

## Structural Transformation through Investment

**Alun Thomas** 

May 2017

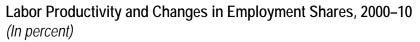


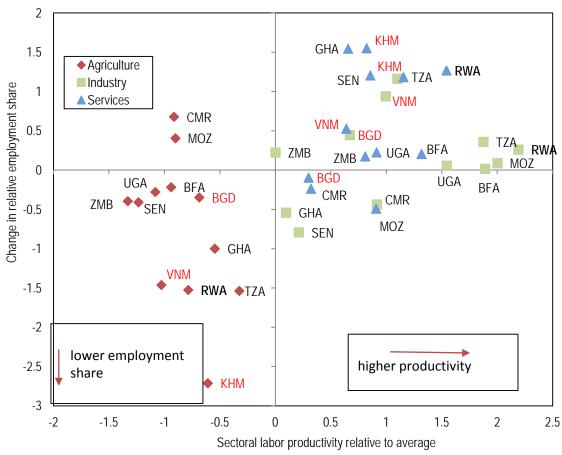


## **Structural Transformation**

#### **Structural Transformation in Rwanda**







•Rwanda has transformed faster than most countries over 2000-15

#### **Industry in Rwanda**



Manufacturing

6.0

9.9

7.5

9.5

7.7

11.0

17.6

**Output share** 

 Rwanda has had rapid increase in industry employment in recent years

But mainly from

construction

Rwanda (2016) Kenya <sup>1</sup>

LIC average <sup>1</sup>

Bangladesh

Cambodia

Vietnam

Laos

Uganda 1 5.8

Tanzania 1

6.9

7.1

**Employment Share** 

Industry

7.4

8.4

5.4

10.8

11.1

14.3

Table 1. Industry Employment and Output Shares (2010 except where stated)

Industry

17.0

13.5

24.1

18.9

14.8

40.0

28.2

29.4 17.0 33.3 13.7

above the average for low income countries

Manufacturing output

remains low, although

industry is rising and

Notes:

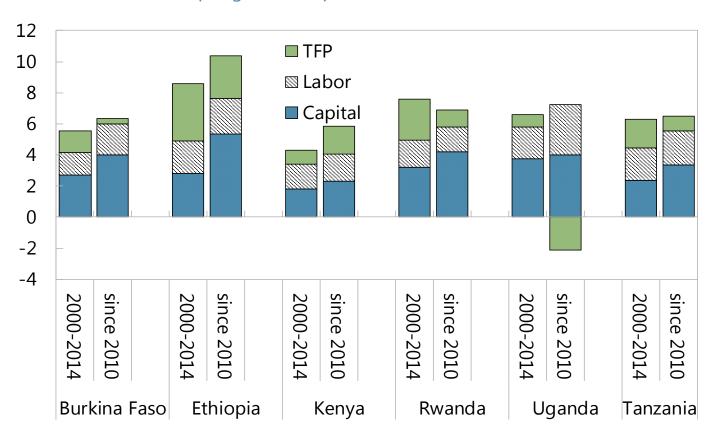
<sup>&</sup>lt;sup>1</sup> Employment data refers to a 2015 projection from Fox et al.(2013)

#### **Total Factor Productivity Growth**



#### **Developments in TFP**

(Contribution to output growth, in percent)





### Role of Investment and Outcomes

#### Role of Investment and Outcomes



Rwanda has focused on agriculture and business services given land-locked status, small economy, and strong security.

- •Agriculture benefits from increased fertilizer, better seeds and irrigation
- Concerns about speed of delivery of inputs.
- Services sector heavily influenced by the MICE strategy
- Need to equip labor force with the appropriate skills to provide high quality services.



#### **Agriculture Yields**

#### Agriculture Yields (Kg per hectare in percent change and in 2014)

	Annual change 2000 - 14	Level	Annual change 2000 - 14	Level	Annual change 2000 - 14	Level	Annual change 2000 - 14	Level
	Maize		Sorghum		Cassava		Pulses	
Burkina Faso	0.6	1911	2.4	1103	-2.3	1297	0.1	1016
Ethiopia	7.9	3421	7.2	2365	12 <sup>1</sup>	20441 <sup>1</sup>	10.4	1634
Kenya	1.1	1660	1.8	832	6.7	13471	-1.4	272
Malawi	2.3	2311	3.4	989	3.7	23361	5.5 <sup>2</sup>	890 <sup>2</sup>
Mozambique	-1.1	797	-0.7	525	0.1	5877	2.0	638
Rwanda (2016) <sup>3</sup>	7.8	1575	0.7	898	-4.7	1644	-	797
Tanzania	-1.2	1604	2.1	1050	-1.4	5285	1.3	962
Uganda	3.1	2501	-2.7	802	-5.2	3301	1.3 4	689 <sup>4</sup>

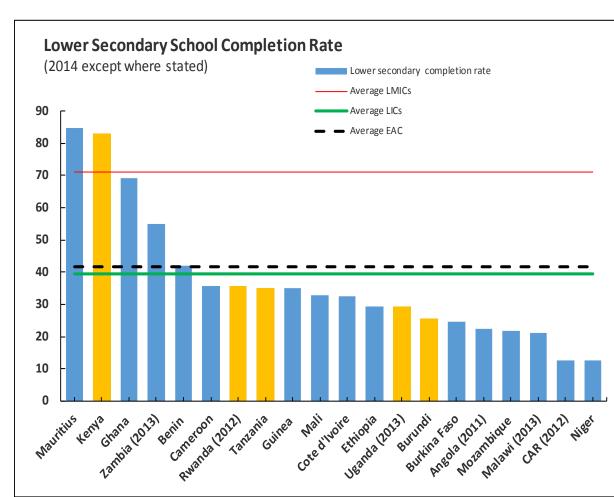
Source: Author's calculation based on Data from Food & Agriculture Organization (FAO)

#### **Education Qualifications**



•Education completion rates below the LIC average

- But comparable to neighboring countries except for Kenya
- Rwanda
  compensates by allowing inward
   migration from EAC



#### **Bottlenecks**



- Availability of agriculture inputs
- Availability of electricity at competitive pricing
- Cost of transporting goods
- Availability of service sector labor skills



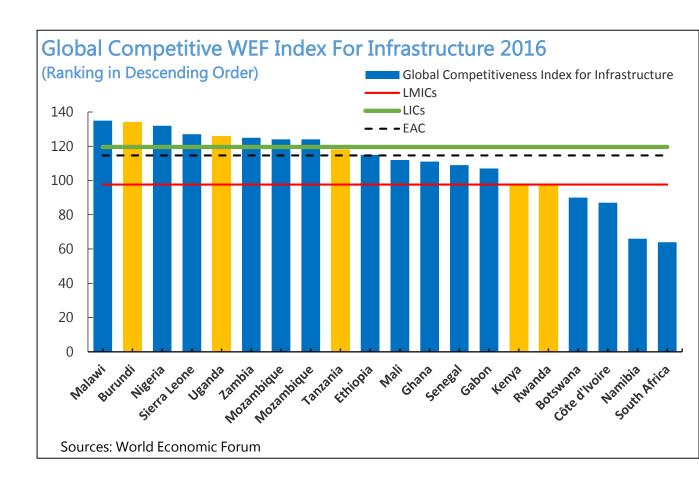
# Quality and Efficiency of Investment

#### **Quality of Infrastructure Investment**



 Quality of infrastructure in Rwanda among the best in SSA

Comparable to the average for LMICs

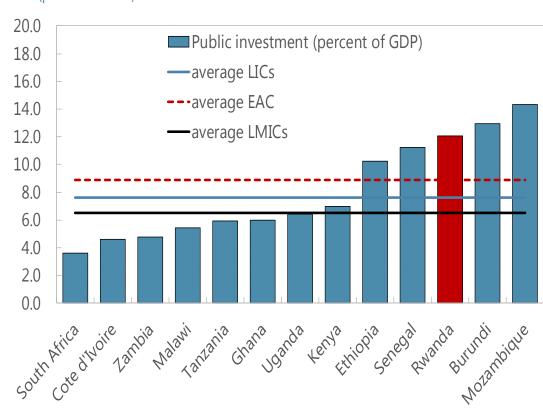


#### **Investment Developments**



- Rwanda has one of the highest public investment ratios among SSA LICs
- Increased considerably over the past decade
- •...private investment (including public enterprises) has accompanied the increase



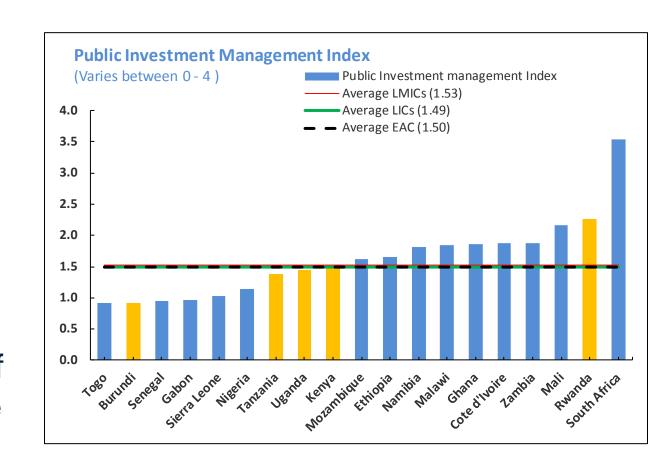




#### **Public Investment Management**



- Public investment management is strong in Rwanda
- •...Improved significantly since this assessment (2011), especially with the creation of the PIM committee





## Where do we go from here?

#### Where do we go from here?

5

0

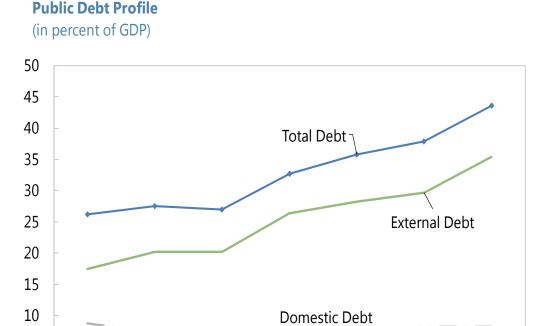
2010

2011

2012



- •Rwanda's development strongly influenced by the public sector
- Public debt finance has risen rapidly to finance infrastructure
- Private sector needs to take up the baton (more I than C)



2013

2014

2015

2016

#### Conclusion



- Public investment instrumental in improving infrastructure
- More can be done to match education qualifications with market demands
- Continued efforts needed to address investor concerns
- Donors can redouble efforts to combine financing with the private sector

Lowering trade costs remain vital



## Thank you very much

#### **Donor support**



- Public investment in Rwanda has been strongly supported by donor assistance
- •Rwanda is one of the countries with the highest assistance in SSA

