop goods and services to deal with climate change adaptation-

African Green Bank-Structure

- For example, supporting companies that manufacture and install solar based African manufactured drip irrigation systems could help deal with the climate related droughts in many parts of the continent.
- The fifth unit serves as the investment intermediary that attracts and arbitrages foreign investment to the key green industries in African countries.

African Green Bank-Structure

- The sixth division would be the green extension service-Many African countries lack familiarity with industrial policy or have technical expertise to deal with new manufacturing-AGB would provide this
- The seventh division is the holding company that specializes in the monitoring and reporting functions described previously.
- Eventually, we could see the organization of regional and even country branches of the Green Bank.

Possible Indirect Benefits

- African Green Bank can provide the added benefit of stabilizing the currencies of countries in the region.
- Two features-exportable revenue and exports from the Bank-supported projects relieve the pressure for foreign currency in the projects' host countries-given advantages tied to the endowments of wind and solar resources on the continent, there should be more exports of energy intensive manufacturing on the continent for both African and international consumption.

Possible Indirect Benefits

- Second, offering African countries options to meet their debt obligations in local currencies to the Bank, can help to relieve some of the downward pressure most countries face on their currencies.
- As its operations ramp up in scale, the Green Bank loans in international currencies could accommodate greater shares of repayment in African domestic

Possible Indirect Benefits

- As a custodian of value for many countries, the bank can facilitate international transfers and exchanges within the continent, especially when such transfers are tied to the value chains of projects in the Bank's portfolio.
- For example, payments from a solar farm or utility in Tanzania to a solar cell manufacturing plant in Kenya or Ethiopia could be simply coded to the respective balances of each project at the Bank, when both corporations are partly owned by the Bank and are the Bank's clients.

Conclusions

- In this paper, we propose a new institution to address the multiple challenges of coordinating effective climate action, building manufacturing agricultural capacity including maximizing value added through building continental wide value chains, helping Africa and the world transition to green energy while building domestic African monetary systems that strengthen local currencies while helping to facilitate de-dollarization while the same time moving the continent away from the export of raw materials

Conclusions

- Perhaps this proposal might seem speculative, whimsical or even utopian
- To quote a notable economist from a book that you perhaps have heard of or even read
- “The difficulty lies not so much in developing new ideas as in escaping from old ones.” (Keynes, General Theory, 1936)
- It is time to boldly challenge the old ones and the vested interests that keep them in place. Climate change leaves us with no choice.