



LDCs' structural transformation in times of COVID

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UNCTAD

Short course for Permanent Missions
in Geneva

Geneva, 16 November 2021



THE LEAST DEVELOPED COUNTRIES REPORT 2021



Productive capacities for the new decade





OUTLINE OF THE PRESENTATION

SESSION 1

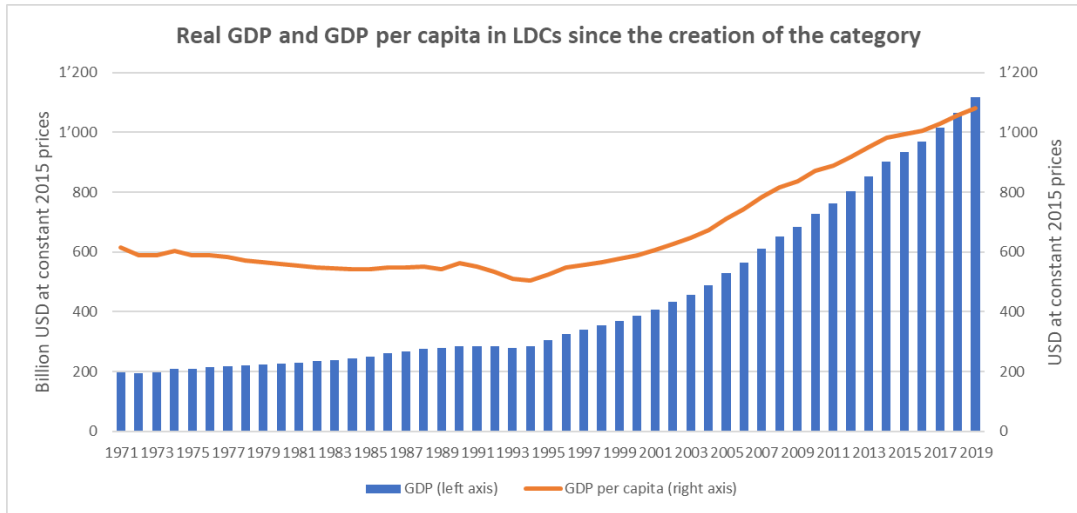
- 50 years of growth in LDCs
- Growth, productive capacities & structural transformation
- Evidence pre-COVID
- The broader picture: 4IR

SESSION 2

- The COVID-19 shock
- Lingering challenges and policy responses
- Towards a new Programme of Action for LDCs



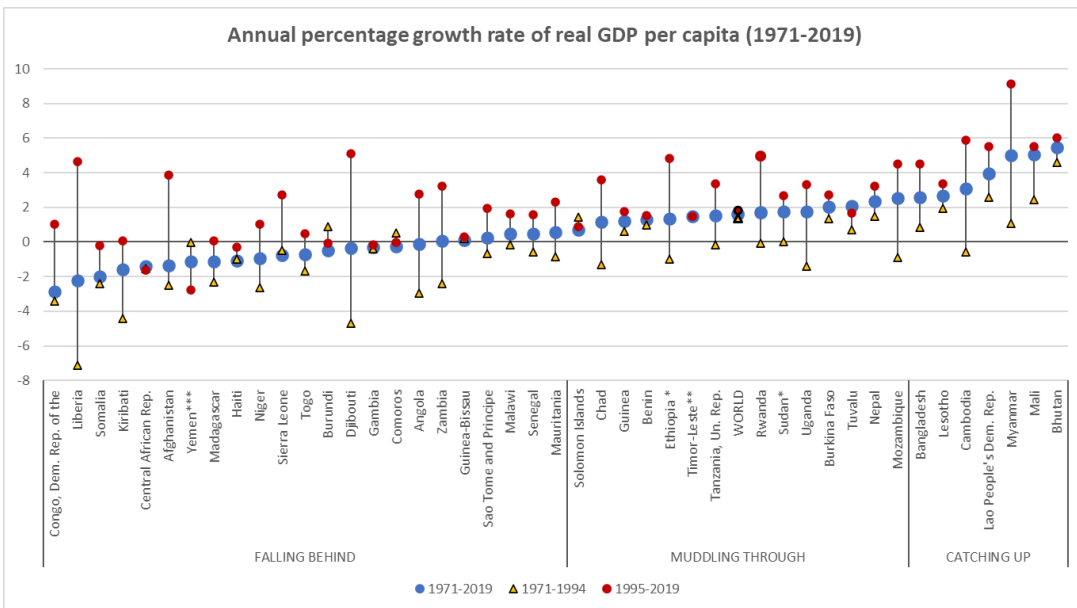
Some improvements but few LDCs catching up



In real terms LDC GDP increased 5x since 1971, but GDP p.c. by <2x

In the long-run half of today's LDCs lagged behind while only 7 caught up (mainly in Asia)

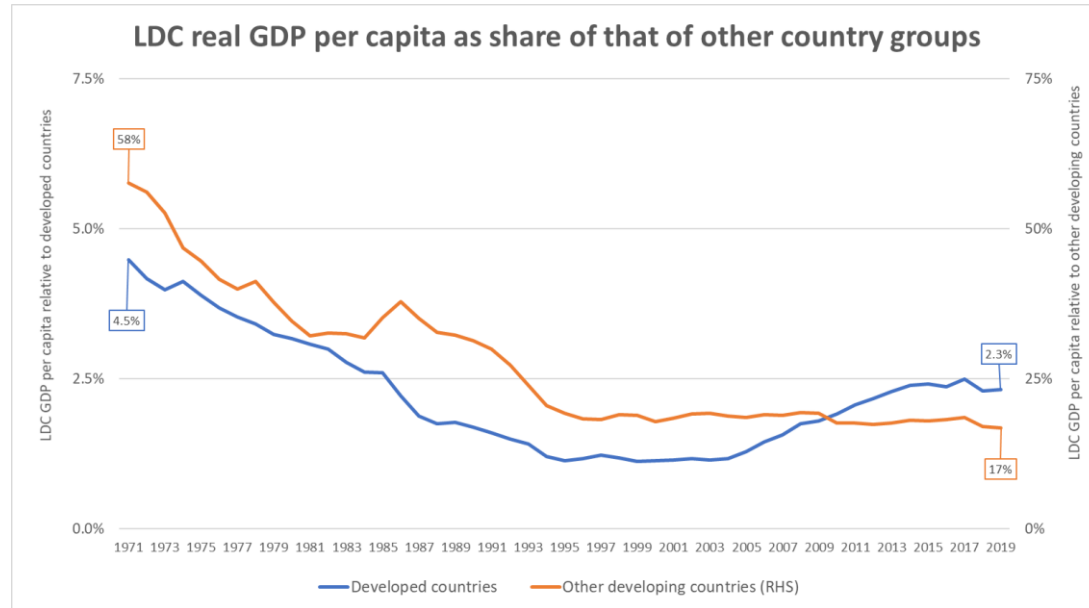
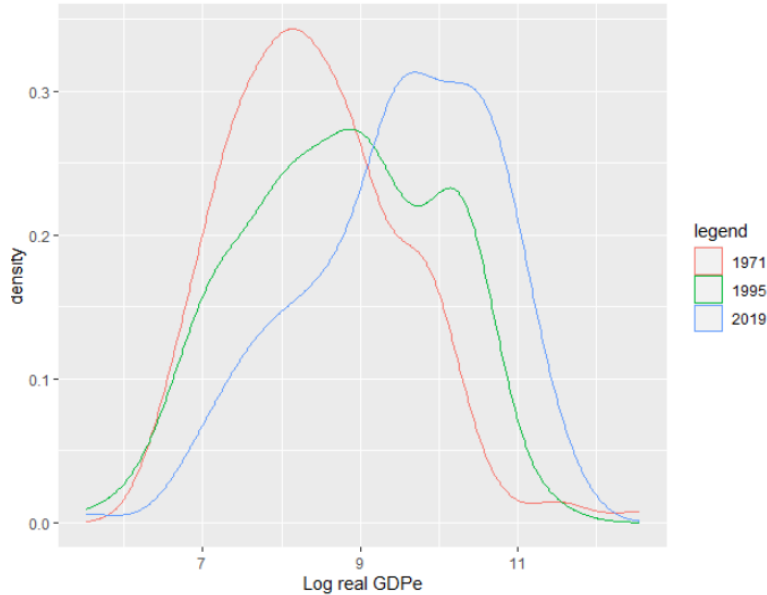
Generalized improvements since the mid-1990s (18 catching up, but still 11 falling behind)





LDCs and global inequalities

Real GDP per capita (PPP) across countries: Kernel densities



Some improvements over time but clear evidence that LDCs are lagging behind towards the **left tail of the density**

Theoretically, this might be consistent with poverty trap or conditional convergence

The key policy issue is that between countries inequality mirrors in inequality of individual opportunities (**locational penalties**)



Boom-bust cycles: LDC vs RoW

Incidence and speed of growth accelerations/decelerations by country groups

Incidence of events (number of years in acceleration/deceleration divided by total number of observations)						
	1971-2019		1971-1994		1995-2019	
	Acceleration	Deceleration	Acceleration	Deceleration	Acceleration	Deceleration
World total	27%	9%	23%	13%	30%	6%
LDCs	25%	16%	15%	23%	34%	9%
Other developing countries	27%	10%	24%	13%	29%	7%
Developed countries	29%	2%	28%	3%	29%	2%
Average growth during each event (percentages)						
	1971-2019		1971-1994		1995-2019	
	Acceleration	Deceleration	Acceleration	Deceleration	Acceleration	Deceleration
World total	5.42	-4.11	4.01	-4.28	5.66	-3.95
LDCs	4.22	-4.60	1.52	-4.22	4.84	-3.79
Other developing countries	6.04	-4.16	4.90	-4.59	6.04	-4.22
Developed countries	5.11	-2.52	4.08	-2.39	5.57	-2.67

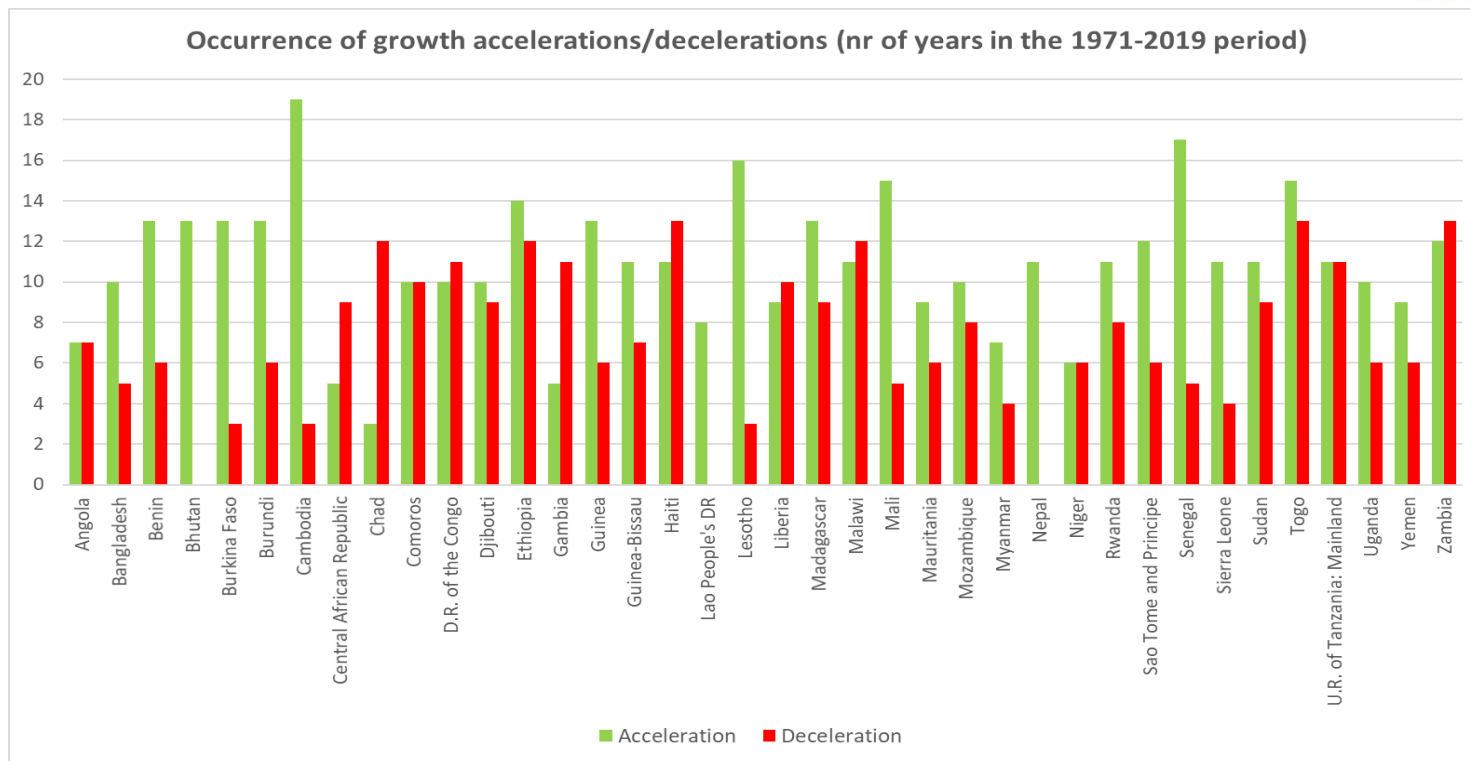
LDCs broadly have similar incidence of accelerations as others, but far more prone to collapses (incl. in the 1995-2019 period)

In LDCs growth was slightly lower during accelerations (incl. in 1995-2019)

Developed countries have shallower collapses than LDCs-ODCs (more resources for countercyclical policies) => COVID-19?



Individual LDC experiences



Only 3 LDCs never had collapses: Bhutan, Laos and Nepal

Conflict & commodity-dependent countries prone to boom-bust cycles

Pathway to catching up: leverage growth and avoid costly decelerations
(LDC-graduates)



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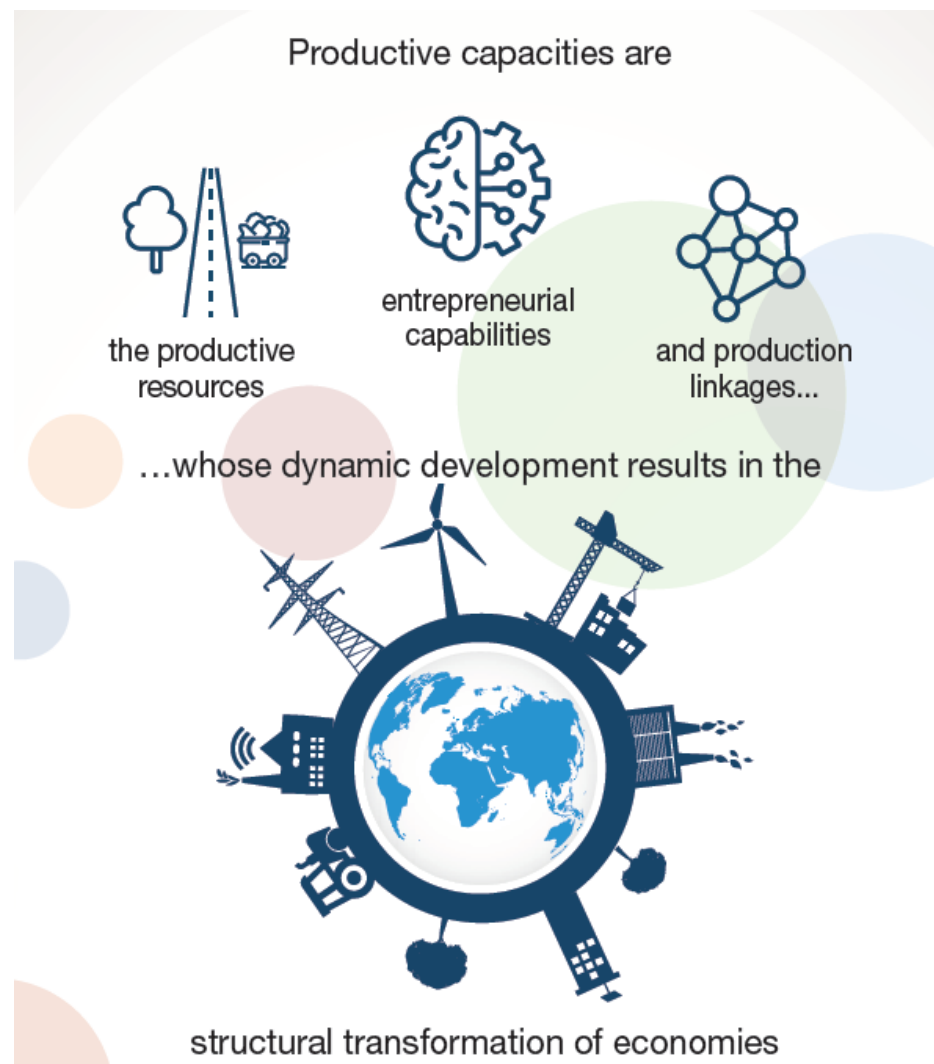
Economic growth ↔ productive capacities

Productive capacities are defined as “the **PRODUCTIVE RESOURCES**, **ENTREPRENEURIAL CAPABILITIES** and **PRODUCTION LINKAGES**, which together determine the capacity of a country to produce goods and services and enable it to grow and develop”



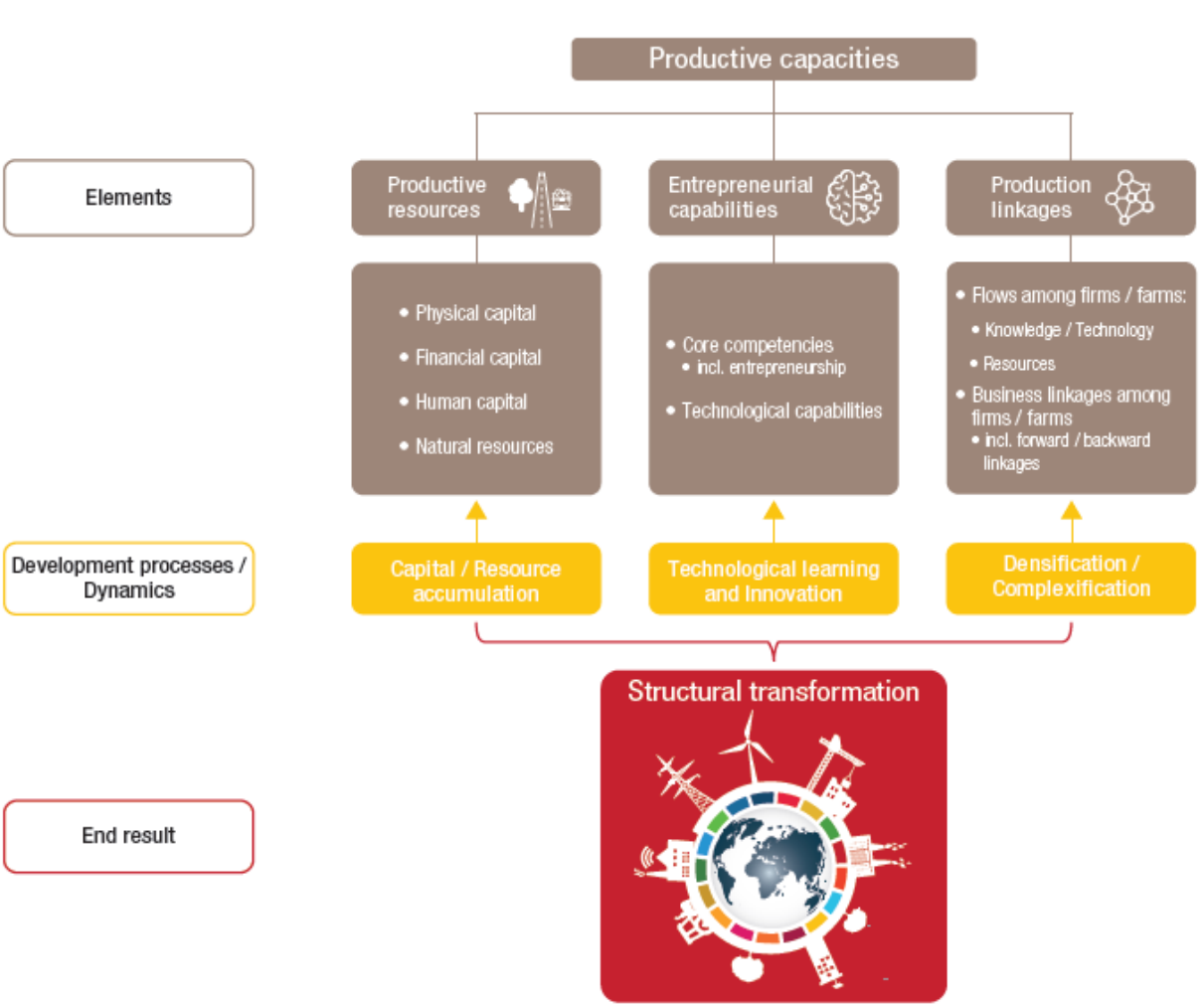
Productive capacities are key to enhance

- ✓ RESILIENCE
- ✓ INCLUSIVITY
- ✓ ENVIRONMENTAL SUSTAINABILITY





Productive capacities & structural transformation



Economic growth & structural transformation

Economic growth is not a homotetic process (unlike in aggregate prod. function): as productivity and output augment, the composition of GDP changes & labour is reallocated from traditional low-productivity to modern high-productivity sectors.

Typically as income increases:

- Agricultural share of Value Added ↓ but agricultural output ↑↑
- Manufacturing contribution to Value Added ↑↑ (increasing returns to scale?) and then ↓ slightly
- Services ↑ their share of Value Added, shifting from low-productivity, to high productivity activities
- In addition, **DEMOGRAPHIC TRANSITION, EDUCATION, AND URBANIZATION** kick in.



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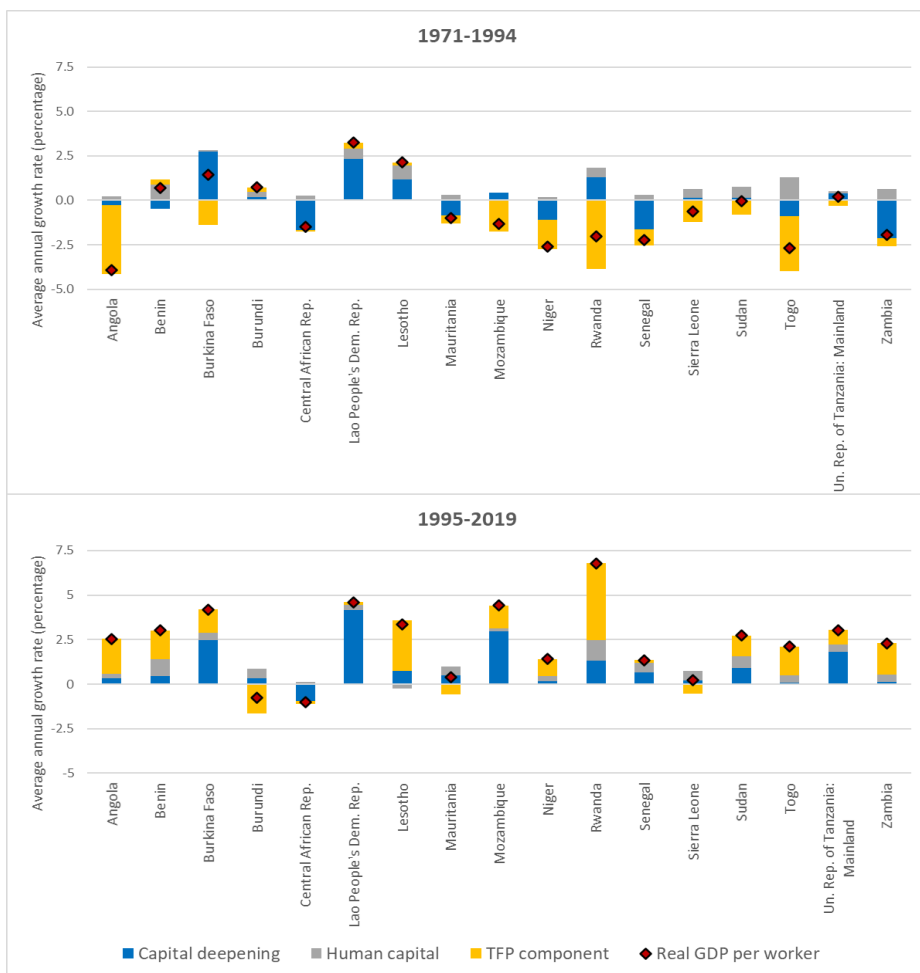
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Patterns of growth: K accumulation & TFP

Development accounting decomposition of real GDP per worker



K deepening accounts for ~40% of growth with human K explaining another 10%

TFP growth (incl. natural resources) is critical, esp. where structural transformation triggers

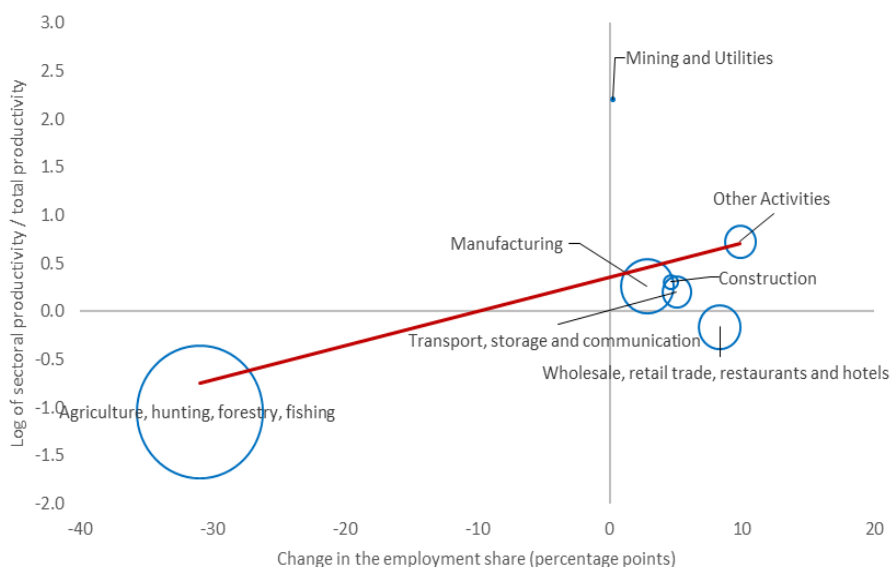
“growth enhancing structural change”

However, few LDCs achieved sustained sophistication of the economy

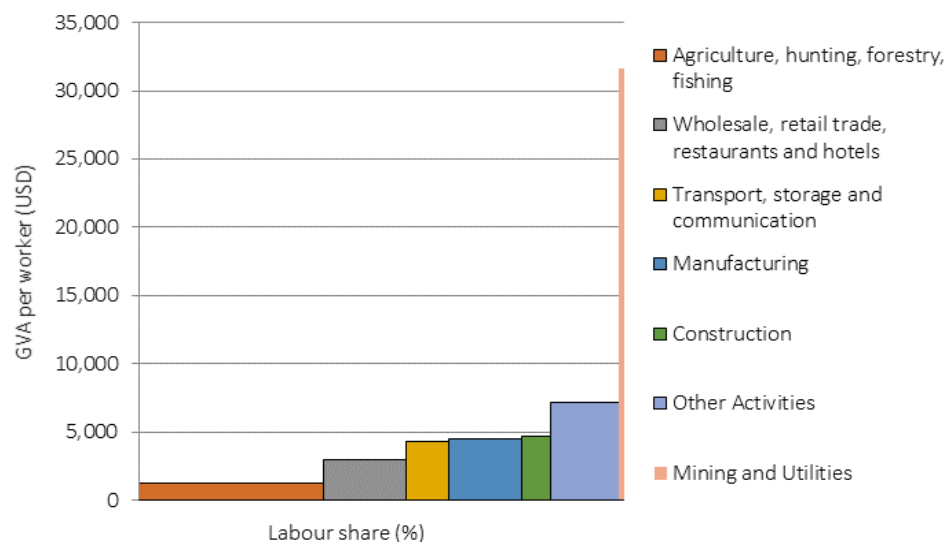


Example of sectoral L reallocation: BANGLADESH

Dynamics of sectoral employment shares and labour productivity (1991-2018)



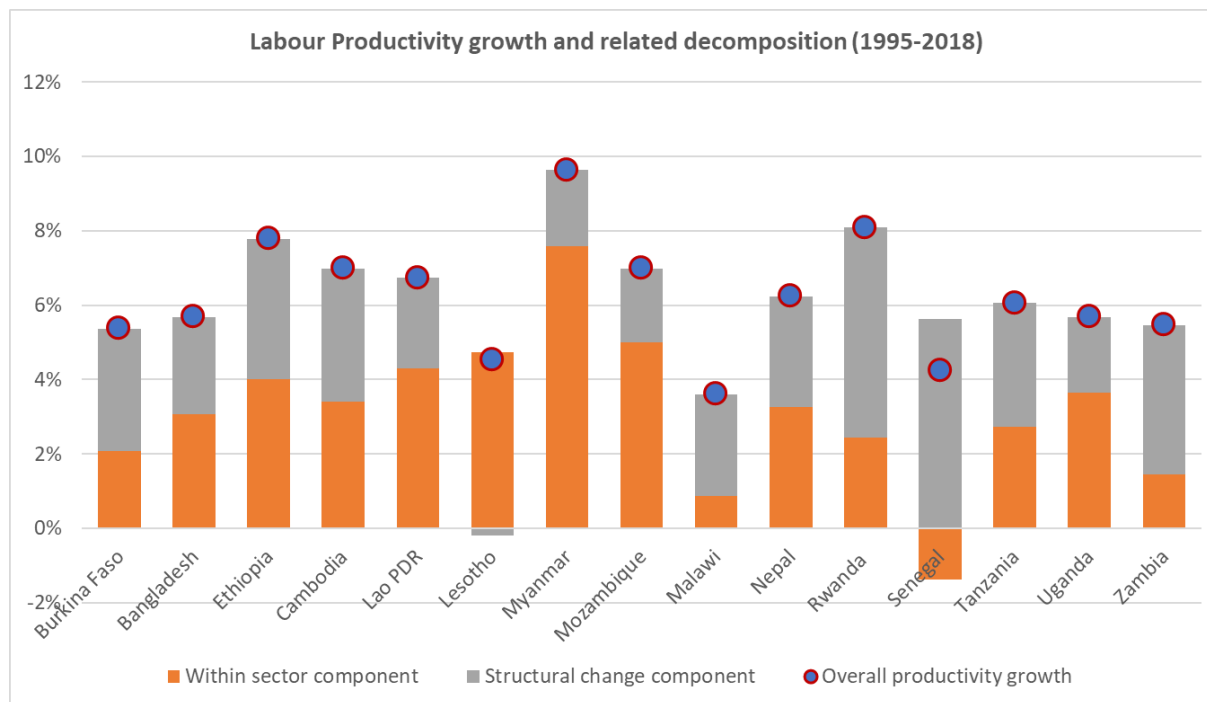
Sectoral employment share and labour productivity (2018)



Note: the size of the bubble is proportional to each sector's employment share in 1991



Structural change and L productivity



L productivity growth averaged 6%, with structural change component accounting for more than half

Since the 2000s, evidence of a growth-enhancing pattern of structural change, incl. in the African region

Agriculture key for within-sec, manufacturing & modern services for ST



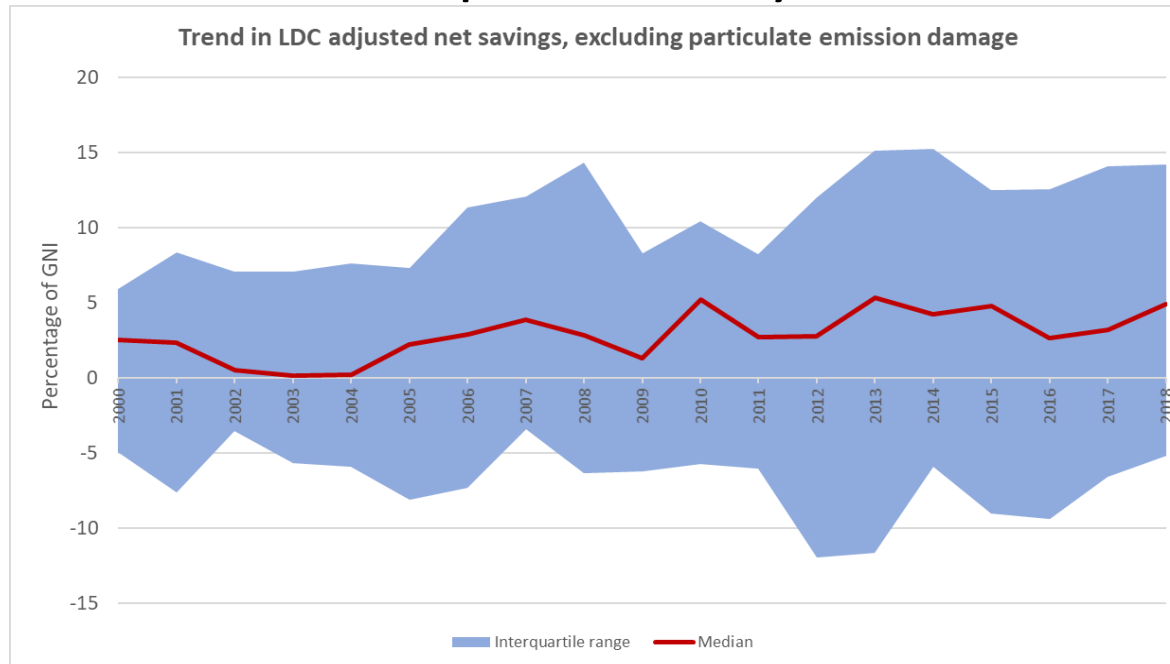
Inclusivity and poverty reduction

- Growth remains main driver of poverty reduction, since LDCs display limited scope for redistribution (due to weak DRM)
- In the past 15-20 years $\sim\frac{3}{4}$ of LDCs displayed inclusive growth either in relative/absolute sense; yet the pace of poverty reduction slowed down significantly
- Geographical and sectoral pattern of growth is thus critical for inclusivity LDCs => attention to agriculture, job creation, and intermediary cities
- COVID is having strong adverse impact on poverty (esp. at \$1.90 and \$3.20 per day), hence quick broadbased and sustainable recovery is vital



Environmental sustainability

LDCs total wealth p.c. is $\sim 8\%$ of world average, with greater weight of natural capital \Rightarrow the gap reflects both availability of K and “productivity”



Reliance on natural resources has not always led to sustainable outcomes \Rightarrow adjusted net savings are negative for a dozen LDCs

VALUE ADDITION & NATURAL RESOURCE MGMT. ARE CRITICAL



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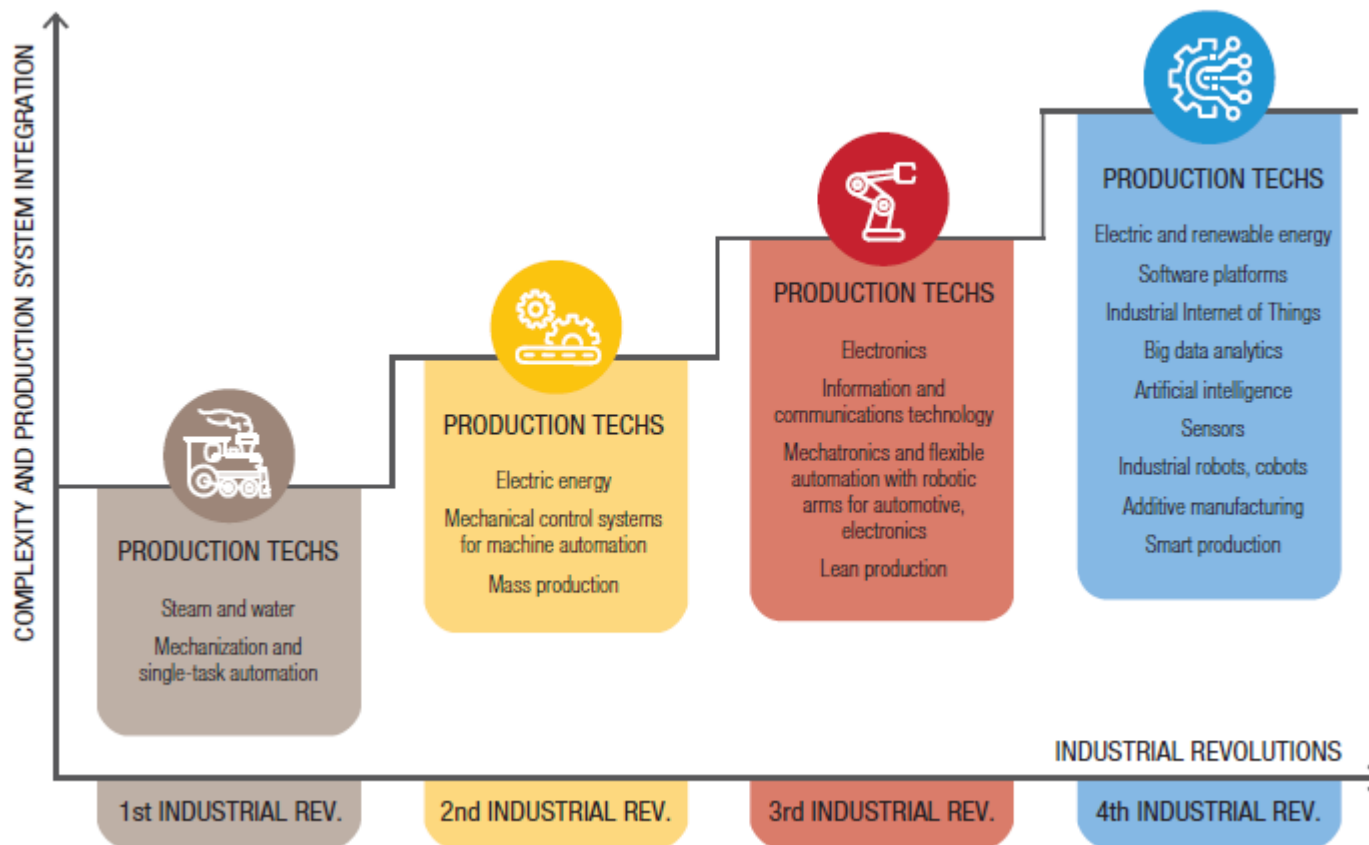
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Frontier technologies & 4IR

Production technologies: From the first industrial revolution to the fourth





Digital disruption?

The rise of digital technologies and their rapid penetration even in LDCs is raising questions about their **DISRUPTIVE IMPACT**



- General purpose tech
- Potential productivity gains
- Advantages of backwardness
 - Leap-frogging
- Lower transaction costs



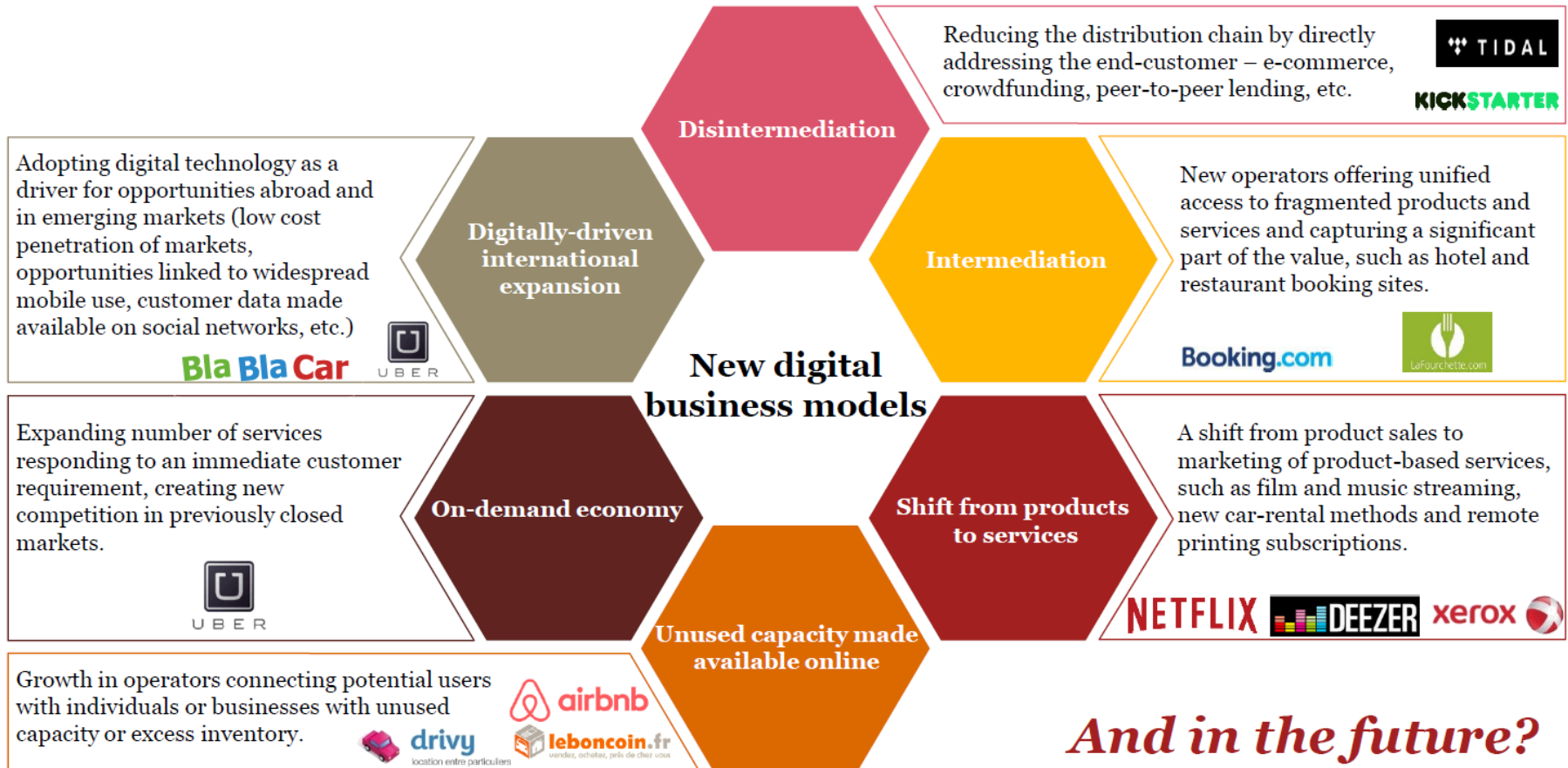
- Path-dependency
 - Digital divide
- Complementarities with specialized skills & other tech
- Winner-take-most dynamics

KEY EFFECTS

- Blurring traditional distinction across sectors => servicification
 - Increasing the range of tradeable services
 - Enabling productivity spill-overs and network economies
- Altering comparative advantages and market power dynamics



Digital tech & business models



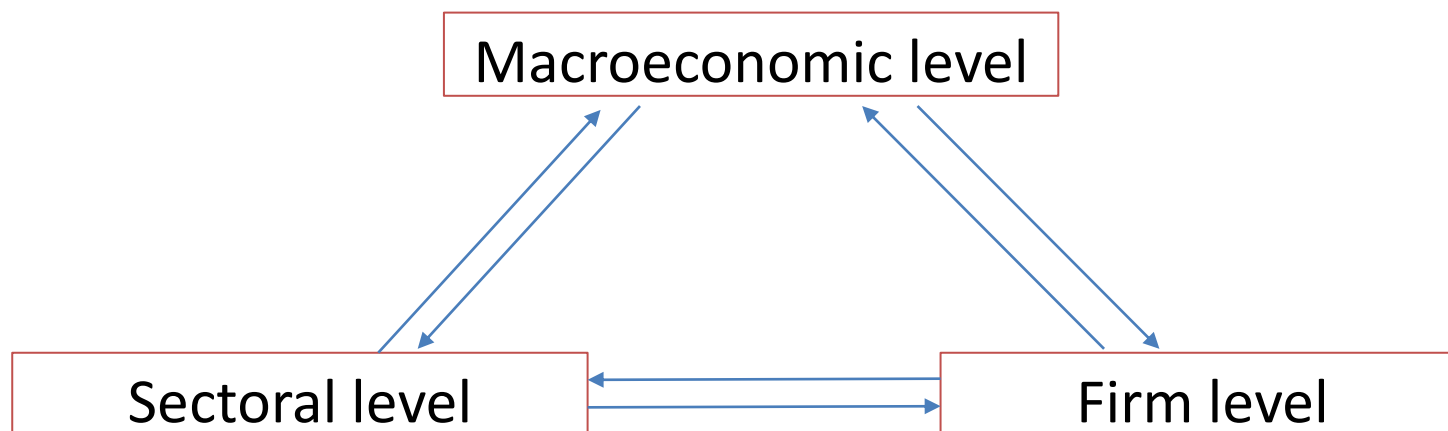
And in the future?

Source: PwC Report – Agribusiness in the digital age

LDC examples: Hello tractor, drones, blockchain & traceability



Technological capabilities

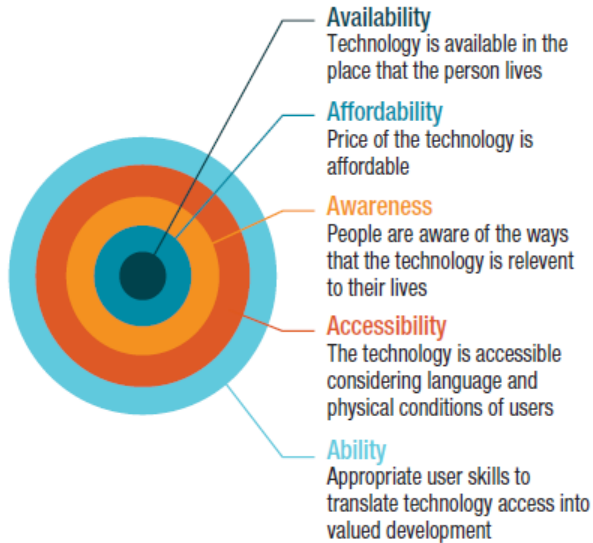


CHALLENGES FOR FIRMS

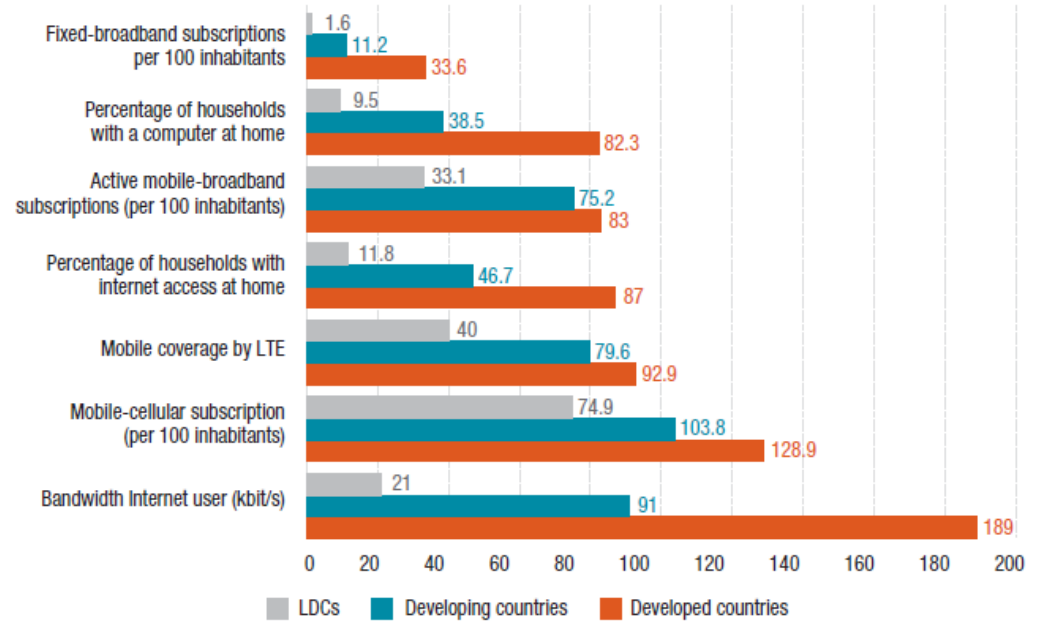
- Capability acquisition is **NOT AUTOMATIC**, it requires deliberate I
- Incremental process **CONTINGENT** on existing tech.& infrastructures
 - Digitization of data => digitalization of processes => Digital transformation
 - **SKILLS AND TACIT KNOWLEDGE** plays an important role
 - Dualistic entrepreneurship landscape **MSME vs large firms**



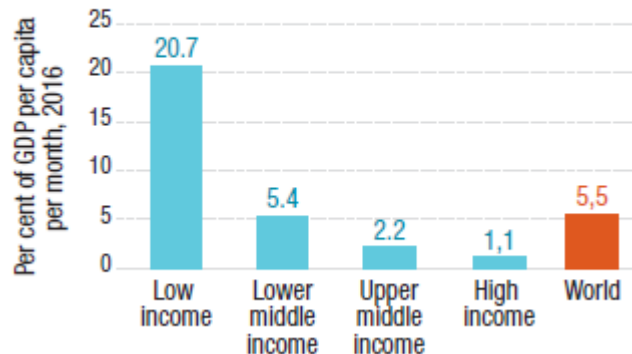
Advanced tech & inequality



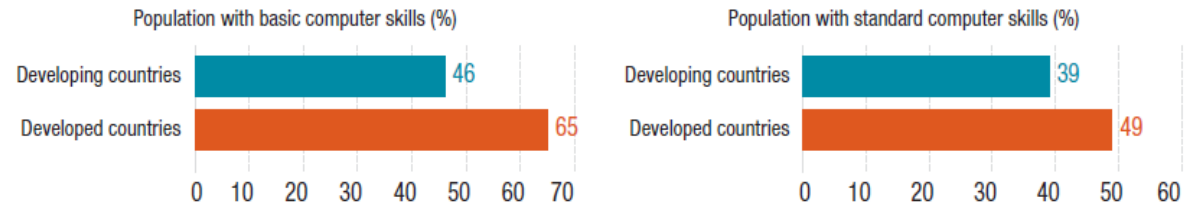
Gaps in digital access, 2018



Price of 1 gb of data, percentage of GDP per capita per month, 2016



Gaps in digital skills





Advanced tech & productive applications

Uptake of advanced technologies is mainly from the consumer side, whereas by producer side it is still incipient

ENGAGEMENT IN ADVANCED TECHNOLOGIES IS CONTINGENT ON THE PRESENCE OF MEANINGFUL INDUSTRIAL BASE

UNIDO classification:

- ⇒ the 10 “frontrunner economies” account for 90% of the patents and 70% of exports of advanced digital production technologies
- ⇒ Among LDCs, Bangladesh is “follower in C”; Ethiopia, Malawi, Uganda and Zambia are “latecomers” & the rest are “laggards”



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Any comment or question so far?



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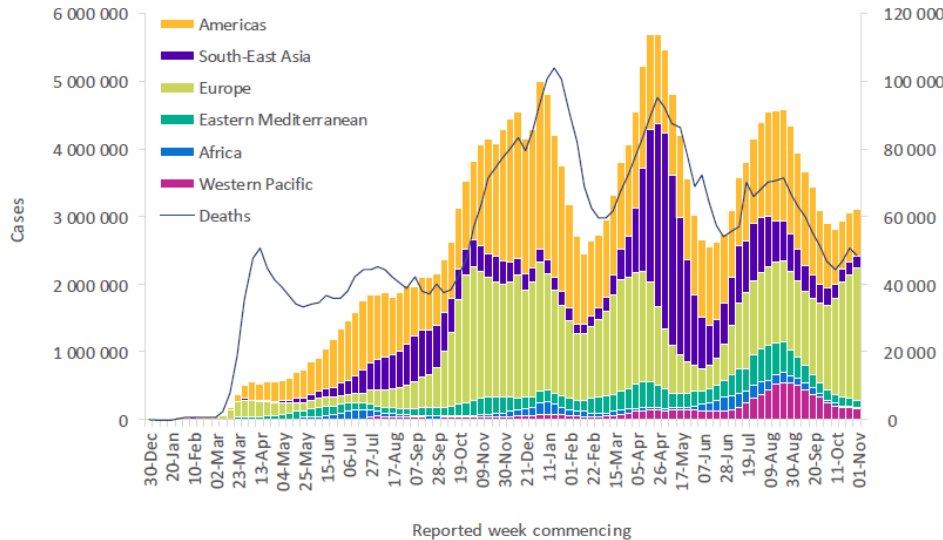
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Limited recorded health impact in LDCs, so far...

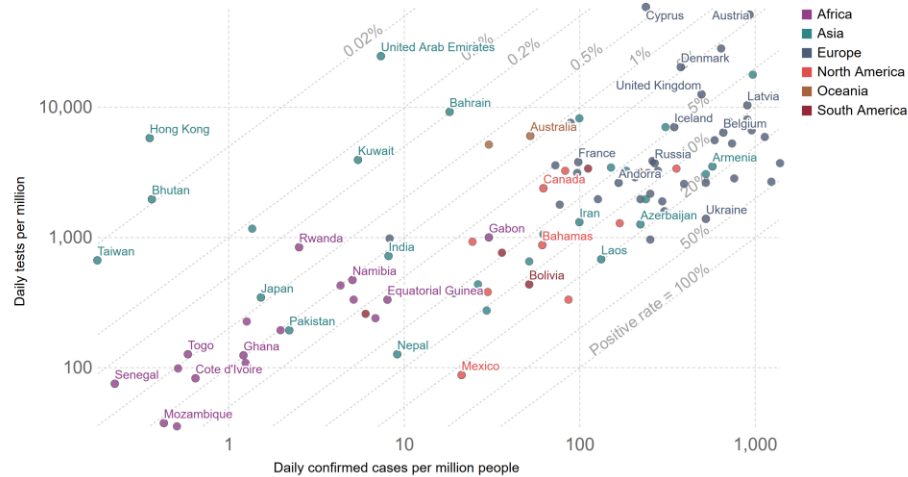
Figure 1. COVID-19 cases reported weekly by WHO Region, and global deaths, as of 7 November 2021**



Source: WHO

Source: www.ourworldindata.org

COVID-19: Daily tests vs. Daily new confirmed cases per million
The figures are given as a rolling 7-day average.



Demography: ≈ 40% of pop. (0-15); < 5% (65+)

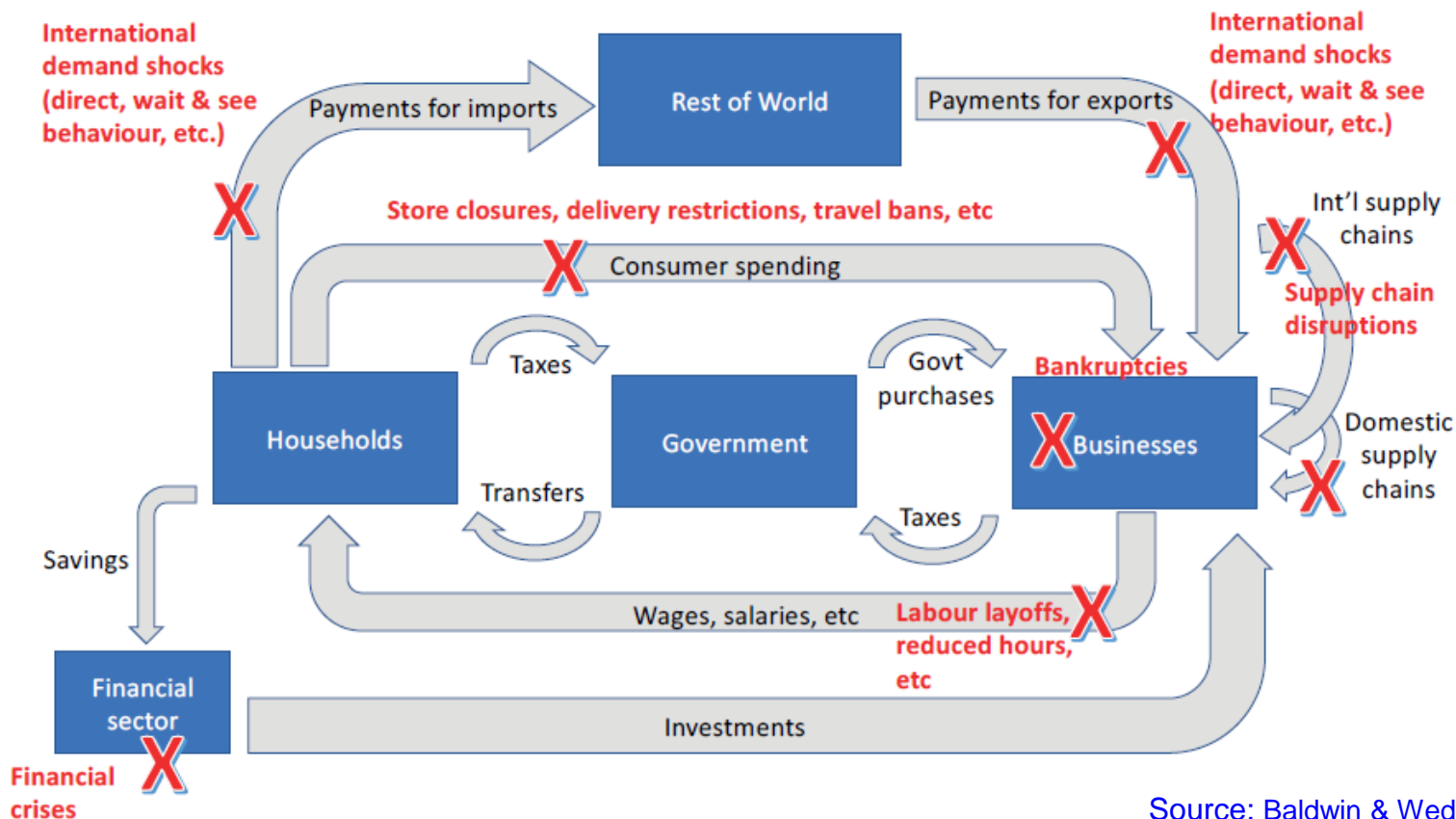
Urbanization: ≈ 66% of pop. in rural areas

HIV, malaria, TBC & diarrhea killed > 400'000 Africans in 2016

Weak health systems but previous experience and rapid action



... but large **economic shock**

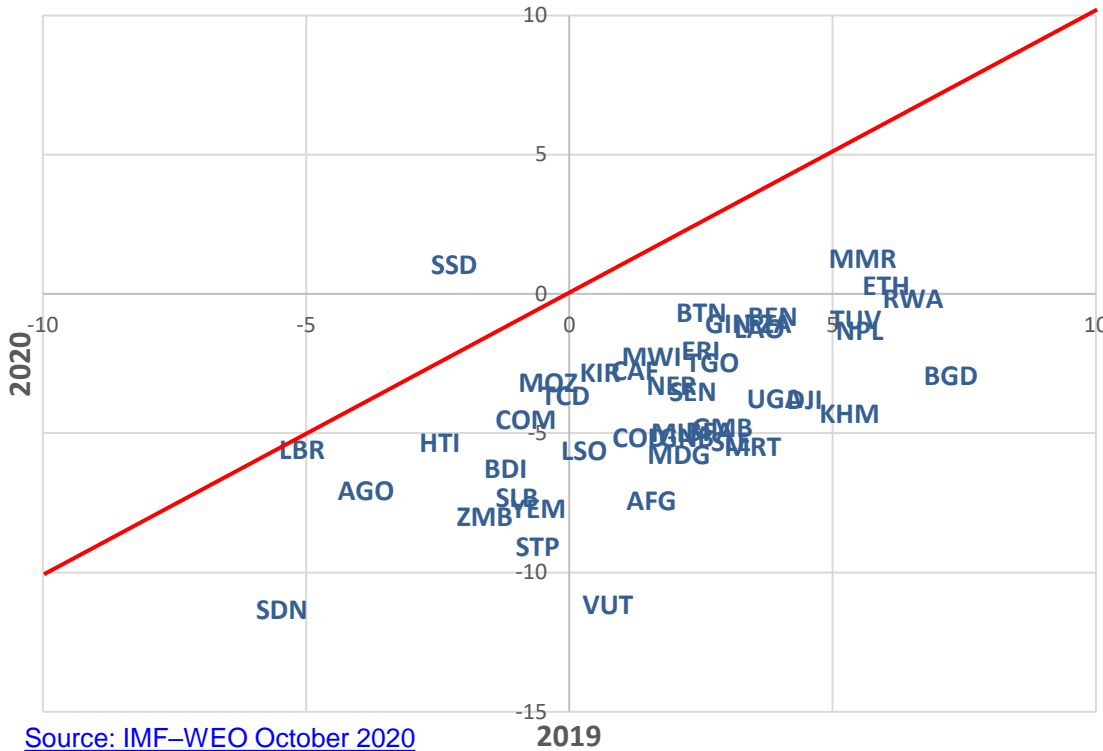


Source: Baldwin & Weder di Mauro

“A crisis like no other”: hitting simultaneously AS & AD, worldwide (though with some lag), feedback loops with policy responses, vaccine availability and distribution affect the duration of the crisis



Real GDP per capita growth 2019 vs 2020 (PPP)



Source: IMF–WEO October 2020

In “more sophisticated” LDCs, firms have demonstrated some innovative/adaptive capacities:

- Uganda → cheap COVID-19 testing kit
- Bangladesh → mask production
- Senegal → E-commerce

Globally => deepest recession since WWII

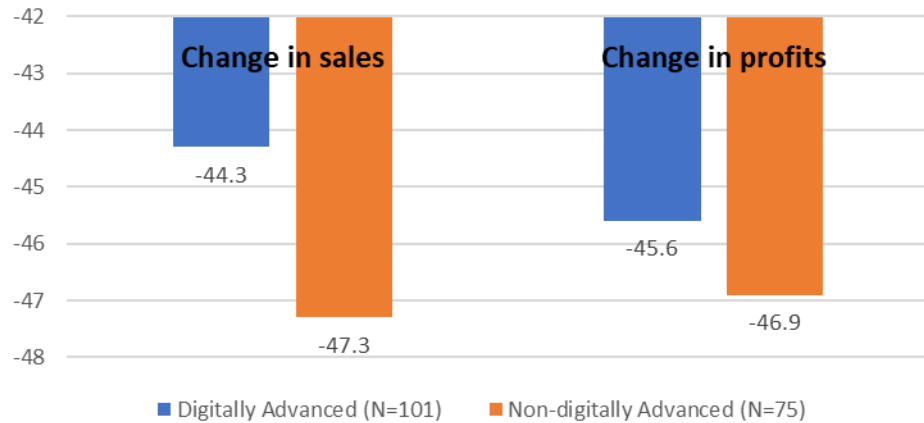
Worst ec. outcome for the LDCs in the last 30 years: 43 of the 47 LDCs experienced a contraction in GDP p.c. in 2020

Particularly hard hit: oil exporters, tourism dependent countries, SIDS



COVID-19 accelerated the shift to digitalization

More digitally advanced firms were more robust to the impact of the crisis (African LDCs)

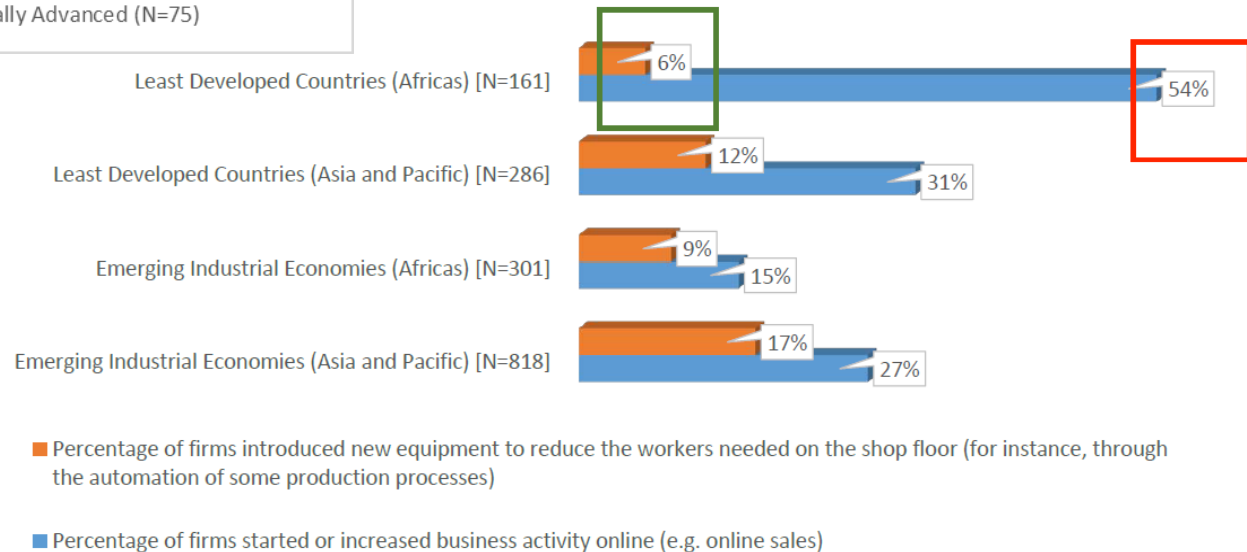


Not all firms are the same => availability of skills & capital is key

Investment & technology capabilities + production capabilities => INNOVATION

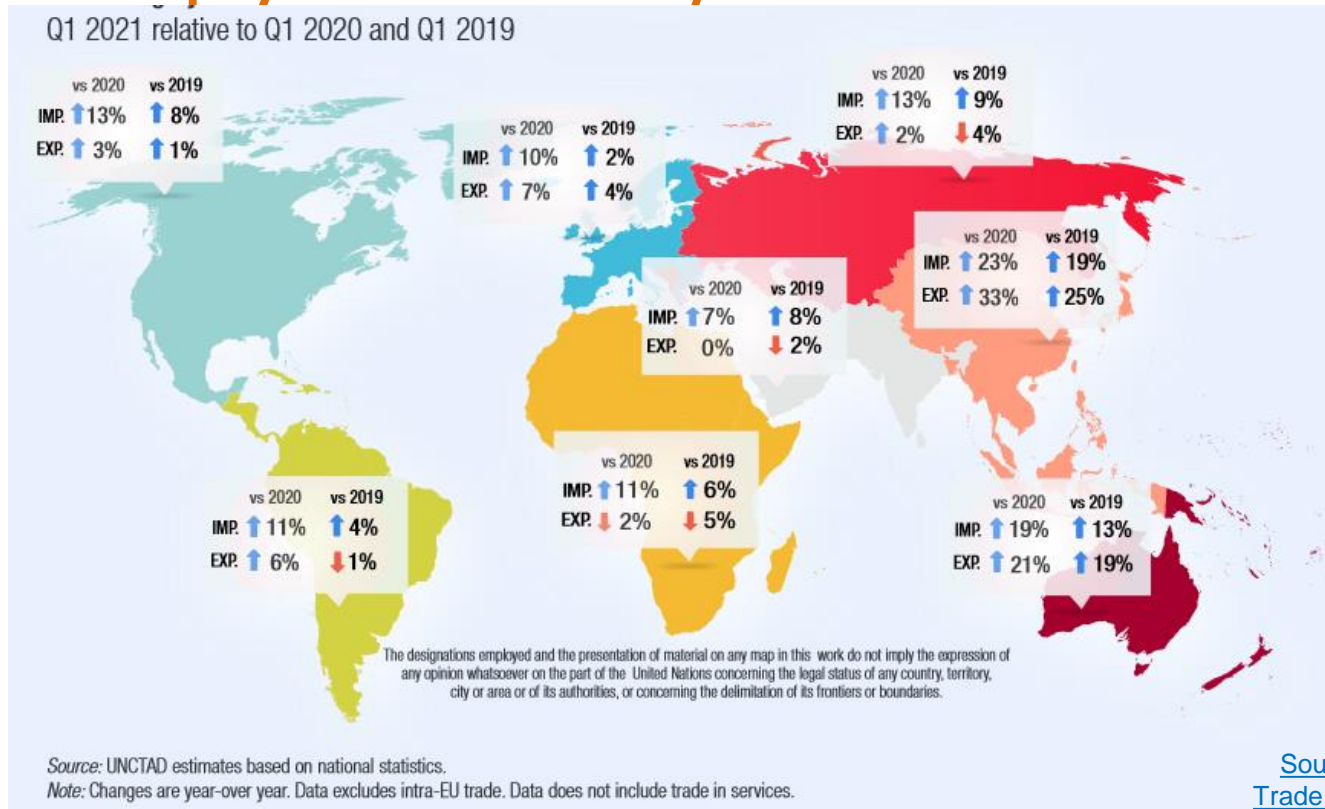
Some examples:

- SquarePharma => digital platform, online marketing & virtual consultations
- Madagascar => online platform SME Business linkage program
- Bangladesh & Senegal => digital agrobusiness





The balance of payment channel 1/2



Global trade rebounded strongly since late 2020, surpassing pre-crisis levels in 2021 (preliminary); however, trade in services remains significantly below averages

Rebound pulled by East Asia & the Pacific, but largely bypassing vulnerable ec.

Import compression continues in parts of the developing world



The balance of payment channel 2/2

Figure I.2. Global FDI inflows, by components, 2019 and 2020 (Billions of dollars and per cent)



FDI contracted globally by 35% according to latest estimates (but flows to LDCs virtually unchanged)

Developing countries now representing 2/3 of global FDI (LDCs 2%)

4 trajectories: Regionalization, Replication, Diversification, Reshoring

Remittances to LMICs fell by “only” 1.6% in 2020, and are projected to raise by 2% in 2021 and 2022 (WB)

ODA +1.8% in 2020 but for how long?

In several LDCs K flights & exchange rate depreciation → higher debt service



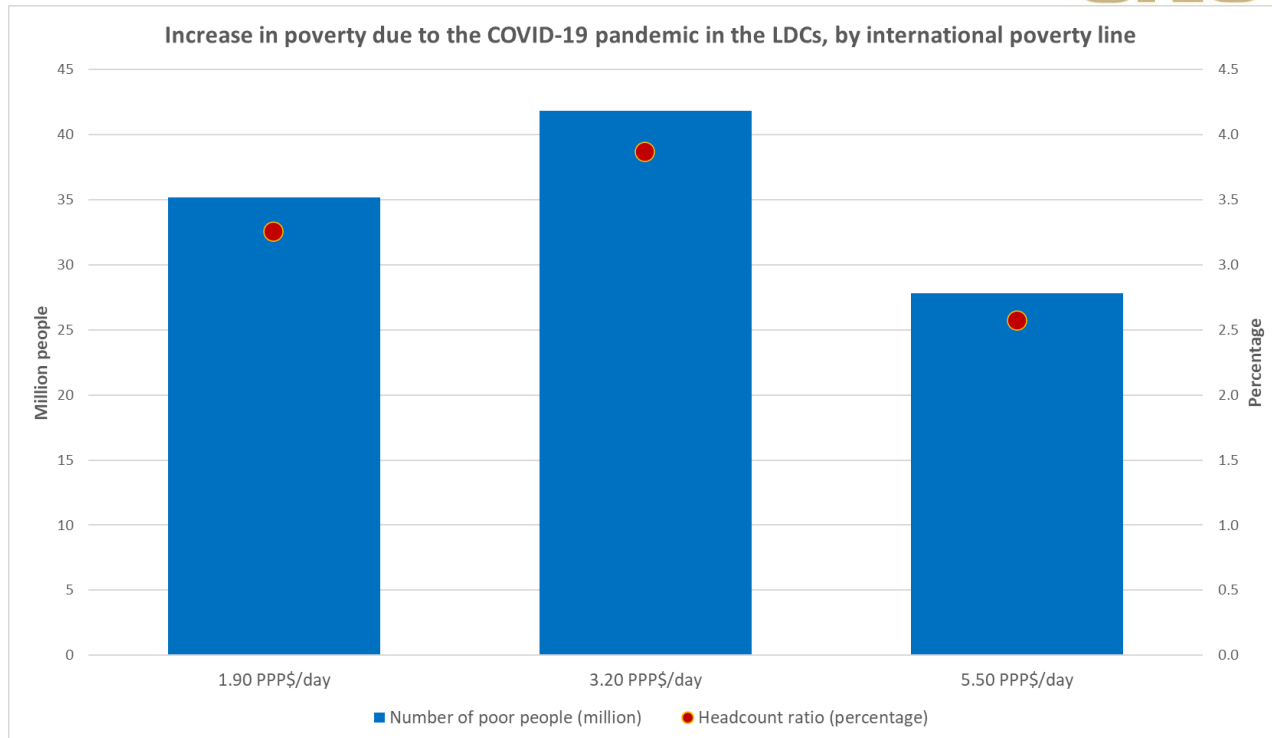
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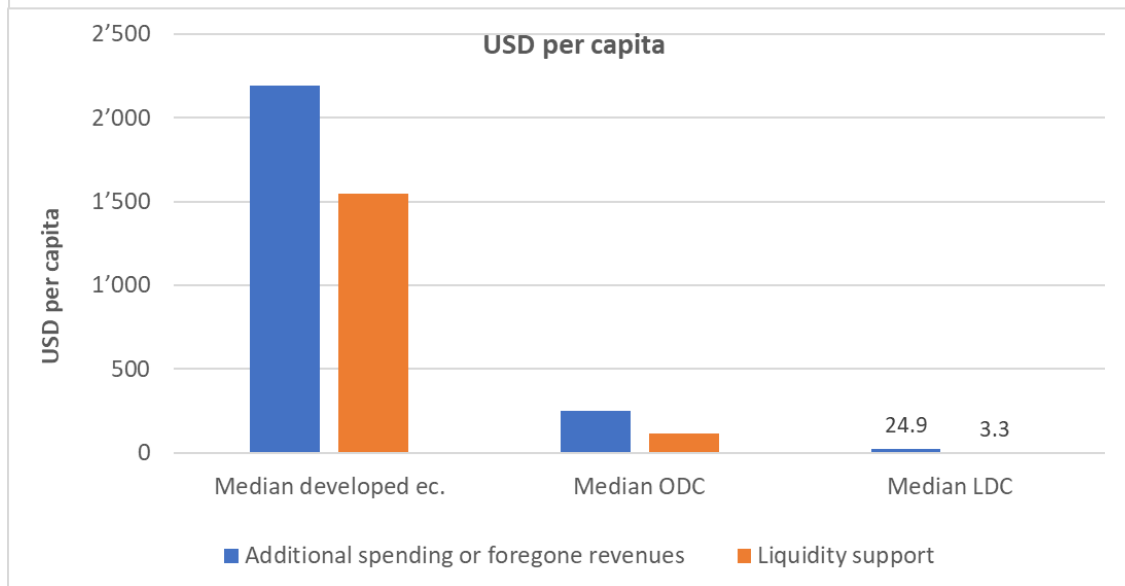
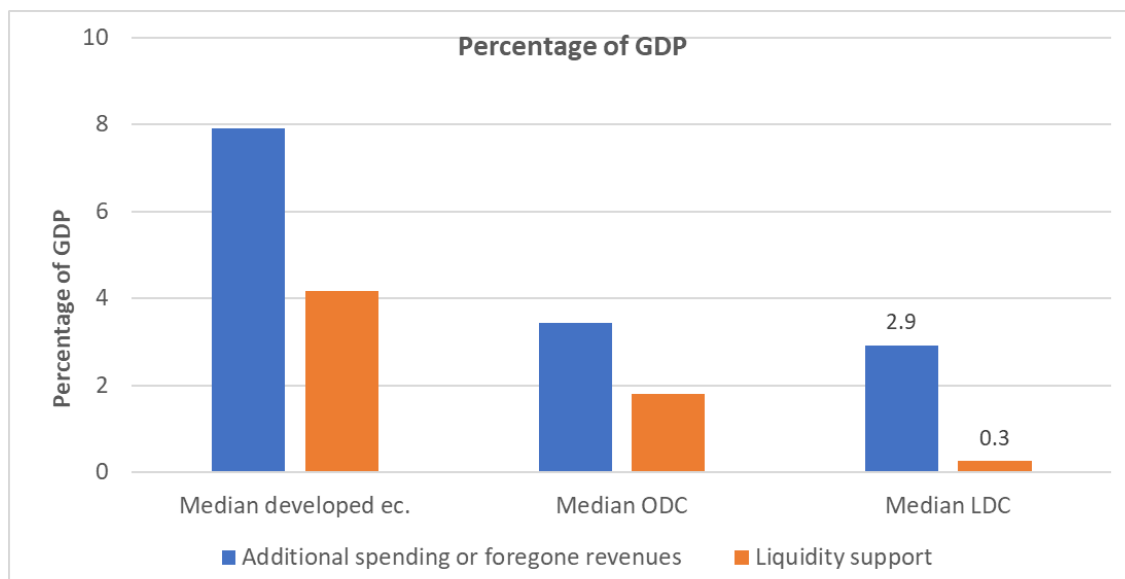
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>35% of LDC population in extreme poverty; +3% compared to no COVID

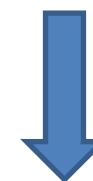
With barely 14% of the world population, LDCs account for over 50% of the people living on less than \$1.90/day (34% of those below \$3.20/day)

They hence represent the litmus test for the 2030 Agenda for Sustainable Development



LDCs have adopted rapid policy responses , incl.

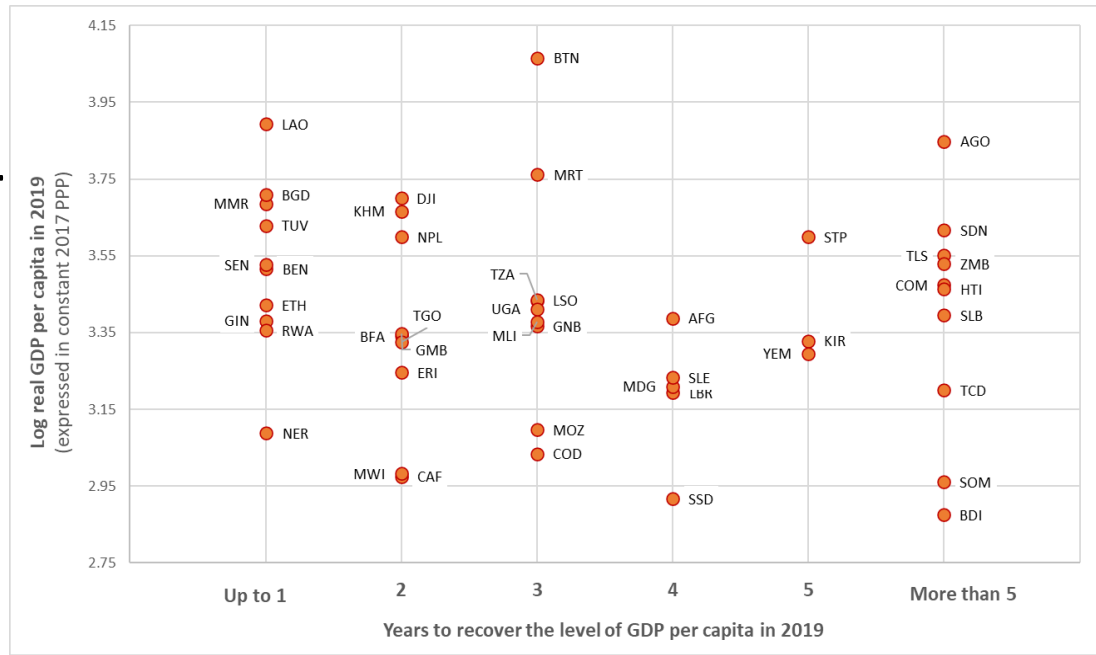
- SOCIAL PROTECTION PROGRAMS
- PUBLIC WORK SCHEMES
- Fast-tracking of E-COMMERCE



BUT ENTRENCHED INEQUALITIES IN THE CAPACITY TO RESPOND TO THE CRISIS

OUTLOOK: “better than previous forecasts” ... but medium-term damage and possible effects on potential output

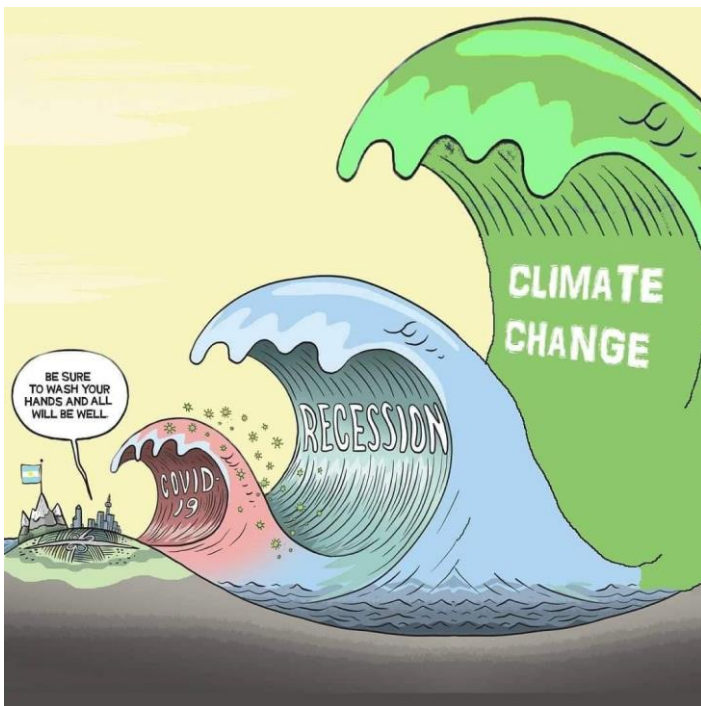
- **SLUGGISH INVESTMENTS**
(uncertainty & precautionary S)
- Disruptions in **HUMAN CAPITAL ACCUMULATION**
- **JOB DESTRUCTION** with related capabilities losses & unemployment
- Long-term shifts in industrial competitiveness & C habits?
- **RISING DEBT BURDEN**



Source: IMF-WEO April 2021



Building back better?



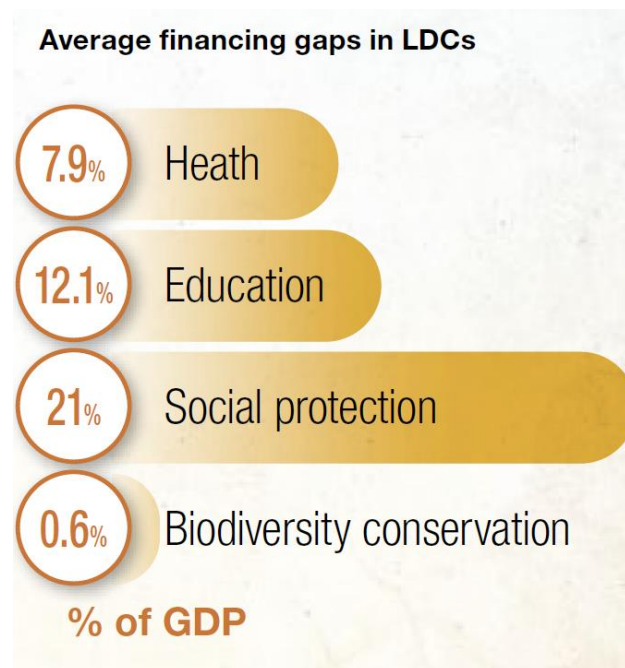
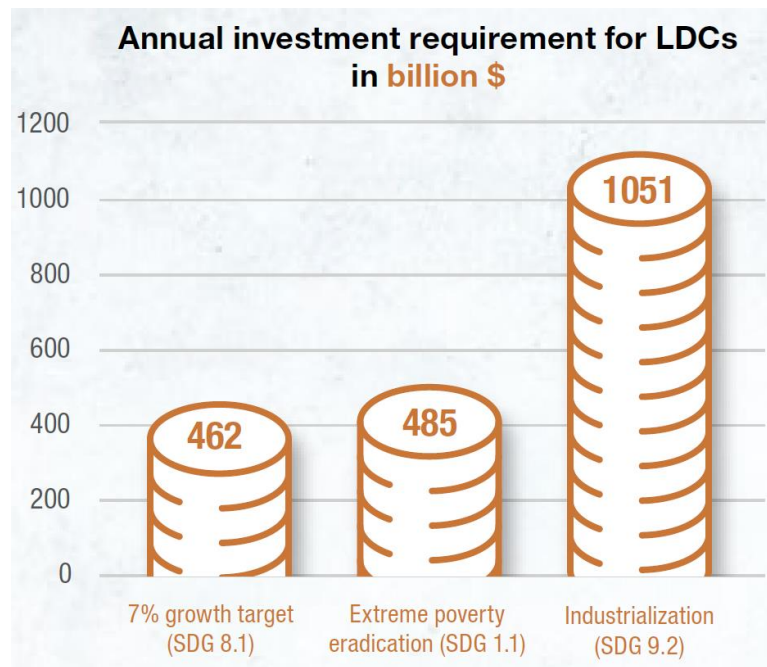
In debt distress	High risk	Moderate risk	Low risk
Mozambique	Afghanistan	Benin	Bangladesh
Sao Tome and Principe	Burundi*	Bhutan*	Cambodia
Somalia	Central African Republic	Burkina Faso	Myanmar
Sudan	Chad	Comoros	Nepal
	Djibouti	Congo, Dem. Rep.	Timor-Leste
	Ethiopia	Guinea	
	Gambia, The	Lesotho	
	Guinea-Bissau	Madagascar	
	Haiti	Mali	
	Kiribati	Niger	
	Lao PDR	Rwanda	
	Mauritania	Senegal	
	Sierra Leone	Solomon Islands	
	South Sudan	Tanzania	
	Tuvalu	Uganda	
	Zambia		
	Liberia		
	Malawi		
	Togo		

[Source: WB Debt Sustainability Analysis as of end September 2021](#)

- IMF estimates that LIC need to deploy at least \$200 bln up to 2025 to respond to the pandemic plus additional \$250 bln to accelerate development (G20)
- Yet out of 43 LDCs covered, 4 are in debt distress and 19 at high risk



COVID-19 accelerated the shift to digitalization



- Costing SDGs is critical for prioritizing and allocating resources
- Financing needs to achieve sustainable development remain daunting, esp. in relation to structural transformation



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LESSONS FROM THE CRISIS

- **PRODUCTIVE CAPACITIES ARE KEY FOR RESILIENCE** => more sophisticated firms showed greater resilience and adaptive capacities
- **LONG-TERM DEVELOPMENT FINANCE IS CRITICAL** => Marshall Plan; redistributive SDR allocation; climate finance; debt workout
- **POLICY SPACE & INTERNATIONAL SUPPORT MEASURES ARE VITAL** => The state has a pivotal role as investor, coordinator and rule setter (e.g. standards, advanced procurement) but also needs adequate institutional capabilities
- **RESILIENCE REQUIRES ADAPTABILITY AND IS CONTINGENT ON PRE-EXISTING CAPABILITIES** (industrial and skill bases) => industrial policies
- **NEED FOR SYSTEMIC THINKING** => crisis can quickly cascade from health/environmental sphere to the socio-economic one and there are complex patterns of interdependence worldwide

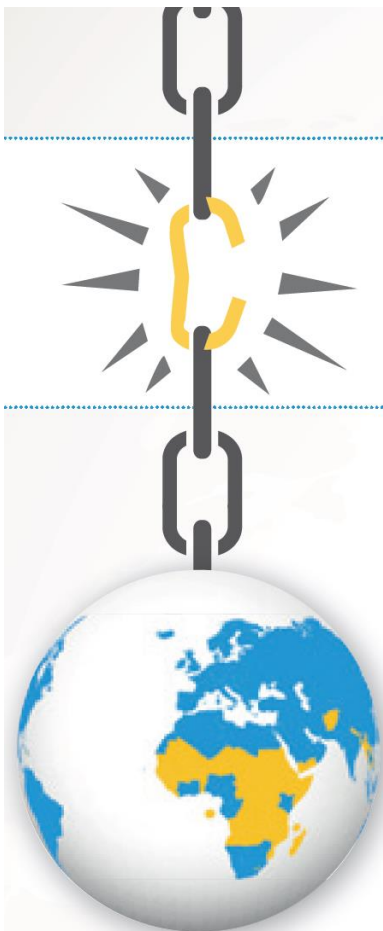


Global partnership for LDCs

In an inter-dependent world, strengthening the global partnership in support of LDCs goes beyond the moral commitment to “leave no one behind” (SDGs)...

... given the potential for spillovers, it is an **INVESTMENT IN SYSTEMIC RESILIENCE**

Crucial occasion to show resolve: UNLDC V (January 2022)





International responses

Increased provision of financial support (eg. IMF provided \$14 bln at 0-interest loans + some debt relief under CCRT)

New \$650 bln SDR allocation => LDCs received 2.1% plus voluntary reallocations

Debt Service Suspension Initiative (DSSI) => until end of December 2021, no private sector, excluding MIC, limited take-up (48 of 73 eligible countries)

Common Framework for debt treatment beyond DSSI => case-by-case (Chad, Ethiopia, Zambia)

Enough to be fit for purpose?



On the way to UN-LDC V

Priorities in the Doha Programme of Action for LDCs (zero draft):

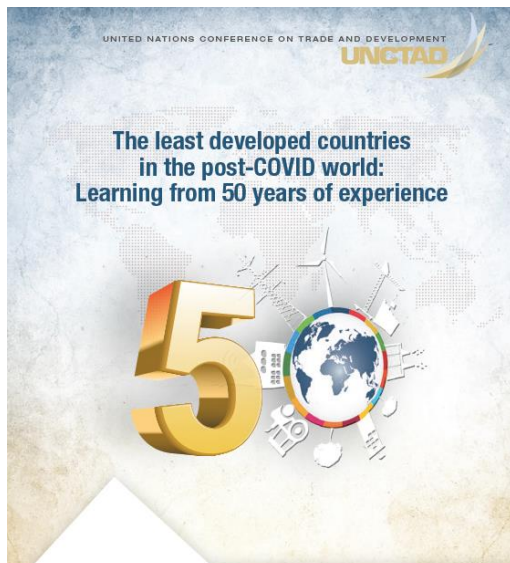
- I. Investing in people in LDCs: **Eradicating poverty and building capacity** to leave no one behind
- II. Leveraging the power of **science, technology, and innovation**
- III. **Structural transformation** as a driver of prosperity
- IV. Enhancing **international trade** of LDCs & **regional integration**
- V. Addressing **climate change, recovering from COVID-19 pandemic**, and building **resilience** against future shocks
- VI. Reinvigorating **global partnerships** and innovative tools for risk-informed sustainable development



Thank you for your attention!

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