

Tools for Valuing Business Sustainability

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Ivey Leadership Centre, Toronto
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Research Question

- Identify the business tools with which managers can value the business case for sustainability. In which contexts have these tools been applied? What are the collective results?



Motivation

- Move beyond the rhetoric
- Hard measures for the CFO



Bounding

- Criteria for Inclusion
 - quantitative calculation of business value or process (tool) for calculating such
- Time
 - Academic – all time periods
 - Practitioner – 2004+

Tasks/Timing

Task	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Start	█							
Scoping	█							
Academic Lit.		█	█	█	█	█		
Practitioner Lit.		█	█	█	█	█		
Forum Input				█				
Delin. Tools				█	█	█		
Report			█	█	█	█	█	█
End								█



Academic Literature

- Measures:
 - Accounting
 - Market
 - Perceptual
 - Cash



Academic

Market Measures

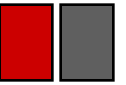
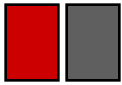


Accounting Measures



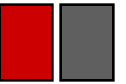
Academic

Little beyond the business case



Academic

Beyond sustainability accounting



Academic

- Performance measures closer to sustainability initiative
 - Debt costs
 - Manufacturing
 - Employee relations
 - Innovative culture



Academic

Where's the mediation?

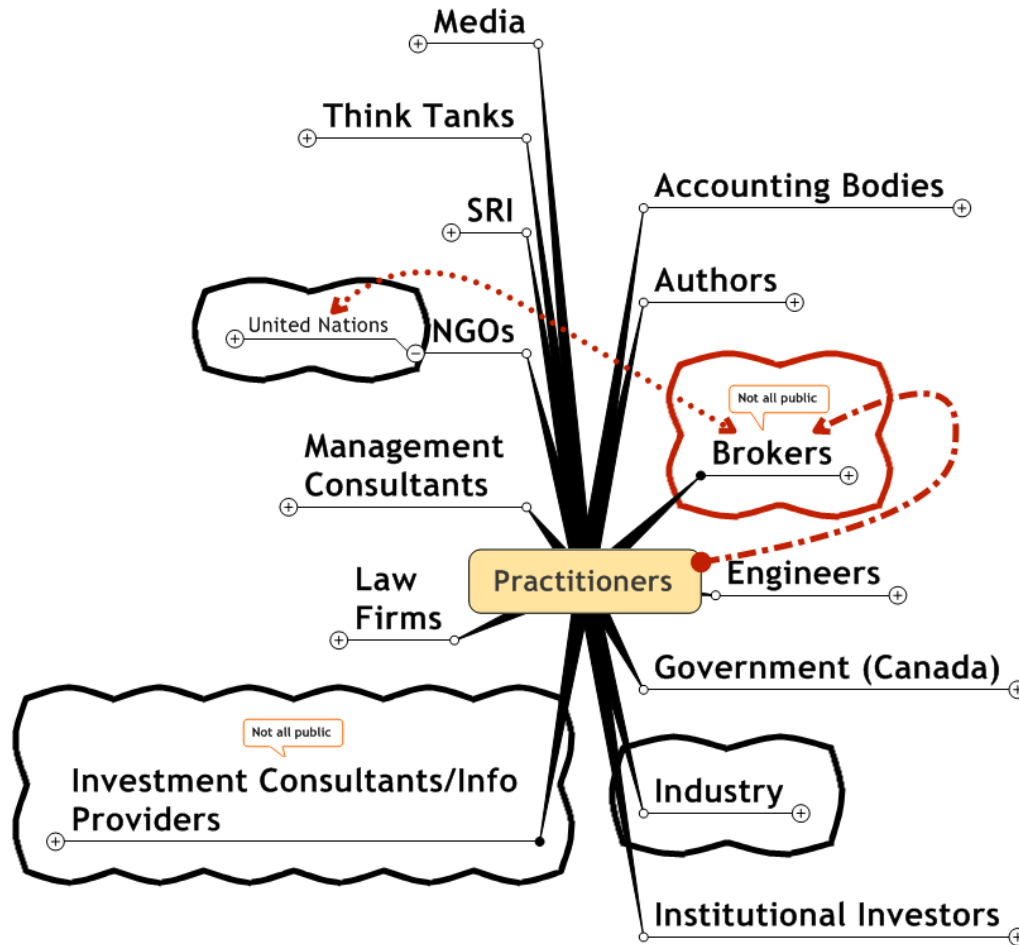




Academic

Editorial bias?

Practitioner Literature



Meta Analysis of Business Case

Linking Environmental Performance to Business Value

A North American Perspective



Environment
Canada

- 2004
- “indicates a positive or, at minimum, neutral correlation...”
- “case strongest at sector/portfolio level + weakest at linking specific performance metrics with specific financial value metrics”
- “need for framework to link specific environmental + financial indicators”



Investment Performance per Indices + Ratings





Investment Performance + Particular Env'tl Exposure

Innovest
STRATEGIC VALUE ADVISORS

Carbon Beta™
and Equity Performance
An Empirical Analysis
Moving from Disclosure to Performance

October 2007

- Companies positioned as top carbon performers tend to outperform, including within sectors

Review of Investment Performance Studies (30)



MERCER

Demystifying Responsible Investment Performance

A review of key academic and broker research on ESG factors

October 2007

- 20 academic studies = “there does not appear to be a performance penalty”
- 10 broker studies = “in most cases, quantitative analysis resulted in an assumed positive influence”



Sector – Intangible Value Drivers

Innovest
STRATEGIC VALUE ADVISORS

Auto Sector Report

A comparative analysis of company performance on intangible investment risk factors and value drivers

October 2007

- Key issues: Fleet fuel economy, powertrain investments, supply chain management, Human capital
- “automakers that are developing their technological capacity for small, efficient powertrains, clean diesel engines, and petrol-electric and diesel-electric hybrids are most often in the best position to gain market share”

NGO – Challenging Brokers

Show Me The Money:
Linking Environmental,
Social and Governance
Issues to Company Value



UNEP Finance Initiative
Innovative financing for sustainability

- 9 of 12 broker reports successfully make the materiality link; 6 quantify the link; 3 do so partially

A Passion to Perform.

Deutsche Bank



WestLB

CM-CIC Securities



Dresdner Kleinwort



ABN-AMRO

JPMorgan



Goldman Sachs



UBS

Morgan Stanley



Merrill Lynch

Day to day...

...Medium term...

... Vision

Economy

- Markets
- Exchange rates
- Interest rates
- Commodity prices
- Globalisation
- Energy supply / demand
- Emerging markets
- BRICs

Industry

- Innovation, technological advances
- New competition
- Substitutes
- New regions, new markets, new products
- Costs, incl. taxes
- Market share
- Public image
- Regulations

Corporate Governance

Independent Board members, Audit fees

CEO/Chair separation and tenure, Independent Board Committees, CEO compensation

Block holdings, Protection of minority shareholders

Social: leadership

Environmental and social ("ES"), reporting and assurance

Leadership gender diversity, Leadership compensation link to ES performance

Leadership ES responsibility

Social: labour

Employee compensation

Employee gender diversity, Employee policies, health and training

Business ethics and transparency

Social: communities and investment

Social investment

Safeguarding independence of content, Responsible marketing practices

Intellectual footprint including environmental and social content

Environment

Environmental policy, Resource use, Recycling

Greenhouse gas emissions, Waste management

Assurance of suppliers, Renewable energy use

Industry Themes and Company Valuation

Markets, brands, new products, disruptive technology, intellectual property, regulation and license to operate

Economic returns, sales growth, margin expansion, earnings growth, dividend growth, capital structure

Stock market performance

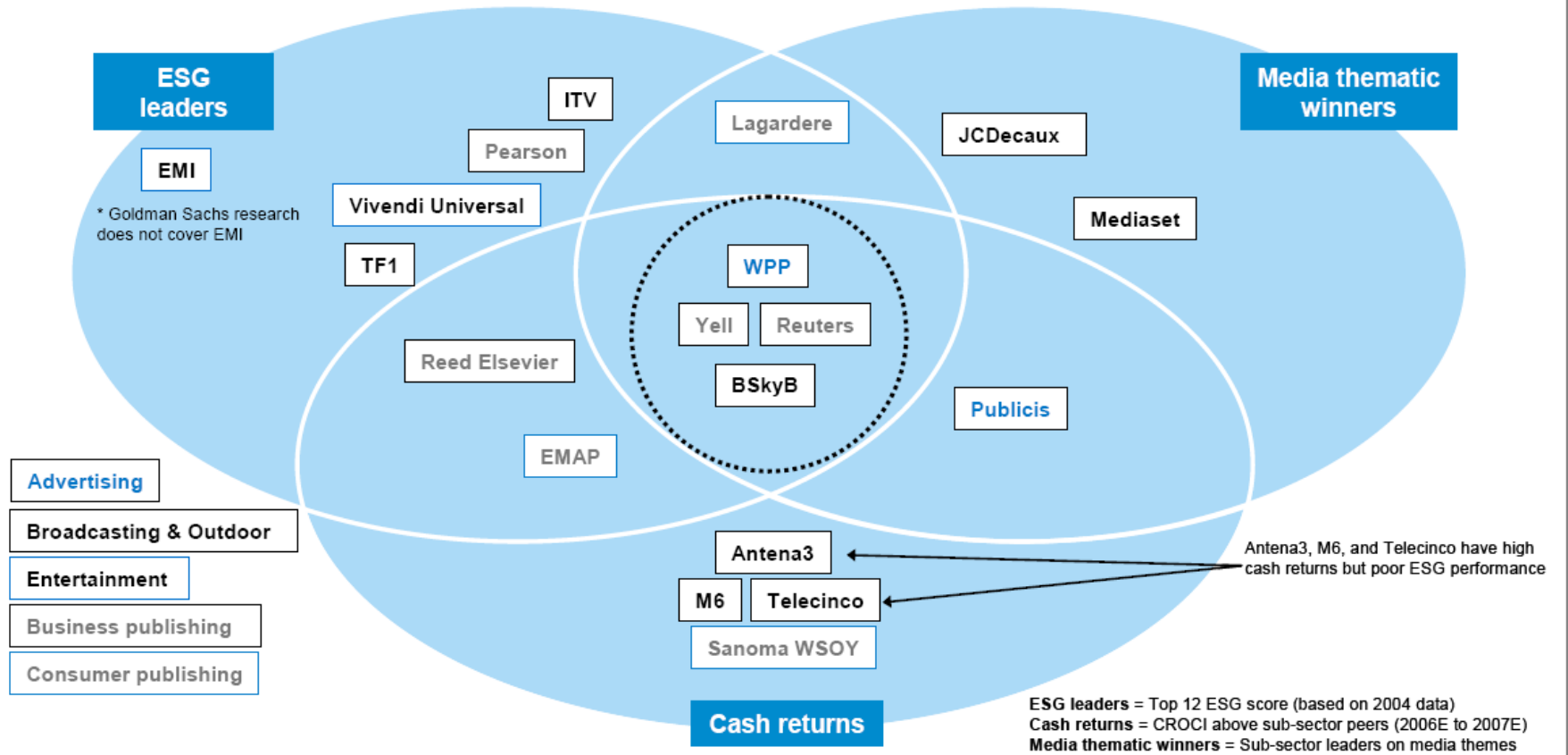
Society

- Consumers
- Communities
- Population growth
- Health, disease pandemics
- Suppliers
- NGOs, lobby groups
- Education
- Government policy, taxes, regulations

Environment

- Climate change
- Water
- Land
- Animals, plants
- Air
- Weather patterns
- Biodiversity
- Agriculture

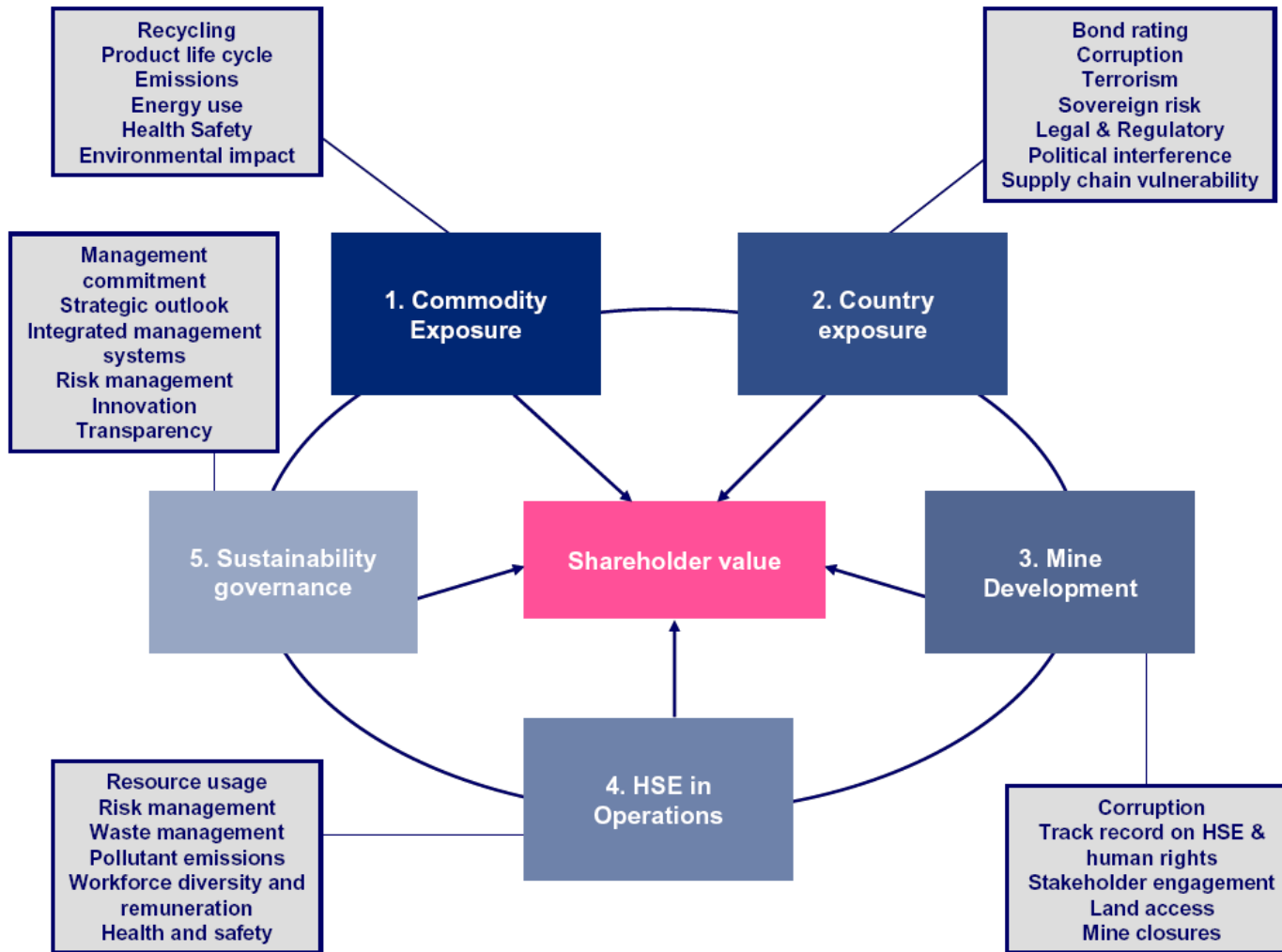
Exhibit 2: Sustainable investing company categorisation

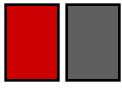


Sustainable investing company categorisation										
Leader board		Average performers				Laggards on disclosure		Broadcasting oligopolies with 1st quartile CROCI		
		+		-						
WPP	Reuters	Pearson	Reed Elsevier	ITV	Vivendi Universal	TF1	Havas	VNU	Antena3	M6
Yell	BSkyB	Lagardere	EMAP	Wolters Kluwer	Sanoma WSOY	JCDecaux	UBM		Mediaset	Telecinco

Towards Sustainable Mining

Figure 5. Five forces of sustainable development





Towards Sustainable Mining

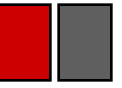
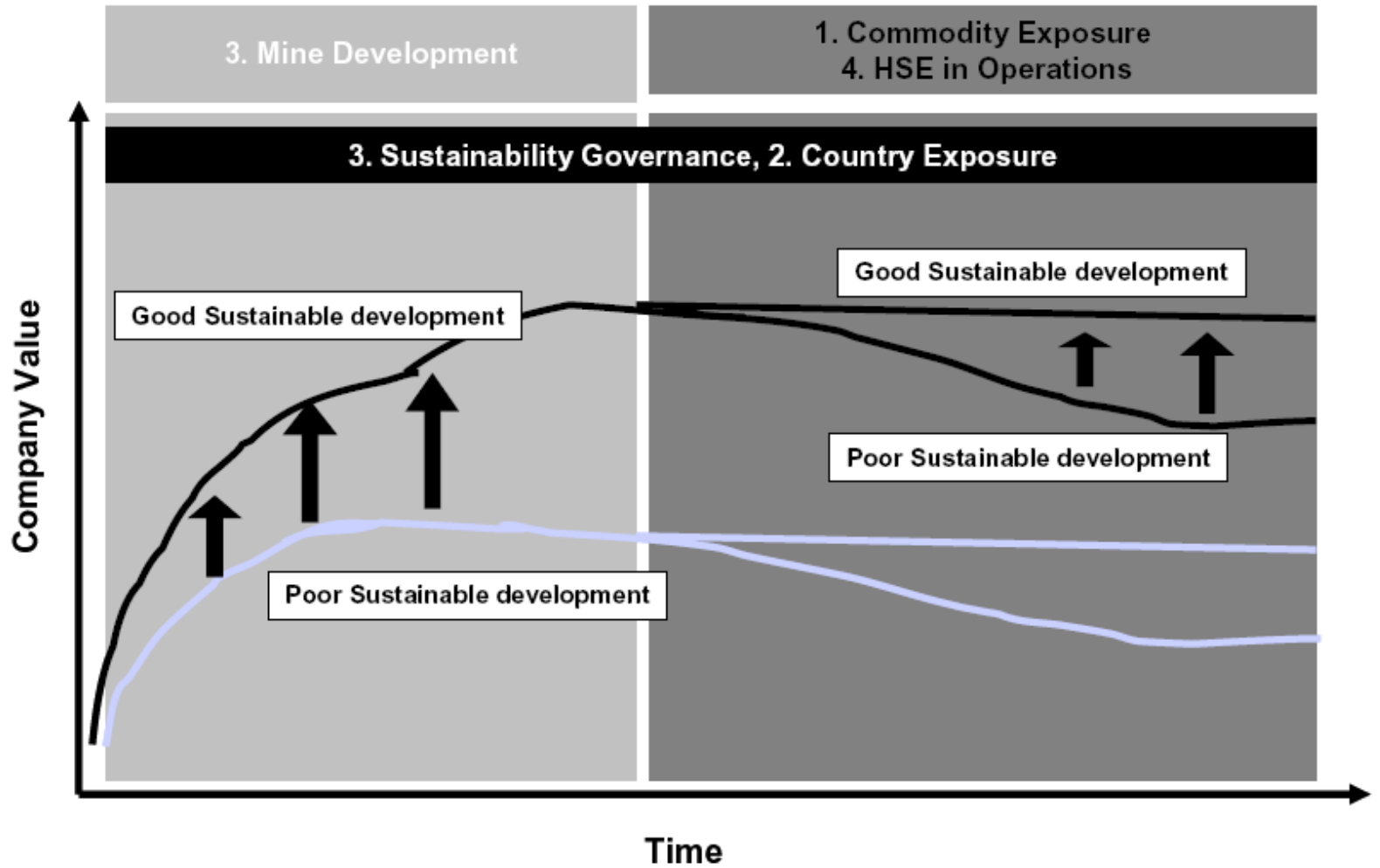


Figure 10. Valuation impact of sustainable development



2006





UBS Investment Research

Q-Series®: Corporate Social Responsibilities



Why try to quantify the unquantifiable?

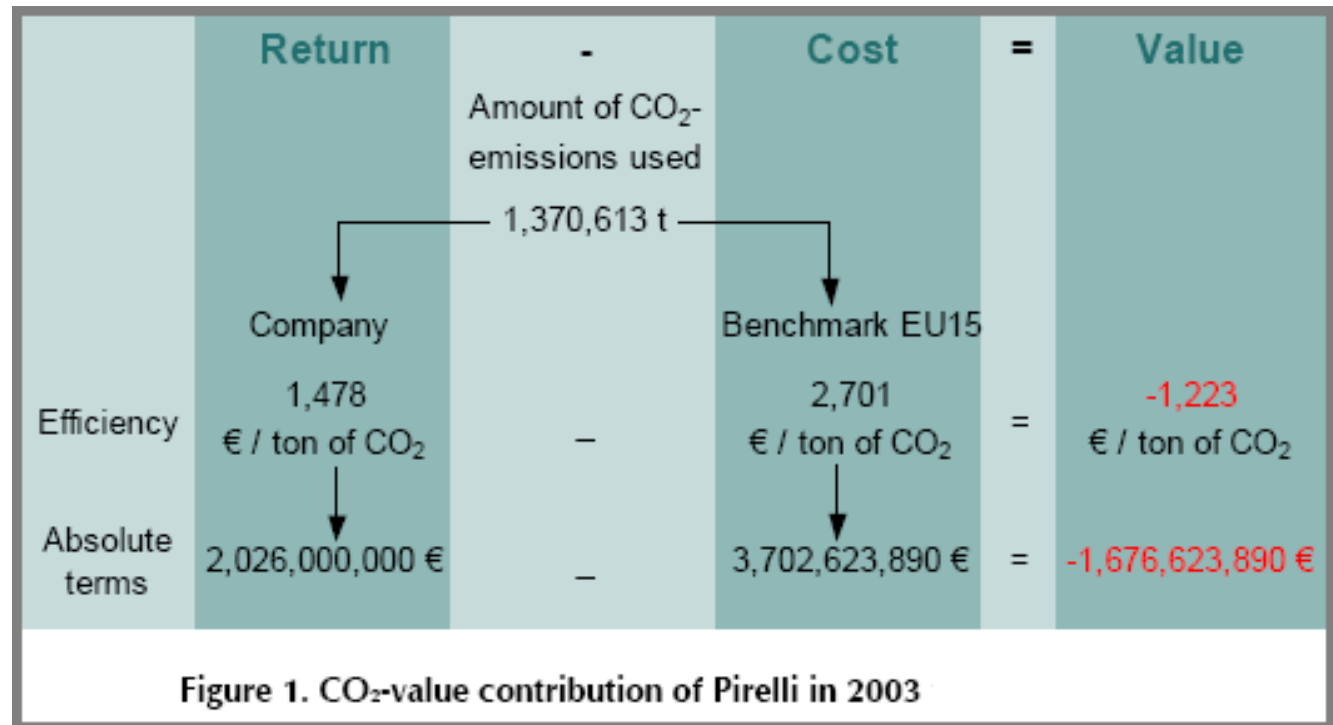
Why try and quantify potential corporate social liabilities?

We define a potential corporate social liability as a potential obligation to make good any adverse environmental, social or economic effects of corporate activity. A firm's enterprise value (EV) is the sum of the market value of all claims on the business, according to the UBS Valuation and Accounting Group. We believe potential corporate social liabilities are potential value-drivers, in the sense that they may compete with shareholders' equity as a claim on the business.

Firm Relative to Group – Efficiency of Resource Use (\$)

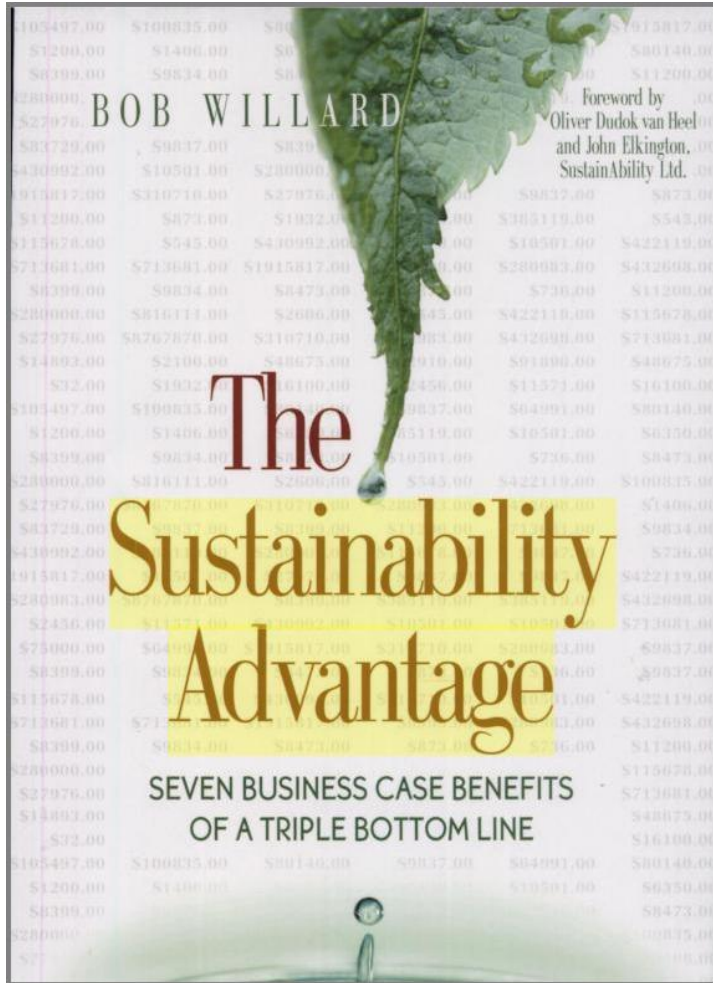


Sustainable Value of European Industry



- “Pirelli, using its environmental resources, created 485 million € more return than the EU15 on average would have created using the same bundle of resources”

Firm - Costs + Revenue (\$)

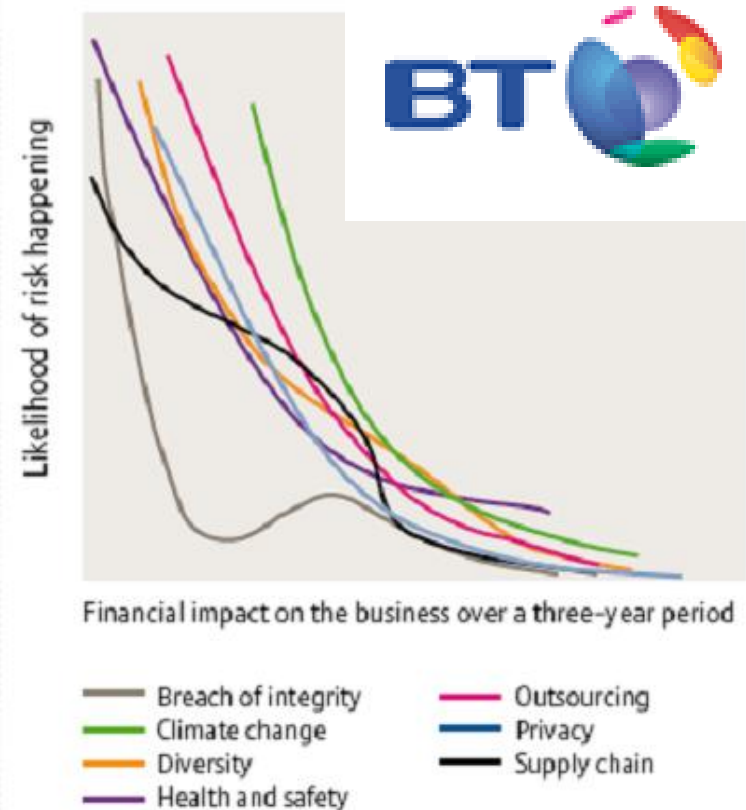


- “For a typical large enterprise, sustainability strategies can conservatively yield a 38 percent increase in profit over five years”

British Telecom

- CSR Business Case = Risk Management (7 risks), Reputation, Cost Reduction, Employee Motivation, Marketplace Innovation
- Cost Reduction = “We quantify financial savings linked to environmental improvements. For the 2007 financial year, we made £216.9 million in productivity gains, £12.2 million in capital and £.02 million in profit and loss savings, making a total of £229.3 million”

CSR key risks



BAXTER 2006 ENVIRONMENTAL FINANCIAL STATEMENT

Estimated Environmental Costs, Income, Savings and Cost Avoidance Worldwide¹ (dollars in millions)

ENVIRONMENTAL COSTS	2006	2005	2004	2003
BASIC PROGRAM				
Corporate Environmental – General and Shared Business Unit Costs ²	\$ 1.3	\$ 1.4	\$ 1.2	\$ 1.2
Auditor and Attorney Fees	0.4	0.4	0.4	0.3
Energy Professionals and Energy Reduction Programs	1.0	1.0	1.0	0.9

ENVIRONMENTAL INCOME, SAVINGS AND COST AVOIDANCE (see detail online on income, savings and cost avoidance from 2006 activities)

FROM INITIATIVES IN STATED YEAR

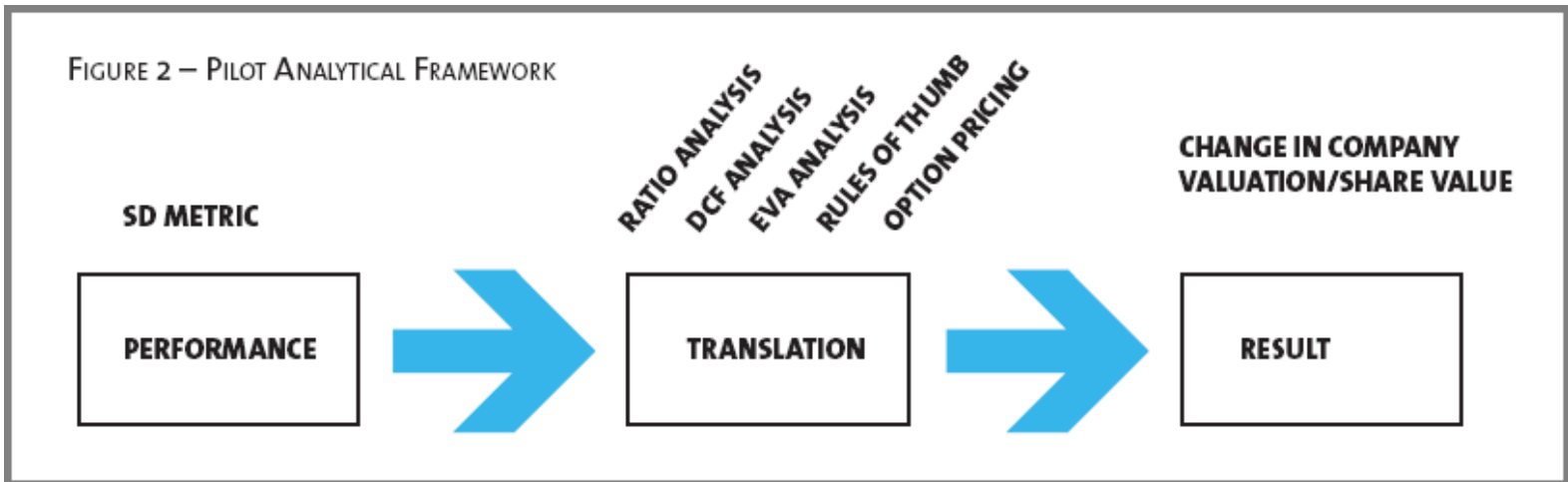
Regulated Waste Disposal	\$ 0.4	\$(0.1)	\$ 0.7	\$ 0.4
Regulated Materials ³	1.1	(0.1)	1.9	1.6
Non-hazardous Waste Disposal	0.3	0.4	0.6	0.4
Non-hazardous Materials ³	0.3	6.8	3.9	6.7
Recycling (income)	5.2	4.8	3.3	2.9
Energy Conservation	6.0	9.3	8.9	4.2
Packaging ⁴	0.0	3.5	2.9	1.7
Water Conservation	0.8	0.1	1.0	0.5
From Initiatives in Stated Year Total ⁵	14.1	24.7	23.2	18.4
As a Percentage of Basic Program Costs	95%	176%	163%	143%
Cost Avoidance from Initiatives Started in the Six Years Prior to and Realized in Stated Year ^{5,6}	76.2	66.2	44.2	32.7
TOTAL ENVIRONMENTAL INCOME, SAVINGS AND COST AVOIDANCE IN STATED YEAR	\$ 90.3	\$90.9	\$67.4	\$51.1

¹ Totals are rounded to reflect an appropriate degree of accuracy.



Firm – Financial Valuation

(\$, company value, share price/ commodity price)



2006

The sdEffect™

Translating Sustainable Development into Financial Valuation Measures:

YACHNIN & ASSOCIATES



CORPORATE KNIGHTS



The sdEffect™ – Some Results

- Waste diversion at INCO saves \$2.4 million/yr; equivalent to just over \$.01 per share. These savings are worth \$31 million in total shareholder value, or between \$0.06 and \$0.16 per share in total value.
- If Placer Dome's community involvement program can fast track the Cerro Casale project by one year it will add value to stock estimated at US\$0.81 per share. This is a 5.5% valuation lift from its current trading price of US\$14.70 per share
- The risk reduction associated with Teck Cominco's enhanced community and employee relations is estimated to be valued at \$859 million or \$4.24 per share



Key Questions

- Mediation?
 - Causality question
 - Leading indicator
 - Unique to the firm
 - Readily available
- Roles + needs of managers + their executives + operational staff?
 - Performance data
 - Value judgements re mediators
 - Executive buy-in/commitment



Takeaways

- Few tools for managers to translate specific aspects of firm-level sustainability performance into financial terms, and more specifically financial valuation terms (only beginning to emerge + mostly from practitioner literature.)
- Past emphasis on establishing/delineating business case



Takeaways

- Interesting times as financial community + companies begin to focus more on delineate value of sustainability
- Recent developments on, + calls for more, firm-level/company-specific analysis/frameworks
- Researchers must add focus on the needs of managers and their executives to delineate additive value in these terms



Thank You

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