

# Can Africa Develop without Smokestacks?

Jaime de Melo  
FERDI

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Developing Countries»

# Can Africa Develop without Factories?

## **challenges**

- Inclusive growth: Get sufficiently inclusive growth so as to get a middle class (\$10-\$50 a day) that will be willing to pay for public goods and will have a stake in functioning governments
- Employment: 122 million jobs need to be created by 2020 (McKinsey (2012). Size of labor force expected to exceed China's by 2035

## **Broad Cross-country evidence (since Chenery-Syrquin)**

- Within-sector increases in labor productivity insufficient: need resource shift to manufacturing and Services sectors (especially today to hook up to value chains
- So far resource shift has not happened in spite of FDI (X4 in 2000-10 relative to 1990-2000, civil wars cut by half, sharp reduction in HC (57% to 41%)

# Reforms, Growth and poverty (1)

- End of lost generation (70-95); reforms picked up and macroeconomic distortions fell ([here](#))
- ... growth picked up; poverty down sharply ([here](#))
- ... but the poverty gap with other regions persists ([here](#))
- The elasticity of poverty reduction to growth is varied across regions but lower in SSA ([here](#))
- Are we witnessing another resource-driven boom-bust cycle? ([here](#))

## Trade and Industrialization Patterns (2)

- SSA export basket diversified «as expected» ([here](#))
- Export surges have ratchet effect and associated with real exchange rate depreciation ([here](#))
- Industrialization is poverty reducing mostly in initially high-poverty countries ([here](#))
- Premature de-industrialization confirmed ([here](#))
- ...as in Ethiopia and Mauritius ([here](#))
- Labor has not shifted to high productivity growth sectors ([here](#))
- SSA has high labor costs relative to Bangladesh and India... ([here](#))

## De-industrialization: Convergence via services ?(3)

- As latecomers, SSA have lower levels of mfg. VA and employment at mfg. peak ([here](#))
- Lack of conditional convergence ([here](#))
- Convergence in services, a possible structural transformation paradigm for SSA? ([here](#))

# Summary and some open questions

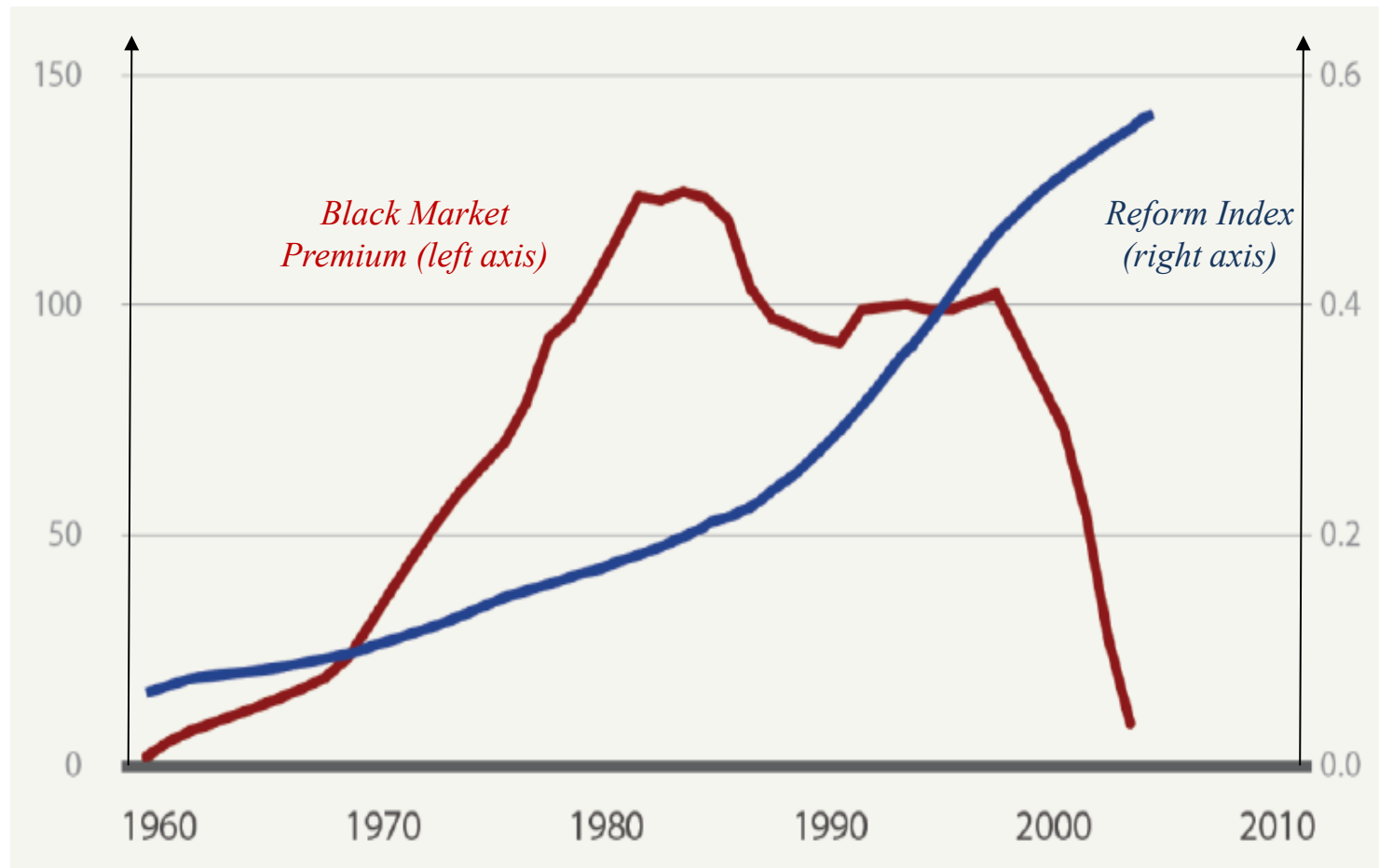
- Reforms + favorable external environment  $\Rightarrow$  growth  $\uparrow$  and poverty  $\downarrow$  (although low elasticity of poverty reduction to growth)
- Resources have not shifted towards high productivity growth sectors. Moving costs, lack of human capital?
- SSA has not taken up labor intensive activities: Some possible causes: Labor costs too high because of lack of appropriate skills? Contribution of : (i) soft infrastructure— inadequate contracting institutions in labor and goods markets; (ii) of hard infrastructure to high trade costs.
- Can the service sector (now increasingly tradable) help convergence? Labor market implications

# Figures

# Macroeconomic Distortions and Reforms in SSA 1960-2010

Black Market Premium (%)

Reform Index : Giuliano et al. (2013)

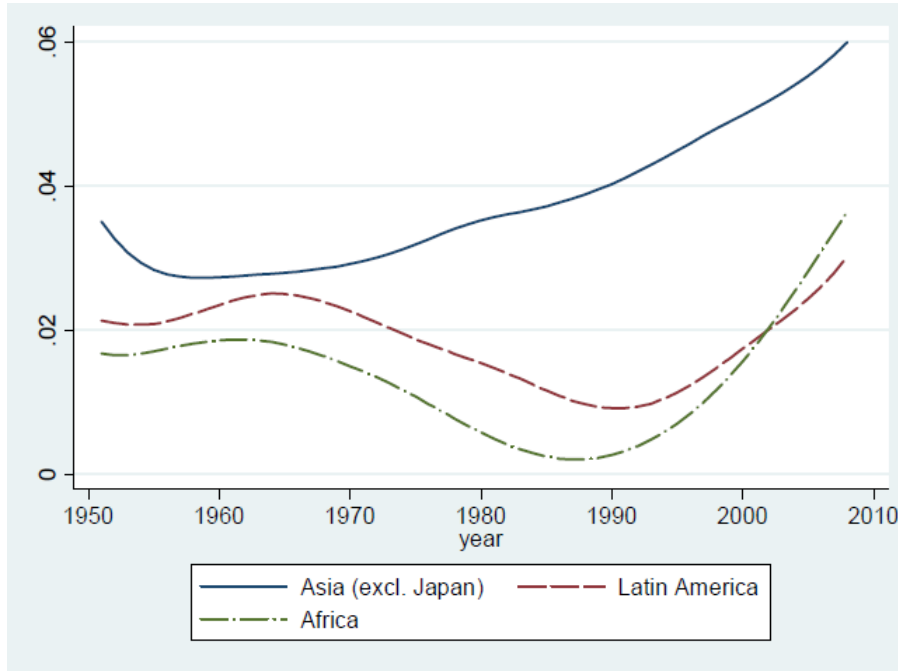


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Source: Cadot et al. (2015). Figure 4 from UNECA (2014) based on Giuliano, Mishra and Spilimbergo (2013)



# GDP Growth and Poverty

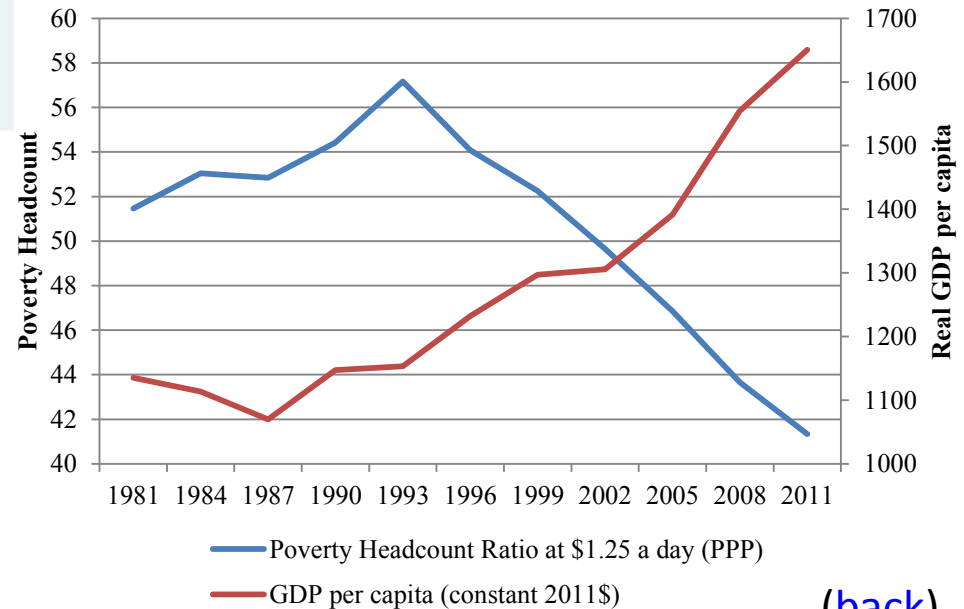


Source: Cadot et al. (2015). Figure 2(a) from Rodrik (2011).

GDP per capita growth by region (1950-2010)



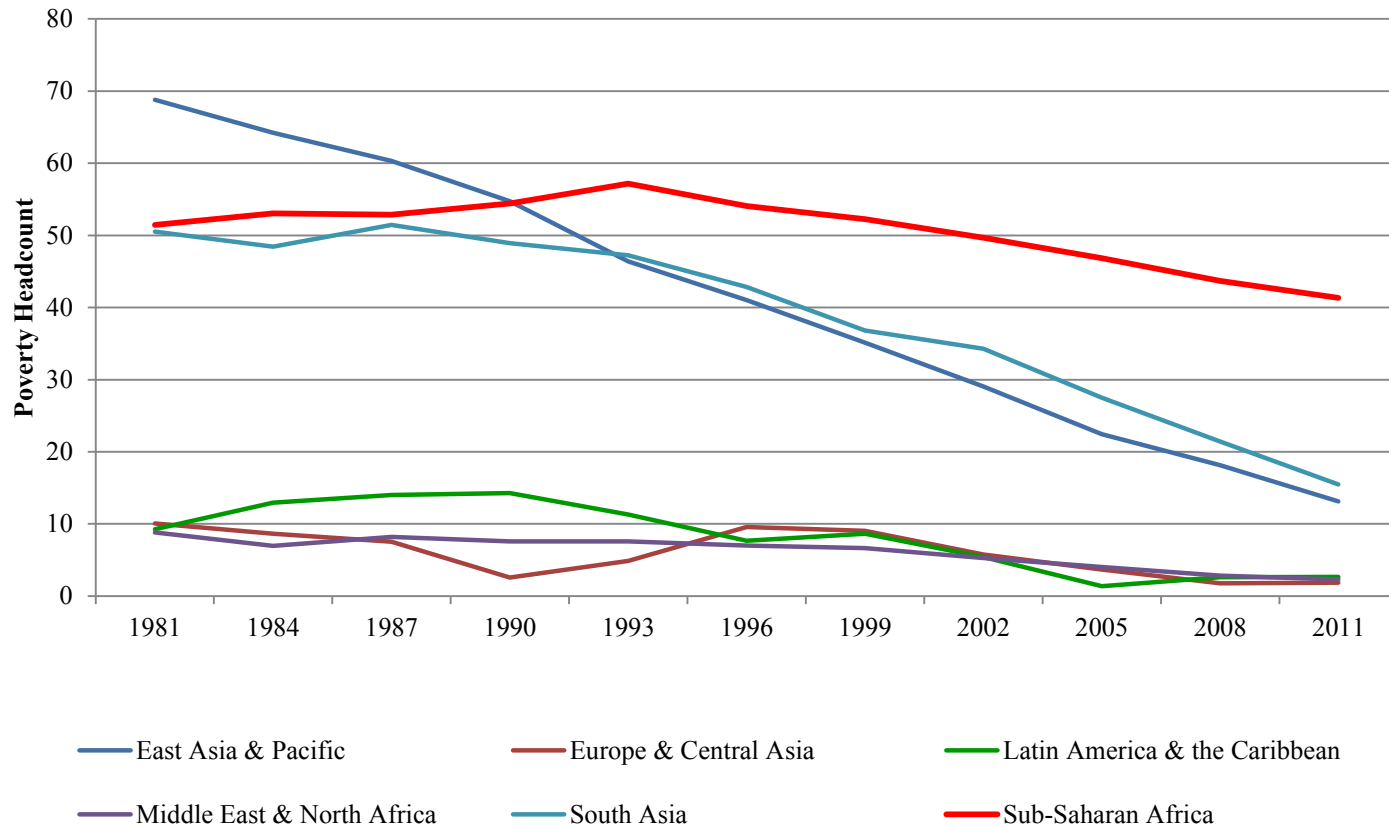
GDP per capita and poverty headcount ratio in SSA



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Source: Cadot et al. (2015). Figure 2(b) from PovcalNet and WDI.

# Poverty Headcount Ratio by Region, 1981-2011

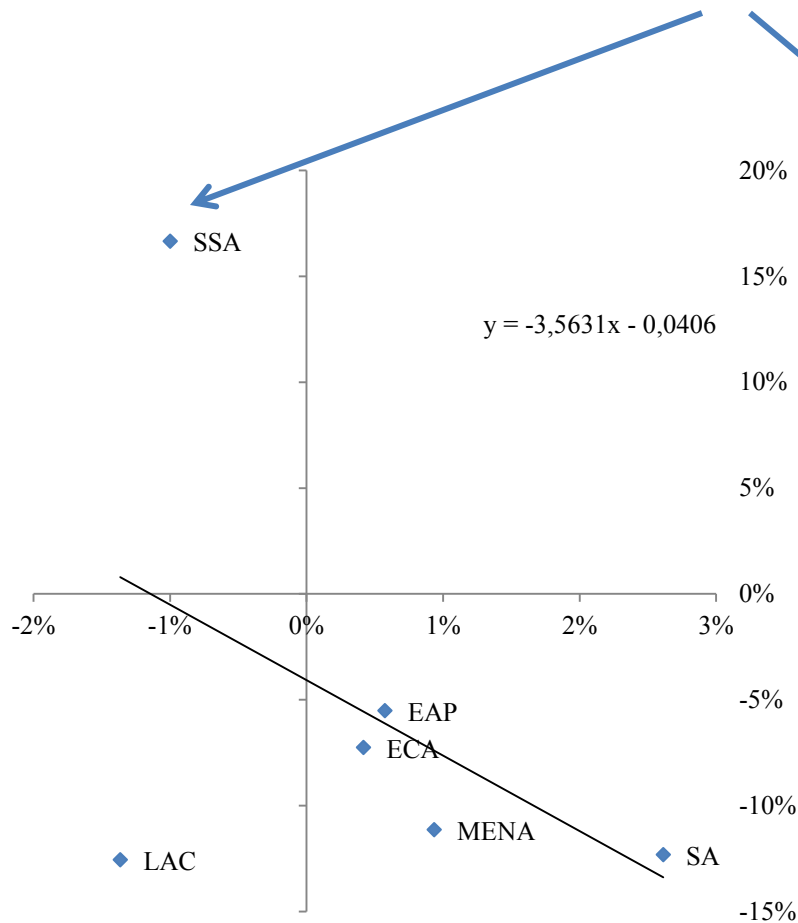


**Note:** Poverty headcount ratio at 1.25\$ per day (2005 PPP)

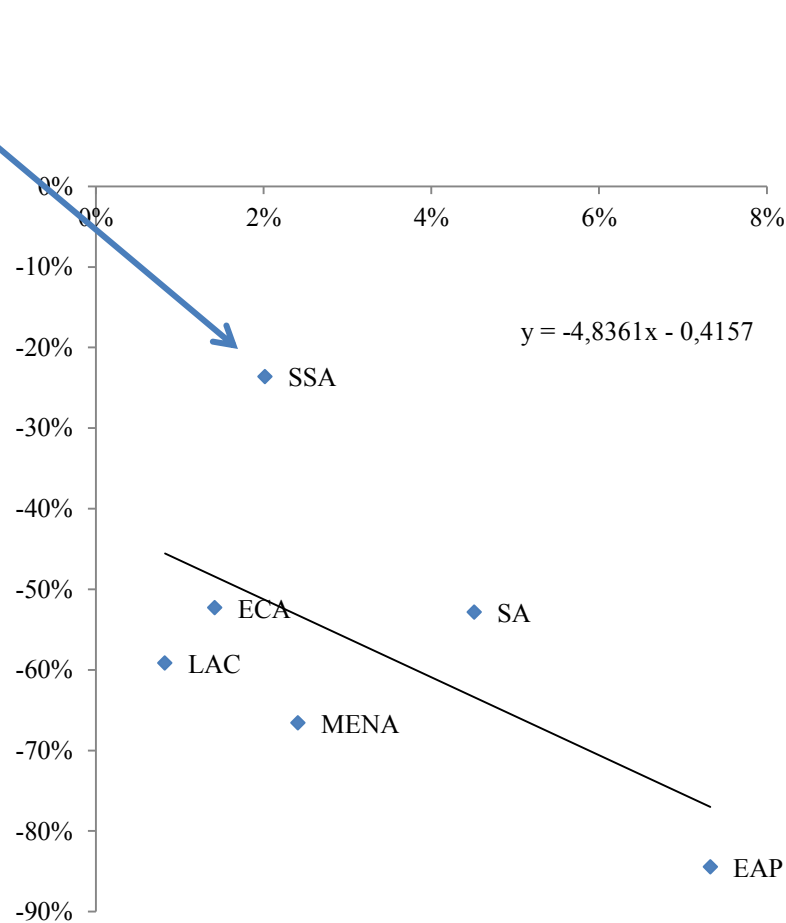
Source: Cadot et al. (2015) Figure 5 from PovecalNet.

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# Poverty Reduction ( $\Delta HC$ ) vs. GDP per capita Growth



GDP per capita growth

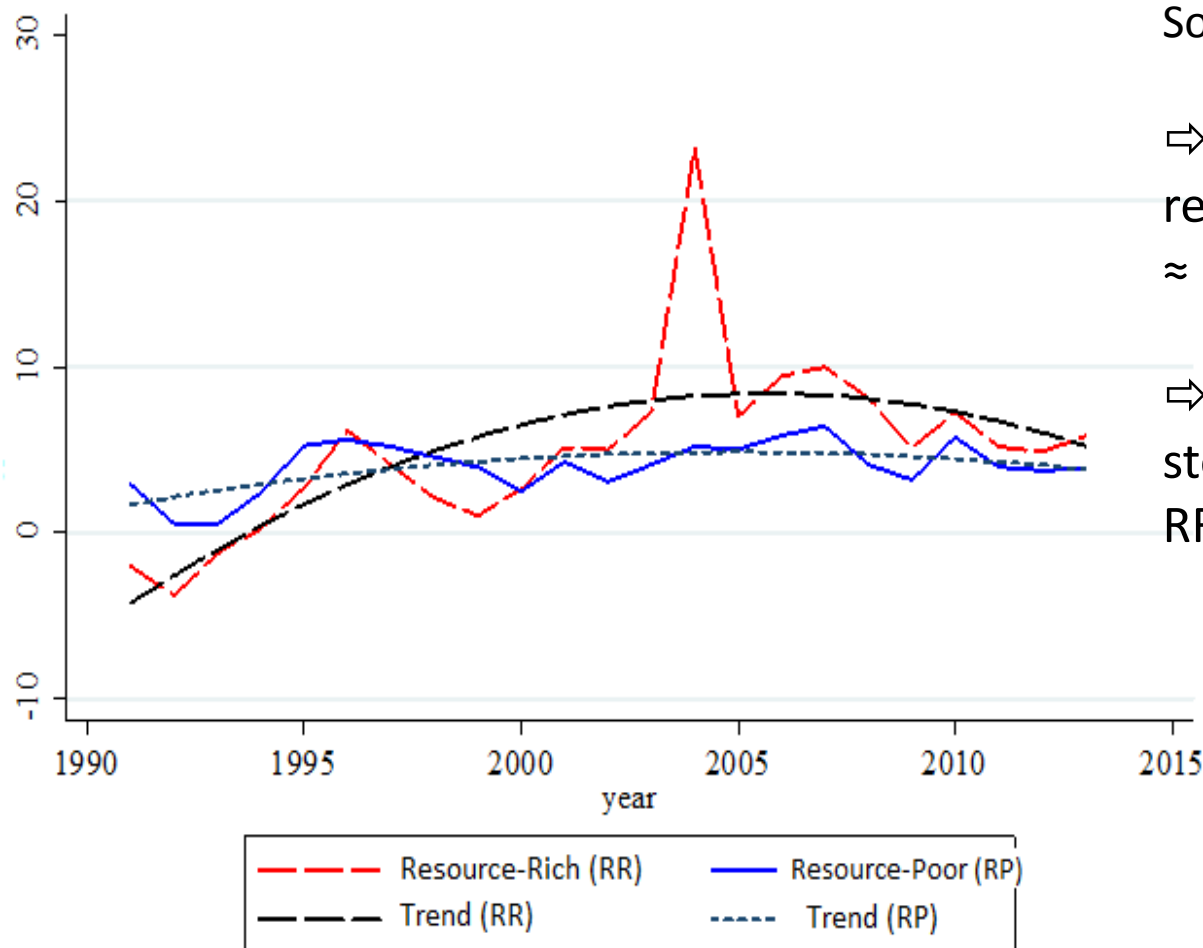


GDP per capita growth

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**Note:** Poverty line at 1.25\$ per day (PPP). 101 countries ( 43 SSA). HC= head count  
*Source: Cadot et al. (2015). Figure 6 from PovcalNet.*

# Resource Abundance and Growth



South is Africa excluded.

⇒ RP have had a relatively stable growth  $\approx 5\%$  p.a.

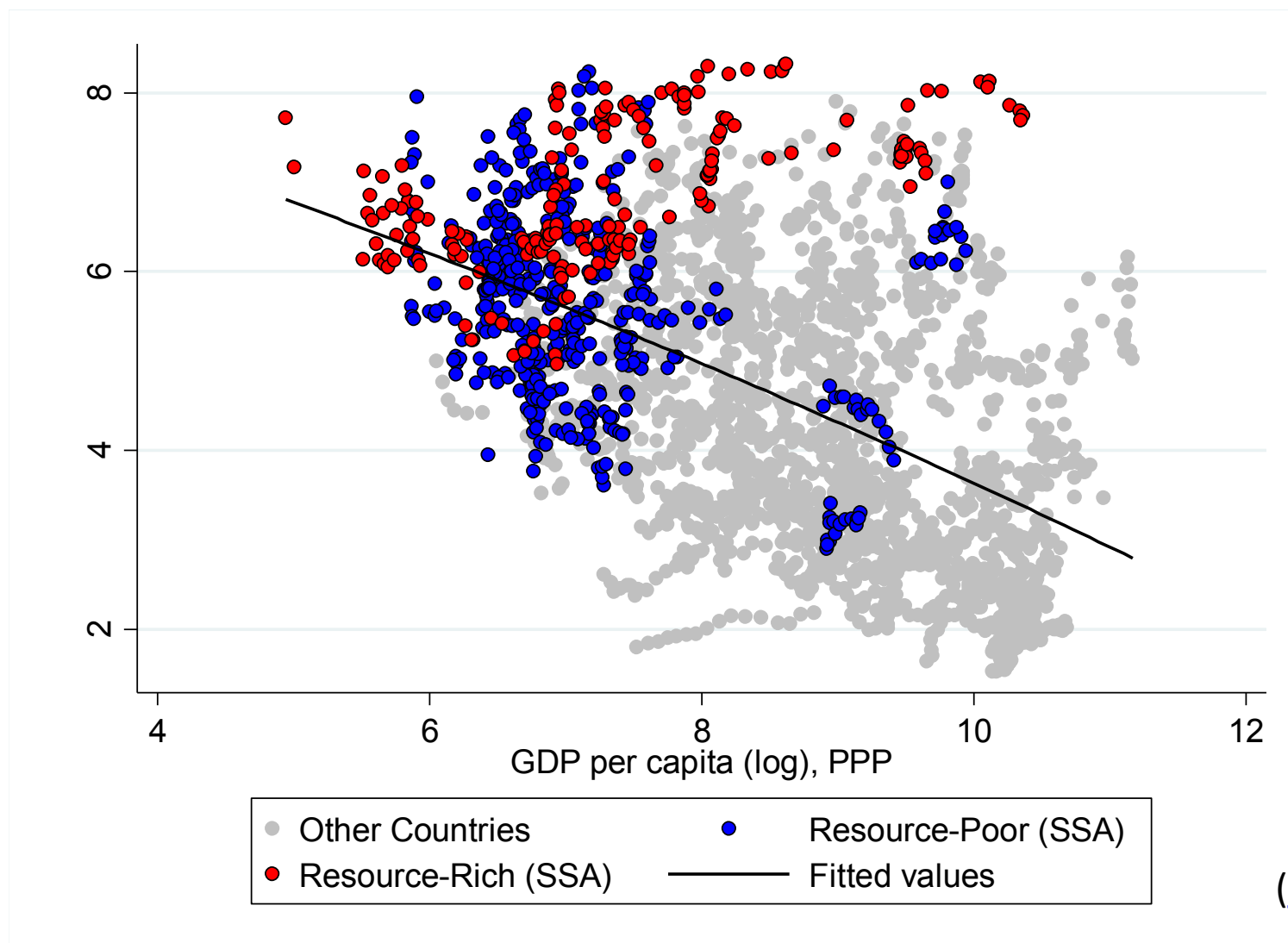
⇒ Running out of steam is attributable to RR group

**Note:** Resource-rich = Resource rents  $> 15\%$  of GDP

Source: Cadot et al. (2015). Figure 7(b) from WDI.

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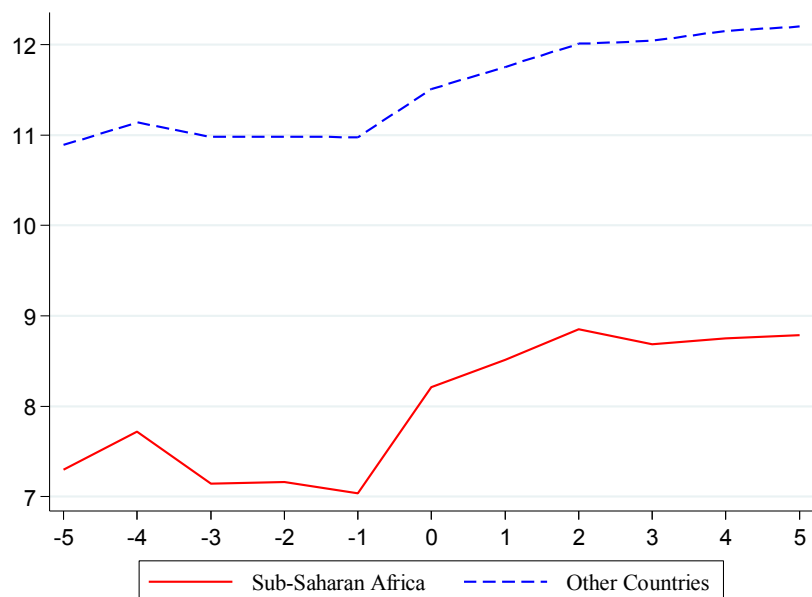
# Export Concentration in SSA is driven by RR Countries



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# Export Surges in SSA

(log of exports sector surges around event)  
(event analysis à la Freund-Pierola)



Source: Cadot et al.(2015). Figure 11 from Woldemichael (2015)

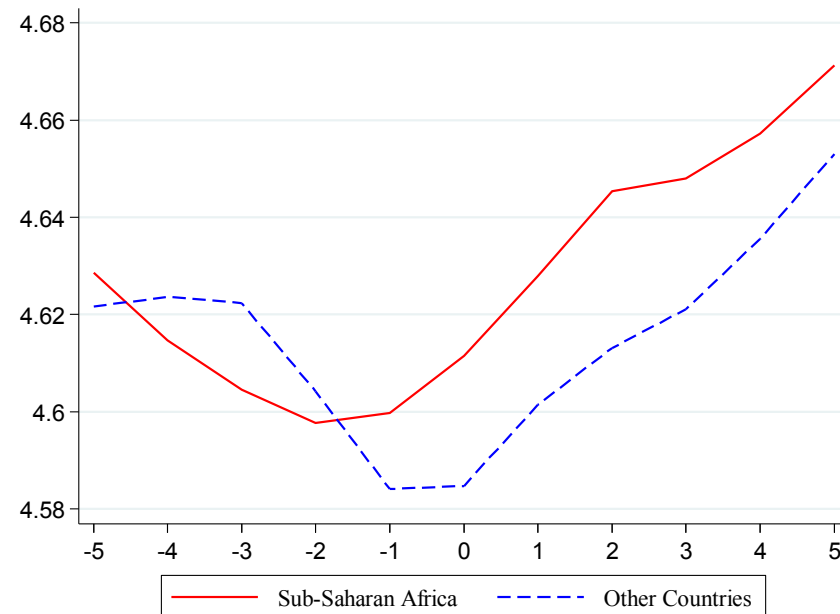
... and seem to be associated with a temporary REER depreciation



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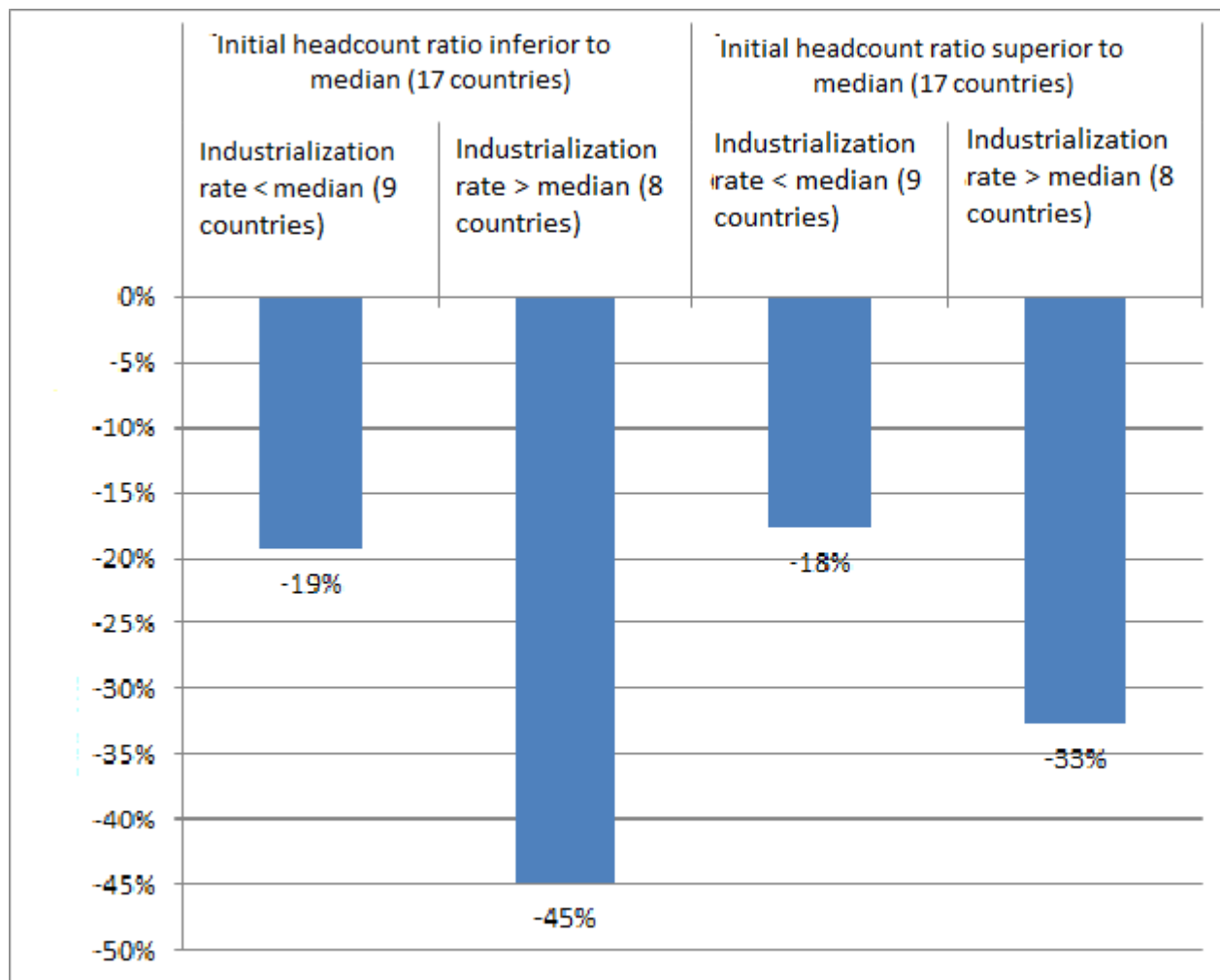


Export surges have a ratchet effect on the level of exports...



Source: Cadot et al. (2015). Figure 13 from Woldemichael (2015)

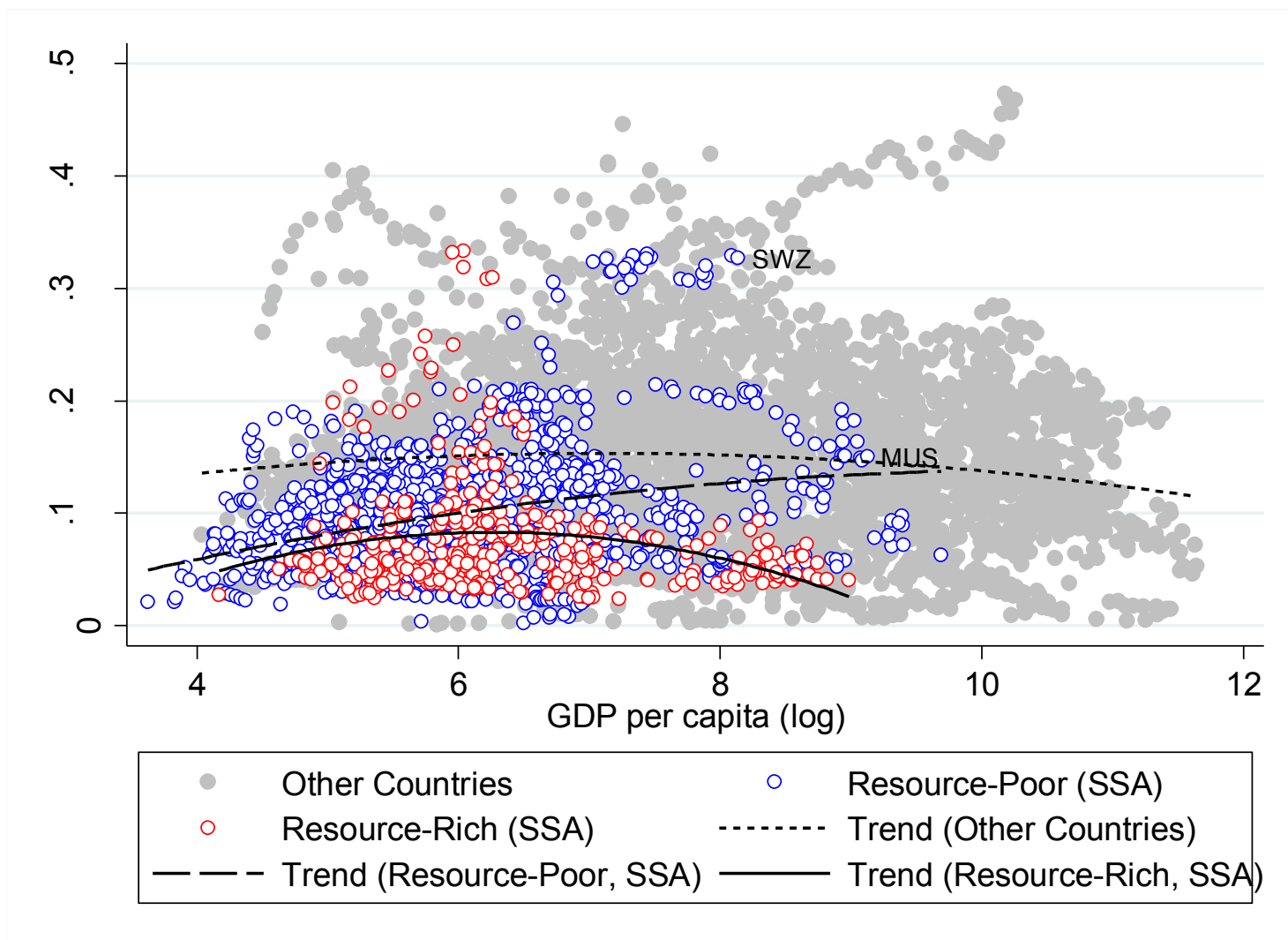
# In SSA, industrialization is poverty-reducing mostly in countries with high initial poverty rates



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Source: Cadot et al. (2015). Figure 15 from PovcalNet and WDI.

# Premature de-Industrialization in SSA



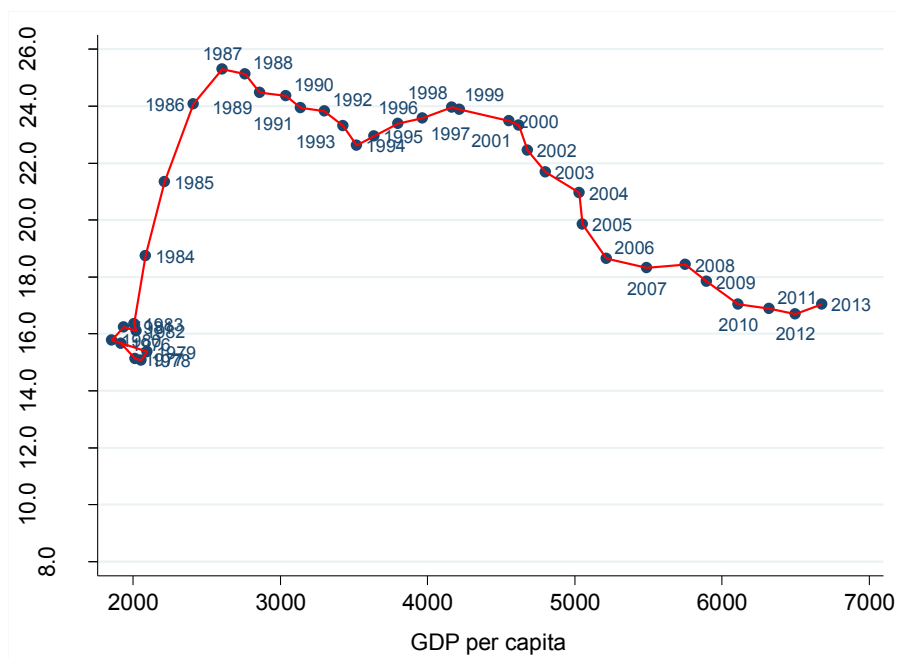
Source: Cadot et al. (2015). Figure 16 from WDI.

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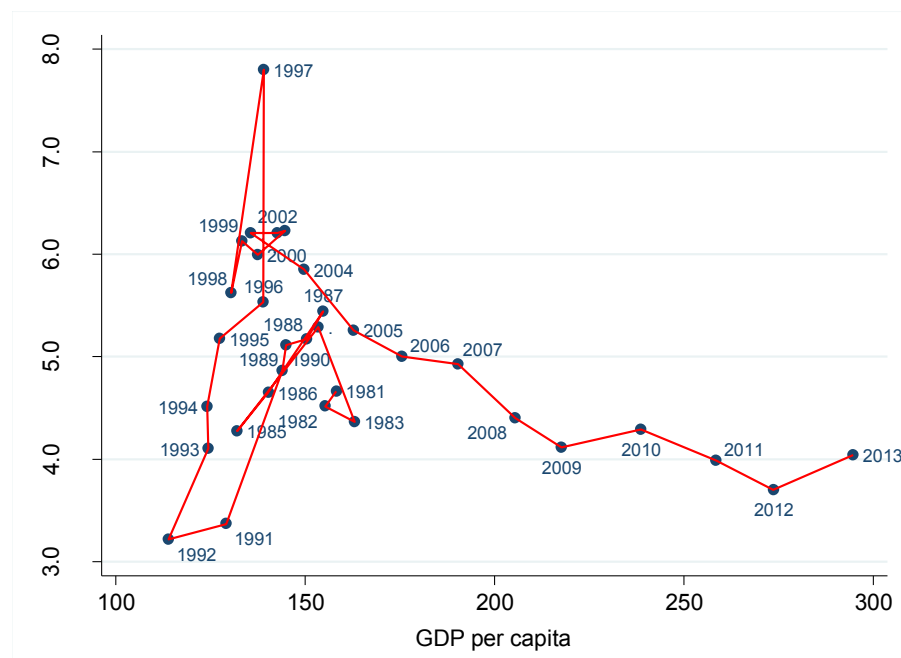


# Mauritius and Ethiopia trajectories confirm premature de-industrialization (14 more in paper)

## Mauritius



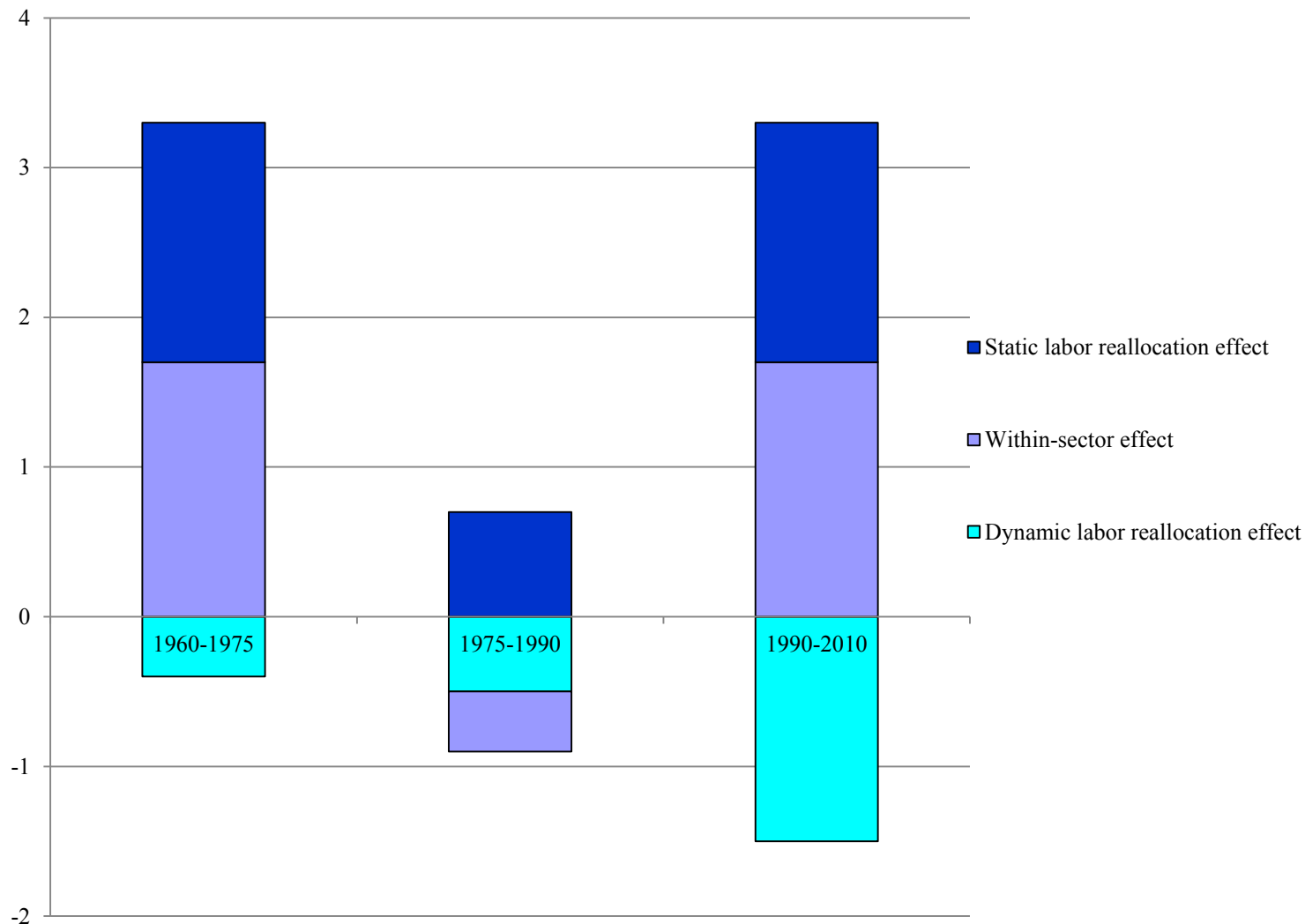
## Ethiopia



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Source: Cadot et al. (2015). Figure 18 from WDI.

# Decomposition of productivity growth in SSA 1960-2010

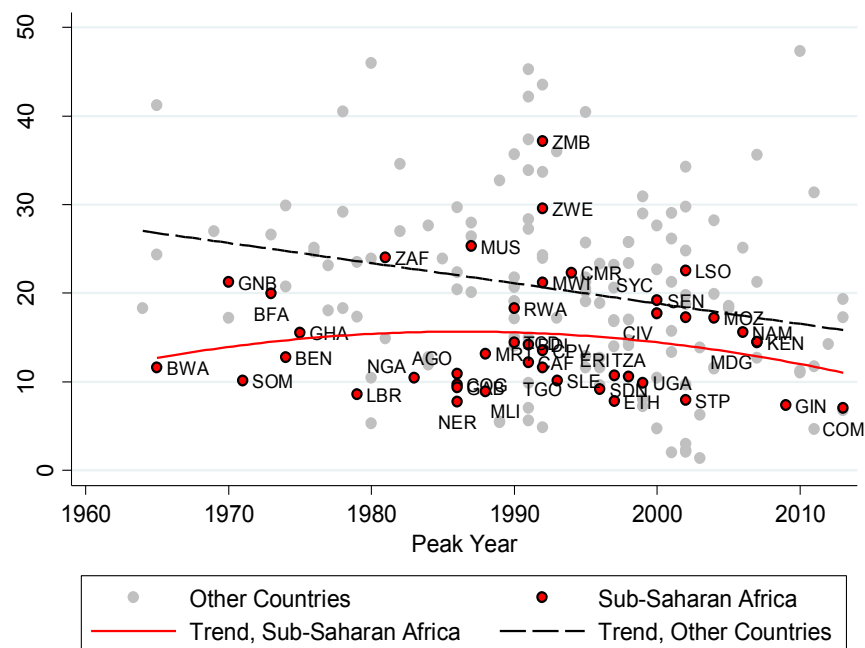


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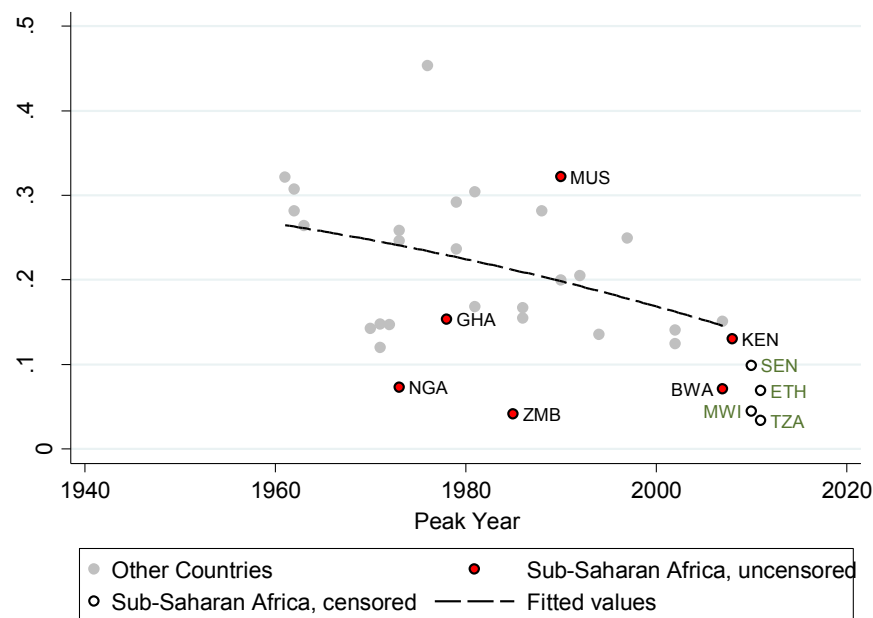
Source: Cadot et al. (2015). Figure 22 adapted from Timmer et al (2014).

SSA countries are latecomers in industrialization.  
They exhibit lower levels of manufacturing VA  
and employment at peak share in GDP

**Manufacturing VA (% GDP)**



**Employment in manufacturing**



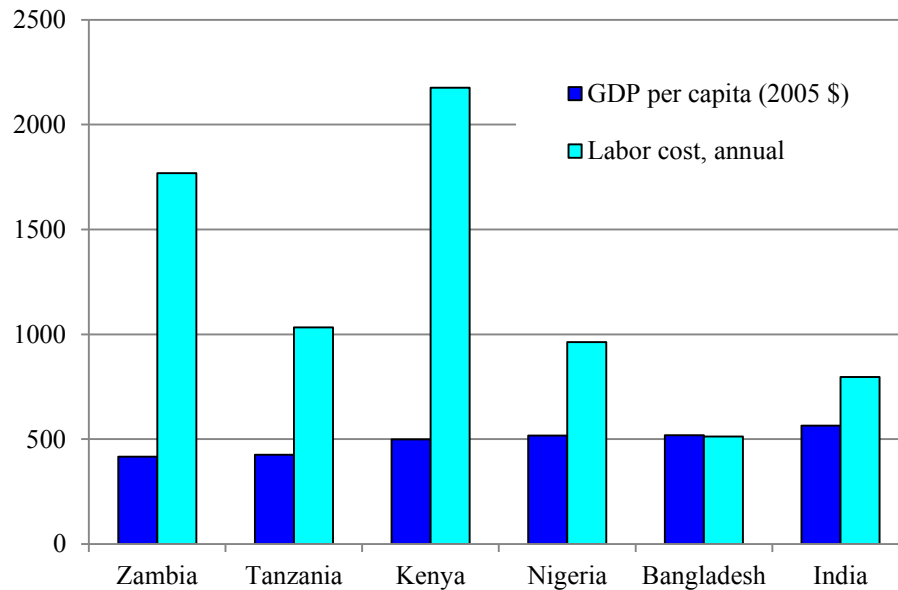
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Source: Cadot et al. (2015). Figure 23(a) from WDI

Source: Cadot et al. (2015). Figure 23(b) from Groningen Growth and Development Center 19

# High labor costs in Sub-Saharan Africa seem to explain the lack of employment creation in manufacturing

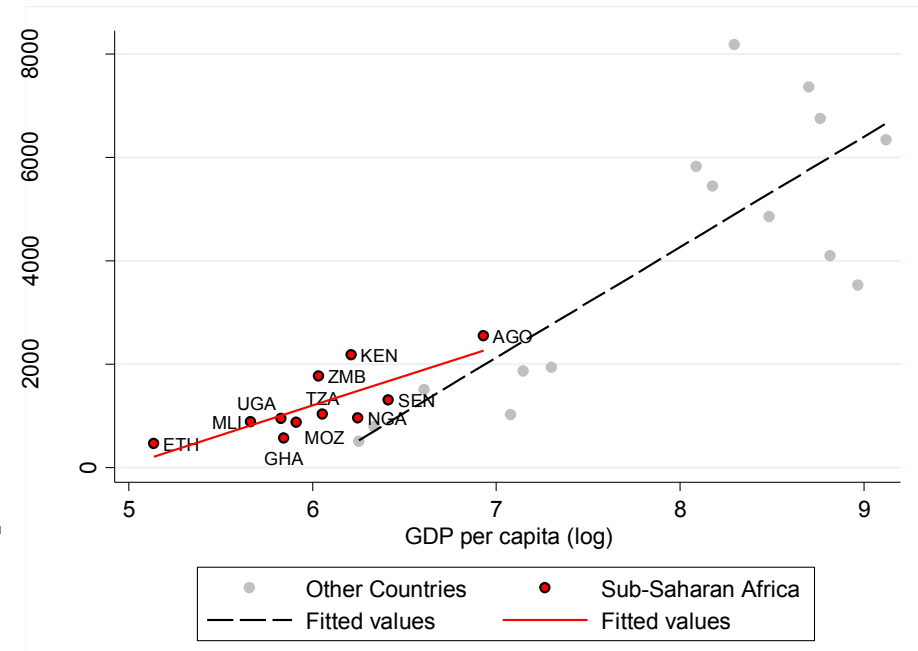
Country comparisons : high mfg. labor costs in selected SSA countries relative to India ...



Source: Cadot et al. (2015). Figure 25 from Gelb et al. (2013)

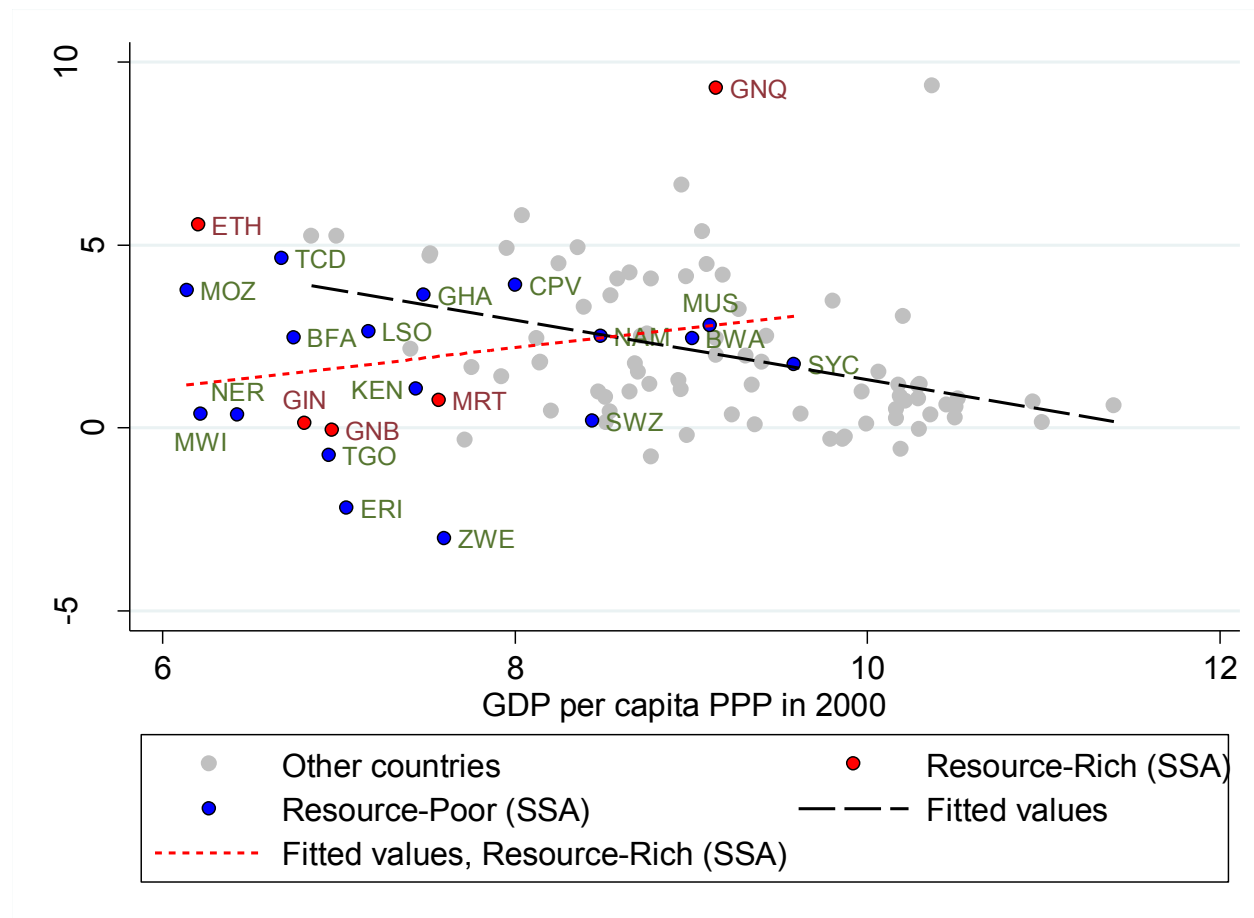
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... a pattern confirmed by regression analysis



Source: Cadot et al. (2015). Figure 26 adapted from Gelb et al. (2013)

# Lack of Conditional Convergence in SSA (positive slope)

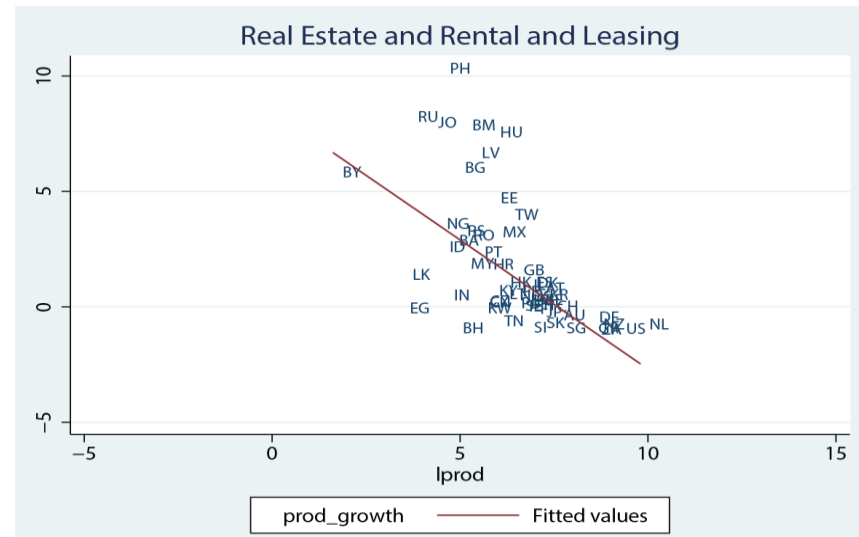
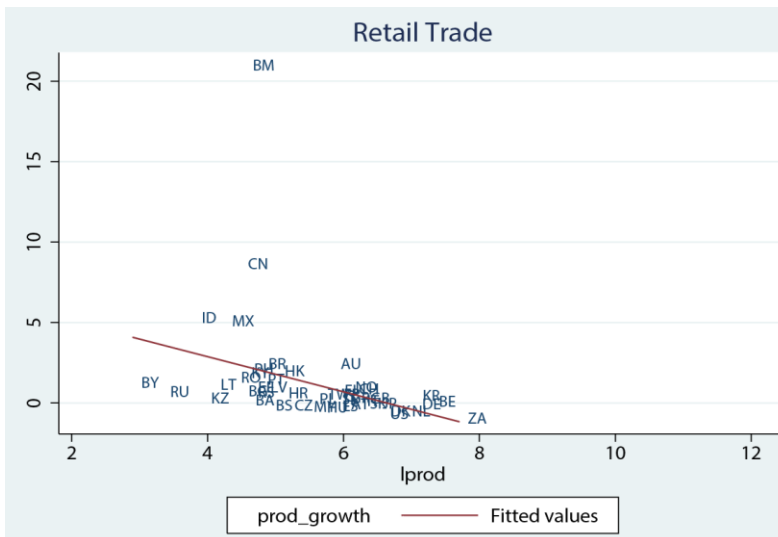
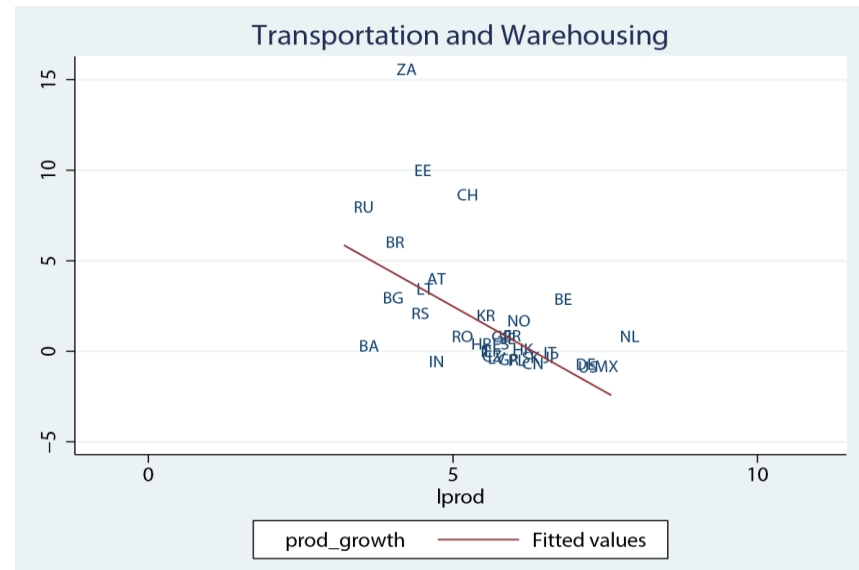
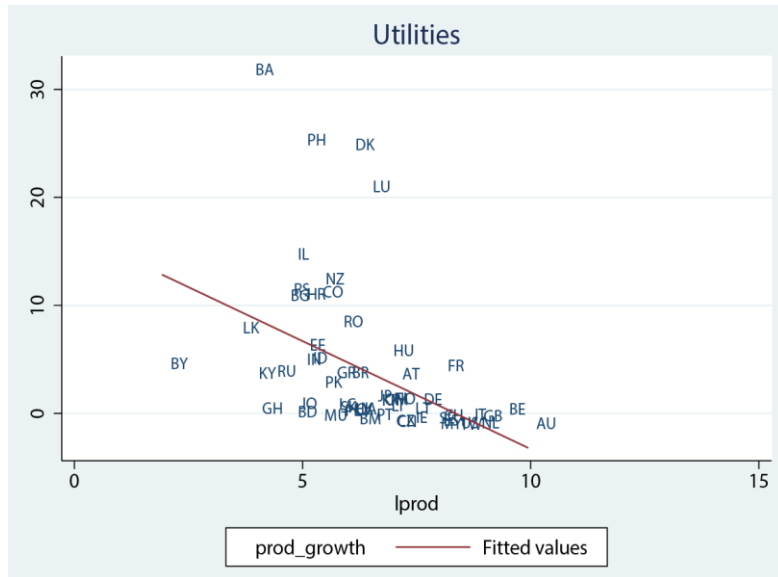


**Note:** Slope of the line is the marginal effect of the initial level of GDP per capita (2000) on subsequent growth (2000-2012) after controlling for human capital

Source: Cadot et al. (2015). Figure 28(b) from WDI.

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# Convergence in services, a possible structural transformation paradigm for Sub-Saharan Africa?



# AFD Report

- Summary of report commissioned by the Agence Française de Développement (AFD)
- Olivier Cadot, Jaime de Melo, Patrick Plane, Laurent Wagner, Martha Woldemichael (2016)

“Industrialisation et Transformation Structurelle: L’Afrique sub-saharienne peut-elle se développer sans usines?”, AFD, n° 2015-10

<http://www.afd.fr/webdav/shared/PUBLICATIONS/RECHERCHE/Scientifiques/Papiers%20de%20recherche/10-papiers-recherche.pdf>

English version here

- “Industrialization and Structural Change: Can Africa Develop without Factories”

<http://www.ferdi.fr/en/publication/p143-industrialization-and-structural-change>