## From Manufacturing Led Export Growth to a 21<sup>st</sup> Century Inclusive Growth Strategy for Tanzania

Joseph E. Stiglitz

**University of Dar es Salaam** 

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## I. Export-led growth model behind 20<sup>th</sup> century growth miracles

- Unprecedented growth in East Asia—closing the gap in income per capita/standards of living with advanced countries
- That model won't be working in the future in the way that it did in the past

#### **End of old model**

- Victim of own success: productivity exceeds rate of increase in demand (share of manufacturing in GDP declining everywhere as next slide shows)
  - Some vertical disintegration of service components of manufacturing gave appearance of more rapid disappearance of jobs
  - Vertical disintegration can have real consequences (e.g. for wages and flows of knowledge)
- Even with emerging markets taking larger share of manufacturing jobs, and with shift of jobs from China to Africa, new manufacturing jobs will only absorb a fraction of new entrants into labor force
  - Can still have impacts disproportionate to size
  - Countries may have a natural comparative advantage in some niches (or in some cases, even be able to create a comparative advantage)
  - But unlikely to have impacts that manufacturing export led growth had in China and East Asia

## Manufacturing Share of GDP (%)

	2000	<u>2015</u>
World	19	15
E. Asia & Pacific	25	23
ECA	19	16
LAC	17	14
North America	16	12
South Asia	15	16
Sub-Saharan Africa	11	11
Low-Income	10	8
Lower Middle Income	17	16
Upper Middle Income	24	21
High Income	18	15

Source: WDI

#### **Industrialization Trends and Africa**

- The share of manufacturing in GDP was once so highly correlated with per capita income that the IMF used the term "Industrial countries" to refer to high income countries until some 15 or so years ago.
- The relationship became an inverted U shaped one some 2 decades or so ago.
- And more recently the height if the inverted U has been declining, i.e. the peak level of income at which manufacturing's share begins to shrink has been falling.
- But Sub-Saharan Africa began its deindustrialization much too prematurely and rapidly: manufacturing's share peaked in 1977 at about 17% and then declined almost continuously: 10% by 2000 and 11% in 2015.
- This "underindustrialization" of SSA should mean more scope for catch-up industrialization notwithstanding the headwinds posed by global technological trends.

## **Key implication**

- Tanzania will have to look for an alternative strategy
- Based on deconstructing what led to success of manufacturing export led growth model
- A strategy that performs some of the essential roles that manufacturing export-led development did
- And incorporating new insights into development

## II. New Thinking about development

- What separates developing countries from developed is not just a disparity in resources, but a disparity in knowledge and institutions
  - Development entails a structural transformation
  - There can be growth without structural transformation—especially common in resource dependent countries

### New understandings have led to new strategies

New understandings have led to movement from a focus on projects to policies and then to institutions

- Corresponding to the realization of the importance of not just physical capital, but human capital, social capital, and knowledge capital
  - And a change in norms and mindsets
    - Including the mindsets about change is possible—a movement away from traditional society towards modernization
  - In the West, associated with the Enlightenment
    - Even in the West, these ideas are contested—Trump and his associates have a pre-enlightenment mindset

## New understandings reflected in Stockholm Statement

- 1. GDP growth is not an end in itself
- 2. Development has to be inclusive
- 3. Environmental sustainability is a requirement, not an option
- 4. The need to balance market, state, and community
- Providing macroeconomic stability
  But this does not just mean balancing budgets or focusing exclusively on inflation

#### **Stockholm Statement**

- 6. Attending to the impact of global technology and inequality
  - Key issue is not developed vs. less developed countries, but appropriate treatment of labor, in both developed and developing countries
  - Requires investment in human capital
  - Creating new instruments of redistributions within and between countries
- 7. Social norms and mindsets matter
  - Bringing the insights of modern behavioral economics to bear in development economics
  - Effective ways of altering behavior (savings, fertility, etc.)

#### **Stockholm Statement**

- 8. Global policies and the responsibility of the international community
  - Recognizing the interdependence of countries
    - That the policies of the large rich countries have large externalities on the rest of the world, which they often don't take into account (including their monetary, regulatory, trade, and migration policies)
    - But tax havens affect all countries
  - International agreements cover only part of these arenas
    - Climate change agreements do not go far enough
    - Do not cover cost of adaptation by poor countries
  - Developed countries have not lived up to their commitments of .7% of GDP in aid

## Marked change from the Washington Consensus

- With its primary emphasis on markets
- With its inadequate treatment of market failures
- With its narrow view of macro stability
- With its narrow conception of the goals of development
  - More instruments
    - More instruments for monetary policy (now embraced even by advanced countries, e.g. in QE and macro-prudential regulation)
    - More instruments for macro-stability (now embraced in new Institutional View of IMF, on capital controls)
    - More instruments for developmental transformation—including industrial policies
  - Broader goals

## Broader goals to reflect challenges of the 21<sup>st</sup> century

- Climate change
- Inclusive growth
  - Trickle down economics doesn't work
  - Greater inclusivity can lead to more robust growth
  - There are policies that can simultaneously increase equality and growth
  - Seeing equality and growth as complements rather than substitutes is major change in development thinking
- There may be further challenges: Is Trump ushering in a new era of global protectionism?
  - Underlying social and political forces go beyond Trump

## Clearer distinctions between means and goals

- Privatization, markets are not ends in themselves—they are only (possibly) means to the broader goals described earlier
- Other variables too need to be looked at through this lens
  - Inflation, budget deficits, current account deficits
- But not attending to some of these variables in a timely way may make it difficult to achieve our goals

## Greater participation: a balance between markets, government, and society

- Not just markets, but government and civil society
  - Systems of checks and balances critical
  - Media and civil society can play a pivotal role
- All successful development has entailed government playing an important role—the development state
- It has a multiplicity of roles
  - Providing enabling conditions for market to work
    - Including good physical and institutional infrastructure, an educated labor force
  - Regulating markets—preventing negative externalities (including exploitation and excessive volatility)
  - Promoting development more directly—industrial policies
  - Understanding the "big picture"—including the problems posed by excessive population growth

## III. Deconstructing success of export led manufacturing model

- Open economy allowed one to avoid complexity of material balance equations—all one had to have was enough foreign exchange
  - Export led growth generated necessary foreign exchange
- Didn't need to generate demand to absorb new supply
  - No need to worry about demand constraints
  - Flexible and correctly managed exchange rate, open economy, and "attentive" producers suffice to absorb supply

## **Deconstructing success**

- Exports provided basis for learning
  - What separates developed and less developed countries is a gap in knowledge
  - Transfer of technology could be accomplished in numerous ways (buying technology, FDI)
  - Important spillovers to other industries
  - Institutional spillovers (e.g. education) even to other sectors
  - Demand for educated individuals—of benefit elsewhere in the economy
- Exports provided basis for tax revenues
  - Finance needed for government expenditures—infrastructure, education, technology
  - Hard to tax informal sector

- Generated employment in urban sector—key in supporting structural transformation
  - Generated jobs for new entrants into the labor force

#### Mechanisms for promoting exports

- Access to credit at near commercial rates—provided incentives for entrepreneurs
- Limited direct support
- Variety of industrial policy instruments

#### Natural system of accountability

Successful firms proved profitable

## Similar outcomes will require a multifaceted growth strategy

- With different facets reflecting different aspects of manufacturing export-led growth
  - Export-led manufacturing naturally combined structural transformation and urbanization, movement to a learning economy, openness that meant one could simply focus on foreign exchange constraint (ensuring that one had the foreign exchange one needed), and job creation for new entrants into the labor force to maintain reasonably high employment

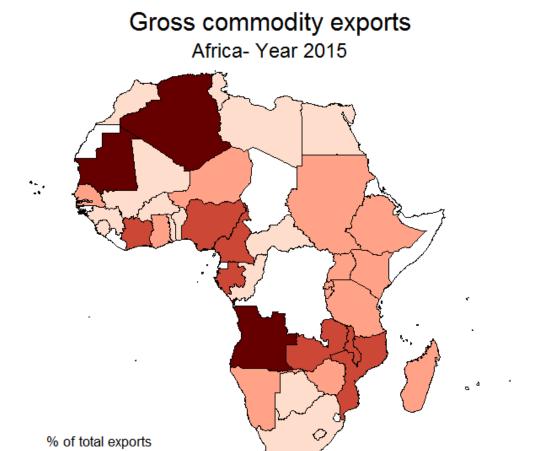
- May need to combine multiple strategies
  - Manufacturing—more directed, more limited, where possible, taking advantage of natural advantage (mineral resources)
    - Challenge for job creation will be greater because of AI
    - Competition for low skilled manufacturing may result in a race to bottom—need to be careful in giving tax breaks
  - Agriculture—basis of employment, but can be restructured in ways that are more dynamic, with more learning, learning to learn, a kind of transformation in situ
  - Mining and oil—important for foreign exchange (maximize revenues, taking advantage as much as possible of spillovers)
  - Services—will be the growth sector of the future but in Africa agriculture also has enormous potential both in its own right and by stimulating the manufacturing and service sectors as ACET's Africa Transformation Report 2017 released earlier this week argues (see below)
    - Understand implications
    - Understand how to maximize growth potential and how to manage transition
- Government has to take an active role if there is to be successful structural transformation
  - Shadow prices for learning, learning spillovers, jobs, and foreign exchange may also entail deviations from market-only solutions

# IV. Review of Issues particularly germane to Africa in general and Tanzania in particular

 Exports remain highly dependent on commodities—from which learning benefits may be limited, making modernization transition all the more difficult

## **Low Diversification of exports**

(75,90)



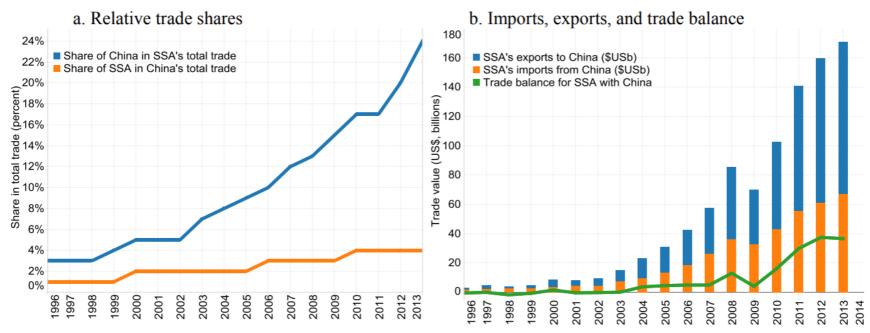
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## New geo-politics

- Increasing reliance on trade with China may also be problematic
  - Continuing colonial tradition of exporting low value added commodities?
  - Some cases (Ethiopia, Rwanda) where China has played important role in diversification and modernization

#### **Trade with China**

Figure 1 Trade between China and SSA



Source: World Integrated Trade Solution Data, World Bank

#### Premature deindustrialization

- Deindustrialization (as a result of structural adjustment policies)
  puts Africa at a disadvantage at the moment
  - But again provides opportunities for expansion
  - Especially when linked with natural resource base
- New lesson: industrial policies can exploit a variety of forward, backward, and horizontal links
  - Possible losses in short run in return for long run learning
  - But careful appraisal of trade-offs required
  - Absence of current spillovers is not necessarily evidence that there aren't potentially long run profitable linkages.

#### **Deindustrialization**

Value added, employment, and relative labor productivity by sector

	Sectoral Shares						Relative					
Sector	Value Added			Employment			Productivity Levels					
	1960	1975	1990	2010	1960	1975	1990	2010	1960	1975	1990	2010
Agriculture	37.6	29.2	24.9	22.4	72.7	66.0	61.6	49.8	0.5	0.4	0.4	0.4
Industry	24.3	30.0	32.6	27.8	9.3	13.1	14.3	13.4	4.4	3.7	3.5	2.6
Mining	8.1	6.2	11.2	8.9	1.7	1.5	1.5	0.9	15.7	22.4	23.3	19.5
Manufacturing	9.2	14.7	14.0	10.1	4.7	7.8	8.9	8.3	2.5	2.8	2.4	1.6
Other Industry	7.1	9.2	7.3	8.9	3.0	3.8	3.9	4.2	8.5	5.8	5.3	2.9
Services	38.1	40.7	42.6	49.8	18.0	20.9	24.1	36.8	2.7	2.5	2.4	1.6
Total Economy	100	100	100	100	100	100	100	100	1.0	1.0	1.0	1.0

Note: Table shows GDP, Employment, and relative productivity levels in Sub-Saharan Africa. Relative productivity level is the ratio of the sector and total economy levels.

Source: deVries, Timmer, and deVries (2013): Structural transformation in Africa: Static Gains, Dynamic Losses. <a href="http://scholarworks.wmich.edu/cgi/viewcontent.cgi?article=1041&context=ijad">http://scholarworks.wmich.edu/cgi/viewcontent.cgi?article=1041&context=ijad</a>

### **Deindustrialization**

Value added by sectors (% of GDP)

	1981	1990	2000	2010	2016
Agriculture	23.7	23.4	19.6	17.8	17.9
Industry	35.4	33.7	36.5	27.4	23.7
Manufacturing	15.0	13.5	11.3	10.3	10.5
Services	42.1	41.8	43.9	54.8	58.3

Source: World Bank Development Indicator

#### **Natural resources**

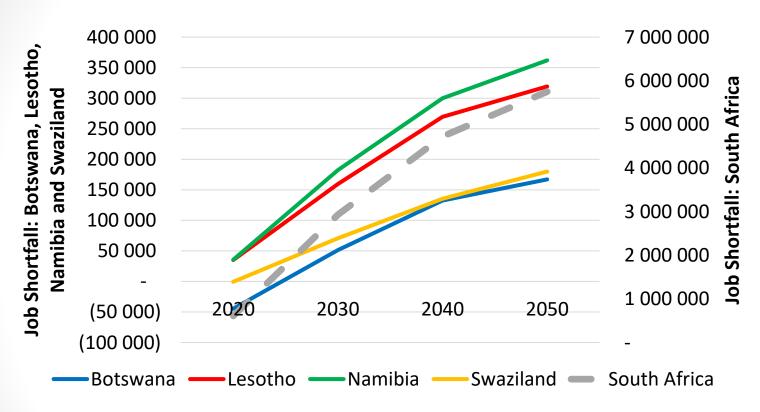
Standard lessons of resource curse have not yet been learned by most countries

- Need to maximize revenues from natural resources from well designed auctions and contracts
  - It may be necessary to auction off different parts of the production process, rather than to have a bid for a "manager"
- Contracts need to be complemented by excess profit taxes
  - Countries need to be careful not to sign investment agreements that circumscribe ability to change taxes and regulations
  - Those that have signed such agreements should exit or renegotiate (e.g. South Africa)
  - Even with these agreements, it may be preferable to change contracts (e.g. Israel)
- Sovereign wealth fund—both to manage cyclical variability and to prevent exchange rate appreciation
- Should look for good partners, willing to participate in broader development strategy

### Demographic Explosion: Dividend or Disaster?

- By 2100 World's population projected to rise by 4 billion of which 3.2 billion in Africa
- Africa's working age population to rise by 2.1 billion or more than the global increase of 2 billion
- Jobs will be a key issue: major shortfall of jobs
  - Any development strategy must address this issue
  - Africa likely to need to generate roughly 500 million jobs over the next 20-25 years to absorb the stock of un/under employed and the increase in the labor force
- Whether and how to make this a demographic dividend is of vital importance not just to Africa but the world
- Complicated not only by the relative decline of manufacturing but also its falling labor intensity

#### Projected Job Shortfall in selected countries



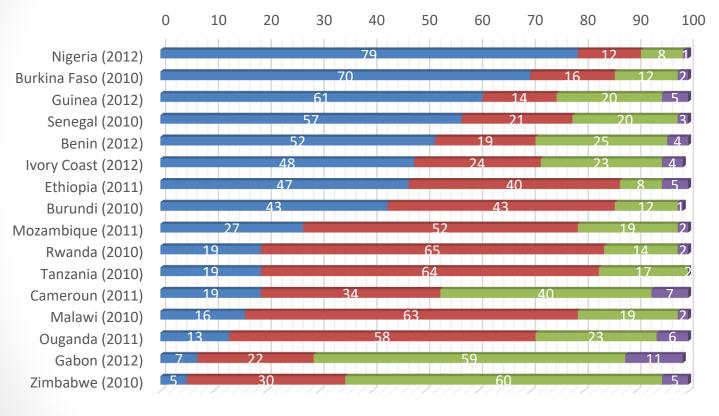
Note: Projected Job Shortfall (difference between the number of jobs needed to keep unemployment stable at today's levels and the projected number of jobs available if job creation continues at the same rate as seen in the recent past).

Source: The World Bank.

#### **Education**

- Problem of jobs complicated by lack of education
  - Not just "quantity" (average level of attainment), but quality
  - Making education free is an important step
  - But there has to be corresponding efforts to ensure quality
  - Otherwise there will be disappointment
- Low education levels also presents particular challenge to modernization
  - Increases importance of learning
  - Opportunities for job creation in education sector

## Distribution of active population according to education level



■ No education ■ Primary ■ Secondary ■ Higher Note: Only countries with data after 2009 are included. Number are in percent.

Source: Demographic and Health Survey, reproduced from Chevallier and Le Goff 2014.

## Agriculture

- Need robust agricultural sector to provide full employment, including by stimulating manufacturing and services
  - Seek to add learning dimension to agriculture and other sectors
    - Modern agriculture can be very "advanced"
    - Focus on non-labor saving innovations—better crop mix, better fertilizers
    - Focus on "learning"—developing skills useful in modern economy
    - Transforming farming from traditional practices to modern farming
  - To reduce need for foreign exchange—using it for areas where it cannot be replaced
- Increasing productivity in agriculture is thus complementary to urbanization and to other aspects of Tanzania's development strategy (e.g. tourism)

## Agriculture

- Enormous scope for improving productivity in agriculture, for creating a modern agriculture sector
- The African Center for Economic Transformation's 2<sup>nd</sup> major report released on Oct. 10:

"agriculture presents the easiest path to industrialization and economic transformation. Increasing productivity and output in a modern agricultural sector would, beyond improving food security and the balance of payments (through reduced food imports and increased exports) Sustain agro-processing, the manufacturing of agricultural inputs, and a host of services upstream and downstream from farms, creating employment and boosting incomes across the economy."

#### Service sector

Move to service sector may have many implications

- Smaller production units
  - Part of explanation of seemingly lower productivity growth (Baumol's disease)
    - Some may be measurement problem
  - But not inevitable
    - Less R & D: more need for cooperative R & D, government R & D
  - Larger productivity differences across firms
    - Increased need for government to push "creating a learning society" to reduce productivity differences
- Many services can be more easily inserted into the global economy through internet
  - Especially if there can be quality certification, either through peer monitoring or certification services
  - Increasing need for skills training, including languages

### VI. Rethinking role of government

#### Need for government in structural transformation

- Important resource constraints—costly to move from "old economy" (jobs, sectors, technologies) to new; imperfections of capital markets become particularly evident in process of transformation (assets of those in "old economy" diminished, so they don't have resources to make necessary investments or provide collateral)
  - Important learning externalities
  - Evident even in earlier Western transformation from agriculture to services
    - Even more in service sector economy—closing knowledge gap between small production units

#### Role of government in transition to service sector economy

- Government plays an important role in many key service sectors (though less than in some other regions)
  - Education
  - Health
  - Will need to expand that role
- Housing services
  - Process of urbanization will require large investments
  - With large job creation potential
  - Government will need to take a more active role
    - Including in planning "livable cities"—important part of well-being
- Agricultural Services
  - Input supply
  - Marketing
  - Extension
  - Finance

## **Rethinking industrial policy**

- Some sectors are more amenable to learning
- Some learning in specific sectors has more spillovers to others
- General principles of industrial policies still apply (including for agriculture)
- Need to identify "learning" and "learning spillover" service sectors and agricultural activities
- These can have much of the benefits of the learning provided by manufacturing
- Industrial policies need to exploit linkages with natural resource one of the country's key comparative advantages

## Reassessing Comparative Advantage

Old theory based on static comparative advantage; new strategies must be based more on dynamic comparative advantage

- Capital highly mobile
- Many aspects of technical knowledge (especially when embedded in machines) relatively mobile
- Skilled labor relatively mobile

### Real source of comparative advantage

- Skills, health and discipline of work force
- Embedded Knowledge
- Institutions and norms
  - Institutional infrastructure
- Physical infrastructure
- Reputation ("branding")

#### All of these affect

- Ability to attract and retain talent
  - Young people care about the environment, about "meaning" in their work, and cooperation and challenge (including intellectual challenge) in the work place
- Ability to attract and retain capital

Hard—but essential—to change these in constructive way

Enhancing these should be central to Tanzania's development strategy

#### VII. Concluding remarks: Reformulating development thinking

- Success in development over past 60 years was greater than anyone anticipated—contrast Myrdal's predictions for Asia with what happened
- There is an enormous gap in knowledge, as well as in resources, that has to be closed
- Most of the advanced countries are engaged in service sector—80% or more
  - So if there are disparities in standards of living, it relates to productivity in these service sectors
  - There are huge disparities in productivities within countries, even greater between countries

### Reformulating development thinking

- The basis of the success of growth over past half century was export-led growth
  - We have deconstructed what enabled manufacturing to provide this growth spurt, this structural transformation
  - It won't be able to do so in the future to anything like that extent
  - There has to be another strategy—that performs some of the essential roles that manufacturing export-led development did

### Reformulating development thinking

- Successful development policy will need to be explicitly more multi-pronged, addressing separate "challenges" that manufacturing sector addressed simultaneously
- We have shown how a coordinated {Agriculture, Manufacturing,
  Mining, Service Sector} strategy has the prospect of attaining the
  same success of the old manufacturing export-led strategy
- Government will need to play an important role in the new structural transformation towards a modern economy—which will not in general be a manufacturing economy but a modern services economy; and in Tanzania's next phase of development modern agriculture will also be vital

## **Comprehensive Development Strategy**

- In short, what is needed is a comprehensive development strategy
  - Leading to inclusive growth
  - With inclusive participation
    - Including a balance between markets, government, and society
- Based on these new understandings of what leads to successful economic and societal transformation
  - Responding to the particular strengths of the country
  - Addressing the particular challenges—including those posed by demographics
  - And creating new dynamic comparative advantages