PRINCIPLES OF SUSTAINABLE FINANCE

Chapter 3: Governance and behaviour

Overview of the book

Part I: What is sustainability and why does it matter?

 Sustainability and the transition challenge

Part II: Sustainability's challenges to corporates

- Externalities internalisation
- 3. Governance and behaviour
- 4. Coalitions for sustainable finance
- 5. Strategy and intangibles changing business models
- 6. Integrated reporting metrics and data

Part III: Financing sustainability

- 7. Investing for long-term value creation
- 8. Equity investing with an ownership stake
- 9. Bonds investing without voting power
- 10. Banks new forms of lending
- 11. Insurance managing long-term risk

Part IV: Epilogue

12. Transition management and integrated thinking

Learning objectives – chapter 3

- explain behavioural biases against change
- understand the changing objective of corporates
- explain the role of corporate governance steering companies behaviour
- explain how markets reinforce short-termism
- understand the design of incentives for long-term thinking

Behavioural biases

Linear consumption and production

Bottleneck to transition is not technical but societal: can we **change** our consumption and production patterns?

Overcome current patterns that deplete natural resources







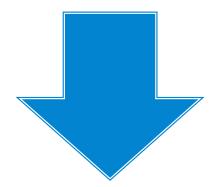




- 1. Competitive consumption (keeping up with the Joneses)
- Linear production (take, make, use and waste)
- 3. Reinforced by lobby of incumbents

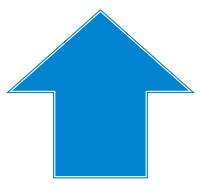
- Collaborative consumption (sharing or peer-to-peer economy)
- 2. Circular production (renewable energy, re-use of materials)

Investors also have behavioural biases



Assets are priced as extrapolation of recent past (thus assuming no transition)

But revolutionary changes to business models and phase transitions can and do happen



Scenario analysis (Chapter 2): useful tool to broaden and lengthen the horizon

New approaches needed:

- 1. From **short** to **long** term (this chapter)
- 2. From investing in the market index to fundamental analysis of investee companies (Chapter 7)

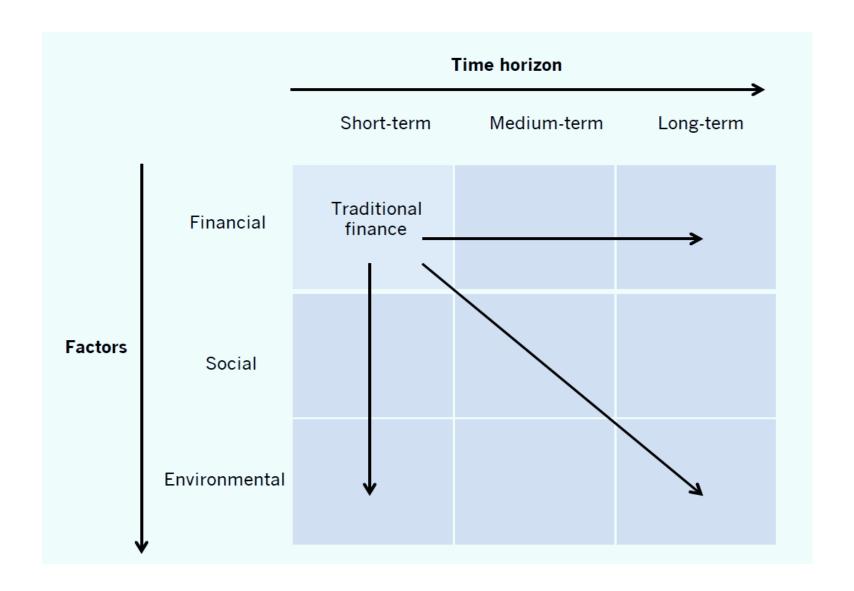
Players in sustainability (Table 3.1)

Player	Sphere of influence	Horizon	Mechanisms	Leading institutions and forums	Opportunities	Threats
Government	Country / Global	Up to 4 years	Strong leadership role • Taxation • Regulation	• United Nations: Conference of Parties (COP)	 Economy wide impact Public role in energy and infrastructure 	 Shortfall of efforts Monitoring climate pledges Policy differences Free rider behaviour Corruption
Civil society	Debate	From MT to LT	Public voice of NGOsMediaSocial capitalDeselection	OxfamAmnesty InternationalGreenpeaceWWF	 Agenda setting Stimulate citizenship of investors and corporates 	 Single issue Fragmentation Dependent on goodwill of (local) government
Investors	Investments	From ST to LT	Long term investors Investment strategy Lending strategy Engagement	PRIFCLT GlobalGINNGABVEquator	 Stimulate corporate sustainability Stewardship and engagement 	 Shortfall of efforts Monthly benchmarking Long investment chain Marking-to-market Monitoring

Players in sustainability (Table 3.1 - Cont'd)

Player	Sphere of influence	Horizon	Mechanisms	Leading institutions and forums	Opportunities	Threats
Corporates	Value chain of production	From MT to LT	Key players for transformation • Procurement • Production process	• WEF • WBCSD	 Reputation building Sound and stable business practices 	 Shortfall of efforts Quarterly reporting Shareholder value thinking Lobbying for status quo Reliability integrated reporting Relocating production to less strict countries
Households	Consumption	From ST to LT	Ultimate beneficiariesBuying decisionsSharing economyElecting government	Consumer association	 Steer corporates, utilities, housing Steer investments Vote for policies 	 Poverty Lack of trust in government Environmental degradation Free rider behaviour Human aversion to change

Time horizon and factors in finance



Role of finance

How can financial firms steer business towards sustainable business practices?

- Corporate governance: stewardship and engagement
- Need to include social and environmental dimensions
- From **short-term** to **long-term**

Objective of the corporation

Shareholder model (SF 1.0)

- Objective is maximising shareholder value
- Unforeseen circumstances: shareholder interest overrides

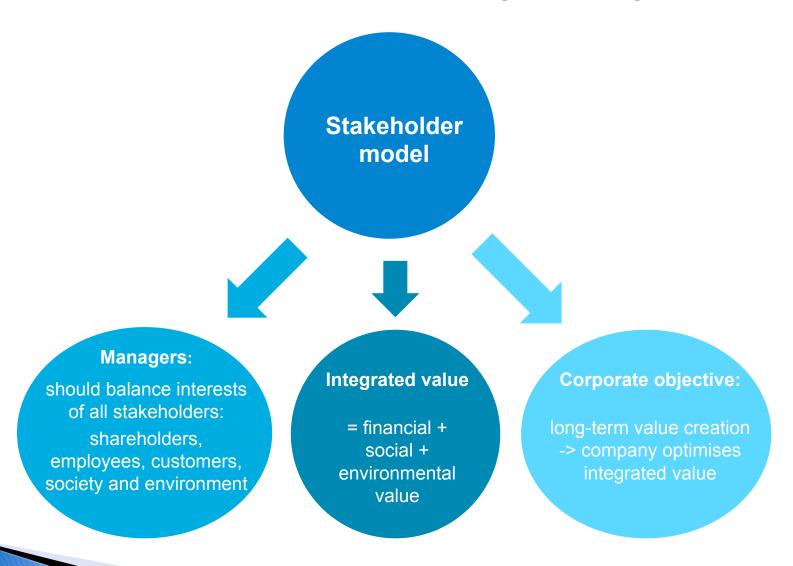
Shareholders as residual claimants of company

But **how to rank** shareholder and other stakeholder interests?

 Managers should cater to all stakeholders as a means to maximise firm value (enlightened value maximisation)

Refined shareholder value model

Stakeholder model (SF 2.0)



New business language

Integration of social and environmental dimensions is dynamic

- Anticipation of regulation / taxation(e.g. carbon tax)
- Reputation pressure from NGOs / consumers
- Future-proof: transition to SDGs by 2030 (e.g. Energiewende)

New approaches based on **integrated value** (I = F + S + E)

- Impact of F + S + E on value drivers of business model (Chapter 5)
- Incorporating S + E into NPV rule for investment decisions
- Integrated reporting (Chapter6)

Corporate governance

Corporate governance

Cooperate governance deals with **conflicts of interests** between **owners/shareholders** and **managers** of a firm

Type of conflicts differ

Anglo-Saxon – widely held ownership: does the manager put in enough effort for shareholder? → often shareholder model (SF 1.0)

Mainland Europe and Asia – controlling shareholders:
how to protect minority
shareholders? → often
stakeholder model (SF 2.0)

Corporate governance & sustainability

Try to get the best of both worlds

- Accountability of shareholder model (take-overs)
- Broad approach of stakeholder model (all stakeholders)
- Societal test of take-overs:
 see next slide

Fiduciary duty of investors towards clients/beneficiaries: clarify that sustainability factors must be incorporated

Engagement of investors with investee companies: dialogue on broad range of ESG issues (remember externalities are linked to companies)

Take-over contests

Kraft Heinz (shareholder model) vs Unilever (stakeholder model)

➤ Without protection, shareholder model will win → SF 1.0

Proposal:

Societal costbenefit test to obtain integrated value of joint companies, based on F, S, E (e.g. using integrated value methodology of SF 2.0)



Only if sum is
positive (in
comparison to
integrated value
of stand-alone
companies), takeover can go
ahead



Independent advisor gives a fairness opinion on outcome

Governance models

- Executive contracts and compensation: incorporate sustainability as
 KPI (key performance indicator)
- Type of shareholders: long-term investors (e.g. pension funds; Ch 4)
- Reporting: integrated reporting (Chapter 6)
- Non-executive monitoring:
 - widen remit of audit committee towards integrated reports, or
 - create sustainability committee: to monitor creation of social and environmental value by management

Organisational forms

Alternatives to publicly listed company:

Private company:
private equity owner
appoints management
and can intervene directly

Cooperation (group of people like suppliers or customers): working for mutual benefit (but cannot raise fresh equity)

B corporation: certified company meeting social and environmental standards (but no legal status)

Social enterprise with a social or environmental goal

Governmental
organisation with a
public objective: run for
the public good, but profit
motive (for operational
efficiency) missing

Horizon – from ST to LT thinking

Tragedy of the horizon

Tragedy of the horizon (Carney, 2015) is major obstacle to sustainable finance:

- Costs of action are now, while benefits remain in the future
- Impact of social and environmental issues in long term ...
- but managers and investors operate in a short-term framework

Short-term practices



Market efficiency and carbon risk

Efficient markets hypothesis (Fama, 1970)

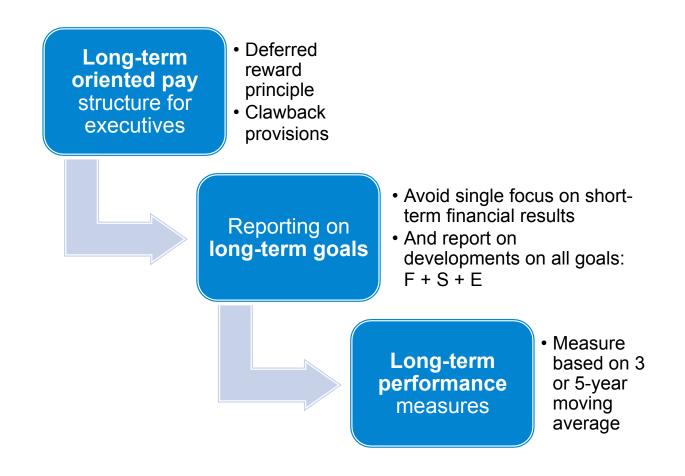
- Stock prices incorporate all relevant information
- On average reflect LT fundamental value of firm
- Stock price is indicator for asset selection and investor performance (Chapter 7)

Market efficiency and carbon risk

Adaptive markets hypothesis (Lo, 2017)

- Degree of market efficiency depends on evolutionary model of individuals adapting to a changing environment
- Prices reflect as much info as number and nature distinct
 groups of market participants allow
- If small number of groups or new risk → market less efficient
- Can explain why new risks (carbon) are not yet fully priced

Mechanisms to reduce short-termism



Discussion: barriers

What is the most important **barrier** to sustainable finance?

- Value: shareholder value versus stakeholder value
- 2. Horizon: **short term** versus **long term**

Conclusions

- Transition to sustainable economy
 - Requires overcoming behavioural bias business + consumers
 - Key challenge is to move from ST to LT thinking
- Corporate governance defines focus of firm
 - ➤ From shareholder model → financial value (F)
 - ➤ To stakeholder model → integrated value (I=F+S+E)
- Several incentives reviewed
 - New theory: from efficient markets to adaptive markets
 - Longer term reporting and LT executive pay