Decarbonising large portfolios

Dirk Schoenmaker, Erasmus University & CEPR
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The energy transition challenge

Transition in the real economy:

- Exogenous, or
- Endogenous?

What are the roles of the players?

1. Governments
2. Institutional investors
3. Companies

- Sweet spot is effective cooperation to speed up transition
Energy transition

High carbon society

New ventures

Net-zero: renewables

Optimalisation
Destabilisation
Disruption
Institutionalisation
Stabilisation

Breakdown
Phase out

Fossil fuels phased out

Experimentation
Acceleration
Emergence
Economic paradigm

**Equilibrium economics** is working horse model (e.g. CAPM)

- What goes up (e.g. stock prices due to ESG preferences), comes down
- Transition risk is increasingly seen as a **systematic risk**, but still considered to be **exogenous**

But transition is about **structural change** from current high-carbon state to net-zero state

- Need for **systems approach**
- Solutions depend on action of key players in system -> **endogenous**

Example of systems approach

- Montreal Protocol put a **regulatory ban** on CFCs that deplete the ozone-layer
Ecological constraint is binding

- Limited carbon budget for 1.5° / 2° Celsius limit
- Transition of high-carbon sectors
  - Supply: oil & gas companies
  - Demand: transport, real-estate, carbon-intensive manufacturing

Role of key players – government

- Shaping markets (e.g. market for hydrogen) to get transition from fossil to renewable
- Full range of policy: R&D subsidy, tax, regulation, public procurement and investment
- Complementary role investors -> co-investing in new ventures, infrastructure, etc.
Role of key players - **investors**

- Transition of high-carbon sectors
  - Supply: oil & gas companies
  - Demand: transport, real-estate, carbon-intensive manufacturing

Three types of companies

1. **Green** -> you can just invest
2. **Grey, that wants to change** -> you can invest with engagement to speed up transition
3. **Grey, that does not want to change** -> you should stay away (stranded asset)

Second type is opportunity for **cooperation** between investors & companies

- Win-win strategy -> investor and company both reap benefits of **future-proofing business model**
Example 1 – oil sector

Oil majors
- Most still **focused on fossil** -> 80%/90% of capex in fossil
- Some are **preparing for future** -> 50% capex in fossil – 50% in renewables (portfolio approach)
- Some are **fully switching** -> 80%/90% capex in renewables

Role of institutional investors
- **Voting** – e.g. Follow This resolutions
- **Engagement** – e.g. coordinated engagement and smart targets (mixed success)
Example 2 – transition of car market

Transition curve

0% - 100%

Demand for electric cars

2010 - 2020 - 2030

Time (t)

Transition: electric cars in 2030

BAU: combustion cars in 2030

Tesla
Can Volkswagen catch up?
The rise of electric cars
Value implications

Source: A Model of Long-term Value Creation
Companies

Prime movers to create long-term value

Investors can support them

Engaging on long-term value creation: two-way dialogue

Supporting large investments

- E.g. VW announced nearly $200 bn investment to speed up transition to electric cars
Conclusions

• Transition requires **systems approach**

• Government has important role to **shape markets**

• Sweet spot of cooperation between governments, investors and companies to accelerate transition -> **endogenous**

• Events will increasingly **highlight** need for transition