Green Financial Instruments: 'Ecological' Patrimoniality and 'Social' Obligatory Relationships

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Abstract

This paper analyses the recent European regulation of financial instruments related to (socio)-environmental objectives and their impact on traditional legal institutes, such as the obligation and the contract. Efforts to make obligatory legal relationships conform to ecological issues lead to establishing remuneration for investors below the market interest rate or indexed to predefined environmental sustainability results. This affects the compensatory nature of the relationship in such a way as to include utilities that are *lato sensu* of a patrimonial nature, and, therefore, have the purposes of social utility or general interest. For this reason, it can be considered a 'social' obligatory relationship as a relationship between legal situations subjectively attributable to a plurality of persons, direct beneficiaries of non-financial utilities deriving from constitutionally valued activities.

Keywords

Social Market Economy, Green Bond, Sustainability-Linked Bonds, 'Social' Obligatory Relationship.

I. Introduction

The importance of the social and relational dimension of the person through the declaration of the indispensable duties of solidarity leads to the need to rethink the market economy. It is not a mere remunerative concept based on free competition but a place for the protection of the person and of the community, also from a diachronic point of view. The demands of social justice guarantee, in fact, the 'vital minimum' as an inviolable space of free and

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¹ P. Perlingieri, 'Mercato, solidarietà e diritti umani' *Rassegna di diritto civile*, 1, 84-117 (1995).

² 'The "vital minimum" is the "essential content" of the inviolable rights of man, it is the *res cogitans* of human dignity as the nucleus of the *status personae*, where the *res*

dignified existence. In the face of the constant and dynamic interrelationship between fact and law,³ the current socio-economic context, characterized by economic instability, political fragmentation and ecological emergency, contributes to redefining traditional legal concepts such as the obligation and the contract. The primary importance of the value of the human personality, in its transgenerational meaning, determines the functionalization of these concepts: from a purely economic and performing logic to one aimed at the maximum implementation of the person.⁴

The market is not, therefore, an aseptic reality without an axiological character but is itself an ideal space for the convergence of patrimonial and existential interests, of individual and general interests. It is a functional tool to ensure free economic initiative and, at the same time, to adapt it to the principles of public constitutional order.⁵ The 'social market economy' enhances the redistribution of goods and services on the basis of social equity, overcoming *de facto* inequalities and ensuring equal accessibility to the essential levels of civil and social benefits (Art 117, para 2, letter m of the Italian Constitution) and the effective satisfaction of the person's primary needs.

In this scenario, ecologism, as a value instrumental to the realization of the value-person, connotes and adapts the legal

extensa is the status civitatis'. E. Caterini, 'Il "minimo vitale", lo stato di necessità e il contrasto dell'esclusione sociale' Rassegna di diritto civile, IV, 1129, 1141 (2016).

- ³ P. Perlingieri, *Il diritto civile nella legalità costituzionale secondo il sistema italoeuropeo delle fonti. Fonti e interpretazione* (Napoli: Edizioni Scientifiche Italiane, 4th ed, 2020), II, 69.
- ⁴ On the functionalization of legal institutes to the realization of human personality, see P. Perlingieri, *La personalità umana nell'ordinamento giuridico* (Napoli-Camerino: Edizioni Scientifiche Italiane, 1972), 21-22. On the other hand, some view private law from an internal perspective on the basis of Kant's *practical ratio*, understood as a concept of free will, whereas corrective justice is understood as mere corrective equivalence between loss and gain. See E.J. Weinrib, *The Idea of Private Law* (Oxford: Oxford University Press, 2012). Others hold that private law is influenced by public or collective values even if it remains independent of public policy. See H. Dagan, 'The Limited Autonomy of Private Law' (2007), available at https://ssrn.com/abstract=1005807; see also, F. Rödl, 'Private Law Beyond the Democratic Order? On the Legitimatory Problem of Private Law "Beyond the State" 56 *The American Journal of Comparative Law*, 743 (2008); J. Gordley, 'The Moral Foundations of Private Law' 47 *American Journal of Jurisprudence*, 1 (2002).
- ⁵ On the overcoming of the justice deficit through the constitutionalization of private law, see S. Grundmann, H.-W. Micklitz and M. Renner, *New Private Law Theory*. *A Pluralist Approach* (Cambridge: Cambridge University Press, 2021).
- ⁶ According to P. Perlingieri, 'Spunti in tema di tutela dell'ambiente' *Legalità e giustizia*, 136 (1989), the personalistic choice of the Italian constitutional system configures the environment as a privileged tool for the development of the human person. In this sense, ecology, including the protection of the environment, biodiversity and

relationships, becoming an intrinsic element of economic activity as well as a criterion for the assessment of the lawfulness or merit of the same. 7 In this sense, the amended Art 41, para 2 of the Italian Constitution states: 'on the one hand, the unlawfulness of conduct harmful to health, the environment, security, freedom and human dignity; on the other hand, the non-contrast of economic initiative with social utility, as a judgment including ecological profiles'.8 Every relationship, therefore, is coloured by environmental needs, including the legal effects of saving and of the transmission of natural resources used in the economic and productive cycle.9 It follows that even those traditionally characterized by pre-eminent patrimonial value, such as legal obligatory relationships of a financial nature, are pervaded by socio-environmental concerns. The latter, in fact, guide the initiative of private individuals and could affect the obligatory relationship, making the same fulfilment conditional on conserving or improving environmental quality. Therefore, there is an evolution of the concept of patrimoniality referring to the nature of the performance and the interest of the creditor pursuant to Art 1174 of the Italian Civil Code¹⁰ which, in the light of the current legal system, is intended to extend and include functions of a socio-existential nature, such as environmental protection.11

In this regard, the recent European Regulation on Green Bonds¹² introduces harmonised rules for financial instruments whose proceeds are allocated to environmental sustainability objectives. In

ecosystems, aims at a balance between ecological systems functional to the protection of life of existing and future biological components, primarily of the person.

- ⁷ On the idea of an ecological public order, see N. Belaïdi, *La lutte contre les atteintes globales à l'environnement: vers un ordre public ècologique?* (Brussels: Bruylant, 2008), 461.
- ⁸ E. Caterini, 'Iniziativa economica privata e "crisi ecologica". Interpretazione anagogica e positivismo', in G. Perlingieri and E. Giorgini eds, *Diritto europeo e legalità costituzionale a trent'anni dal volume di Pietro Perlingieri. Atti dell'Incontro di Studi dell'Associazione dei Dottorati di Diritto Privato 9-10 settembre 2022, Università Politecnica delle Marche* (Napoli: Edizioni Scientifiche Italiane, 2024), 291.
- ⁹ Art 3-quater of decreto legislativo 3 April 2006 no 152 (Environment Code) establishes the obligation to achieve a balance between natural resources to be saved and transmitted in order to ensure the protection and improvement of environmental conditions in the context of the dynamics of production and consumption.
- ¹⁰ The Art states that 'The obligation must consist in a performance which can be economically assessed and which serves an interest of the creditor, whether or not of pecuniary nature'.
 - ¹¹ E. Caterini, 'Iniziativa economica privata e "crisi ecologica", n 8 above, 297-298.
- ¹² European Parliament and Council Regulation 2023/2631/EU of 22 November 2023 on European Green Bonds and optional disclosures for bonds marketed as environmentally sustainable and for sustainability-linked bonds.

the face of increased demand from savers of environmentally sustainable bonds¹³ and the associated exponential increase in bond issuance, 14 a legal framework has been drawn up laying down uniform specific conditions and requirements for these green bonds. 15 Their intrinsic international nature calls for uniform rules to promote forms of financing with a positive and lasting impact on the environment, and, at the same time, to ensure clear and transparent information to investors to allow for comparisons to be made between different financial instruments and for the adoption of informed choices. The use of forms of sustainable finance needed by the climate emergency and encouraged by international and European sustainability policies requires, in accordance with the principle of horizontal subsidiarity, greater accessibility to the financial market and, therefore, a process of 'democratization' of the same. In this sense, the European Regulation provides that green bonds may be issued by non-financial undertakings and by noncorporate entities, such as sovereign issuers. Moreover, in order to favour smaller companies, 'the requirement to allocate the proceeds of European Green Bonds to environmentally sustainable economic activities should apply only to the net proceeds of such bonds', that is. 'the difference between the total bond proceeds and the issuance

¹³ According to the research carried out by Forum per la Finanza Sostenibile, *PMI italiane*, *policrisi e finanza sostenibile: le opportunità per le imprese* (2023), 11, available at https://finanzasostenibile.it/attivita/pmi-italiane-policrisi-e-finanza-sostenibile-le-opportunita-per-le-imprese/, stakeholders' requests regarding sustainability issues are increasing considerably. It turns out that 70% of the companies interviewed have received questions on ESG policies (Environmental, Social and Governance), of which 35% by customers and 12% by private investors. Similarly, Global Sustainable Investment Alliance, *Global Sustainable Investment Review* (2022), 5, available at https://www.gsi-alliance.org/members-resources/gsir2022/, shows on a macroeconomic scale that \$30.3 trillion are invested in sustainability-related assets and that even in non-US markets, as in Europe, there has been a 20% increase in this form of investment compared to 2020.

¹⁴ In fact, 6% of bonds issued in the European Union are linked to sustainability, of which 68.6% are green bonds. Platform on Sustainable Finance, *Monitoring Capital Flows to Sustainable Investments: Intermediate Report* (April 2024), 35, available at https://finance.ec.europa.eu/publications/platform-sustainable-finance-intermediate-report-monitoring-capital-flows-sustainable-investments en.

¹⁵ Before the introduction of the European framework, the International Capital Market Association (ITMA) adopted *Green Bond Principles. Voluntary Process Guidelines for Issuing Green Bonds* (June 2021), 4, available at https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/green-bond-principles-gbp/, that 'are voluntary process guidelines that recommend transparency and disclosure and promote integrity in the development of the Green Bond market by clarifying the approach for issuance of a Green Bond (...) The four core components for alignment with the GBP are: 1. Use of Proceeds (for eligible Green Projects); 2. Process for Project Evaluation and Selection; 3. Management of Proceeds; 4. Reporting'.

costs that are directly related to the issuance of the bond', such as the costs of the financial intermediaries leading the issuance.¹⁶

The main feature of these bonds is the use of the proceeds to finance economic activities defined as environmentally sustainable by the European Taxonomy¹⁷ and, therefore, those so-called enabling activities that contribute substantially to one or more specific environmental objectives (Art 16 Regulation 2020/852/EU), or so-called transitional activities, that contribute substantially to climate change mitigation (Art 10, para 2 Regulation 2020/852/EU). ¹⁸ Given the lasting nature of the environmental objectives, such financing may occur either in a direct form and relate to fixed tangible or fixed intangible assets, current or operational capital and operating expenditure, assets and expenditure of households, which also have a positive and lasting impact on the environment, either indirectly through subsequent financial assets, or allocated to economic activities that meet the Taxonomy requirements (Recital 12 Regulation 2023/2631/EU).

From the above considerations, it follows that the remuneration in green bonds is similar to that in conventional bonds, while the title is changed and the possible contractual provision of a revenue below the thresholds applied on the market is justified. Alongside them, there are forms of financing in which the socio-ecological utility affects more deeply the legal relationship, altering the synallagma of the financing contracts. The European Green Bond Regulation itself leaves a wide margin of autonomy to private initiative and provides for 'sustainability-linked bonds' 'whose financial or structural characteristics vary depending on the predefined achievement bv the issuer of environmental sustainability objectives' (Art 2, no 6 Regulation 2023/2631/EU).

These financial instruments may, in fact, be characterized by the condition of the reimbursement of the capital and the payment of interest to achieve a predetermined environmental and potentially social result, presenting elements common to both bonds and

¹⁶ Recital 14 of European Parliament and Council Regulation 2023/2631/EU.

¹⁷ European Parliament and Council Regulation 2020/852/EU of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088.

¹⁸ Art 5 of European Parliament and Council Regulation 2023/2631/EU provides for a margin of flexibility of 15% of the proceeds of green bonds with regard to activities that comply with the taxonomy requirements with the exception of the technical screening criteria or those in the context of international support which, however, contribute to the objectives set out in Regulation 2020/852/EU.

shares.¹⁹ For this reason, dividends are defined as 'mixed' because they include a financial return and a social return, the latter resulting from economic activity and on which the first depends.²⁰ In particular, the investor bears the risk of non-performance, in terms of the loss of the sums invested and/or the interest accrued on the basis of the adequacy and effectiveness of the environmental sustainability policies predetermined in the negotiating rules and adopted in the exercise of economic activity.

II. Green Finance: Teleological Evaluation of the Pecuniary Obligatory Relationship and Indexed Investor Remuneration

The introduction of these particular financial instruments leads to some reflections on the renewed functions of the very notion of pecuniary obligations in the face of the changed legal context and, in particular, the different assessment of investor remuneration, intended to affect the relative negotiating operations.

A teleological evaluation of the obligatory relationship,²¹ focused on its practical functions,²² precludes a generic homologation of pecuniary obligations. The latter, in fact, imply different functions and interests.²³ The balance between the interests involved in the specific case varies according to their patrimonial or existential nature or the coexistence of both, that is, according to their homogeneity or heterogeneity. The first hypothesis determines the prevalence of the interest most deserving of protection in that given situation, while the second determines the primacy of existential

- ¹⁹ With reference to Social Impact Bonds, it has been pointed out that the bond represents the link between the investment made and the generation of a social impact, regardless of the nature of the capital invested (debt, risk or hybrid). G. Pasi, 'Credito e innovazione sociale: l'avvento di nuovi schemi negoziali nell'amministrazione delle carceri. La direzione suggerita dai Social Impact Bond' *Rassegna economica*, 1, 207, 209 (2015).
- ²⁰ A. Del Giudice, *I Social Impact Bond* (Milano: FrancoAngeli, 2015), 12; C. Mignone, 'Terzo settore e strumenti finanziari ad impatto sociale' *Giustiziacivile.com*, 2, 9 (2014).
- ²¹ It is understood as a relationship between complex subjective situations. Its content varies, on the one hand, according to the concrete interests and, on the other, according to the values and fundamental principles of the legal system in a given social context. P. Perlingieri, *Le obbligazioni: tra vecchi e nuovi dogmi* (Napoli: Edizioni Scientifiche Italiane, 1990), 31-32.
- ²² P. Perlingieri, *Il diritto civile nella legalità costituzionale secondo il sistema italocomunitario delle fonti* (Napoli: Edizioni Scientifiche Italiane, 3rd ed, 2006), 694.
- ²³ A. Malomo, *Risarcimento da inadempimento da obbligazione pecuniaria* (Napoli-Camerino: Edizioni Scientifiche Italiane, 2012), 84.

interests over economic ones as functional to the realization of the primary value of the human personality.

Depending on the reason for the exchange of performances of the obligatory relationship, the value of the pecuniary performance varies. The latter relates to a sum of money and, therefore, its value depends on fluctuations in the purchasing power of the currency over the course of time. For this purpose, the unit of measure of the money value acts as a criterion of determination of the object, the rectius of the quantity of the performance. This unit of measurement can be legal, if established by law (nominal principle), or real, if related to a certain good, such as the metal coin itself (metal value principle).²⁴ However, these are not mandatory principles²⁵ whereby the choice between the establishment of a currency or a value debt²⁶ arises from the function of the same obligatory relationship.²⁷ If, with the application of the metal value principle, the relevant value is fixed at the time of the establishment of the legal relationship, the option for the other principle shifts the determination of that value to the stage of its execution: in the first case, the risk of revaluation is borne by the debtor and the risk of devaluation is borne by the creditor; in the second case, the risks are reversed. 28 It follows that, by virtue of the constitutional choice of the primacy of the person over the stability of the markets, the balancing of the interests involved in the specific relationship may justify differentiated solutions (of currency or value) on the basis of their axiological relevance and, therefore, on their greater convenience for the creditor or debtor.29

²⁴ The inadequacy of the nominal principle and the appreciation of value in the pecuniary obligation emerge from the words of M. Semeraro, *Pagamento e forme di circolazione della moneta* (Napoli-Camerino: Edizioni Scientifiche Italiane, 2008), 116-117.

²⁵ Pursuant to E. Caterini, *Le obbligazioni pecuniarie nell'ordinamento italoeuropeo* (Napoli: Edizioni Scientifiche Italiane, 2022), 7-10, 27-28, 39-40, the principle of nominal value is an expression of the principle of legality according to which the law determines the unit of measurement of value and attributes the fulfilment effect to the currency whose foundation is not, however, found in the Constitution. This would be a so-called technical principle, aimed at achieving the right distribution of risks arising from fluctuations in the financial markets. In the author's opinion, the absence of a constitutional provision on the subject does not imply the constitutional irrelevance of currency but highlights its different axiological character according to the functions it realizes in the concrete pecuniary obligation.

²⁶ Šee F. Mastropaolo, 'Obbligazione. Obbligazioni pecuniarie' *Enciclopedia giuridica* (Roma: Treccani, 1990), XXI, 10.

²⁷ P. Perlingieri, *Le obbligazioni*, n 21 above, 39-40.

²⁸ E. Caterini, *Le obbligazioni pecuniarie*, n 25 above, 6-7.

²⁹ ibid 29-30.

With regard to the financial instruments in question, whereas green bonds borrow their structure and operation from traditional forms of investment, the functional peculiarity may justify the incorporation of particular financial characteristics affecting the obligatory legal relationship. The pursuit of general interests that go beyond the individual-speculative investor, such as, for example, the protection and restoration of biodiversity and ecosystems through the adoption of sustainable agricultural practices, inevitably affects the content of the pecuniary performance and, specifically, its value. In these hypotheses, the measurement of the value can be associated to an external parameter, like the achievement of a predetermined socio-environmental objective shared in the medium to long term: the investor's remuneration is determined on the basis of the produced positive impact compared to that planned over a specific period of time. In this way, a currency debt is converted into a value debt30 in which the determination of the content of the performance³¹ is often referred to as the fair appreciation of a third party³² in relation to the assessment of the impact achieved by means of quantum-qualitative criteria (Art 1349 of the Italian Civil Code).33

³⁰ In accordance with the Corte di Cassazione-Sezioni unite 23 February 2023 no 5657, the financing whose amount is related to an exchange ratio is a value debt, and the relevant value-clause establishes the criterion for measuring the debtor's obligation. See, I. Martone, 'La clausola di doppia indicizzazione al vaglio della meritevolezza nel composito mosaico della finanza derivata' *Rassegna di diritto civile*, 4, 1500-1540 (2023).

³¹ Following F. Pistelli, *L'indicizzazione del regolamento contrattuale* (Napoli: Editoriale Scientifica, 2023), 184, the index represents the object that becomes part of the content of the contract through indexing. The indexation clause becomes a source of determination of the content of the contract through a process consisting of two phases: in the first, the parties establish the basis for defining the determining instrument, describing the economic dimension relevant to the contract through the index (descriptive dimension); in the second, the tool is implemented, regulating the ways in which the external reality described by the index influences the determination of contractual performance (dispositive dimension).

³² In negotiating operations such as Social Impact Bonds, this assessment is attributed to a neutral evaluator, a third and independent body whose task is to measure the outcomes achieved with the relative social impact and to determine the consequent return of investors. See C. Napolitano, 'Il social impact bond: uno strumento innovativo alla ricerca del suo diritto', in M. Francesca and C. Mignone eds, *Finanza di impatto sociale, Strumenti, interessi, scenari attuativi, Atti del convegno, Lecce, 17-19 maggio 2018* (Napoli: Edizioni Scientifiche Italiane, 2020).

³³ F. Criscuolo, *Arbitrato e determinazione dell'oggetto del contratto* (Napoli-Camerino: Edizioni Scientifiche Italiane, 1995), specifically 165-209, according to the author, within the scope of the definition of the object by the third party with fair appreciation talks about negotiation *per relationem* in which the case and the effects are imputable to the parts of the negotiating tool. In the latter, they have intended to devolve the specification of the object to the third party, according to the margins of discretion devolved by the parties to the same and defined by the agreement through which the role has been assigned.

The exception to currency stability is based on the high axiological character of the relationship aimed at achieving existential interests not limited to the creditor-saver but extendable to the person himself, in his relational and diachronic dimension.

These particular financial instruments could be considered a form of indexation of the obligation.34 The latter involves the identification of the remuneration according to pre-established socio-environmental objectives, in turn linked to the performance and management of the financed economic activity. The same Art 2411, para 2 of the Italian Civil Code provides for the possibility of relating the timing and entity of the payment of interests to objective factors, also related to the economic performance of the company. In this case, however, it is important to focus on the non-economic results of the activity that depend on the adequacy of the organizational structure of the production cycle.35

III. The 'Anallagmatic' Nature of the Green Financing Contract and the Purpose of Distributive Justice

Both the clauses of indexation of the relationship and the fixing of the interest rate below the market rate have a structural and

34 Indexing is an 'open structure' mechanism that is applicable to a potentially indefinite number of figures, provided that they are united by an element: the determination of the nominal value of an obligation by means of a predetermined parameter. The indexation clause is, therefore, multifunctional in that, behind the typical structure of variability, it is capable of implementing different purposes, including the allocation of resources to certain objectives or an incentive to achieve predetermined results. F. Pistelli, L'indicizzazione del regolamento contrattuale, n 31 above, 13, 144, 166 ('(l)'indicizzazione costituisce un meccanismo trasversale a un numero potenzialmente indefinito di figure (c.d. a struttura aperta), accomunate da un elemento: la determinazione del valore nominale di una obbligazione per mezzo del riferimento a un parametro prestabilito'. Si evidenzia, inoltre, 'la polifunzionalità della clausola di indicizzazione la quale, dietro alla struttura tipica della variabilità, è in grado di asseverare a scopi differenti' fra cui 'l'allocazione di risorse verso determinati obiettivi o incentivo al raggiungimento di prefissati risultati').

35 In this respect, it has been noted that qualitative indices are increasingly widespread. This practice stems from the progressive development of instruments for measuring macroeconomic variables that do not merely take into account the development of the 'dimensional' parameters of economic growth, such as price fluctuation, but also those of the 'direction' of growth, ibid 163 ('sempre più diffusi sono gli indici di natura qualitativa. Questa prassi nasce dal progressivo sviluppo e affinamento di strumenti volti alla misurazione delle variabili macroeconomiche che non si limitino a dar conto dell'andamento dei soli parametri "dimensionali" della crescita economica – come, per esempio, l'oscillazione di un prezzo –, ma anche di quelli

della "direzione" della crescita').

functional impact on the contract which they access, and, therefore, on the *synallagma* and on the *causa*³⁶ of the same.³⁷

Before going in-depth into the issue, some considerations should be made. The payment of interest is a civil fruit that is the consideration for the enjoyment of a good and, in this case, for the utility derived from the use of money (Art 820, para 3 of the Italian Civil Code).³⁸ The functional versatility of the obligatory pecuniary relationship entails the variability of the synallagmatic potential of the same and, consequently, the entity and existence of the consideration based on the utility produced in the specific case.³⁹

The variability of the enjoyment consideration resulting from the provision of the Code, unlike the rigid declarations of automatic production of interest on liquid and receivable credits and the legal interest rate referred to in Arts 1282 and 1284 of the Italian Civil Code, corresponds more closely to the constitutional logic of protection of the currency according to the different utility deriving from the title of the pecuniary obligation.⁴⁰ It guarantees, in fact, a variable determination of the consideration in the light of balancing the interests and the values concretely involved, inspired by proportionality, adequacy and sustainability.⁴¹ In this way, the relevance of the existential functions allows the determination of a balance not exclusively based on economic equivalence and compliant with the utility of a non-patrimonial nature. This is bound inevitably to affect the synallagmaticity of the obligatory

³⁶ Causa means the 'summary of essential legal effects coloured by the concrete interests that the operation is intended to achieve', otherwise, the grounds constitute 'the concrete interests of one or both parties not inferred in the concrete regulation'. In this sense, see P. Perlingieri and A. Federico, in P. Perlingieri et al, *Manuale di diritto civile* (Napoli: Edizioni Scientifiche Italiane, 12th ed, 2024), 491-499.

³⁷ Interesting in this regard is Corte di Cassazione ordinanza 16 March 2022 no 8603, which refers to the Sezioni Unite the question of a financial leasing contract of property to be built with the insertion of a clause indexing the fees. The Court, in fact, notes the need to assess whether the provision of such a clause, beyond its classification as a derivative, affects the *causa* of the contract.

³⁸ M. Semeraro, *Pagamento*, n 24 above, 38-40.

³⁹ E. Caterini, *Le obbligazioni pecuniarie*, n 25 above, 21-22.

⁴⁰ Art 820, para 3 of the Italian Civil Code does not give the parties absolute discretion in determining the amount and nature of the consideration but differentiates according to the concrete functions of the obligatory relationship. The need for distributive justice implies the use of lower interest rates, the indexation of the obligation to environmental objectives, or the production of effects in favour of non-parties with a legally protected interest. In this sense, the overall remuneration could also be affected by the very significant regulatory, fiscal and monetary *derisking* interventions on the side of public institutions. D. Gabor, 'The (European) Derisking State' *Stato e mercato*, 1, 53-84 (2023).

⁴¹ ibid 22-24.

relationship, generating situations in which the consideration is commensurate to the enjoyment of the good according to Pareto efficiency,⁴² in which it is economically inferior to the same or in which it is even lacking.⁴³

This leads, therefore, to forms of remuneration for capital which are not merely based on proportionality, but rather on an assessment of adequacy in relation to the functions pursued by the obligatory relationship. The general nature of the underlying interests may, in fact, become a parameter of particular merit of the negotiating operation such as to affect the consideration of the relationship.44 In the present case, the fulfilment of the pecuniary obligation relating to the reimbursement of the sum invested and the payment of interest at a rate lower than the market rate and/or to the achievement of a specific environmental objective corresponds to the particular function of the social utility effectively pursued. As stated above, the constitutional protection of savings and credit is not indiscriminate and detached from the different functions performed, but varies according to the balance struck with other interests and values underlying the relationship, such ecologism.⁴⁵ It follows that the consideration for the enjoyment of a sum of money referred to in Art 820, para 3 of the Italian Civil Code and, therefore, the investor's remuneration, depends on the title of the obligatory relationship. The economic or existential nature of the function affects the content of the pecuniary performance so as to be capable of including non-pecuniary utilities in the strict sense, such as the conservation and improvement of natural resources, or of removing the reason of the consideration for the lack of a positive and lasting impact on the environment to which it was related. 46 In the latter case, the contract would be too uncertain and would discourage investment or encourage greenwashing operations behind which lie merely speculative intentions. For this reason, it is

⁴² 'Pareto Efficiency, a concept commonly used in economics, is an economic situation in which it is impossible to make one party better off without making another party worse off (...). Therefore, Pareto Efficiency indicates that resources can no longer be allocated in a way that makes one party better off without harming other parties. In Pareto Efficiency, resources are allocated in the most efficient way possible', available at https://corporatefinanceinstitute.com/resources/economics/pareto-efficiency/.

⁴³ This possibility is inferred from the same concept of 'sinallagma' whose etymology refers to ' $\dot{\alpha}\lambda\lambda\dot{\alpha}\sigma\sigma\omega$ '. The Greek term, in addition to indicating 'to give or receive something in return' also means 'to leave, to abandon', opening up to forms not necessarily equivalent to legal relations.

⁴⁴ E. Caterini, Le obbligazioni pecuniarie, n 25 above, 78-80.

⁴⁵ ibid 18-19.

⁴⁶ ibid 22-24.

necessary to provide for measures of social effectiveness and economic materiality to ensure savers benefits to compensate for the reduced economic attractiveness of the investment. It would be a utility also of a non-pecuniary nature that, pursuant to Art 820, para 3 of the Italian Civil Code, serves as consideration for the enjoyment of money, such as the provision of health services or social assistance. This leads to different risk-taking by the investor, not necessarily higher than that resulting from traditional financial instruments. In fact, it is guaranteed an advantage in the short term which is capable of being assessed economically and, therefore, of a patrimonial nature in the sense that is strictly understood and, at the same time, in the long term, a lower exposure to random events with a high probability of verification, such as climatic ones.⁴⁷

There is a different hypothesis of specific environmental impact measures, such as the production of renewable energy to which the reduction of carbon dioxide emissions is related. It is a risk mitigated and greatly reduced by the use of environmental impact assessment criteria which are not only qualitative but also quantitative and, therefore, more stable and easier to measure. ⁴⁸ For these reasons, it is a more guaranteed and long-term remuneration. ⁴⁹

It forms part of an exchange which is not merely based on the economic equivalence of performances but which is suitable for achieving an outcome beneficial to the investor in a socio-environmental and potentially economic way. This does not affect the patrimonial nature of the contract that exists even outside the market's commutative logic in the perspective of distributive

⁴⁷ Unregulated markets are, in fact, incomplete, as they are exposed to adverse risks, also climatic ones, which are not hedged. They are therefore always exposed to sunspot, that is, 'an extrinsic random variable (→), which is not connected to market fundamentals (such as the preferences and resources of agents or production technology), which nevertheless influences the behaviour of operators through their expectations (→ expectation) on the choices of everyone else'. 'Macchia solare' *Dizionario di Economia e Finanza* (Roma: Treccani, 2012), available at https://tinyurl.com/bdzbw29k. This leads to inefficient fluctuations in the economy. G. Giraud, *Transizione ecologica*. *La finanza a servizio della nuova frontiera dell'economia* (Verona: EMI, 2015), 74.

⁴⁸ As regards the difficult *ex ante* measurement of the social impact by investors and, consequently, the identification of adequate quantitative and qualitative parameters, see C. Mignone, 'Meritevolezza dell'iniziativa, monetizzazione del benessere e nuovi modelli di welfare sussidiario' *Rassegna di diritto civile*, I, 115, 123 (2017).

⁴⁹ According to G. Giraud, *Transizione ecologica*, n 47 above, 27, this would be a profitability of 3% over ten years. On the greater profitability of green financial instruments compared to traditional ones, see B. Hachenberg and D. Schiereck, 'Are Green Bonds Priced Differently from Conventional Bonds?' *Journal of Asset Management*, 19, 371-383 (2018).

justice.⁵⁰ The patrimonial interests underlying the negotiating operation can, in fact, realise as many benefits, not only individual but also and above all social ones, as are those expressed by constitutional legality.⁵¹ The compensatory nature of the performance stems from the homogeneity or heterogeneity of their functions.⁵² It follows that the conclusion of financing contracts, the *causa* of which is characterized by ecological objectives,⁵³ implements both patrimonial and existential interests to justify an exchange that is not synallagmatic but 'anallagmatic'.⁵⁴ The latter is aimed at implementing human dignity and substantial equality

⁵⁰ E. Caterini, Sostenibilità e ordinamento civile. Per una riproposizione della questione sociale (Napoli: Edizioni Scientifiche Italiane, 2018), 99.

⁵¹ '(I)l contratto perequativo dà effettività alla dignità della persona'. Tale contratto fondato sulla prestazione satisfattiva sine-allagmatica, (...) non presenta ragioni competitive mentre accentua la giustizia sociale sostenibile (...) Il contratto satisfattivo sine-allagmatico, pur se a contenuto patrimoniale, inaugura il gruppo dei contratti gratuiti tesi ad assicurare la dignità della persona, in quanto tali leciti e meritevoli (...) I contratti della comunità sociale hanno pur sempre un contenuto patrimoniale, possono essere di scambio ma non corrispettivi (...) È la categoria dei contratti del welfare society nei quali emerge il nesso tra la produzione e la persona', ibid 99-104 (the equalizing contract, based on sine-allagmatic satisfactory performance, implements the need of distributive justice and ensures the dignity of the person. Although it is not compensatory, it still has a patrimonial content and can be of exchange).

52 Interesting, in this regard, is the decision of the Corte di Cassazione 8 October 2018 no 24734, which qualifies the so-called 4You contract as not worthy of protection pursuant to Art 1322, para 2 of the Italian Civil Code, because it lies in contrast with the principles set out in Arts 47 and 38 of the Italian Constitution on the protection of savings and the incentive of forms of social welfare, including private ones. It is, in fact, a complex unilateral random negotiating operation characterized by an abnormal imbalance between the performances, since, while the bank acquires the immediate availability of the loan amount to be allocated to financial investment, without the constrains of the mandate, and profits from the restitutive interests, the subscriber of the contract will accrue only at the end of the contract the premium of his investment and only if it is active. In this case, the compensatory nature derives from the homogeneity of the interests underlying the transaction based on a commutative exchange and, consequently, implies an assessment of the economic equivalence of the benefits.

53 M. Pennasilico, 'Sviluppo sostenibile e "contratto ecologico": un altro modo di soddisfare i bisogni', in Id ed, *Contratto e ambiente. L'analisi "ecologica" del diritto contrattuale* (Napoli: Edizioni Scientifiche Italiane, 2016), 299, '(ne)l contratto ecologico (...) l'interesse ambientale penetra e colora la causa del contratto, enfatizzando tanto la convergenza degli interessi dei contraenti all'utilità ambientale, nonostante l'iniziale asimmetria informativa, quanto la doverosità dell'uso razionale delle risorse naturali a vantaggio anche delle generazioni future. Il principio dello sviluppo sostenibile costituisce, così, un parametro di meritevolezza dei contratti ecologici' (in the ecological contract the environmental interest connotes and conforms to the causa of the contract, promoting the purposes of environmental utility. It follows that the principle of sustainable development is a parameter of merit of ecological contracts).

⁵⁴ E. Caterini, 'Il contratto sinallagmatico e anallagmatico', forthcoming.

through performances that ensure access to essential goods and services and consequently, utility of general interest.⁵⁵

This does not preclude a judgment of merit of the concrete initiatives, as an assessment of the positive implementation of the fundamental values,⁵⁶ involving an evaluation not only in quantitative terms but also of the 'better qualitative satisfaction of the vital needs of the person'.⁵⁷ To this end, the judgment of sustainability becomes a parameter of merit of acts and relationships as functional to preserve the quality of life and the person in its continuity.⁵⁸ It serves as a general clause which, together with reasonableness and proportionality,⁵⁹ ensures existential needs in the social dimension⁶⁰ and, therefore, adapts or produces the concrete rule aimed at the best implementation of the fundamental principles.⁶¹

- ⁵⁵ F. Maisto, 'L'ingegnerizzazione finanziaria del contratto nell'economia globale: cartolarizzazione dei contratti derivati, cryptocurrencies e non-fungible tokens' *Il diritto degli affari*, 3, 204-220 (2023) who, in resuming the opinion of F. Galgano, 'Lex mercatoria, autonomia privata e disciplina del mercato', in M. Paradiso ed, *I mobili confini dell'autonomia privata* (Milano: Giuffrè, 2005), 677, confers to the contract the function of production, as well as of exchange, of financial utility. A reading of 'maximum implementation of the Constitution' would lead to link the exchange of the contractual relationship to social benefits, including ecological profiles.
- ⁵⁶ P. Perlingieri, "Controllo" e "conformazione" degli atti di autonomia negoziale' Rassegna di diritto civile, 1, 204, 213 (2017), according to which 'un'interpretazione costituzionale dell'art. 1322 c.c. e, in particolare, il principio di legalità impone di assegnare alla locuzione "nei limiti imposti dalla legge" un peculiare significato. La conformità al sistema non si esaurisce in un controllo meramente "negativo" (non contrarietà a norme imperative, ordine pubblico e buon costume), ma va individuata e verificata anche in relazione alle norme che impongono valori positivi (es. artt. 2, 3, cost.). Sí che il concreto atto sarà meritevole soltanto se attuativo dei valori fondanti il sistema' (according to a constitutional interpretation of Art 1322 of the Italian Civil Code, conformity to the legal system and, therefore, the merit of the act implies a control on the positive implementation of the fundamental values).
 - ⁵⁷ E. Caterini, Sostenibilità e ordinamento civile, n 50 above, 109.
- 58 On the assessment of sustainability as a qualitative parameter of merit of acts and relationships, '(i)l giudizio di sostenibilità rende meritevole ciò che preserva la persona e la comunità alla crescente autoconservazione. I parametri di misurazione della crescita o del benessere di un popolo mutano da esclusivamente quantitativi a qualiquantitativi [...] Aggettivare il contratto, la responsabilità, la proprietà e gli altri istituti del diritto civile europeo con la qualificazione "sostenibile" ha la funzione di introiettare la intergenerazionalità nel rapporto che scaturisce dai fatti giuridici su menzionati, in modo da considerarne come costante lo scopo sociale di essi', ibid 33-44, 86.
- ⁵⁹ Relating to the proportionality to be understood as a rule-principle and, therefore, not identifiable by the equivalence and/or appropriateness of the patrimonial attributions subject to the exchange but aimed at ensuring the congruity of the interests of the actual contractual agreement, see A. Federico, 'Equilibrio e contrattazione algoritmica' *Rassegna di diritto civile*, 2, 483, 491-493 (2021).
 - 60 E. Caterini, Sostenibilità e ordinamento civile, n 50 above, 148-149.
- ⁶¹ 'La sintassi delle regole prevede l'adattamento alla realtà anche con le clausole generali: tutto affinché il mondo resti com'è, i suoi assetti d'ordine proseguano, il sistema

The relevance of the numerous interests and values involved in practice, of an existential or patrimonial nature or of both, implies a balance based on their importance in accordance with the hierarchy of the Italian-European constitutional system. Sustainability, therefore, can affect both the fact, as its essential element, and the relationship, becoming a condition of effectiveness.

IV. Conclusions

In light of these considerations, it emerges how the evolving socio-economic scenario leads to the inclusion of ecological issues, as an implementation of the human personality, in the obligatory relationships conventionally characterized by speculative purposes, such as financial ones.

The functional peculiarities of the analysed financial instruments affect the value of pecuniary performances in terms of the negotiating provisions of a remuneration that is financially lower than the rates charged on the market or indexed to the achievement of pre-established thresholds of positive environmental impact. This results in the loss of the synallagmaticity of the contract-source, understood as measured exclusively with the parameters of the economic efficiency of the market, that is, with homogenous and quantitative parameters. It becomes the expression of an exchange based on the commutative logic no longer in its traditional sense but in the innovative one permeated by demands of social justice and, therefore, of equal distribution of goods and services for the satisfaction of the basic needs of the person. In accordance with a reading of 'maximum implementation of the Constitution'62 of Art

normativo li protegga, mantenendo l'aspettativa della stabilità dei comportamenti; la sintassi dei princípi non cerca la stabilità, ma la giustizia: è la funzione costituente, la trasformazione, l'innovazione e se necessario anche la rivoluzione rispetto alle regole. Le clausole generali non sovvertiranno mai il mondo, perché sono nate e pensate per confermarlo. Le regole disciplinano, i principi giudicano; le regole sono il primo tempo dell'ordine, i principi, il secondo, e fondamentale (234-235) (...) Le clausole generali escono rafforzate da questa revisione teorica (...) quando l'interpretazione sistematica individui nel caso (non l'esigenza di sovversione, ma) la necessità di adattamento riservato alla autonoma creazione sociale di significati regolativi, le clausole saranno applicate per effetto di una delegazione ricevuta dai principi' (245), P. Femia, 'Tre livelli di (in)distinzione tra principi e clausole generali', in G. Perlingieri and M. D'Ambrosio eds, Fonti, metodi e interpretazioni. Primo incontro di studi dell'Associazione dei dottorati di diritto privato, Napoli, 10-11 novembre 2016 (Napoli: Edizioni Scientifiche Italiane, 2017).

⁶² The expression of S. Pugliatti, 'La retribuzione sufficiente e le norme della Costituzione' *Rivista giuridica del lavoro*, I, 189-194 (1949-1950); Id, 'Ancora sulla minima retribuzione sufficiente ai lavoratori' *Rivista giuridica del lavoro*, II, 174-176

820, para 3 of the Italian Civil Code, this aim allows for the payment of an amount that is made up of benefits of a patrimonial nature, to be understood as inclusive of its qualitative meaning, and, therefore, according to the degree of intensity and 'proximity' to the personal value, the purposes of social utility or general interest.⁶³

In this regard, it can be considered a 'social' obligatory relationship which, in the light of objective and functional peculiarities, presupposes a relationship between complex legal situations whose imputed centre of interests⁶⁴ is by nature plurisubjective, exceeding the subjective sphere of the creditor or debtor. It is an obligatory relationship whose active and passive situations are subjectively spread to a distinct plurality of holders, direct beneficiaries of non-financial utilities produced by constitutionally valued activities.⁶⁵

(1951), limited to principles with a normative function with defined content, is to be understood according to a historical-evolutionary vision as including all the fundamental principles set out in the Constitution.

63 On the distinction between social utility and general interest, see E. Caterini, 'Iniziativa economica privata e "crisi ecologica", n 8 above, 309-310, in which '(l)'utilità sociale persegue più equi rapporti sociali, l'interesse generale la dignità dell'uomo. L'ecologismo si avvale ora dell'una ora dell'altra, a seconda se investe la modalità della razionalità ecologica, ovvero, attenta alla persona nella sua essenza esistenziale. Nel primo caso è in questione il livello e il miglioramento della tutela ambientale; nel secondo caso la sicurezza ambientale' (the social utility pursues the equity of social relationships while the general interest implements the dignity of the person. Ecology achieves one or the other function depending on whether the aims are to improve environmental protection or ensure environmental safety).

⁶⁴ The subject is the centre of imputations of interests and subjective situations. It is not an essential element of the subjective situation since there are interests protected by the legal system even without a current holder. It is, however, essential to the ownership of the subjective situation, understood as a link between the subject and the subjective situation (P. Perlingieri, *Il diritto civile nella legalità costituzionale secondo il sistema italo-europeo delle fonti. Metodi e tecniche* (Napoli: Edizioni Scientifiche Italiane, 4th ed, 2020), I, 257-259).

 65 For an in-depth discussion of the topic, please refer to a subsequent work in progress.