

Interdisziplinäres Fernstudium Umweltwissenschaften - **infernum**

# Sustainable Finance

von

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## A Introduction

The concept of sustainable development has gained considerable attention and significance over the last fifteen years. The concept postulates a need for a development that ensures the well-being of future generations without comprising the needs of the present generation. By doing so, it is based on three pillars: economic, environmental and social goals are to be met in order to achieve such a development. Latest since the publication of the so called Brundtland Report in 1987 (WCED 1987) sustainable development has been adopted and applied in many fields in academia, politics and also in corporate practice. This is also the case for financial markets. With the growing influence of financial markets through the globalization and deregulation of financial transactions during the last decade it has become crucial to integrate sustainability issues in financial investment decision making.

Sustainability and financial markets

In this module the decision situation of financial analysts represents the focal point. If financial markets and analysts are to integrate sustainability issues in their decision making their decision context has to be considered. It is commonly assumed, that investors seek for high risk-adjusted returns for their investments. It is the role of financial analysts to assess different potential investments for their risk-return characteristics in order to come up with recommendations for investors. Therefore, when it comes to the integration of environmental and social aspects into financial analysis it is crucial to find out which environmental and social management enhances the financial performance of companies. From the decision making perspective of financial analysts this translates into the core question:

Integrating sustainability issues into financial decision making

*How can financial analysts assess whether the environmental and social management practice of companies improves their financial performance?*

To answer this question it is appropriate to adopt a value-based approach of sustainability management. Such a value-based approach aims at a simultaneous achievement of ecological, social and economic goals (cf. Figge et al. 2001; Schaltegger/Burritt 2000). Following the logic of a value-based approach one would prefer those environmental and social management initiatives which help to achieve a companies economic/financial objectives. In the context of the integration of environmental and social aspects into financial analysis a value-based approach is necessary for two main reasons:

The value-based approach

- *Firstly*, tools for sustainable finance must cover *all three pillars of sustainable development*: economic, environmental, and social development. A value-based approach ensures that environmental and social aspects are not maximized separately but are *integrated* with economic goals.
- *Secondly*, the integration of environmental and social aspects into financial market decision making requires that the *causal link* between environmental and social management and the economic success of a company are addressed. A value-based approach looks at environmental and social aspects from an economic per-

spective. Therefore, it helps to identify those environmental and social management measures which contribute to the attainment of economic goals.

#### Eco- and social-efficiency

The relation between economic goals on the one hand, and environmental and social goals on the other can be expressed through the notions of social-efficiency and eco-efficiency (see Figure A-1). Those efficiency figures mirror the ratio between economic benefits and the social or environmental impacts caused by the economic activity (cf. Schaltegger/Sturm 1990). With a value-based approach one takes the perspective of the upper economic corner of the triangle in Figure A-1 in order to assess the relation of environmental and social goals with the economic goals.

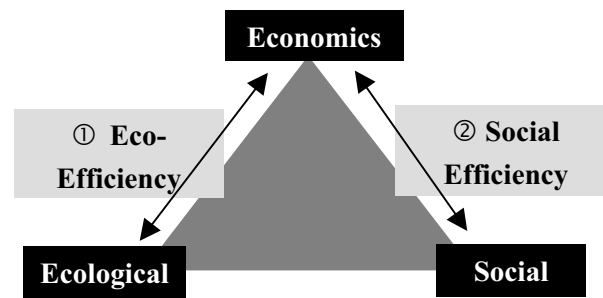


Figure A-1: Value-based approach to sustainable finance.

#### Environmental Shareholder Value and Stakeholder Value Added

Tools of sustainable finance serve to analyze the relationship between economic, environmental, and social performance of companies. Thus, they serve to identify those companies which arrive best at turning their environmental and social commitment into economic success and higher financial performance. There are two main purposes for such tools. They must

- help to identify the causal relationships between environmental and social management and financial performance, and
- assess the contribution of these links to value creation.

Tools of sustainable finance can be distinguished into two large groups depending on whether they analyze the relation between environmental and economic (eco-efficiency, ① in Figure A-1) or social and economic goals (social-efficiency, ② in Figure A-1). As a consequence of the value-based perspective and the given decision making context of financial analysts those tools are mainly based on a shareholder value thinking. Shareholder value is considered to be the present value of expected cash-flows to the shareholders. This represents an appropriate approach to reflect analysts' and investors' interests. Thus, for both eco-efficiency and social-efficiency there are some basic tools which are based on an extended shareholder value approach. Environmental shareholder value investigates the relation between environmental management and the creation of company value using the shareholder value approach (cf. Rappaport 1986; *ibid.* 1995) as a starting point. The concept of Environmental Shareholder Value first published by Schaltegger and Figge (1997) has been developed further by Figge (2001) to also include the option value created by environmental management. On the social side the concept of

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Stakeholder Value Added (Figge/Schaltegger 2000) analyzes the contribution of different stakeholder groups to the creation of company value.

In the following two main chapters of this module the basic concepts Environmental Shareholder Value (part B) and Stakeholder Value Added (part C) are introduced and explained in detail. These two parts are organized in a modular way, i.e. the two parts can be read independently from each other according to the information needs of the reader. This will provide the reader with a sound basis of the most important analytical tools in sustainable finance and lay the ground for further reading if required.