Sustainable Value

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ADVANCE

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Some preliminary remarks

- We have heard
  - Sustainable Development/Sustainability are complex.
  - many fascinating presentations on the problems/challenges we face.
- We will not add to the illustration of these problems.
- The real challenge is to find simple (that‘s not: simplistic) and applicable solutions to a complex problem.
- Solutions that do not find acceptance will not be sustainable.
- Sustainable Value aims to find acceptance because it is based on accepted tools & techniques.
- At the same time a sustainable solution will be radically different.

What is this talk about?

- This talk will introduce you to a new way of assessing and managing sustainable performance called Sustainable Value.
- Sustainable Value
  - is value-based while existing assessment approaches are burden-based.
  - allows to express sustainable performance in monetary terms (e.g. €, £ or $).
- Using the example of BP we will illustrate how Sustainable Value can be calculated.

Some basics

- Our society in general and companies in particular need
  - economic,
  - environmental and
  - social

  capital.
- Any integrated sustainability assessment must considers these three forms of capital.
- Traditional (corporate) economic assessments concentrate on the use of economic capital.

The traditional economic approach

€

€

= ROC

The **green** twist to the traditional economic approach

- Does it pay to be green?

or (for the enthusiasts among us)

- It pays to be green!

but what if

- It doesn‘t pay enough to be green

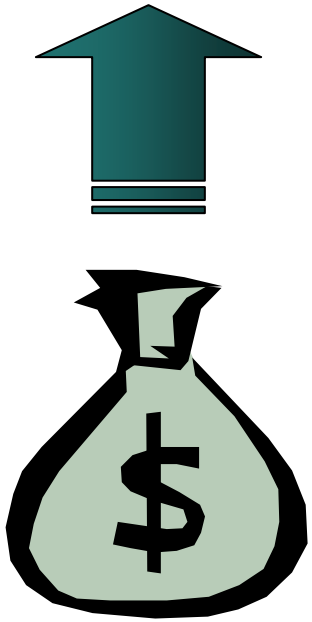
or even

- It greens to pay!
  (but it doesn‘t pay to be green)

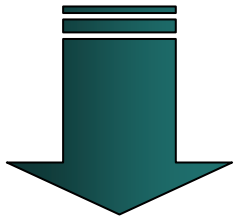
More basics
Value and impacts/burdens/resources/capital.

- Companies create value

More preferred to less.



- Companies need resources



Less preferred to more.

Eco-Efficiency: The big buzz-word

€

CO_2

What‘s the problem with eco-efficiency?

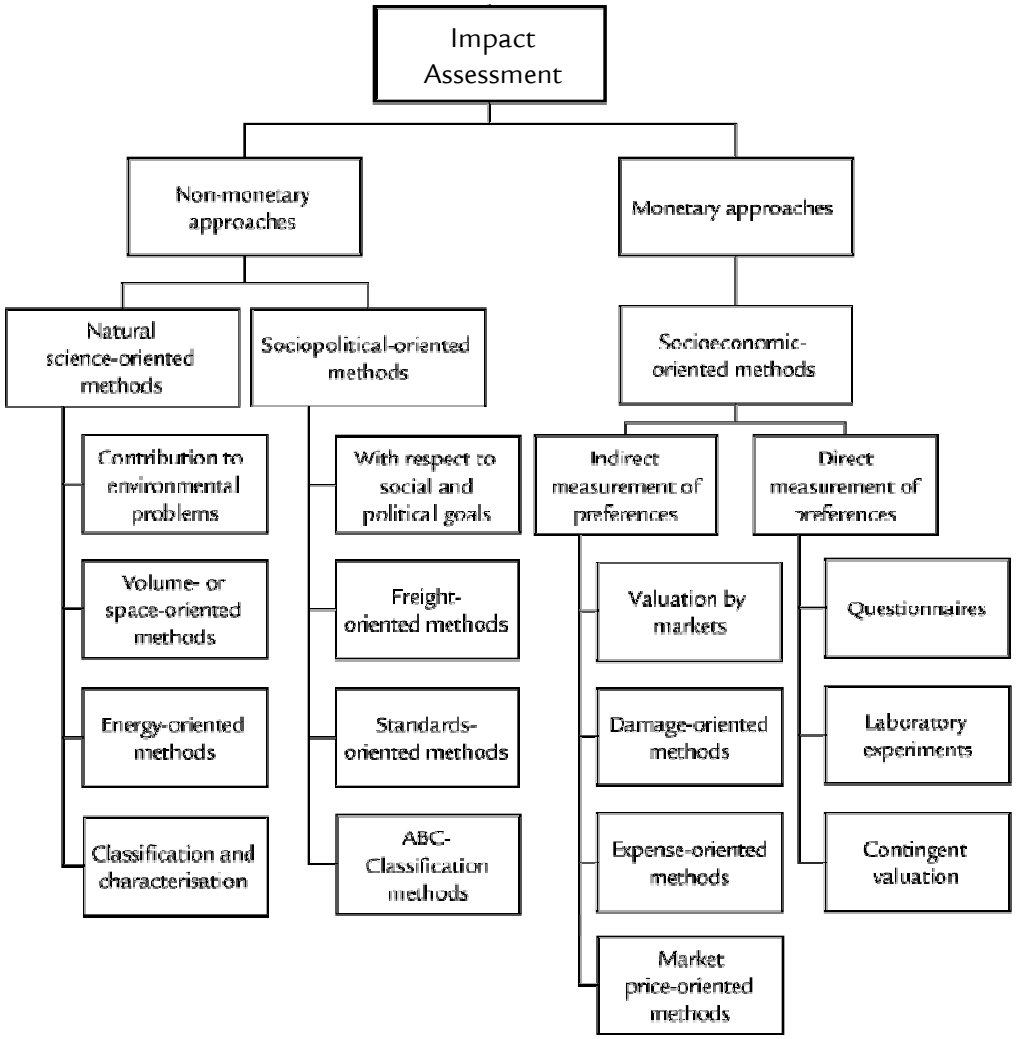
- Interpretation difficult. What is a «good» eco-efficiency?
- Trade-off problem not solved. Can a «good» eco-efficiency compensate another «bad» eco-efficiency?
- Effectiveness not considered, rebound effect.
- Eco-efficiency is measured in units that are difficult to remember.
- We have never met a practitioner who could actually remember the eco-efficiency of his/her company.

Easy in theory – difficult in practice

Challenge: We need to express this in the same unit!

The challenge

How are these challenges being addressed? Burden-oriented assessments



Source: Similar to Schaltegger & Burritt 2000

Let's sum up
The Burden-Oriented Approach

- Research and practice use a burden-oriented approach to assess and manage environmental and social bads.
- Weigh up different „environmental bads"
  - How bad is more CO_2 in comparison to all the other impacts?
  - What's e.g. the trade-off between work accidents and CO_2?
- To be able to subtract «burden» from «value» we need to (in addition to the weighing up) monetarize the burden.
- The burden-oriented approach works in theory.
- Does it really work in the real world?

Let‘s take 2 big steps back to leap ahead.
Step 1

- «An absolutely essential point to be kept in mind is that the value of an object is not derived from the sacrifice made to obtain it. On the contrary we make the sacrifice because the object has this value. The value is first, the sacrifice second.» (Whitaker 1904)
- Why are we looking at sacrifices – when we are interested in value?
- Rather than looking for the relative and absolute burden - shouldn‘t we look for the value-potential of our resource use?
- But how can we do this?

Step 2
Opportunity cost thinking

But, when we once recognize the sacrifice of opportunity as an element in the cost of production, we find that the principle has a very wide application. Not only time and strength, but commodities, capital, and many of the free gifts of nature, such as mineral deposits and the use of fruitful land, must be economized if we are to act reasonably. Before devoting any one of these resources to a particular use, we must consider the other uses from which it will be withheld by our action; and the most advantageous opportunity which we deliberately forego constitutes a sacrifice for which we must expect at least an equivalent return.

(Green 1894)

How can we deal with environmental & social capital?

Substituting different forms of capital

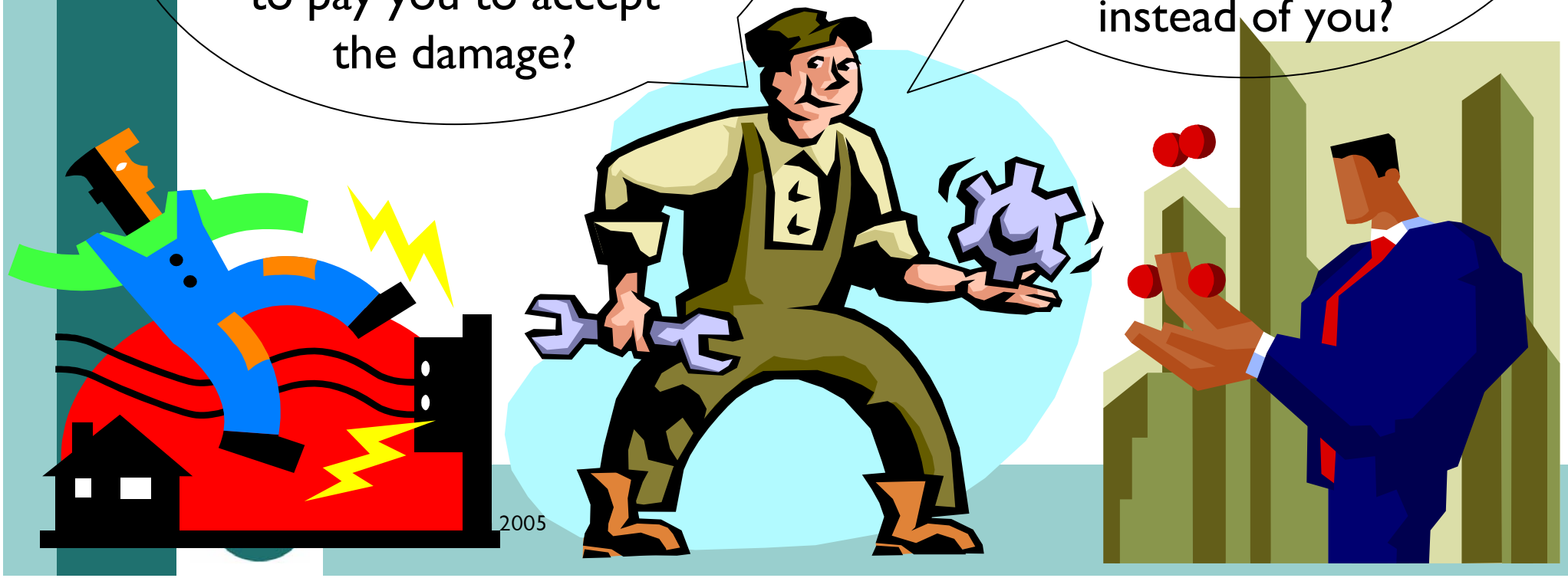
How much do I have to pay you to accept the damage?

BURDEN

Substituting different uses of capital

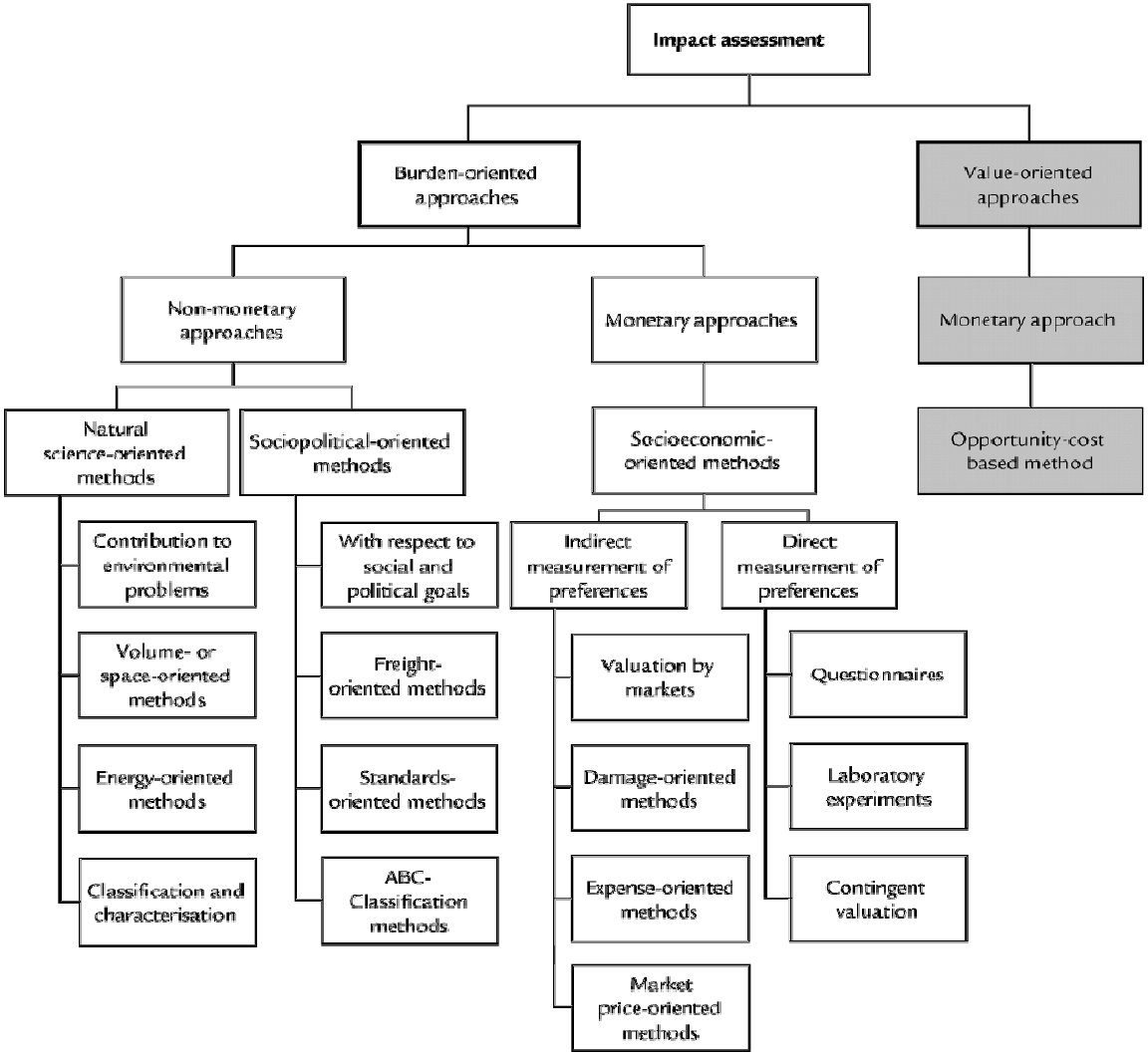
How much do I have to pay you to pollute instead of you?

VALUE



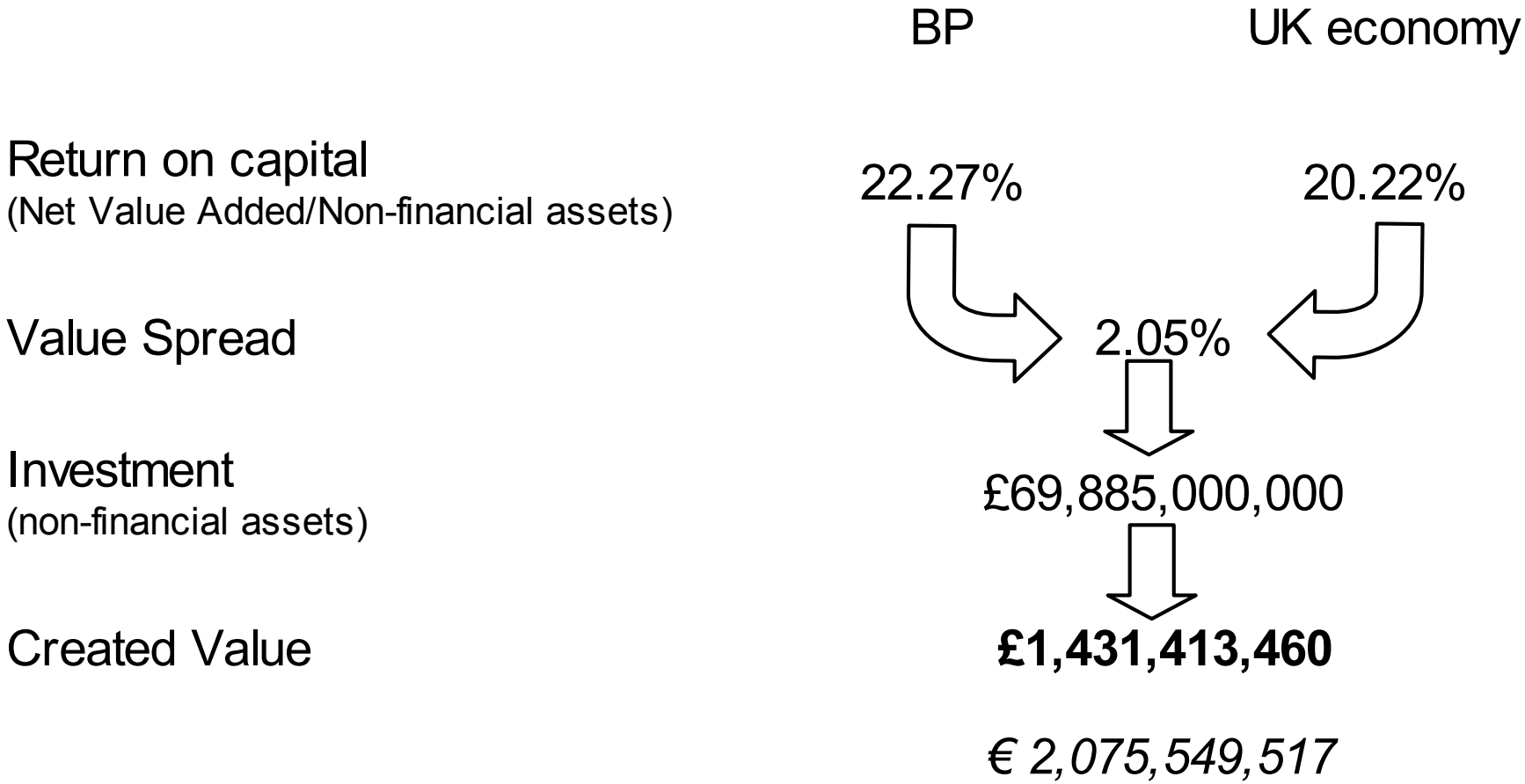
2005

Finding the right weights.



Source: Figge & Hahn 2004

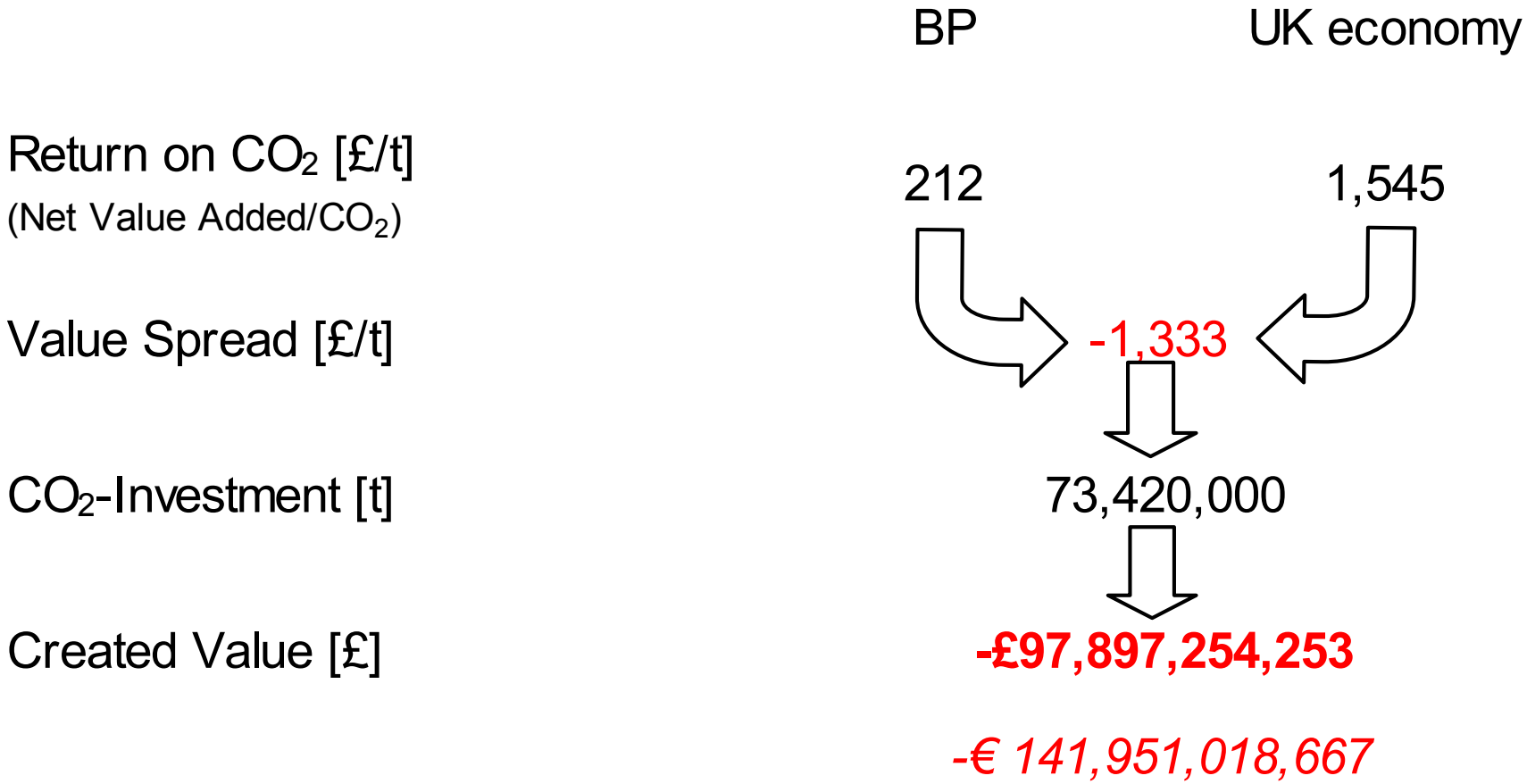
Financial market thinking...



The economy is about 1.4 billion £ better off than if BP's capital was invested in the UK average company.

Source: Figge & Hahn forthcoming

...applied to more than economic resources.



We could be about 97 billion £ better off, if BP's CO_2s were allocated to the UK average rather than to BP.

More than one form of capital

- Sustainable Value can consider more than just one form of capital.
- In the BP case we cover
  - Economic capital (non-financial assets)
  - Environmental capital (CO_2, CH_4, SO_2, NO_x, PM_{10}, CO)
  - Social capital (work accidents)

Result & Interpretation

- BP‘s Sustainable Value amounts to -72 billion £ in 2001. This corresponds to about 8% of UK’s GNP (or about 240,000,000 fully paid entries to next year’s SDR conference).
- Invested in the UK economy we could have 8% more GNP while keeping our use of economic, environmental and social capital constant.
- Alternatively, we could reduce our use of economic, environmental and social capital by 8% while keeping our GNP constant.

A pleasant side-effect

- Monetarizing external costs is difficult in practice.
- Coincidentally we have found an interesting new way to assess external costs.
- Sustainable Value can be interpreted as being the value that society gains/foregoes through an (in)efficient allocation of economic, environmental and social capital.
- This constitutes an external cost.

How do we ADVANCE ?

- Sustainable Value is now applied in the EU-funded ADVANCE project.
- We will assess about 50 companies until the end of this year.
- Assessment results will be published in a survey and the methodology will be published in a handbook.
- We will present the findings of our project at conferences all over Europe (e.g. at this year‘s BSE conference)
- Visit our project website for more information:

  www.advance-project.org

Contacts – More information

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Or visit our presentation tomorrow at 8:30-10:30 (Room 29). We will explain the BP case in detail.

ADVANCE

Application and Dissemination of Value-Based Eco-Ratings in Financial Markets

ADVANCE

A European Project assessing the Sustainable Performance of European Industry with the Sustainable Value Approach.