UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

UNCTAD

Structural transformation and green transition: a developing countries perspective

Igor Paunovic,

Senior Economist, Chief of Climate and Development Strategy Unit

UNCTAD

Green transition in Response to Climate Emergencies and its Implications for Key Industries in SIDS

Bridgetown, Barbados

28 February 2024

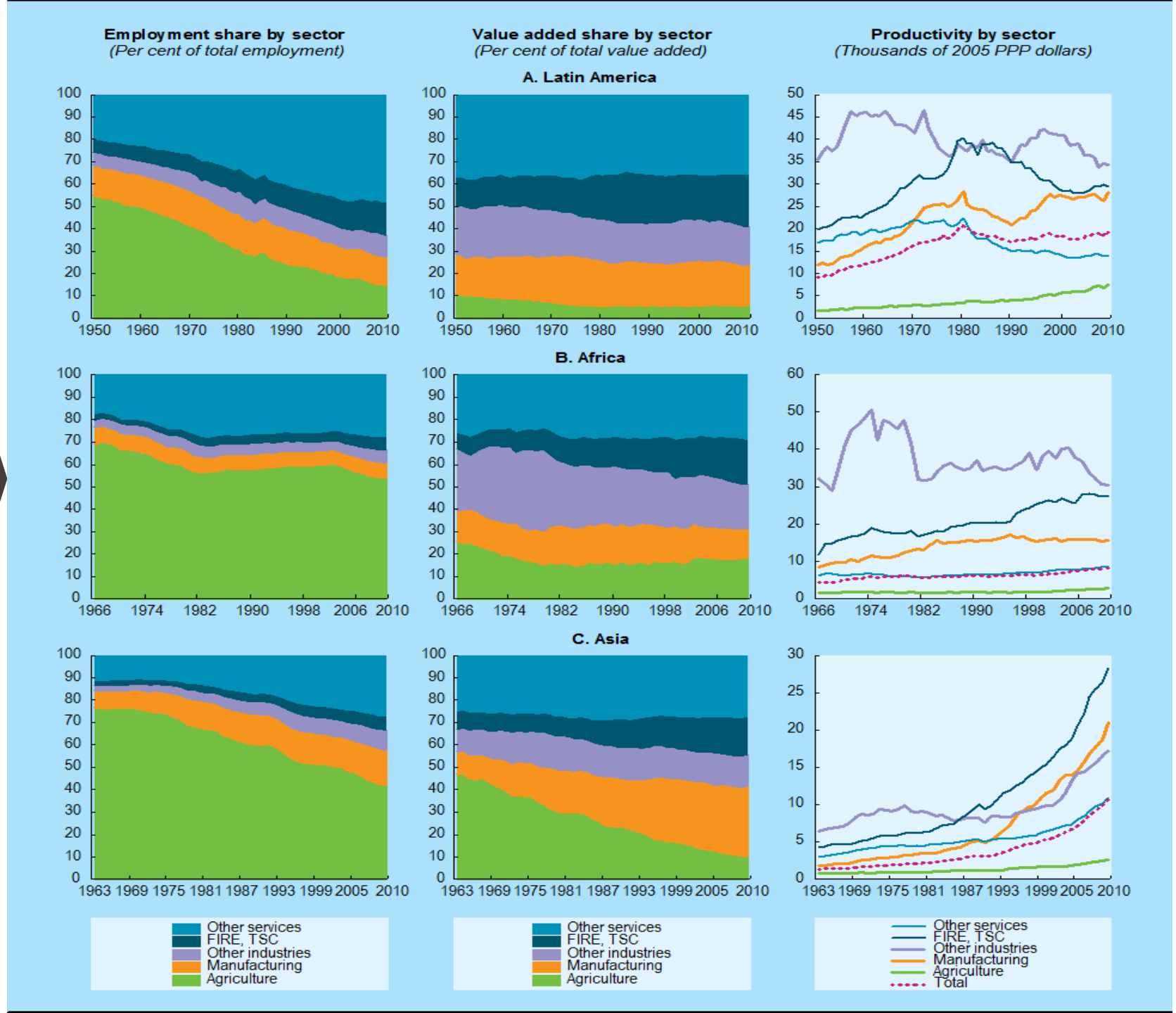
UNITED NATIONS

UNCTAD

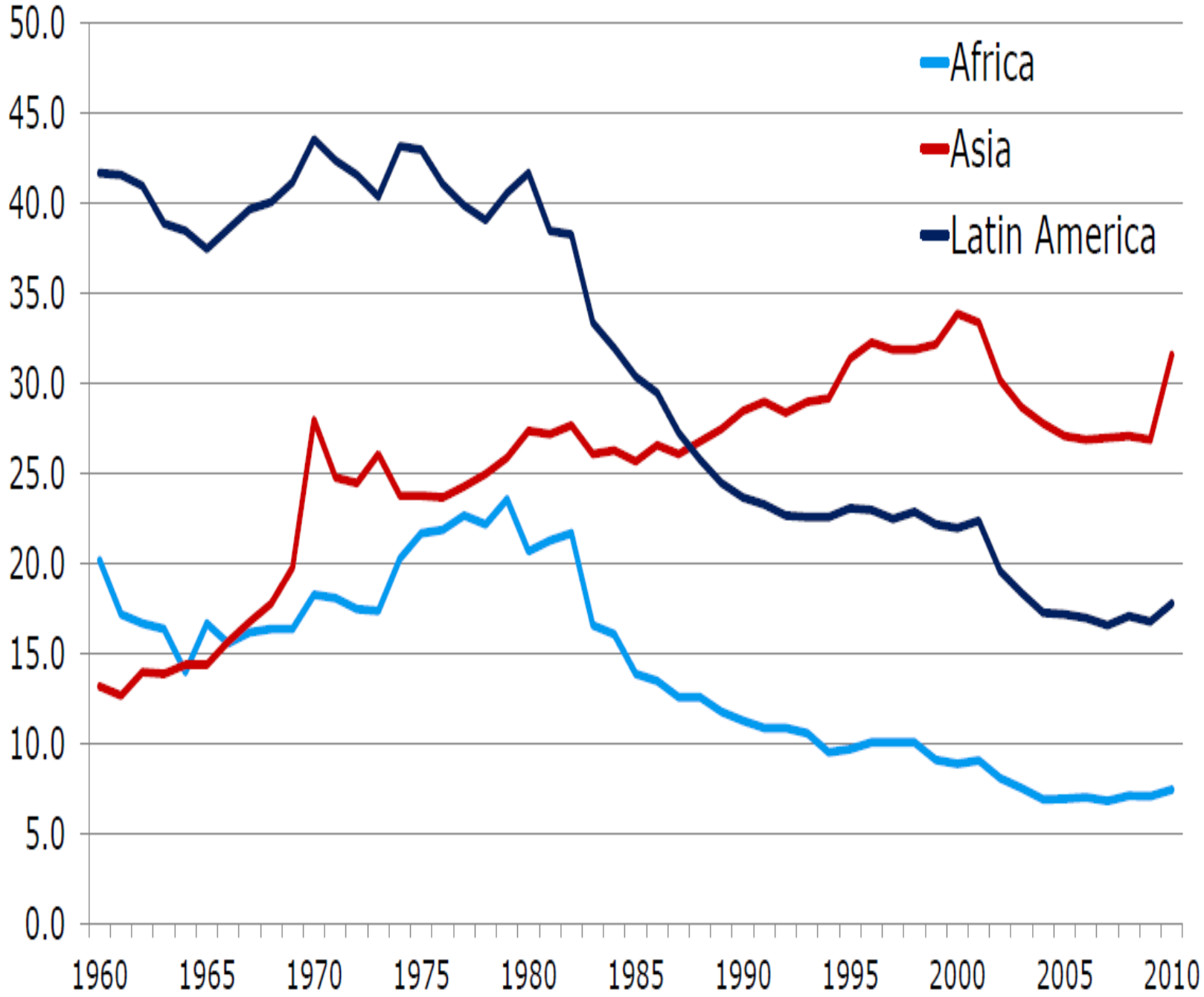
Content

1. Structural transformation: long-term trends
2. Structural transformation in a climate-constrained world
3. Green transition and structural transformation: obstacles in developing countries and how to address them
4. Barbados and its potential for alternative development strategies
5. Main messages

Structural Transformation: long-term trends

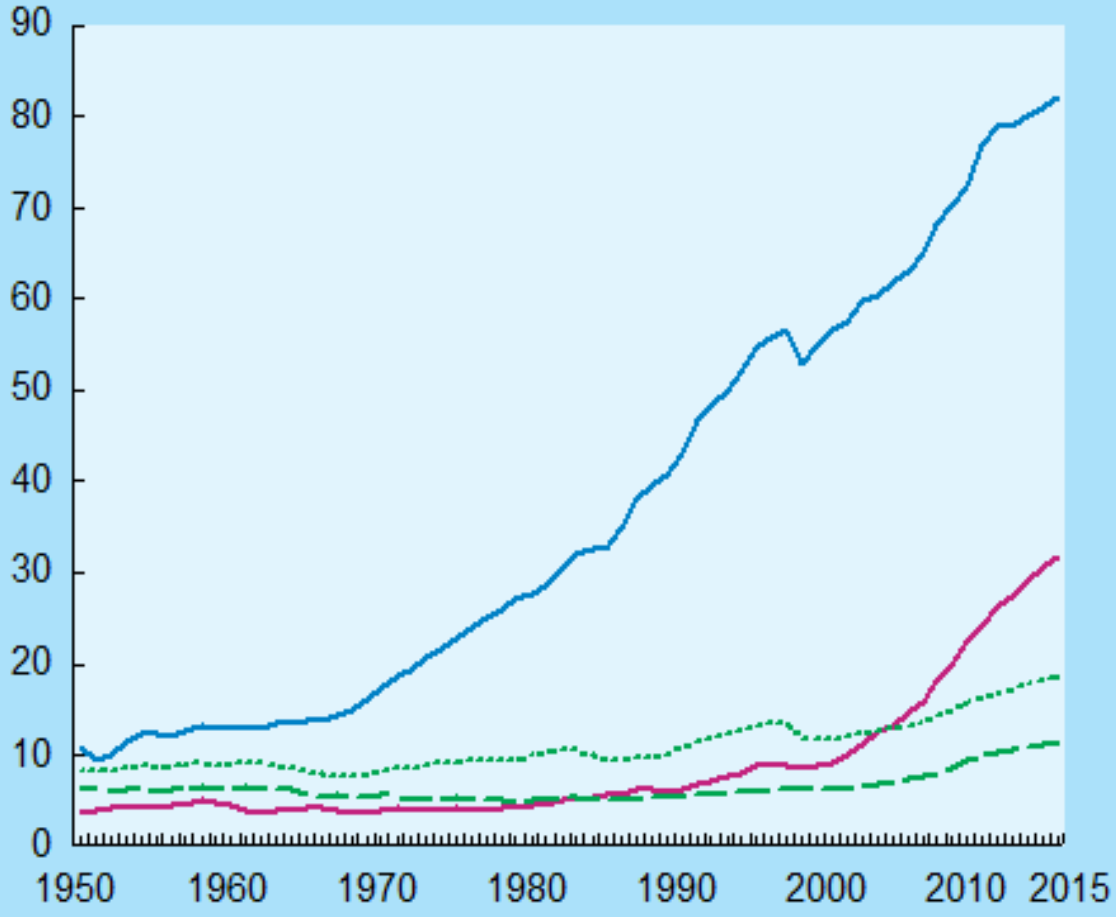


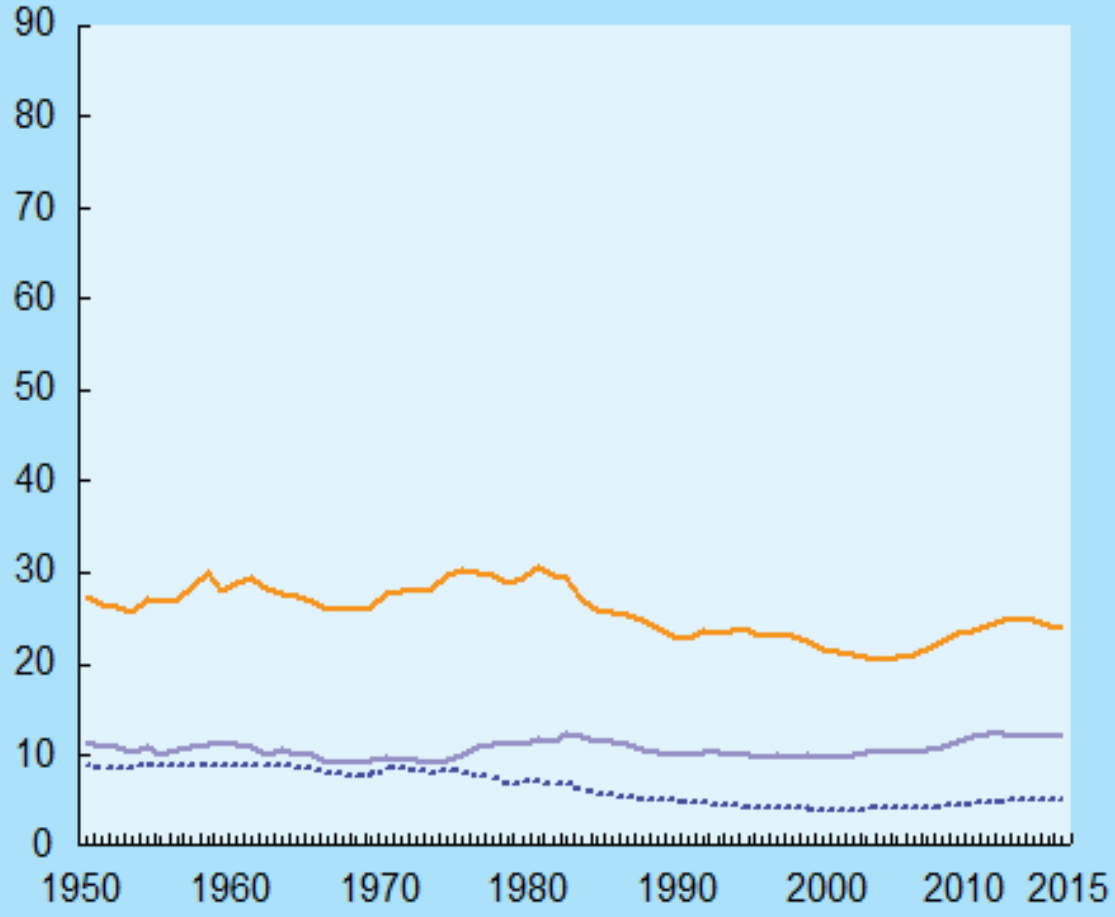
Productivity in Manufacturing compared to the USA: premature de-industrialization



Catching up is hard to do

Ratio of GDP per capita of selected countries and country groups to GDP per capita of the US, 1950–2015





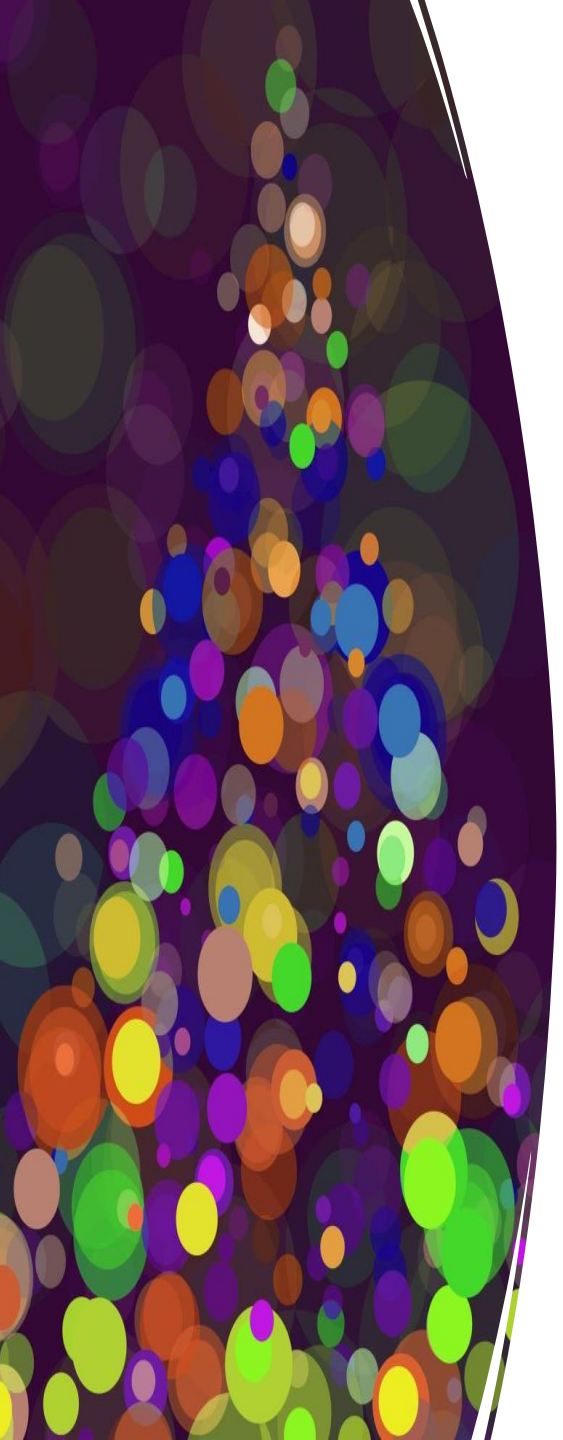
Structural Transformation in a climate-constrained world

Industrial policy matters even more today:

- More diversified and polarized world economy
- Limits to the strategy of export-led growth
- Inadequate employment creation
- Middle-income trap
- Growing inequality
- Monopolistic tendencies
- Rapid technological advances, especially digitalization and artificial intelligence (AI)

Most important: large and growing impact of climate change

Developing countries must adapt their developing strategies to the new challenges of the 21st century



Wanted: a successful development strategy for the 21st century

- East Asian development strategies are less available today as the world has changed
- Less policy space, economies more dependent on international capital flows, trade and investment rules not conducive to creation of domestic productive capacity, etc.
- **Most important**: the fossil-fuel based model of East Asia, if replicated by developing countries, would take emissions and resource consumption way beyond the planet's ecological capacity
- What kind of development strategy can be successful under these adverse conditions? This is a big task ahead of us!

“Green transition is a structural transformation during which low-emission industries grow and high-emission industries decline due to deliberate policies and technological changes.”

Structural transformation full of obstacles so far; why do we expect developing countries to embark on a rapid green transition without international sufficient support???

Green transition - one of many challenges of developing countries - not a main policy priority

Other challenges: rapid industrialization, providing employment to young population, managing rapid and chaotic urbanization, adapting to impacts of climate change, etc.

UNITED NATIONS
UNCTAD

Structural Transformation and Green Transition

- Promotion of structural transformation, industrialization and economic diversification should aim to build a low-carbon production structure, powered by renewable energy and green technologies

- Energy transition and an emergent circular economy will reduce the carbon footprint of both traditional and new sectors

Green transition can increase scope for industrialization because it:

- decouples economic activity from natural resource use
- reduces the quantity of new resources (circular economy)
- potentially operates at low scale
- is more equally distributed than fossil fuels

But, without sufficient international support, this will be impossible!

Challenges facing developing countries (1)

- **Lack of financial resources** for investment in infrastructure and technology needed for green transition, economic diversification and structural transformation.
- **Technological barriers:** some green technologies still in the early stages of development and expensive; challenges in adopting technologies due to limited technological expertise.
- **Governance and institutional capacity**: challenges in enacting and implementing policies due to competing priorities and weak governance structures; lack of institutional capacity to manage the complex and multifaceted nature of green transition and structural transformation, including the capacity to plan, implement, monitor, and evaluate policies and programs.
- **Inadequate infrastructure**: many developing countries, especially LDCs, lack the necessary infrastructure to support a green transition and structural transformation, such as energy grids and transportation systems.
- **Limited policy space** to pursue their own strategy of economic development.

Challenges facing developing countries (2)

1. **Insufficient international financial support**: financing, such as ODA, IMF and WB, and bilateral finance, not sufficient to meet the needs of developing countries.

2. **Trade barriers**: developed countries often impose barriers to trade such as non-tariff barriers or CBAM, which limit the ability of developing countries to transition to a green economy and reduces their competitiveness.

3. **Intellectual property rights**: developed countries hold most patents and intellectual property rights to green technologies, making it difficult for developing countries to access and use them, as they may be expensive or require licensing agreements.

4. **Unequal participation in global governance**: developing countries often have limited representation and influence in global governance institutions, such as the United Nations Framework Convention on Climate Change (UNFCCC) and the Conference of the Parties (COP), limiting their ability to shape global policies and initiatives.

5. **Limited access to information**: developing countries often lack access to the necessary information and knowledge needed for green transition, including on best practices, policies, and technologies.

6. **Global rules biased against developing countries**: measures prohibited under WTO less important at advanced levels of development, but reduce policy space to promote productive capacity at earlier stages of development

UNITED NATIONS
UNCTAD

Proposals for facilitating green transition in developing countries

1. **Green developmental State**:
   (i) developmental leadership centered on the catching-up process;
   (ii) policy approach focused on active and coordinating role of the State;
   (iii) institutional setup based on competent and mission-oriented bureaucracy shielded from special interests;
   (iv) a broad alliance between the State and society
2. **Larger policy space**: reform of the global rules that impede developing countries to use all available tools for green transition
3. **Reforms in the WTO**: to Trade Related Intellectual Property Rights (TRIPs), Trade Related Investment Measures (TRIMs), and subsidies
4. **Adequate financing options** for developing countries
5. **Meaningful technology transfer** from developed to developing countries
6. **Use of Special and Differential Treatment** at the WTO and **Common but Differentiated Responsibilities in the UNFCCC**, to establish a development and climate agenda that responds directly to the needs of development, supporting environmentally sustainable transformation in all countries – a **Just Transition**

Barbados and its potential for alternative development strategies

- Vulnerable to climate change and natural disasters
- Economic vulnerability – dependence on capital flows and trade (FDI more than 10% of GDP, trade more than 80% of GDP)
- Sustainable development requires building resilience to environmental and economic shocks
- Smallness precludes SIDS from adopting development strategies based on abundant factors of production, thus most have a service-led development strategy, Barbados included
- Most of these rely disproportionately on tourism – another source of economic vulnerability

Barbados and its potential for alternative development strategies

Barbados compared to other SIDS

Weak: - capture fisheries production

- natural resource rents as % of GDP
- high concentration of value added and employment in services
- low gross savings rate and high dependence on FDI

Strong: - high GDP per capita

- high access to electricity
- high proportion of population using Internet
- high govt. expenditure on education
- high patent application per capita
- high regulatory quality index

Barbados and its potential for alternative development strategies

Barbados compared to other SIDS

- Perhaps the most important advantage of Barbados over other SIDS is its readiness for Frontier Technologies Index
- Technology and Innovation Report of UNCTAD (2021) assessed a readiness for frontier technologies in the world
- The USA used as a benchmark with 1 (highest) and countries were classified as high, upper middle, lower middle and low.
- Barbados came out with a total score of 0.58 and ranked 48th of the total of 158 countries with data available
- That is the upper middle classification and is **the highest of all SIDS**, apart from Singapore
- As Minister Blackman said yesterday, Barbados can build a knowledge-based economy

Barbados and its potential for alternative development strategies

Some possible options

- Linking tourism with other sectors, most notably agriculture and creative industries
- Prioritizing high-value activities that do not rely on economies of scale or geographic proximity to markets (fintech, outsourced business functions, design)
- Creating incentives for smart agriculture, including precision and vertical agriculture
- Identifying niche opportunities in ITC (digital nomads?)
- Exploring possibilities to develop blue economy
- Supporting priority opportunities with public investments and spending in infrastructure, research and development, human capital development and innovation

Barbados and its potential for alternative development strategies

Where to start?

- Radical transformation of the energy system: create an energy system entirely based on solar energy.
- Back of the envelope calculation: it would cost USD3.75 billion to provide solar panels for every single household in Barbados
- Create incentives to mobilize domestic investment and FDI into industrial scale production of the renewable energy source which Barbados has in abundance
- Engage large energy consumers such as tourism sector to construct renewable energy resources
- Economic benefits: large reduction of the import bill, energy sufficiency, and perhaps energy exporter in the future

Main messages

- Structural transformation and green transition are necessary for the achievement of climate-resilient development
- Catching up is hard to do and will be even harder in future
- Developing countries depend on the international support for embarking on a green transition
- Global economic governance is not providing enabling conditions for rapid economic development and green transition – needs to be reformed
- Barbados can explore alternative development strategies based on its strengths
- Knowledge-based economy with economic diversification in agriculture, financial and business services, ITC, creative industry, blue economy
- Radical energy transformation is needed

Thank you!

igor.paunovic@un.org

UNITED NATIONS
UNCTAD

UNITED NATIONS
UNCTAD