Extra-Financial Performance Made Tangible: A Handprint Approach for Financial Institutions

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Abstract The financial industry has been engulfed in a crisis of confidence since 2007. This impacts strategic considerations in the industry and changes the immediate prospects of individual business areas and products. The authors of this chapter argue that financial institutions will face further potentially bigger challenges in the next 15 years. They propose a strategic tool to prepare for these challenges. The so-called handprint approach applies an expanded value concept. It reflects the economic, social and environmental added value generated by a financial institution. In contrast to exclusively risk-centred sustainability approaches, it opens up ways to make sustainability a driver of business development, proactive reputation management and capacity building. This chapter describes the handprint approach and relates it to major concepts such as integrated reporting. It further provides applied examples for how other industries start using the handprint approach and points out potential implications of this trend for the financial industry. Finally, it names specific starting points for using the handprint approach to increase the future viability of financial institutions.

1 Introduction

The financial industry has been engulfed in a crisis of confidence since 2007. As a consequence, banks and insurance companies find themselves confronted with a large number of regulation and supervision mechanisms, which are further

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increasing in terms of quantity and intensity. This impacts strategic considerations in the industry and changes the immediate prospects of success of individual business sectors and products. The authors of this paper point out that the current pressure will appear light in view of the challenges and changes of the next 15 years. With the handprint concept, they recommend an approach on how financial institutions can prepare for a future where value creation is redefined. In such a future, mitigating negative social and environmental footprint will not be enough. Instead, companies will need to improve and report their social value added, i.e. their handprint. Recent initiatives in the manufacturing industry offer examples for translating this approach to financial institutions. And also within the financial industry, new developments prepare the methodological basis for such a transfer.¹

With the integrated reporting approach (IIRC 2013), a framework for the integration of nonfinancial indicators into reporting and management concepts is being created that greatly fosters the implementation of the handprint approach. This process will, however, take time. The article therefore closes with specific recommendations for human resources development and management and suggests sector initiatives and proposals for an industry-wide, cross-sectoral cooperation. These approaches make it possible to apply the new handprint concept already now and pave the way for companies and organisations to actively invest in their future viability.

1.1 Global Megatrends Require a New Approach to Value Creation

In the future, global megatrends will require society and economy to expand their value creation concept to include areas in which policy has failed or is too slow. The management of challenges such as climate change, resource scarcity and demographic change at the individual and institutional level will be key, as they will determine economic success (UNEP 2013) in a globalised world lacking binding global governance structures.

Studies describe in detail how demographic change, resource depletion, climate change, migration, *big data* and radical geopolitical changes will transform lifestyles and needs at the consumer level. One example is the SPREAD 2050 project funded by the European Commission (Uyterlinde et al. 2012; Rijnhout and Lorek 2012). It describes potential scenarios from which fundamental changes in consumer needs can be derived. Megatrends such as sharing instead of owning (e.g. car sharing) or decentralisation of production using 3D printers challenge traditional business models. The crisis in the German energy sector is a good example of how even well-established systems have to rethink their revenue models and production infrastructure.

¹Examples for this are activities in the area of *Financed Emissions* and/or *Avoided Emissions* (UNEP FI Investor Briefing 2013; 2° Investment Initiative 2013).

Many companies have therefore begun to concentrate more on coming changes and resulting opportunities. They commit themselves already today to the preservation of resources and urge policy-makers to support them more in this regard (Auer and Rakau 2011). In the absence of political regulations, they join organisations such as the World Business Council for Sustainable Development (WBCSD) and develop common strategies in collaboration with relevant stakeholders in. Our society, in turn, begins to hold companies increasingly accountable for the effects created by the use of their products, instead of looking at the impact of the production process only. The business environment for the chemical industry, for example, has changed considerably as a result of the European chemicals directive REACH. In the face of shifting consumer preferences, in particular, companies with direct consumer contact will have to take a broader view of their net value creation.

For companies in the financial industry, in their capacity as financing and capital market partners, and for insurers, it is particularly relevant to deal with megatrends and the prerequisites for a future-proof economy. The ability within financial institutions to assess the future viability of a investment strongly affects their own future viability. Nevertheless, the expansion of their added value concept is particularly challenging for financial services providers. More than any other service providers or even manufacturing companies, they need to pay attention to the fact that—bottom line—the financial value creation does not fall behind other identifiable value dimensions. What is therefore the significance of a changing corporate self-image that also defines corporate successes in nonfinancial or extra-financial terms?

1.2 Rate of Return, ESG Performance and Future Viability

In the context of a changing business environment, forward-looking strategies for the financial sector must look at more than just regulatory aspects. Forward-looking strategies need to address all aspects influencing the future remuneration of entrepreneurial performance. Monitoring, managing and communicating this combined financial *and* extra-financial added value will become a key success factor in an industry that reflects and manages values like no other and has the ability to support or distort them. Compliance and corporate due diligence remain the basis. In addition, however, formerly separate indicators such as *rate of return* and *ESG performance*² must be expanded and merged to a new value concept of future viability.

This future viability refers to both regulatory and reputational risks—including the loss of a *social license to operate*—but also to tangible business risks in the portfolios. Indirect portfolio risks usually outweigh direct ecological, social or technical risks for financial institutions. The reason for this immediacy is that

 $^{^{2}}$ ESG Performance stands for performance with regard to environment and social aspects and corporate governance.

megatrends, even though they may not affect the banks directly, have the potential to severely damage their investments and customers. This can result in increased defaults of individual loans but can also lead to a rapid loss in value of entire asset classes. The example of nuclear power in Germany after Fukushima shows how suddenly such risks can lead to losses of profit and write-downs.³

The case of nuclear power may be an extreme, and the debate about financed emissions and the related discussion on *stranded assets*, however, are good examples of less acute but potentially very substantial risks (Carbon Tracker Initiative and Grantham Research Institute 2013). The concept of stranded assets refers to assets that could drastically and quickly lose in value in the event of substantial political changes or slumps in demand with a climate reference. Especially long-term investors might be left stranded with such investments. The study of the 2° Investing Initiative (2013: 27), for example, explains that investments in industries such as fossil fuel provision, aerospace or automotive industry are exposed to considerable legal as well as political climate risks and could be noticeably affected by carbon markets. In spite of the fact that carbon markets are currently depressed and international governance processes not going anywhere, there is a risk that drastic measures may be taken in the future to make up for present failures—accompanied by social accusations and holding emitters politically liable.

But climate risks are only one of the examples of relationships between investment strategies and global megatrends in areas such as demographics, health, shortage of resources and technological development, which will significantly impact financial institutions. The future viability concept for the financial industry proposed here addresses these interactions and suggests a transfer of the value creation concept to the sector. Instead of minimising the damages caused by it, the financial industry could position itself as a financier of added social value and as a reliable partner in a volatile environment. It could also strengthen its own resilience against expected shocks.

2 How Value Creation Is Being Redefined in Practice

First, companies have already begun to redefine value creation. With the help of their stakeholders⁴, they are busy expanding their concept of ESG performance and open up new options. Instead of limiting themselves to reducing negative effects of their activity, they are considering and supporting the creation of added social value—in analogy to reducing the negative footprint, this added value is referred to as handprint (see Fig. 1). This perspective opens up new ways for product development and communication as well as corporate strategy.

³ After the nuclear power plant disaster in Fukushima, the German federal government switched off eight German nuclear power plants from the electricity market in one go; the plants had however already been written off (SZ 2012).

⁴ The term "stakeholder" subsumes relevant external groups of stakeholders and influencers, e.g. from the political arena, civil society and research.

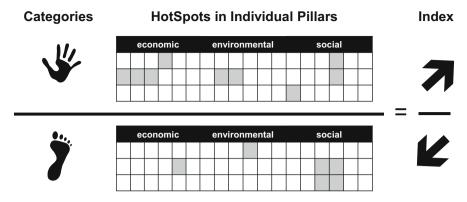


Fig. 1 The handprint concept uses an index to reflect an expanded added value. Source: Own illustration; symbols by shutterstock.com (2014)

The 2012 Sustainability Report of Henkel KGaA (Henkel 2012) reflects the approach of this novel handprint principle. The company has already tested the opportunity cost approach by Figge and Hahn (2004). It is now proceeding to assess its product improvements based on a combined index where hand- and footprint are put into relation to one another. Instead of concentrating on avoiding negative environmental and social effects—i.e. the footprint⁵—Henkel is improving its products from a perspective of added social value, i.e. by also looking at the positive handprint of its own corporate activity. The company can, for instance, provide more benefits to society by investing in further reducing the washing temperature on the consumer side than by investing in another tenth of a per cent in energy efficiency increase on the production side.

Henkel's handprint takes the previously applied *sustainable value* concept by Figge and Hahn (2004) to the next level. The latter reflects the number of units of gross national product generated by a company using its capital *and* resources, in comparison to a reference group. The handprint approach, on the other hand, is based on an expansion of the value creation concept. It also includes effects that are not mentioned in the company's direct environmental and social balance. Emissions generated when consumers use a product are a good example for this. But the concept is also suitable for including social aspects of entrepreneurial activity. Henkel, for example, does not only train hairdressers to efficiently use its products but concurrently provides opportunities for socially disadvantaged groups in emerging countries (SOS Children's Villages 2010).

In the future, policy-makers, consumers and civil society will have new instruments for accessing such information and comparable data and will be able to integrate it in their interactions with companies. Against this background, a broader handprint concept significantly helps companies to ensure their future viability, while it arguably is much more challenging than traditional product optimisation.

⁵ "Footprint" has become an established indicator of negative external effects.

A company that addresses both footprint and handprint learns more about its customers, stakeholders and supply chain. Its sustainability management turns from an avoidance strategy to an added value strategy, thus enabling a different kind of internal cooperation in the company and with external stakeholders. Beyond new communication options, the company also expands its strategic choices.

The assessment of a combined hand- and footprint includes the identification of so-called hotspots. These hotspots highlight the major value drivers on the hand-print and the largest improvement potentials on the footprint side of the matrix (see Fig. 1). This enables focused responses and makes the broader added value identification manageable and affordable. In many cases, civil society stakeholders also contribute significantly to specifying such hotspots. Hence, the company does not only gain access to a reflection of its commercial activities but also builds up long-term relationships with important groups of stakeholders.

The inclusion of a company's handprint in the development of products and business activities also adds to conventional market research. The knowledge of how their own products generate added social value can open the eyes of companies for new fields of business. It can provide them with a new perspective of their own innovative performance and portfolio. The insight that driving performance is more important for young urban groups of buyers than car ownership may, for example, have motivated car manufacturers to enter the car sharing market—even if this concept might in the long run lead to a reduction in absolute sales numbers. Following this line of argumentation, BMW's DriveNow programme would have resulted in successfully improving the company's handprint⁶ and being one of the first manufacturer to open up a promising new field of business. Added value-oriented thinking can help companies to identify and seize such opportunities.

2.1 Innovations Raise New Expectations of the Financial Industry

A sole focus on immediate monetary value creation will negatively impact the financial industry's profitability. In the medium term, understanding and utilising new value creation concepts is of vital importance for financial institutions. Without developing competences in this respect, they will find it more difficult to continue fulfilling their basic functions. They might lose their predictive abilities and, hence, their power of interpretation; they might have difficulties to satisfy new requirements by equity owners, and they would not have a full understanding of their business clients' economic environment. Conversely, those financial institutions will profit that monitor and actively shape innovations in the areas of information management and controlling, both on the customer and on the investment side.

⁶ For a definitive statement on the impact of the DriveNow programme, rebound effects would have to be taken into account.

The financial sector is the crystal ball of an economy. Dividend expectations can ruin careers, and future markets decide on power plant investments that will still impact the electricity market and world climate 40 years from now. This predictive function will become even more effective the more today's decisions are linked to future prosperity via fundamental factors such as climate change and shortage of resources. Actors in the economy and society are faced with the challenge to make decisions for the future, while knowledge about the effects of climate change and other trends continues to increase. Add to this the mass production of personal data described as *big data*. If the crystal ball of the financial markets now remains opaque with regard to exactly these future issues, while product markets, society and policy-makers are adjusting their value creation concept accordingly, analysts will lose influence. For individual financial institutions that fall behind this development, this may prove to be a strategic error in the medium term.

Successful producers have learned that they must adjust to new technological, political, societal and resource trends if they want to stay in the market. The same is true for companies in the financial sector, as their business involves assessing the performance of commercial enterprises and optimising capital flows accordingly. So far, however, the financial industry—more than any other industry—still measures performance based on financial parameters only. Due to the design of the financial system, other value dimensions than financial parameters can hardly be found in the language of the financial industry. Based on the same logic, credit institutions and investors prefer to issue capital to companies promising a fast return with a high risk-weighted dividend. Consistent with this approach, the current reporting and accounting standards are also almost exclusively geared towards the financial value dimension.

At the same time, new civil society stakeholders are using the availability of data to gain power of interpretation for areas that were previously not transparent, or examined by analysts only. The *Carbon Disclosure Project* organises the publication of emissions of large industrial companies and, in the meantime, has become well established. The transparency of pioneer companies increases the pressure on others companies to at least document and communicate their emissions. Furthermore, participating companies have begun to include emission management issues in their supplier selection and are therefore also passing on the responsibility along the value chain.

Emissions management has developed from a playing field of sustainability departments to a fixed reporting element. The *Asset Owner Disclosure Project* (AODP 2012) transfers this principle to institutional investors. It makes their climate risks transparent and addresses individual aspects such as transparency, investment and risk strategy. By doing so, AODP underlines the observation that, bottom line, actual climate risks and their effects on a business are borne by equity owners and not by the management. Hence, the indirect influence of megatrends such as climate change and shortage of resources widens the gap between equity owners as the principals and the management as their agents. Asset managers in particular and financial institutions in general are important mediators to bridge this gap. Initiatives such as AODP anticipate the basic trend of an increasing demand for

this mediator function by investors in the future. Most players in the financial industry are currently not yet really prepared to offer such services.

Corporate customers will also exert increasing pressure on financial institutions the more the manufacturing industry changes towards a broader value creation concept. The social, economic and ecologic environment of the economy is busy changing. Companies are faced with greater influence from stakeholders and a new information architecture in which they interact with their stakeholders and customers. In this context, companies will increasingly expect their bank to develop a broader understanding of value creation and provide instruments for supporting corporate customers in implementing such a wider added value concept.

2.2 A Huge Opportunity for Financial Institutions

New value concepts provide huge opportunities for risk management as well as business and product development in financial institutions. On the one hand, they allow preparing for new framework conditions, and on the other hand, they offer the opportunity to introduce additional performance indicators. In times of big data, they enable companies to get more out of the available data volume.

According to the basic principles of portfolio management, an attempt to reach sustainability goals by exclusion lists would limit the success of sustainability portfolios. The reason is that negative lists reduce diversification options without offering additional indicators for risk reduction. With a comparable architecture, sustainable portfolios may therefore actually fall behind traditional portfolios in terms of financial return. Broader value creation concepts such as the handprint approach could counteract this. The systematic documentation of handprint indicators by companies will increase the amount of company information available to investors and lenders. This provides the latter with the opportunity to use this information for new and improved financial products. Instead of a passive distinction, the new handprint indicators allow to actively differentiate the considered investments. They do so by reflecting additional value drivers in companies and re-classifying known parameters, thereby making product innovations more tangible.

In addition to innovation opportunities, the handprint approach, in conjunction with approaches for integrated corporate reporting, offers great advantages for long-term risk management. On the example of implicit climate risks, the abovementioned *stranded assets debate* pinpoints the importance of documenting implicit risks. If a financial institution is systematically looking at the handprint of its portfolio, it can use these analyses not only for identifying preferred investment options but also for a differentiated risk management of existing portfolios.

The strategic communications aspect of the handprint approach is of similar importance: it enables financial institutions to approach stakeholders as well as supervisory authorities backed by a solid information basis. Hence, handprint approaches can enable financial institutions to leave their defensive position behind

and actively manage reputational risks. Here also, the subject of climate change provides a good example. While some banks such as Bank of America, Merrill Lynch, Rabobank or ASN Bank (2° Investing Initiative, 2013: 18) have started to actively address the emissions financed by them, other players shy away from such a step. Some are concerned that the availability of documented data might provide the ground for regulations and that transparent players might be publicly named and shamed. In the medium term, however, such players are taking high risks for their reputation, which are becoming more and more real in the context of projects such as the Asset Owner Disclosure Project. External stakeholders will increasingly come up with numbers on financed emissions which portfolio managers without a financed emissions model, for lack of own numbers, will be unable to either refute or provide an informed comment on. A communications strategy focusing on the added social value of a portfolio circumvents this problem. It creates an additional value for the respective financial institution, as it strengthens the confidence of policy-makers, society and customers in the core business. Ideally, this results in a positive underlying connotation, increased deposit and private customer business and a better brand value.

2.3 Realignment of the Industry Can Help Overcome Challenges

In the medium term, the adoption of the handprint concept by financial institutions would require integrated reporting, improved alignment of the reporting system with management systems and an adjustment of communications strategies. These three adjustments pose significant challenges for the financial industry. However, they are necessary adjustments, which need to happen even without implementing the handprint approach. The latter profits from these adjustments and makes it more worthwhile to overcome the obstacles connected with them.

The implementation of an expanded value concept represents fundamental challenges for financial institutions (Pictet Asset Management 2008). At first glance, the so far dominant quantification and monetarisation approaches render other types of valuation impossible, as they depend on currently not measurable and tradable extra-financial performance aspects. Sustainability reports and financial reports are regularly within the scope of responsibility of different departments of the reporting entity and not much linked (Haller and Fuhrmann 2012). The integrated reporting concept (IIRC 2013) provides a framework for overcoming these limitations. Companies such as Goldman Sachs and Deutsche Bank are among the supporters of the long-term goal to mainstreams such as integrated reporting (IIRC 2014).

According to Haller (2013), integrated reporting also suggests the use of jointly collected key performance indicators for management and compensation schemes. This requires new approaches in the areas of strategy and corporate management,

1. Conventional Mode of Separated Reporting

economic		environmental	social
Annual Report	+	Sustainability Report	

2. A First Step in the Direction of Integrated Reporting

	economic	environmental	social
¥	Economic Indicators	Explanation	Explanation
ÿ	-	Environmental and Social Footprint	

3. Integrated Reporting Using the Handprint Approach

	economic	environmental	social		
*	Which economic, environmental and social value added has the company created?				
ÿ	Which economic, environmental and social costs evolved from this value creation?				

Fig. 2 Development from traditional to integrated handprint reporting. Source: Own illustration; symbols from shutterstock.com (2014)

human resources development and software application. While their implementation constitutes a major burden, they may benefit other fields of corporate change, such as adjustment to Big Data or restructuring of business models in accordance with changing regulatory requirements. The prospect of implementing the handprint approach might make the introduction of integrated reporting even more worthwhile. In this context, the handprint approach constitutes a supplementation and expansion of integrated reporting concepts (see Fig. 2) that are already dealing with different value dimensions (IIRC 2013, p. 10).

The alignment of their communications strategy to an integrated assessment approach constitutes another barrier for many financial institutions. The reasons for this are of historical and structural nature. The great importance of confidentiality in financial transactions, complex processes and products as well as the high-profile financial market and compliance crises influences the communications culture and strategy. In this context, communication officers may regard the disclosure of additional information as an additional reputational risk. The fact that many financial institutions do not have an institutionalised dialogue with external stakeholders reinforces this view.

However, a reactive response to the interests of external stakeholders involves many dangers. Consumer goods and retail companies such as the REWE Group and Nestlé Deutschland abandon this approach in favour of proactive communications management in the form of advisory bodies and panels. The handprint approach and its expanded value definition provide an ideal and credible basis for such a use of sustainability communication for lowering reputational risks.

3 The Way Forward for Financial Institutions

The financial industry currently undergoes a period of reorientation. Many institutions are restructuring their operations due to European and national regulations in the wake of the crisis of the financial market. They are adjusting businesses models and looking at new development options. Regulatory requirements (for instance, BASEL III) set a narrow framework for this. In this context, the possibility to introduce a broader added value concept such as the handprint approach provides a huge potential on a strategic and communications level.

Social and political stakeholders as well as business partners critically observe the renewal phase of the financial industry, and even private customers are slowly turning into critical consumers. Their confidence in the industry is low. In this environment, financial institutions can use the handprint approach to regain trust by individual and joint initiatives, open up new options and work on their future viability. It will take time to develop an integrated reporting system that reflects both financial and extra-financial value creation, but short-term approaches are available. Examples are the introduction of new human resources development and management concepts, the expansion of industry initiatives by handprint approaches and cross-industry cooperation in the area of added value assessment.

3.1 Rethinking Human Resources Development and Management

Brains are the most important productivity factors in the financial industry. Welltrained and motivated employees continuously develop product innovations using the limits provided by the regulatory framework to the maximum. After the financial crisis revealed significant social risks stemming from some of these innovations, they are currently in the focus of new regulatory efforts. The handprint approach can considerably contribute to aligning product innovations with added social value. At the same time, it can offer benefits in the areas of strategy and credibility for the respective financial institution. Human resources development and management systems play a central role in this context.⁷ Furthermore, a broader added value definition can mean additional motivation for employees.

The handprint concept supports the integration of sustainability in the core business. From this perspective, internal sustainability training can contribute to support innovations in the core business. So far, traditional sustainability training has frequently focused on minimising environmental and social damages, serving to enforce exclusion criteria within financial institutions. This approach counteracts the interests of those whose success depends on innovative performances within an

⁷ Buch and Orbach (2003) provide a respective analysis for Germany.

as much as possible barrier-free playing field. Training sessions using the handprint principle to propagate a broader added value concept, however, provide more room for reconciling the interests of the various players within a company. They can have a motivating effect and promote innovation. In the context of such training, sustainability departments and human resources development cease to act as promoters of restrictions and rather become an internal source of ideas for new business models.

New training approaches alone can already have positive effects for a company. However, the simultaneous development of compensation schemes and management systems provides much further reaching levers for a reorientation of innovation in different fields of business. Extra-financial value creation must pay for employees to be enforced by them. New management systems are closely linked with the development of integrated reporting and the further development of key performance indicators and therefore profit from current trends in these areas. In the medium term, the assessment of the management of a company should also apply this broader framework of criteria.

3.2 Expanding Industry Initiatives

With the United Nations Principles for Responsible Investment (PRI; UNEP FI & UN Global Compact 2006) and the Principles for Sustainable Insurance (PSI), the financial industry has created important standards and frameworks for sustainable innovation. The implementation of these standards in financial services companies provides huge opportunities for implementing the handprint approach. It would in all likelihood prove to be profitable for the industry.

Both PRI and PSI suggest the development of new approaches for integrating sustainability in product development and analytical instruments. They support a reduction of negative environmental and social effects within the investment portfolios, recommend sustainability training and promise cooperation within the industry to overcome barriers. The implementation of these aspects can easily be supplemented by handprint concepts and integrated reporting principles. Their implementation can, in turn, profit from this addition, as portfolios will not just be reviewed for the potential damage they can cause but also for their benefits beyond a profitability aspect. New analysis instruments can pick up on methods that the real economy is already using and will continue to further develop. Specific industry initiatives such as initiatives for financed emissions may help to share implementation costs on a national or international level, promote standards and create comparability.

Altogether, the combination of a broader added value concept, integrated reporting and PRI and/or PSI would release additional dynamics within the industry. Change managers could bring strategies of financial institutions in line with PRI and PSI and demonstrate that integrating sustainability can create extra-financial as well as financial value for the industry.

3.3 Going Beyond Industry Limits

Cooperating with their target industries and external groups of stakeholders can significantly reduce the costs of changing to a new added value concept for the financial industry. Cooperation can also unleash substantial potentials in the field of standardised measuring methods. In the long term, a harmonisation across industries will also be vital for realising other ambitions such as integrated reporting.

Financial institutions profit tremendously from their deep insight in the industries they are working with. They need comparability of assets and of companies within industries. A broader value concept based on the handprint approach would provide new indicators for evaluating investment and lending decisions and help develop new sources of information. However, these advantages depend largely on the standardisation and harmonisation of new approaches within target industries and across industries. An uncoordinated development of methods for integrating social added value is likely to produce major coordination problems. The context of financing sustainability in small to medium-sized enterprises in Germany is an example for such a coordination problem (Philipps et al. 2012).

The implementation of new integrated reporting standards will take time and does so far not include handprint approaches. However, new networks on a national and European level provide the opportunity to start joint pilot projects on this subject, to determine mutual expectations and conduct joint cost-effectiveness analyses. The exchange between financial industry and real economy plays a key role in this process. First-mover companies will benefit from starting early learning curves. Pilot projects can build on traditional social value creation processes (Kuhndt and Philipps 2010) and expand them to value creation networks. Within these networks, customers, suppliers, financing partners and stakeholders can jointly develop solutions and advance innovations that create added social and environmental value. Such cooperation has the potential to distribute costs, strengthen the acceptance of the financial industry by society, maintain its innovative strength and thereby ensure its viability for the future.

References

2° Investing Initiative. (2013). From financed emissions to long-term investing metrics. State-ofthe-art review of GHG Emissions Accounting for the Financial Sector.

Asset Owner Disclosure Project. (2012). AODP global climate index: 2012 results.

- Auer, J., & Rakau, O. (2011). Rohstoffboom birgt f
 ür deutsche Industrie nicht nur Risiko. In Deutsche Bank Research. Aktuelle Themen, 522.
- Busch, T., & Orbach., T. (2003). Zukunftsfähiger Finanzsekor: Die Nachhaltigkeitsleistung von Banken und Versicherungen (Wuppertal Papers No. 129).
- Carbon Tracker Initiative, & Grantham Research Institute. (2013). Unburnable carbon: wasted capital and stranded assets.

- Figge, F., & Hahn, T. (2004). Sustainable value added ein neues Maß des Nachhaltigkeitsbeitrags von Unternehmen am Beispiel der Henkel KGaA. *Quarterly Journal of Economic Research*, 73, 126–141.
- Haller, A. (2013). *Presentation for the trends and developments in sustainability reporting panel*. UNEP FI VFU Roundtable 2013.
- Haller, A., & Fuhrmann, C. (2012). Die Entwicklung der Lageberichterstattung in Deutschland vor dem Hintergrund des Konzepts des "Integrated Reporting". Zeitschrift für internationale und kapitalmarktorientierte Rechnungslegung: KoR 1/12 (2012), 17–25.
- Henkel. (2012). *Sustainability report*. Retrieved February 2, 2014, from http://sustainabilityreport. henkel.com/report-2012.html
- IIRC. (2013). The International IR framework. International Integrated Reporting Council.
- IIRC. (2014). Pilot programme investor network. International Integrated Reporting Council. Retrieved February 2, 2014, from http://www.theiirc.org/companies-and-investors/pilotprogramme-investor-network
- Kuhndt, M., & Philipps, S. (2010). Nachhaltige Innovation durch strategische Allianzen in Wertschöpfungsketten. In T. Lemken, M. Helfert, M. Kuhndt, F. Lange, T. Merten, (Hg), Strategische Allianzen für nachhaltige Entwicklung. Innovationen in Unternehmen durch Kooperationen mit NPOs. Wuppertal.
- Philipps, S., Pratt, N., Raab, C., & Wagner, T. (2012). Nachhaltige Finanzierung in mittelständischen Unternehmen. Erstellt im Auftrag der GIZ und des Deutschen Global Compact Netzwerks, Wuppertal.
- Pictet Asset Management. (2008). Das SRI-performance-paradox. Messung und Reporting der extra-finanziellen Performance nachhaltiger Anlagen.
- Rijnhout, L., & Lorek, S. (2012). EU sustainable lifestyle roadmap and action plan 2050. Pathways for enabling social innovation and behaviour change. EU SPREAD 2050, Wuppertal.
- SOS Kinderdörfer. (2010). Schwarzkopf Professional fördert Ausbildung. Retrieved February 2, 2014, from http://www.sos-kinderdoerfer.de/informationen/freunde-und-partner/ unternehmen/ schwarzkopf-professional-shaping-futures-sos
- SZ. (2012). Sechs Monate AKW-Ausstieg. Wie Deutschland ohne Atomkraft-funktioniert. Süddeutsche Zeitung. Retrieved February 2, 2014, from http://www.sueddeutsche.de/ wirtschaft/sechs-monate-akw-ausstieg-wie-deutschland-ohne-atomkraft-funktioniert-1.1275253
- UNEP FI. (2013). Principles for sustainable insurance. Rio de Janeiro: UNEP FI.
- UNEP. (2013). *GEO-5 for business: Impacts of a changing environment on the corporate sector*. UNEP
- UNEP FI Investor Briefing. (2013). Portfolio carbon measuring, disclosing and managing the carbon intensity of investments and investment portfolios. UNEP FI Investor Briefing
- UNEP FI & UN Global Compact. (2006). *Principles for responsible investment*. New York: UNEP FI & UN Global Compact.
- Uyterlinde, M., Straver, K., Mont, O., Tigchelaar, C., & Breukers, S. (2012). Future research agenda for sustainable lifestyles. EU SPREAD 2050, Wuppertal.