PRINCIPLES OF SUSTAINABLE FINANCE

Chapter 10: Banking – new forms of lending

Overview of the book

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

1. Sustainability and the transition challenge

Part II: Sustainability's challenges to corporates

2. 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 10

- explain the role of banks in screening and monitoring (potential) borrowers
- explain the relevance of sustainability for banking
- understand how ESG risks can be incorporated in the credit risk assessment
- list the barriers and incentives to sustainable lending
- understand the various forms of impact lending and microfinance

Sustainability of banks

Governance of banks themselves

Values-based banks	Social capital matters
Global banks	Performed worse during crisis, but better before

Value based banks vs global banks

	2015	
	Values-based banks	Global banks
Real economy		
Loans/Assets	76.8%	41.6%
Deposits/Assets	81.7%	52.2%
Capital strength		
Equity/Assets	8.1%	7.3%
Tier 1 Ratio	12.8%	14.0%
Risk weighted assets/total assets	61.6%	44.2%
	10 years (2006-2015)	
	Values-based banks	**Global banks**
Financial returns and volatility		
Return on Assets (RoA)	0.65%	0.53%
Standard deviation RoA	0.26%	0.35%
Return on Equity (RoE)	8.3%	8.7%
Standard deviation RoE	4.9%	7.7%

ING's materiality matrix

↗ Topics increasing in importance (2016 vs 2015)
↙ Topics decreasing in importance (2016 vs 2015)

Customer centricity

- A Innovative business developments
- B Customer privacy and data security
- C Enhancing customer financial capabilities
- D Stability of IT systems and platforms
- E Usability and accessibility of our products and services
- F Fair communication about our products and services
- G Responsible lending and debt prevention

Economic contribution

- H Financial performance
- I Pricing of products and services
- J Managing risks

Fair operating practices

- K Regulatory developments
- L Anti-competitive behaviour prevention
- M Corruption prevention
- N Sustainable finance and investment policies

Stakeholder engagement

- O Transparency and openness
- P Trust

Human capital

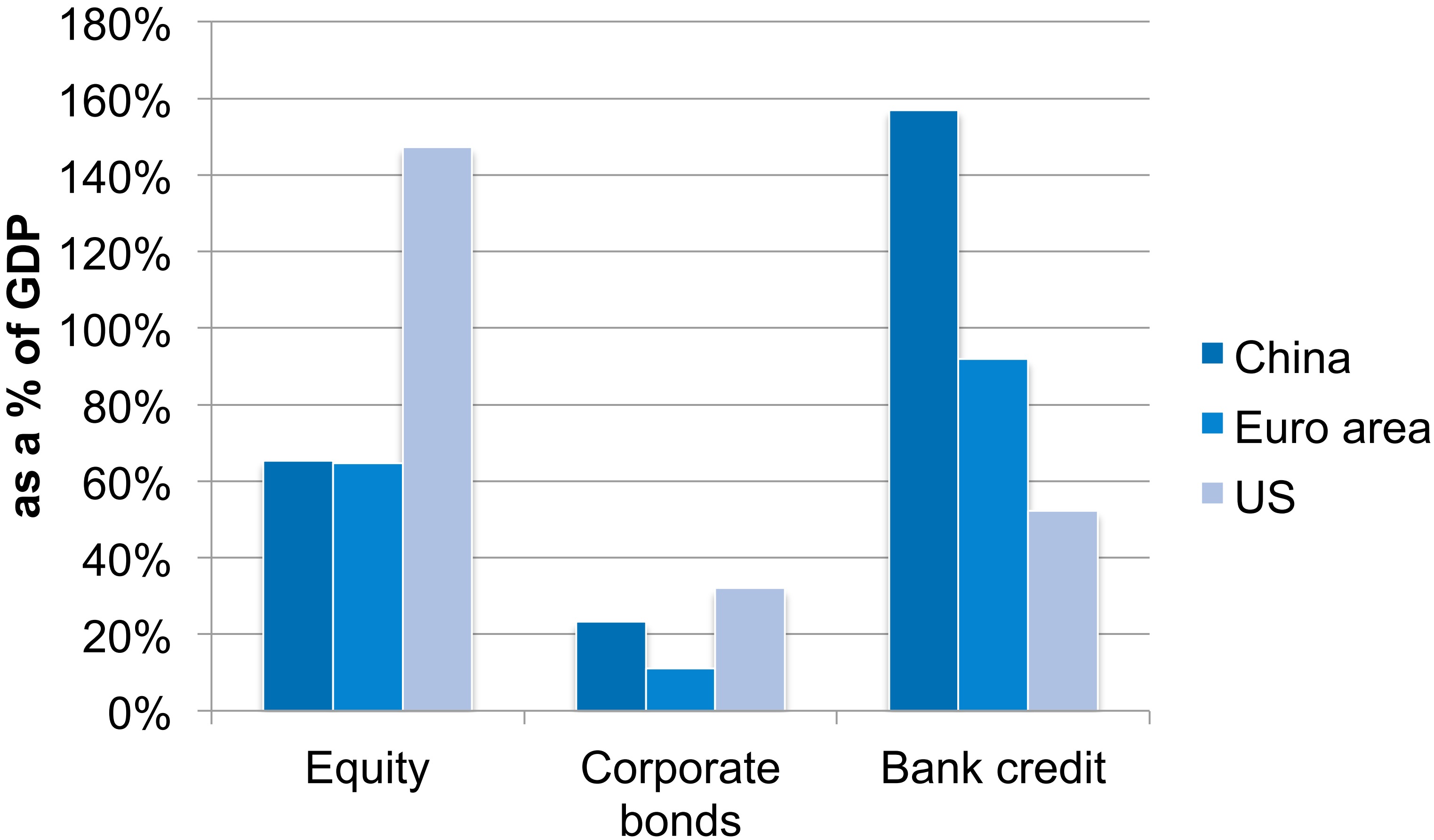
- Q Diversity and equal opportunities, preventing discrimination
- R Being a good employer

Why does sustainability matter to lending?

Relevance of sustainability to lending

- ESG factors do not only influence creditworthiness company
- But also impact on collateral value (e.g. real estate)

Bank credit is important!



Two broad approaches

Risk based

Integrate ESG factors into credit assessment

Values based

Mission driven: impact comes first

Integration of sustainability

Sustainable Finance Typology	Bank loans	Approach
Sustainable Finance 1.0	Exclusion	Risk based
Sustainable Finance 2.0	ESG integration	
Sustainable Finance 3.0	Impact lending Microfinance	Value based

Risk-based approach

Sustainability credit core system

1) Analyse company's industry

2) Paths for average company

- a) Business as usual
- b) Sustainable business
- c) Future sustainable business

3) Determine material (ESG) issues

- plus vulnerabilities / opportunities

4) Define weights & combine into overall credit assessment

Sustainability policies

- Several banks apply sustainability policies
  - General and sectoral parts
- Examples of sectoral lending policies
  - Westpac: zero net deforestation
  - Rabobank: food and agri standards (see Box 10.2)
- New approaches with focus on transition towards 2^0C
  - Terra – look at technology scenarios for each industry
  - Grant loans which are consistent with projected installed base

Assessment clients

Determine material ESG factors

Questions to clients on:

- Meeting regulations (compliance)
- Their own initiatives (commitment)
- What they can do (e.g. supply chain, reporting)
- Track record (e.g. incidents, media attention)

Sustainability criteria for credit risk management

Economic sustainability criteria	Environmental sustainability criteria	Social sustainability criteria
Net debt service Quality of growth Sector development Integration of environmental aspect in economic decision-making Community relations Risk of accidents Job creation Adequate firm size Eco-efficiency Material productivity Energy efficiency Waste management Toxic waste Contaminated sites	Costs of environmental measures Emissions Environmentally friendly construction Consideration of nature and landscape Soil erosion Sewage quality Air emission Noise emission Resource protection Material use Ratio of renewable resources Use of renewable energy Use of water (amount)	Wage policy Health policy Social security of the employees Workers' participation Conservation of workplaces Flexible working conditions and working hours

Loan facility to Philips

Lead arranger of five-year loan facility

- Has conducted credit risk assessment; and
- Acts as sustainability coordinator in loan syndicate

A leading sustainable corporate

- 'Healthy People, Sustainable Program'

ING → Philips

Loan

If sustainability performance up, interest rate goes down

- Measured by Sustainalytics
- Up to 5-10% of credit spread

ING is the leading bank for the innovative sustainability improvement loan

Succesfully completed 10 transactions in 2017

France 12/17
Casino Guichard Perrachon
EUR 50m
Sustainability Improvement Loan
Casino
Sole Lender
Retail

Singapore 11/17
Wilmar
Sustainability Improvement Bilateral RCF
wilmar
Sole Lender
Food Products

Spain 10/17
Abertis
EUR 100m
Sustainability Improvement Bilateral RCF
abertis
Sole Lender
Infrastructure

Belgium 10/17
Société Financière des Caoutchoucs
EUR 15m
Sustainability Improvement Bilateral Term Loan
SOCFIN
Sole Lender
Palm Oil and Rubber

Belgium 10/17
bpost SA
EUR 300m
Sustainability Improvement Syndicated RCF
bpost
Joint Sustainability Coordinator, Sole Agent & BMLA
Transport and Logistics

Spain 07/17
Gas Natural
EUR 330m
Sustainability Improvement Bilateral RCF
gasNatural
Sole Lender
Utilities, Power & Renewables

Switzerland 06/17
Barry Callebaut
EUR 750m
Sustainability Improvement Syndicated RCF
BARRY CALLEBAUT
Sustainability Coordinator
Consumer goods

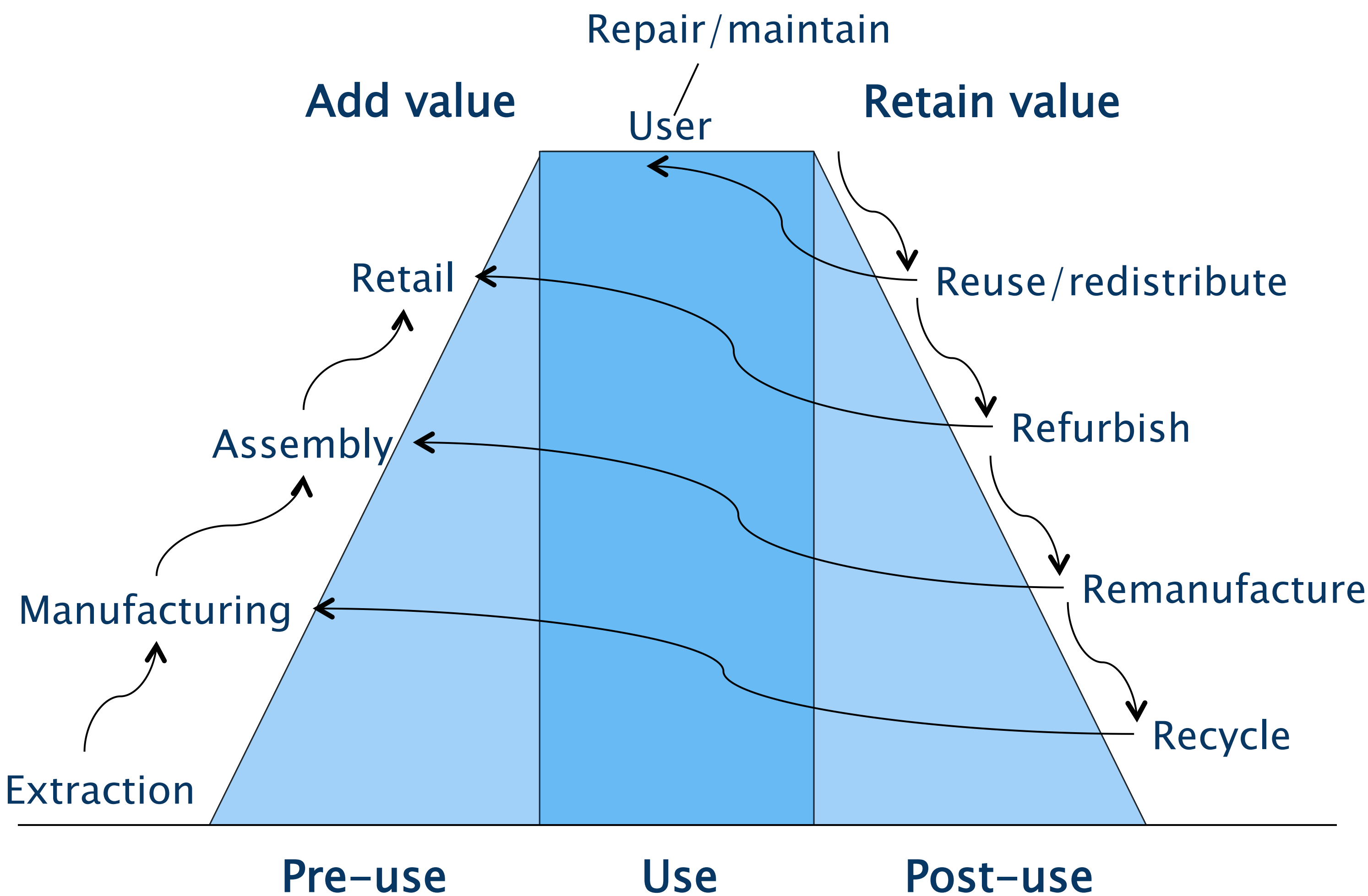
Netherlands 04/17
Royal Philips
EUR 1bn
Sustainability Improvement Syndicated RCF
GlobalCapital Green/SRI Loan of the year
PHILIPS
Sustainability Coordinator & BMLA
Technology

Switzerland 04/17
LafargeHolcim
Sustainability Improvement Bilateral RCF
LafargeHolcim
Sole Lender
Construction, Engineering, Infra & Real Estate

France 03/17
Électricité de France
EUR 150m
Sustainability Improvement Bilateral RCF
EDF
Sole Lender
Utilities, Power & Renewables

Circular business models (Chapter 5)

The value hill in a **circular** economy:



Circular business models

Closed loop supply chain

- Materials remain with party that can do most with these materials
- New production technologies
- Longer life time products
- From selling to using: payment for service models

Business components

- Pre-use: design and manufacturing
- Use: services
- Post-use: refurbishment

Financing circular business models

- New challenges for financing
  - From asset based (collateral)
  - To cash flow based (clients)

- Asset based (inventory)
  - Standardisation, modularity and flexibility

- Cash flow based (strategy, network, customers)
  - Where is value part in product chain?
  - Contract terms + quality customers

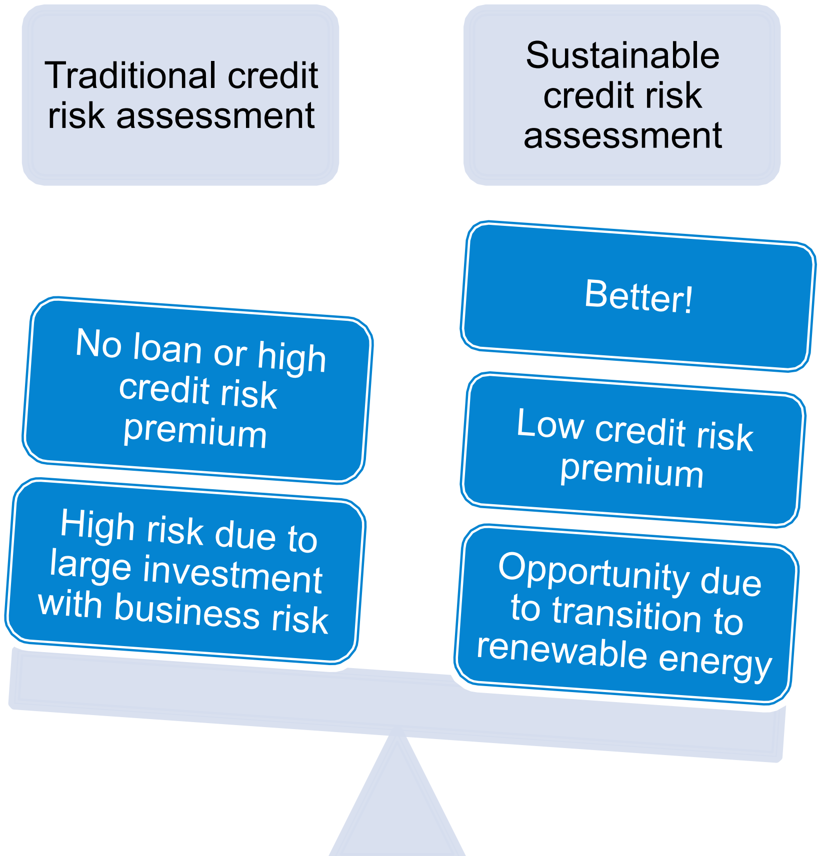
Sustainable lending

- **Evidence**: Chava (2014) – lower (higher) interest rates for loans to companies with environmentally friendly products (environmental concerns)

- **Barriers:**
  - Training account managers to include ESG in due diligence and calculation of credit risk premium
  - Status quo existing clients -> higher risk premium / ban
  - Maturity risk < 10 years, while ESG long term

Example of old vs new thinking

Assessing a large investment in new battery facility



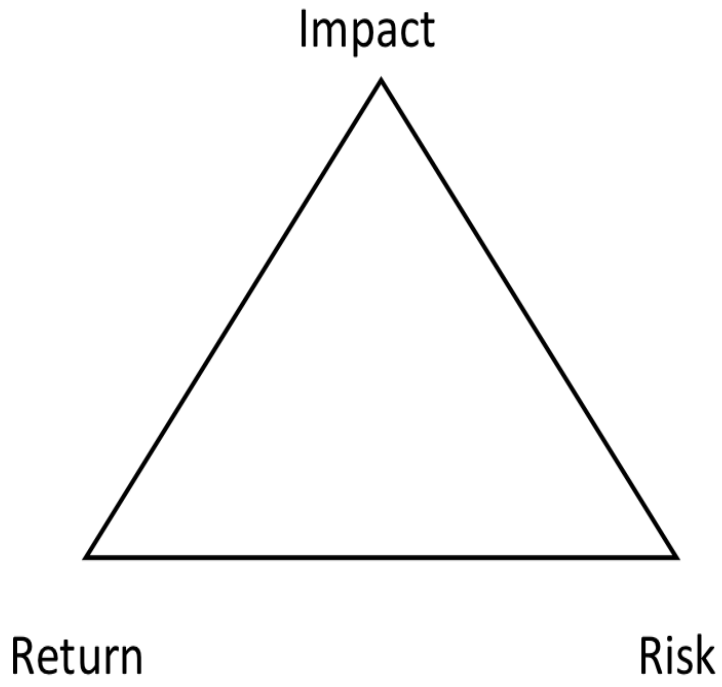
Incentives

- **Nudging**: base rate for low ESG risk projects and extra premium for projects with ESG concerns
  - Example: energy-efficient mortgages
  - Real estate very important (60% lending portfolio)

- **Capital adequacy framework**:
  - Should it be used for sustainability?
  - If so, green support factor or brown capital charge?

Values-based banking

Values-based banking: impact lending



Scorecard – values based banks

Quantitative factors	Weight	Minimum	Benchmark
Financial viability			
Return on average assets (3 year average)	10%	0%	Peer market
Equity/Total assets	10%	3%	8%
Low quality assets	5%	0%	Peer market
Liquid assets	5%	n.a.	n.a.
Real economy focus			
Real economy loans/Total assets	10%	30%	65%
Client funding/Total assets	10%	30%	75%
Real economy revenues/Total revenues	10%	50%	75%
Triple bottom line focus			
Triple bottom line exposures/Total exposures	40%	10%	55%

Scorecard – Cont'd

Qualitative factors	Consistent analysis of factors
Leadership	Values-based mission, strategy and culture; gender diversity
Organisational structure	Values-based commitment of owners and partner organisations
Products and services	Impact of products and services; gender diversity clients
Human resources	Recruitment; training; culture; compensation equality
Management systems	Risk and lending processes; capital allocation; ALM
Performance reporting	Publicly available information on ESG activities and impacts

Microfinance / microcredit

- Microfinance: banking service to low-income or unemployed and micro-enterprises
  - Pioneers in Bangladesh (different from traditional banking)
  - Social control, group lending, etc.

- Challenges + opportunities
  - Unserviceable and unreachable part of population
  - Small loans at affordable cost
  - New approaches: satellite linked with mobile vans/boats
  - Use mobile telephones

Conclusions

- Integrate sustainability in credit risk assessment
- New approach for account managers
  - New ways of looking (transition preparedness; circular models)
  - Policy and technology uncertainty (future is uncertain)
  - Material ESG issues differ across sectors/companies
- Values-based banking: impact comes first
- Microfinance emerging in Asia, Latin-America and Africa