

THE FINANCIAL SECTOR TOWARDS EFFICIENCY OF SUSTAINABLE DEVELOPMENT FINANCING IN THE LIGHT OF LITERATURE REVIEW

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ABSTRACT

The paper reveals that the relation between finance and sustainable development (SD) is a relatively novel area. The paper aims to draw attention to the significant gap in the existing research, along with the issues of SD. The concept of SD requires a lot of attention, but seeing the cognitive category from the perspective of the discipline of finance, the latter is unsatisfactory. At the same time, the rank problem, its strategic dimension and the amount of financial resources allocated and disbursed for the purposes of focusing around sustainable development, identification of financial phenomena accompanying this category is seen as a priority. The research methods compose of critical analysis of literature, induction, deduction and reduction, desk research and dependencies and causal analysis. The time of analysis is 2017/2018. The manuscript deals with two main research questions that have been formulated as follows: 1. How to include multidimensional, holistic and long-term perspectives of SD into finance? 2. How SF impacts on efficiency of financing of sustainable development? A few conclusions/suggestions can be made to solve the research problem and include the SD perspective into finance: 1) internalization of externalities in the calculation of an investment (i.e. in a company's present value); 2) assigning a long-term horizon to investments, also as a necessity for maintaining the prospect of safeguarding financial capital for the future; 3) progressive substitution of financial ratios with sustainability ratios; 4) a changing perspective on the connotation of financial profits.

Introduction

Sustainable development, when seen from an economic point of view, along with the research problem, has been widely described in literature. Despite numerous publications on this subject, it remains under recognized with a definitional standpoint, of the impact and the impact on the economy and stakeholders. This diagnosis applies in particular to the issue of financing of sustainable development. The interpretation of sustainability concept and

its meaning is particularly important from the point of view of discipline and finances, for which sustainable means, among others, the financial sustainability of results, or balance in the context of managing deficits and debt, which is shaping financial balance/the budget at state level, local government, the financial system etc. In addition, the complexity of the category, which is sustainable development parallel to the economic, social and environmental causes, that the scale of relationships, interactions and interdependencies of this phenomenon is very broad and difficult to diagnose and research. It brings forth the cognitive difficulties, resulting mainly from limitations in measuring the phenomenon and difficulty in the same interpretation of the results (including its multifaceted phenomenon interdisciplinary).

Research on sustainable development and its financing are desirable and also justified by the fact that this is one of the strategic concepts implemented at community level, which is to counteract and mitigate the impact of negative externalities on the economy, society and the environment, and to provide comparable dynamics of development (but the growth as well) to all its beneficiaries. At this point, it is worth noting the special role of sustainable development in tackling the wider and socially harmful phenomena, namely the exclusion and increase of inequality. Theoretical and empirical dimension of sustainable development as a phenomenon of the research, the volume of public and private funds allocated to the funding, the scale of the expected impact on the economy and society and the strategic dimension of the concept of being reflected in the public to public policy, which makes this issue require in-depth research and, above all, an analysis for identification reasons, conditions and efficiency of its financing. The legitimacy of research on the financing of sustainable development is determined by the fact that the provision of funding is a prerequisite for the implementation of this concept and has an impact on its results, and effective management of funds directed to the realization of the principles of sustainable development. This determines the efficiency of sustainable development in itself, because it displays the efficiency and effectiveness of spending of funds for this purpose.

Comparing framework financial sector versus sustainable development

An effective financial sector, allocating capital and managing associated risk, is essential for a well-functioning economy. The conventional logic of the financial sector is the one-dimensional goal of maximising profits. The neoclassical approach to finance, based on private property theory, discounts environmental and social considerations. A strict neoclassical finance perspective as advocated by Friedman (1970), Modigliani and Miller (1958), Jensen and Meckling (1976) holds that social responsibility is outside the duties of directors of corporations and should be solely the concern of the government.

The traditional approach to finance based on the efficient market hypothesis and the maximization of cash-flow generating process, tends to neglect an interface between the field and sustainable development ('SD'). Conventional finance protocol offers no room for the environment, society, including employees and other third parties who are not privy to the contract. There is also no room for unselfish and so-called irrational behaviour and related external effects for third parties.

Yet in recent years, there has been an awareness of the need for a multidimensional and holistic understanding of SD. A balance among environmental protection, social equity and economic development deserves to be pursued (Pisano, Martinuzzi, Bruckner, 2012). The approach based on conventional finance fails to be valid as governments decentralise. There is a desire and an expectation that contemporary companies are human agents satisfying economic, environmental and social needs. In line, qualitative factors, including behavioural considerations and

seeking trades – off between expected rate of return and risk impact on financial markets. Sustainable finance ('SF') needs to provide an alternative to the paradigm of shareholders as only stakeholder.

SF should be directed towards ensuring the wellbeing of all stakeholders actors in the short and long terms. One among the major factors of success is taking into account the needs and expectations of the stakeholders (Freeman, 1984; Harrison, Freeman, 1999). Employees, regulators, and society can each have significant impact on the overall performance of a financial system, and should be included (Rebai, Azaiez, Saidane, 2015). Yet according to Pissano et al. (2012), a vast gap remains between SD and the actions of most financial markets (Table 1).

Table 1. Financial sector versus sustainable development

Sustainable development	Financial sector
Balancing SD dimensions: environment preservation, social equity, economic development	One dimensional logic; maximisation of profits and return on investment
Long timeframes and intergenerational equity	Short-term perspective; discounting; present value calculation
Environment preservation, limits to growth, and planetary boundaries	Little to no consideration of environmental effects
Equal opportunities, access, and intra-generational equity	Little to no consideration of social effects
Inclusion and participation	Highly complex; not inclusive, nor open to participation
Governance for SD	Efficiency oriented; shortage of transparency and accountability

Source: Pisano et al. (2012), p. 27.

The challenges include: balancing SD dimensions which are typically long-term focused with the typically short-term profit focus of conventional finance. The difference is crucial for efficiency of financing of SD as there is a need to identify and evaluate negative externalities such as air pollution from industry (Pisano et al., 2012). The emerging field of sustainable funding, largely driven by physicians, provides an opportunity to build a more general theory of finance that takes account of such realities while demonstrating that traditional financial theory is only a case of more general theory (Fullwiler, 2015). Another problem pointed out by Werner (2012) is that, leading economic theories and models, as well as influential advanced textbooks in macroeconomics and monetary economics, did not feature money (Van Egmond, De Vries, 2015).

Efficiency of financing sustainable development

The question of the efficiency of financing sustainable development has not been solved satisfactorily on the basis of the national and international literature. The authors of the studies (inter alia G. Borys, T. Borys, Z. Wysockińska, J. Witkowska, L. Dziawgo, B. Fiedor, L. Mierzejewska, E. Sobczak, B. Guziejewska, M. Burchardt-Dziubińska and others) focus primarily on identifying complex issues relating to sustainable development (inter alia environmental policy and environmental protection, social policy and the issues of exclusion and inequality, sustainable development and the quality of human capital, etc.) from the perspective of the European Union states and local governments or in terms of the sectoral issues (inter alia transport, environment, etc.) or in the context of corporate social responsibility (CSR). Efficiency issues and financing for development are presented in the context of the characteristics of the EU funds aimed at financing sustainable development, or evaluation of projects supporting the objectives of this development and the development usually has the nature of industry reports or case studies. There are also elaborate facts that, in a comprehensive way and on the macro level-without being

able to present the relationship between finance and growth, and development of financial markets and economic growth and development (inter alia S. Owsiak). The issue of the efficiency of financing sustainable development is very rare, and if it is considered, on the occasion of the discussion of financial efficiency of projects, not focusing on the aspect of sustainability is key. Foreign literature shows a wide explanation of the definition, the methodological and conceptual relating wholes to sustainability (inter alia Enders, Remig, 2015; Mawhinney, 2002; Lawn, 2006; Grober, 2015; Jeucken, 2001; Hargreaves, Fink, 2004; Emerson, 2003; Soppe, 2004, and others). The financial aspect focuses primarily on issues in the field of sustainable finance (Soppe, 2004) and environmental finance or impact assessment of the financial system on the growth and development (Arestis, 2006; Wright, 2002; Todaro, Smith, 2012; King, Levine, 1993; Acemoğlu, Johnson, Robinson, 2005 and others) does not have papers, which attributes to the study on the efficiency of financing sustainable development of financial variables affecting this performance.

Finance paradigm towards efficiency of financing sustainable development

The financial sphere and sustainable development are interrelated and collaborative research categories. Sustainable development as an economic category and as a research problem has been widely described in the literature of the subject. Despite numerous publications devoted to this issue, this area of research remains underdeveloped from a definitive point of view, impact assessment, and impact on the economy and stakeholders. This concerns in particular the insufficiently researched issue of sustainable development financing, which on the basis of the current publication acronym focuses on almost exclusively a narrow section, namely the characteristics of the sources of financing. Crisis 2008 has revealed the imperfections of a traditional approach to finance, particularly the mechanisms used so far by financial markets, and has become the impetus for creating new dedicated financial solutions, especially in the context of ensuring long-term financial stability and security. In this context, the role of finances that are sustainable in stabilizing financial markets, after the crisis, appears to be significant.

Effective financing of sustainable development requires a holistic approach in finance, which means the need to include economic and non-economic finance models that correspond to the three dimensions of sustainable development and mapping the links between the financial system, the economy and the state. The three-dimensionality of the sustainable finance model eliminates traditional financial model constraints that result in distorted pricing of risks, costs, capital, and value, influencing individual and institutional motives for financial managers. An additional element that enhances the financial sphere's adaptability to sustainability financing is the inclusion of a behavioral financing model relevant for understanding the motivations of ESG (Environmental, Social, Governance) risk management managers in sustainable risk and risk conditions in the traditional financial model.

Effective financing of sustainable development requires therefore an extension of the perception of the financial system to two of the other dimensions, social and environmental, and thus the design of sustainable financial systems, in line with the sustainable finance paradigm, in harmony with the three dimensions of sustainability. The theoretical achievements in finance are lacking of a comprehensive definitional and methodological approach that allows for in-depth research into the effectiveness of sustainable development financing.

Conclusion

Financing of sustainable development and assessment of efficiency of this financing is an important problem regarding decision-making. Efficiency is a category that can be managed and therefore, defining the efficiency and

its determinants is the premise of priority from the point of view of measures to support the decision-making process in this field and, based on the results given, to control efficiency.

Sustainable development is a special kind of public good whose effective financing is cognitively important because of the social, economic and environmental consequences it determines. Effective financing of public goods, due to their specificity, faces many limitations. In the case of sustainable development, an additional element affecting the efficiency of finalization is the mismatch of the financial sphere to the financing of the specifics of sustainable development.

Regarding the research questions raised in the introduction it is worth mentioning that under the influence of financially sustainable adjustment processes, a new sustainable finance paradigm emerges. Taking into account the economic, social and environmental perspectives that characterize sustainable finance allows for a more appropriate adaptation of the financial sphere to financing requirements determined by the specific nature of sustainable development.

Conventional finance is based on the economic factor in risk, cost and value valuation, which means that this kind of finance does not have the mechanism to fully perceive the three dimensions of sustainable development. This results in an inadequate transfer of risk and capital in the financial system and inefficient financing of development. Increasing in efficiency of sustainable development financing requires a change of the financial paradigm towards sustainable finance and a holistic approach to finance by including in the financial model the noneconomic variables that are representative of the three pillars of sustainable development.

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