

Rethinking Economy for Circularity

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1. How do we govern our economy and companies?
2. From growth & profit (F) to integrated value: $I = F + S + E$
3. Purpose first, profit follows
4. Circular economy

Summary

Current economy

- Maximising return on investment per hectare leads to environmental degradation



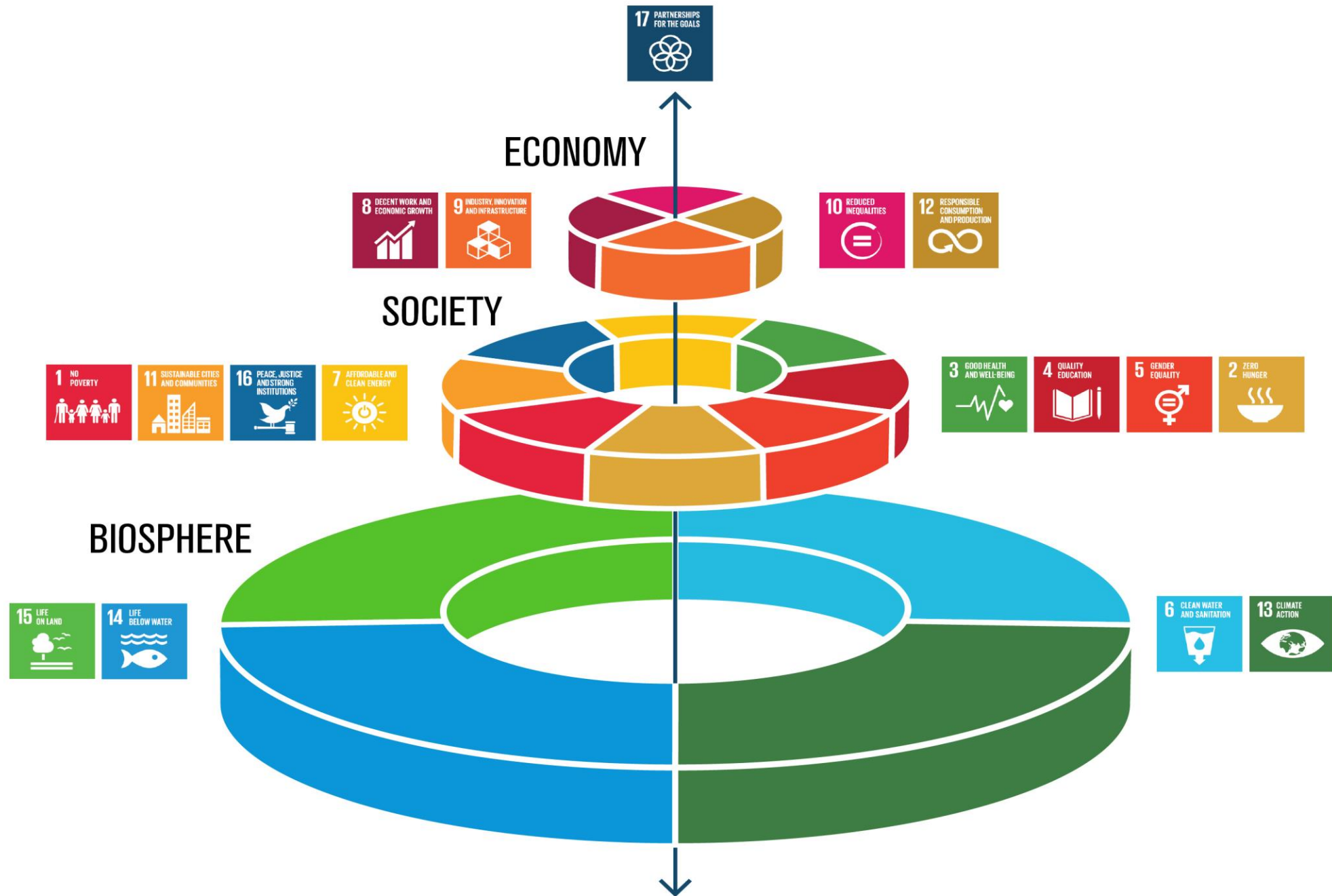
Impact economy based on circularity

- Operating within ecological boundaries is needed for long-term value creation

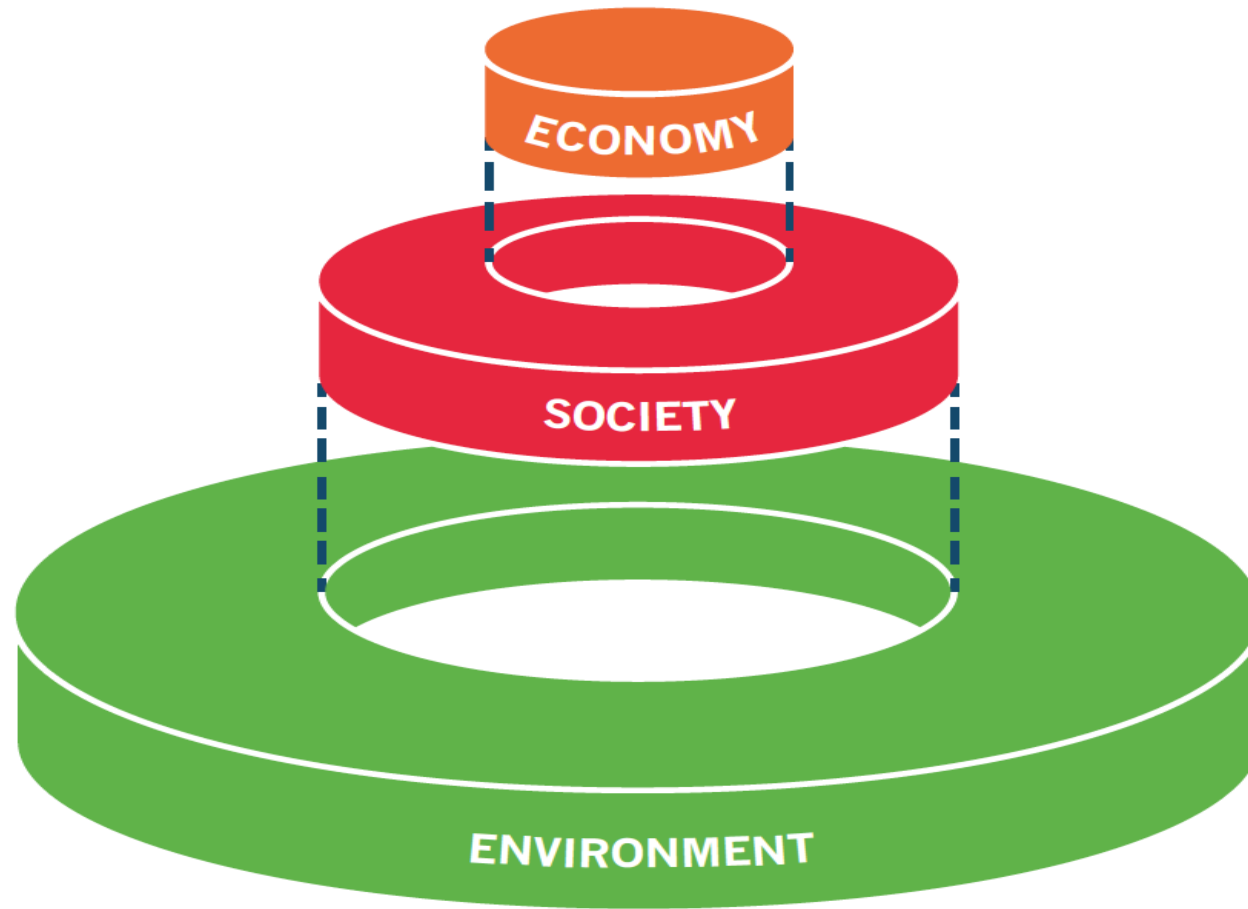


From SDGs to new economic systems

- SDG agenda for 2030, but still
 - social challenges: rising social inequality, lack of inclusiveness, etc.
 - environmental challenges: climate change, biodiversity loss, fresh water shortages, etc.
- Leading paradigm for steering:
 - economy => economic growth
 - corporates => profit maximisation
 - these are not going to solve the challenges
- Impact economy paper looks for solution by
 - search for economic system that can address challenges
 - linking economic system and corporate sector



Sustainable development



▶ financial return and risk: **F**

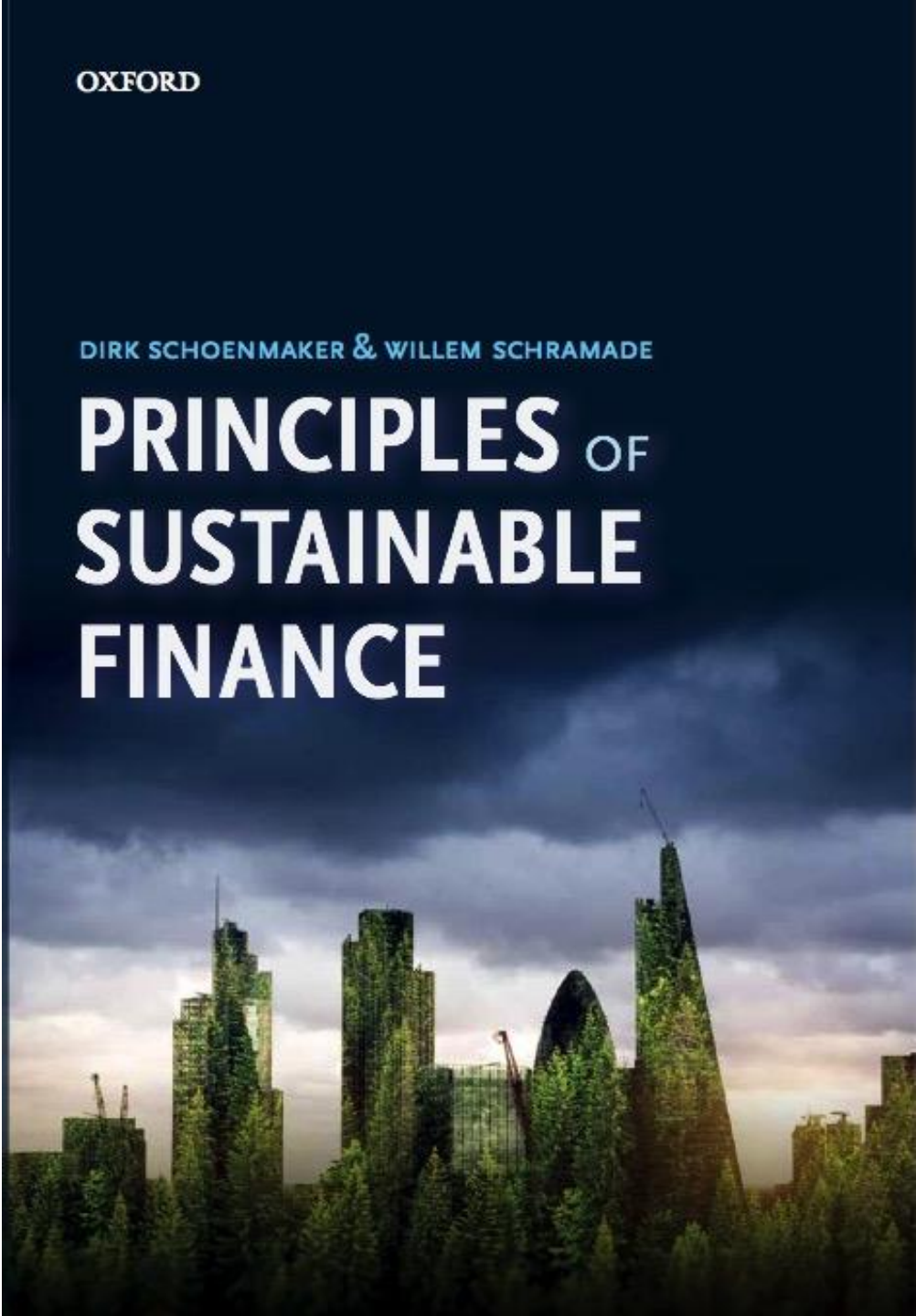
▶ impact on society: **S**

▶ impact on environment: **E**

Principles of sustainable finance

Sustainable Finance Typology	Value created	Ranking of factors
Finance-as-usual	Shareholder value	F
Sustainable Finance 1.0	Refined Shareholder value	F > S and E
Sustainable Finance 2.0	Stakeholder value	E > F > S
Sustainable Finance 3.0	Common good value	S and E > F

?



Governance matters

Governance is the process of decision making and accountability in countries or companies

- Corporate governance has to fit within broader economic system to be successful

Key question is the goal function

- Maximise growth or profit (F), or
- Integrated value $I = F + S + E$



Classifying economic systems

Market economy

- Government responsible for public goods + sets conditions
- Business responsible for private goods
- Companies are run for profit (shareholder model), but no regard to externalities



State economy

- Government responsible for public + private goods
- Companies are steered by the state, but lack of efficiency and individual initiative



Classifying economic systems

Impact economy takes the middle ground

- Government responsible for classical public goods
- Business responsible for private goods
- Government + companies jointly care for sustainable development
- Guiding principle: balancing profit and impact



What are we aiming for?

Stiglitz report (2009) -> beyond GDP

- Detailed list of indicators measuring current and future well-being
 - Material conditions (F)
 - Quality of life (S)
 - Preservation of natural resources (E)
- But neither standardised nor available across countries

We propose 2 to 3 main indicators for each dimension

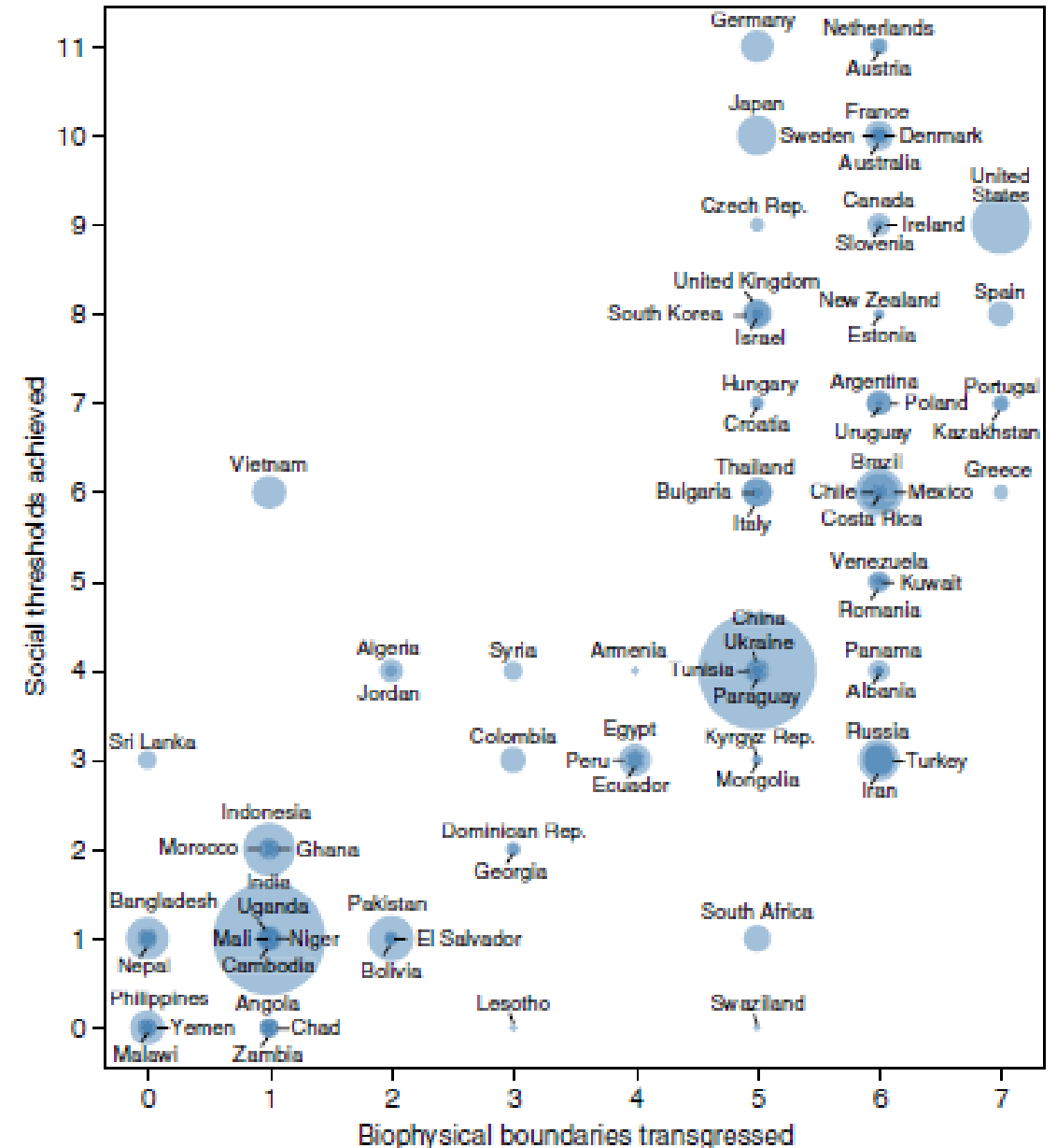
Performance indicators (2019)

Indicator	Economic system		
	Market (USA)	Impact (EU)	State (China)
Performance indicators			
0. SDG index (0 – 100 best)	74.5	79.5	73.2
1. Economic dimension			
- GDP per capita PPP (\$)	65,112	44,539	19,504
- Real GDP growth (5-year average)	2.4%	2.2%	6.6%
2. Social dimension			
- GINI index (0 - 100 unequal)	38.2	33.2	41.2
- Global gender gap (0 - 1 parity)	0.72	0.76	0.68
- Human rights (-3.8 - 5.4 better)	0.2	2.0	-1.3
3. Environmental dimension			
- Carbon emissions per capita (metric tons)	22.8	11.9	6.7
- Material footprint per capita (tons)	31.9	21.7	19.7

Discussion

What is link between consumption and carbon/material footprint?

- Strong correlation:
more wealth (consumption) leads
to higher footprint



2 broad channels for corporate social responsibility (CSR)

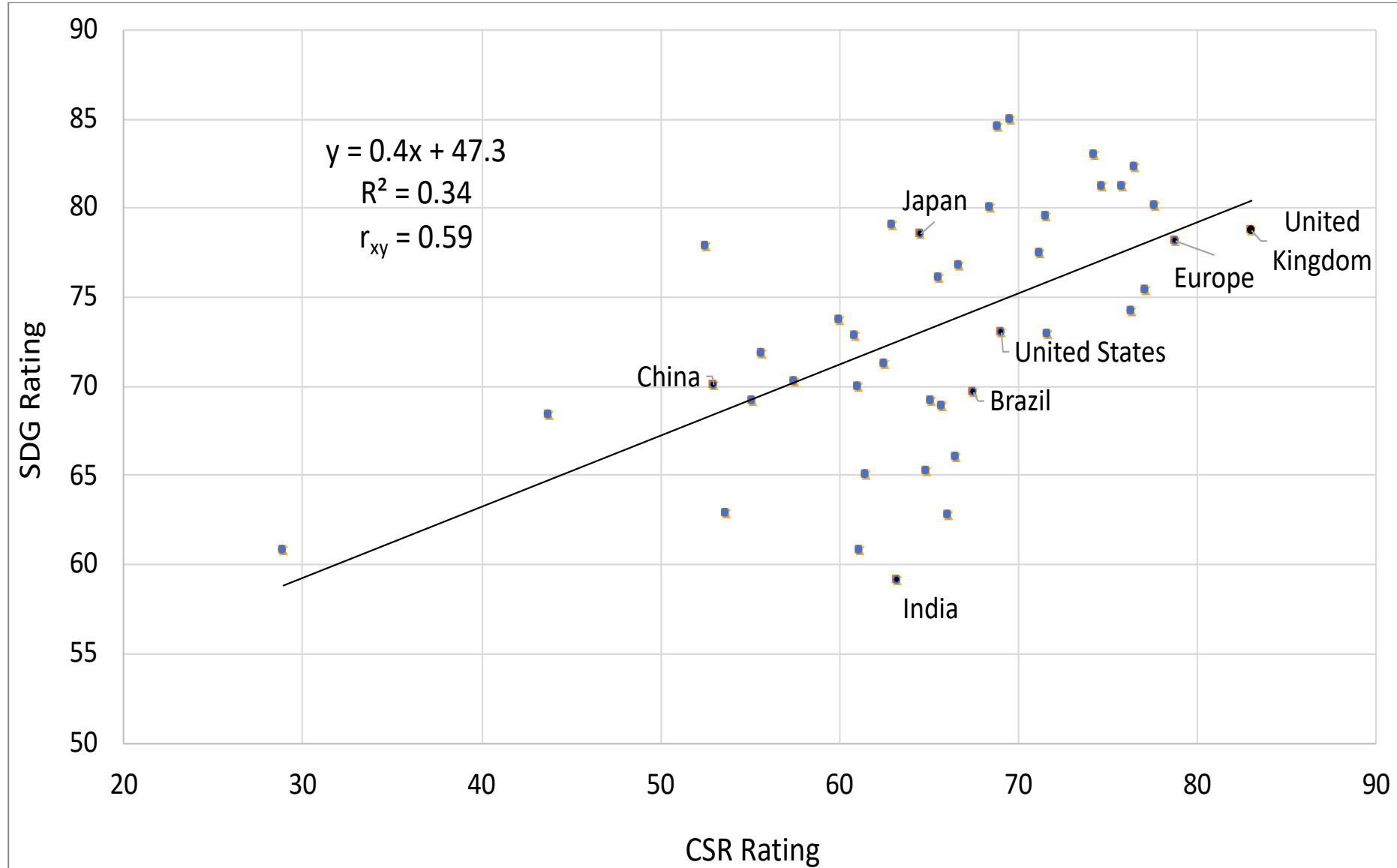
1. Legal channel

- Legal system provides indication of discretion for firms
- Ex-ante regulation French civil vs ex-post litigation Anglo-Saxon common law
- **Finding: Civil law gives higher CSR than common law**

2. Culture and values

- Country's values is indicator of social mindedness
- Post-materialist values more important than wealth (GDP per capita) to explain higher CSR performance
- **CSR level depends more on country's willingness than on its means**

Relation SDG and CSR rating



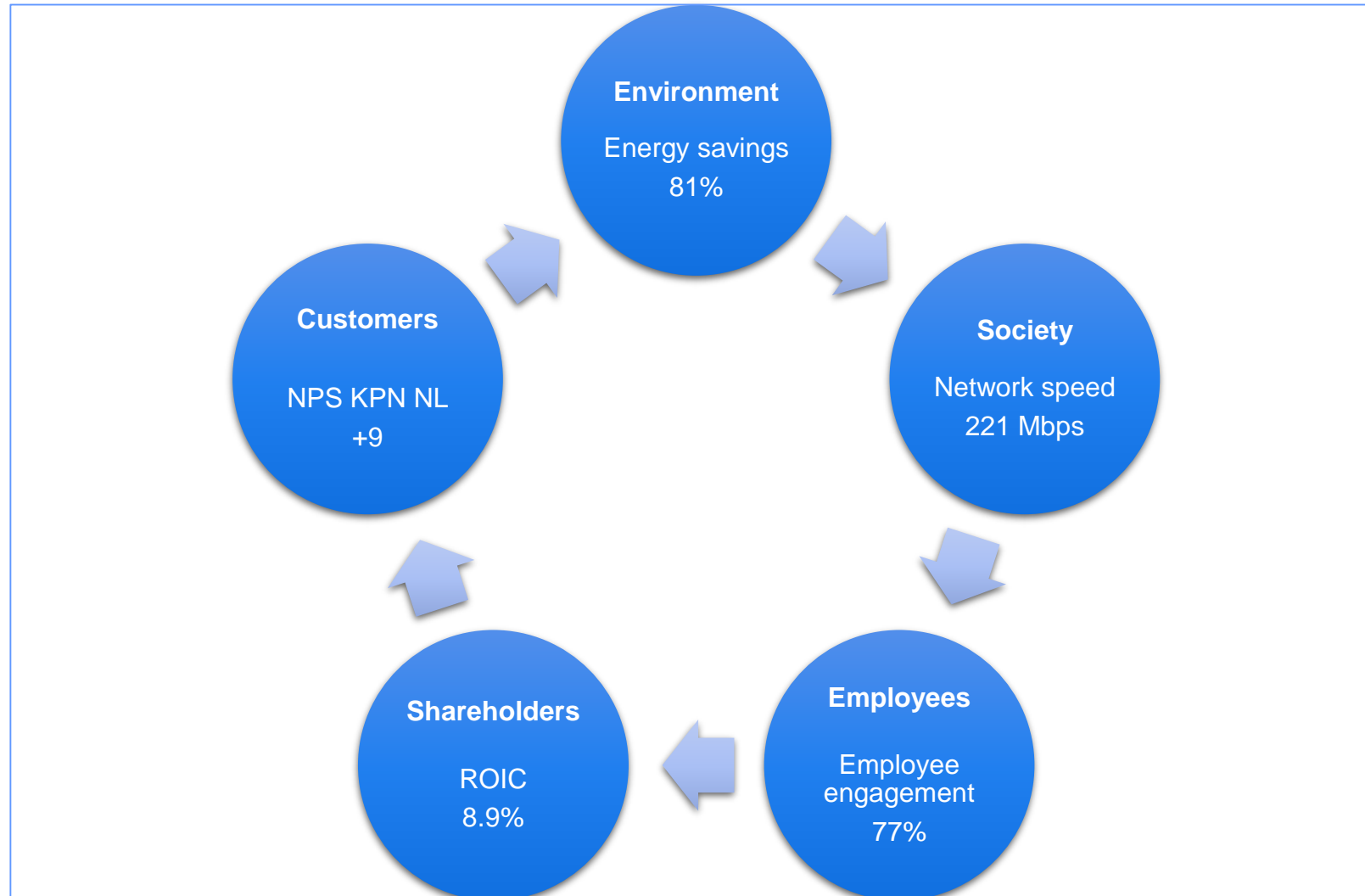
Findings of high-level overview

- Economic growth strategy seems to come at cost of social and environmental performance
- Balancing three dimensions delivers highest SDG score at higher tax rate
- SDG score at country level is related to CSR scores of firms in that country

- Government
 - Set sustainability goals
 - Set regulations and taxation to address externalities
 - Engage in early stage for innovation
- But not all externalities can be addressed by regulation
 - Externalities linked to production
 - Asymmetric information + unforeseen circumstances
 - Example: DuPont in West-Virginia (Dark Waters movie)
- Also important role for corporates
 - Companies that manage sustainability issues well (adapting strategy and business model) -> future proof (LT value creation)
 - Steer on integrated value ($I=F+S+E$)

- New paradigm for corporate governance
 - Colin Mayer (2018) + Alex Edmans (2020) -> purpose of firm
 - Purpose is what a company wants to achieve
 - Purpose first, profit follows
- Concept of long-value creation
 - Purpose can be translated in LT goals for all stakeholders
 - Balancing these goals determines success of firm
- Steering on integrated value
 - Calculate all components: $I=F+S+E$
 - Make value visible to all stakeholders

Delivering value to all stakeholders (KPN)



- Performance
 - Market + state economy higher levels of economic growth at the expense of social inequality + environmental degradation
 - Impact economy better overall performance, as measured by SDG index, at the expense of higher taxes
- Economic system and corporate sector linked
 - SDG scores and CSR scores are related (correlation = 0.59)
- Way forward
 - Balancing economic growth/profit and impact
 - New paradigm

Contours of an alternative paradigm

Dimension	Current paradigm	New paradigm
Objective - Economy - Corporate	GDP growth Profit maximisation	Broad welfare Purpose driven
Decision-making - Economy - Corporate	Public good based on fiscal and economic indicators NPV based on financial factors (Max FV)	Public good based on fiscal, economic, social and environmental indicators NPV based on integrated value (Max IV = FV + SV + EV)
Control - Economy - Corporate	Parliament Shareholders	Parliament Stakeholders
Reporting - Economy - Corporate	Budget Financial report	Well-being budget Integrated report

Translate to circular economy

- Impact economy based on
 - Reduced social inequality
 - Reduced material use
 - Regenerative agriculture
- Major transitions
 - Energy: from fossil to renewable
 - Circular: redesign / refuse
 - Food: healthy food based on regenerative agriculture

Questions?