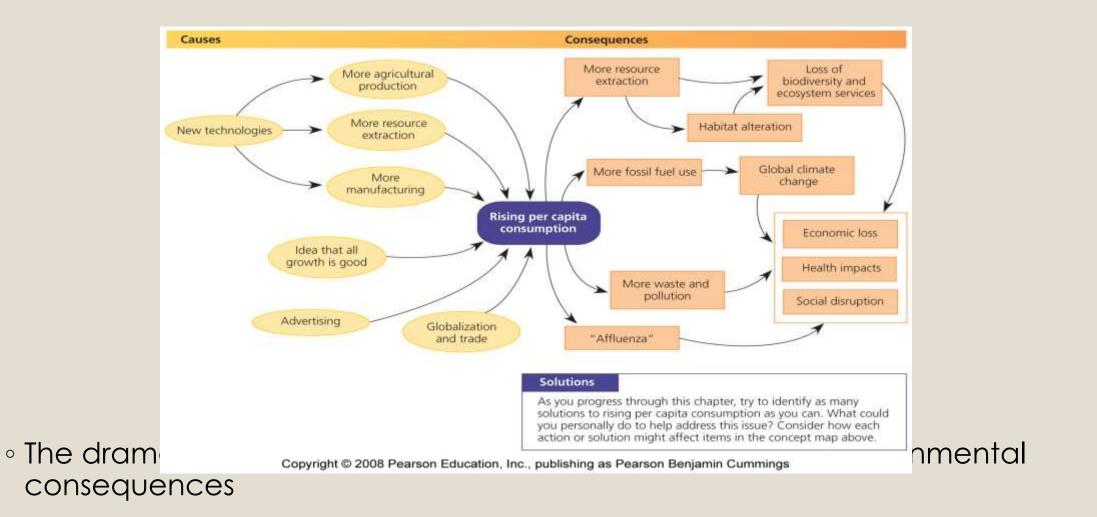
LINGKUNGAN DAN BISNIS

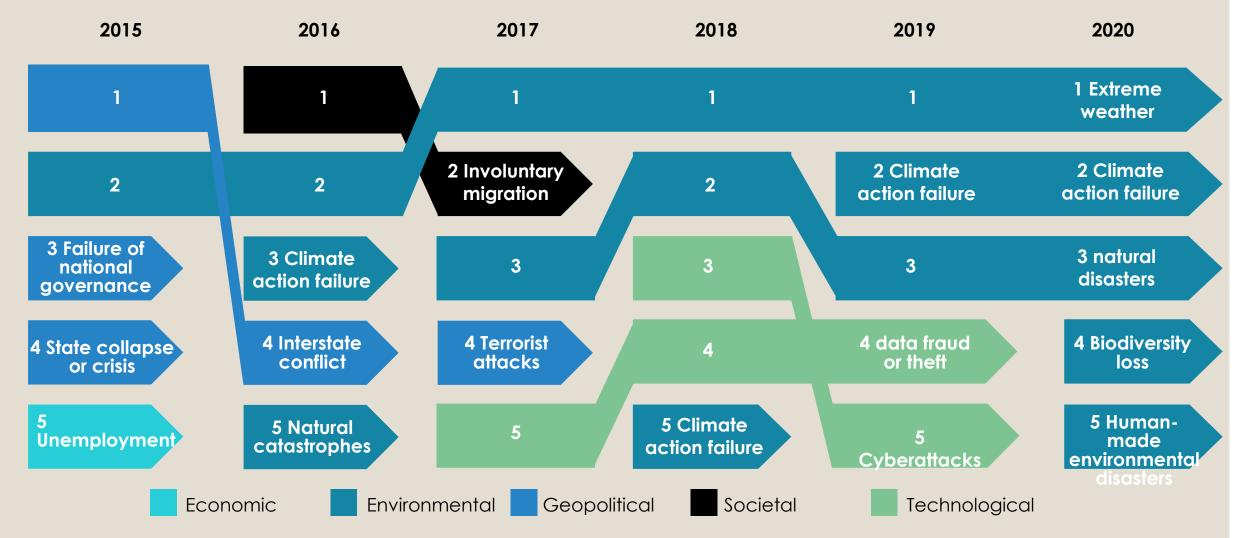
Dony Abdul Chalid

Is the growth paradigm good for us?

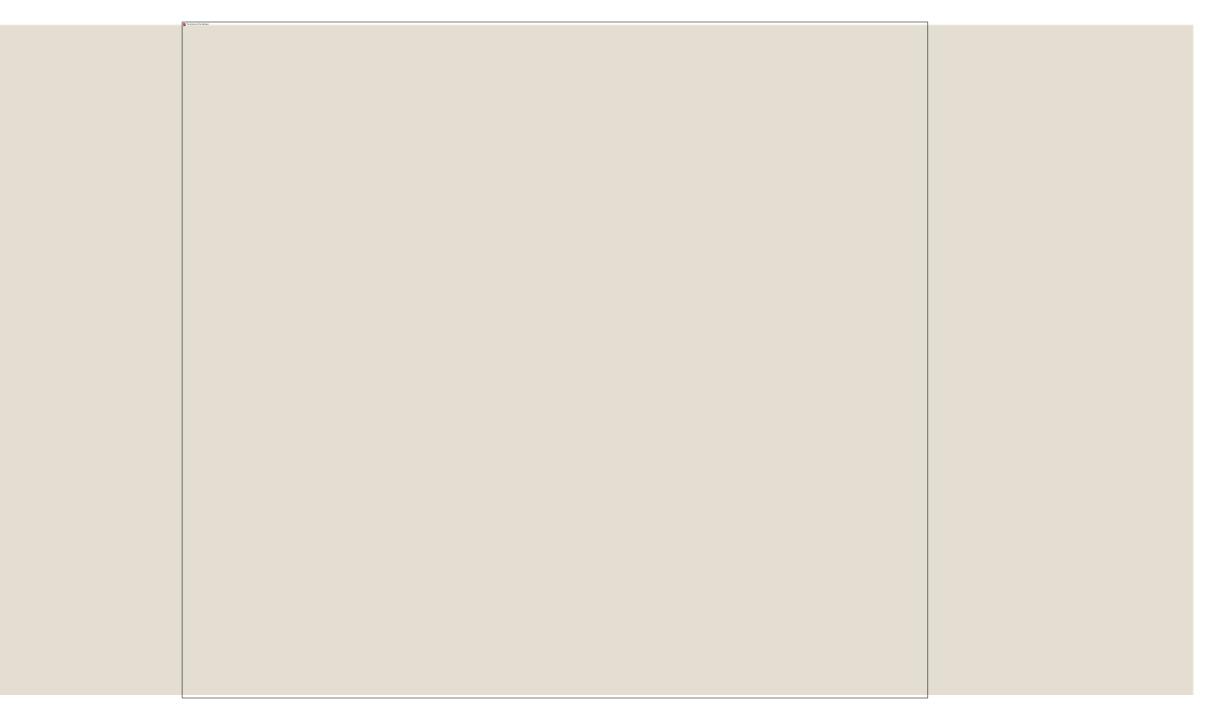
• "More and bigger is better"



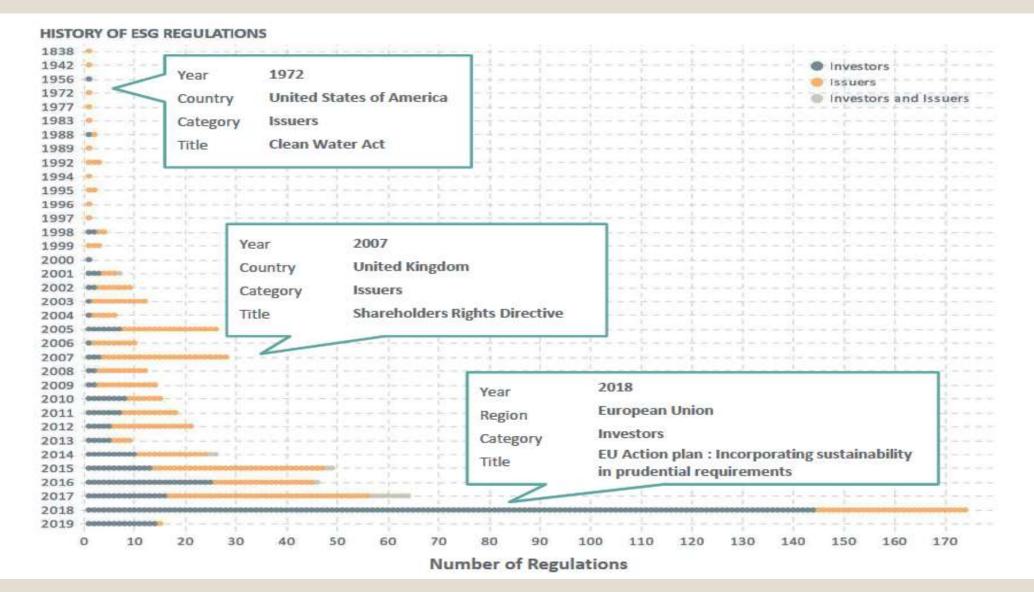
The WEF 2020 top risks



Source: World Economic Forum



Exponential growth in ESG regulations



Environmental Risk

Country Portfolio Returns and Temperature Beta

Country	ℓ	R	β_w
Group 1	0.10	19.74	-28.28
Group 2	0.30	16.56	-21.28
Group 3	0.45	15.11	-0.45
Group 4	0.62	12.44	37.53

Table IV presents descriptive statistics and the temperature-related betas for four country distance-sorted portfolios. Group 1 corresponds to countries closest to the Equator, and Group 4 corresponds to countries furthest from the Equator. The table reports the average distance to the Equator ℓ , the average temperature w, the average real equity return R, and the temperature beta β_w for the countries in each group. ℓ_i is computed as the absolute value of the latitude in degrees divided by 90 to place it between 0 and 1. The average temperature is expressed in degrees Celsius and is computed as the average temperature within each group's countries. The temperature betas β_w are computed from the fixed-effects model presented in Table III. The data is annual, and market equity returns are real and expressed in percentage terms. "countries closest to the Equator earn the highest risk premium"

Source: Bansal, R., Ochoa, M. (November 2011), Temperature, Aggregate Risk, and Expected Returns, NBER Working Paper No. 17575.

"Green" Business?

• Definition:

- A business that minimizes the environmental impact of its activities?
- A business that offer environmentally friendly products/services?
- A business that supports "green" causes?
- Reasons:
 - Government Regulations
 - Consumer preferences/pressure
 - Strategic advantage
 - Risk management
 - Ethical considerations

• Is more responsible bad for business?

Reasons for going "Green"

- Government Regulations
- Consumer preferences/pressure
- Strategic advantage
- Risk management
- Ethical considerations

Sustainable Business

Environmental Value

Social
ValueEconomic
Value

What needs to be done

Integrating the Environmental Risk
Stress testing

Helping reduce the Environmental Risk
"Going green"