Indonesia's Transition Towards Greener Economies and Policies

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green jobs (unep, 2008)

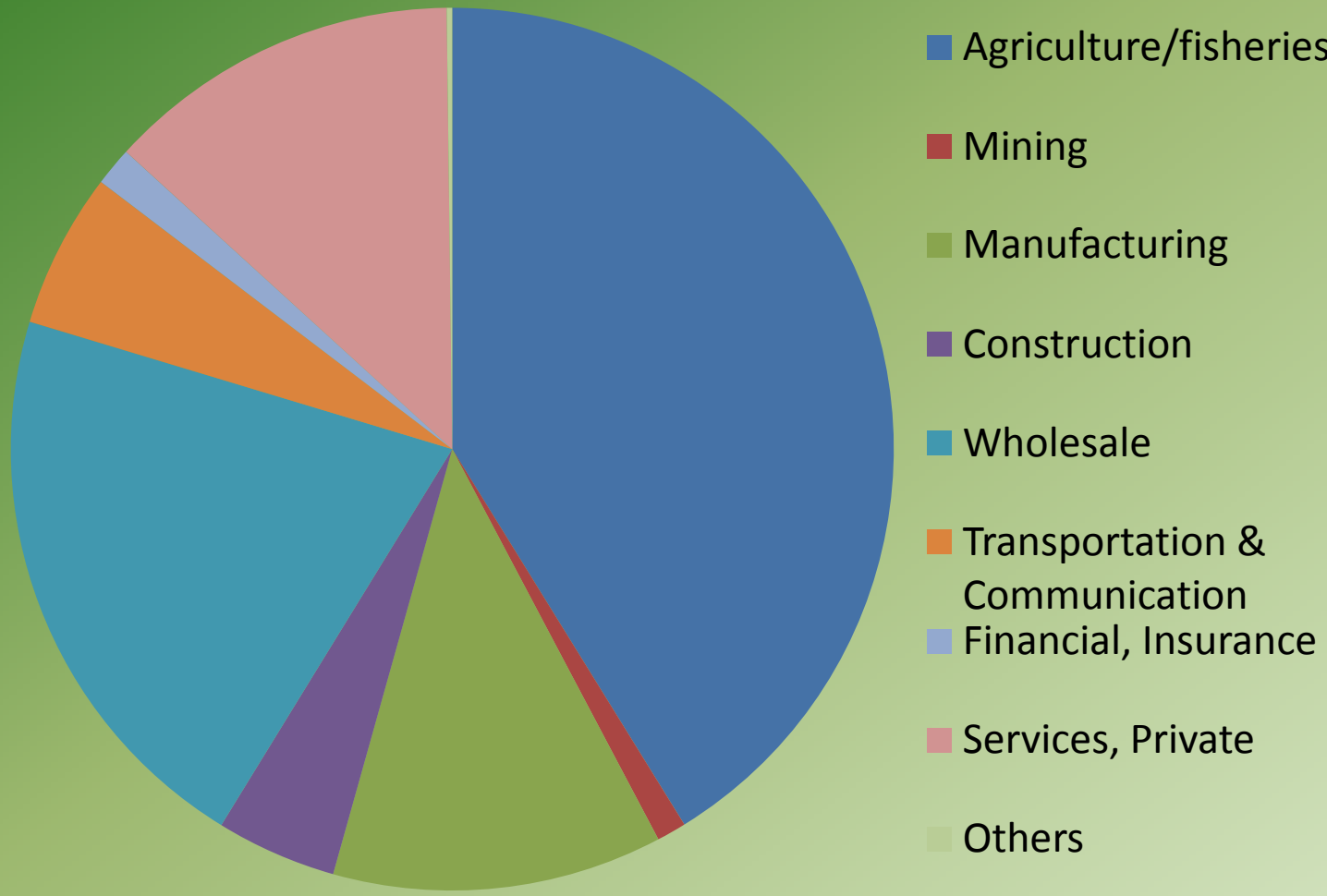
- We define green jobs as work in agricultural, manufacturing, research and development (R&D), administrative, and service activities that contribute substantially to preserving or restoring environmental quality. Specifically, but not exclusively, this includes jobs that help to protect ecosystems and biodiversity; reduce energy, materials, and water consumption through high efficiency strategies; de-carbonize the economy; and minimize or altogether avoid generation of all forms of waste and pollution.

- Employment will be affected in 4 ways:
  - Additional jobs will be created—as in the manufacturing of pollution-control devices added to existing production equipment.
  - employment substitution—as in shifting from fossil fuels to renewable, or from land filling and waste incineration to recycling.
  - Elimination without direct replacement—as when packaging materials are discouraged or banned.
  - Many existing jobs (especially such as plumbers, electricians, metal workers, and construction workers) will simply be transformed and redefined as day-to-day skill sets, work methods, and profiles are greened.

GDP by sector (%), BPS 2009

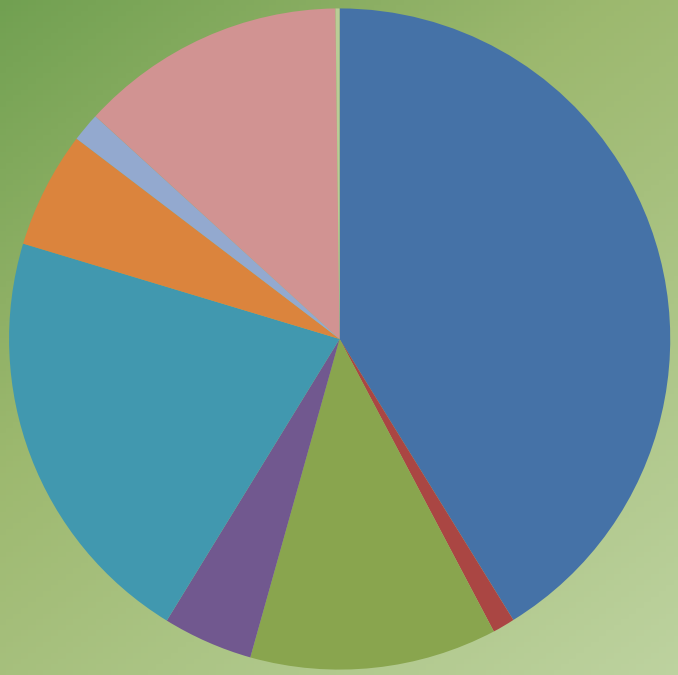
- Agriculture/fisheries
- Mining
- Manufacturing
- Construction
- Commerce
- Transportation & Communication
- Financial & Biz Services
- Services
- Others

employment by industry (%), BPS 2009



in synch? implications?

GDP

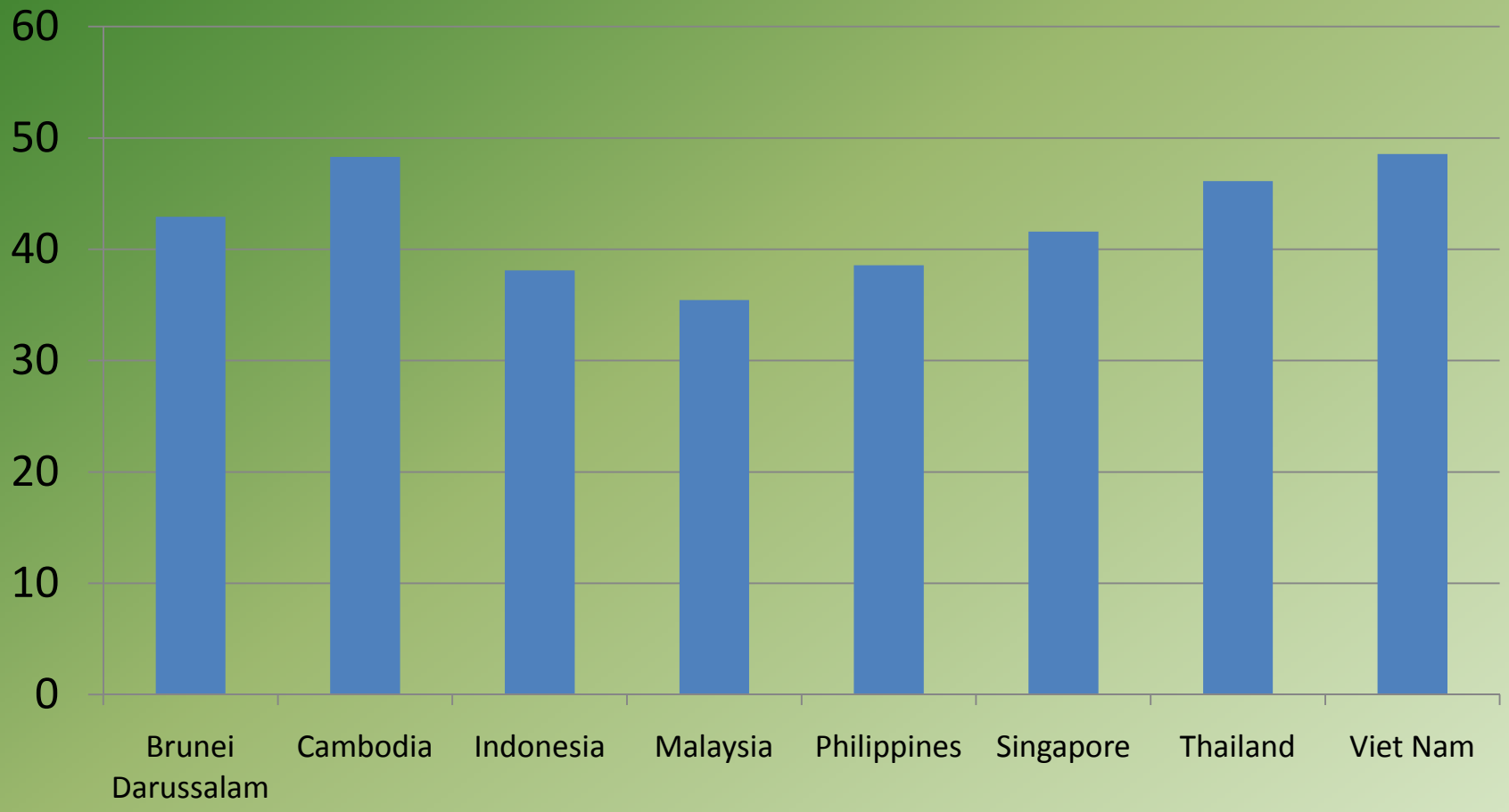


Employment

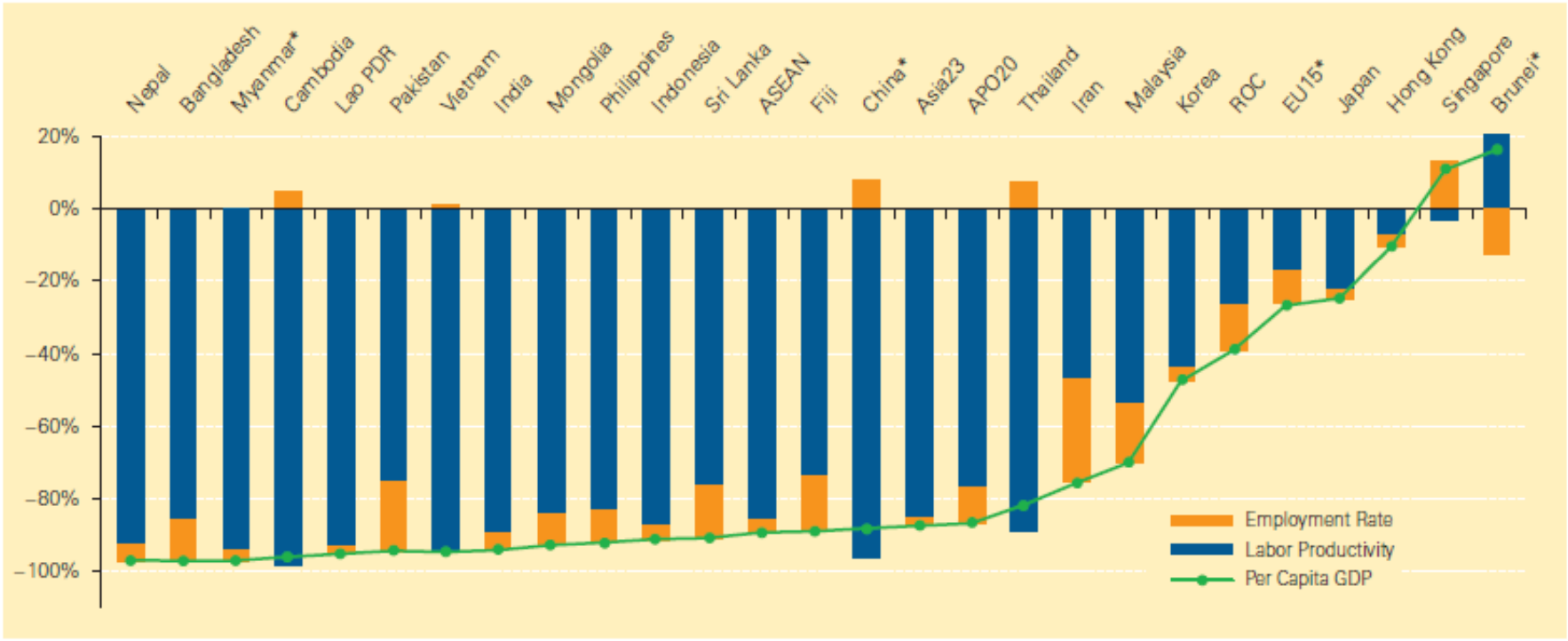
- Agriculture/fisheries
- Mining
- Manufacturing
- Construction
- Wholesale
- Transportation & Communication
- Financial, Insurance
- Services, Private
- Others

% taking care of household, BPS 2009

% of women in adult labor force, UNStats 2009



productivity



: Labor Productivity and Employment Rate Gap with Respect to the US, 2007
—Decomposition: Gap of GDP at constant market prices per person, using the 2005 PPPs

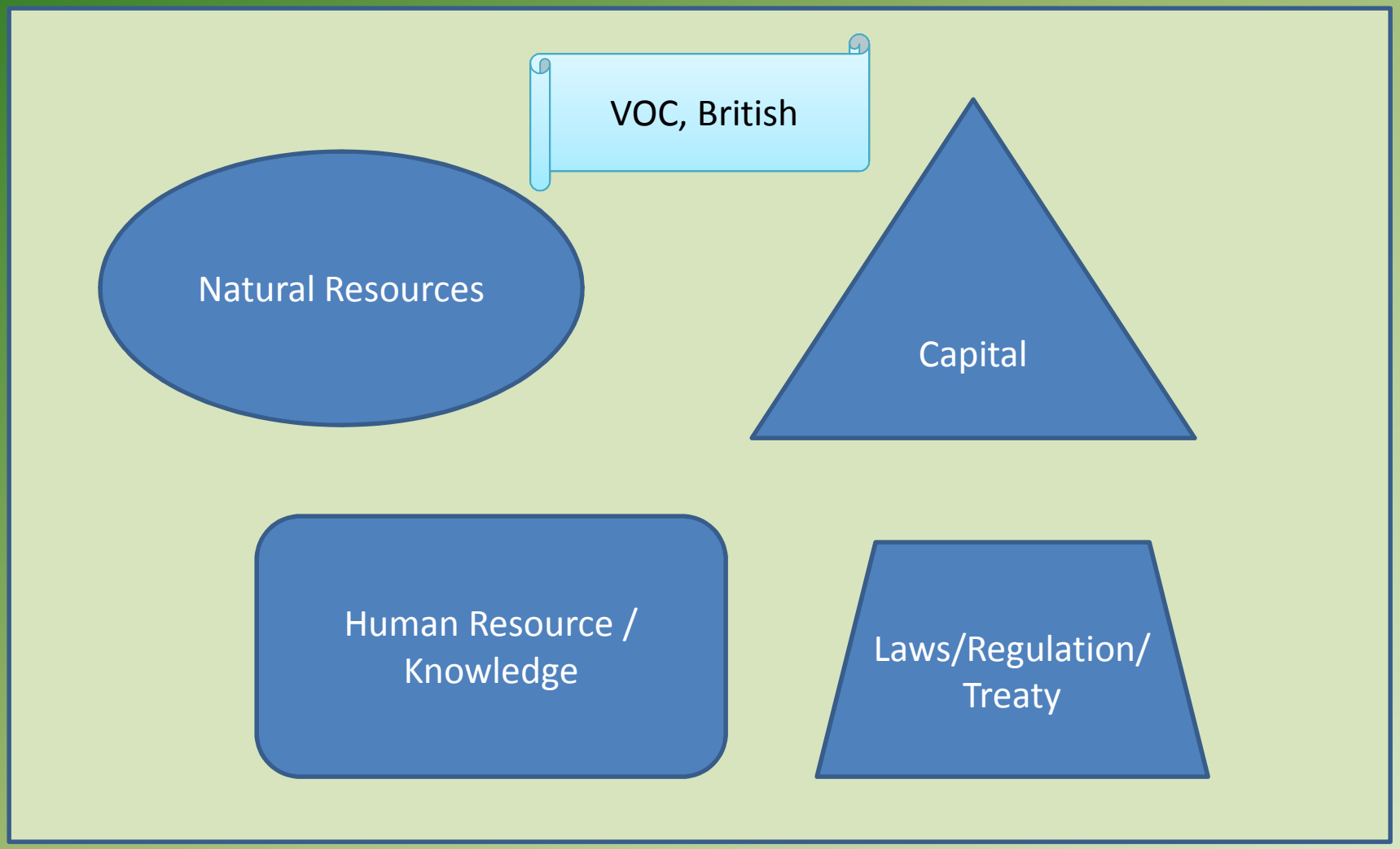
catching up to do ?

: Country Groups Based on the Initial Economic Level and the Pace of Catching Up with the US
—Level and average annual growth rate of GDP at constant market prices, using the 2005 PPPs

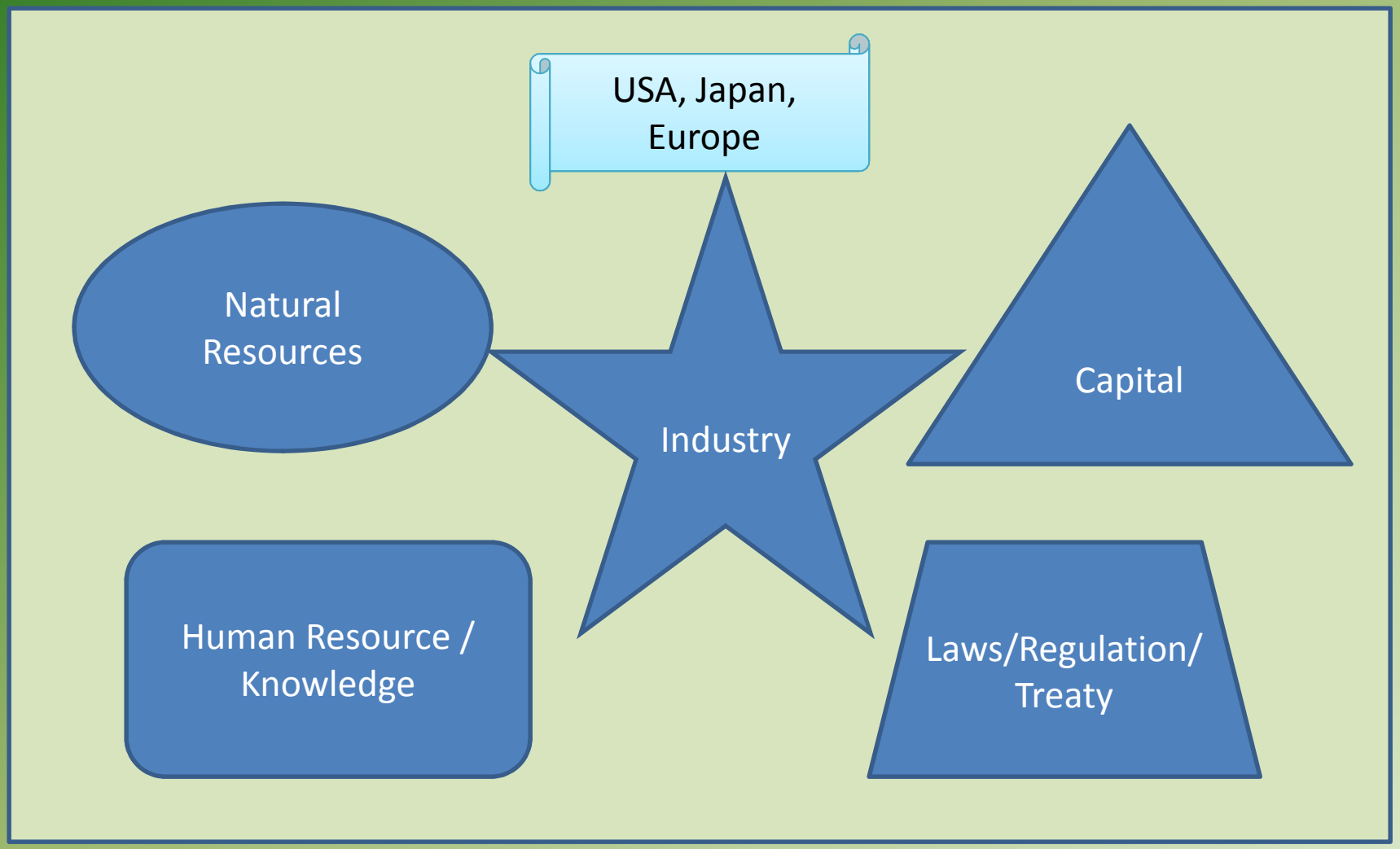
GDP Level to the US	Annual Rate of Catchup to the US			
	(C1) 3% <	(C2) 1% < – < 3%	(C3) 0% < – < 1%	(C4) < 0%
(L1) 60% <			Japan, EU15*	Brunei*
(L2) 20% < – < 60%	Singapore	Hong Kong		Iran
(L3) 5% < – < 20%	Korea, ROC	Malaysia, Sri Lanka, Thailand	Mongolia, Pakistan	Fiji, Philippines
(L4) < 5%	Cambodia, Vietnam, China*	India, Indonesia, Lao PDR, Myanmar*	Bangladesh	Nepal

Note: The annual catch-up rates are estimated based on the data during 1970–2007. The starting years for some countries are different due to data availability: Bangladesh (1973–), Brunei (1974–), Cambodia (1987–), Lao PDR (1984–), Nepal (1974–) and Vietnam (1986–). The countries with "*" represent the non-member countries in Asia.

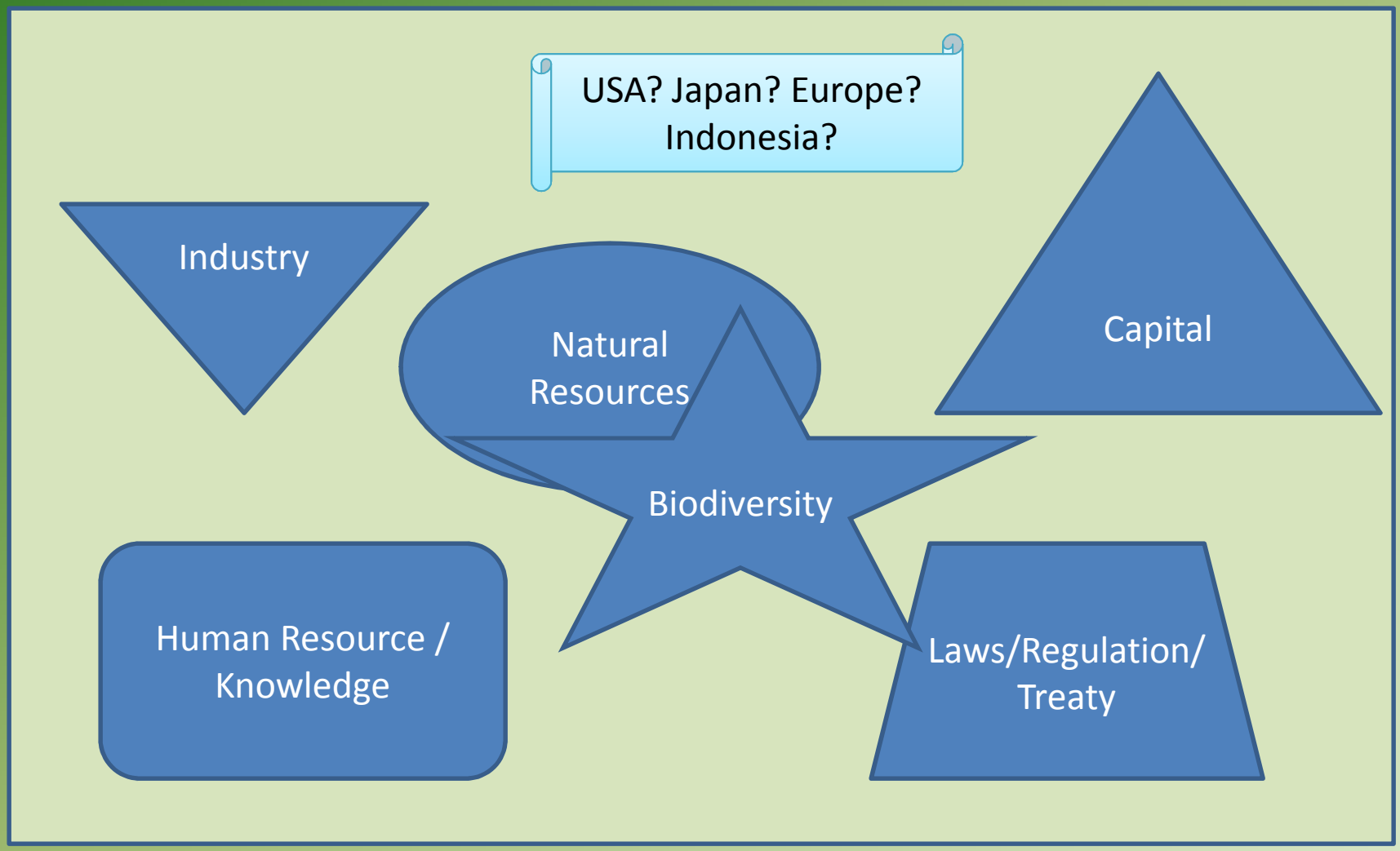
“business” from time to time power



“business” from time to time industrial revolution



“business” from time to time green revolution



- Asia's growth helped global recovery from recent financial crisis (Risks: Slow recovery of developed nations, capital flows that destabilize, increasing protectionism, global instability).
- Other foreseeable crisis: food, energy & environment → social crisis → Needs green policy that is sustainable.
  - Although Asia leads in global recovery but at the same time there are problems of environmental degradation and lower social indicator in Asia. Income disparity, pollution, natural resources depleting fast → real capital decrease in Asia.
- The richness of biodiversity in Asia-Pacific is facing its biggest threat ever → causing higher poverty.
  - Need to stop climate change and biodiversity erosion.

- APEC, 54% of world's GDP, 44% world's trade, 40% world's population.
- APEC, 90% SME, 20-50% GDP, 25% of work-force (in Indonesia it is nearly 90%).
- Changing into an economy with low carbon intensity needs green technology, such as "smart grid", renewable energy, environmental friendly transportation in urban area, etc. The focus is on 3 areas: stop climate change, stop biodiversity erosion, work on achieving MDGs.

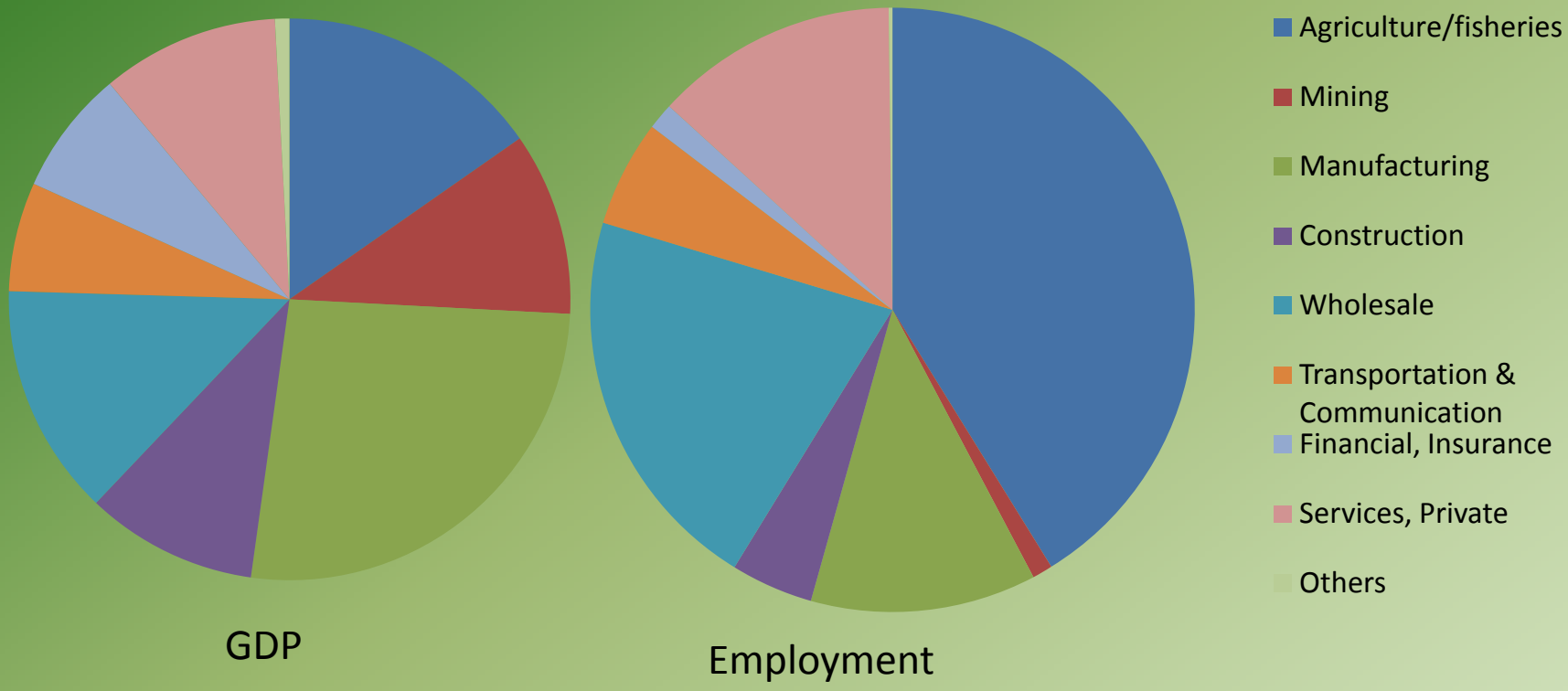
where are we heading? example

- REDD+ → where carbon and other ecosystem services of Indonesia's forest can be credited, compensated and traded. (Land status/rights of stakeholders/establish certification & registry system, law/legal enforcement, etc.)
- Political (SBY's declaration of emission reduction, Sumatra governors', Copenhagen Accord), Policies & Regulations (Sumatra Spatial Planning, Decentralization Law). Setting up plan on financing and MRV, moratorium.
- Biodiversity and Peat and Forest Carbon Conservation.
- Where is the value? How is the supply chain developed? What type of businesses? Ripe?
- From natural resource exploitation to value added.

Closing

what ever we do….

in synch? implications?



Knowledge Management
SECI vs Linearity

Industries,
National research centers,
Research universities

→

New technology adaptation and diffusion,
New innovations and inventions,
Engineering and reversed engineering,

→

Industry competitiveness
National defense/dignity
Women empowerrment
S&T acquisition