

Economic Growth and the Pursuit of Inequality Reduction in Africa

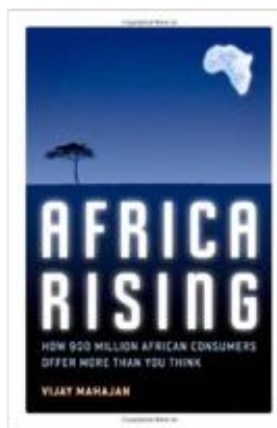
Haroon Borat
Development Policy Research Unit
School of Economics
University of Cape Town
haroon.bhorat@uct.ac.za

Expert Group Meeting and Policy Forum on “Poverty, inequality and jobs in
Africa”

6-7 June 2018 at UNCC (CR4)
UNECA, Addis Ababa, Ethiopia

Outline

- Background: Africa Rising?
- Growth, Poverty and Inequality Interactions in Africa
 - Patterns of Poverty in Africa
 - Inequality in Africa: Emerging Trends
 - The African Employment Challenge
- Emerging Barriers to Long-Run Growth in Africa
 - Resource-Led Growth
 - The African Manufacturing Malaise
 - Informality in Africa: Early Results
- Conclusions



Africa Rising?

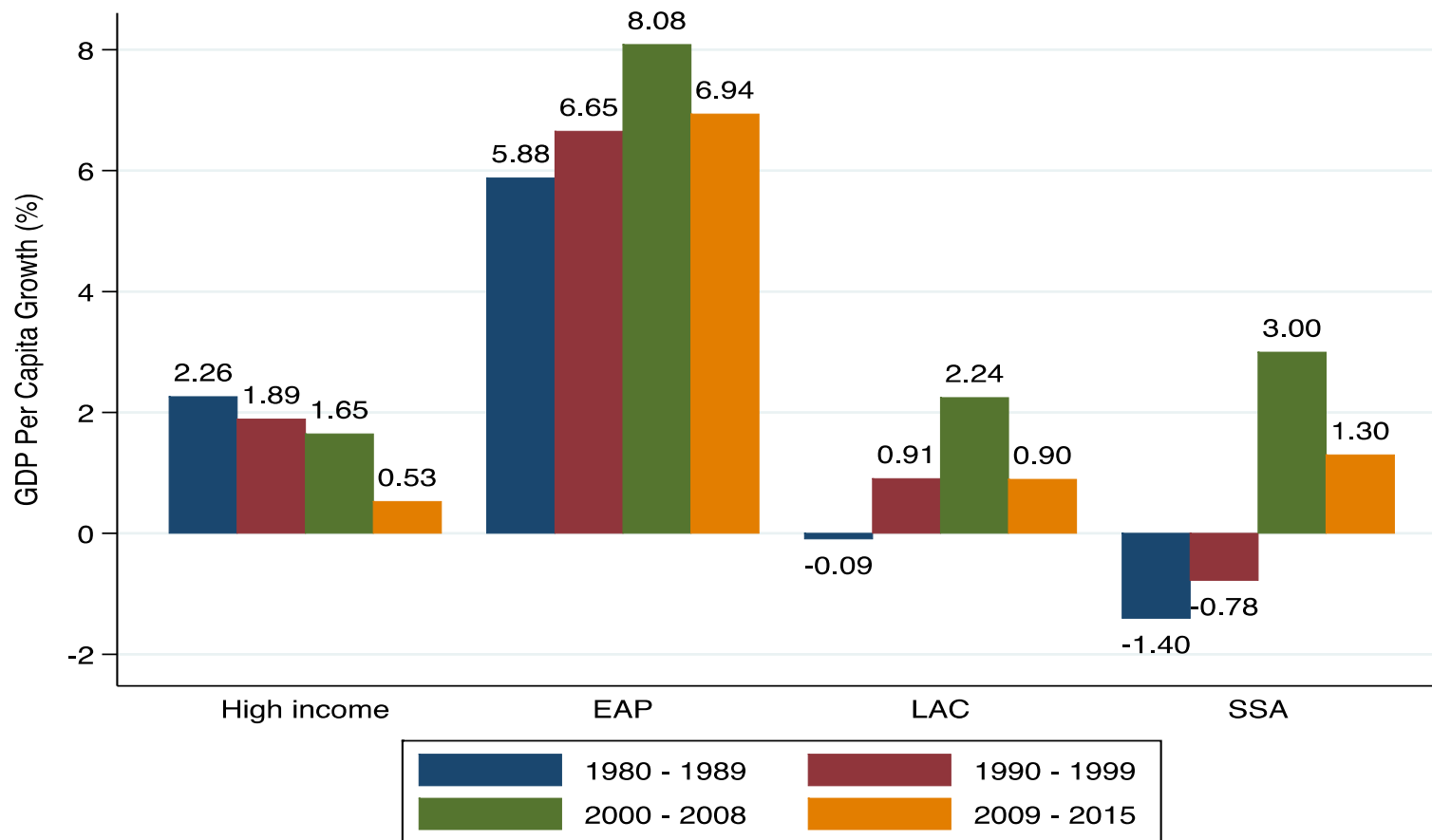
Background

- Move from being a case of ‘regional economic delinquency’, to significant global optimism.
- Global sentiment around SSA has changed significantly.
- Current dominant global view: Africa is last of great untapped markets, ripe for rapid growth and development.
- Supported by the Data: 6 of the world’s 10 fastest growing economies during 2001-2010, were in Sub-Saharan Africa.*

* The countries are Angola, Nigeria, Ethiopia, Chad, Mozambique, and Rwanda

Africa Rising?

GDP per Capita by Region



Source: Authors' own calculations using World Development Indicators (2017).

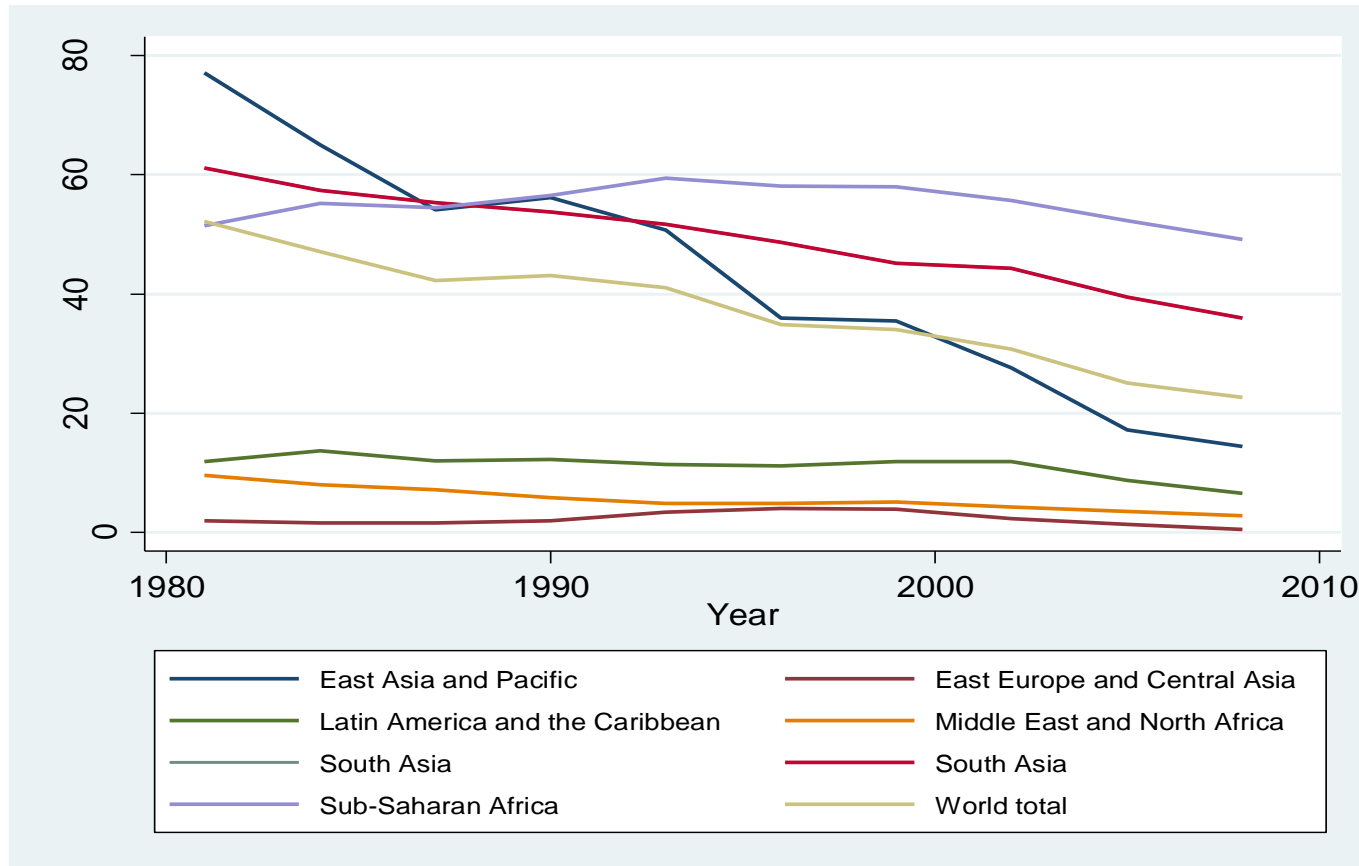
Notes: EAP: East Asia and Pacific (excluding high-income countries); LAC: Latin America and the Caribbean (excluding high-income countries); Sub-Saharan Africa (excluding high-income countries).



Growth, Poverty & Inequality Interactions in Africa

Patterns of Poverty in Africa:

Poverty Headcount Ratio, By World Region

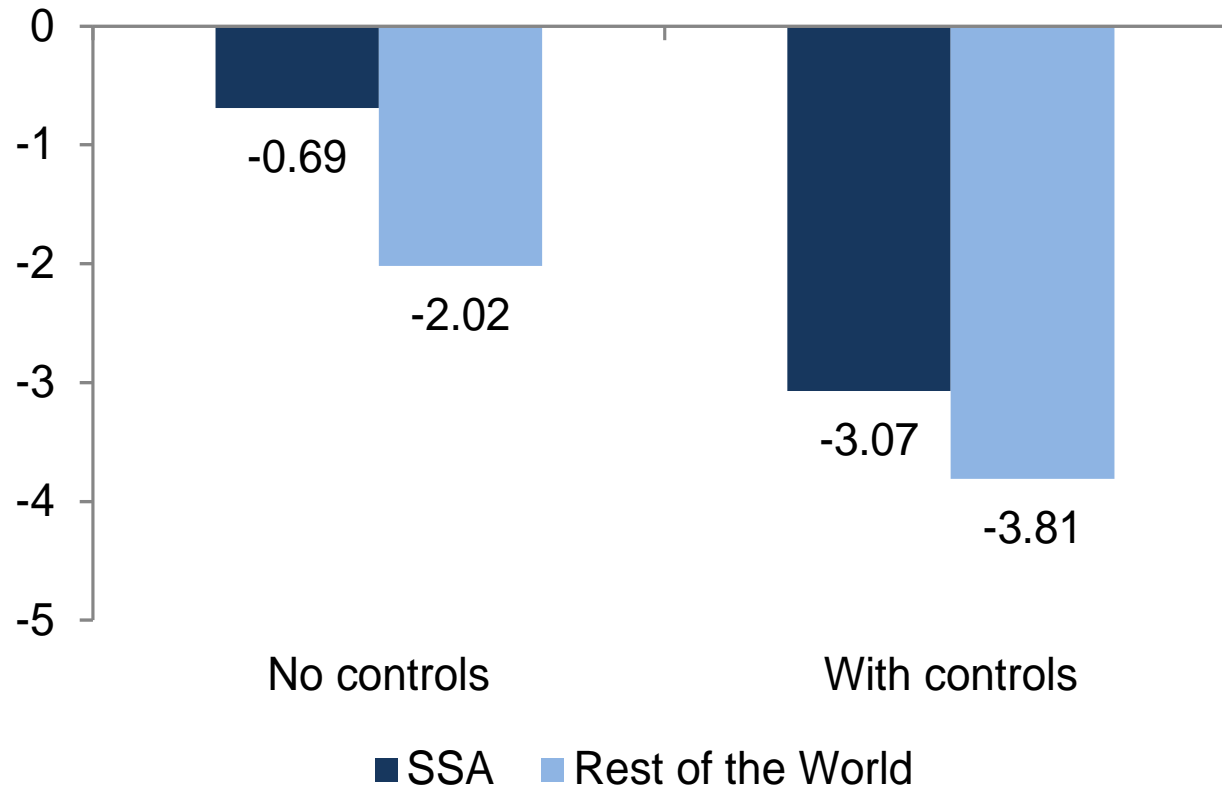


- Extreme poverty has fallen in the region since the 90s, but almost 50% of SSA's population continue to live below the poverty line.
- Share in extreme poverty in Africa, except for North Africa, at 39 - 46% of popn.: Higher than poverty rates of all other developing regions.
- **DRC, Ethiopia, Nigeria & Tanzania constitute almost 50% of Africa's poor.**

Source: PovcalNet (World Bank), 2014 based on Borat et al (2015).

Patterns of Poverty In Africa:

The Growth Elasticity of Poverty, Africa & RoW



- The estimated growth elasticity of poverty in the two decades since 1990 in SSA is -0.7, which implies that a 1% growth in consumption is estimated to reduce poverty by 0.7%. For the rest of the world (excl. China), this elasticity is substantially higher at -2.
- The impact of growth on poverty reduction is lower when initial inequality and mineral resource dependence are higher.

Source: World Bank (2013b) based on Christiaensen, Chuhan-Pole and Sanoh (2013)

Note: Controls include initial consumption, inequality and an indicator for a natural resource share >5% of GDP. Country fixed effects are controlled for in all results.

Inequality in Africa: Emerging Trends

Inequality in Africa vs. Other Developing Economies

Gini	Africa		Other developing countries		Difference
Average	0.43	(8.52)	0.39	(8.54)	0.04**
Median	0.41		0.38		
Min	0.31		0.25		
	(Egypt)		(Ukraine)		
Max	0.65		0.52 ^a		
	(South Africa)		(Haiti)		
Ratio of incomes: Top 20% / Bottom 20%	10.18		8.91		
Average Gini					
Low-income	0.42	(7.66)	0.39	(11.84)	0.03
Lower-middle-income	0.44	(8.31)	0.40	(8.55)	0.05*
Upper-middle income	0.46	(11.2)	0.40	(8.29)	0.06*

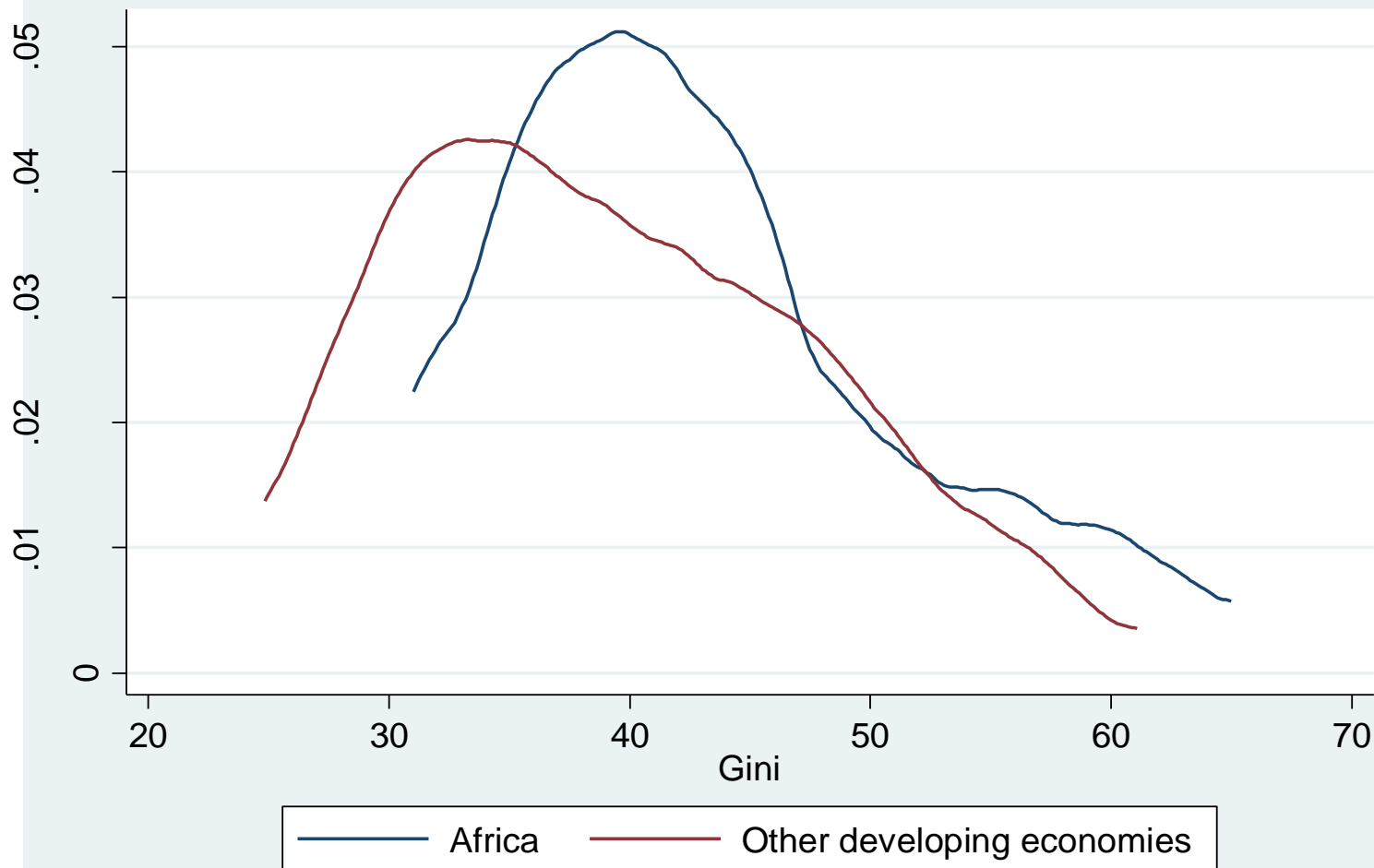
- The average Gini coefficient for Africa is 0.43, which is 1.1 times the coefficient for the rest of the developing world at 0.39.
- On average, the top 20% of earners in Africa have an income that is over 10 times that of the bottom 20%.

Source: WIDER Inequality Database, 2014; World Development Indicators, 2014

Notes: 1. Other Developing Economies have been chosen according to the World Bank classification of a developing economy, which includes a range of countries from Latin America, Asia and Eastern Europe. 2. The latest available data was used for each country (after 2000). 3. Standard deviations are shown in parenthesis. 4. ^a The small island nation of the Federated States of Micronesia has the highest Gini coefficient 0.61 in the 'other developing countries' category, which has been excluded here for comparability purposes. 5. ** significant at the 5% level, * significant at the 10% level. 6. The small sample size of other developing countries in the low income group makes determining statistical significance difficult.

Inequality in Africa: Emerging Trends

Distribution of Gini Coefficients: Africa and Other Developing Economies



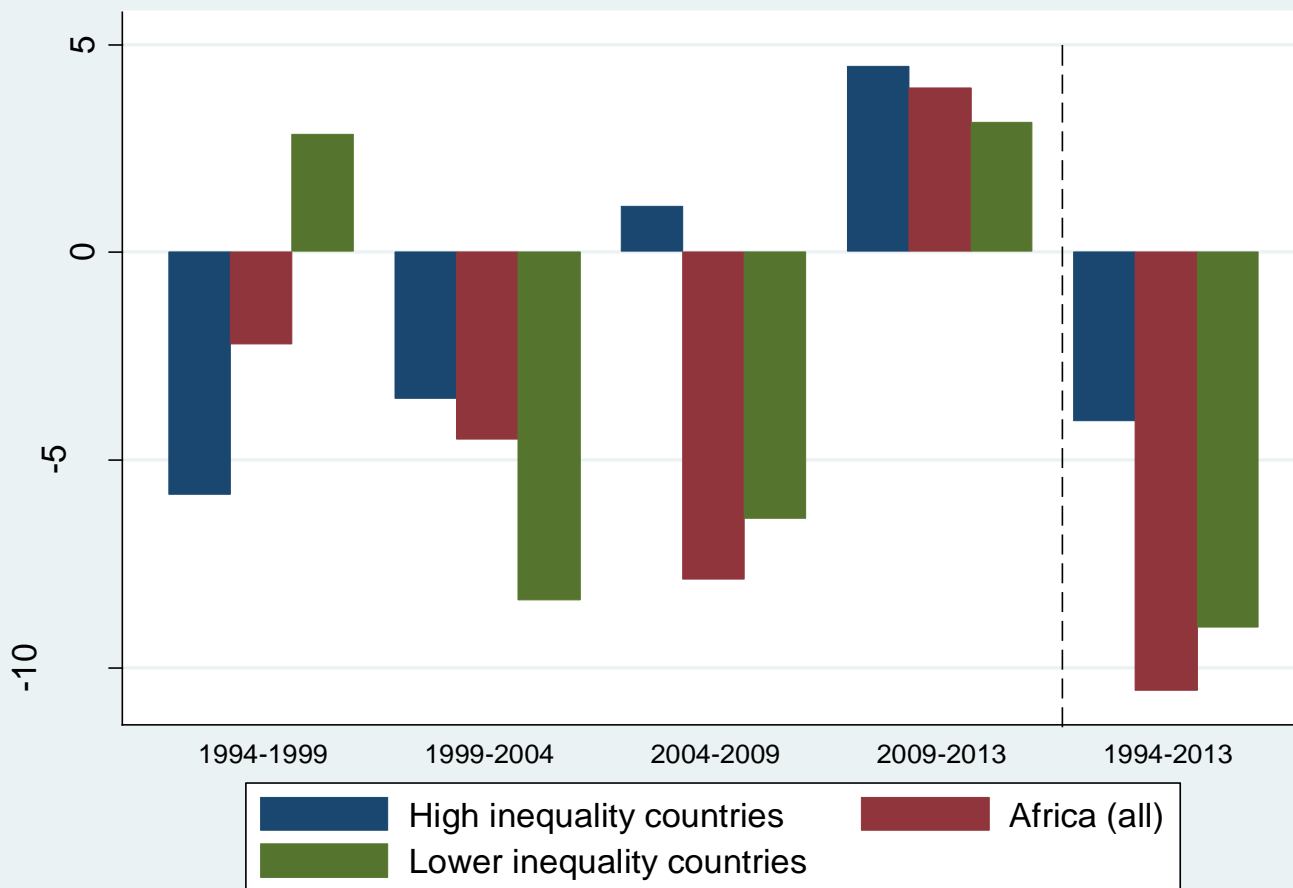
- An outstanding feature of this graph is the prevalence of extreme inequality in Africa, which is not observed in other developing economies.
- 7 outlier African economies that have a Gini coefficient of above 0.55: Angola, Central African Republic, Botswana, Zambia, Namibia, Comoros and South Africa.

Source: WIDER Inequality Database, 2014; World Development Indicators, 2014; Own graph

Notes: 1. The latest available data was used for each country (after 2000). 2. Kolmogorov-Smirnov tests for equality of distributions are rejected at the 5% level.

Inequality in Africa: Emerging Trends

Rates of Change in Inequality in Africa, 1994-2013



- After 1999, the overall decline in inequality in Africa has been driven disproportionately by the decline in inequality of the ‘low inequality’ sub-sample of African economies.
- The cohort of ‘high inequality’ African economies have jointly served to restrict the aggregate decline in African inequality.

Source: WIID, 2014; World Development Indicators, 2014; Own graph

Notes: 1. For the Africa average, the sample sizes per period are as follows: 27 (1990-1994), 24 (1995-1999), 38 (2000-2004), 28 (2005-2009), 25 (2010-2013). 2. The High Inequality countries are: Angola, Botswana, Comoros, Central African Republic, Namibia, South Africa, Zambia. The sample sizes per period are as follows: 5 (1990-1994), 2 (1995-1999), 7 (2000-2004), 3 (2005-2009), 3 (2010-2013).

Inequality in Africa: Emerging Trends

Five Key Results

- Africa: Higher mean and median level of inequality when compared with the rest of the developing regions.
- Presence of 'African Outliers': 7 economies exhibiting extremely high levels of inequality. Excluding the African Outliers – Africa's level of inequality approximates those of other developing economies.
- Inequality has on average declined in Africa, driven by economies not highly unequal.
- No obvious predictive trend around nature and pattern of African inequality over time.
- High inequality African economies: Stronger relationship between economic growth and inequality.

The African Employment Challenge

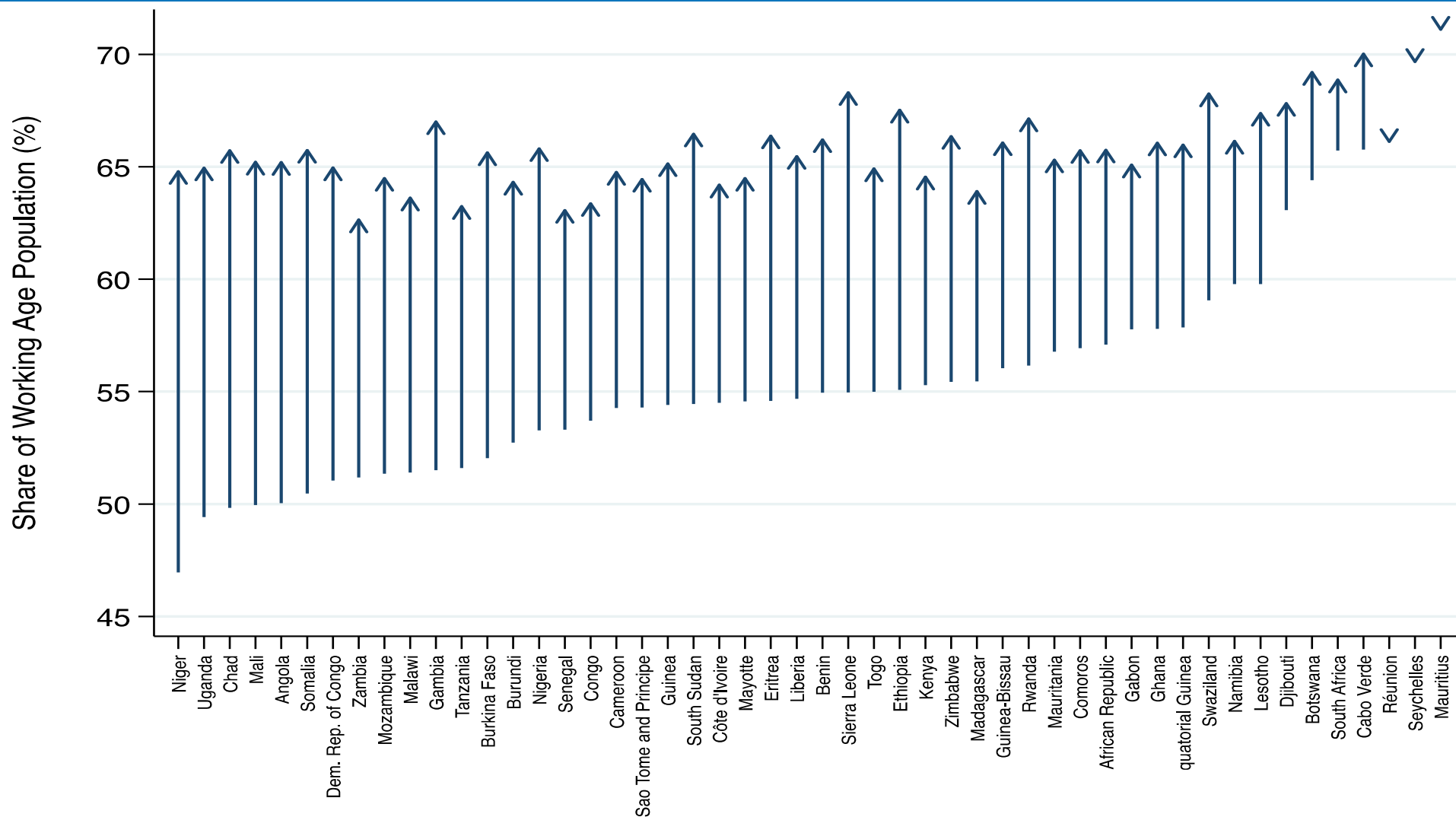
Population Projections, World and Sub-Saharan Africa: 2015-2100

	Total Population (Billion)			Working Age Population (Billion)		
	2015	2100	% Change	2015	2100	% Change
SSA	1.0	3.9	291.62	0.5	2.5	400.00
World	7.3	11.2	53.42	4.8	6.7	39.58
SSA Proportion (%)	13.7%	34.8%	-	10.4%	37.3%	-

Source: Authors' calculations using the UN World Population Database.

The African Employment Challenge

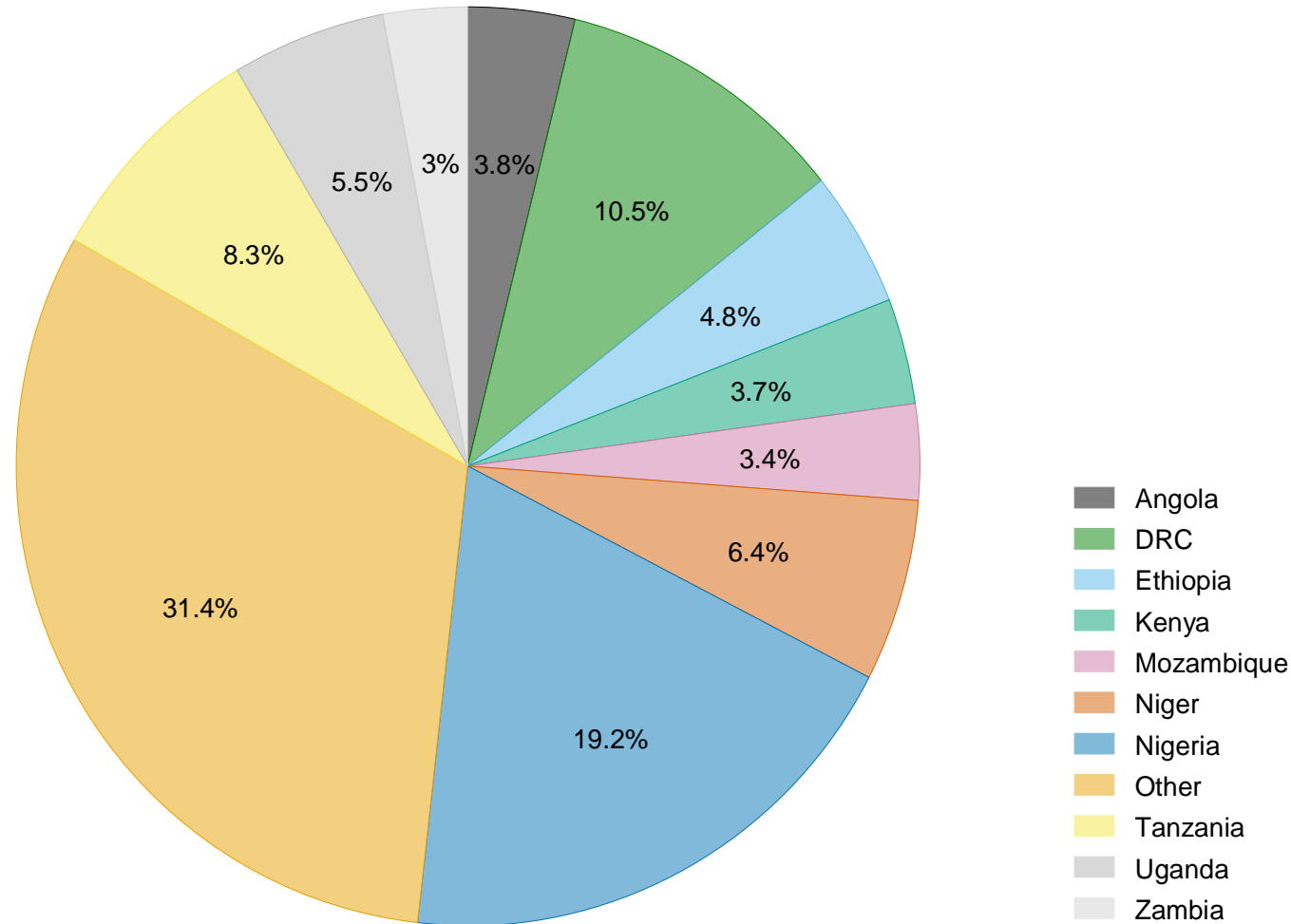
Current and Peak Share of the Working Age Population in Sub-Saharan Africa, 2015-2100



Source: Authors' calculations using the UN World Population Database.

The African Employment Challenge

Share of Sub-Saharan African Population Growth by Country, 2015-2100



Source: Authors' calculations using the UN World Population database.

The African Employment Challenge

Key Demographic and WAP Messages

- Nearly 40% of the world's working age population is expected to reside in Africa by 2100 – up from 10% in 2015.
- Considerable heterogeneity in pace of population growth and stage of demographic transition.
- Ten SSA countries will account for nearly 70% of the population growth in the region:
 - *Nigeria*: An increase of 570 million, accounting for nearly 20% of all SSA population growth.
 - *DRC*: Will see its population increase by 311 million or 10.5% of all SSA growth.
 - *Tanzania*: Experience six-fold increase in the size of its population from 53 to 299 million.

The African Employment Challenge

The Global Labour Market at a Glance, 2010 (millions)

Region	Wage Employ.	Self-Empl. Total	of which: Self-Empl. Agric.	of which: Self-Empl. Non-Agric.	Total Empl.	Unempl.	Labor Force
SSA	61.00	236.00	181.00	55.00	297.00	23.00	320.00
	(0.19)	(0.74)	(0.56)	(0.17)	(0.93)	(0.07)	(1.00)
Other Non-OECD	1 118.00	1 068.00	584.00	484.00	2 186.00	134.00	2 320.00
	(0.48)	(0.46)	(0.25)	(0.21)	(0.94)	(0.06)	(1.00)
OECD	333.00	50.00	7.00	43.00	383.00	32.00	415.00
	(0.80)	(0.12)	(0.02)	(0.10)	(0.92)	(0.08)	(1.00)
Global total	1 512	1 354	772.00	581.00	2 866	189.00	3 055
	(0.50)	(0.44)	(0.25)	(0.19)	(0.94)	(0.06)	(1.00)

Source: (Bhorat et al, 2015)

Notes: 1. The data is based on the World Bank's International Income Distribution Database (I2D2) dataset, which is a harmonised set of household and labor force surveys drawn from a multitude of countries.

2. Shares of regional labor force estimates in parenthesis.

The African Employment Challenge

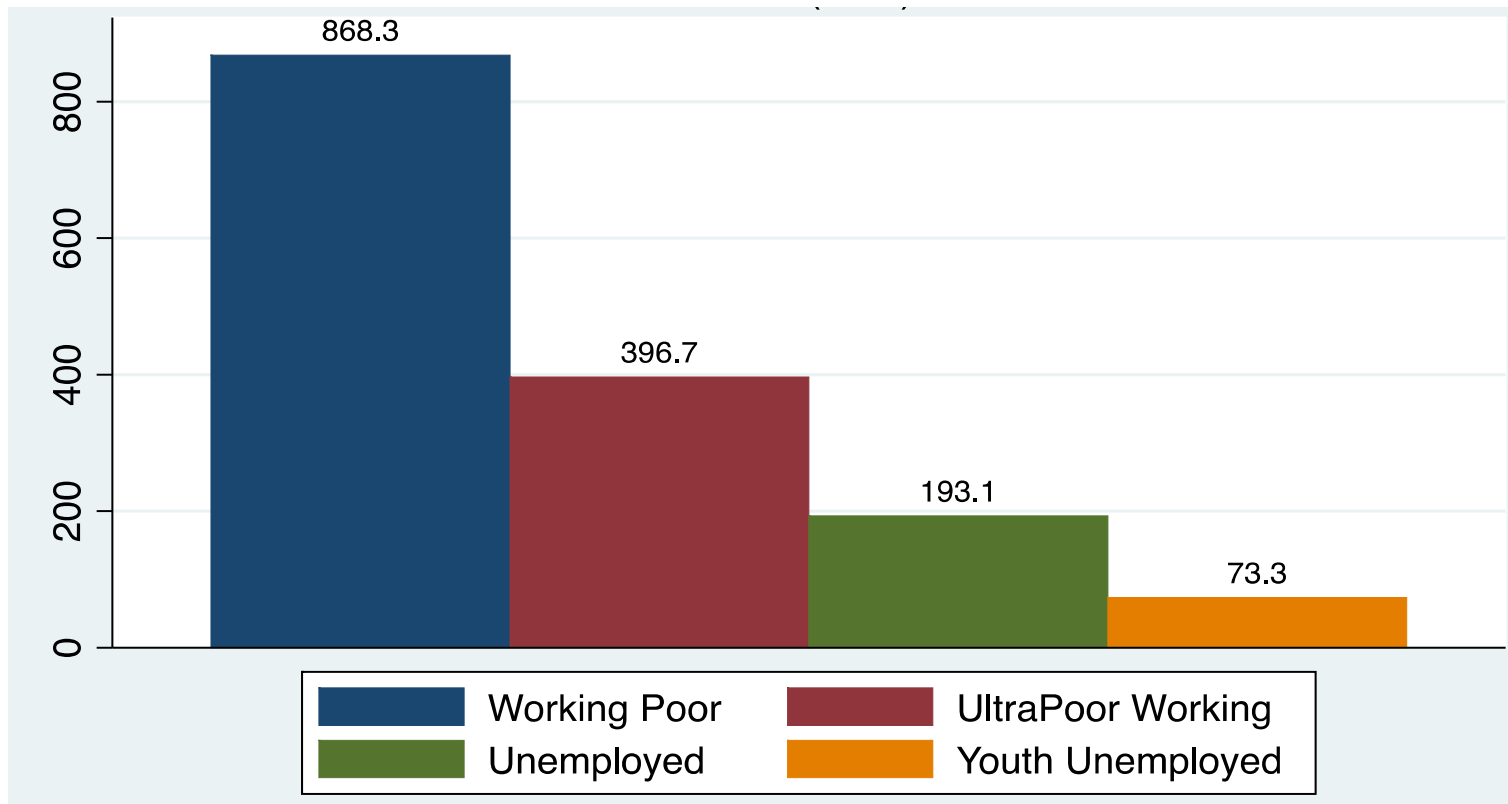
Employment in SSA: A Comparative Exercise

- 3 billion individuals in global labour force: **Only half in wage employment.**
- 297 million employed individuals in SSA: **Only 21% in wage employment.**
- Dominant source of employment in SSA is **self-employment in the agricultural sector.**
- In SSA, **77% of self-employed individuals are employed in agriculture** [59% in non-OECD countries; global average of 60%].
- Agricultural sector central element of debate around job creation and poverty alleviation in SSA.
- SSA has an **average unemployment rate of 7%**, compared to non-OECD and global averages of 6%, with SSA comprising 15% of the non-OECD's 157 million unemployed individuals.
- This average, however, hides much of the country variation.

The African Employment Challenge

The Global Working Poor and the Global Unemployed

Vulnerable Workers in the Global Labour Force, 2011 ('000)



Source: ILO (2013).

Notes: The Ultra-Poor Working (working poor): employed indiv. in households consuming less than \$1.25 (\$2) per day.

The African Employment Challenge

Working Poor by Regions (\$2 a day, 2000-11)

Both sexes	Number of people (millions)				Share in total employment (%)			
	2000	2007	2010	2011	2000	2007	2010	2011
World	1197.6	978.3	916.6	911.5	45.9	33.1	30.2	29.5
Central and South-Eastern Europe (non-EU) and CIS	19.3	8.8	7.7	7.4	13	5.5	4.8	4.5
East Asia	396	206.7	157.1	148.9	53.2	25.6	19.1	18
South-East Asia and the Pacific	146.5	105.3	96.1	95.7	60.5	38.3	33	32.3
South Asia	415.5	425.5	421.1	421.6	81.2	70.8	68.7	67.3
Latin America and the Caribbean	31.3	25.5	23.7	23.3	15.1	10.4	9.1	8.8
Middle East	3.4	4.4	4.1	4.4	8.3	8	6.8	7
North Africa	15.4	16.7	16.8	17.3	32.7	28.4	26.5	27.2
Sub-Saharan Africa	170.2	185.3	189.9	193	75.7	67	63.2	62.4

- SSA has had consistently high rate of vulnerable employment over last decade, ranging between 81% and 77%, and marginally second only to South Asia (ILO, 2012).
- Furthermore, number of working poor in SSA – defined as those earning less than \$2 a day – currently at **193 million people**, constitutes almost two-thirds of total employed and approximately 8 times the number of unemployed in the region.

Source: ILO (2012) and (Bhorat et al , 2015)

Notes: 1. The ILO definition of the working poor classifies those individuals working in households receiving an income of less than US\$2 a day, as the 'working poor'. 2. 2011 are preliminary estimates.



Emerging Barriers to Long-Run Growth in Africa

Emerging Barriers to Long-Run Growth in Africa

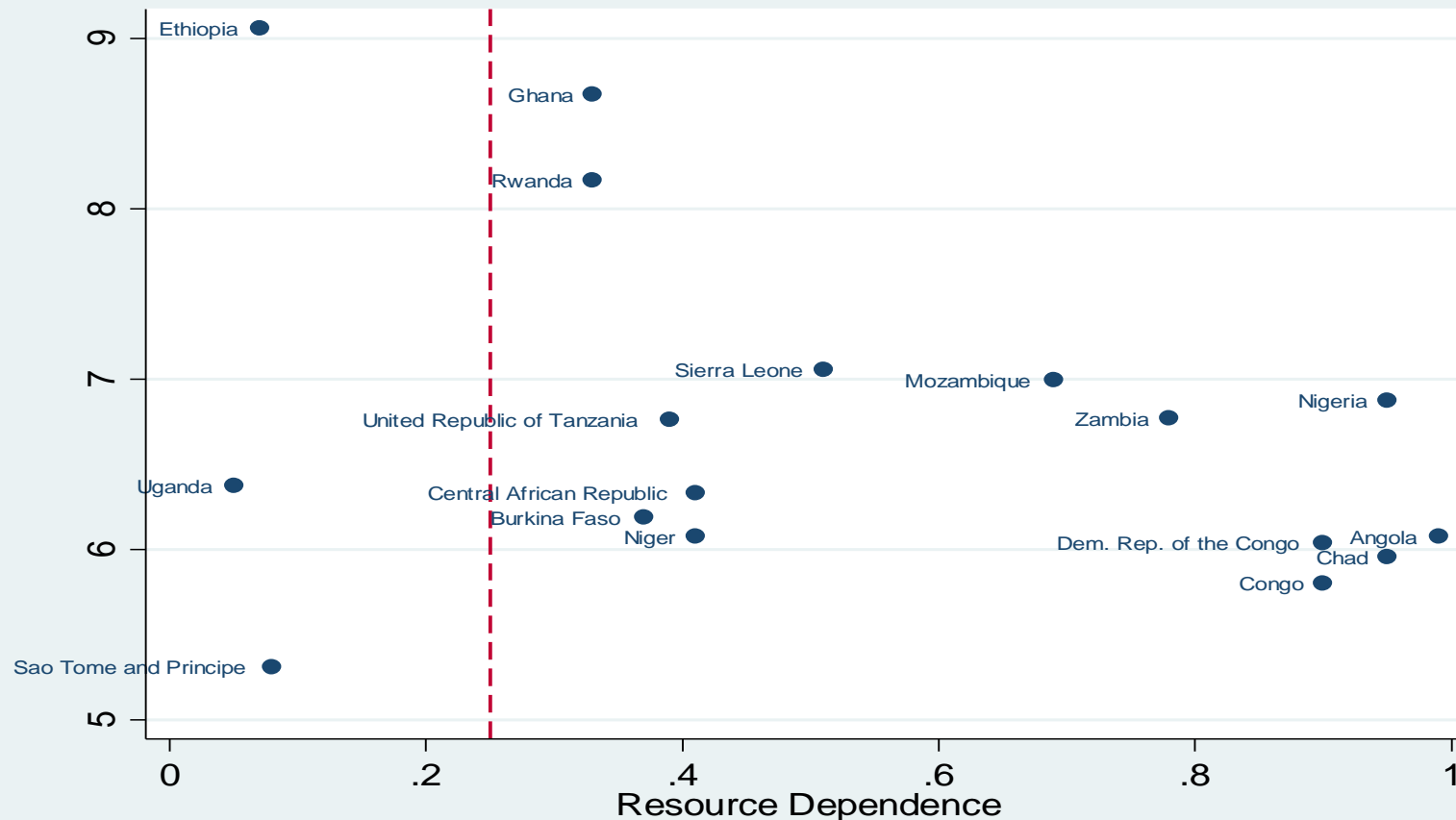
- Three major common themes which in-part, characterise nature of growth challenges and constraints in Africa.
- If unchecked, could reinforce pattern of low growth and inelastic poverty-reducing impact.
- Two themes explored here:
 - A Resource-led Growth Path
 - The African Manufacturing Malaise



A Resource-led Growth Path

A Resource-Led Growth Path in Africa

GDP Growth and Level of Resource Dependence, 2008-2012: The Group of 17 'African Lions'



Source: WDI, 2014, UNCTAD (2014), Own Calculations.

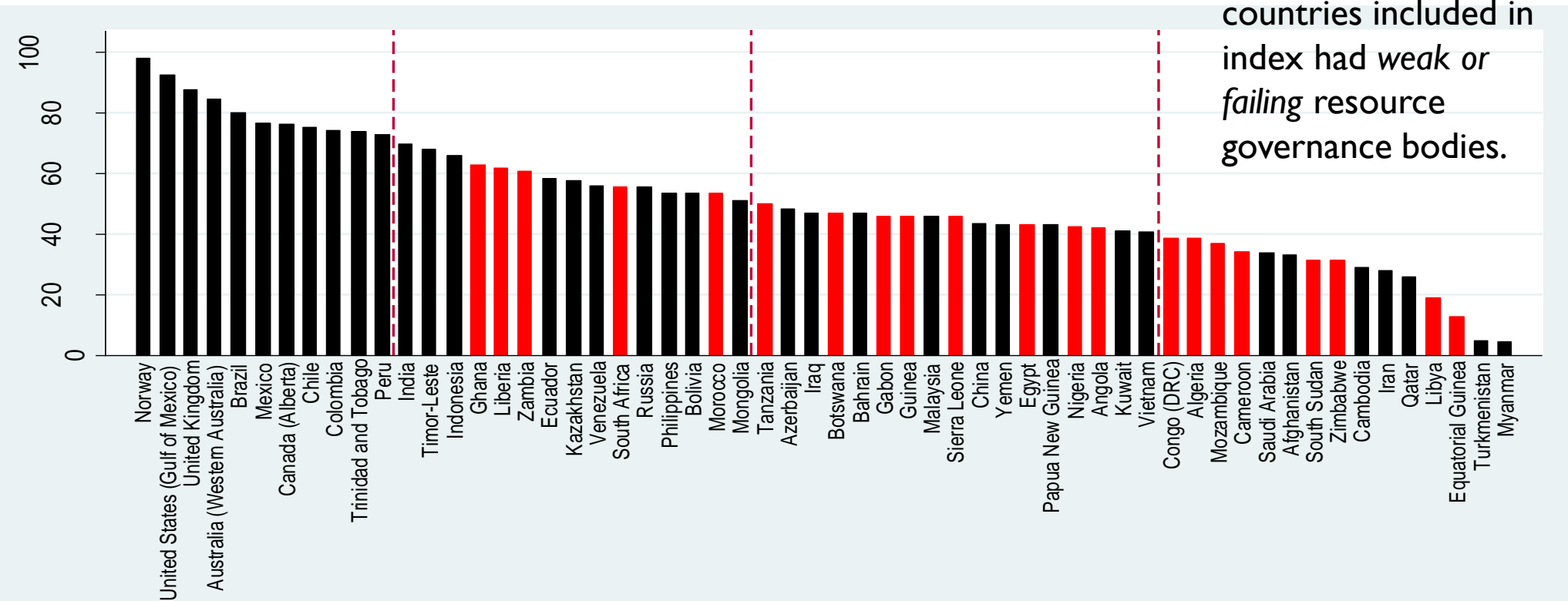
- In period 2008-2013: 17 African Economies have grown at over 5%.
- *14 of these 17** 'African Lions' are classified as resource-dependent.

* The 17 countries are: Ethiopia, Uganda, São Tomé and Príncipe, Ghana, Rwanda, Burkina Faso, Tanzania, CAR, Niger, Sierra Leone, Mozambique, Zambia, DRC, Congo, Chad, Angola, and Nigeria.

A Resource-Led Growth Path in Africa: The Governance Channel

Resource Governance Index: Composite Scores for Developed and Developing Countries, 2013

- Over 75% of African countries included in index had *weak or failing* resource governance bodies.



A Resource-Led Growth Path in Africa: The Governance Channel

Resource Dependence and Political Rights in Africa

Resource-Dependence	Political Rights Score (from 1 to 7, 1 being the best score)
Highly Dependent (80-100%): 13 countries	5.62
Dependent (50-79%): 5 countries	4.20
Weakly Dependent (25-49%): 17 countries	3.88
Not dependent (<25%): 20 countries	4.58
Total Average	4.58

Source: Own calculations, Freedom House's Freedom in the World 2014 report; Note: Based on a sample of 54 African countries

A Resource-Led Growth Path in Africa: The Investment and Labour Market Channel

- High initial capital cost of entry into the natural resources markets can also lend itself to monopolistic or oligopolistic market structures:
 - Excess profit from higher prices (transferred from consumers to the monopoly) may result in inequitable distribution of income.
 - Monopoly control can also provide firm with economic conditions for ensuring greater political influence.
- Dutch Disease arises through appreciation of the currency:
 - Serves to disadvantage employment-intensive and export-oriented sectors such as agriculture and manufacturing.
- Poor Employment Absorption:
 - Relatively few jobs created within these extractive industries.
 - Jobs created are often higher-skilled jobs, imported into these economies.
- Downstream Industrial Policy not pursued e.g. CAR & Cote d'Ivoire:
Manufacturing as % of GDP declined by 7 and 4 perc. points, 2007-2011.

A Resource-Led Growth Path in Africa: Some Conclusions

- Resource-Dependence defines the recent growth trajectory of many of Africa's high performing economies.
- This has not been inequality-reducing.
- The RD growth trajectory provides for a number of potential channels which are directly and indirectly inequality inducing.
- A more explicit strategy by domestic governments is required, in order to minimize the inequality-increasing effects of a resource-dependent growth path.



The African Manufacturing Malaise

The African Manufacturing Malaise

Sectoral Composition of Growth in Africa, by Region: 1980-2000s

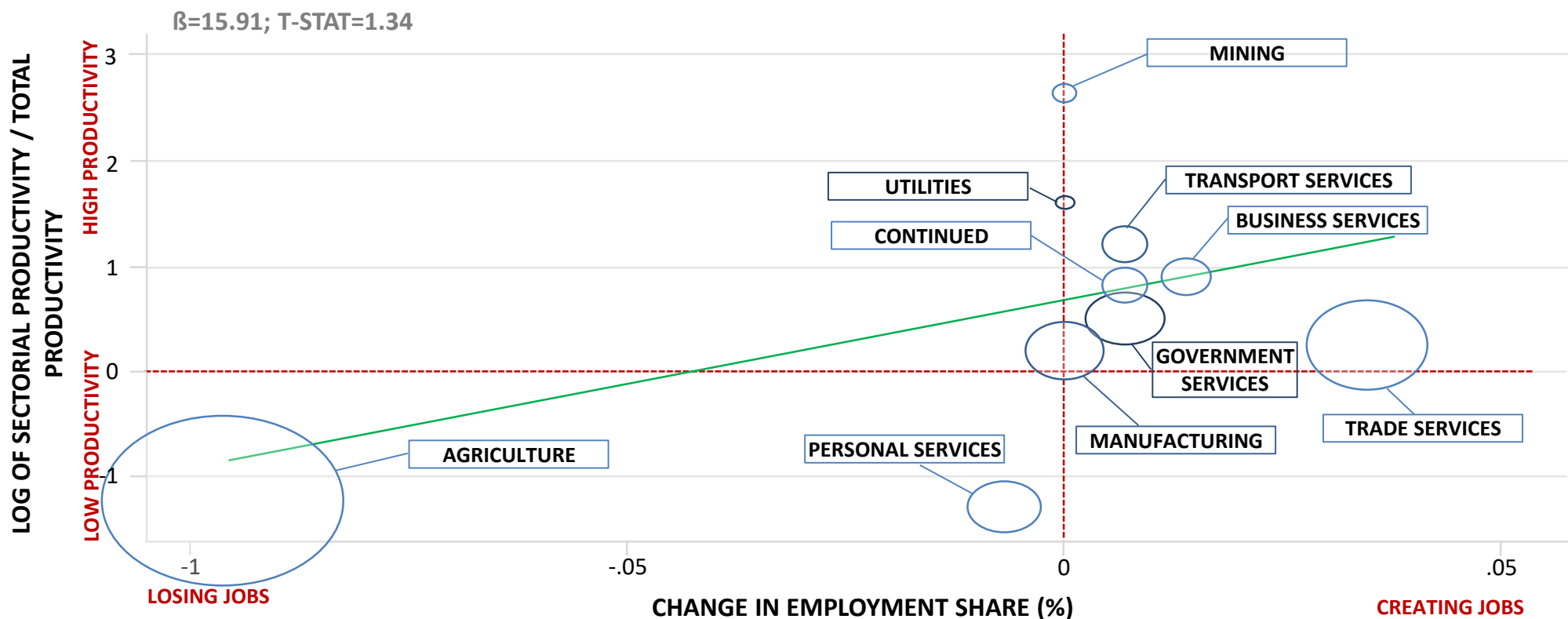
Share of GDP	1980s	1990s	2000s	1980s-2000s % Change
Agriculture	27.4	27.5	23.4	-4.0
Industry	26.8	26.7	28.1	1.3
<i>Of which:</i>				
Manufacturing	11.3	11.9	10.6	-0.8
Services	45.8	45.8	48.2	2.4

Source: World Development Indicators (WDI) 2015 and own calculations.

Notes: 1. Columns 3, 4 and 5 represent the average sector share of GDP for the 1980s (1980-1989), the 1990s (1990-1999) and 2000s (2000-2013), respectively. 2. Due to missing data, not all African countries are included in calculations. This is done in order to provide a consistent set of countries over time and so as not to bias the sector shares by the inclusion of new countries as data becomes available. The following countries are excluded: Angola, Cote D'Ivoire, Eritrea, Equatorial Guinea, Gambia, Guinea-Bissau, Libya, Liberia, Mozambique, Somalia, South Sudan, Sao Tome & Principe, and Tanzania. 3. Industry corresponds to ISIC divisions 10-45 and includes manufacturing (ISIC divisions 15-37). It comprises value added in mining, manufacturing (also reported as a separate subgroup), construction, electricity, water, and gas.

The African Manufacturing Malaise

Sectoral Productivity and Employment Shifts, 1975-2010

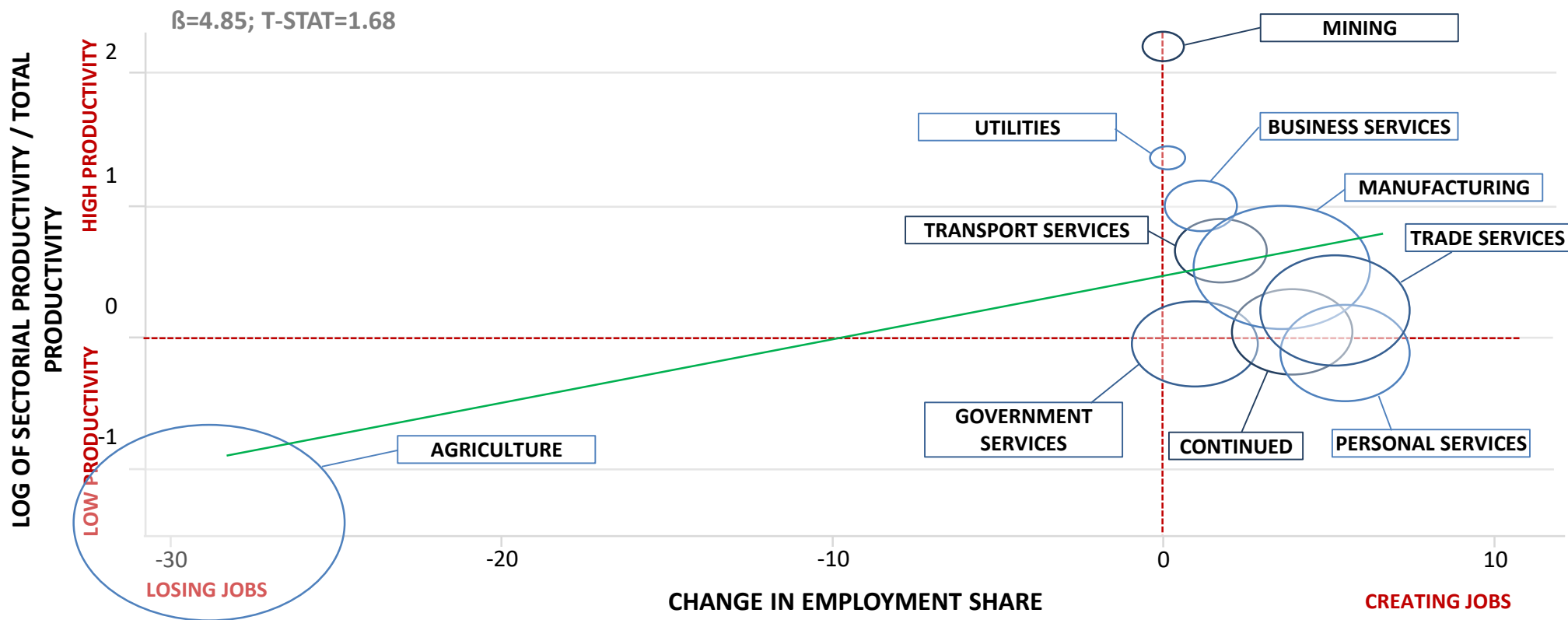


Source: Own calculations using Groningen Growth and Development Centre 10-sector database (Timmer et al., 2014)

Notes: 1. African countries included: Botswana, Ethiopia, Ghana, Kenya, Malawi, Mauritius, Nigeria, Senegal, South Africa, Tanzania and Zambia. 2. AGR = Agriculture; MIN = Mining; MAN = Manufacturing; UTI = Utilities; CONT = Construction; WRT = Trade Services; TRS = Transport Services; BUS = Business Services; GOS = Government Services; PES = Personal Services.

The African Manufacturing Malaise

Sectoral Productivity and Employment Shifts in Asia, 1975-2010



Source: Own calculations using Groningen Growth and Development Centre 10-sector database (Timmer et al., 2014)

Notes: 1. AGR = Agriculture; MIN = Mining; MAN = Manufacturing; UTI = Utilities; CONT = Construction; WRT = Trade Services; TRS = Transport Services; BUS = Business Services; GOS = Government Services; PES = Personal Services. 2. The estimated regression line, measuring the relationship between productivity and changes in employment share by sector, is not statistically significant.

The African Manufacturing Malaise

Understanding and Measuring Economic Complexity

- **Economic Complexity** of Hausmann & Klinger (2006); Hidalgo et al. (2007); Hausmann & Hidalgo (2011).
- Economic Complexity and Economic Growth:
 - Building capabilities & implicit knowledge in production of goods leads, through adjacent product spaces, to increased economic complexity.
 - Increased economic complexity strongly associated with higher GDP per capita.
 - Building economic complexity key to pursuit of inclusive growth.
- Economic complexity viewed as equivalent to other determinants of growth such as HK, institutions etc.
- Caveats and Reminders:
 - Services Exports are excluded in the Measure of Economic Complexity, but strong positive correlation between ECI in goods and ECI in services.
 - **Agriculture is included**, so this is a narrative about building economic complexity in manufacturing and agriculture.

The African Manufacturing Malaise

Understanding and Measuring Economic Complexity



Holland

- X-Ray Machines
- Pharmaceuticals
- Creams
- Cheese
- Frozen Fish



Argentina

- Creams
- Cheese
- Frozen Fish



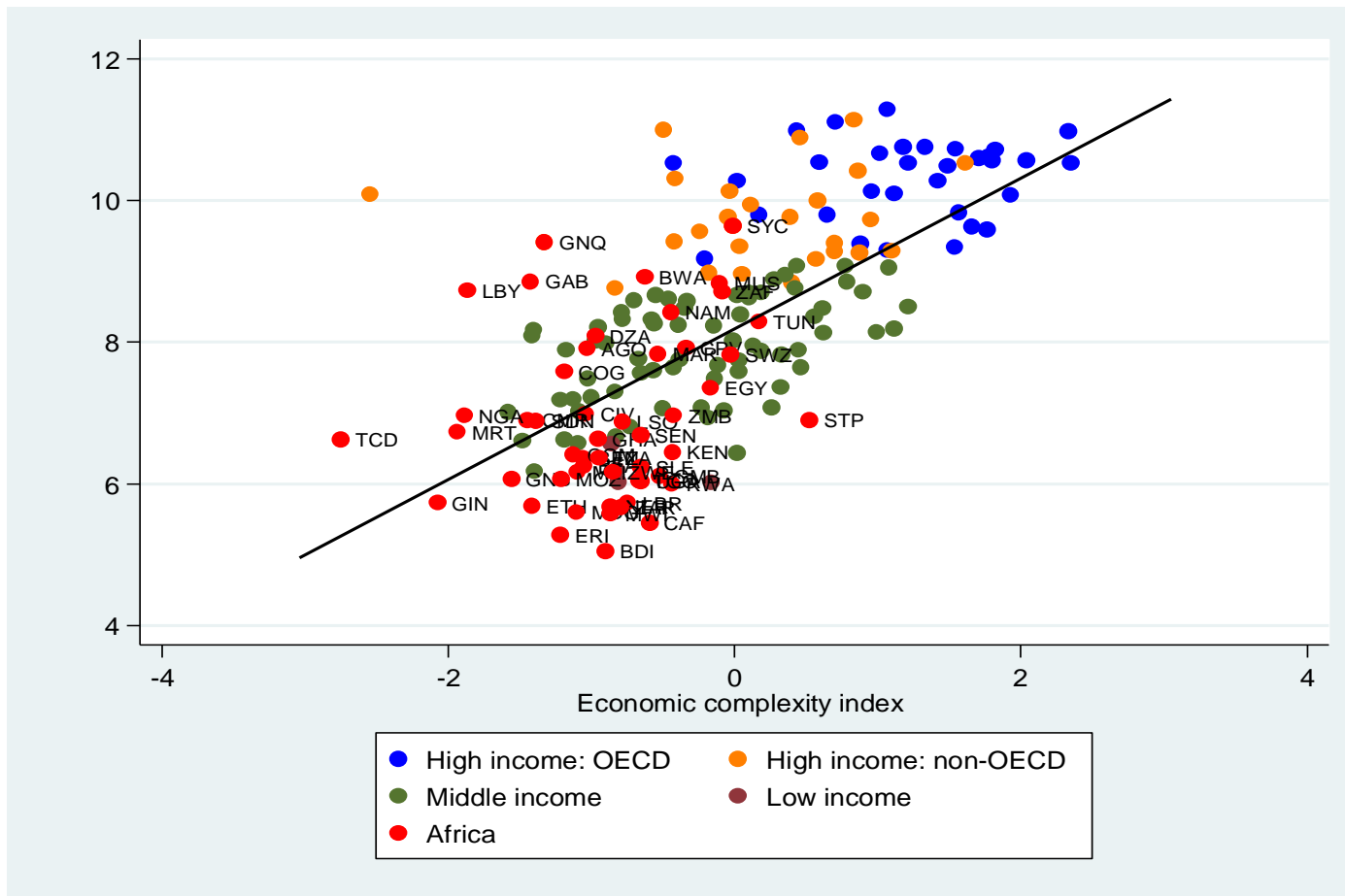
Ghana

- Frozen Fish

- **Diversity (k_c, θ)** is related to no. of products a country exports:
 - *Holland*=5
 - *Argentina*=3
 - *Ghana*=1
- **Ubiquity (k_p, θ)** is related to no. of countries exporting a product:
 - *X-Ray* = 1
 - *Pharma* = 1
 - *Cheese*=2
 - *Fish*=3
- *Note that there are 34 product communities in this framework, for e.g.: Precious stones; coal; agrochemicals; cotton; soya; cereals; machinery; electronics.*

The African Manufacturing Malaise

Economic Complexity (ECI) & GDP p.c., 2013



Source: Own calculation using data from The Economic Complexity Observatory (Simoes & Hidalgo, 2011).

The African Manufacturing Malaise

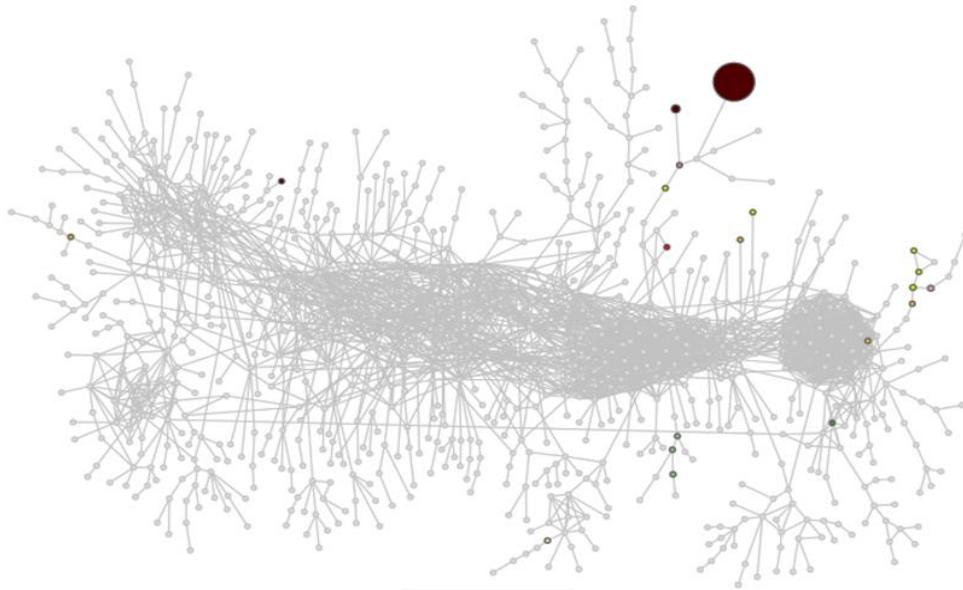
Economic Complexity Results For Africa

- ‘Substantial African Manufacturing Exporters’ (blue markers) are Mauritius, South Africa, Tunisia, Morocco and Egypt – have higher levels of economic complexity.
- Group of African countries ‘substantial exporters’ of manufactures, but lower levels of econ. Dev. (blue markers) – Cote d’Ivoire, Kenya, Uganda, Togo, Malawi and Madagascar.
- Relative to top-performing emerging market countries, Africa’s top manufacturing exporters have lower levels of economic complexity and hence lower levels of productive knowledge.
- Number of African countries have relatively high levels of economic development, measured in real GDP per capita, but low levels of economic complexity – Libya, Gabon, and Equatorial-Guinea. [‘The Resource Curse’?]

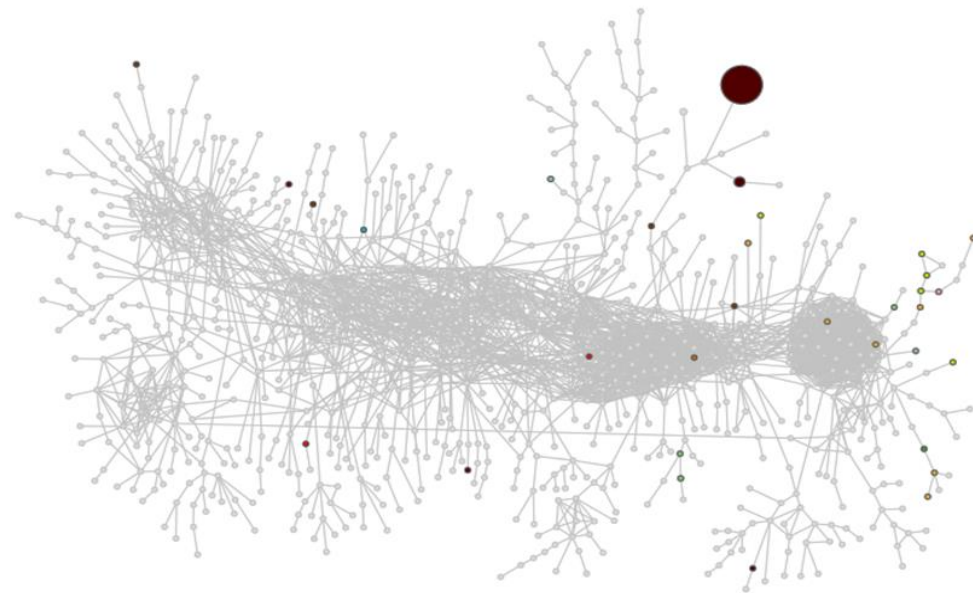
The African Manufacturing Malaise

Product Space Analysis – Nigeria 1995 & 2013

1995



2013



The African Manufacturing Malaise

Conclusions

- Several trends observed when focus shifts to nature of manufacturing exports undertaken by African countries:
 1. Exports typically consist of primary products.
 2. Estimated that over half of these manufacturing exports are capital-intensive in nature and heavily resource-based.
 3. Manufacturing exports out of Africa have relatively low technology content.
- Positive results from the continent however indicate that most economies are in transition as the share of agriculture relative to GDP has declined while the contribution of services has grown significantly.
- Data reveals that growth in the intermediate sector principally driven by expansion of the mining sector, whereas the manufacturing sector has experienced decline.
- Share of manufacturing exports in manufacturing output has remained significantly low historically, which begs the question of whether service-led growth can deliver a sufficient volume of jobs to necessitate a significant increase in employment levels.



Conclusions

Conclusions

- A tepid growth-poverty elasticity for Africa is of concern, as is clear evidence of high levels of inequality in the region.
- Inequality partially driven by economies in Southern Africa.
- Major challenge in SSA: Young and growing labour force, requiring sustainable employment.
 - Differentiate between the problem of unemployment, and that of the working poor.
- Natural resource dependence and the associated impacts such as governance failures, capital intensity and Dutch Disease effects remain critical to resolve for more inclusive growth.
- African Productive structure disconnected and characterised by products with low levels of economic complexity.
 - Contrast to Asia: Productive structure that is connected and complex.
- Conversely, marginal nature of the African manufacturing sector points to limited employment opportunities.
- The informal sector is dominant as a source of employment yet remains unproductive and almost an employer of last resort in urban Africa.



Thank you