Industrialization in Africa

AERC Senior Policy Seminar XIX, Abidjan, Cote d'Ivoire March 13-14, 2017

Seminar Report

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About African Economic Research Consortium (AERC)

African Economic Research Consortium, established in 1988, is a premier capacity building institution in the advancement of research and training to inform economic policies in sub-Saharan Africa. It is one of the most active Research and Capacity Building Institutions (RCBIs) in the world, with a focus on Africa. AERC's mission rests on two premises: First, that development is more likely to occur where there is sustained sound management of the economy. Second, that such management is more likely to happen where there is an active, well-informed cadre of locally-based professional economists to conduct policy-relevant research. AERC builds that cadre through a programme that has three primary components: research, training and policy outreach. The organization has now emerged as a premier capacity building network institution integrating high quality economic policy research, postgraduate training and policy outreach within a vast network of researchers, universities and policy makers across Africa and beyond. AERC has increasingly received global acclaim for its quality products and services and is ranked highly among global development think tanks.

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Industrialization in Africa – AERC Senior Policy Seminar XIX Abidjan, Cote d' Ivoire, March 13 –14, 2017: Seminar Report

Published by: African Economic Research Consortium

P.O. Box 62882 City Square Nairobi 00200, Kenya

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Abbreviations

AfDB African Development Bank

AERC African Economic Research Consortium's

AU African Union

AGOA Africa Growth and Opprtunity Act
BIP Border Industrialization Program
DRC Democratic Republic of Congo

ECOWAS Economic Community of West African States

EPZ Export Processing Zone
EIB Ethiopian Investment Board
FDI Foreign Direct Investment
GVCs Global Value Chains
GDP Gross Domestic Product

GTP Growth and Transformation Plan

IPDC Industrial Parks Development Corporation

IWSS Industries Without Smoke Stacks MNCs Multi-National Corporations

NEPAD New Partnership for African Development

OECD Organization for Economic Co-operation and Development

SPS Senior Policy Seminar

SMEs Small and Medium Enterprises SEZs Special Economic Zones

SSA Sub-Saharan African

TTIP TransAtlantic Trade and Investment Partnership

UK United Kingdom

UNCTAD United Nations Conference on Trade and Development
UNECA United Nations Economic Commission for Africa
UNIDO United Nations Industrial Development Organization
UNU-WIDER United Nations University World Institute for Development

Economics Research

USD United States Dollar

Preface

The pressure for Africa to industrialize is being felt. Recent research observes that Africa can more than double its overall Gross Domestic Product (GDP) per capita by increasing industrial GDP in the next ten years. The continent, however, needs to leverage the full strength of a wide range of strategies to realize this. Records show that Africa has really underperformed in terms of industrialization. Today, the share of manufacturing in GDP is about what it was in the 1970s, less than one-half of the average for all developing countries. And in contrast with developing countries as a whole, it is declining. Many of the region's recent growth success stories—Ethiopia, Ghana, Kenya, Tanzania, and Uganda, for example—have shares of manufacturing in GDP that are well below their predicted values.

The African Economic Research Consortium's (AERC) Senior Policy Seminar XIX (SPS) is, thus, a timely opportunity to explore policy options for accelerating the pace of industrialization in the continent. The seminar drew on research by the AERC network, and on a multi-year research programme, involving many AERC affiliates, and it was jointly sponsored by the African Development Bank (AfDB), the Brookings Institution, and the United Nations University World Institute for Development Economics Research (UNU-WIDER). These contributions indeed enhance our understanding the ingredients for accelerated industrialization toward African economic transformation. The theme for AERC's 19th Senior Policy Seminar was "Industrialization in Africa" and was held in Abidjan, Cote d'Ivoire, March 13-14, 2017.

AERC senior policy seminars are forums designed specifically to bring together senior policy makers from sub-Saharan African countries to exchange experiences and deliberate on topical issues pertaining to sustainable development of their economies. Participants in these seminars are drawn from the highest levels of government, including the presidency, ministers, governors of central banks, heads of civil services, permanent secretaries and heads of government agencies and parastatals.

Africa has no choice but industrialize. Simultaneously it has no choice but integrate in its quest for inclusive and sustainable growth. There are positive upswings, though. A strong and positive growth trajectory, rapid urbanization, more stable and improving economic and political environments have opened a window of opportunity for Africa to achieve economic transformation through industrialization and regional integration. And this specific senior policy seminar on industrialization in Africa provides a timely forum for dialogue on the subject between senior policy makers, academic thought leaders, private sector actors, and among policy makers themselves. This debate was conducted in the best of AERC's traditions guided by rigour and evidence.

African Economic Research Consortium (AERC) is immensely grateful to the Government of Cote d'Ivoire for welcoming us to the country and for co-hosting Senior Policy Seminar XIX. I also thank the authors who produced very high-quality papers, and the partici¬pants for their active participation in producing the seminar's policy recommendations that were shared with other African policy makers who did not find time to take part in this event. I am grateful to all those who made the seminar a success. AERC appreciates the hard work of Dr. Charles Owino, Manager, Publications,

for organizing the event and putting this publication together. Dr. Wilson Wasike, Collaborative Research Manager, and Dr. Owino again for their role as rapporteurs. Mr. Juffali Kenzi, ICT Manager, Ms. Pamela Kilwake, Accountant, Ms. Edith Mutui, Ms. Catherine Mwalagho, and Ms. Hellen Makimi who assisted with logistics. To all of these and the many others who were involved, AERC extends its heartfelt gratitude.

Prof. Lemma SenbetExecutive Director
African Economic Research Consortium

Industrialization in Africa

Introduction

The African Economic Research Consortium's (AERC) Senior Policy Seminar XIX (SPS) on the theme "Industrialization in Africa" that was held in Abidjan, Cote d'Ivoire on March 13-14, 2017 was a great success. The conference, which attracted 121 participants from all over Africa was officially opened by Hon. Jean-Claude Brou, Minister for Industrialization and Mines, Cote d'Ivoire. This was a timely opportunity to explore policy options for accelerating the pace of industrialization on the continent. The seminar drew on research by the AERC network, and on a multi-year research programme involving many AERC affiliates. It was jointly sponsored by the African Development Bank (AfDB), the Brookings Institution, and the United Nations University World Institute for Development Economics Research (UNU-WIDER).

The contributions in this meeting really enhanced the understanding of ingredients for accelerated industrialization toward African economic transformation. Records show that Africa has really underperformed in terms of industrialization. Today, the share of manufacturing in Gross Domestic Product (GDP) is about what it was in the 1970s; less than one-half of the average for all developing countries. And in contrast with developing countries as a whole, it is declining. Many of the region's recent growth success stories—Ethiopia, Ghana, Kenya, Tanzania, and Uganda, for example—have shares of manufacturing in GDP that are well below their predicted values.

"Africa has no choice but industrialize. Simultaneously it has no choice but integrate in its quest for inclusive and sustainable growth. There are positive upswings, though. A strong and growth trajectory, rapid urbanization, more stable and improving economic and political environments have opened a window of opportunity for Africa to achieve economic transformation through industrialization and regional integration. And this specific senior policy seminar on industrialization in Africa provides a timely forum for dialogue on the subject between senior policy makers, academic thought leaders, private sector actors, and among policy makers themselves. This debate will be conducted in the best of AERC's traditions guided by rigour and evidence," said Professor Lemma W. Senbet, Executive Director of AERC on the eve of the conference.

Leading researchers and thought leaders shared their ideas with distinguished senior policy makers in various sessions. The first session was devoted to a presentation by **Prof. Finn Tarp** of the *UNU-WIDER*, *Finland*, titled "Industrialization in Africa: Setting the Stage & Overview" The second session featured **Prof. Carol Newman**, *Trinity College*, *Ireland*, who presented a paper on "Industrial Clusters: The Case for Special Economic Zones in Africa". **Dr. Eyerusalem Siba**, *Brookings Institutions*, *Washington D.C* did the last presentation of the day on "Learning to Export and Learning by Exporting".

The first session of the second day was a presentation by **Prof. Judith Fessehaie**, *University of Johannesburg, South Africa* on "Regional Industrialization in Africa" and

the second session featured "Financing Industrial Development: Lessons from other Regions" by **Prof. Keun Lee**, *Seoul National University, Korea*. Third session was on "AfDB's Industrial Strategy" and the presenter was **Dr. Ludovic Alcorta**, *United Nations Industrial Development Organization (UNIDO)*.

The lead discussants for these papers were, respectively, **Prof. Aly Mbaye**, *CREA/UCAD*, *Senegal*; **Dr. Adam Mugume**, *Bank of Uganda*; and **Dr. Nii Sowa**, *International Growth Centre*, *Ghana*. Session chairs were **Pierre Guislain**, *AfDB*; **Dr. Kheswar Jankee**, *Mauritian Ambassador to Germany*; **Prof. Monty Jones**, *Minister of Agriculture*, *Sierra Leone*; **Dr. Louis Kasekende**, *Deputy Governor*, *Bank of Uganda*; and **Dr. Frannie Leautier**, *Senior Vice President*, *AfDB*. There were floor discussions by participants after each presentation. The closing session of the conference was a policy roundtable on Industrialization in Africa. This roundtable was chaired and moderated by **Dr. Bright E. Okogu**, *Executive Director*, *AfDB*.

Industrialization in Africa: Setting the Stage Overview

Session chair: Pierre, Guislain, AfDB

Presenter: Finn Tarp, UNU-WIDER, Finland

- Socio-economic progress in Sub-Saharan Africa has been markedly better than almost anyone expected 25 years ago
- Progress has not been even; the development process has without exception been highly non-linear; and the fragility of the gains is evident

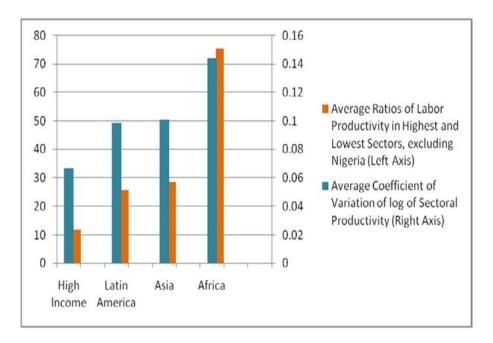
So attitudes in and outside Africa towards the continent's development potential have changed

At the same time, a series of pressing policy questions present themselves (at both global and national levels) including:

- How to keep up the aggregate growth performance
- How to transform economic structures
- How to diminish the reliance on primary commodities

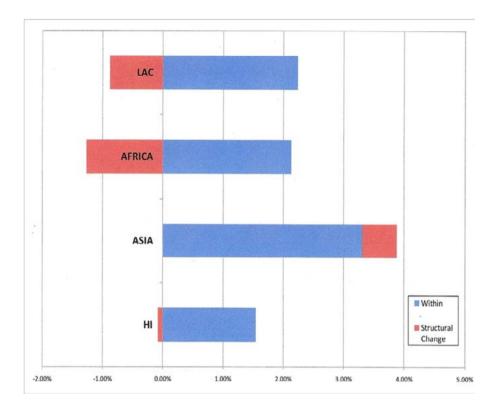
The Potential for Structural Change

- In countries at low levels of income productivity differences between sectors are large
 - The movement of resources from low productivity to high productivity employment can help drive growth
 - As incomes rise, productivity differences among sectors (and enterprises) tend to converge
- Africa has the greatest differences in productivity among sectors, and therefore the greatest potential for structural change



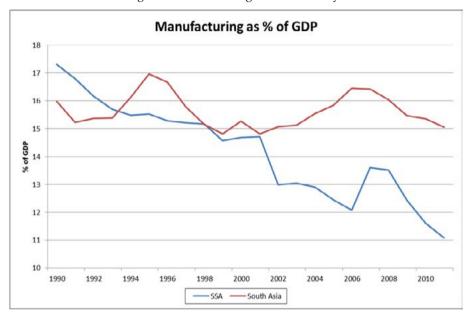
Going Up the Down Escalator

- In Africa structural change has been going in the wrong direction until recently
- An increasing share of the labour force in lower productivity sectors
- "Growth reducing" structural change has slowed overall aggregate growth



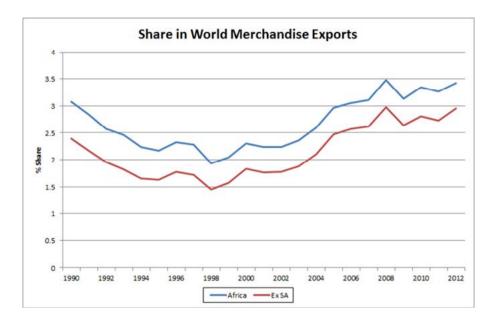
Aggregate Growth Has Occurred with De-industrialization

- Africa's share of manufacturing in GDP is less than half of the average for all developing countries
- Per capita manufactured exports are about 10 per cent of the developing country average
- The share of SSA of global manufacturing is smaller today than in the late 1980s

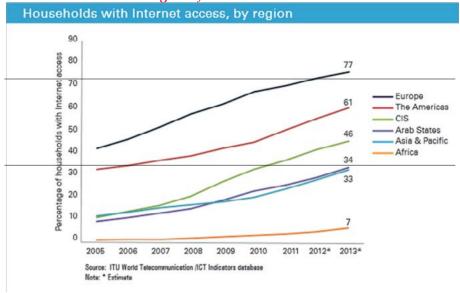


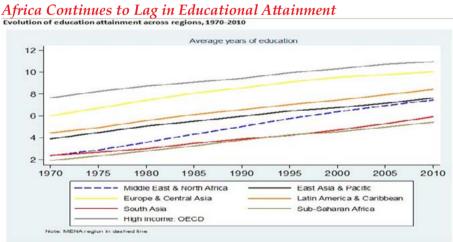
Low Penetration of International Markets

- Africa marginal
 - Even less excluding South Africa
- Asia 23% in 1990 to 33% in 2012
- Low survival rates in export markets



Internet Access: Growing in Africa





Putting Structural Transformation and Industrialization Back on the Development Agenda

Key Questions

Trying to answer a simple question:

- Why is there so little industry in Africa?

Lead to other questions such as:

- Does it matter?
- Is it realistic for Africa to break into global markets?
- What makes firms more competitive?
- What makes countries more attractive to competitive firms?
- What are the policy options available to further industrialization in Africa?

The L2C Country Comparative Framework

- Eleven Countries
 - Nine African: Ethiopia, Ghana, Kenya, Mozambique, Nigeria, Senegal, Tanzania, Tunisia and Uganda
 - Two Asian: Vietnam, Cambodia
- Three Track Approach
 - Detailed case studies of industrialization and the evolution of public policies
 - Econometric analysis of the stock of firm level surveys
 - Qualitative surveys of FDI firms and linked domestic firms

Drivers of Productivity

- 1. The "basics" ("investment climate")
 - Infrastructure, technology and skills
 - Institutions and regulation
- 2. Exports, productivity and competition
 - Firms in low income countries increase their productivity by exporting they learn by exporting
 - Competition increases productivity through entry and exit

3. Firm capabilities

- The tacit knowledge and working practices that affect both productivity and quality
- Capabilities can spill over to other firms through supply chain links
- 4. Agglomerations and Special Economic Zones
 - Industrial clusters confer significant productivity gains
 - But virtually everything we know about agglomeration economies comes from middle and high-income countries

AfDB's Industrial Strategy

- Approved 16 July 2016: https://www.afdb.org/en/news-and-events/board-approves-afdb-groups-industrialisation-strategy-for-africa-2016-2025-15981/
- Represents a roadmap for implementing priority programmes to scale—up the industrial transformation of Africa
- Addresses key issues such as:
 - Why we need to industrialize Africa
 - What it will take
 - How the AfDB will help
- Points to five enablers: (i) Supportive policy, legislation and institutions; (ii)
 Conducive economic environment and infrastructure; (iii) Access to capital; (iv)
 Access to markets; and (v) Competitive talents, capabilities, and entrepreneurship

Two Critical Dimensions

- Regional industrialization
 - Regional integration is a critical priority for supporting industrialization in Africa
 - How to address the major political economy issues?
- Financing industrial development
 - Significant investment resources are required (AfDB industrial strategy makes reference to crowding-in third party resources to the tune of USD 35 to 56 billion over the next decade)
 - Lessons from other regions

Reasons for Cautious Optimism

- Africa has a chance to break into the global market for industrial goods:
 - Changes in Asia; trade in tasks; industries without smokestacks (IWSS)
 - But business as usual will not deliver desired for results
 - Comprehensive infrastructure development, skills upgrading, and a major export push are all essential
- And throughout focus must be on industries that add value, including both processing of agricultural commodities and manufacturing more broadly

If Africa and African policymakers do not take charge of the destiny of the Continent and its People – Someone else will....

Industrial Clusters: The Case for Special Economic Zones in Africa

Session chair: Kheswar Jankee, Mauritian Ambassador to Germany

Presenter: Carol Newman, Trinity College, Ireland

Discussant: Aly Mbaye, CREA/UCAD, Senegal

Introduction

Manufacturing production tends to be highly geographically concentrated.

Firms are drawn together for a variety of reasons, motivated by the desire to reduce the cost of transporting goods, people and ideas.

This is the case in both developed and developing countries

- In France, the UK and the US 75-95% of industry is spatially concentrated
- In Ghana, thousands of small metalworking firms are clustered together in the Suame Magazine near Kumasi

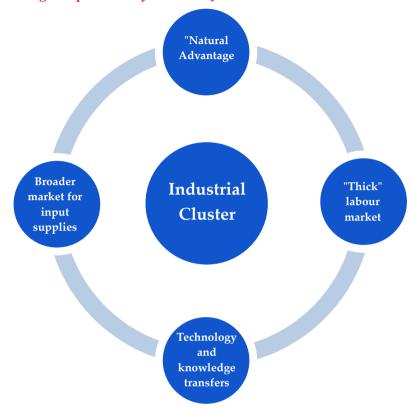
Areas of dense economic activity tend to prosper while others are left behind.

This is in part due to agglomeration economies: productivity benefits associated with firms locating near one another.

Spatial industrial policies that influence the location choice of firms could be an effective tool in accelerating the pace of industrialization in low-income countries .

One way of achieving this is through the establishment Special Economic Zones

Clustering and productivity: the theory



Clustering and productivity: the evidence

Learning to Compete: UNU-WIDER, African Development Bank and Brookings Institution.

Detailed econometric studies in four low income countries: Cambodia, Ethiopia, Tunisia, and Viet Nam.

Strong evidence for productivity spillovers associated with agglomeration.

- The largest effects were in Viet Nam: firms in small clusters experienced more spillovers than those in large clusters; foreign-owned firms experienced the largest productivity spillovers (Howard et al. 2014; Howard et al. 2016)
- In Tunisia, there is evidence of agglomeration economies arising from the transmission of innovative ideas between firms (Ayadi and Mattoussi 2014)
- In Cambodia, evidence of productivity spillovers from clustering, particularly for informal firms (Chhair and Newman 2014)

 In Ethiopia, agglomerating firms have higher productivity, but only if they produce products similar to other firms in the cluster (Siba et al., 2012)

Results consistent with the view that clustering is associated with capability building for firms in low income countries (Sutton 2012).

Special Economic Zones: the theory

Agglomeration as a collective action problem: little incentive for an individual firm to move to a new industrial location unless a critical mass of similar firms also move.

Special Economic Zones can be used to foster industrial clusters

- Concentrating state or private investments in high-quality institutions, social services, and infrastructure in a limited geographical area
- Offering incentives to encourage firms to locate in the SEZs (tax breaks, subsidies, free trade arrangements)

A particular case has been made for using SEZs to promote trade through Export Processing Zones where distortions exist in an economy

Schrank (2001) defines the life-cycle of a successful EPZ in three phases:

- i) luring foreign investors;
- ii) demonstrating the feasibility of international competition;
- iii) drawing local manufacturers into world markets

Special Economic Zones: the importance of linkages

The success of SEZs in achieving longer-term industrial development objectives will depend on the links between zones and the domestic economy (Schrank, 2001)

- South Korea: 'process of constant integration' to transform EPZs into major markets for *locally manufactured capital and intermediate goods*
- Dominican Republic: vertical integration and linkages with the rest of the economy very weak. Later programs to promote linkages upstream sectors did not exist or failed to meet global standards
- Mexico: Border Industrialization Program (BIP) created a series of free trade areas along the US frontier in 1965. Ten years later and firms located in BIP zones purchased a greater proportion of their inputs at home than those located outside of the zones

All three cases demonstrate the necessity of setting SEZ programmes within the context of a larger industrial policy framework.

Special Economic Zones: the African experience

Most African countries are latecomers to the promotion of SEZs with most established in the late 1990s or early 2000s.

Many experienced rapid growth between 2000-2004 but since the mid-2000s growth rates have been much slower. Anecdotal evidence suggests that, in many countries—zones are struggling (Malawi, Mali, Nigeria, Senegal, Tanzania).

Farole (2011) measures success of SEZ programmes on four metrics:

- Attracting FDI
- Increasing exports
- Creating jobs
- · Productivity spill overs

Special Economic Zones: the African experience

1. Attracting FDI

FDI into African SEZs is low, relative to non-African zones, although FDI into SEZs is a relatively high proportion of the total national figure.

This suggests either:

- (i) that the failure of African SEZs to attract investment may be due to a poor overall investment climate or
- (ii) that the zones themselves fail to offset the worst aspects of the national investment climate.

2. Increasing Exports

Manufactured exports from African EPZs are small in absolute terms and relative to more dynamic SEZs elsewhere.

Some exceptions include the zones in Ghana which performed well in terms of exports, partly as a result of cocoa processing.

In contrast, firms in Kenya's and Tanzania's EPZs exported little

Special Economic Zones: African experience

3. Job creation

Absolute and relative contribution of African SEZs to employment is limited (with the exception of Lesotho).

4. Productivity spill overs

Little evidence of linkages between firms in African SEZs and local firms; many have become enclaves that are not connected to domestic value chains.

A second channel for transmitting spill overs is the movement of workers and managers across firms, but Farole finds that African zones rely more heavily on foreign management than non-African SEZs.

Lack of linkages with the domestic economy which is reflective of underlying domestic capabilities could go far in explaining the failure of many SEZs

The changing landscape of SEZs in Africa

To understand better the current situation in Africa in relation to SEZs we attempted to provide a full inventory of SEZs in operation in SSA

- All 46 countries in SSA considered
- Rely exclusively on internet sources and gather information on 79 zones
- Heterogeneity across countries in information available online, our overview does not capture all SEZ programmes in operation in SSA

A significant number of SEZs have been established across SSA in last 30 years:

- Earliest established EPZs were in Togo in 1989 (light manufacturing); Cameroon, Kenya, Malawi, Mauritius, Namibia, Nigeria and Zimbabwe, established a number of zones in the early 1990s
- Majority of zones established during the 2000s
 - 2000-2009: 38 zones were established in 14 countries. 16 in Nigeria; 6 in Tanzania
 - 2010-2016 an additional 16 zones were established
- Latecomers to SEZ development are Rwanda, Sierra Leone and Uganda

The changing landscape of SEZs in Africa

Considerable variation across zones in range of activities.

Most zones welcome investment from multiple, often integrated, sectors:

 Chambishi zone in the Zambia hosts activities in copper smelting, household appliances, electric cables and motor parts

Many zones offer supporting services for industry (call centres, business services, logistic services, conference facilities):

 Baluluane zone in Mozambique includes both light and heavy manufacturing and supporting downstream industries, packaging, labeling and other related services Some zones exclusively focus on a single activity:

- Kenya is home to 6 EPZs exclusively in garments
- Many zones exclusively dedicated to oil and gas, minerals and other mining sectors (Angola, Gabon, Ghana, Nigeria, South Africa and Zimbabwe)

Most countries have zones that include agriculture related sectors covering agri-business, agro-processing, livestock and dairy products.

Zones focused on high-end service sectors are less common.

 Some examples include the East London IDZ in South Africa and ITC and Biotechnology focused zones in Benin and Cote d'Ivoire.

The changing landscape of SEZs in Africa

All zones offer some form of tax relief, deductions or exemptions.

Most common type of tax incentive offered is a zero or reduced rate of corporation or income tax for a number of years, increasing gradually thereafter:

- Kenya: tax amnesty for 10 years, and 25% corporate tax rate for the next ten years
- Zambia: 0% corporation tax for first 5 years, 50% of profits taxed in years 6–8, and 75% in years 9–10.
- Zimbabwe: 5-year tax holiday with 25% rate applied thereafter
- Cote d'Ivoire: exemption from income tax for the first 5 years, 1% income tax rate from year six onwards with the possibility of a tax rebate
- Sudan and Uganda: tax exemptions on construction of buildings

Other services offered include employment services, e.g. long-term visas, work permits and flexible recruitment laws.

- Senegal: one single authority for all licenses and permits is provided along with more relaxed laws in relation to the recruitment of foreign labour
- Nigeria: a guarantee that there will be no strikes or lockouts is provided in all 17 zones

The changing landscape of SEZs in Africa

Information on the effectiveness of zones only available for 36 zones.

Of the 36 zones 29 report that they are functioning well:

- Gabon: 80 investors located within zones from 18 different countries
- Djibouti Free Zone (2004): home to 160 companies from 39 different nationalities
- South Africa: 2,931 jobs are attributed to the 28 operational investors in the East London IDZ.
- Togo: 65 companies operate in SEZs directly employing 13,000 people accounting for approximately USD\$500 million of commercial activity
- Chambishi zone in Zambia: employs more than 5,600 people with a total investment outlay of more than USD\$800 million
- Zimbabwe: 183 designated companies located in EPZs
- Kenya: Athi River EPZ has 42 firms operating and by the end of 2016 was expected
 to attract 100 textile investments. Five other zones in Kenya indicate that they are
 fully occupied.

There are some examples of less successful stories due to, for example, delays in land allocation, local resistance, under-resourcing and other institutional problems.

Underperformance is of course unlikely to be reported on official websites.

There are many more SEZs under construction or planned across Africa

- Zones under construction in Nigeria (25), South Africa (10), Democratic Republic of the Congo (5) and Djibouti (5)
- In Angola, there are plans to extend the incentives offered to firms in SEZs to a range of tax exemptions.
- In Mozambique, a special tax and custom regime is being planned for the Zambezi Valley that will run until 2025.
- In Zambia, the Lumwana SEZ is currently under development. Over the next 4 years it is expected to accommodate 50–60 enterprises with an output exceeding USD\$1.5 billion, of which USD\$600 million will be exported. It is also expected to lead to the creation of 6,000 jobs for the local population
- SEZs are also planned in Congo (Brazzaville), DRC, Djibouti, Gabon, Senegal,
 South Africa, Sudan, and Tanzania.

China's engagement in Africa

China's engagement in Africa has intensified over the last decade.

 By the end of 2009, China's outward foreign direct investment (FDI) in Africa had reached a stock of US\$9.33 billion

- A large share 22 per cent, second only to mining—went to manufacturing (Lin 2011).
- From 2009 to 2012 Chinese investment in African manufacturing was estimated to be US\$1.33 billion
- The Chinese government currently offers tariff-free entry to more than 400 products from Africa's low-income countries
- The composition of exports from Africa to China is also much more diverse than with other trading partners such as the US where most exports are raw materials (Brautigam and Tang 2014)
- China has also become a major aid donor to Africa and a source of development policy advice.

Building on its own highly successful experience with spatial industrial policy, China has played a leading role in reviving interest in SEZs as a tool for industrial development. Since 2000, China's Ministry of Commerce has supported the development of 6 Economic Cooperation Zones in Africa in Zambia, Egypt, Nigeria, Mauritius and Ethiopia

By 2015 only 3 zones were in operation (Zambia, Egypt and Ethiopia), the other 4 zones were still under construction

All zones are designed to support manufacturing, most concentrated on traditional mass manufacturing sectors.

Process for creating ECZs:

- Chinese government issued tenders for Chinese firms to develop the zones
- Chinese private developers construct the infrastructure inside the zones and are responsible for day to day operation
- Chinese government provided grants to the developers of between US\$29 and US\$44 million in addition to long term loans of up to US\$294 million
- Access to subsidies was performance-based
- Chinese government promotes the zones among Chinese firms looking to offshore low-end manufacturing
- African governments are responsible for regulating the zones and providing fiscal incentives to potential clients and for providing infrastructure outside the zones.

Ethiopia: Implementing the Chinese Model

- In 2015, the Government of Ethiopia launched its second Growth and Transformation Plan (GTP II) with a focus on fostering industrialization
- Plan includes an ambitious set of spatial economic policies, modelled on the Chinese experience

- The Ethiopian Industrial Parks Development Corporation (IPDC) was established in 2014 to build and maintain federal industrial parks
- The IPDC provides a 'one-stop-shop' service for investors in zones. This
 includes serviced industrial land and pre-built sheds that are 'equipped with
 all-encompassing utilities and infrastructure facilities that conform to international
 standards.'
- The Ethiopian Investment Board (EIB), chaired by the Prime Minister, provides overall direction and policy coordination.
- There are 16 publicly owned industrial parks operating or planned by the IPDC and a growing number of privately owned industrial parks.
- The SEZs are focused on specific manufacturing sectors, such as textiles and apparel, leather and integrated agro-processing
- Significant infrastructure is already in place or under construction, particularly on-site facilities including electrical sub-stations, electrical installations, domestic water supply and sanitation
- The zones will also include some support services, for example training rooms for workers, customs offices, health clinics and offices for banks, greenery and other public amenities.
- A key challenge will be integrating the SEZs into the surrounding cities
- Job creation through the SEZs presents significant challenges to transport infrastructure, accommodation and other services for workers such as health and education
- Key lesson is the complementarity between spatial industrial and urban development policies

What is needed for successful SEZ development in Africa?

1. Infrastructure and Institutions

- While African SEZs have physical environments that are more attractive than the overall economy, they are not competitive compared with SEZs globally.
 - Customized infrastructure (IT centres, broadband, power supply, security services, financial services, transportation and logistics) are essential
- Customs clearance times in African zones are double that of their non-African competitors (Farole 2011)
 - Institutions supporting SEZs (customs clearance, legal requirements for exporting and the regulatory regime) must function well.
- Most African SEZs are disconnected from domestic value chains
 - Promoting domestic linkages crucial for spill overs to be realized

2. Infrastructure and Institutions

- African SEZs have suffered from many institutional problems:
 - · insufficient strategic planning
 - poor location choices
 - · weak implementation capacity
 - a lack of internal coordination
 - poor management
- Lack of policy coordination is also evident. SEZs are often not linked with other institutions responsible for industrial policy, such as the FDI promotion agency

3. Leadership and coordination

Leadership is crucial for the successful implementation of industrial policy (Page and Tarp, 2017)

 In China and Viet Nam, the senior government and party leadership were publicly committed to the success of SEZs. This signalled to officials that the economic zone programme was a central instrument in the government's industrial development strategy.

Accountability and visibility: Having a high-level champion identifies a person who has the job of explaining why the policy agenda looks as it does and who can be held politically responsible for things going right or wrong.

Coordination failures across various government agencies contributes to the mismanagement of SEZs.

Summing up

To date, Africa's experience with spatial industrial policy has been largely disappointing

- African zones have low levels of investment and exports, and their job creation impact is limited
- They have few links with the domestic economy, and from the perspective of agglomeration it is notable that African SEZs have a much lower density of enterprises within the geographical boundaries of the SEZ than zones in Asia or Latin America.

To meet the region's ambitious industrial development goals, it is essential for African governments to upgrade SEZ performance to international standards.

One of the key challenges has been coordination across the local and national organizations that control public services and institutions outside the zones.

Stronger leadership and better institutional coordination are essential to the future success of spatial industrial policy in Africa.

Learning to Export and Learning by Exporting

Session Chair: Monty Jones, Minister of Agriculture, Sierra Leone Presenter: Eyerusalem Siba, Formerly Brookings Institution,

Washington, DC

Discussant: Adam Mugume, Bank of Ugunda

The development thinking on the relationship between export orientation and economic performance has long been optimistic. Exports are expected to promote economic growth through increased earnings of foreign exchange (thus relaxing balance of payments constraints), economies of scale and access to new technologies and knowledge (Helpman and Krugman, 1985; Melitz, 2003). There is considerable cross-country empirical evidence of a positive association between growth in aggregate exports and real output growth (see Greenaway and Sapsford, 1994 for a review). The miracle of industrialization in East Asia is also often explained by the export orientation of these countries (World Bank, 1993).

Land scape of Global trade parnerships

- · Emergence of mega trading aggreements
 - Trans Pacific Partinership (TPP)
- Concluded in 2015 between (US, Canada, Mexico, Chile, Austrialia, Vietam, and Malaysia)
 - TransAtlantic Trade and Investment Partnership (TTIP)
- US and European Union
- Africa is not part of these agreements, making it
 - Increasingly difficult to engage in global trade

Response of African policy makers

- Conclusion and implementation of regional trading agreements (TFTAs & CFTAs)
 - Upto speed to meet the standards of global trading agreements
- Domestic capacity building of competitiveness of firms
- Better utilization of existing preferential trade access (e.g. AGOA)

Elements of Regional Integration

- Free movement of:
 - People
 - Goods and services
 - Capital and investments
- Trade facilitation
 - Cross-border infrastructure
 - Harmonization of macroeconomic, trade & investment policies
 - Better protection of property rights
 - Improvements in investment climate & information
- Financial & political committment

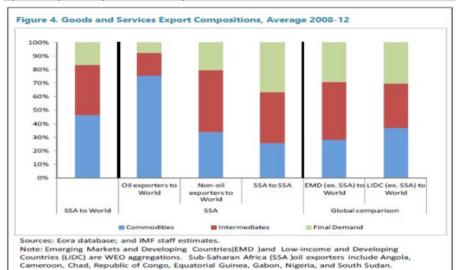
Potential Impats of regional Integration

- AfDB, 2012
 - Increase exports and FDI
 - Facilitates knowledge transfer & income convergence among SSA countries
- Shift in industrial landscape of SSA
 - Improved market access=> economies of scale =>firm size
 - Removal of trade barriers (tariff & nontarif barriers)
 - Increased access to capital
 - Emergence of regional supply chains

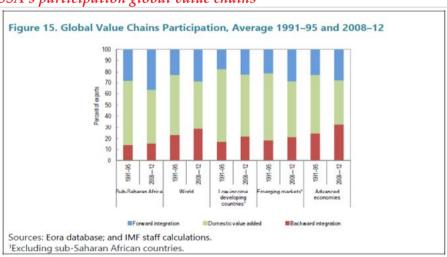
SSA's participation in exports & global value chains

Export shares Destinations	1995	2000	2005	2010	2014
High-income economies	73.80	64.30	68.08	54.39	46.02
Developing economies within region	11.47	10.48	11.43	15.03	17.70
Developing economies outside region	7.72	13.54	15.89	26.12	32.69
Economies in the Arab World	1.93	1.46	1.69	2.36	2.75
Manufactures exports (% of merchandise exports)			26.89		27.80

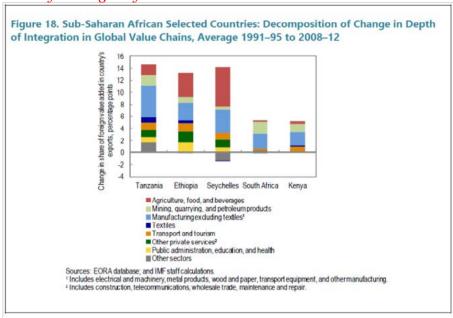
Africa's participation in Exports



SSA's participation global value chains



Country heterogenity-EAC & SADU



National responses & Industrial policies

- Competitive capacity of domestic firms
 - Export promotion
 - Export processing SEZs
 - FDI inflow
- L2C project
 - Africa (e.g. Ethiopia, Kenya, Tunisia, Mozambique)
 - Asia (e.g Vietnam, Cambodia)

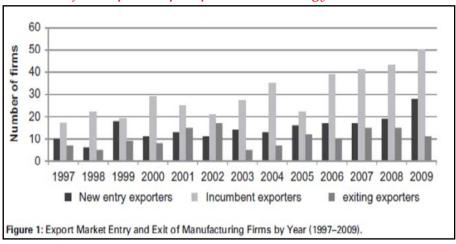
L2C project-Ethiopia's manufacturing export

- · Ethiopia like many SSA countries
 - Declining share of manufacturing output
 - Increasing share of its export developing countries
- Aggressive export promotion & export processing SEZs
- AGOA utilization strategy & subsquent increase in utilization

Elements of Ethiopia's Export promotion strategy

- Subcidies and preferential tariff
- Conditional on export committment
- Post 2005
 - Increase in the number of manufacturing firms & exporters
 - Increased export commitments

Elements of Ethiopia's Export promotion strategy



Learning to compete in Ethiopia-Exports (with Mulu gebreeyesus)

- Do entry cost matter for who gets to export?
- Do firms learn from exporting?
- Data
 - Formal Manufacturing firms in Ethiopia (1996-2009)

Lessons learned-Exports

- Result 1:
 - Reducing entry costs can encourage entry of exporters without prior production history
 - Firms, once entering export market, continue to export
- Fairly generalizable to other Afr. countries in L2C
- There is more to Export promotion than reducing entry cost
 - Export commitment

Lessons learned-Exports & FDI

- Result 2: that firms learn upon entry into the export market
 - And this makes it even easier to export
- Fairly generalizable to other Afr. countries in L2C
- Result 3: Firms learn more from direct supplyer linkages with foreign owned firms than trade flows (other SSA case studies)
 - Case for global and regional supply chains

Implication for regional integration (trade & supply chains)

- Push Regional Integration agenda to:
 - Encourage regional value creation beyond trade in final goods and services
- Increase industrials competitiveness
- Viable solution for africa's SMEs to break into global market

Implication for regional integration (trade & supply chains)

- Challenges to completion of RI agreements
 - Financing constraints and coordination failure
 - Not everybody may win
 - Political economy
- But until we get there:
 - Embrace export promotion!

Regional Industrialisation in Africa

Session chair: Louis Kasekende, Deputy Governor, Bank of Ugunda Presenters: Ludith Fessehaie, Centre for Competition, Regulation of

Judith Fessehaie, Centre for Competition, Regulation & Economic Development, University of Johannesburg,

South Africa

Discussant: Nii Sowa, International Growth Centre, Ghana

This paper explored whether and how regional value chains (RVCs) can support industrialization in Africa. We argue that these opportunities are shaped by dynamics at global level, where indeed RVCs are becoming more important although with particular configurations that may not be easily replicated in Africa. The most significant opportunities in Africa are found in RVCs directed at regional end markets. These offer fast-growing demand, a platform to promote functional upgrading, and established institutional frameworks. A case study on the Southern Africa RVC for mining capital equipment investigates these issues in detail. From a policy perspective, regional industrialisation requires effective policies at domestic and local level, policy coordination between countries, and investment in regional infrastructure and regional public goods. The political will to find and agree on tradeoffs is key to ensure that regional industrialisation delivers win-win outcomes.

This paper discusses the potential for regional value chains (RVCs) to support industrialisation across the continent. These opportunities need to be understood within the big picture of Global Value Chains (GVCs) which today underline most international trade and industrial production. The way GVCs are structured and governed by lead firms should inform Africa's strategies to improve the level and nature of its participation in GVCs. We argue that there are important opportunities in RVCs directed at regional end markets, where fast-growing regional demand and existing regional economic integration frameworks offer a significant platform for African firms' growth and upgrading.

The paper presents a case study where these issues are threshed out in concrete details. The case study covers the Southern Africa value chain for mining capital equipment. By exploring the strategies and inter-firm linkages developed by global and regional manufacturers across South Africa and Zambia, this study shows that the significant demand, investment and trade flows underpinning the mining capital equipment industry impact unevenly on local upgrading in South Africa and Zambia. The global dimension of this industry is important to understand dynamics at regional and local level, in terms of where manufacturing, product design, R&D, and marketing value-added links are located. We argue that it is at regional level that policy makers can best address the bottlenecks of this RVC, build the competitiveness of South African firms and support value addition and knowledge intensification in the Zambian Copperbelt. This will require significant political will to coordinate local content policies, promote value added investment, and deal with the economic disparities which characterize every REC.

Conclusions and policy implications

Africa's industrialisation strategies need to take into account the spread of GVCs and their changing dynamics. Whilst GVCs have created opportunities for many countries, especially in Asia, their governance has impacted unequally on participating firms' economic returns and upgrading possibilities. Africa has been by and large marginalized by the expansion of GVCs, which reflects an underlying problem of weak or no structural transformation notwithstanding recent economic growth. Strategies to enter and upgrade in GVCs need to consider that GVCs governance has important implications for upgrading, and that such governance varies across industries and over time, sometimes across lead firms as well. Moreover, these strategies need to take into account that the export-oriented industrialisation policies of East Asia may be difficult to replicate. China's participation in GVCs, whilst resulting in growing South-South trade and investment flows, may constrain the scope for Africa's industrial upgrading and manufactures export growth. During the last decade, GVCs have also seen important changes in terms of industry consolidation, increased supplier capabilities and power in large emerging economies and slow growth in Northern markets. This creates a challenge for Africa as traditional markets are not growing as fast as before, but are supplied by increasingly large, competitive and established suppliers. At the same time, the rise of Asia as a major export destination carries the risks of further reducing the value-added content of Africa's export.

Regional value chains are characterised by a combination of intra-regional trade, regional investment and/or regional corporate ownership. They entail that two or more countries participate in different segments of the value chain, which is reflected in intra-regional trade in intermediate and final goods. The regional dimension of GVCs is many-fold. In the East Asia RVCs, countries with different comparative advantages and capabilities are integrated in a complex production network which supplies Northern buyers. US and EU buyers are increasing their regional sourcing from Central America and Eastern and Central Europe, respectively, for sophisticated products and/or products which require short lead times and supplier/buyer cooperation. These types of RVCs are difficult to replicate in SSA because of its distance from major Northern markets, and the lack of a 'flying geese' trajectory where higher capabilities African suppliers relocate to lower cost neighbouring economies. We argue that Africa's main opportunities reside in RVCs targeting regional end markets.

Three factors can justify some optimism about RVCs in Africa: fast-growing demand for goods and services linked to economic growth, urbanisation and the rise of the middle class, as well as large investment in infrastructure and extractive industries; other regional experiences suggesting that regional markets offer upgrading opportunities; and existing institutional frameworks which are supportive of RVCs.

The case study on Southern Africa's RVC for mining capital equipment raises some important issues for our discussion. The findings of this case study however are not generalizable to other value chains. Firstly, trade and investment data provide a scale of the opportunities for local industrialisation, but value chain analysis shows that firms in the less developed economy, Zambia, have been largely marginalised. The risk of these firms being trapped in the lowest value-added links, with weak impact on industrialisation is very high. Second, the organisation of global lead firms, both from

the North and from the South, with their global supply chains and high R&D, design and marketing capabilities, are increasing competitive pressures in regional markets, where even more established firms in an economic hub such as South Africa struggle to maintain their market shares. Thirdly, within the region, the RVC is resulting in very uneven outcomes between countries, in terms of where the value added is taking place, and where dynamic capabilities are being built. Firm linkages across the border are only having a limited impact in this respect, with limited forms of process upgrading taking place.

Policy has a role to play to strengthen RVCs and create win-win outcomes. Deepening regional integration is important to create scale and facilitate cross border flows of goods, services and knowledge. It should be highlighted however that regional cooperation on industrial policy cannot replace effective policy making at domestic level. Internal policy coherence, implementation and monitoring of domestic policies remain serious challenges in this respect. Firm competitiveness is most and foremost determined by local and national institutions.

Policy coordination and regional investment in productive capacities and regional public goods can support regional industrialisation. Regional cooperation needs to result in shared benefits, with benefits also for smaller economies. This will require the political will within countries to support policies that create tradeoffs and compensation between countries. For example, the case study clearly shows that multiple local content policies at national level are incoherent with a regional agenda and are not consistent with the reality of RVCs and the scale economies required to support competitive producers. For the smaller economies to agree to regional coordination in this area, however, there must be clear advantages. Cooperation should aim at building regionally-based, globally competitive industries, supported by regional infrastructure and regional institutions (research centres, development finance, etc).

Financing Industrial Development: Lessons from other Regions

Session chair: Frannie Leautier, Senior Vice President, AfDB Presenter: Keun Lee, Seoul National University, Korea

South Korea (officially the Republic of Korea) has achieved rapid economic growth for several decades or since the early 1960s, and finally joined the OECD in 1996 and the ranks of high-income economies. It is noteworthy because its initial conditions were quite similar to typical countries in African countries, in that it underwent several decades of colonial rule, several years of civil war, and a period of hunger and food shortage in the 1950s and thus relying on the US food aid. It was worse in terms of resource endowments with all the minerals located in North Korea. Furthermore, although it launched a series of the 5 year-long economic planning since the early 1960s with the new political leadership (ex-military President Park), Korea used to be in the same situation as other developing countries in terms of facing the continual external imbalances with persistent trade deficits until the late 1980s (Lee and Mathews 2010; Lee 2016, Ch 1).

While the initial emphasis of the industrial policy was promotion of labor-intensive sectors for earning dollars by exporting in the 1960s and 1970s, the government put a new emphasis on technological development mostly since the 1980s with some preparation in the 1970s. The preparation for such policy shift was started with an establishment of a government research institutes (eg. KIST) in the 1970s to conduct problem-solving type R&D for private firms and transferring the R&D outcomes to private firms. A decisive policy shift was from the mid-1980s when the government encouraged private in-house R&D by allowing tax exemptions for R&D expenses, and even initiating public-private joint R&D to break into higher-end segments and sectors involving bigger and risky projects (Lee 2013a; Lee and Kim 2009). This policy initiative succeeded in building the competitive and high-end manufacturing sector, which was an important factor which led to a trade surplus in 1986 for the first time in the modern Korean history. Since then, Korea has been able to overcome the persistent trap of external imbalances or stop-go cycles of crisis and reforms.

It is Amsden (1989) that attributed such successful economic catch-up to industrial policy by the government, getting prices wrong and thereby creating rents for targeted sectors. Industrial policy in Korea under the leadership of the EPB (economic planning board) has more or less followed the practices of Japan, which is well documented in the influential work of Johnson (1982) who attributed the Japanese miracle to the role of one super ministry called MITI (ministry of international trade and investment) in Japan. One of the first definitions of industrial policy was in Johnson (1982) who defined it as policies that aims to improve the structure of a domestic industry in order to enhance a country's international competitiveness.

While Japan and Korea have made remarkable success in catch-up development owing to industrial policy, some other countries followed the free market principle of the so-called Washington Consensus, and focused on macroeconomic stabilization and trade and financial liberalization. While the latter group also experienced some economic growth, they tend to be short-lived or be of the stop-go cycle type because they failed to bring up capabilities of private sectors (Lee and Mathews 2010). While Rodrik (1996) noted the importance of sequential or gradual adoption of 10 policies of the Washington Consensus in East Asia, different form the simultaneous adoption in Latin America, he missed the fact that East Asia had further built up and upgraded capabilities before going to more marketization (next 5 policies in the Washington Consensus) since the mid-1980s (Lee and Mathews 2010).

When we see catching-up growth as the process of capacity building, what we have in mind is the capacity of private corporations. The capacity of latecomer economies to grow capable private companies is the most important and fundamental criterion to determine the success or failure of economic development or growth. They may initially be state-owned firms (eg. POSCO in Korea), when the risks for private capital are too high, but the idea is to move them towards private ownership (i.e. make them 'public' through an IPO) eventually after they build up certain level of capabilities or competitiveness. Thus, this paper considers the essence of industrial policy is building capabilities of private firms to sustain long term economic growth, rather than picking winners or protection of some firms or sectors (Lee 2013b).

Among various aspects of capacities, emphasis should be on technological capabilities because without these, sustained growth going beyond the middle-income trap is impossible (Lee 2013a). In this era of open market competition, private companies cannot sustain growth if they remain to rely upon cheap products; they need to be able to move up the value-chain to higher-value added goods based on continued upgrading and improvement and technological innovation. Furthermore, another important feature of the Korean model is that these private companies have been "local owned" companies including locally controlled JVs, not foreign controlled subsidiaries of the MNCs. MNCs subsidiaries are always shopping around the world seeking cheaper wages and bigger markets. Therefore, they cannot be relied upon to generate sustained growth in specific localities or countries although they can serve as useful channels for knowledge transfer and learning.

In what follows, we discuss the role of the government or industrial policy in this process of capability building, with focus on the financing aspect of the policy implementations. This paper can be regarded as sequel to Lee (2013c) and Lee (2015). The former has a more theoretical focus, discussing the three types of failures, market-, system- and capability failures as a justification for government activism, whereas the latter discusses the different tools of industrial policy at different stages of development.

In Section 2, we first elaborate the nature of financial control by the government which was one of the enabling conditions for industrial policy since the 1960s (its takeoff). We also explain the roles and evolution of key developmental banks, such as the Korea Development Bank, Ex-Im Bank and Industrial Banks for SMEs. Section 3 elaborate the

three episodes of industrial policy and financial arrangement in this case, such as the case of establishment of the POSCO (Pohang steel corporation), targeted development of bottleneck technologies for SMEs, and leapfrogging into digital TV since the mid-1990s. Then, Section 4 concludes the paper discussing implications for African economies.

Concluding Remarks and Implications for Africa

The Korean Experience of Financing Industrial Development

For an effective industrial policy, state ability for financial control is often critical. Financial control implies more discretionary control. With credit allocation, the state can control not only the financial ability of firms but can also impose the firm's compliance in other matters, such as industrial policy implementation. In the Korean experience, the banking sector had always been supposed to "serve' real sector by providing stable supply of the so-called "growth money" at affordable rates, whereas the manufacturing or production sector had always been given priority. Of course, such practice had been possible because Korea established several development banks, such as Korea Development Bank, Ex-Im Bank and Industrial Bank, and also because most of the commercial banks were under the government ownership up to the mid-1980s or influence even after privatization in the mid-1980s. Furthermore, manufacturing sectors are often earning rents owing to entry control by the government, in adjusting the "optimal number of the firms" in each sector in consideration of the market size, so that the admitted firms may be sort of guaranteed a minimum level of profits (rents) which can be source of investment funds for next period. This making the rate of return in certain industrial sectors higher than interest rates can be one of the tools for industrial policy, especially in a situation facing high interest rates.

Diverse cases of industrial policy and financing may have some policy implications for economies in Africa which try to build up certain industrial bases. Tools of policy and financing can be different, depending upon the nature of the sectors and projects. For a project like physical infrastructure or those with strong externality, the practices in POSCO in Korea may be applicable, where more direct intervention in the form of SOEs can be justified. Building oil or god refineries in African can be in the form of this kind of SOEs which can be privatized later as the case of POSCO. Korea air, the top airlines in Korea, was also a SOE. For targeted development of certain technologies in Africa, especially for the MEs, the bottom-up approach taken in the IBTDs in the past Korea can have useful implications, in terms of how to identify 'needed technologies' by conducting firm surveys and arranging diverse financing tools. Finally, in efforts to break into newly emerging sectors/businesses, the public-private joint R&D or foreign-domestic joint R&D practiced in the past Korea can be a useful device of industrial policy in terms of sharing necessary knowledge, funds, and risks.

Externa Imbalance and Industrial Policy for Export Manufacturing in Africa

It is not surprising that many countries in Africa at low income stage have had trade deficits for many years. That is basically due to the still weak export capabilities while the economy has many and diverse demand for imported goods. Korea also had to go through the three decades of trade deficits until it first time recorded a trade surplus in 1986; since then it has maintained trade surplus (Lee 2013b). Korea in the early 1960s used to have the 1 to 9 ratio of exports to imports, which is much worse than a typical

country in Africa. Thus, Korea had in the 1960s a huge saving gap with the domestic savings at 9 % of GDP and gross investment 15% of GDP, and thus had to rely on foreign borrowing to fill the gap. That should be why exports are so important and is the critical binding constraint for growth for an economy at lower and middle-income stages.

Given that getting out of the trade deficits may take several decades, it may be necessary for a country at lower income stage to take transitory measures to manage the balance of payments. In looking for specific policy tools, the past experience in Korea might be useful. In the 1960s and 1970s, Korea used to maintain a tight centralized control on foreign exchanges within the economy, with all export earnings (foreign currencies) first put under the control of the government (Bank of Korea) and then allocated for 'justifiable uses' like payment for imports of capital goods (Amsden 1989). One of the reasons for tight control of foreign exchanges under the closed capital market in the early period has also to do with the fact that export promotion and free capital mobility cannot go together because export promotion often involve under-valuation of currencies (or because typical economic conditions in emerging economies tend to involve frequent depreciation) which works as a signal or incentive for people to take out their money abroad (or put their money in foreign currency-dominated bank accounts).

In this practice, imports of 'non-necessaries,' such as luxury consumer goods, tended to be discouraged by high tariffs, diverse non-tariff barriers or social campaigns, and was difficult to get permission to use dollars. For instance, even imports of foreign fruits (eg banana) was discouraged by high tariffs or non-tariff barriers. In general, tariff tended to be low for capital goods while very high for consumer goods which Korea aimed to promote for exportable goods, which has been termed as asymmetric protection in Shin and Lee (2012); such protection is found to have significant impacts not on TFP changes but on the volume and market shares of the Korean export products. This practices also meant that there was a tight control of capital outflow (capital flights); for instance, ordinary people cannot have their bank account in foreign countries, and foreign banks are not allowed to open business in Korea until the late 1980s.

Despite the low income and thus low domestic saving, Korea has maintained a higher investment rate and one of the reasons for this was the low interest rates suppressed by the government. Despite this suppressed interest ratio, domestic savings ratio in Korea had kept increasing owing to the growth of income associated with strong investment over the decades. This experience may have some implications for African countries, including the current Uganda where interest rates are very high or over 24% despite not that high inflation rates, in contrast to very low interest rates to savings. This situation is very bad for private investment and reflects the asymmetric power and dominance of the lender over borrower, and also dominance of the banking sector over the real sector; if the both sides have equal power, saving interest rates should also be high. In other words, financial markets seem to be oligopolistic and imbalanced in power of the supply and demand side and cannot be said to be an effective competitive market, which may justify some form of government intervention. In other words, banking sector is earning extra rents associated with oligopoly, which is quite opposite to the desirable state of productive sector enjoying rents, like in the past Korea where the banking sector had always been supposed to "serve' real sector by providing stable supply of the so-called "growth money" at affordable rates, whereas the manufacturing or production sector had always been given priority.

Dilemma and Prospects of the Resource-based Development in Africa

In the meantime, situations in many African countries, like Uganda, is that despite competitive exchange rates (under-valuation or deprecation), exports tend not to respond. This situation is not that surprising because competitive exchange rates would work only in economy with a strong manufacturing basis. Relatedly, Ramanayake and Lee (2016) find an even a negative effect of undervaluation on growth in mineral exporting groups and positive (no significant) effects of undervaluation in manufacture exporting groups. This finding is consistent with the fact that if currency is more undervalued in countries that highly depend on natural resource exports, then they earn less amount of income in terms of dollar and that natural resource exports are often insensitive to exchange rates. Thus, there is an important contrast between manufacture- versus mineral exporting countries, such that depreciation often tends to exert countercyclical effects of recovering exports and growth in economies with strong manufacturing base (or non-negative effects on average), which is not the case in mineral exporting economies. These mineral exporting economies face the growth-impeding and procyclical effects of undervaluation during the times of weak performance of the economy with the typical balance-of-payment crisis. This growth-impeding and procyclical effects of undervaluation underscore the difficulties facing economic growth in mineral exporting economies and thus the dilemma of the so-called "resource-based" development model. In other words, the nature of the curse is not only the symptom associated with the Dutch disease but also being stuck in the resource-based sector with few chance of entry into manufacturing due to the counter-cyclical effects of the low valuation of currencies.

Therefore, while entry into, and promotion of, manufacturing sectors would be a desirable long term development goal for typical countries in Africa, the condition of already-fee capital mobility and already-privatized banking sectors indicates that the role of the government in promoting manufacturing and FDI would have limited impacts, except in a few countries like Ethiopia; low valuation of currency would lead to capital flights and less domestic savings available for investment, and control of interest rates for boosting investment in industrial sectors is not that feasible under the private (or foreign) dominance of commercial banking. The situation of Kenya which tried recently a form of interest ceiling indicates the dilemma.

If domestic effort to promote exports is limited, FDI is of course an option but attracting FDI in manufacturing sector has not been easy in many African countries. If this is the case, a more radical or innovative idea, for instance for a country like Uganda, might be leapfrogging into IT service or 'Smart Agriculture' bypassing the stage of manufacturing. A preceding case of leapfrogging has been happening in India which bypassed also the manufacturing to leapfrog into IT-service as the engine of growth (Lee 2013a, Ch. 8). There is also a growing recognition that agriculture is no more a traditional industry but a 'high-tech' sector or now called the 6th industry as a combination of the primary, secondary and tertiary industry. It is combined with IT or digital technologies as it braces the benefits of new innovations, recently associated with the so-called Fourth Industrial Revolution. An example would be the Netherlands which is leading 'Smart Farming and Dairy"; in 2015 its export value in agriculture is the 2nd largest in the world or 438 billion Euro, with its share of 20% in total export of the country. Agriculture may be a more attractive sector to attract FDI than manufacturing in some African economies like Uganda in terms of their comparative advantages. Of course, agro-food industry

and processing segment of the primary sector industry can also be a god option for industrial development, too. In this regard, a good example is the case of an own brand coffee company, called "Good African Coffee" established by an entrepreneur from Uganda named Rugasira (2013), which is already successful in global market with its brands and sale network in Europe and Northern America. This case is important because this company does not export crude or unprocessed coffee but high-valued, processed and branded coffee.

Policy Roundtable

Panel¹

Session chair: Panellists: Bright E. Okogu, Executive Director, AfDB

- Bwalya Ng'andu, Deputy Governor, Bank of Zambia
- Monty Jones, Minister of Agriculture, Sierra Leone
- Celestine Monga, Chief Economist, AfDB
- John Page, Brookings Institution
- Olivier Sunguru, Association of Burundi Industrialists

In this session among the issues that were discussed included the following:

- 1. It is often argued that manufacturing productivity is low in Africa, relative to other developing regions, and hence detracting from robust industrialization strategies. Do you agree? If so, why is productivity low in manufacturing?
- 2. It is also argued that agricultural productivity is low in Africa. What are the key strategies for industrialization of agriculture and agro-processing?
- 3. What do you see as the biggest challenges to fostering excellence in special economic zones and industrial clusters in Africa? What should be the guiding principle(s) or policy strategies for addressing the above challenges? What, if any, can SSA countries learn from the Asian experiences with SEZs and industrial clusters?
- 4. It is also argued that regional integration, and the associated infrastructural development, can foster Africa's industrialization. By the same token, intra-Africa trade is low. How can we speed up regionalization that is conducive to industrialization?
- 5. Please share key success stories from other regions or your own country regarding export- induced industrialization and strategies for promotion of such exports.
- 6. The other side of the coin is the need to finance industrialization. What are most effective public-private partnerships for the design of innovative financing schemes to promote large scale long term finance for industrialization?
- 7. Well-meaning strategies and policies, including industrialization and regionalization, have political economy dimensions which can slow and distort implementation of such strategies? How do we foster political will and commitment to "Industralize Africa"?

¹ Ideally, a maximum of 6 panelists are needed, excluding the chair. We also try to have some Francophone participants on the panel.

Key Policy Issues and Recommendations

Policy maker recognized that industrialization should be thought of comprehensively, not in isolation, but in the context of other major regional initiatives, such as regional integration, infrastructure development, advancing technology, regional agricultural value chains, financing of industrialization, capacity building, and structural transformation.

They also noted the vital role of public-private partnerships in designing and implementing industrial strategies, especially in such areas as infrastructure investment, financing of industrial development, advancing technology and innovation and fostering dialogue and coordination between all relevant stakeholders;

The policy makers took note of past declarations on industrialization in Africa, especially African Union/NEPAD Agenda 2063, AfDB industrialization Strategy (under its 'Industrialize Africa' priority), the Addis Ababa Action Agenda (2015), the Third Industrial Development Decade for Africa (IDDA III), and the United Nations SDG Agenda, particularly on industry, innovation and infrastructure (SDG9);

It was also important to acknowledge the fact that many sub-Saharan African countries are either developing or already have industrial policies and strategies in place.

- Policy makers affirmed that industrialization is a core element of structural transformation for inclusive and sustainable development in Africa and the need to increase investment in knowledge generation, capacity building of individuals, firms and institutions, research and development (R&D), skills development and skills transfers to address regional imbalances and thus pave the way for broadbased regional industrialization in Africa;
- Policy makers commended the critical role of African Economic Research Consortium (AERC) and its partner institutions, especially AfDB and UNU-WIDER, in capacity building for promoting evidence-based policies and generating the knowledge basis for decision making on such key economic policy issues as industrialization and industrial development;
- They also took note of the important role of financial sector development and deepening in strengthening domestic resource mobilization to support industrial development in Africa;
- The policy makers recognized that many well-meaning declarations and strategies have not largely been executed, call for immediate action, and a sense of urgency are paramount in industrializing Africa.
- The African policy makers present committed to reducing infrastructure gaps, strengthen regional value chains, improve trade logistics, and reduce trade barriers to scale up intra-African cooperation and boost regional industrialization and trade; and to empowering women, youth and other agents of inclusive and resilient development through industrialization policies and strategies adopted by African governments.

Annex A

Conference Papers

- Industrialization in Africa: Setting the Stage & Overview by Finn Tarp, UNU-WIDER, Finland
- Industrial Clusters: The Case for Special Economic Zones in Africa by Carol Newman, Trinity College, Ireland
- Learning to Export and Learning by Exporting by Eyerusalem Siba, Formerly Brookings Institution, Washington, DC
- Regional Industrialisation in Africa by Judith Fessehaie, Centre for Competition, Regulation & Economic Development, University of Johannesburg, South Africa
- Financing Industrial Development: Lessons from other Regions by Keun Lee, Seoul National University, Korea
- Pathway to Industrialization in Africa by Ludovic Alcorta, UNIDO

Annex B

List of Participants

1. Alain Siri

Centre d'Analyse des Politiques Economiques et Sociales Director Burkina Faso

2. Ibrahim Abba

Ministry of Employment & Vocational Training Technical Advisor *Cameroon*

3. Prosper Sagbo Honagbode

Ministry of Economic, Finance and Decentralisation Programs
Director *Benin*

4. Hon. S.E. Osmond Hanciles MINISTRY OF ENERGY Deputy Minister Sierra Leone

5. Nicholas Ozor

African Technology Policy Studies Executive Director *Kenya*

6. Pam Zahonogo

Université Ouaga II Associate Professor Burkina Faso

7. Adam Mugume

Bank of Uganda Executive Director Research *Uganda*

8. Mokube Mathias Itoe

MINISTRY OF FINANCE Associate Director Cameroon

9. Edward Bbaale

School of Economics, Makerere University Dean *Uganda*

10. Stephen Emuria

Ministry of Trade, Industry and Cooperatives Assistant Commissioner *Uganda*

11. Joseph Lule

Office of the President Chief Economist Uganda

12. Ndikumagenge Jean Marie

Ministry of Trade, industry and Tourism Advisor Director General *Burundi*

13. Ibi Ajayi

University of Ibadan Professor of Economics (Capital Flight Project) *Nigeria*

14. Kavuma Samuel

National Youth Chairman 1st Vice President ICGLR Youth Forum *Uganda*

15. Julius Mucunguzi

Prime Minister's Office Advisor the PM *Uganda*

16. Henri Ngoa Tabi

University of Yaoundé Dean Cameroon

17. Magdi Norain

Central Bank of Sudan Director Sudan

18. Danford Sango

ESRF

Head of Department Capacity Development Tanzania

19. Dialel Guisset

Ministry of Commerce, Industry and Tourism Director *Mauritania*

20. Modibo Kolly Keita

Ministry of TransportChief of Party *Mali*

21. David Wamai

Ministry of Finance Planning and Economic Development Commissioner *Uganda*

22. Parfait Abouga

Ministry of Labour and Social Security Head of Technical Cooperation Unit Cameroon

23. Ahmadou Aly Mbaye

CREA/UCAD Director Senegal

24. Martin Ojok

Ministry of Water and Environment, Climate Change Department. Climate Change Officer Uganda

25. Finn Tarp

UNU-WIDER
Director
Finland

26. Augustine S. Sheku

Public Sector Reforms Permanent Secretary Sierra-Leone

27. Tsitsi Hungwe

Bank of Zimbabwe
Director, Finance and Procurement
Zimbabwe

28. Lucious Kanyumba

Malawi National Assembly Former member of Parliament/ lecturer *Malawi*

29. Olivier Suguru

Association of Burundi Industrialists President Burundi

30. Bernard Ongodia

Ministry of Energy and Minerals Director *Uganda*

31. Bwalya E. Ngandu

Bank of Zambia
Deputy Governor
Zambia

32. Grivas S. Chiyaba

Bank of Zambia
PA to Deputy Governor *Zambia*

33. Meaza Ashenafi

Enat Bank Board Chair and Founder, Enat Bank *Ethiopia*

34. Elton Macuacua

PAADCA General Coordinator *Mozambique*

35. Gibson Chigumira

ZAPARU Executive Director Zimbabwe

36. Charles Chol Mojwok

Ministry of Finance and Planning Economic Advisor on Macroeconomic Policies/ Office of the Minister South Sudan

37. Andre Moulemvo

Faculté des Sciences Economiques Université Marien Ngouabi Enseignant chercheur Congo Brazzaville

38. Aldret Albert Musisi

Ministry of Finance Planning and Economic Development Commissioner *Uganda*

39. Malekoetje E. Lekoetje

Ministry of Small Business Development Director *Lesotho*

40. Jules Tapsoba

Office of the Prime Minister Special Advisor *Burkina Faso*

41. Monty Jones

Ministry of Agriculture, Forestry and Food Security Minister Sierra Leone

42. Edward Tenywa

Bank of Uganda P.A to Dep. Governor Uganda

43. Louis Kasekende

Bank of Uganda Deputy Governor *Uganda*

44. Steve Mbollo

Ministry of Economy Planning and Regional Development Director General Cameroon

45. Abdoulave Toure

Ministry of Planning and International Co-operation Advisor of the Minister *Guinea*

46. Carol Newman

Trinity College, Dublin Author *Ireland*

47. Nii Kwaku Sowa

International Growth Centre Director General Ghana

48. Peter Balimunsi

Ministry of Trade, Industry and Cooperatives Commissioner for Industry *Uganda*

49. Bekele Tadesse

Ministry Of Industry Former Minister *Ethiopia*

50. Mohamed Cheikh Sidi Lehbib

Ministry of employment and Vocational Training Director of Employment Mauritania

51. John Page

Brookings Institute Senior Fellow *USA*

52. Adebayo Adebiyi Michael

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53. Everusalem Siba

Independent Scholar Research Fellow Sweden

54. Jashinto Genye

National Secretariat Secretary of Finance and Economic Affairs South Sudan

55. Amb. Kheswar Jankee

Mauritian Embassy Head of Mission Mauritian Embassy in Berlin, Germany Mauritius

56. Welcome Nxumalo

Central Bank of Swaziland Senior Economist Swaziland

57. Ahmada Kelly

Mauritanian Centre for Policy Analysis Director Mauritania

58. Jean-Christophe Boungou Bazika

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Congo Brazzaville

59. Kennedy Ondimu

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60. Mohammed Jalloh

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61. Iudith Fessehaie

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62. Etsri Homevor

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63. Didier Jean Joel Bounsana

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64. Dieu-Donne N'Guessan

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65. Paulin Tano

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67. Eugenio Maria Paulo

Advisor AfDB Cote d'Ivoire

68. Jacob Oduor

Research Economist AfDB Kenya

69. Dovi Amouzou

Business Coordinator AfDB

Cote d'Ivoire

70. Patrick Kanyimbo

Principal Regional Integration Coordinator AfDB Cote d'Ivoire

71. Zakarya Keita

Director of Studies
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Cote d'Ivoire

72. Mariam Diawara

Secretary to the sauctiais Appeals Board BSAB Cote d'Ivoire

73. Haidara

Chief Investment Officer-Private Sector AfDB Cote d'Ivoire

74. Nadege Nean

Manager Foundation African Women Initiatives Cote d'Ivoire

75. Jean-Phillipe Adia

Director Ministry of Planning Cote d'Ivoire

76. Seydou Tinite

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78. Wilbert T.K Kaahwa

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79. Modibo Traore

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80. Mark Eghan

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81. Owor Saip SY

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82. Mwila Kamwela

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83. Mercy Cyrille Mballa

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84. Blessing Ose Oliagbi

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85. Elizabeth Owiti

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87. Eric Kere

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88. Elita Mwenda Mwambazi

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89. N'cho Yapi Patrice
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90. Ryota Sugiyama
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91. Bokang Mokati-Sunkutu Trade Facilitation Officer PITD Cote d'Ivoire

92. Gerald Ajumbo Trade Facilitation Officer AfDB Cote d'Ivoire

93. Memory Dube Senior Trade Officer AfDB Cote d'Ivoire

94. Dohanna Maula Consultant AfDB Cote d'Ivoire

95. Lou Boli Caroline Sahie Senior Director Ministry of Industry and Mines Cote d'Ivoire

96. Gareth Phillips Chief Climate Change+ Green Growth AfDB Cote d'Ivoire 97. Jonathan Danladi Senior Lecturer AFE Babalola University Cote d'Ivoire

98. Ludovico Alcorta
Director Research and Statistics
UNIDO
Cote d'Ivoire

99. Jean-Claude Brou Minister Ministry of Industry and Mines Cote d'Ivoire

100. Célestin Monga Vice President AfDB Cote d'Ivoire

101. Pierre, Guislain Director AfDB Cote d'Ivoire

102. Frannie Leautier Vice President AfDB Cote d'Ivoire

103. Keun Lee Professor of Economics Seoul National University Korea

104. Bright E. Okogu Executive Director AfDB Cote d'Ivoire

105. Abebe Shimeles
Director
AfDB
Cote d'Ivoire

106. John Anyanwu Manager AfDB Cote d'Ivoire

107. Ahoure Alban Alphonse

Director CAPEC

Cote d'Ivoire

108. Diarra Ibrahim

Director CIRES Cote d'Ivoire

109. Adama Coulibaly

Director

Ministère de l'Economie et des

Finances

Cote d'Ivoire

110. Gnamien Guillaume

Director

Ministry of Industry and Mines *Cote d'Ivoire*

111. M. Karim Traore

Director

Ministère du Budget et du Portefeuille de l'État

Cote d'Ivoire

112. Nahoua Yeo

Deputy Minister Ministry of Planning and Development

Cote d'Ivoire

113. Amane Paul Marie

Director

Ministère de l'environnement et des ressources naturelles

Cote d'Ivoire

114. K.Y. Amoako

President (Formerly UNECA's Executive Secretary) African Center for Economic Transformation (ACET)

Ghana

115. Lemma Senbet

Executive Director

AERC

Kenya

116. Innocent Matshe

Director, Training

AERC Kenya

117. Witness Simbanegavi

Director, Research

AERC

Kenya

118. Charles Owino

Manager, Communications

AERC

Kenya

119. Wilson Wasike

Manager, Research

AERC

Kenya

120. Juffali Kenzi

Manager, IT

AERC

Kenya

Annex C

Seminar Programme







Industrialization in Africa

Sunday 12 March 2017

16:00–18.30:00 Hrs **Registration**

Monday, 13 March 2017

remarks:

13:00 –13:45 Official Opening Session

Introductory Lemma W. Senbet, Executive Director, AERC

remarks:

Opening Célestin Monga, Vice President, AfDB

Official Jean-Claude Brou, Ministre de l'Industrie et des

Opening: Mines, République de Côte d'Ivoire

13:45 –14:30

Session 1: Industrialization in Africa: Setting the Stage & Overview

Session chair: Pierre, Guislain, AfDB

Presenter: Finn Tarp, UNU-WIDER, Finland

14:30 -16:00

Session 2: Industrial Clusters: The Case for Special Economic

Zones in Africa

Session chair: Kheswar Jankee, Mauritian Ambassador to Germany

Presenter: Carol Newman, Trinity College, Ireland

Discussant: Aly Mbaye, CREA/UCAD, Senegal

Floor Discussion

16:00 –16:30		Tea/Coffee Break
16:30 – 18	8:00	
10.00	Session 3:	Learning to Export and Learning by Exporting
	Session Chair:	Monty Jones, Minister of Agriculture, Sierra Leone
	Presenter:	Eyerusalem Siba, Formerly Brookings Institution, Washington, DC
	Discussant:	Adam Mugume, Bank of Ugunda
	Floor Discussion	on
19:00 – 20	0:00	Cocktail Reception
Tuesday, 09:00 –10	, 14 March 2017	
07.00 10	Session 4:	Regional Industrialisation in Africa
	Session chair:	Louis Kasekende, Deputy Governor, Bank of Ugunda
	Presenters:	Judith Fessehaie, Centre for Competition, Regulation & Economic Development, University of Johannesburg, South Africa
	Discussant:	Nii Sowa, International Growth Centre, Ghana
		Floor Discussion
10:30 –11:00		Tea/Coffee Break
11:00 –12	1:30	
	Sessions 5:	Financing Industrial Development: Lessons from other Regions
	Session chair:	Frannie Leautier, Senior Vice President, AfDB
	Presenter:	Keun Lee, Seoul National University, Korea
	Floor Discussion	on
12:30 –14	::00	Lunch Break
14:00 –15	Sessions 6:	Pathway to Industrialization in Africa
	Session chair:	Lemma W. Senbet, Executive Director, AERC

Presenter: Ludovic Alcorta, UNIDO

Dinner

Discussant: Kevin Urama, Senior Advisor to the President, AfDB

Floor Discussion

19:00 - 21:00

15:00 –15:3	Tea/Coffee Break	
15:30 – 17:	30	
	Sessions 7: Policy Roundtable	
	Session chair: Bright E. Okogu, Executive Director, AfDB	
	Panellists:	
	Bwalya Ng'andu, Deputy Governor, Bank of Zambia	
	Monty Jones, Minister of Agriculture, Sierra Leone	
	Celestine Monga, Chief Economist, AfDB	
	John Page, Brookings Institution	
	Olivier Sunguru, Association of Burundi Industrialists	
17:45 – 18:	00 Vote of Thanks - Director of Research, AERC	
17:30 – 17:	45 Resolutions/Communiqué (Drafting Committee:	
	Lemma Senbet, AERC Abebe Shimeles, AfDB are Convenors	