

Learning to Compete

L2C Meeting of Project Teams

Summary Report

Nairobi, Kenya

May 27-28, 2011

Learning to Compete (L2C) is a collaborative project of the Africa Growth Initiative at The Brookings Institution, the United Nations University World Institute for Development Economics Research (UNU-WIDER), and the African Development Bank. The project is a comparative, country based research program that seeks to answer a seemingly simple but complex question: *Why is there so little industry in Africa?*

Utilizing both qualitative and quantitative research methods, the project enlists research teams from a selection of nine African and two south East Asian nations to produce a cross-nations analysis of the challenges to industrial development in Africa. The project director is John Page of the Brookings Institution and external project director for UNU-WIDER. A project management team consisting of Page, Finn Tarp, and director of UNU-WIDER, and Desire Vencatachellum, director of the AfDB research department are responsible for project management and oversight. The country case studies will be based on research by institutions in Ghana, Nigeria, Kenya, Tanzania, Uganda, Senegal, Ethiopia, Rwanda, Mozambique, Tunisia Cambodia, and Vietnam.

The project commenced in 2011 and will run through the year 2013, during which time country teams will produce a series of academic working papers that will eventually contribute to a large-scale publication of accumulated research findings. Products from this research are intended to provide practical policy recommendations for the development of industry in Africa, inform the debate in the academic community, and contribute to the data available for further research on the continent.

The project participants convened in Nairobi, Kenya in late May of 2011 to present the data and work compiled thus far, to confirm a mutual understanding of the project structure, and to establish necessary milestones and deliverables for the country teams moving forward. This report is a summary of the project structure, country presentations, key conclusions, and points of action outlined in Nairobi.

Project Overview – John Page and Finn Tarp

When considering the realities of the current status of industrialization in Africa, many questions arise, especially in comparing Africa to other regions. For example one of the critical ways of transferring capabilities from high income economies to low income economies is through foreign direct investment. In China and India, FDI and links to domestic suppliers have played a pivotal role in the development of industry. Export processing zones in Cambodia and across Asia have been widely productive. *Why has this not occurred in Africa? Can lessons learned elsewhere be applicable in Africa?* A major goal of L2C is to offer to decision makers a set of concrete policy ideas that address industry constraints in African countries. It is necessary to gather a detailed understanding of these realities before we can make educated policy recommendations.

The structure of L2C is two-dimensional and encompasses four elements. The first dimension of the project is thematic (horizontal), and will approach four issues using both qualitative and quantitative research methods. The first thematic element will explore the *role of exports*, and the ability of firms to learn by exporting and engaging within international markets. Secondly, there is great potential for *foreign direct investment*, and governments will need a comprehensive understanding of how to make foreign investment in sectors such as natural resources beneficial to domestic growth. The third theme is the role of *industrial clusters*, and whether deliberate policy decisions to foster agglomeration have the potential to help firms grow. Finally, the project will explore *workplace skills* and the differences in competitiveness of firms whose workers and management have higher levels of education or applied technical skills.

These themes will define the majority of the quantitative work and will be useful and informative; yet, it is necessary to give them context within countries to be applicable to policy making. The second element of the project will be a vertical analysis at the country level of the evolution of industry and the historical background that explains the current status of growth today. This approach will explain the path-dependent nature of industrial growth, and acknowledge the current constraints to industry in Africa.

The project will also incorporate a third institutional element, which will consider the institutions, regulations, and policies that structure and guide the relationship between governments and the private sector. The strength of governing institutions that control the interactions between the government and private industry is pivotal for industrial development. Finally, the fourth element of the project will be policy itself; a major output of the project must be new ideas for policies that have the capacity to strengthen industry in each nation.

In summary, the project attempts to account for both the horizontal dimension of thematic issues across countries, as well as the vertical dimension of the historically-dependent evolution of industrial policy in each nation. The research methodology is also eclectic: quantitative methods provide the necessary econometric data and results, and qualitative work through case studies and analytical narratives fill in the gaps where the econometrics cannot explain the casual mechanisms. The project's Lead Academics, Carol Newman, Mans Söderbom, Abebe Shimeles, and John Rand, will provide a more exhaustive explanation of the themes we will explore.

Themes

1. Learning by Exporting – Mans Söderbom

Can exporting be a source of competitive gains? When poorer countries engage in international markets, they often struggle to compete in terms of firm efficiency, profitability, and skills. However, less-developed countries may be able to remedy these gaps in competitiveness through learning by expansion to export markets. Exposure to international competition forces firms to cut out slack, interact with foreign clients, and gain new ideas through international business networks. If firms who export are more efficient than non-exporting firms, this notion is significant for policy in that that an increase in productivity is caused by exposure to foreign markets.

1a. The Data Available - To measure firm competitiveness in international markets, firm level data from each country will be necessary. For these purposes, country research teams will need panel data with at least two years. Unfortunately, the data cannot accommodate for learning lags (the notion that gained knowledge is not immediately reflected in a firm's productivity), nor

can it indicate whether a firm is more efficient than a domestic-only firm because it is learning through exporting, or if it is simply more efficient due to the preexisting maturity necessary to engage in foreign markets. Research teams should gather firm level data on exporting status, destination of exports, sales, inputs (human capital, employees, and costs), facilities and equipment, as well as intermediate inputs such as raw materials.

1b. Defining the Variables - In approaching these analyses, it is imperative to establish parameters for defining an “exporting firm”, what is considered “industry”, and also what is considered “learning.” In drawing the line between an exporting firm and a non-exporting firm, there must be a uniform threshold of the proportion of transferred goods that is exported from each firm. Also, we will measure whether the firm exports regionally or across oceans to distant markets. In defining industry, in Africa industry does not always have to be complex and embody the characteristics typical of large industrialized nations. Agro-industry, the service sector, as well as other forms—Ethiopia has seen great success in the cut flower industry—have large potential for growth and are valuable for our purposes. Additionally, some existing data does exist on the skills attained through learning by exporting, but it will be important to consider how that knowledge is gained (Is it gained through interacting, doing, or using?). The parameters defining an “export” should also acknowledge exports from the informal sector.

1c. The Role of Networks - Finally, the project participants reached a mutual agreement that the role of networks and informal business relationships is pivotal to the analysis of information sharing among firms. Firm specific characteristics such as the nationality and ethnicity of the firm owner are highly indicative of network affiliation. There is also a consensus that networks are beneficial only for those who belong and place large roadblocks to those outside them. Successful learning by exporting will be the maintenance of these communication networks but altering them to be more inclusive.

2. The role of skills – Abebe Shimeles

The development of industry in Africa will inevitably require improving output per worker. How large of a role do skills play in the productivity gap noted across African nations when compared with Asian and Western counterparts?

2a. Skills Gaps - For our purposes, it is important to understand how skills gaps can constrain productivity; yet, it is also useful to explore the shadow price for skills. There is an inherent structural transformation that occurs as firms transition from low productivity to high productivity sectors. The data available demonstrates that the most profitable firms are those which use less and less labor over time. Skill spillover amongst the institutional hierarchy within and across firms in an industrial cluster may not occur naturally. Therefore, it is important to consider the role of externalities and whether or not there is a strong relationship between firm level education and agglomeration.

2b. Firm owner education - The education level of firm owners affects the capacity of the firm to engage in higher-level business transactions and networks. Do firms controlled by well-educated people perform better? Are firms with educated owners more likely to successfully engage in international markets? It is certainly evident that a critical minimum of education and professionalism exists to engage in international business. These standards are necessary to ensure trust and legitimacy.

2c. Defining ‘skills’ – Education is a broad way to define skills. Whether an employee has completed primary, secondary, or tertiary education affects their output per worker. The

MDG's have prioritized universal primary education; yet, to effectively industrialize, African nations will require technicians and firm owners with more advanced educational degrees. Additionally, technical degrees obtained through in-house training or firm-sponsored programs may not be measured within the data available. For our purposes, it will be imperative to understand what is included in the umbrella of 'education' when looking at preexisting data on skills.

2d. Agglomeration and skills – Skilled workers often tend to be in industrial clusters. In industries such as tourism, workers learn language and communication skills through communicating with other firms in their area. Managerial and entrepreneurial skills are different based on firm size and often vary across industry type as well. Agglomeration may not inherently cause skill spillover due to these realities.

3. Industrial Clusters – Carol Newman

The benefits of agglomeration have been noted worldwide. Firms who locate in industrial clusters have easier access to suppliers, a reduction in transportation costs, a common labor pool, and are at a greater disposition for skill spillover. In regions like Africa where the cultivation of industry will be deliberate and assisted through policy, clustering that is more than natural is a potential consequence. This project will apply both a case study (qualitative) and quantitative approach to studying agglomeration. The research teams will generate an expected clustering pattern based on geography and economic zones, taking care to acknowledge the interconnectivity between industries in clusters. This will be compared with preexisting data on clusters.

3a. Clustering and Industrial Policy – Should governments generate policy to promote clustering, and if so, how? If a large benefit to clustering does exist, it is interesting that it has not occurred already. If governments remove the constraints to relocation and agglomeration, will the costs be too high? It is important to acknowledge that there is a competitive effect from clustering, as firms must compete for suppliers. In some cases, firms may not want to cluster because the potential benefits are directed more at the consumer, which has large implications for industrial policy.

3b. The Role of Infrastructure – The lack of adequate infrastructure in Africa is a serious constraint on industrial growth. Firms who are located within industrial clusters are more likely to benefit from policies that improve infrastructure. Not only does improved infrastructure guarantee increased access to suppliers and lower transportation costs, but heightens the efficiency of firms as well to be competitive in international domestic markets. Moreover, better infrastructure increases the potential for FDI.

3c. Agglomeration has not been Spontaneous – There are a number of factors which inhibit or deter firms from naturally agglomerating that are relevant to the analyses. Zoning policies within respective nations impose difficult roadblocks to firms, cultural factors such as ethnicity and nationality influence business networks, stylized facts and variance across countries make assumptions inappropriate across nations in Africa.

4. Foreign Direct Investment – John Rand

Foreign direct investment (FDI) creates the potential for local firms to learn from high productivity firms investing in the region. The L2C project must quantitatively analyze the extent to which spillover exists when foreign firms invest in African nations. The project will also engage in an ethnographic field study (qualitative) which will consist of semi-structured interviews with thirty enterprises in each nation.

4a. Spillover – Little is known about whether skill spillover exists in Africa between foreign and domestically owned industry. Two dimensions of spillover are relevant for these analyses. Horizontal spillover accounts for the share of total sector output produced by foreign invested enterprises. Alternatively, vertical spillover accounts for the backward and forward linkages of information sharing that occur between foreign and domestic owned industry. Domestic firms may benefit from foreign firms, while foreign firms may learn from domestic content requirements imposed by industrial policies.

4b. Resource-based FDI – In the case of Africa, it is beneficial to include resource-based FDI to expand the data pool. Should governments put local content requirements on natural resources investors? If they were to enact such policy, would it deter investors?

Explanation of Goals and Milestones – John Page

Goals for Learning to Compete – L2C intends to inform the debate in the international policy community on appropriate industrial policies. Country research teams will identify the constraints to faster industrial growth at the country level, evaluating why the potential for growth has not been realized in industry. Conducting research across nations with varied geographic, economic, and political realities will give a comparative view on key issues and provide indicators as to whether the challenges are similar. Ideally, these findings will provide a compelling story of industrial development for each country intended a large output, such as a book.

Topical Analyses – Through all four methodological approaches already outlined (analytical narratives, case studies, quantitative analyses (themes), and qualitative surveys), research will cover ten topics addressing a common core set of questions. These topics include:

1. **The evolution of industry** – Study of historical evolution of industry in the country, the current policies in place, key industrial episodes, as well as turning points for growth.
2. **The structure of the industrial sector** – This analysis should include sectoral composition, size distribution, employment, ownership, as well as consider sunrise and sunset industries.
3. **Patterns of industrial productivity** – What is the current level of competitiveness? This topic will consider output per worker (and if possible TFP): distribution across firms, distribution across industries, and patterns of productivity change.
4. **The industrial policy framework** – This analysis should include the macroeconomic policies, trade policies, the institutional and regulatory framework, and sector-specific policies (such as agriculture).

Themes:

5. *The role of industrial exports* – The effectiveness of the practice of policies is more important than the written policy. Are exports enabled?
6. *The geography of industrial development* – This should include the spatial distribution of industry, agglomerated economies, the constraints to industrial clusters, and all spatial industrial policies.
7. *FDI* – What are governments doing to attract FDI? Are governments utilizing best practices?
8. *Employment and skills* – Should policymakers be rethinking the Millennium Development Goals? Should governments be rethinking education policy when considering industrial growth?
9. *New directions for industrial policy* – Who are the best advisors for industrial policy? Strategic initiatives such as export processing zones and growth poles as well as regulatory and institutional reforms should be analyzed. Are sectoral policies that ‘pick winners’ not something that have always occurred?
10. *The practice of industrial policy* – How is the relationship between business and government structured and regulated? If governments are going to be involved in industrial policy, they must bolster their relationship with the private sector.

As a caveat, not all of these topics will be relevant for each nation, and not all country research teams will analyze each topic. The goal is to have a variety of studies which will collectively contribute to a broader set of core questions. If the main constraints within a nation do not fall within these topics, that is acceptable for L2C. The purpose is to generate strong messages from the relevant challenges of each nation.

Note: Data Already Available

Firm level data from World Bank surveys already exists and does include a large number of firms. Each country will go through the data. While preexisting and used for other purposes prior to our investigations, these data have not been used before in terms of our framework. It will be possible to manipulate the data sets if they are not in the formats we require.

Preliminary Work Country Presentations – Research Teams

1. Nigeria – Louis Chete and Olurunfemi Ogundele (NISER)

1a. Sectoral Composition -The government has not been able to sustain industrial growth due to economic constrictions. Much of the industrial sector is dominated by small farms, which account for about twelve per cent. Industrial contribution to GDP is fluctuates between four and five per cent. The majority of all investment goes into oil, gas and telecommunications. While legislation has been drafted to regulate these sectors, it has not been passed.

1b. Deindustrialization - To date, investment in manufacturing has been minimal, and sector growth has declined over time. The once thriving textile industry employed more than seventy thousand people—second only to the government—yet today deindustrialization has reduced the number of factories to only two.

1c. Skills – Significant progress has been made in the obtainment of skills. While the number of graduates has increased, the number of qualified graduates with applicable skills is still insufficient. This project will explore the value of skills training in the industrial development of Nigeria.

2. Ethiopia – Eyerusalem Siba and Mulu Gebreeyesus (EDRI)

In Ethiopia, the majority of employment comes from small scale and cottage firms. As agriculture declines, growth is occurring in the service sector as opposed to the manufacturing sector. In fact, only eight per cent of exports in 2009 came from the manufacturing sector.

2a. Clustering - A recent study by Mans Söderbom, Eyerusalem Siba, and Mulu Gebreeyesus found that while clustering does exist in Ethiopia, sixty per cent of that clustering is in Addis Abba and Oromia. Agglomeration reduces output prices and improves productivity of firms. EDRI will explore the differential performance within firms who have already agglomerated for the purposes of L2C.

2b. Skills - The same study also investigates why firms within a similar network make similar decisions on technology investment, but different decisions regarding investment in human capital. The results demonstrate that networking and business interactions within buyers, suppliers, and producers are the major channels through which knowledge is transferred. The level of education of the firm owner is also relevant in Ethiopia. EDRI will also consider the role of skill spillover.

2c. Learning by Exporting – Stronger firms tend to enter the export market but they continue to grow after entering international markets. This can be cited as learning by exporting. Current data is only available to 2004; L2C will gather data from more recent years.

3. Cambodia – Ung Luyna and Chhair Sokty

In Cambodia, the evolution of industry began in the 1960s, which saw strong growth in the manufacturing sector and the construction of new factories. In the 1980s, state-owned factories produced goods for local consumption with some assistance from the Soviet Union and Vietnam. Since the opening of the market in the 1990s, Cambodia has witnessed significant sectoral transformation.

3a. The Structure of Cambodian Industry – The Cambodian manufacturing and service sectors has grown substantially, while growth in the agricultural sector has leveled off. The vast majority of this growth within the manufacturing sector has been textiles, with a minimal amount of food processing spurring growth as well. This high growth in industry is significantly linked with FDI.

3b. Learning by Exporting – The garment sector provides a low risk value chain and Cambodia holds a comparative advantage in cheap labor, which attracts substantial FDI. Domestic companies struggle to compete internationally, as only nine per cent of factories in Cambodia are locally owned. This is an area for further exploration under L2C.

3c. Spillover - The export market in Cambodia is struggling to diversify. They are not learning from FDI, and further evaluation throughout the L2C project is merited.

3d. Clustering – Most Cambodian firms are small and have not agglomerated. Large firms are mostly located in Phnom Penh. The potential benefit of agglomeration is an area for further research.

4. Uganda – Marios Obwona and Eria Hisali (EPRC)

In Uganda, focus in recent years has been on inflation and exchange rate policies, investment incentives provided for in the tax code, as well as export processing zones (EPZs). Institutional and regulatory issues are also being addressed. Sectoral response, demonstrated by figures in employment, industrial share in GDP, and export performance has remained weak. Policy makers must now focus on promoting growth in the sector through new factories as well as enhancing competitiveness of the existing industrial framework in the challenging context of a more liberal global trade regime and regional integration.

4a. Industrial Policy – Existing policies and incentives in place have done little to catalyze growth. It will be necessary to analyze the effectiveness of those in place and identify more deliberate policies to combat constraints. This may include the extension of tax holidays, or protection of the manufacturing sector. It is also important to measure whether growth that has occurred has stemmed from these policies or from foreign investors.

4b. Regional Integration – Moving forward, it will be imperative to consider the interconnectivity of east African counties. How can we recommend community compatible policies? Because nations in the region have little control over where foreign investors chose to invest, the incentives in the regional community will not be equal. Perhaps there is need for a government compensation mechanism here.

4c. New directions in industry – This project will investigate the potential for new industry, as well as promote growth of the existing small scale establishments. Finally, the research team will investigate formalization of establishments in the informal sector.

5. Kenya – Peter Kimuyu, Dianah Ngui-Muchai (KIPPRA)

Kenya has experienced significant foreign investment in recent years. There has also been a noted increase in firm squatting. Firms are able to share their security concerns, general operations, as well as manufacturing tools. This provides for a reduction in input costs. There is

an incentive to formalize operations and permit direct employee management. In Kenya, three areas that merit further exploration are:

5a. *The Role of corruption in industrial development* While this topic is not in the research design circulated, it is very important in Kenya and must be addressed.

5b. *Skills* – There is little technical training for job skills that can be applicable to industry. Reform in the education sector and an acknowledgement of the value of technical and vocational training is necessary.

5c. *Export Processing Zones* – It is evident that perhaps each industry in Kenya does not require its own export processing zone. Benefits to factory sharing include shared security, general operations, as well as manufacturing tools. This provides for a reduction in input costs. There is an incentive to formalize operations and permit direct employee management. This has significance for fiscal policy, as EPZs may make room for investment in infrastructure.

6. *Tanzania – Samuel Wangwe (REPOA)*

Since the 1960s, Tanzania has maintained a policy of attracting FDI. The response was not strong, and the government adopted a policy of state-led ISI with the nationalization of industries. Foreign investors participated through management agreements and as suppliers for machinery and equipment. When privatization trade liberalization occurred in the 1980s, nearly all textile factories closed and deindustrialization occurred.

6a. *SIDP* - The Sustainable Industrial Development Strategy was passed in 1996 to enhance sustainable development of the industrial sector. SIDP outlines prioritization of employment creation, economic transformation and equitable development, and seeks to strike an appropriate balance between import substitution and export orientation. Currently, manufacturing exports are higher than agricultural exports, second only to mining. This is significant for policy.

6b. *Infrastructure Development* - The government is currently working today to enhance SIDP through investment in infrastructure and development corridors. Policymakers are considering the industrial village concept to bolster Tanzanian SMEs, as well as legislation to improve ports and encourage export processing zones. What are firms that are successful in manufacturing zones not also in EPZs? There is no incentive for these firms to move into an EPZ if they still must go through regulations at Tanzanian ports. This is an area where L2C can recommend more effective policy.

6c. *Skills and human resource development* – The skilled people in Tanzania are not moving into industry. This is also relevant for policy – are industries recruiting skilled people, or is that skilled citizens are not interested in industrial development? It is necessary for transferrable skills to be identified within successful industries and extrapolate them across sectors. Overall capacity building generates potential across sectors. With FDI and EPZs, it is not the technology that is difficult to acquire, it is the skilled management.

7. *Rwanda – Jonathan Argent and Laura Collinson (IGC)*

In Rwanda, agriculture and the service sector account for thirty and fifty per cent of GDP and employ eighty and seventeen per cent of the work force, respectively. This leaves little room for industry, which is half concentrated in construction, specifically mineral extraction.

Therefore, industry is minimal in Rwanda. There remains a low export rate to GDP, and growth in exports is highly concentrated in coffee, tea, and minerals.

7a. Infrastructure – Infrastructure is a major constraint to industry in Rwanda. Because of this, extremely high transportation costs limit profitability. Input prices are high, with each KWH of energy costing USD .24 cents.

7b. Skills gap – There is also a significant skills gap in Rwanda. Technical and managerial skills are not high enough to participate in international markets. Language skills are also a large constraint to the development of industries such as tourism. Foreign companies are concerned that if they invest in Rwanda, they will not find the quality labor force necessary to be profitable.

7c. Land – The topography in Rwanda is extremely rough and difficult to develop. This poses challenges for infrastructure as well as the development of agro-industry.

If industrialization in Rwanda is possible, it will need to be considered in broad terms, focusing on industries such as coffee, tea, and high-end tourism. From a policy standpoint, Rwanda should seriously consider the potential of regional integration with the EAC for export growth, reducing transportation costs, as well as learning from others in the community. Rwanda provides an important role for L2C because the project seeks to address not only the potential for industry in Africa but also the limitations of industry in nations like Rwanda. Perhaps “smoke-stack” style industry is not sustainable everywhere on the continent.

8. Ghana - Charles Ackah and Charles Adjasi (ISSER)

Ghana has witnessed consistent GDP growth over the last fifteen years. Significant improvement in Ghana has been noted since hyperinflation during the 1980s. After periods of import substitution and state-led industrialization, the nation shifted to a market approach in the 1990s.

8a. Competitiveness – There is a competitiveness gap when competing with foreign markets. There is a high amount of imports of cheap goods from China that are causing problems for the manufacturing sector.

8b. The Structure of industry – Agriculture and mining dominate the export market in Ghana, with most exports going to European and North American markets. The share of manufacturing is dominated by food processing of agricultural products and textiles. The agricultural value chain would be an interesting area of study in Ghana.

8c. Areas for further study – The L2C research team in Ghana will explore private sector relations with government and the role of corruption, China-Ghana trade relations, and private returns to investment in education.

Deliverables

1. Scoping Paper – John Page

Each country team will be responsible for a scoping paper on the background of industry in each country. The format should appear in the same format as UNU-WIDER working papers. The structure of the paper should be the following:

- A. *The evolution of industry*** – The paper should first explore the evolution of industry in the respective country since 1965, policies for industrial development and the historical development of those policies, and highlight key industrial episodes.
- B. *The structure of the industrial sector*** – This section should include sectoral composition, size distribution, employment, ownership, as well as sunrise and sunset industries.
- C. *Patterns of Industrial Productivity*** – Here, papers will analyze output per worker (TFP), distribution across firms, distribution across industries, as well as patterns of productivity change. There is room for policy analysis.
- D. *Emerging policy issues - What*** are the “top three” issues in the current industrial policy debate?

2. Quantitative Country Study Working Papers – Mans Söderbom

- A. *Introduction*** – The introduction will be two pages in length and will explain the goal of the analysis, the importance and relevancy to the policy community, and describe the research question.
- B. *Conceptual Framework*** – This section should be three pages in length and describe the empirical specification used in the paper, what is learned from such a modeling framework, the econometric estimator, and explore how this framework relates to the appropriate literature.
- C. *Data and Descriptive Statistics*** – The data section will also be three pages in length and will present the contents of the data set. It should give summary statistics on key variables, as well as summarize broad patterns in the data.
- D. *Econometric Analysis*** – This section should be five pages in length. It should report econometric results in table format, and then comment on the findings.
- E. *Conclusions*** – Two pages.

Thematic Topics to be explored by Country Teams in Quantitative Papers:

Ghana – Skills and education

Cambodia – Learning by Exporting

Tanzania – Learning by Exporting and FDI

Uganda – Learning by Exporting and Skills

Kenya – Learning by Exporting

Nigeria – Agglomeration

Rwanda – TBD (establishing research team)

Ethiopia – Learning by Exporting

Mozambique – TBD

Tunisia – TBD

Senegal – TBD

Vietnam – TBD

Morocco – (Team will be in place by mid-June)

Core Set of Questions moving forward

The following is a summary of reoccurring questions which consistently came up across sessions throughout the meeting.

1. What are the necessary institutions to facilitate industrial development in Africa?
2. What is the appropriate role of government in regulating and incentivizing growth?
3. How do African nations establish a strong political economy?
4. How should regional integration be considered in generating policy recommendations for industrial growth? What about an East African Union?
5. How should we conceptualize a definition of ‘industry’ relevant for Africa?
6. How influential are networks and business interactions (both vertical and horizontal), as well as culture, nationality, and ethnicity?
7. What lessons can be learned from Asia, and are they applicable in Africa?
8. What is the potential of export processing zones?
9. What is the role of the informal sector, and how can it be measured?
10. ‘Skills’ is a broad term than encompasses all education levels, technical training, in-house training, managerial, communications, and language skills. How can we better define these terms to effectively measure the role of skills in industry?
11. What is the potential of externalities in FDI and learning by exporting?

Potential Structural Additions/Modifications

1. Senior policy workshops – The meeting participants agreed high-level working groups on specific issues such as agricultural value chains, the dismal lack of infrastructure, export processing zones etc., may be valuable for the purposes of this project.

2. Consideration of Additional Qualitative Issues – Country research teams and lead academics suggested that the unmonitored informal sector, the role of business networks, east African community structure, and the role of culture and ethnicity are all issues which affect industrial development and merit analysis.

3. Specified Case Studies – The group reached a consensus that several key topics are relevant for a number of the countries involved in the project, and a special analyses of these issues would supplement the research well. These included the agricultural value chain, the Cambodian garment sector, and cut flowers industry in Ethiopia.

4. Burning Policy Issues – It became evident throughout the meeting that concurrent policy issues not previously included in the project structure are pivotal to the policy debate in certain countries right now. Country teams should let the burning policy questions drive their research in hopes of contributing to the current policy debate. These may include corruption in industrial development in Kenya, industrial policies in Tanzania, and massive transportation costs in Rwanda.

Points of Action

The *Learning to Compete* Meeting of Project Teams established a framework for the project as well as defined agreed-upon milestones and deliverables for the remainder of calendar year 2011.

- Each country research team, overseen by their respective Lead Academic, will **produce drafts of the scoping paper as well as the quantitative country study by September 31st, 2011**. The scoping paper will cover the evolution and background of industry in each nation, while the quantitative paper will explore selected themes through econometric analysis. **These papers will be reviewed and final drafts will be expected by December 2011**. The group has tentatively agreed to reconvene to present both the scoping papers and quantitative country study papers in Addis Abba, Ethiopia in January 2012.
- Moving forward, the project directors, lead academics, and country research teams have agreed to a **centralized web portal on the UNU-WIDER website** which will be available to all participants. This resource will serve as both a location to submit working paper drafts, as well as a forum for information and ideas exchange in the months between project meetings. Project materials such as presentations from the meeting in Nairobi, the meeting report, and any other relevant materials will be available as well.
- The project directors and lead academics are pleased to **welcome research teams from Rwanda and Morocco** to the project and look forward to the unique comparative perspectives of these nations.