

MALAWI'S GROWTH IDENTIFICATION: STIMULATING STRUCTURAL TRANSFORMATION, JOB CREATION AND WEALTH CREATION

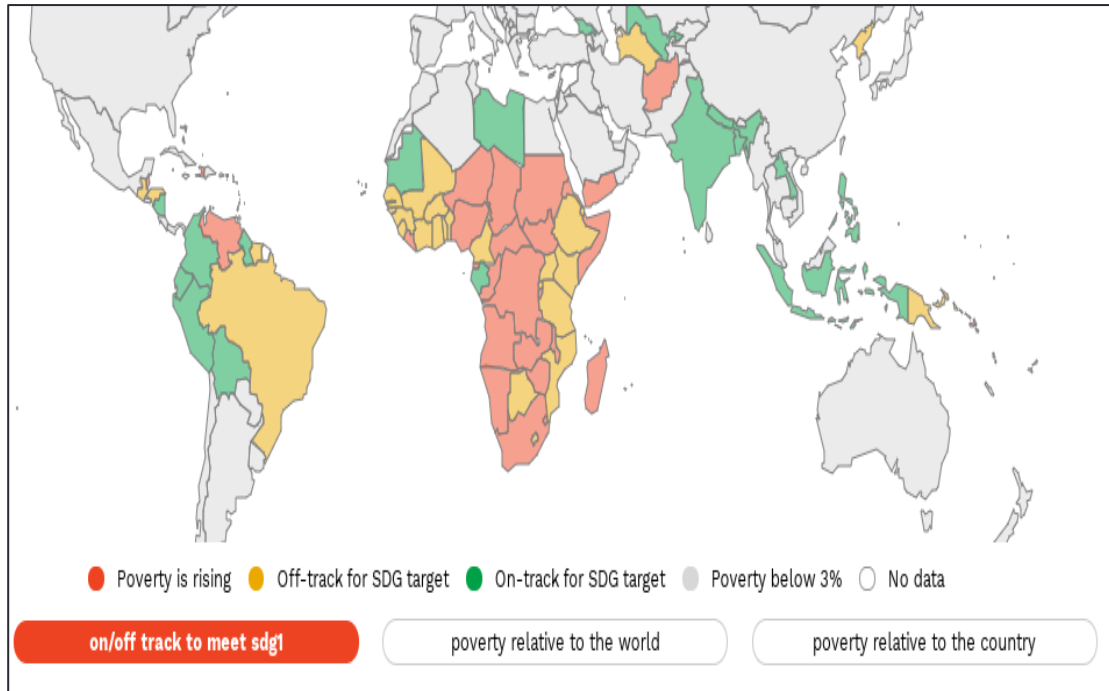
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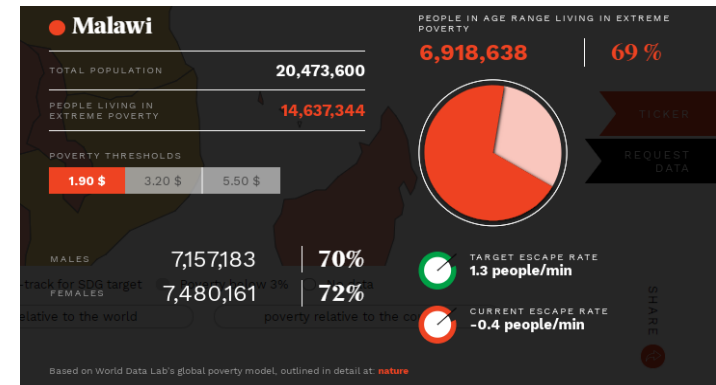
Structure

- Introduction
- Motivation : Problem statement
- Evidence
- Methodology
- Results
- Way forward

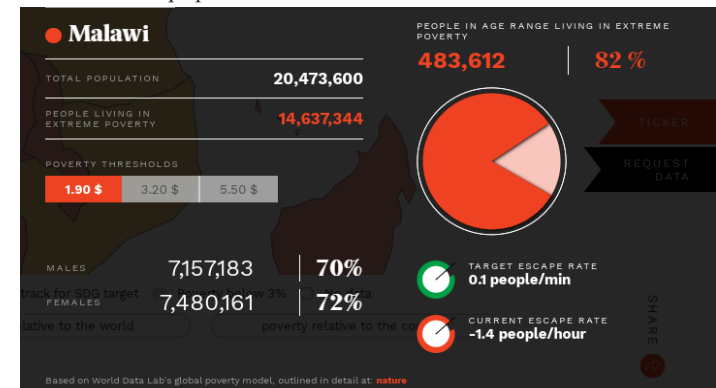
Malawi :Poverty status (SDG1 progress update)



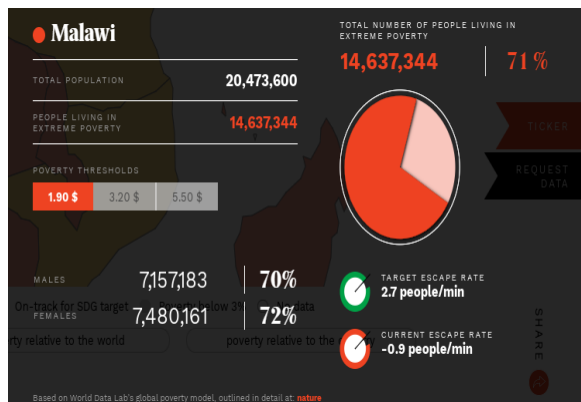
Youth population (10-35)



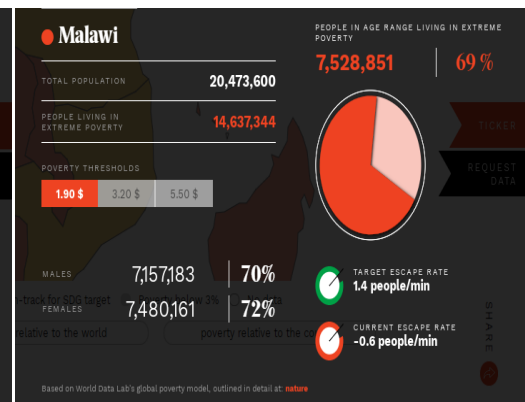
Retired population 65 -



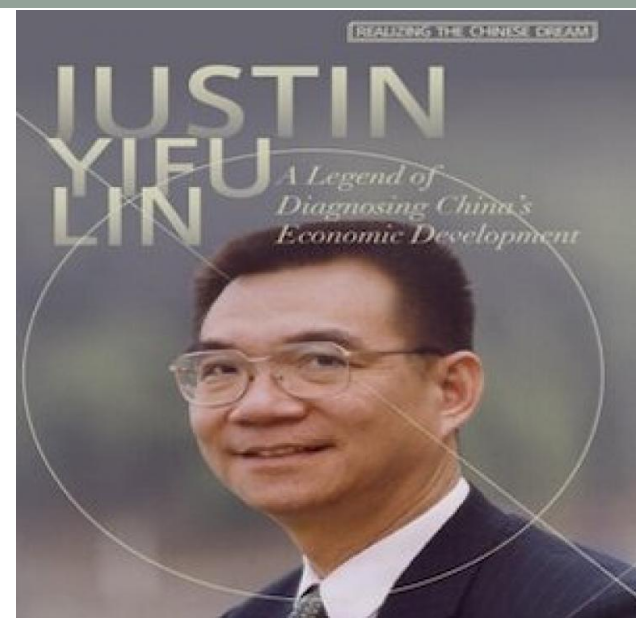
Whole population



Working age population (15-64)

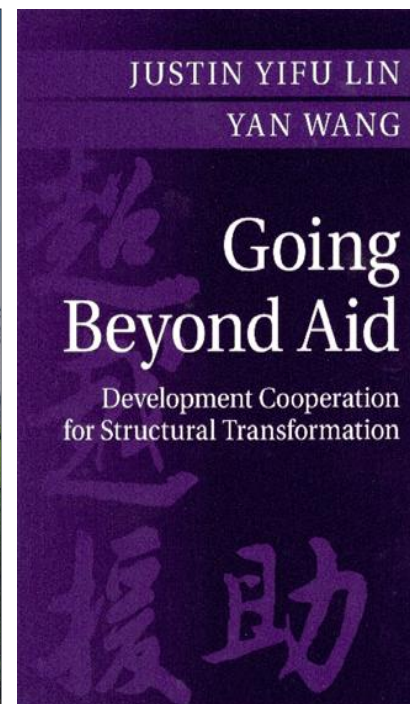
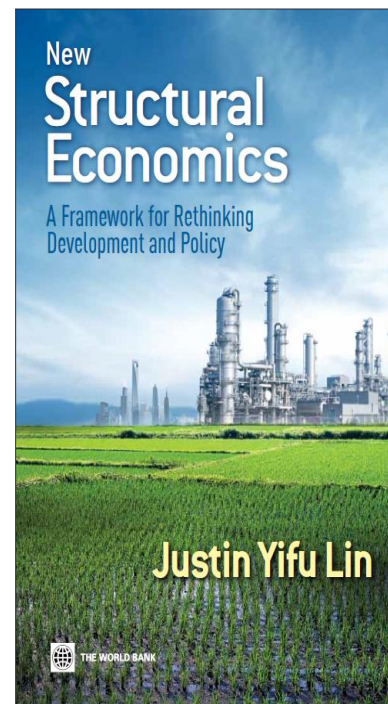
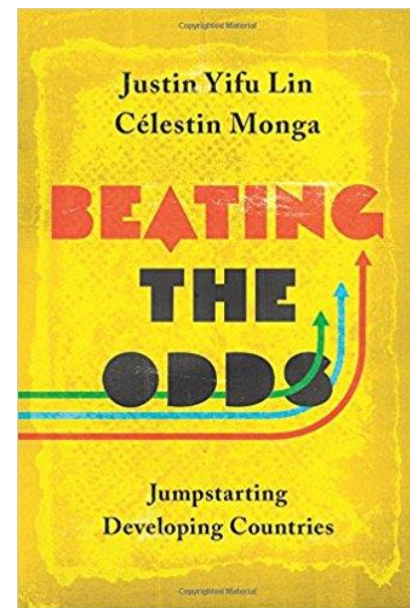
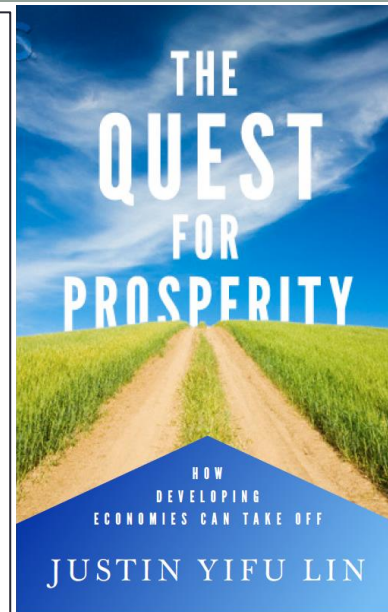


1. Despite evolution of development efforts from government and Multinational companies.
 2. Efforts suffer from:
 - Benchmark countries
 - Political commitment
 - Comparative disadvantage following strategies
 - One size fits all policies
- Need to rethink development**

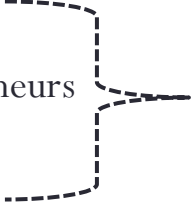


Prof Justin Yifu Lin

1. Former chief economist of World Bank
2. Former Vice president World Bank
3. First Chief economist from developing country
4. Lead economist in China's miracle growth
5. PhD University of Chicago
6. First internationally trained PhD economist in China(1978)



Introduction

- There is hope for all developing countries to achieve quick wins
- This presentation explains the paradox of what is wrong with mainstream development thinking :need for **mindset change**
- It offers a “way out” for Malawi towards quick wins in development
 - it proposes a development strategy that encourages Malawi to leap directly into the global market
- The main idea is to leverage “industrial parks and “export processing zones” to attract light manufacturing from more advanced economies, as East Asian countries did in the 1960’s and China did in 1980’s.
- By attracting these foreign firms and investment, Malawi can improve :
 - trade logistics
 - increase knowledge and skills of local entrepreneurs
 - gain confidence of international buyers
 - gradually make local firms competitive**job creation and wealth creation.**
- This strategy, inspired by New Structural Economics, is already being used with great success in **Vietnam, Cambodia, Bangladesh, Mauritius, Ethiopia, Rwanda and other countries**

Success story 1: Huajian Shoes: A quick win in Ethiopia



- PM Meles in March 2011 went to China to personally invite shoe manufactures to invest in Ethiopia's Eastern Industrial Park.
- Huajian visited Addis Ababa in October 2011, decided to make the investment on the spot and recruited 86 workers to be trained in China.
- Two production lines with 600 employees were set up in January 2012.
- The first shipment for export to the US was made in March 2012
 - by May Huajian became the largest shoe exporter in Ethiopia.
 - Huajian's exports consisted of 57 % of Ethiopia's total leather export in 2012.
- Huajian employed 3,500 workers by the end of 2013.
- The success of Huajian produces a snowballing effect on attracting FDIs to Ethiopia.

Success story 2: C&H Garments: A quick win in Rwanda



- President Kagame approached *Institute of New Structural Economics* to advise him about how to have quick wins in Rwanda
- C&H Garments made a decision to invest in the Kigali Special Economic Zone in 2014
- March 2015- Training of 300 Rwandan workers to produce protective clothing and T-shirts for export started
- July 2015-The shipment of protective clothing for export started
- **Job creation** increased from **500**(in August 2015) to **2000** (in 2017)



Current development approaches focus on “**what a developing country lacks (does not have)**” (good governance; good institutions; human capital) **instead** of focusing on “what a country has got”

Mindset change: This presentation adopts a different approach, where industrial policy focuses on “**what a country possesses**” (revealed Comparative advantage) and “**how they can make them more competitive**” (*effectively travel from A to C*)

Inquiries

1. Insurance
2. Certificate of Fitness (COF)
3. License
4. Fire extinguisher
5. Triangle
6. Tail lights

NONE of these help you get from A to B

Similarly, development efforts have similarly identified “**best conditions**” for growth (**copied from developed countries**) but do not necessarily guarantee growth; Ethiopia (rank of doing business) China (rule of law; government intervention; deregulation) and many more...

Motivation: The problem statement

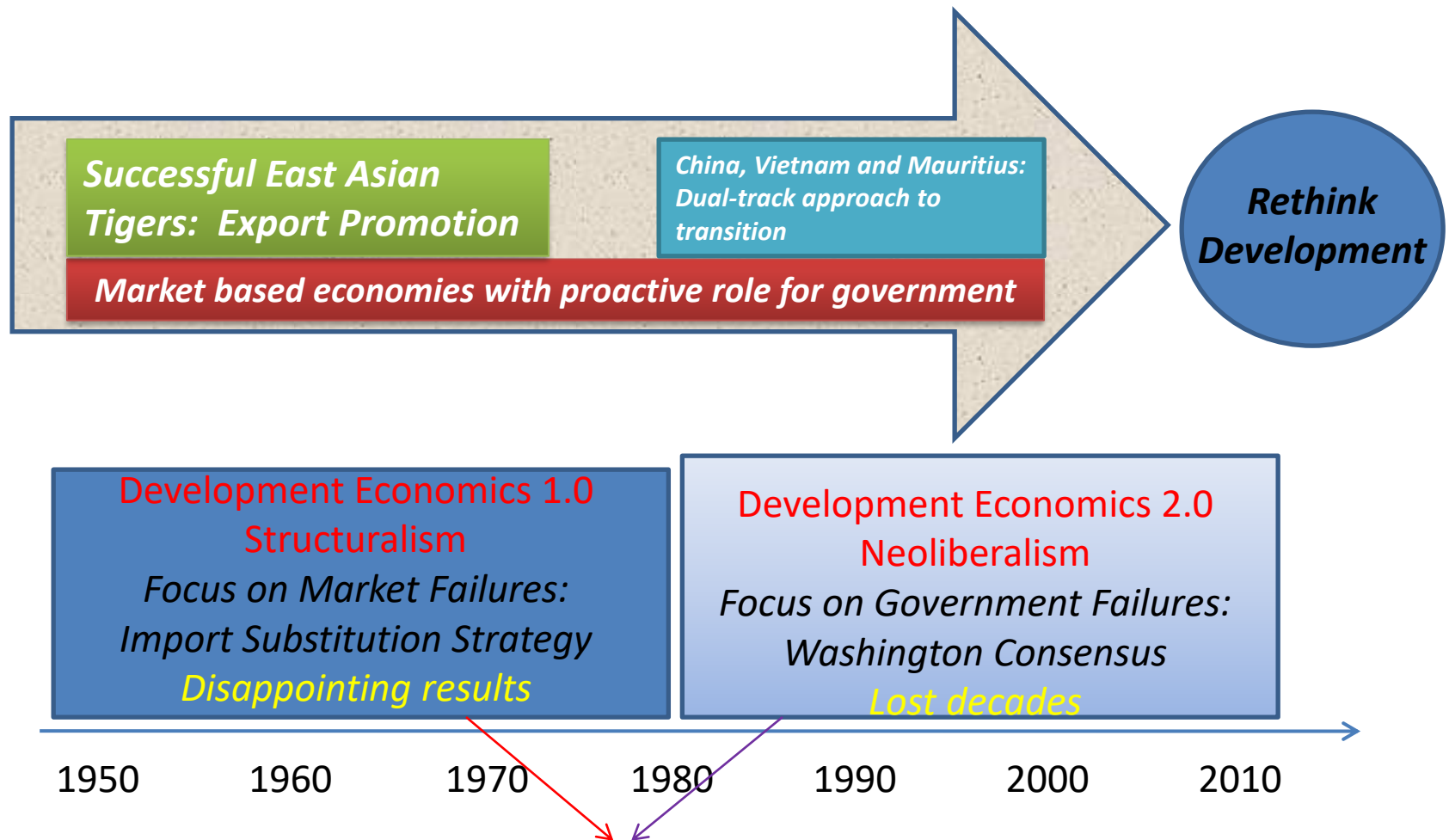


World Bank Growth report (2008)

According to the World Bank Growth report(2008):

- In the period between WWII and 2008, among **200** developing economies, only South Korea and Taiwan, China moved up from the status of low-income to high income
- Among the 101 middle-income economies in 1960, only 13 became high income economies by 2008
- The above statistics show that most economies are in a low income and middle-income trap in spite of a half century's development efforts by Governments and various multilateral and bilateral development institutions

Motivation: Historical gap



Wrong benchmarking and Comparative Advantage Denying Strategies (one size fits all policies)

Main features and Policy prescriptions	Strengths	Weaknesses
<i>Early Structuralism : Focus on Market Failures</i>		
<ul style="list-style-type: none"> Need to target modern, advanced, capital intensive industries 	<ul style="list-style-type: none"> Stressed the importance of innovation and technological change in the growth process. 	<ul style="list-style-type: none"> Ignored comparative advantage and led to the development of industries that were not competitive
<ul style="list-style-type: none"> Way for developing country to avoid exploitation by developed countries is to develop manufacturing industries through a process known as “import substitution” 	<ul style="list-style-type: none"> Attempted to close the structural gaps between low and high income countries 	<ul style="list-style-type: none"> Identified the wrong causes of the problems. Attributed the low income countries’ inability to establish high income countries’ advanced industries to market rigidities
<i>Structural Adjustment: Focus on Government Failures</i>		
<ul style="list-style-type: none"> Recommended macroeconomic stabilization, liberalization, deregulation and privatization 	<ul style="list-style-type: none"> Used the price system to ensure efficient allocations of resources, encouraging efficiency. 	<ul style="list-style-type: none"> Ignored issues of coordination and externalities that cannot be addressed by market mechanisms
<ul style="list-style-type: none"> Suggested that state-sponsored development strategies necessarily give rise to incorrect relative prices in poor economies and distort incentives 		<ul style="list-style-type: none"> Policy prescriptions did not include crucial elements for growth and structural change such as human capital or institutions
<i>Augmented Washington Consensus: Focus on Government Failures</i>		
<ul style="list-style-type: none"> Recommended that initial Washington consensus framework be completed with policy measures to improve social and institutional development. 	<ul style="list-style-type: none"> Drew attention to issues of governance, institutions , and human capital development, generally seen as critical to sustain dynamic growth 	<ul style="list-style-type: none"> Had same weaknesses as Washington consensus
		<ul style="list-style-type: none"> Offered only generic recommendations for good governance, and institutional development, which are actually endogenous to growth
<i>Randomized Control Trials and Micro recipes: Focus on Government and Donors’ Failures</i>		
<ul style="list-style-type: none"> Extensive use of project and program evaluation 	<ul style="list-style-type: none"> RCTs are good tools for understanding the effectiveness of specific micro projects and programs, and why they work or fail. 	<ul style="list-style-type: none"> Provide few insights to policy makers facing strategic macro decisions
<ul style="list-style-type: none"> Suggested that policies to reduce poverty be based on “scientific evidence” through the use of randomized control trials (RCTs) or social experiments 	<ul style="list-style-type: none"> Highlights what works and what does not- even though lessons are not transferrable from one context o another 	<ul style="list-style-type: none"> RCTS do not provide answers to the main question of economic development, which is why and how some countries succeeded and others failed to fundamentally transform their economies, so the countries remain trapped in poverty
<i>Growth Diagnostic and Product Space: Focus on Government and Donors’ Failures</i>		
<ul style="list-style-type: none"> Posits that identifying the most binding constraints to growth is key to economic growth. 	<ul style="list-style-type: none"> Stresses the need to prioritize reforms using the information revealed by shadow prices 	<ul style="list-style-type: none"> Applies to new industries that a given country is attempting to develop and argues that choices of successful industries should depend on a self-discovery process by individual firms.
<ul style="list-style-type: none"> Economic progress occurs because countries upgrade what they produce 	<ul style="list-style-type: none"> Provides a simple method(the network of relatedness between products) for industrial and technological upgrading 	

- For developing countries, the targeted sectors are often too capital intensive
- For developed countries, the targeted sectors are too labor intensive

Why?

Why correctly benchmark (target)?

- Developing countries have poor hard and soft infrastructure- with limited sector specific resources to invest.
 - Government must therefore choose specific infrastructure elements to improve and where to provide these services
- Identification is needed because industrial clustering is essential for economies of scale and reducing costs
- Otherwise firms may be spread too thinly over too many sectors, reducing the chances of surviving and gaining competitive edge

Consequences of Comparative Advantage Defying strategies

- The firms in the industrial policy's targeted sectors were non-viable in the competitive market.
 - The factor costs of production are higher than those in countries with the comparative advantages in those sectors
- governments supported the non-viable firms through subsidies
- As a result, the attempt to pick winners ended up picking losers

Evidence

Evidence

1) Benchmarking

Year	Successful Countries	Target		% of per Capita GDP
16 th and 17 th Century	Britain	Netherland's industries		About 70% of the Netherland's
19 th Century	<ul style="list-style-type: none"> Germany France USA 	Britain's industries		60% to 75% of Britain's
Meiji restoration	Japan	Prussia		40% of Prussia's
1960's	Japan	USA		40% of USA's
1960s – 80s	<ul style="list-style-type: none"> Korea Taiwan Hong Kong Singapore 	Japan		30% of Japan's
1970's	Mauritius	Hong Kong	Textiles	50% of Hong Kong's
			Garments	
1980's	China	<ul style="list-style-type: none"> Hong Kong's industries Korea's industries Taiwan's industries 		Above 30%
1980's	Ireland	USA	Information	45% of the USA
			Electronic	
			Chemical	
			Pharmaceutical	
1990's	Costa Rica	Taiwan	Memory Chip packaging	40% of Taiwan's
			Testing	

Criteria: Successful benchmarking = per capita GDP of country > 20% of per capita GDP of target country

2) Comparative Advantage

Testable Hypotheses

Key:

CAD: Comparative Advantage **Defying**

CAF: Comparative Advantage **Following**

- **H1:** The country that adopts a CAD strategy will result in various government interventions and distortions in the economy.
- **H2:** Over an extended period of time, the country that adopts a CAD strategy will have a poor growth performance.
- **H3:** Over an extended period of time, the country that adopts a CAD strategy, its economy will be volatile.
- **H4:** Over an extended period of time, the country that adopts a CAD strategy will have less equitable income distribution.

Following Lin(2003):

The Proxy for Development Strategy (TCI):

$$TCI_{i,t} = \frac{AVM_{i,t} / LM_{i,t}}{GDP_{i,t} / L_{i,t}}$$

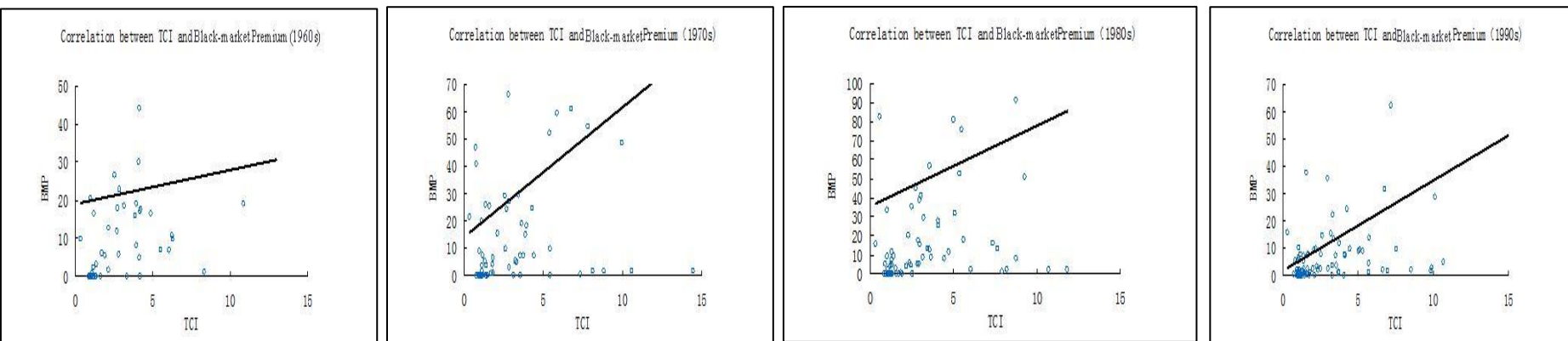
$TCI_{i,t}$ = Technology Choice Index of country i at year t .

$AVM_{i,t} / LM_{i,t}$ = Added value per worker in manufacturing industries
in country i at year t .

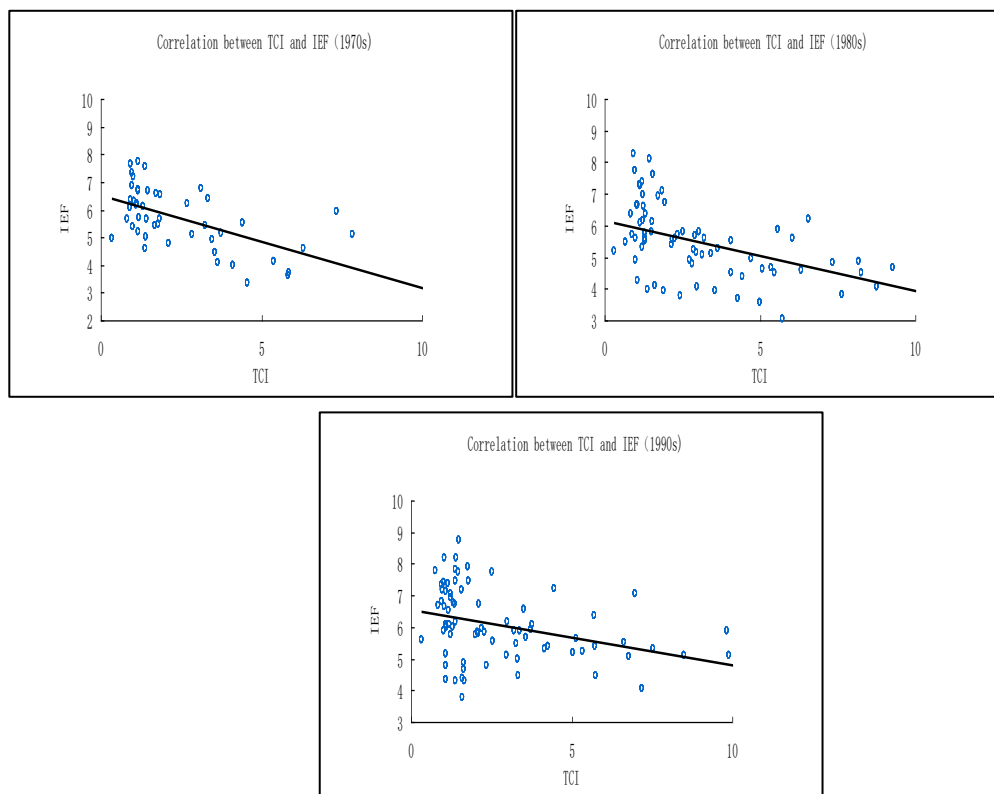
$GDP_{i,t} / L_{i,t}$ = GDP per worker in country i at year t .

**The more a country pursues a CAD
Strategy, the higher is TCI in the country.**

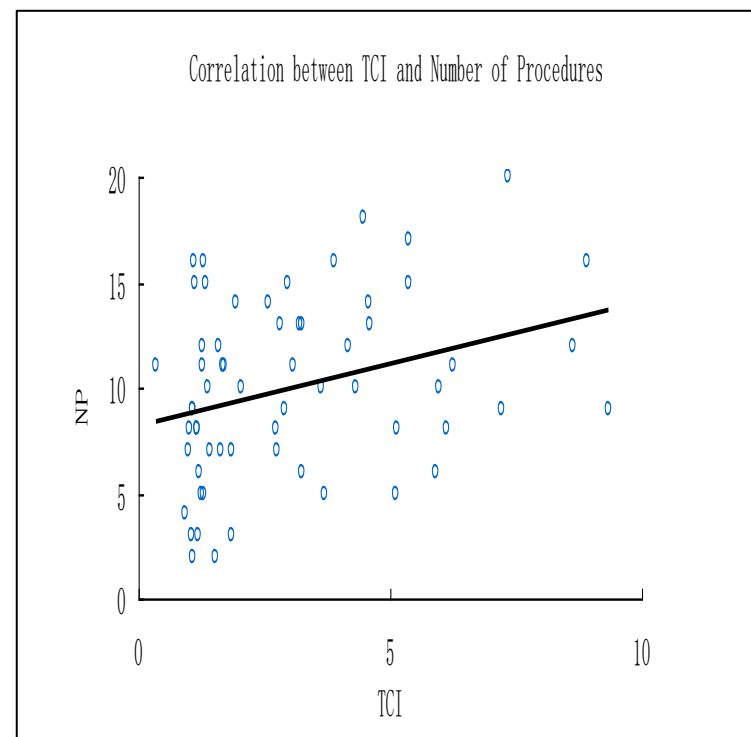
H1: TCI and Black Market Premium



H1 :TCI and Economic Freedom

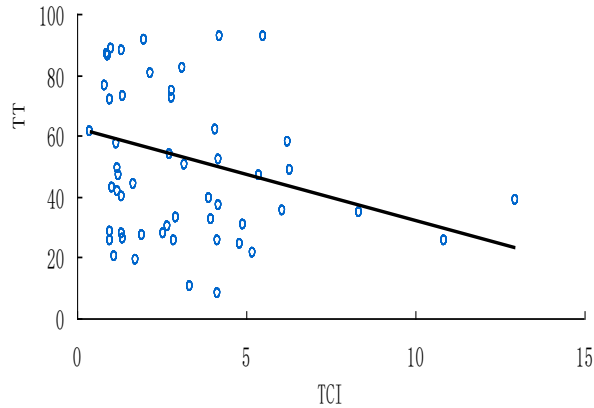


H1 :TCI and # procedures for business

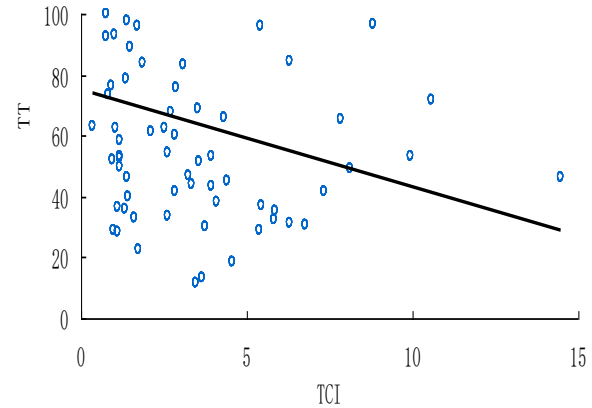


H1 : TCI and Openness

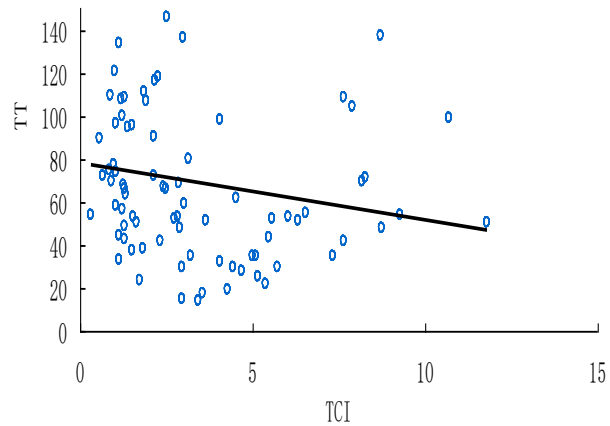
Correlation between TCI and Total Trade(1960s)



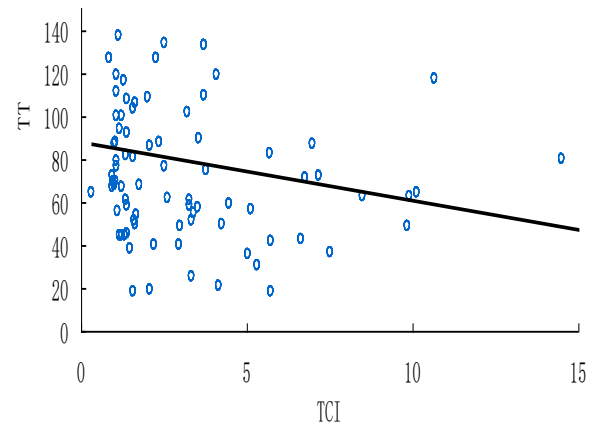
Correlation between TCI and Total Trade(1970s)



Correlation between TCI and Total Trade(1980s)



Correlation between TCI and Total Trade(1990s)



H2: TCI and Growth

Dependent Variable: <i>Average</i> Per capita GDP growth rate in 1962-1999							
	Model 1.1 (OLS)	Model 1.2 (OLS)	Model 1.3 (2SLS)		Model 1.1 (OLS)	Model 1.2 (OLS)	Model 1.3 (2SLS)
Constant	7.32*** (1.60)	4.66** (1.87)	3.26 (2.15)	TRADE ₁			.93** (.43)
<i>ln</i> TCI ₁	-1.25*** (.20)	-.66*** (.18)	-.92*** (.19)	<i>ln</i> DIST		.20 (.16)	.47*** (.16)
<i>ln</i> GDP60	-.54*** (.20)	-.99*** (.18)	-.59*** (.21)	<i>ln</i> POP1		.33*** (.09)	.22** (.09)
RL01		.58*** (.21)		LANDLOCK		.07 (.32)	.46 (.38)
INST			.22 (.41)	Adjusted-R ²	.36	.56	.44
<i>ln</i> OPEN ₁		.70*** (.22)		Observations	85	83	83

Lin, J. (2003). Development Strategy, Viability, and Economic Convergence. *Economic Development and Cultural Change*. Vol. 51(2). Pp 277-308

H3: TCI and Volatility

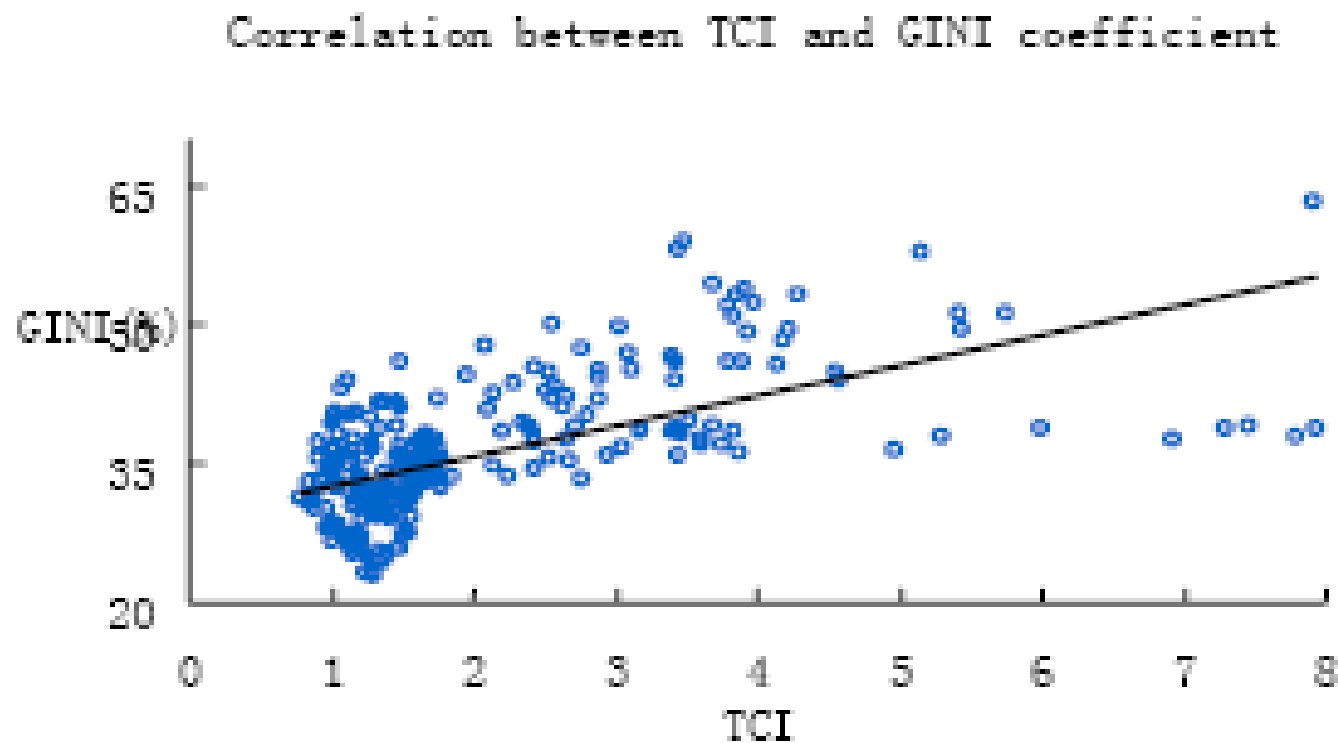
Dependent Variable: Economic Volatility							
	Model 3.1 (OLS)	Model 3.2 (OLS)	Model 3.3 (2SLS)		Model 3.1 (OLS)	Model 3.2 (OLS)	Model 3.3 (2SLS)
Constant	.49 (1.06)	3.03** (1.44)	3.63** (1.56)	TRADE ₁			-.53 (.33)
<i>ln</i> TCI ₁	.64*** (.13)	.41*** (.14)	.56*** (.14)	<i>ln</i> DIST		-.003 (.11)	-.15 (.11)
<i>ln</i> GDP ₆₀	-.04 (.13)	.17 (.14)	-.07 (.15)	<i>ln</i> POP ₁		- .26*** (.06)	-.18** (.07)
RL01		-.33** (.16)		LANDLOCK		-.31 (.24)	-.53* (.28)
INST			-.20 (.29)	Adjusted- R ²	.29	.47	.37
<i>ln</i> OPEN ₁		-.46*** (.17)		Observations	103	93	93

H4: TCI and Income Distribution

Dependent Variable: GINI coefficient Sample: 261 observations from 33 countries					
	Model 4.1r	Model 4.2r	Model 4.3f	Model 4.4r	Model 4.5f
CONSTANT	6.46 (4.72)	8.18*** (2.40)	31.5*** (1.75)	8.09*** (3.16)	32.6*** (0.97)
TCI	1.32*** (0.33)	1.35*** (0.31)	1.84*** (0.48)	1.35*** (0.32)	1.72*** (0.46)
IGINI	0.73*** (0.08)	0.71*** (0.07)		0.71*** (0.07)	
GDPPC	-0.89 (11.3)		0.43 (12.6)	0.74 (10.8)	
GDPPC_1	0.40 (1.84)		1.91 (2.11)	3.21 (16.6)	
CORR	1.03* (0.58)				
BQ	-0.84 (0.58)				
OPEN	0.12 (1.68)				
R2	0.9040	0.8941	0.5495	0.8936	0.5780
Hausman Statistics	3.32	1.19	23.91	1.99	7.98
Hausman P-value	0.19	0.28	0.00	0.37	0.00

H4: TCI and Income Distribution

Correlation between TCI and GINI coefficient



“Implied” Blueprint of Malawi Industrial Policy

1960's to present

Evolution of development efforts by Government and Multi-lateral and bilateral international organizations

Blueprint for Malawi Industrial Policy

Policy gap in Industrial Policy

Wrong Industrial Policy due to:

- 1) Ignoring Comparative advantage
- 2) Wrong benchmarking

Mitigation to Industrial Policy: Picking Winners

Industrial Policy to be guided by:

- Target sectors that conform Latent comparative advantage
 - Latent comparative advantage are industries that the economy has low factor costs of production but transaction costs are too high to be competitive in domestic and international markets
 - They are not yet realized(invisible)
 - They are potential industries

Key Questions

- But how can we identify these latent comparative advantages?
- How can we see the unseen?

Tool to be used:

Growth Identification and Facilitation Framework
(GIFF)

Identification tool: Growth Identification and Facilitation Framework (GIFF)

- New Structural Economics has therefore introduced a tool for identifying growth opportunities to incorporate comparative advantage and pragmatic benchmarking: **Growth Identification and Facilitation Framework**
- The objective is to identify right target countries and right target sectors to achieve quick wins for any country
- Government plays the facilitating role: Coordination and externalities
- Several African countries are now attempting to follow the GIFF approach to target certain countries and sectors in which they have latent comparative advantage(see UNIDO 2015; technical reports on Senegal and Ethiopia on GIFF adoption)



Literature review: Where has it been used?

Title	Country	Author	Results	
			Benchmark countries	Growth sectors
Applying the Growth Identification and Facilitation Framework to Nepal	Nepal	Jiajun Xu & Sarah Hager	<ul style="list-style-type: none"> • Vietnam • India • China 	<ul style="list-style-type: none"> • Garments • Trunks • footwear
Applying the Growth Identification and Facilitation Framework to the Least Developed Countries: The case of Uganda	Uganda	Justin Yifu Lin & Jiajun Xu	<ul style="list-style-type: none"> • China • India • Nigeria • Uzbekistan • Vietnam 	<ul style="list-style-type: none"> • Garments • Footwear • Video and radio equipment • Trunk and cases • Agro-processing business • Cotton yarn • Paper production • Iron and steel • Printing industries • Glass and glassware • Dyeing materials
Applying the Growth Identification and Facilitation Framework to the Least Developed Countries: The case of Nigeria	Nigeria	Justin Yifu Lin & Volker Treichel	<ul style="list-style-type: none"> • Indonesia • Vietnam • China • India 	<ul style="list-style-type: none"> • Garments • Footwear • Leather(luggage) • Agro-processing products (Milled rice and miscellaneous fruits) • Raw materials(synthetic rubber, Miscellaneous non-iron waste, raw cotton) • Fuels
Applying the Growth Identification and Facilitation Framework to Malawi	Malawi	Farai Chigaru	<div> ? Empirical Gap to be filled ? </div>	

Methodology

Theoretical Framework

Step 1

Find fast **growing countries** with similar endowment structures and with about 100% higher per capita income, or 20 years ago had a similar per capita income.

Identify dynamically growing, tradable industries that have performed well in those countries over the last 20 years. Alternatively identify major imports that are produced in countries with about 100%-200% of per capita income

Avoid the government doing the wrong things or being captured by vested groups for rent seeking

Incorporate the idea of tacit knowledge

Step 2

See if some **private domestic firms** are already in those industries (existing or nascent). Identify constraints to quality upgrading or further firm entry. Take action to remove constraints

Step 3

In industries where no domestic firms are currently present, **seek FDI** from countries examined in step 1, or **organize new firm incubation programs**.

Import or cultivate tacit knowledge

Benefit from opportunities arising from new technologies

Step 4

In addition to the industries identified in step 1, the government should also pay attention to **spontaneous self discovery** by private enterprises and give support to **scale up successful private innovations** in new industries.

Step 5

In countries with poor infrastructure and bad business environments, **special economic zones or industrial parks** may be used to overcome barriers to firm entry, attract FDI, and encourage industrial clusters.

Play the coordination function in a pragmatic way

Address the externality issue

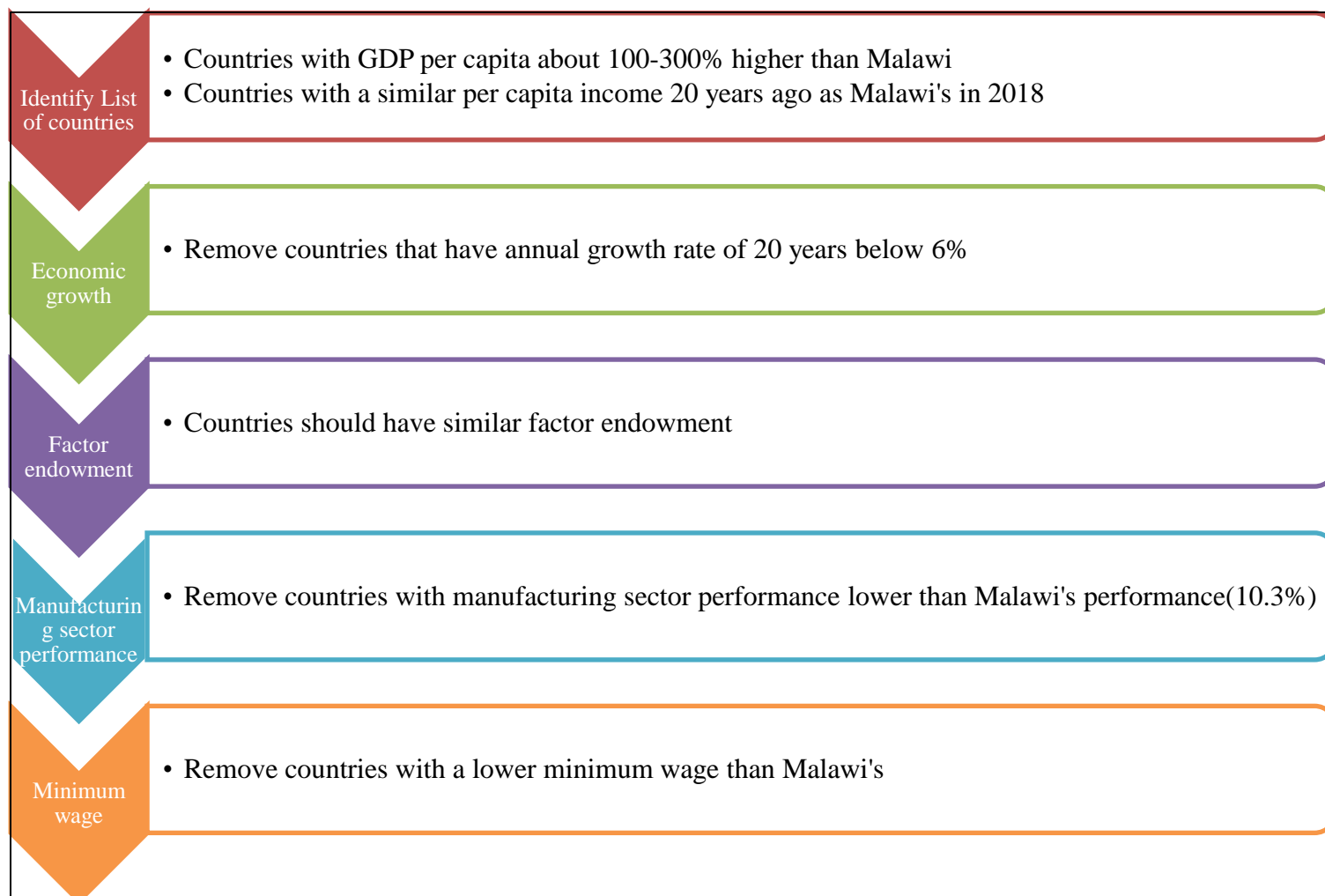
Step 6

The government may **compensate pioneer firms** identified above with:

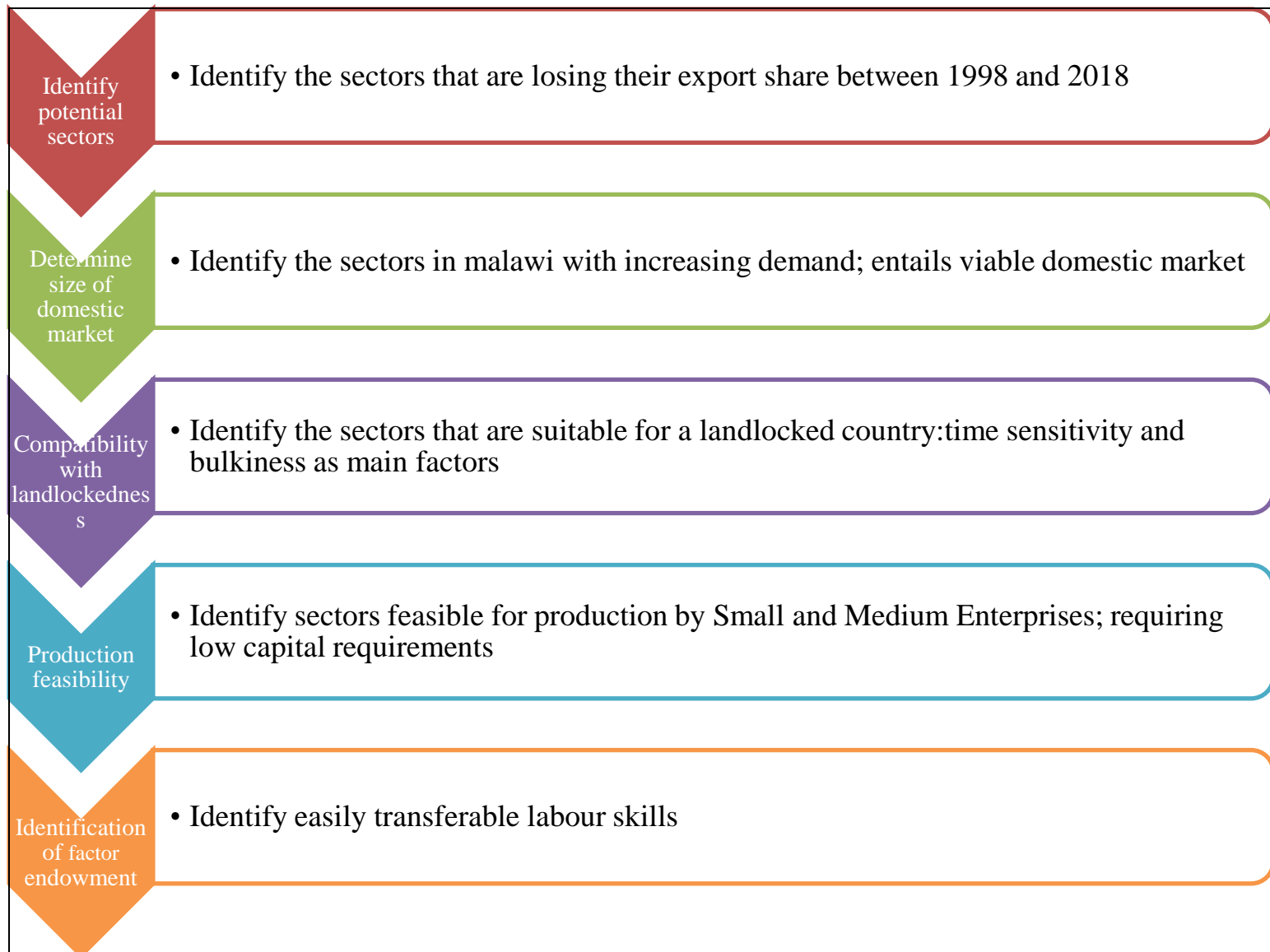
- Tax incentives for a limited period
- Direct credits for investments
- Access to foreign exchange

Empirical Framework: Pragmatic Step-by-step guide for Malawi

1) Identifying benchmark countries for Malawi



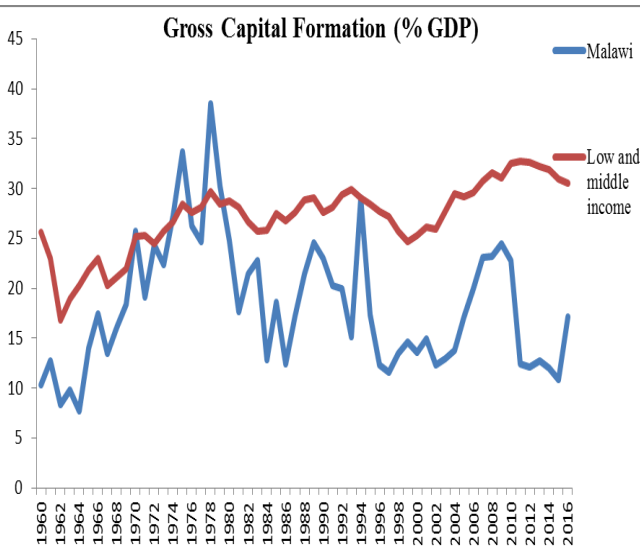
2) Identify sectors with latent comparative advantage



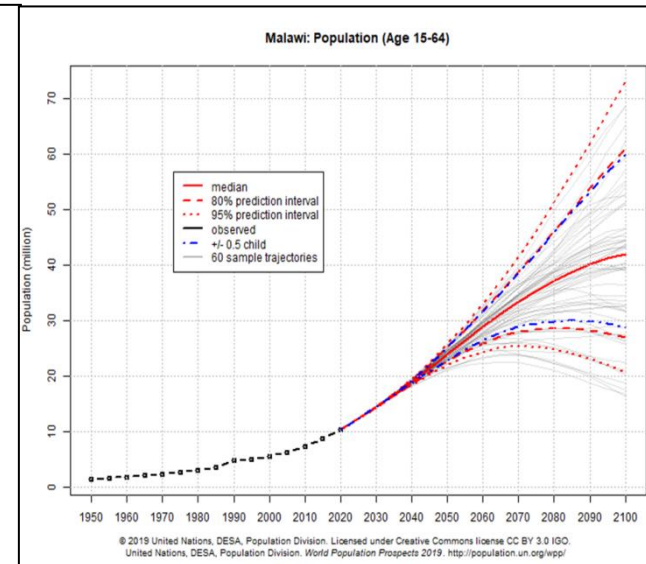
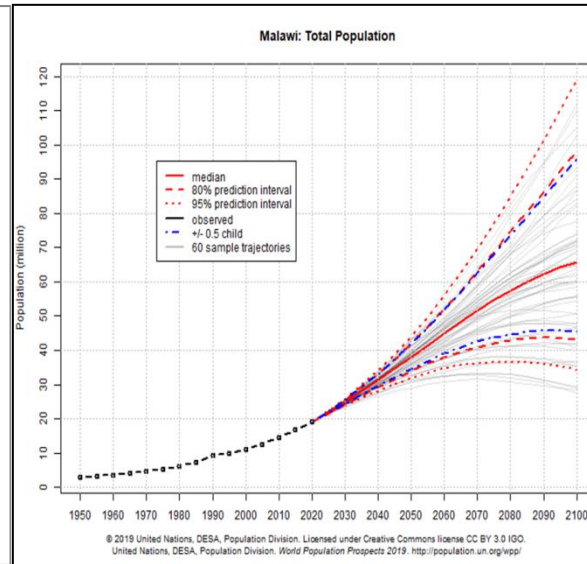
Results

Factor endowment analysis: What does Malawi have? = Malawi is relatively a labor abundant country

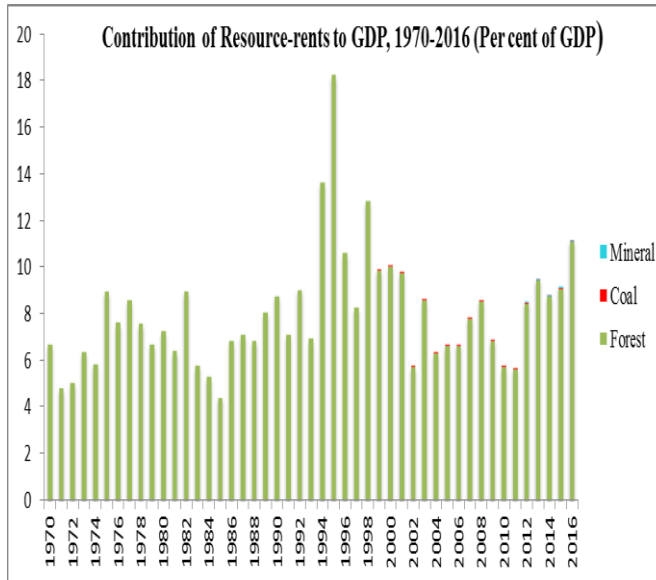
Capital abundance



Labor abundance



Natural resource abundance



Population density :persons per square kilometer

Location	1995	2000	2005	2010	2015	2020
Sub-Saharan Africa	25.8	29.5	33.7	38.6	44.3	50.6
Malawi	105.1	120.7	138.3	160.9	186.4	215.1
Mozambique	20.0	23.0	26.6	30.8	35.6	41.1
Tanzania	33.8	38.6	44.5	52.0	60.8	70.9
Zambia	12.3	14.2	16.2	18.6	21.7	25.1
Zimbabwe	29.3	31.6	33.4	36.4	40.8	45.7

GIFF steps

1) Identifying benchmark countries

1

1. Countries with GDP per capita about 100-300% higher than Malawi

2. Countries with a similar per capita income 20 years ago as Malawi's in 2018

2

31 countries

16 countries

Key screening criteria

1. Identify list of countries
2. Remove growth less than 6%
3. Have similar factor endowment
4. Remove countries with MVA less than Malawi
5. Remove countries with lower minimum wage

Further screen criteria (step 2-5)

3

4

Final list

1. Myanmar
2. Tajikistan
3. Cambodia

2) Identifying key sectors in Malawi(growth sectors) : {latent comparative advantage + self discovery by domestic firms}

i) Industries with latent comparative advantage (unrealised **yet** industries)

Step 1: Identify sectors in which the benchmark countries are losing comparative advantage(competitiveness).

- **Method:** i) Rank aggregate exports of these countries over 20 years in declining order of a given country
ii) the top 10 exports of a given benchmark country every 5 years and track their performance(1998, 2003,2008,2013,2018)

Table : List of sectors that have lost comparative advantage in the benchmark countries

	SITC Code	Commodity
Cambodia	8451	Knitted outerwear
	2320	Natural rubber
	2483	Non coniferous worked wood
	8423	Men's pants
	6341	Sawn wood
	8441	Men's shirts
Myanmar	0360	Crustaceans and mollusks
	2225	Sesame seeds
	2320	Natural rubber
	0422	Milled rice
	2472	Non coniferous saw logs
	2483	Non coniferous worked wood
Tajikistan	2631	Raw cotton
	6842	Processed Aluminum
	0575	Other plastics, in primary forms
	5721	Prepared explosives
	3510	Electric current
	1211	Unstripped tobacco
	6513	Cotton yarn

Detailed description

Windows of opportunities: Sectors that Malawi could potentially enter for growth for Malawi

Sector/Product codes	Sector/Product Descriptions	Notes
8451,8423,8441	Knit Outerwear, Men's pants, Men's shirts	As wages are rising, these labour-intensive sectors are losing comparative advantages in Cambodia
2320,2483,6341,2472,2483	Natural rubber, Non coniferous worked wood, Sawn wood, Non coniferous sawlogs, Non coniferous worked wood	As wages are rising, these labour-intensive sectors are losing comparative advantages in Cambodia and Myanmar
360,2225,422,1211	Crustaceans and Molluscs, Sesame seeds, Milled rice, Unstripped Tobacco	As wages are rising, these labour-intensive sectors are losing comparative advantages in Tajikistan and Myanmar
2631,6513	Raw cotton,Cotton yarn	As wages are rising, these labour-intensive sectors are losing comparative advantages in Tajikistan
6842	Processed Aluminum	This industry is losing cost competitiveness in Tajikistan
575	Other plastics, in primary forms	This industry is losing cost competitiveness in Tajikistan
5721,3510	Prepared Explosives,Electric current	These assembly industries are losing cost competitiveness in Tajikistan



Sectors where Malawi has latent comparative advantage

Step 2: Identify the sectors in which Malawi has increasing demand: entails domestic market

➤ Imperative to choose the sectors that have domestic market in Malawi, ensuring adequate local demand

Method: We observe the import shares of the top 15 imports of Malawi

Top 15 Malawi Imports

No.	Commodity Code	Commodity	Import Value (1000 US\$)	% of total imports
1	5417	Medicaments	157,409,154	7.70%
2	5621	Nitrogenous Fertilizers	122,805,510	6.00%
3	5629	Miscellaneous Fertilizers	97,394,091	4.80%
4	8928	Miscellaneous Printed Matter	56,247,285	2.70%
5	7810	Cars	54,064,931	2.60%
6	9310	Unclassified Transactions	49,701,119	2.40%
7	6612	Cement	43,980,729	2.20%
8	5541	Soaps	42,546,701	2.10%
9	2690	Rags, textile waste, clothing	42,533,402	2.10%
10	6749	Miscellaneous Processed Iron	40,544,184	2.00%
11	5831	Polyethylene	35,843,920	1.80%
12	1212	Stripped Tobacco	36,486,767	1.80%
13	6584	Linens	35,544,258	1.70%
14	0440	Maize	32,689,052	1.60%
15	7821	Trucks and Vans	28,784,165	1.40%

Step 3: Identify sectors that are compatible with land lockedness of Malawi

- Time sensitivity
- Bulkiness

Step 4: Consider feasibility of production; identify sectors that require low capital requirements

Step 5: Identify sectors that have easily transferable skills

Product group	Step 1: There is a significant domestic market	Step 2: How Malawi's landlocked situation affects its latent comparative advantage	Step 3: Production has low capital requirements; production in benchmark countries is by small and medium enterprises	Step 4: There is some factor endowment in Malawi (easily transferable labor skills; domestic or imported materials)
Knit Outerwear, Men's pants, Men's shirts	Yes	Largely negative. If these products are time-sensitive Neutral. If these products are less time-sensitive	Yes	Yes. Malawi has raw materials such as cotton.
Natural rubber, Non coniferous worked wood, Sawn wood, Non coniferous sawlogs, Non coniferous worked wood	Yes	Negative. These products are bulky items	Yes	Yes
Crustaceans and Molluscs, sesame seeds, Milled rice, Unstripped Tobacco	Yes	Neutral. This product is relatively light and less time-sensitive. Negative to Crustaceans and molluscs. These products are time sensitive.	Yes	Yes
Raw cotton, Cotton yarn	Yes	Neutral. This product is relatively light and less time-sensitive	Yes	Yes. Malawi already exports cotton, which indicates that the supply chain exists
Processed Aluminum	Yes	Negative. These products are bulky items.	No	No
Other plastics, in primary forms	Yes	Neutral. This products are relatively light and less time-sensitive	Yes	Yes labour skills are transferable, and raw materials can be imported
Prepared Explosives, Electric current	Yes	Negative to Prepared Explosives. These products are time sensitive. Neutral to Electric current. These products are less time sensitive	No	No

2) Self discovery industries by domestic firms

- In order to identify these self-discovery firms, the study identifies the sectors in which Malawi has been gaining competitiveness in the global market.
- The study uses the Revealed Comparative Advantage (RCA) as the indicator.
- By definition, RCA is an index used in international economics for calculating the relative advantage or disadvantage of a certain country in a certain class of goods as evidenced by trade flows.
- Therefore :

$RCA < 1$: implies country has comparative disadvantage in that product

$RCA > 1$: implies a country has a comparative advantage in that product

Summary of Sectors that Lost RCA and Sectors that Gained RCA, 2003–2018, selected years

2003		2008		2011		2018	
Sectors that lost RCA	Sectors that gained RCA	Sectors that lost RCA	Sectors that gained RCA	Sectors that lost RCA	Sectors that gained RCA	Sectors that lost RCA	Sectors that gained RCA
Raw materials	Food Products	Food Products	Textiles and clothing	Raw materials	Food products	Chemicals	Raw materials
Textiles and clothing	Vegetables	Raw materials	Wood	Textiles and clothing	Vegetables	Textiles and Clothing	Food products
		Vegetables		Transportation	Wood		Vegetables
					Minerals		Stone and Glass

Summary of results

- The study obtains the growth sectors by combining the sectors with latent comparative advantage with those from self-discovery by domestic firms
 - Growth industry sectors in Malawi = Latent comparative sectors + Self discovery sectors
- **The identified sectors are as follows:** Garments; Plastics; Cotton Yarn; Wood; Rubber, Agro-processing products (Sesame seeds, Molluscs, Milled Rice, Unstripped Tobacco); Food products; Vegetables; Raw materials; Stone and glass

Way forward

- Approach benchmark countries to attract targeted sectors to set up in Malawi
- Create conducive environment for target sectors- “industrial parks”
- Focus on providing infrastructure to support clusterization
- Government remove transaction costs – coordination and externalities
- National policies to focus on CAF strategies, by continuously identifying benchmark countries as factor endowment changes
- Political will is imperative!

THANK YOU

Zikomo