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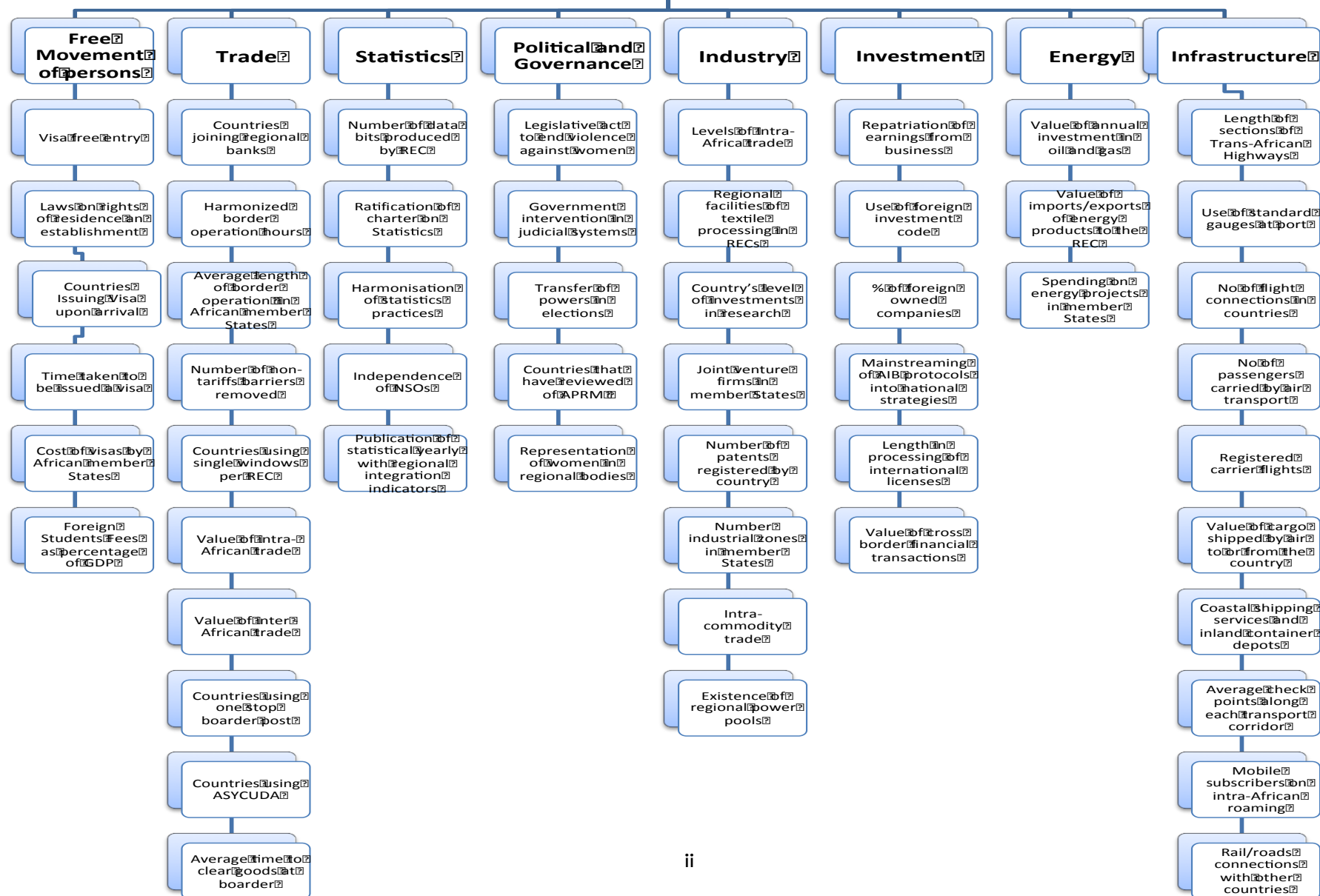
AFRICAN UNION

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Africa Regional Integration Index

Contents

Selected Regional Integration Indicators

Free Movement of persons
- Visa free entry
- Laws on rights of residence an establishment
- Countries Issuing Visa upon arrival
- Time taken to be issued a visa
- Cost of visas by African member States
- Foreign Students Fees as percentage of GDP

Trade
- Countries joining regional banks
- Harmonized border operation hours
- Average length of border operation in African member States
- Number of non-tariffs barriers removed
- Countries using single windows per REC
- Value of intra-African trade
- Value of inter - African trade
- Countries using one stop boarder post
- Countries using ASYCUDA
- Average time to clear goods at boarder

Statistics
- Number of data bits produced by REC
- Ratification of charter on Statistics
- Harmonisation of statistics practices
- Independence of NSOs
- Publication of statistical yearly with regional integration indicators

Political and Governance
- Legislative act to end violence against women
- Government intervention in judicial systems
- Transfer of powers in elections
- Countries that have reviewed of APRM
- Representation of women in regional bodies

Industry
- Levels of Intra-Africa trade
- Regional facilities of textile processing in RECs
- Country's level of investments in research
- Joint venture firms in member States
- Number of patents registered by country
- Number industrial zones in member States
- Intra-commodity trade
- Existence of regional power pools

Investment
- Repatriation of earnings from business
- Use of foreign investment code
- % of foreign owned companies
- Mainstreaming of AIB protocols into national strategies
- Length in processing of international licenses
- Value of cross border financial transactions

Energy
- Value of annual investment in oil and gas
- Value of imports/exports of energy products to the REC
- Spending on energy projects in member States

Infrastructure
- Length of sections of Trans-African Highways
- Use of standard gauges at port
- No of flight connections in countries
- No of passengers carried by air transport
- Registered carrier flights
- Value of cargo shipped by air to or from the country
- Coastal shipping services and inland container depots
- Average check points along each transport corridor
- Mobile subscribers on intra-African roaming
- Rail/roads connections with other countries

A.   Background

1.   At the regional and continental levels, Africa's future and aspirations regarding regional integration are embodied in the Charter of the Organization of African Unity, the Treaty Establishing the African Economic Community (Abuja Treaty), the Constitutive Act of the African Union, and the treaties and protocols establishing the African economic communities. These agreements are anchored on the following key priorities, among others: liberalization of trade; free movement of persons, goods, services and capital; development of regional infrastructure; development of production capacities; and harmonization of macroeconomic and sectoral policies. The key milestones of the Abuja Treaty are reflected in Table 1.

Table 1: Key milestones of the Abuja Treaty

Phases	Duration	Key milestones
First stage	1994-1999	♦ Strengthening of existing regional economic communities (RECs); establishing new RECs in regions where they did not exist previously
Second stage	1999-2007	♦ Stabilization of tariff and non-tariff barriers, customs duties and internal taxes in each REC ♦ Schedules for the removal of such barriers ♦ Harmonization of customs duties ♦ Strengthening of sector integration ♦ Coordination and harmonization of the activities of RECs
Third stage	2007-2017	♦ Establishment of a free trade area and customs union in each REC
Fourth stage	2017-2019	♦ Coordination and harmonization of tariffs and non-tariff systems among RECs, leading to a continental customs union
Fifth stage	2019-2023	♦ Common sector policies ♦ Harmonization of monetary, financial and fiscal policies ♦ Free movement of persons and rights of residence and establishment
Sixth and final stage	2023-2028	♦ African Common Market ♦ Pan-African Economic and Monetary Union ♦ African Central Bank and a single currency ♦ Pan-African Parliament ♦ Development of African multinational enterprises

2.   Africa's current integration landscape contains an array of regional economic communities (RECs), including eight considered as the main building blocks of the African Economic Community. The RECs have agreed to integrate in a variety of ways that sometimes differ from continent-wide agreements.

3.   In more recent times, the African Union's political leadership has adopted a number of initiatives to accelerate Africa's integration agenda. A Minimum Integration Programme was adopted by the African Union to accelerate the African integration process in key areas including trade and market integration, free movement of persons, and infrastructural development. Given

that many African countries are members of multiple RECs, which can have overlapping objectives and mandates, complicating the coordination of the integration process, the Minimum Integration Programme serves to focus the actions of the RECs with a view to accelerating Africa's integration in key and critical priority areas in a coherent and harmonious manner. In addition, in January 2012 the African Union made a landmark decision to fast-track the establishment of a continental free trade area by an indicative date of 2017, and to implement a comprehensive action plan for boosting intra-African trade. Moreover, institutions including the African Union Commission (AUC), the African Development Bank, the United Nations Economic Commission for Africa (ECA) and the RECs are currently promoting the continent-wide Programme for Infrastructure Development in Africa.

4.   Despite these agreements, regional integration in Africa still has a significant way to go in order to fulfil its potential for contributing to the continent's overall development objectives. One area in which this is obvious is trade. On average, formal intra-African trade remains relatively low at about 11 per cent of total African trade, which compares unfavourably with other regions of the world. Only Western Asia has a lower share of intra-regional trade as a percentage of total exports. In comparison, the share of intra-regional trade in South and Central America, North America, EU-27 and Asia stands at 17 per cent, 42 per cent, 62 per cent and 64 per cent respectively. Africa's RECs also have a low share of intra-group trade relative to other regional groupings: the 14 top-performing regional groupings worldwide have an average share of 15 per cent of intra-group trade in their total trade with the rest of the world, while Africa's RECs average is 4 per cent. Africa continues to have some of the highest trading costs of any region in the world, surpassed only by Eastern Europe and Central Asia (where the percentage of landlocked countries is higher). Trade barriers between African countries are often higher than those between African countries and the rest of the world.

5.   Africa's regional integration agenda also lacks a systematic scientific monitoring and evaluation mechanism that uses indicators to track progress at all levels: continental, regional and national. Nevertheless, AUC prepares an annual report on the status of integration in Africa, based on information provided by the RECs regarding progress made in implementing the integration agenda at regional and continental levels. There is currently no systematic monitoring and evaluation mechanism that uses objective and quantitative indicators to evaluate progress towards regional integration targets at the continental level. At the REC level, although a number of proposals have been put forward, periodic quantitative evaluation is not being implemented.

6.   In this context, the Sixth Joint Annual Meetings of the Economic Commission for Africa Conference of African Ministers of Finance, Planning and Economic Development and African Union Conference of Ministers of Economy and Finance, held in Abidjan, Côte d'Ivoire, in April 2013, and the Sixth Conference of African Ministers in charge of Integration, held in Port Louis, Mauritius, in May 2013, both called for enhanced monitoring and evaluation of Africa's integration. In response to these calls, AUC and ECA began developing a regional integration index with a view to monitoring more effectively the implementation of the regional integration agenda in Africa.

B.   Objectives of the Africa Regional Integration Index

7.   An index of African regional integration can become an indispensable reference for African Governments, enabling them to see how much progress they are making towards realizing the agreed vision of an integrated Africa, and in which areas of the integration agenda they might be lagging behind. By producing a single index, ECA and AUC will be able to summarize information from the many areas that regional integration covers into a single number. This will make it easier for Governments and the general public to gain an overview of the performance of their RECs; it will also help Governments to assess their overall progress compared with other countries in Africa.

In addition, the index will be constructed in such a way that Governments will be able to identify specific areas of integration in which they are performing less strongly. This will encourage and help Governments to take corrective action in areas where their progress is slow in comparison to other African countries.

C.   Expected outputs

8.   A set of indicators especially designed to measure progress in the different dimensions of Africa's integration on a regular basis, aggregated to form an Africa Regional Integration Index that will measure the overall progress of African countries and RECs towards regional integration.

9.   A decision by the AU-ECA Conference of Ministers, set to take place in Abuja at the end of March 2014, to institutionalize the Africa Regional Integration Index as a regular feature of the statutory reports and agendas of African Union summits and the RECs.

D.   Methodology

10.   There is no doubt that a regional integration index will help to assess progress in the implementation of the Abuja Treaty among all African member States.

11.   In order to design an Africa Regional Integration Index, it is necessary to adopt a definition of regional integration and then choose indicators that can best measure regional integration as defined. As outlined above, African leaders have reached a clear agreement on their vision and priorities for regional integration in Africa. The Africa Regional Integration Index will therefore base itself on the aspects of regional integration identified in the treaties and protocols entered into by African leaders, namely the Charter of the Organization of African Unity, the Treaty Establishing the African Economic Community (Abuja Treaty), the Constitutive Act of the African Union, and the treaties and protocols establishing the African RECs. Consequently, the methodology developed for the index focuses on measuring progress in the following key areas: liberalization of trade; free movement of persons, goods, services and capital; development of regional infrastructure; development of production capacities (with a focus on industries that are key for intra-African trade); and policy harmonization.

12.   The indicators are categorized slightly differently to the above list because of the need to group the indicators rationally based on the availability of data; as such, indicators are grouped into free movement of persons, trade, statistics, politics and governance, industry, energy and infrastructure. In order to capture how African leaders' priorities have evolved over time, the index also carefully takes into account the priorities agreed to under the Minimum Integration Programme, the comprehensive Action Plan for Boosting Intra-African Trade and the road map on the implementation of the Continental Free Trade Area.

13.   However, it is important to distinguish the aims of the index from tracking the implementation of current African Union policies on integration such as the Minimum Integration Programme. The index takes a results-oriented approach that, instead of measuring the implementation of all the aspects of the Minimum Integration Programme and other continental policies, focuses on whether policy in Africa is achieving the deeper goals that underlie Africa's regional integration vision as defined in the relevant treaties and protocols. It is also important to highlight that only indicators which have a clear implication for cross-border interactions between Africans have been included.

14.   In constructing the list of indicators, in addition to extensive work by its own staff, ECA worked with external experts. An expert group meeting was held on 25 and 26 November 2013 in Addis Ababa and ECA also organized subsequent consultations with these same experts. This process produced a list of indicators selected according to the following criteria: relevance to Africa's integration priorities (as defined above), and measurability and availability of data. Efforts were made to keep the number of indicators as low as possible and where two indicators were proposed that were very similar, it was decided to include just one of the two. In addition, dynamic indicators (that is ones likely to change over time) were prioritized.

15.   In addition to continentally-agreed integration frameworks, African leaders have also reached different integration agreements at REC level. These agreements can vary from REC to REC. In order to take these agreements into account, a separate REC-specific index will be produced, in addition to the continent-wide index detailed above, which will compare countries within each of the eight RECs recognized by the African Union in terms of progress made towards implementing REC-level integration agreements. Since different regional integration agreements have been reached within each REC and they may not be directly comparable with one another, the REC-level index will measure the individual progress of each REC against the terms of its REC-level agreements. It should be noted that the RECs are continuing to update their regional-level integration targets and, as a result, it may be necessary to add more indicators to the index in the future, meaning that it may be difficult to track progress over time.

16.   Annex II of the present document includes the proposed list of indicators for the continent-level index.

E.   Computing scores for countries, RECs and the continent

17.   The Africa Regional Integration Index will compute an overall score and ranking for each country in Africa, as well as aggregate scores for each of the RECs and for the continent as a whole. The reason for the inclusion of scores for individual countries is to enable Governments and citizens to judge their performance relative to other countries and to use this to assess whether or not they are adequately fulfilling their commitments regarding the integration process. Scoring individual countries will also allow judgements about relative performance in the different areas of integration included in the index; this means that Governments will know whether they could be doing better in a particular aspect of integration, and it is hoped this will spur further progress and a redoubling of efforts or rethinking of approach in that area. Scores for the RECs will be computed by taking the mean average of the scores for the countries in the REC. For some of the indicators, it will only be possible to give a score for the REC as a whole, rather than for the individual countries (for example, on whether a REC has adopted a protocol in a given area); this could be the case for both the continental and REC-level indexes. Where this is the case, each country in the REC will be allocated the same score. Similarly, in the continent-level index, if there are indicators that apply to the whole of Africa rather than to individual countries, all countries will be given the same score (that is the score for the continent as a whole) for these indicators.

F.   Scaling, weighting and aggregating the indicators

18.   As discussed above, the indicators to be included in the Africa Regional Integration Index will be based on continent-wide treaties and protocols on regional integration. These include a wide range of different policies that African countries are expected to implement. In order to construct the index, AUC and ECA must decide how to score progress in one indicator relative to progress in others when aggregating individual scores for each indicator into a single overall score. The preferred method chosen in this document is to use a simple average weighting of the indicators.

Under this method, the indicators will be scaled to make each indicator lie between zero and one and then a simple mean average of indicator scores will be taken.

19.   The selection of the simple average method was made on the basis that there can be diverse motivations for a particular integration goal and that any method of assigning weight to indicators based on a perception of their relative importance would likely be biased and arbitrary. A fuller discussion of the merits and demerits of various options for weighting the index is included in Annex I of the present document.

20.   Scaling of indicators between zero and one will be done by taking the raw value for that indicator, by subtracting the lowest raw value for that indicator for any country in the world in the year in question and then dividing this by the difference between the highest raw value for any country in the world and the lowest raw value for any country in the world in the year in question. Where values for countries outside of Africa would not be easily available, this will be restricted to countries within Africa. Where the indicator is a binary indicator (for example, whether the country in question has ratified a particular treaty), the score for that indicator will simply be either zero or one, depending on what actions the country has taken.

21.   While other methods for scaling of indicators have been used in other places (for example, changes relative to a base-year value, percentiles among the group included in the index, and so on.), it was felt that this method was the most appropriate for the Africa Regional Integration Index. This is because change relative to a base year would only measure how much Africa's integration has changed over time as a proportion of that base-year value, but would not give a comparison relative to what is possible. Similarly, focusing on countries' percentiles within Africa may fail to give a clear picture of how Africa as a whole is doing in integration as compared to the rest of the world, since it only compares African countries with one another. The approach taken here (scaling indicators relative to worldwide maximum and minimum values, or "the frontier") gives a sense not only of how much progress African countries have accomplished, but also how much further they could go in a particular dimension of integration.

G.   Dealing with incomplete data

22.   Where data is available for some African countries, but not all, for a given indicator, this should not pose problems for the index. The indicator in question can still be included and this will not distort the overall scores for countries for which there is missing data. For each country where data is unavailable for some indicators, that country's score will be determined based on the average of its scores for the other indicators. Using this method will mean that individual countries will not necessarily be advantaged or disadvantaged if there is no data for their country for a particular indicator; as such, it is submitted that it is justified to use indicators for which data is incomplete.

H.   Separating institutional and real integration

23.   It was also decided to separate "institutional" integration efforts (policies adopted, treaties signed, and so forth) from "real" integration (trade and investment flows, number of passengers carried by intra-African air transport, and so on) and to create separate indexes for each of these two dimensions. As a result, each country will have four overall scores – two for the continental-level index (one for institutional integration efforts and one for real integration) and two for the REC-level index.

I.   Computing scores for the various dimensions of integration

24.   In order to enable citizens and policymakers to see how their countries are performing in the various different dimensions of integration (free movement of persons, trade in goods and services, and so on), AUC and ECA will aggregate all of the indicators within a dimension to produce an overall score for each dimension. AUC and ECA will use the same method of scaling, weighting and aggregating the indicators as for the overall index. Further details of the integration dimensions employed are given in Annex II of the present document, which includes the list of proposed indicators for the index. Institutional and real integration will also be separated for each of these subcomponents.

J.   Data collection methods

25.   The production of the index will require an annual data collection exercise. The collection mechanism should avoid duplicating already existing data flows, which would result in an increased response burden on countries.

26.   It is therefore proposed that the data will be acquired in three stages:

(i)   For as many indicators as possible, data held by the African Centre for Statistics (ACS) will be used;

(ii)   Where ACS does not have data on a particular indicator, checks will be made to see whether the eight recognized RECs already publish this data;

(iii) Where neither (i) nor (ii) can provide all of the data needed for a given indicator, the RECs will be consulted to see whether they have the data for the indicator. If this is not possible, ECA will consult with Governments, through their national ACS focal points, to obtain the data.

27.   It may be necessary for staff to travel to the RECs in order to verify data provided, for instance by inspecting source documents for the data in question. Travelling to all countries to verify data provided by Governments may be too costly and time-consuming.

K.   Next steps

28.   Following the finalization of the methodology, the following steps would need to be taken to compute the index:

- Take into account comments from Governments on the proposed methodology for the index and revise the methodology as appropriate;

- Contact the RECs to request data that is not available from ACS and to check that the data for the index that ACS already has is up-to-date;

- Collect any remaining data that is not available from the RECs from Governments, compute scores for the index and produce accompanying analysis prior to publication.

Annex I. Discussion of various methods for weighting the Africa Regional Index

29.   The AUC and ECA considered a number of different methodologies for weighting the Africa Regional Integration Index before selecting its preferred option. The following section explores the merits and demerits of the methodologies that were not selected.

Methodology 1:   Weight the indicators according to the relative priority assigned by African Governments to the policies/outcomes that they are measuring

30.   While this approach has the advantage of being closely aligned with Africa's priorities, the limitation is that there is no quantifiable and comparable data on the relative priorities assigned to each of the policy areas under consideration. Although there is data in the Minimum Integration Programme document on the relative priorities assigned by the RECs to different integration areas, these questions, and the answers resulting from them, are very imprecise. The RECs defined which areas were considered priorities and which were considered 'urgent priorities', but there is no way of knowing from the survey how to weight the urgent priorities against other priorities. In addition, the survey did not ask RECs any more precise questions about how much they valued progress in a particular policy area other than whether it was a priority and whether it was an urgent priority. In terms of whether relative priorities could be used to weight the REC-level index, there may be a similar lack of data on the different priorities.

Methodology 2:   Consult experts on the relative weights to be assigned to the indicators

31.   The limits of this approach are that different experts may be consulted on different indicators, and these experts may use different concepts in assigning weight to the various indicators, leading to weights that are not comparable. This would mean that the system of aggregating the indicators would not have a theoretical justification. This would suggest that, before consulting experts on this subject, it would be advisable for AUC and ECA to come up with an overarching concept according to which experts could assign weights.

Methodology 3:   Weight the indicators according to their contribution to a broadly shared and measurable policy objective

32.   This approach has the advantage that it gives the opportunity to approximately weight all of the policies, where there is a link to a broad policy goal. The same goal should be chosen for all of the areas included in the index, to make sure that it is comparable. The contribution of each indicator towards this policy goal can be assessed using existing academic literature or statistical analysis carried out by AUC and ECA. While this will not capture all of the benefits of regional integration reforms for African countries, it still seems more precise than the methodology of basing the weighting on assigned priorities. A broadly shared and measurable policy goal that could be used to approximate the benefits of regional integration would be the level of gross national income (GNI). If this measure is adopted, individual indicators could be weighted according to how much they contribute to the GNI of the country to which the indicators apply; if there are spill over effects on the GNI of other countries, these could also be added. If the existing literature measures the impact on gross domestic product (GDP) rather than GNI, the impact on GDP could be used as an approximation of the impact on GNI.

33.   The disadvantage of this approach is that, given the indicators selected, it will likely be impossible to get data on the contribution of several of the indicators to GNI. In such cases, the best way to integrate them into the index would be to give to these indicators the average weight of the other indicators. This could be done by assigning a linear scoring system to that indicator and obtaining the equation for scoring the indicator through the following assumptions: the lowest possible level of that indicator would score zero, and the mean average level of that indicator (across all countries) would score the same as the mean average score across all the other indicators. However, this introduces a level of complexity that makes it difficult to follow the intuition behind the methodology and reduces the intuitive appeal of the index. This would mean that the index

would be less powerful as a communication tool and, ultimately, less successful in its mission of spurring further progress in regional integration.

Annex II. Proposed indicators for the Africa Regional Integration Index

Thematic area		Indicators	Levels
Free movement of persons	1	Number of African countries whose citizens are allowed to enter visa-free in one particular country.	Country
	2	Countries that have enacted laws on rights of residence and establishment.	Continental
	3	Countries issuing visa upon arrival.	
	4	Average time taken for African nationals to be issued with a visa by one particular country.	Country
	5	Cost of visas charged to African nationals by countries.	Country
	6	Average fees charged to students from other African countries as a percentage of fees charged to domestic students.	Country
Trade	1	Member States joining the African Export-Import Bank (Afreximbank) and a regional development bank.	Country
	2	Proportion of member States within the REC with which border operation hours are harmonized.	REC
	3	Average number of hours per day a country's border posts are open.	Country
	4	Number of non-tariff barriers removed (see methodology of Intra-African Trade Survey) by the country (if possible to get data, focus on vis-à-vis other African countries).	Country
	5	Proportion of member States in the REC/continent with which a single window is used.	Country
	6	Value of a country's trade with the rest of its REC, per capita.	Country
	7	Value of a country's trade with other African countries outside of its REC, per capita.	Country
	8	Countries using harmonized road transit axle, carriers licence and regional bonds.	
	9	Proportion of member States within the REC/continent in which one-stop border posts are used.	Country
	10	Value of trade in services.	
	11	Number of countries using ASYCUDA (Automated System for Customs Data) and other trade facilitation tools at borders.	Country
	12	Average time spent at each border before the clearing of goods.	Country
Statistics	1	Number of data bits produced by the REC for the five previous years in main statistical areas relevant to regional integration.	REC
	2	Number of countries that have ratified the African Charter on Statistics.	Continental
	3	Number of other African countries with which a country has harmonized its statistical practices.	Country

Thematic area		Indicators	Levels
	4	Dependence of the national statistics office on the Government.	Country
	5	Publication of regional/continental statistical year book in the last year, including indicators of regional integration.	REC
Political and governance	1	Countries implementing legislative action to end violence against women and girls.	Country
	2	Level of government intervention in judicial systems.	
	3	Peaceful transfer of power in the most recent elections.	Country
	4	Number of countries that have completed review of the African Peer Review Mechanism.	Continental
	5	Gender balance in regional governance bodies.	REC
Industry	1	Levels of intra-African trade.	REC
	2	Number of regional facilities for textile processing in each REC i.e. processing centres that source textiles for processing (including foreign-owned ones).	REC
	3	Level of investment in research and technology in member States.	Country
	4	Number of joint venture companies involving multiple African countries in a particular member State.	Country
	5	Number of patents registered by country.	Country
	6	Number of industrial zones within a country.	Country
	7	Intra-commodity trade (imports of raw materials to produce finished goods).	Country
	8	Existence of regional power pools.	Country
Investment	1	Level of restrictions on repatriation of earnings from business.	Country
	2	Number of countries with a foreign investment code having national treatment.	REC
	3	Percentage of foreign-owned companies (source: business survey). Separate indicators for those owned by nationals of other countries in the REC and those owned by nationals of other countries in Africa.	Country
	4	Mainstreaming of the protocol on the establishment of the African Investment Bank into national strategies, by country.	Country
	5	Number of days taken to process international business licences.	Country
	6	Average cost of setting up a business for a foreigner.	
	7	Value of cross-border financial transactions with other African countries.	Country
Energy	1	Value of annual investment in oil and gas pipelines per capita, by country.	Country
	2	Value of imports and exports of energy products going	Country

Thematic area		Indicators	Levels
		to the REC/rest of Africa. Multiple indicators based on dimensions: import/export, destination.	
	3	Value of spending on regional energy projects within the country's power pool, where applicable.	Country
Infrastructure	1	Total length of sections of the Trans-African Highways network within a country's territory that fail to conform to design standards.	Country
	2	Use of standard gauges at ports by member States.	Country
	3	Number of other African countries with which the country has flight connections.	Country
	4	Number of passengers carried by air transport (if possible: number carried on intra-African flights) by country.	Country
	5	Registered carrier departures within Africa (not necessarily the same as number of flights), by country.	Country
	6	Value of cargo shipped by air to or from the country.	Country
	7	Availability of coastal shipping services and inland container depots, by country.	
	8	Rail lines/roads connected with other neighbouring countries (total number of kilometres), by country.	Country
	9	Mean average number of checkpoints along each country's transport corridors.	Country
	10	Number of subscribers with mobile phone companies that allow intra-African roaming.	Country