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# LAW AND ECONOMICS YEARLY REVIEW

ISSUES ON FINANCIAL MARKET REGULATION, BUSINESS DEVELOPMENT AND GOVERNMENT'S POLICIES ON GLOBALIZATION

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The "Law and Economics Yearly Review" is an academic journal to promote a legal and economic debate. It is published twice annually (Part I and Part II), by the Fondazione Gerardo Capriglione Onlus (an organization aimed to promote and develop the research activity on financial regulation) in association with Queen Mary University of London. The journal faces questions about development issues and other several matters related to the international context, originated by globalization. Delays in political actions, limits of certain Government's policies, business development constraints and the "sovereign debt crisis" are some aims of our studies. The global financial and economic crisis is analysed in its controversial perspectives; the same approach qualifies the research of possible remedies to override this period of progressive capitalism's turbulences and to promote a sustainable retrieval.

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# THE FINANCIAL SYSTEM TOWARDS A SUSTAINABLE TRANSITION

Francesco Capriglione *

ABSTRACT: *The pandemic crisis together with the financial crisis of the recent decades showed the need of a transition towards a new era. The Covid-19 has played the role of catalyst in the identification of socio-economic strategies suitable to preserve forms of 'sustainable development'. Therefore, there is need to respect, on the one side the ecosystem, on the other the dignity of person, whose fundamental rights have to be subjected to the evaluation of sustainability in the overall framework of available resources. In this context, the term finance assumes a specific meaning to reduce social imbalances and to restore the employment. As a result, it presents a close relationship with politics, so the perspective of a "commutative justice" that equally involves everyone to the benefits stemming from economics. The transition is founded on two pillars: a reforming eurocentric vision and the technological development which, through the digitalisation, fills the information asymmetries and avoids new risks to consumers. Indeed, the challenge of innovation needs a strong intervention of politics both from the European Union and Member States that are interested to ensure the fundamental rights and to address the social problems. Therefore, it is evident that Italy will face most of these difficulties because of its political instability that could impede the completion of reforms which is the condition for the achievement of Recovery Fund.*

SUMMARY: : Introduction: the post-pandemic scenario - 2. Values essence of finance related to a 'new projectuality'. - 3. The transition of the EU towards a «community entity»: suspension of the 'stability pact' and the Recovery Fund. – 4. The impact of digital technology on market order and the prospects for open finance. – 5. Challenges and conditionality of the policy... – 6. *Continued*:

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the paradigm of a new relationship between politics and technology. – 7. The Italian case: a complex political framework. - 8. *Continued*: the National Recovery and Resilience Plan, a necessary reform that is difficult to implement.

1. The analysis of the evolutionary process of the national and European order to cope with the pandemic crisis and the repercussions at system level in the new times is at the heart of the research, involving a wide field of investigation that ranges from the examination of the interventionist methods adopted by the EU leaders to the digital market. The studies on the financial sector are now dedicated, as a priority, to the evaluation of the use in the banking and insurance sector of the particular instruments developed by technology. The prospect of an indispensable recourse *in subiecta materia* to the digital, to the artificial intelligence, to the smart contracts induces to examine the change of this sector of the economy: this seems, in fact, started to a mutation that, besides innovating the operative techniques, affects the relative business and, therefore, the same possibilities of development in the future.

The pandemic crisis, together with the financial crisis of the first decade of the present millennium, highlight the obsolescence of a substantial part of the sector's regulations; therefore, reflection must be directed towards a critical examination of the most appropriate direction for responding to the generalised need for a *transition* to the new.

This once again gives particular vitality to the debate between *norm* and *fact*, which has become topical in reference to the peculiar relationship between law and technique. This is identified, in the first place, in the tendency to greening examined in its various forms (greening competition law, greening financial services, etc.); this is followed by the affirmation of a financial *action* often detached from the legal order and entrusted to the action of «platforms» which escape the controls of the competent authorities. One often has the impression that the exercise of an activity which requires appropriate forms of protection to safeguard savers/investors is being transferred to a 'no man's land'.



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From another point of view, it should be borne in mind that the recent health and economic emergency ascribes to the pandemic event a catalysing function in the identification of socio-economic strategies suitable for preserving forms of 'sustainable development'. In fact, the need to respect, on the one hand, the ecosystem and, on the other, the dignity of the person is taken into consideration, whose incompressible rights must always and in any case be subjected to a check on *sustainability* in the overall context of available resources.

The result is the search for an innovative paradigm of political organization, such as to enliven the relationships within civil society and, therefore, able to give new life to the *democratic process*. It is understood that the latter, in a climate of cultural rebirth, will be able to draw from the sad experience we are currently experiencing the synthesis of instrumental and cognitive elements to start a recovery able to combine efficiency, equity and sustainability. Hence the favourable expectation of a change in political *action*, responding to the need felt by many to refound its essence on values different from those that until now have fed a dangerous delirium of omnipotence and exclusivity; the latter being a primary factor in the territorial, structural and climatic changes that, as demonstrated by the recent pandemic, negatively affect the balance of the earth.

2. At present, we are witnessing an incisive integration of the teleological structure that characterizes the function of finance with respect to its original formulation, which was described in a merely technical context. It shows, in fact, a growing correlation with the improvement of the conditions of development - and, therefore, of life - of civil society, so that, although the operational logic underlying the activity that characterizes the essence is always oriented to the growth of the production system, it can now recognize an interaction on the social able to reflect on its role.

Finance is, in fact, at the centre of the new economic and political context that is being determined: it identifies the pivot of a construction that, to a decid-



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edly greater extent than in the past, entrusts the possibility of recovery from the crisis to correct methods of use and negotiation of the relative flows. This gives it a valence, which in some ways we could define as value-based, given the ethical dimension that can be recognised, especially with regard to the action to be carried out to protect future generations in the allocation of funds donated by Europe through the *Recovery Fund*[1]. Indeed, at a time in history such as the present, finance has a correlation (of a magnitude never seen in the past) with the primary objective of reducing the social imbalances of the Member States and, in particular, of our country, in which the pandemic, aided by the lack of adequate social safety nets, has exacerbated inequalities, creating new poverty.

Consequently, unlike what I had the opportunity to observe after the crisis of 2007 and following years, an investigation on the financial system goes beyond the analysis of the impact on the credit system of the specific regulation adopted in the EU, a theme that has traditionally given content to a significant part of the studies of *law and economics*[2]. Although there is still interest in the issues concerning the profiles that qualify the activity carried out by banking and insurance companies (as well as by some particular types of funds and alternative forms of collective management of savings), today, talking about *finance* means to be able to analyse the impact of the regulation adopted by the EU on the credit system. It is essential to focus on government programmes aimed at levelling out social differences, which have been exacerbated by the pandemic. Hence the need to pay attention not only to the regulatory evolution that has marked the interventions

[1] This refers to the agreement reached at the European Council of 23 April 2020 on the establishment of the so-called *Recovery Fund,* whose activity should be linked to the EU budget for the next seven years. The Commission's proposal presented at the end of May 2020 to the European Parliament for the creation of an instrument called the *Next Generation EU* has been enthusiastically welcomed by many European countries; the provision to set up a fund of 750 billion to be allocated to transfers and loans to Member States (respectively 500 and 250 billion) was, in fact, considered suitable to "strengthen cooperation in the health field" as well as to give a common response to the crisis, cf. in this regard BANCA D'ITALIA, *Report for the year 2019*, *Final considerations*, p. 17 of the drafts, where it is stressed that «this is an important opportunity to prepare a common response that, like monetary measures, is proportionate to the severity of the crisis».

[2] Cf. CAPRIGLIONE, *Nuova finanza e sistema italiano*, Milan, 2017, p. XIII.



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of national and EU legislators following the last crisis, but also to the specificity of the technical forms that, in the disciplinary intentions, are preordained to the 'employment recovery' especially of young people, in view of a fair balance of interests between present and future generations.

The emergence of a closer link between politics and finance is evident: the former indicates the goals to be pursued with a view to a rebirth that by now contradicts the generalised expectations of the population and, therefore, defines spending plans to be able to give them concrete implementation. The second, while maintaining an instrumental character in the outlined whole, sees its function exalted, now more than in the past urged by the «realization of a *commutative justice* that makes all those who (albeit to a different extent and for different reasons) intervene ... (in the relative) ... (processes) equally share in the benefits brought by the economy», as I had the opportunity to point out some decades ago[3].

The interactions and the possible lines of development of an *agere oeconomicus* marked by principles of ethicality also re-emerge; the need for it is felt as the binomial «finance/production» no longer appears sufficient to give a complete reading of the dynamic process based on technological innovation that confers a new vectorality to the search for valid models for living together. As has been authoritatively underlined in doctrine, it is necessary to «continually reinvent the chains of value»[4]!

From another point of view, the reality we are observing leads us to review whether it is still possible to think about the realisation of a «liberal democracy». For some time I have been aware of the dangers of a *drift of* the latter, in reference to the growing number of those who are forced to live below an ordinary level of well-being. Significant in this regard is the circumstance that the entrepre-

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[3] Cf. CAPRIGLIONE, *Il rapporto tra 'etica e mercato' alla luce dell'insegnamento di Papa Giovanni Paolo II,* in AA.VV., *Giovanni Paolo II. Le vie della giustizia. Itinerari per il terzo millennio*, edited by Loiodice and Vari, Rome, 2003, p. 678.

[4] Cf. MASERA R., *L'impresa e la creazione di valore*, in AA.VV., *Finanza impresa e nuovo umanesimo*, edited by Capriglione, Bari, 2007, p. 67.



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neurial formula - considered in its essence of a peculiar moment of synthesis between 'activity and organization', according to the indications of classical legal doctrine[5] - has been bent, over time, to «utilitarian interpretations, in which little or no space is given to the design of an enterprise qualified by a specific value essence», as I have had the opportunity to point out on another occasion[6].

On the contrary, the new constituted order (economic and juridical) that arises from the pandemic event looks at a *planning* that aims at abandoning logics instrumental to the realization of profit, practiced until today, in order to be finalized to the growth and welfare of future generations. This implies, on the one hand, the abandonment of *nihilism,* underlying a technological innovation that proposes as an end the mere support of entrepreneurial development (to use an expression of Giancarlo Montedoro), for another presupposes an *action* characterized by the consistency that must exist between the *ends* and *means of* the correct action to be put in place.

The aim of avoiding degenerative distortions in the use of available financial resources is thus given concrete form; it is realised that the latter must be oriented towards overcoming situations that deny respect for the dignity of those engaged in low-paid work, without enjoying adequate levels of protection.

3. The transition to the new is centred on two pillars: a different Eurocentric vision from the one known up to now and a reform hypothesis destined to change both the finalistic orientation and the technical forms with which the objectives indicated in the new systemic planning are pursued. An openness to *solidarity* identifies the *leitmotif* guiding the transition to a relational model in which the logic of illiberal individualism should give way to an attainment of the rigid application of the categories of economic science and technology (such as interest, profit, etc.).

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[5] Cf. the classic essay by OPPO, *Realtà giuridica globale dell'impresa nell'ordinamento italiano,* in *Riv. dir. civ.*, 1976, I, p. 591 ff.
[6] Cf. CAPRIGLIONE, Introduction to AA.VV., *Finanza impresa e nuovo umanesimo,* cit., p. 19.



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The first pillar is characterised by a significant impulse towards cohesion in the European sphere, as can be seen in the adoption of particular strategic guidelines by the top institutions of the Union. In fact, the search for a single path to resolve the critical issues arising from the pandemic crisis has been pursued, so as to achieve, for the first time since the origins of the Community, results that mark a sharing of objectives and a rapprochement of ideologies, which are very promising with regard to the possible future creation of a federal state.

Overcoming the lack of specific financial rules in European legislation aimed at counteracting the inconveniences (*i.e.*: economic difficulties) caused by disasters (which can affect the entire EU area), the so-called stability pact was initially suspended[7] and the initiation by the ECB of a series of measures to revive the European economy[8]. The strict regime that had until then been imposed on the Member States, which were required to comply with very invasive disciplinary criteria, was therefore interrupted; the aversion with which some EU countries (first and foremost Germany, Finland, the Netherlands and Austria) had always viewed the possibility of achieving a mutualisation of risks was also overcome[9].

The adoption of the Recovery Fund, introducing measures to support the countries in crisis from a financial point of view, represents a turning point in the relations between the Member States, as previously mentioned. In the face of the massive fall in GDP of the main European economies, all EU countries were clearly aware of the need to adopt a solution that would protect them from the pandemic emergency by implementing a recovery of the development conditions that had

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[7] Cf. the editorial entitled *Lagarde (ECB): «The Stability Pact must be revised before it comes back into force»*

[8] This refers, in particular, to the increase in *Quantitative Easing* in anticipation of a massive programme of long-term loans, the so-called TLTRO III. This programme is completed by the planned purchase of assets for an additional amount of 120 billion euro until the end of 2020, while no changes are made to interest rates. See https://www.soldionline.it/notizie/economia-politica/diretta-bce-12-marzo-2020

[9] Cf. *ex multis* the editorial entitled *Merkel: "Ready for more EU contributions in a spirit of solidarity against the pandemic*", available at https://www.repubblica.it/esteri/2020/04/23/news/angela_merkel_l_ue_non_e_niente_senza_la_solidarieta_-254766986/ in which the Chancellor is quoted as saying that debt mutualisation would require "treaty changes", which takes time and the involvement of parliaments.



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been lost in the meantime. Hence the need for a full sharing of the programme set up for this purpose, achieved in an agreement of July 2020, which was immediately blocked by the vetoes of Hungary and Poland; vetoes that were only removed in the following month of December, thanks to a compromise found by the Council[10].

Underneath the objective of stemming the devastating criticalities of Covid-19, there was undoubtedly a clear reference to the implementation of process and product innovations that would guarantee the well-being of citizens, in terms of improving living conditions. The strategy that governs the feasibility of this Fund - in making clear the intention to overcome the conditionalities that in the past had prevented the creation of Eurobonds - has assumed the issuance of financial instruments, guaranteed by the EU budget, which - while involving a sharing of risk - do not implement a mutualisation of past debt (since the financing of the Fund through the collection of liquidity achieved with the issuance of Recovery Bonds).

We are in the presence, therefore, of a mechanism preordained to the recovery of the EU countries - especially those most affected by the pandemic - operating with financial means collected through common European bonds. The result is a strengthening of the Union as a «community entity» (to use an expression of the *former* Prime Minister Giuseppe Conte) in which the manifest opposition of the nominated countries of the eastern area and the resistance of others (in particular, Austria and Holland), unwilling to accept any form of debt sharing, is at least resized. Moreover, it is significant that, in order to achieve the financial resources allocated to the various countries, the individual governments of the latter will have to draw up detailed national spending plans and plan appropriate reforms of their legal system, guaranteeing the effective achievement of the objectives they have set themselves.

The peculiarity of the agreement, which was reached with difficulty by the

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[10] Cf. the editorial entitled *Blackmail by Hungary and Poland on Budget and Recovery Fund,* available at https://www.affarinternazionali.it/2020/11/il-ricatto-di-ungheria-e-polonia-sul-recovery-fund/ which states that Orbán and Morawiecki threatened to block the completion of approval procedures for both the Recovery Fund and the €1.074 billion seven-year budget.



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EU countries[11], lies in the fact that for the first time the latter were allowed to obtain a large amount of resources (some of which were non-repayable) to be managed directly. On the other hand, the commitment they have undertaken (to achieve the objectives to which the acquisition of the instalments granted by the Fund is subordinate) becomes a pre-condition for a political action in which 'economic prosperity' (of the domestic community of reference) shows a specific link with the financial intervention of the Union.

Hence the obvious interaction between the *recovery* of national realities (which is being carried out in this way) and the saving role of Europe, whose action must, in my opinion, be considered fundamental in order to correctly identify the nature of the new type of relationship established between the action of the Union and the economic integrity of the countries receiving funds. In view of the serious difficulties currently facing many Member States (whose debt public has expanded in ways that threaten the well-being of future generations), there is no doubt that the function of the Recovery Fund goes beyond the realm of a mere subsidy to be counted among the factors that allow the continued existence of national structures.

4. As I pointed out in the previous paragraph, the second pillar that marks the change brought about by the recent pandemic event concerns the technical forms to be used to achieve the objectives underlying the reform programme that the Union prefigures as essential for a lasting economic recovery. It identifies the necessary prerequisite for a possible innovation of the institutional structure (hopefully in a federative key) that in the not-too-distant future could be assumed by the EU.

This is a scenario that has long been the focus of attention of jurists interested in the analysis of the impact of cybernetics and digital technology on the

[11] Significant, in this regard, is the circumstance that the Union (in addition to renouncing the ambitious objective of the 'rule of law') has had to scale down investment programmes in some sectors in which it is traditionally interested (*i.e.* research and the green deal transition fund).



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performance of negotiation relationships, the horizon of which opens up to the use of innovative models of knowledge[12]. Indeed, past studies have also emphasised the intrinsic capacity of technology to govern reality; hence its impact on the legal order of the market through the modification of the structure of the ordinary *modus procedendi*, implemented with reference to the specificity of the virtual world.

Over the course of time, technological development and changing social dynamics have made clear the advantages of generalised use of the myriad of intangible information and data. The analysis has allowed to understand that these last ones, opportunely canalized in software systems of automated elaboration, are able to interact positively on the supply of services of various kinds and, in particular, of those practiced in the financial market. Hence the need to ascertain how the information processes are coordinated with the ordering principles of existing law and, therefore, their impact on the current paradigms of financial operations[13].

In this regard, we consider, on the one hand, the regulations contained in the special discipline concerning the ESG regulation (*i.e.* the *governance* of environmental and social protection) for a green, digital and resilient Europe, and, on the other hand, the interpretative dimension of the relationships on which the interactive processes interact, giving rise to what, already in the last century, a distinguished jurist defined as the "dehumanisation of the contract"[14]. This opens a wide perspective of investigation that ranges from the verification of possible improvements in investment choices, to the identification of the advantages brought by the new technologies in overcoming information asymmetries, as well as of the criticalities in safeguarding the interests of savers which, in some cases, are ascribable to the use of automated instruments.

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[12] See for all FROSINI, *Informatica, diritto e società*, Milano, 1988; ID., *Il giurista e le tecnologie dell'informazione*, Roma, 1998.

[13] See PELLEGRINI, *Il diritto cybernetico nei riflessi sulla materia bancaria e finanziaria,* in AA.VV. Liber amicorum Guido Alpa, edited by Capriglione, Milan, 2019, p. 351 ff.

[14] Cf. OPPO, *Disumanizzazione del contratto?*, in *Riv. Dir. Civ.*, 1998, I, 525 ff.



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In particular, there is the problem of developing a digital strategy aimed at the modernization of IT structures, a need felt both by those in the sector and by the supervisory authorities. Hence, the programming of processes and tools derived from the study of "prototypes, based on *text mining* techniques, for the analysis of documents sent by supervised subjects "[15]. This is a profound transformation, which imposes high costs on intermediaries who are forced to deal with the promoters of alternative trading platforms, which are responsible for transactions carried out in a context of such disintermediation of operations (often entrusted to algorithmic systems of the same type and automatic exchange)[16]. On the other hand, the authorities in the sector, in defence of the values of efficiency and democracy, are obliged to *continuously* update the perimeter of regulation in order to meet the new challenges, without disregarding the opportunities arising from sustainable finance.

The growing use of the digital channel induces, in perspective, the need to avoid savers/investors the possibility of incurring new risks due to the intensification of their participation in the activity of the digital market. Hence the need for a heterogeneous plurality of interventions aimed at preventing and, therefore, protecting the financial activity carried out in the same, while stimulating operators' confidence. To consider, this market, even if it registers an increase in production and consumption, "accentuates the difficulty of identifying regulatory techniques suitable to support the expansion of information technology", due to the application of sophisticated models, for which it is not exempt from hypothesizable imbalances caused, precisely, by the intensification of technological applications[17].

Recently, in a study elaborated with two acute economists, analysing the terms of the digital transformation of the banking sector, I had the opportunity to point out that the passage from the "analogical to the digital" is at the centre of

[15] Cf. BASKERVILLE - CAPRIGLIONE - CASALINO, *Impacts, challenges and trends of digital transformation in the banking sector"*, in *Law And Economics Yearly Review*, 2020, p. 341 ss.
[16] Cf. PAECH, *The Governance of Blockchain Financial Networks*, in 80(6) *Modern Law Review*, 2017, pp. 1073-1110
[17] In this sense see PELLEGRINI, op. ult. cit., p. 354.



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the present reality, allowing the streamlining of workflows that is achieved through the automation of activities[18]. In this regard, the prospect of an activity capable of generating profiled databases, intercepting potential customers and building the loyalty of those already acquired was recalled; hence the opportunities offered by an assessment of credit risk in *aggregate* form, which interacts positively with the truthfulness of the data meritability[19].

However, even in that forum, we had the opportunity to observe that, despite the efficiency of the sector, the emergence of digital technologies entails a change in mentality that leads banks to a critical review of their current organizational structure. Added to this is the commitment of credit institutions to avoid the dangerous competition that *FinTech* companies will be able to exercise in the future. These companies, as we know, are increasingly present in the markets, performing functions that involve credit activities, payment services and technologies to support banking and financial services, i.e. tasks that, until now, have typically been carried out by members of the sector[20]. Hence the inescapable need for banks to be able to cope with the entry of technological *start-ups* on the markets, which - making use of modern IT tools and the uncertainty of the regulatory framework of reference - could constitute a valid alternative to the same[21].

In this context, pressing questions arise that need to be answered quickly. With regard to the different macro-areas of digital technology (payments, financial planning, *crowdinvesting*, *trading*, *blockchain*, etc.), one has to ask, among other things, what will be the future landscape of digital payments? Will it be possible to identify and counteract typical cases of misuse? How can digital currencies be

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[18] Cf. BASKERVILLE - CAPRIGLIONE - CASALINO, *Impacts, Challenges and trends of DigitalTransformation in the Banking Sector,* in *Law and Economics Yearly Review,* 2020, p. 341 ss.

[19] CAPRIGLIONE - CASALINO, *Improving Corporate Governance and Managerial Skills in Banking Organizations*, on *International Journal of Advanced Corporate Learning (iJAC),* Austria, vol. 7, issue 4, pp. 17-27, 2014.

[20] Cf. TROIANO, *Fintech between innovation and regulation, report to the conference on "Fintech: first experiences and regulatory perspectives",* Rome, La Sapienza University, 4 December 2017.

[21] Cf. BANCA D'ITALIA, *Fintech In Italy*. Indagine conoscitiva sull'adozione delle innovazioni tecnologiche applicate ai servizi finanziari, December 2017



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used in the fight against illicit financing? Can the current architecture of financial regulation be deemed to facilitate digital innovation while meeting policy and regulatory objectives of the EU?

Certainly, an in-depth study of the contents of 'decentralized finance' - as an operational paradigm that refers to an ecosystem of financial applications developed on the basis of *blockchain networks*[22] - could be of help in clarifying the correct functioning of the *halting tracing* mechanisms. Similarly, the creation of an ecosystem of *open source* financial services, *permissionless* available to all and operating without any central authority, creates justified fears about the existence of adequate safeguards for users, who could maintain full control of their *assets*, connecting to this ecosystem through decentralized applications (d.app.) *peer-to-peer.* This situation appears even more complex when the offer to investors through *web* platforms has as its underlying currencies, stock market indices, commodities and, increasingly, *cryptocurrencies*[23].

The easy access to the type of financial services deployed on blockchain, given the interoperability of the related applications, makes it conceivable that a large market could be created. In this case, the presence of significantly new products together with the absence of intermediaries or brokers allows us to glimpse lines of development that cannot be calculated at present, also facilitated by the reduction of costs associated with the supply and use of related products, as well as by the automated solution of disputes.

The recording of data on the *blockchain* and its dissemination among thousands of "nodes" - hence the networking of data between financial and non-financial institutions, as well as the offer of new products within the traditional fi-

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[22] It should be noted that the European Commission with the *Digital Finance Package* has started a path for the regulation of *Crypto-assets*: this is an important signal for the markets supported by the workof the EBSI (*European Blockchain Service Infrastructure*).

[23] As pointed out in the Consob *Report* for 2020, "in the typical scheme, the saver is invited to provide his personal data and to pay sums of money (by means of bank transfers,credit cards, repaid cards) to open accounts for the *trading of* securities on the *online* platform indicated by the abusive operator. The client, lured by the prospect of easy gains against initial investments of modest entity, is then invited to pay ever greater sums of money and to operate on an account which promises consistent returns over time" (pg. 51).



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nancial system - make the censorship or potential suspension of this type of operation particularly complex. In short, we can say that we are in the presence of an *open finance,* an innovative formulation, independent from the current infrastructures, detached from the traditional mechanisms of production of profits after the intervention of intermediaries; factors that make its affirmation foreseeable also in places with low income communities.

That being said, the imposing set of rules issued (since 2010) by the EU to stabilize the market order seems destined to rapid obsolescence: plans, directives, and recommendations which, as an acute scholar points out, are not always the same, "they come to make up a *body of* law that could be represented as an inverted pyramid"[24].

5. The above considerations presuppose, upstream, decisive political action by the Union and the individual Member States, which is necessary to ensure recovery and foster social cohesion. There is no doubt, in fact, that the objectives correlated to the challenge of renewal highlight a twofold effort by the EU and its members, to be assessed as indispensable in order to identify measures capable of restarting a virtuous circle that can lead to an increase in growth processes and, therefore, the activation of an operational opening never before practiced. In addition, the need to review the terms of the 'relationship between technology and politics' emerges, to the definition of which the socio-economic balance of the EU is linked and, more generally, the achievement of an equal line of development of its members.

I have already had occasion to point out in the past how, after the identity crisis in some countries of the Union, resulting from the progressive despoliation of their so ciety, it has been possible to find a solution to this problem.

The need for the nation-state, nostalgically considered the best place (ex-

[24] Cf. ALPA, *Il mercato unico digitale* - The digital single market DSM, Debates, *Contratto e Impresa / Europa Journal*, 1/2021, p. 2.



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pressing *ethos* and *ethnos*) to guarantee rights and overcome social problems[25]. The finding of evident contradictions within the European regional context prevented at the time the activation of adequate propulsive thrusts (proper to politics) towards higher levels of cohesion between the different countries[26].

At present, the pandemic event has led, as previously attempted to highlight, to revise the traditional forms of investment in terms of sustainability, taking into account the new instruments with social or environmental impact. Today there is a unanimous conviction that we must aim at a sustainable recovery that can make use of the abundant financial resources, of a Euro-unitary matrix, placed in support of the recovery[27]. This is the challenge that European and national policies must face, the latter providing for a suitable planning based on adequate measurements of the plants (*rectius*: projects) to be built, of the instruments that can be used for this purpose (and, therefore, of the costs underlying both); while it will be up to the former to *continuously* monitor the effective allocation of the huge amount of financial resources to the strategic objectives indicated above, in view of the pursuit of positive social and environmental impacts.

With this in mind, it is possible to identify the paths that, at European and domestic level, should be followed by the Union and the countries that make it up respectively.

Starting from the behavioural line that, in the context outlined above, is imposed on European leaders, it should be noted that the latter must first of all in order to eliminate the significant gap between the Member States of the Union, a real climate of cohesion must be established which will enable a united change to be achieved. Indeed, in order to eliminate the significant gap that exists between the components of the Union, a climate of *real cohesion* must be established, which will make it possible to achieve a unified change. In fact, in this logic, it be-

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[25] Cf. CAPRIGLIONE, *Non-places. sovereignty, sovereignisms. Some considerations,* in *Riv. trim. dir. ec.,* 2018, p. 397.
[26] Cf. CAPRIGLIONE - SACCO GINEVRI, *Politica e Finanza nell'Unione Europea*, Padova, 2015,p. 142.
[27] Cf. United Nations Environmental Action Programme (UNEP-FI).



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comes possible to initiate, at a legal level, the changes that actually affect the current geopolitical situation of Europe, making convergence between the Member States a reality.

It is evident how the search for a *new* stability of the system, to be achieved in the twofold political and economic sphere, cannot disregard renewed strategic political lines. It seems inescapable, in fact, that in taking full advantage of the *opportunities* offered by the economy, action should be based on the affirmation of fundamental values such as solidarity, reasonableness and correctness of *action*. Faced with the bursting forth of a globalised economy that proposes itself, in a self-referential key, as a new paradigm for the regulation of coexistence, politics will have to overcome the ample perplexity that arises with regard to the need to seek appropriate systems of *checks and balances*, capable of ensuring the dialectic necessary for the joint advancement of democracy and the European model of "a highly competitive social market economy" (art. 3 TEU).

We identify the terms of the challenge that must be taken up by European political forces in order to deal with the government of complexity represented by technological transformations (*e.g.* digitalisation, automation, artificial intelligence, etc.) and institutional reforms (*e.g.* justice, tax, labour, etc.) destined to radically change the *choices* to be made in the medium/long term. It should be pointed out that only in this perspective of development is it possible to find the solution to the many problems that still hinder an adequate growth of some countries (including Italy), starting from youth unemployment (which, in all probability, will benefit from the opportunities of a new labour market).

In particular, the informatics 'revolution' is a key aspect of the desired metamorphosis that the Union is facing. As has been pointed out in the preceding pages, it is horizontally connected to the totality of the economic and social sectors, interacting on the structure of the markets and, therefore, on the entrepreneurial strategies, on the modalities and on the investment programmes.

Consequently, the very logic of competition itself seems destined to



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change, given the current and prospective changes brought about by the factors of demand; moreover, the latter radically affects the role of work in the function of production and, therefore, of the economic, social and political relations we have known so far. Perhaps the time has finally come to modify the current regulatory framework, which has proved to be inadequate in offering suitable solutions to reconcile the positive results of IT innovation with the need to evaluate and control its potential risks. It is not by chance that a distinguished scholar, Guido Alpa, in years gone by, sensing the innovative capacity of information technologies, hypothesized the need to create a 'new law' (*Cyber law*) able to cope with the change induced by this process[28].

There is no doubt, however, that in the absence of precise "operational guidelines", indicated by the EU regulator, it will be difficult for the individual member states - and, therefore, for both companies and investors - to measure and compare, on an objective basis, the financial and other factors to be taken as a reference parameter for the success of the initiatives to be undertaken. It follows that the focal point of the *project in* question will be the disciplinary panorama - adopted at supranational level (in view of the subsequent conformation of the domestic one)

- aimed at providing a wide range of technical possibilities for financial support for sustainable development.

Similarly, in order to prefigure the exercise of cohesive action on the part of the Union, a prerequisite for objectives that go well beyond the achievement of a financial rebalancing of the EU countries, it is desirable to make a U-turn with respect to the attitudes (*or rather*: behaviours) that, until recently, have led me to doubt the existence of a 'solidarity-based will' within the European regional context[29]. The possibility of building the 'common house' on new foundations is, in my

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[28] Cf. the the keynote address given at the conference entitled "*Cyberlaw. Problemi giuridici connessi allo sviluppo di Internet*", organized on July 9, 1998 by CNEL under the patronage of the Council of the Bar Association of Rome.

[29] Significant in this regard, is the position of Germany, where the Constitutional Court has for decades been critical of the possibility of the Union giving rise to an integration between the



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opinion, the most important opportunity to be seized following the pandemic crisis; this has taught us, in fact, that only from the union among peoples can the 'old neighbour' draw the strength to overcome the adversities of a varied nature that may arise over time. This is a warning whose importance becomes clear in all respects when it is referred to the need to identify in the *political conclusion of* the aggregation process (which began more than half a century ago) the most suitable way to deal with the difficulty of managing a significant role in the current geopolitical framework.

In this regard, it should be borne in mind that the objective pursued with the set of measures indicated above, as expressly stated by the Commission itself, is to ensure that the measures are consistent with the principles of subsidiarity and proportionality and is to build a "more ecological, digital and resilient Europe "[30]. This is a particularly ambitious programme, which entails a critical review of the results achieved with the *single currency*. Similarly, it seems to have become clear that the 'European Stability Mechanism' and the 'Fiscal Compact' have limitations that reflect negatively on the growth expectations of European countries,

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peoples of Europe; cf. the sentence of 12 October 1993 in which the limits of compatibility of the Monetary Union with the Fundamental Charter and with the basic principles of the national order were established; see the text in *Giur. cost*, 1994, p. 677 ss and, for critical evaluations, RESCIGNO G.U., *Il tribunale costituzionalefederale tedesco e i nodi costituzionali del processo di unificazione europea*, *ivi,* p. 3115 ss.; EVERLING, *Zur stellung der Mitgliedstaaten der Europaischen Union als "Herren der Vertrage*", in BEYRLING, BOTHE, HOFMANNE, PETERSMANN, *Rechts zwischen Umbruch und Bewahrung- Volkr-recht-Europarecht-Staatrecht. Festschrift fur R. Bernhardt, Berlin*, 1995, p. 1161 ff.; HERDEGEN, *Germany's Constitutional Court and Parliament: Factors of Uncertainty for the Monetary Union?* in *European Monetary Union Wtch,* XIX, 1996, p. 8 ff. This jurisprudential orientation has remained firm over time and, recently, has been reiterated in the decision of 5 May 2020 in which it is held that this Court is entrusted with the power to disregard any disciplinary innovation and activity implemented in the EU (including the work of the ECB) if it is not deemed to be in conformity with the ordering criteria (prohibitions, limitations, etc.) set forth in the fundamental law of Germany. For a commentary on this decision see LOMBARDO, *Quantitative Easing: the German Constitutional Court's ruling*, in dirittobancario.it of 6 May 2020; BASSAN, *Theprimacy of German law,* in *dirittobancario.it* of 7 May 2020.

[30] Cf. EU COMMISSION, A *Plan for Europe's Recovery*, available at *https:// ec.europa.eu/info/strategy/recovery-plan-europe_en#refuse,* which specifies the elements of the agreement signed by the Member States (equitable climate and digital transitions, a new health programme, modernisation of agricultural policies, the fight against climate change, protection of biodiversity and gender equality); these are the parameters for the new long-term budget, which will include enhanced flexibility mechanisms to ensure that unforeseen needs can be met.



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hence the need for these instruments to be suitably modified, giving them a structural character by submitting them to the democratic control of the EU Parliament. Basically, the reference to such important changes can be correctly linked to a reconsideration of the federative idea of the *founding countries of* the Community, which, as we know, aimed at the constitution of a United States of Europe[31].

On the other hand, at a domestic level in the EU countries it will be necessary to seek the recovery of adequate forms of financial balance, on which the presence of situations of political instability interacts negatively. Therefore, it is necessary to abandon *divisive* orientations that, on the one hand, fuel tensions and hinder the achievement of continuity in the implementation of projects for economic recovery, and on the other hand, reduce the activities carried out to the mere adoption of propaganda mechanisms of illusory and unrealistic promises aimed only at the development of the economy to the acquisition of consent.

6. In fact, the preparation of investment programmes for growth must be constructed in such a way as to respond to the problems raised by the absence of a 'healthy' financial market, i.e. one capable of fluidly transferring wealth to those activities which, in the real economy, satisfy the fundamental needs of individuals and the community. The need to interact with the financial and entrepreneurial paradigm that has been so far dominant, focused on profit maximization, seems increasingly pressing, so that the latter gives way to an action that integrates the strictly financial reporting with the openness to the recognition of value-based ob-

[31] See in this regard, the well-known text entitled the *Ventotene Manifesto,* drafted in August 1941, in the midst of the raging of the Second World War, by Altiero Spinelli, Ernesto Rossi and Eugenio Colorni, anti-fascists confined to a small island in the Mediterranean Sea. It is the bearer of the federative idea of a "free and united Europe", which wanted to overcome the ideological crisis inducedby the authoritarian dogmatism prevailing at the time.
The first edition of the *Manifesto,* published under the title *Per Un'Europa libera e unita. Progetto d' un manifesto, has been* lost; later in 1944 a new edition, edited by Colorni, was printed in Rome in a book entitled *Problemi della Federazione Europea*, with the addition of two other essays by Altiero Spinelli (*Gli Stati Uniti d'Europa e le varie tendenze politiche* and *Politica marxista e politica federalista*) written between 1942 and 1943.



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jectives, which can be traced back to the essence of political *accountability.*

The identification of valid organizational models and optimal dynamics (internal and external) of management and financing of projects activated by public, private or mixed entities, cannot disregard the evaluation of their social impact. In perspective, it is conceivable that the method of production must take into account the objectives oriented to the pursuit of collective welfare through the economic exploitation of natural resources (think of their use in an environmentally sustainable way) or through an appropriate enhancement of cultural heritage. It follows that the challenge of renewal requires a review of the terms of the 'relationship between technology and politics', the definition of which is indispensable in order to identify the appropriate measures to restart a *virtuous circuit* capable of determining an increase in the processes of development, favouring employment, equity and the affirmation of the typical logic of democratic pluralism.

However, if we focus on the assessment of the organisational model adopted by the Member States, we can see that there is a wide gap between the Member States of the European regional context. In particular, the last decade has seen a sort of disintegration of the previous relational consistency, implemented over many decades; hence a scenario characterised by activism and rigour (sometimes translating into a hegemonic tendency, sometimes into selfish pretensions) in some virulent states, matched by the shortcomings and delays in policy in others (in the Mediterranean area), with obvious negative effects on the possibility of an equal line of development in the EU.

Faced with challenges that cannot be tackled by the states individually (think, for example, of the fight against global pollution), the 'sharing of know-how' at European level represents, in my opinion, the only way for EU countries to preserve themselves in the post-pandemic era. This objective is, moreover, opposed by *populist* movements (of various political colours), which have arisen in the climate of generalised disillusionment that, in the last decade, has followed the intolerance towards the constraints imposed by the Union's *austerity* policies.



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Hence the inspiration of these movements to an anti-political logic and their tendency to channel 'social protest' into the rejection of the process of European integration; hence the birth of claims that show the clear intent of a reaffirmation of the "dogma of state sovereignty "[32].

It is clear, moreover, why, after an initial period of uncertainty about the direction to be taken, the Union now seems to be moving beyond the critical turning point, which - ever since the financial turbulence of 2007 and subsequent years - has interacted negatively with the process of integration among the Member States. In fact, the alternation between a line that professes the affirmation of a logic of cohesion and unity and the opposite tendency to downsize the goals indicated by the founding fathers (so as to redefine the scope as a "free trade area", a "customs union" and a "common market") seems destined to end.

It goes without saying that for a complete identification of the ordering principles on which to base the change in a democratic key, it will be necessary to overcome the logic that distinguishes populism in favour of innovative socio-economic models, contrary to any form of totalitarianism of sovereign intonation.

I am referring, in particular, to the counteraction that must be taken against events such as those that recently occurred in Hungary, a country in which the fight against the coronavirus has been considered the justifying cause for the conferring of 'full powers' on Premier Orban, who has become the recipient of a sort of 'messianic investment', from which derives the concrete possibility of suspending 'democracy' in his country[33]. A similar observation should be made with regard to the introduction in Poland of a new disciplinary system for judges of the

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[32] Cf. CAPRIGLIONE - TROISI, *L'ordinamento finanziario dell'UE dopo la Crisi*, Milano, 2014, spec. 121 ss.

[33] Cf. the editorial entitled Hungary, parliament gives full powers to PM Orbán to fight the coronavirus, viewable on *www.repubblica.it/foreign/2020/03/30/news/hungary_parliament_full_powers_premier_orban*, where it is specified that the exceptional superpowers given to Orban are renewable without limit. He is allowed to rule by decree, to close the Parliament for a period of time at his discretion, to impose that only information from official sources on the pandemic is accepted, where anyone accused by the executive of spreading fake news - that is, potentially even criticism of the management of the health alert and the disastrous state of public health or other decisions of power - may be sentenced to up to 5 years in prison.



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*Sąd Najwyższy*, the country's supreme court, and the ordinary courts; a system that in essence has subjected the judiciary to government control, with the obvious consequent rejection by the EU Court of Justice, which ordered the immediate suspension of the new rules[34].

Therefore, dangerous cases of 'democratic drift' are identified as a consequence of the so-called 'sovereignism', an ideology to which, also in Italy, certain parties conform, which often assume different characteristics, being oriented towards the achievement of political objectives which are not always reconcilable. I refer to the of the sovereigntist right, divided between a firm opposition (by Fratelli d'Italia) to the current "emergency government" (which sees the convergence of almost all political forces), chaired by Mario Draghi and a surprising adhesion to the latter (by the Lega), moreover, marked by continuous criticism of his work, put in place with the clear intent not to disappoint their electorate.

Populism, qualified by a common reactive matrix, claims the full independence of political power, which - according to the teaching of Rousseau[35] - must be the exclusive prerogative of the people. This leads to the claiming of national self-nominations, which in turn leads to the proposition of demands and behaviours that oppose the limitations imposed by certain European organisations; this, in line with the implementation of a project oriented towards the acquisition of positions of full power and the modification of the existing institutional context, to which reference was made earlier[36]. The example of Orban *docet* and becomes a model of common aspiration!

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[34] Cf. the editorial entitled *EU Court to Poland: "Immediately suspend the reform of the Supreme Court"*, available at *www.eunews.it/2020/04/08/corte-ue-polonia-sospendere-immediata mente-la-riforma-della-corte -suprema/128820.*

[35] See, in particular, ROUSSEAU's well-known work entitled *Social Contract* of 1762, in which he formulates the political proposal of this eminent philosopher for the 're-foundation of society' on the basis of an 'equitable pact'; pointing out that it is (and must be) the unitary will of the people that determines its actions, insofar as it is the depository of all sovereignty.

[36] Memorable, in this regard, is Salvini's request for "full powers" with reasons similar to those with which in 1922 Mussolini obtained them "operating quickly and without balls at the feet" as observed in the specialized press, cf. the editorial entitled *"Datemi pieni poteri". Salvini's (unintentional?) reference to fascism and Matteotti's lesson,* viewable at https://www.huffingtonpost.it/entry/datemi-pieni-poteri-il-richiamo-involontario-al-fascismo-di-salvini-e-la-lezione-di-matteotti-di-c-paudice_it.



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This is the perspective framework in which the bad weather of a form of association develops, which - as I said - takes advantage of the discontent and often manages to assert itself by leveraging bivalent racist feelings and the cultural deficiency of large sections of the electorate[37].

Certainly, in the times to come, scholars will have to further investigate the relationship between 'sovereignty and federalism', in order to identify - where possible - the cornerstones of an ideological construction aimed at bringing together conceptual hypotheses and technical forms of public intervention that are not easy to reconcile. Among these, I would like to point out the reflections formulated by some distinguished jurists - including G. Alpa, P. Ridola and M. Luciani - who, faced with the emergence of populism, have felt the need to give new input *to the* analysis, addressing the delicate issue of "Sovereignty and federalism in the future of the European Union"[38].

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[37] In this context, of specific relevance is the approach that distinguishes the theses sustained by a new type of political subject, the Five Star Movement, which in the initial phase of its existence became the bearer of an innovative form of 'direct democracy' based on 'participatory practices' that rely on new information technologies. At its origins, this movement promotes itself as an organization neither of the right nor of the left and post-ideological and does not defines a party, preferring terms such as "free association of citizens", or "political force". It therefore proposes to define a "new model of democracy", giving life to a reality that has regard to the overcoming of the democratic-representative structures, hence the substantial negation of the mediating synthesis and compromise, a methodological profile that notoriously identifies the characterising element of democratic parliamentarianism; cf. the classic proposition of KELSEN, *La democrazia*, Bologna, 1981.
The subsequent political maturation - realized thanks to certain governmental experiences, as well as the withdrawal of membership in the right-wing Eurosceptic political group, called Europe of Freedom and Direct Democracy - has determined a profound change within this political force. It, abandoning the populist attitude and logic which, in the past, had characterized its essence, now seems to be on the way to a structural renewal in which - even though the values at the base of the Movement remain firm (one thinks of the request for an operative "honesty" which was thought to have been abandoned by the political class) - there is a substantial acknowledgement of the necessity of having to proceed on the basis of canons oriented to the recognition and respect of the classic democratic logic. In this regard, see BOBBIO, *Quale socialismo*, Turin, 1976, p. 42, where, if we consider the construction of such a distinguished scholar, the reference to the thought of Hobbes is implied, whose notion of democracy - in reference to the theses of modern constitutionalism - was defined in the manner of "procedural idea, on which everyone can agree", so MONTEDORO, *Il ruolo della giurisprudenza nei sistemi costituzionali multilivello*, in *Il giudice e l'economia*, Rome, 2015, p. 173.

[38] In this regard, reference is made to the reports on this issue given at the seminar held on 14 July 2016 at the Faculty of Law of the Sapienza University of Rome.



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7. The particular situation in which Italy finds itself at the present time leads us to formulate a few considerations regarding the specificity of this country. I have already had the opportunity to highlight, on other occasions, the peculiarity that characterises the Italian situation, which reflects, at the same time, the typical virtues of its population and the limits that come with it. A sort of ambivalence seems to pervade the strategic options taken by the same, showing it, on the one hand, reactive in the face of crises, able to identify the right path to take, facing with seriousness sacrifices and renunciations, on the other hand, reluctant to abandon a road paved with individualism, cunning, lack of knowledge, defects that translate into draining factors of the action taken and prevent *politics* from playing its own primary role[39].

It outlines, therefore, a reality in which intrinsic capabilities (found in the most diverse sectors: from industrial production of excellence, to the sciences, to the arts) are contrasted with endemic deficiencies, irresponsibility of the ruling class, rampant corruption (which brings discredit and, because of the *malum agere* of a few, ends up overshadowing the commitment and goodwill of many). The governments that have succeeded each other in the last five years have proposed the implementation of an innovative political action, able to support the economic recovery after the financial crisis of 2007 and following years; hence the attempt to detach it from old ideological patterns, accepting the challenge of change. However, once again, the limits have emerged from old contradictions of the socio-political forces in the field that prevent the achievement of a conciliation necessary to overcome the ideological differences between them.

In this context, the so-called policy of 'doing' - which goes hand in hand with that of 'talking' and 'promising', aimed at the objective of conquering and broadening the con- sideration to support the government - propagated by Renzi, turned out to be inadequate and ended up betraying the expectations of those who had relied on it. Multiple misunderstandings soon emerged regarding the real

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[39] Cf. CAPRIGLIONE, *Mercato regole democrazia*, Milan, 2013, p. 196 ff; CAPRIGLIONE - IBRIDO, *La Brexit tra finanza e politica,* Milan, 2017, p. 65 ff.



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political intentions of said premier, the sense of the 'personalization' of his politics and the fundamentally *divisive* function conferred on it were understood; hence the position of "substantial isolation" in which he ends up placing himself, witnessing a progressive downsizing of the consensus acknowledged to him, which has now reached levels of marginal importance (since the fall of the Conte government has been attributed to him).

The subsequent experimentation of a 'green-yellow' government, based on an *insane* agreement between two movements (5 stars and Lega) which, although having a common populist origin, are substantially different as far as their reference to the democratic conception is concerned, to which they both declare to adhere, turns out to be decidedly negative.

The first, originating from impatience with the degradation of traditional politics, expresses dissent for representative democracy, but does not disavow its values. Faced with the tendency for modern forms of "oligarchy", of economic potentates or techno- structures that escape any form of democratic *accountability*, the challenge for a return to "honesty", invoked by the 5 Stelle, attempts the proposition of a new way of doing politics. The latter appears decidedly unusual and is destined, in the medium term, to deflect towards a sad epilogue, not being able to offer effective answers to the crisis of "governability" that has determined the *impotence* of democratic institutions.

On the contrary, the Lega bases its political project on an interpretation of democratic principles and the Charter of Fundamental Rights which, while declaring its rejection of any authoritarian model, highlights an intrinsic contradiction in the incoherent statements of its leader in search of 'full powers'. The sovereignty of the state, in the logic of this party, while accepting the possibility of cooperation with other nations, rejects supranational schemes and, therefore, opposes the idea of a European federative union. Hence the defence of national identity, the vaunted right to control borders and immigration, as well as the preservation of economic, social, cultural and territorial archetypes that characterize the Euro-



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pean Union sovereignism in the different countries of Europe.

It is evident that such a 'marriage' was not destined to last. And, in fact, after a year of compromises and situations of difficult conciliation, Italy has known the new experience of a 'yellow-red' government, founded on the collaboration between 5 stars and parties of the democratic left, certainly closer to each other than the components of the previous government. It was a decidedly positive period for those who had the expectation of a government that, despite the presence of objective difficulties, would be able to direct politics in innovative ways, both at a domestic and international level. Under the leadership of a 'new man', Prime Minister Giuseppe Conte, the most serious disaster to hit Italy since the Second World War was tackled with balance and determination: efforts were made to fill the gaps in the health sector and to put in place measures to compensate those affected by the economic emergency caused by Covid-19. At the same time, relations with Europe have been reactivated, leading to a reactivation of the latter on new bases that have allowed - at the launch of the Recove ry Fund - the recognition to Italy of over 200 billion euro, a large part of which also in the form of non-repayable transfers.

At the beginning of this year, under the input *of* Matteo Renzi's 'divisive' logic, the 'yellow-red' government fell and a parliamentary crisis opened up that made the President of the Republic fear the country's ungovernability; this was followed by the latter's appeal for political unity, indispensable for overcoming the difficulties that characterize the negative impact of the second phase of the Covid-19. The government headed by Mario Draghi is born, a personality known and respected internationally, as well as domestically, for his high technical skills and operational balance that have made him a leading man in the entire European regional context.

Of course, the heterogeneous composition of the current government does not provide the cohesion necessary for shared *action* by the political forces. The success of the vaccination campaign and the start of the country to overcome the



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pandemic crisis are essentially due to the decision-making coagulation of the Prime Minister who is able to reconcile positions intrinsically distant. This practicing, among other things, an appropriate *laissez-faire* towards Matteo Salvini, who - regardless of the lack of consistency of the line of conduct held - claims to himself the achievement of certain achievements of the government and, at the same time, makes open opposition to the behaviour of some ministers and some strategic options of the executive.

It is evident how such a national coalition government, expression of a historical moment of significant emergency, bears with difficulty the abandonment, albeit temporary, of the roles that ordinarily pertain to the political forces that compose it (*i.e.* majority and opposition). The help given by opposing parties - which unite in view of the common goal of overcoming serious national adversity - is, in my opinion, insufficient in itself to create the climate of sharing in which the line of ideological conjunction necessary to support a coalition government is harmonized. This is the challenge Draghi has to face, a challenge that is certainly riskier than the others he has had to face so far!

This is confirmed by the growing concern of the parties to highlight their identification with the government, assuming that the recognition of this identity is to their credit in the tacit competition that continues to take place between the parties. We are in the presence of a democratic process in the deformed - or, at least, anomalous - room, which was created to overcome uncertainty and to feed the hope of escaping it. And indeed, the abandonment of the dialectical relationship between the majority and the opposition[40] - and, therefore, of the class paradigm that connotes said process - marks a moment of waiting, of "oscillation between order and chaos" (to use an expression dear to Giancarlo Montedoro). In such a context is preserved, however, a function which must be ascribed significant validity, which is identified in the suspension of indeterminacy, of the instability that could also degenerate into 'systemic drift'; hence the need to resort to

[40] By FERRAJOLI, *Il paradigma garantista*, Naples, 2016, which investigates Kelsen's legal-political conception in the light of the constitutionalist theory of democracy.



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the formula in question in order to benefit from its being aimed at recomposing, at reconstructing the dynamics of things in *fieri*.

8. In the political scenario outlined above, the recovery, on which the resources of European origin are leveraged, is entrusted to the possibility of preserving for a long time the operational balance that, in the first months of the Draghi government, thanks to its charisma, seems to constitute a significant innovation in Italian politics.

As is well known, the European Commission recently approved the *National Recovery and Resilience Plan* (PNRR), a document in which are indicated the systemic innovations that Italy intends to implement and the modalities of investment of the funds provided by the Union through the Recovery Fund in order to stimulate economic recovery after the pandemic. Therefore, the following are taken into consideration: *a)* the framework of institutional reforms, the implementation of which is conditional on the achievement of the financing sent by the EU after the first tranche related to the approval of the Plan; *b*) the expenditure programme for the implementation of the commitments undertaken, punctually indicated in the above-mentioned document.

The policy objectives and related interventions are centred on three 'strategic axes' (digitalisation and innovation, ecological transition, social inclusion), while the sectors targeted by the interventions are specified in six 'missions'[41]. The Plan identifies the governance scheme centred on the Ministry of the Economy, which is empowered to make payment requests to the EU Commission; this is done through a 'coordination structure' (to which the administrations responsible for the investments must refer) that is flanked by two others, one for evaluation and another dedicated to monitoring. The organization chart is completed by *task forces* with the task of supporting the territorial centres to improve their invest-

[41] These are in order: 1) digitalization, innovation, competitiveness and culture; 2) green revolution and ecological transition; 3) infrastructure for sustainable mobility; 4) education and research; 5) Inclusion and cohesion; 6) Health.



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ment capacity by simplifying the procedures; while the political supervision of the plan is entrusted to a committee, set up at the Presidency of the Council, in which the competent ministers participate.

It goes without saying that the positive assessment today given to the Italian Recovery Plan attests to its compliance with the criteria set by Europe for post-pandemic recovery. It allows, therefore, to fully depict the prospective framework of the innovations that will be arranged in the years to come, all aimed at overcoming the fragilities (economic, social and environmental ones) that in the past decade have slowed Italy's growth compared to that of other EU countries. The interventions envisaged are intended to accompany the country along a path of ecological and environmental transition, contributing to reducing the territorial, generational and gender gaps. In this context, the allocation of a significant amount of the Plan's territorial resources to the South seems worthy of appreciation, even though there has been no lack of criticism that stresses the marginalisation of the South[42].

Particularly important are the reforms of the institutional apparatus, which concern: a) the *P.A.*, which should be accompanied by concrete forms of assistance and, therefore, freed from the gap of a heavy bureaucracy that hampers its action and prevents an adequate exercise of its functions; b) *justice*, subject to specific measures that intervene on the judicial system, sometimes accelerating the development of trials, sometimes foreseeing appropriations for the management of the backlog of civil and criminal cases and for the efficiency of judicial buildings; c) *taxation*, with a reduction in its pressure on labour, the fight against evasion (with the strengthening of compulsory electronic payments), the implementation of pension and IRPEF reforms, or the extension of the 110% *Superbonus;* d) the promotion and protection of competition, related to the achievement of greater social justice; e) *active labor policies*, establishing the guarantee of em-

[42] Cf. the editorial entitled *Marginal the South in the National Recovery and Resilience Plan. And the bridge over the Strait returns...*, viewable at *www.lacivettapress.it/2021/05/10/marginale-il-sud-nel-piano- national-recovery-and-resilience-plan-and-the-bridge-over-the-strait-returns*.



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ployment of workers (Gol), as well as the "plan for new skills".

Significant, in this context, is the common thread linking the aforementioned reforms, making use of the interaction between digital development and growth, thereby establishing 'a virtuous process of interdependence, in which the political objective guides technology, but in turn the technological platform opens up new horizons for politics'[43]. This does not exclude, however, that - without prejudice to the guidelines outlined above for a correct reading of the Plan - there were some critical evaluations concerning the presence of 'weaknesses' that, in my opinion, could be the subject of corrective measures in the future[44].

This being the case - regardless of any question regarding the presumable *contiguity of* the Plan drawn up by the government in office with that represented by the pre-executive government[45] - before any evaluation regarding the *quomodo agendum* - it must be pointed out that the country's *credibility is at* stake in the way the programme is implemented. The stern warning with which Prime Minister Draghi concluded his speech in the *Cinecittà* studios, in the presence of Ursula von der Leyen, leaves no doubt about this. The call for a sense of "responsibility towards Europe" and the need to "spend everything, well and honestly" highlight, in fact, the close correlation between the Union's intervention and the "pride ... (of having) ... developed a plan to make our country fairer, more competitive and more sustainable in its growth"[46].

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[43] So MOCHI SISMONDI, *A magic quadrilateral for a PA capable of changing the country,* available at *https://www.forumpa.it/riforma-pa/un-quadrilatero-magico-per-una-pa-capace-di-cambiare-il- paese.*

[44] Cf. among others PALUMBO, *La salute nel Pnrr has not received the attention it deserves. And it is not just a matter of resources,* viewable at *http://www.quotidianosanita.it/studi-e-analisi/ articolo.php?article*; *the* editorial titled *National Recovery and Resilience Plan: criticisms from environmentalists,* viewable at *https://www.themapreport.com/2021/ 04/28/national-recovery-and-resilience-plan-criticisms-from-environmentalists.*

[45] Cf. the editorial entitled *Recovery, Letta: "In Pnrr continuity with work Conte government and Gualtieri"* can be viewed at *www.affaritaliani.it/coffee/video/politica/recovery-letta-in-pnrr-continuita- con-lavoro-governo-conte-gualtieri.html,* where it is specified*:* Rome, April 29, 2021 "In the NRP there is a strong continuity with the work of Conte and Minister Gualtieri, Draghi listens andshares his views". So said the secretary of the Democratic Party Enrico Letta speaking at the initiative'Towards the Agora' with Giuseppe Conte and Goffredo Bettini.

[46] Cf. the editorial entitled *Pnrr. Green light for the Italian Plan, Draghi: "A proud moment",* available at *www.rainews.it/dl/rainews/articoli/draghi-von-der-leyen-ursula-cinecitta-pnrr.*



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Hence the expectation of a change that interacts in depth, also imposing the ethicality of behaviour, an inescapable prerequisite for a historic turning point that marks a rebirth of Italy; an innovative reality that seems to be on the right track with the decisive "support of political forces, local authorities and social partners", as Draghi himself stressed.

From this premise it follows that any failure to execute the plan, in addition to causing the suspension of the funding in question, affects Italy's reputation. In the political sphere, there is full awareness of the difficulty of "maintaining the commitments" on the PNRR, as promptly warned the European commissioner for the economy, Paolo Gentiloni, who also specified that, in his opinion, "there are favourable conditions with a large parliamentary majority led by the right man at the right time, namely Mario Draghi"[47], highlighting in this regard the close connection existing "between the Recovery Plan and ... (the implementation of) ... institutional reforms".

Whilst expressing its full support for the hope that a consensus can be reached in Parliament on a unified course of action which will lead to a prompt implementation of the reforms indicated in the PNRR, some doubts about this seem, however, conceivable. This doubt is confirmed by the significant consideration made by a well-known columnist when assessing the scope of the innovations introduced by the Plan, the reading of which "makes one's wrists quiver: it presupposes a capacity for action that is light years away from our usual *standards.* One wonders if the government and the parties that support it are aware of the enormity of the challenge"[48].

In this regard, I believe that consideration should be given to the composition of the majority - which includes political forces that in the recent past have taken opposing positions on some thematic profiles, hence the justified fear of

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[47] Cf. the editorial entitled *Pnrr: Gentiloni, difficult commitment, but Draghi is the right man,* available at *https://www.ansa.it/sicilia/notizie/2021/06/21/pnrr-gentiloni-impegno-difficilema-draghi-eluomor -right.*

[48] Cf. FERRERA, *L'Europa, le riforme: gli esami da superare*, in *Il corriere della sera*, 24 June 2021.



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possible conditioning of their implementation - which suggests a contestability of uncertain outcomes. It is hardly worth mentioning the controversy between the parties, which arose last year, on the issue of *statutes of limitation*, or the request - long a 'battle-horse' of the sovereign right - to introduce a *flat tax,* in contrast to the more recent proposal of the secretary of the PD to introduce a 'tax on inheritance'; these latter claims, both rejected by Draghi in no uncertain terms, albeit with different reasons, succeeding in obtaining unanimous consent in the Council of Ministers[49]. And what can we say, finally, of Salvini's attempt to "put a flag" on the reform of justice, calling an autonomous *referendum to* avoid parliamentary debate and direct disciplinary changes in ways he likes; a referendum program that has provoked the reactions of the ANM whose president has, in this regard, stressed that in this way it can "cancel, in the name of the idea that the system is not redeemable, a structure of rules built around certain principles that should not change "[50].

In addition, there is the search for solutions to other significant issues - *first and foremost* that concerning migration (which is linked *by relationem* to the question of *ius soli, which* has always been opposed by the right) - which, although not related to the commitments made in the PNRR*,* certainly affect the internal balance of the country, as can be inferred from the contrasting positions of the political forces *in subiecta materia*. In this regard, justifies the doubt that, in the future, may be reached on the point of a conciliation the recent statement of Salvini:

"'hundreds of illegal immigrants disembarked in a few hours is unacceptable'! The seriousness of the same, beyond its intrinsic content, can be deduced from the fact that it was pronounced on the day in which public television broadcast a video showing fleeing migrants being followed and beaten by the Libyan

[49] Cf. the editorial entitled *Fiscal reform 2021, from Salvini's flat tax to Letta's inheritance tax: Draghi's no's,* viewable at *https://www.money.it/riforma-fiscale-2021-flat-tax-salvini-tax-inheritance-letta.*

[50] Cf. the editorial entitled *Giustizia, Salvini: "Gravissime parole Anm su referendum*", available on *www.adnkronos.com/giustizia-salvini-gravissime-parole-anm-su-referendum,* where the full text of Giuseppe Santalucia's speech is reported.



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coast guard, who forced them to return to the hell from which they had departed[51].

In the face of such a political reality, rationality must give way to hope, and it is comforting to know that the latter is well placed if the man who has defended the euro to the bitter end is carrying out the underlying project, demonstrating to the whole world the culture and socio-political sensitivity, as well as a technical ability that make him a figure of excellence in the process of Europeanisation.

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[51] Cf. the editorial entitled *Migrants, from Salvini new attack on the majority: "Unacceptable landings. I have written to Draghi"*, available at *https://www.repubblica.it/politica/2021/05/01/news/migrants_from_salvini_new_attack_on_the_majority_unacceptable_landings_I_have_written_to_draghi*.



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# SOCIETY, POLITICIANS, CLIMATE CHANGE AND CENTRAL BANKS: AN INDEX OF GREEN ACTIVISM

Donato Masciandaro [*] - Romano Vincenzo Tarsia [**]

ABSTRACT: *This paper proposes an index for evaluating central bank activism in addressing climate-change issues. Consistent with a principal-agent approach, this metric assumes that the central bank's sensibility on climate change depends on both economic and political drivers. The index has been created to include not only actual policies but also participation in green networks and initiatives that signal central bank activism on climate change.*

SUMMARY: 1. Introduction. - 2. Literature Review. - 2.1 Climate Change and Financial Risk. - 2.2 Market-based Solutions. - 2.3 From Climate Change to Financial Stability. - 2.4 Climate Change, Financial Stability and Central Banking. - 2.4.1 Climate Change and Central Bank Involvement. - 2.4.2 Climate Change and Central Bank Goals. - 2.4.3 Climate Change and Central Bank Tools. - 2.4.4 Climate Change and Central Bank Policies. – 3. Society Preferences, Political Pressure and Central Banks' Green Sensibility. - 3.1 Economy, Climate Change and Central Banks' Green Sensibility. - 3.2 Society's Preferences and the Green Political Voice. – 4. The Central Bank Green Activism Index. 4.1 The Central Bank Green Activism index. – 5. Conclusion.

1. According to the Intergovernmental Panel on Climate Change IPCC (2014), the average global temperature will increase by 0.5 to 2 degrees by 2050 with a predicted maximum increase of 5 degrees by 2100. In his seminal paper, Stern (2007) points out that this will result in an overall economic cost of climate change equivalent to losing at least 5% of global GDP each year, from now onwards. If a wider range of risks and impacts are considered, the estimate of damage could rise to 20% of GDP or more. Among the various ways in which

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climate change can affect economic growth, Schaunberger et al. (2017) show that high temperatures lead to a decline in crop yields and Kotz et al. (2020) show that day-to-day temperature variability has a negative linear effect on regional economic growth rates.

To avoid these effects, global emissions should be cut by at least 30% and preferably by 50% by 2050, bearing a cost of almost 1% of global GDP each year (Stern, 2008). This will involve many radical changes, not only in society but also in the economy. On 12 December 2015, 196 countries signed the Paris Agreement with the goal of limiting global warming to below two degrees (preferably 1.5) Celsius, compared to pre-industrial levels (UNFCCC, 2016). Attempts to limit the risks from global warming will require system transitions, which can be enabled through an increase in adaptation and mitigation investments, policy instruments, the acceleration of technological innovation, and behavioural changes (Schoenmaker, 2021). Additional resources could come from efforts to direct finance towards investments in infrastructure for mitigation and adaptation (IPCC, 2018).

Central banks have begun to consider the economic and financial effects of climate change. The initial step in this regard was taken by Carney (2015), who highlighted the impact that climate change will have on financial stability. In addition, Carney (2015) highlighted the temporal mismatch between climate change and central bank policies. Finally, as climate change will also affect monetary policy by slowing productivity growth and heightening uncertainty and inflation volatility, central banks should integrate sustainability considerations into their investment decisions (IMF, 2019).

As Carney (2015) suggests, there are three broad channels through which climate change can affect financial stability: 1) physical risks, 2) transition risks and 3) liability risks. Physical risks are likely to directly harm firms’ finances, and affect their ability to access credit and invest, eventually leading to bankruptcy (Dietz et al., 2016). Transition risks may increase the risks of economic dislocation and stranded assets" which will lose their value, thereby leading to unemployment,



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economic losses (McGlade and Ekins, 2015) and, eventually, to financial imbalances. Each central bank's activities will be highly affected by climate change in terms of both their balance sheets exposure and the policy tools available to them.

The aim of this paper is two-fold. After a review of the extant literature on climate change and central banking (Section 2), we propose a metric for evaluating central bank activism in addressing climate-change issues. Consistent with a principal-agent approach, the metric assumes that central bank sensibility on climate change depends on economic and political drivers (Section 3). It includes not only actual policies but also participation in green networks and initiatives (Section 4). Proposed steps for future research are discussed in the conclusion (Section 5).

2. This section aims to review the extant literature on climate change and central banking. The main limitation of this stream of literature is the relatively low number of articles on the subject. Although the topic is becoming increasingly relevant, policymakers and academics have only focused their attention on it in the past few years. Although are a few peer-reviewed articles, the literature is mainly based on reports. In addition, most articles and reports lack empirical analyses, although this is not surprising given the absence of robust methodologies and comprehensive data (Campiglio et al., 2018). However, research in the field has been increasing substantially.

2.1. Today, climate-related financial risks are highly debated because of the possible effects on the financial system and financial stability in general. Dietz et al. (2016) find that the expected "climate value at risk" (climate VaR) of global financial assets today is 1.8% given a business-as-usual emissions path. A representative estimate of global financial assets amounts to USD 2.5 trillion. Monnin (2018b) claims that climate risks are not adequately reflected in credit-risk analyses and shows that accounting for them can alter the ratings of firms



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and, thus, their credit eligibility under current risk-management frameworks. Therefore, integrating climate risks into credit risk analysis is essential for enforcing risk standards.

Kling et al. (2018) investigate the impact of the climate vulnerability on bond yields. They provide early evidence that measures of climate vulnerability have a positive impact on the cost of sovereign debt (e.g. an increase in interest rates). They estimate that the debt cost due to higher climate vulnerability has exceeded USD 62 billion over the last ten years. Volz et al. (2020) present new empirical evidence on the relationships among climate vulnerability, resilience and the sovereign cost of capital. Using a sample of 40 developed and emerging economies, their econometric analysis confirms that climate vulnerability has significant implications for sovereign borrowing costs and that the magnitude of the effect is larger for countries vulnerable to climate change.

2.2. Given the increasing awareness on climate-based financial risk, some researchers have tried to highlight the potential role of markets in mitigating the risks associated with climate change. The evidence produced so far is not unanimous regarding the ability of markets to fully and efficiently incorporate the costs of the environmental transition. Hong et al. (2019) investigate whether the prices of food stocks efficiently discount these risks and show that climate risk information is incorporated into stock prices with a significant delay. In contrast, Bansal et al. (2016) find that climate-change risk has a negative impact on asset valuations, which implies that markets price in climate-change risk. In the real-estate market, Giglio et al. (2021) show that housing markets provide information about the appropriate discount rates for valuing investments in climate-change abatement. However, the extent to which this result extends to other situations is highly uncertain and beliefs regarding future cash flows are highly heterogeneous.

In terms of the real economy, Bernstein et al. (2019) examine how markets price long-run uncertain cash flows in relation to one of the most salient, long-run risks facing today's society: sea level rise (SLR). Homes exposed to sea level rise



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(SLR) sell for approximately 7% less than equivalent, unexposed properties equidistant from the beach. Interestingly, these effects may, in part, be triggered by psychological factors. In this regard, Baldauf et al. (2020) assess how much beliefs about the future impact of climate change affect home prices, and find that homes located in climate-change “denier” neighbourhoods sell for about 7% more than homes in climate-change “believer” neighbourhoods.

Various authors have tried to identify viable ways to pursue a smooth environmental transition by using well-known market-based instruments. Most of this literature has focused on carbon pricing and its feasibility (Stieglitz et al., 2017; Klennert et al., 2018). However, as these instruments are insufficient for adequately addressing the challenges of climate-change mitigation (Tvinnereim and Mehling, 2018), macroeconomic- and financial-policy instruments should be included in policy efforts focused on climate mitigation (Campiglio, 2016; Krogstrup and Oman, 2019) to complement the market-based solutions mentioned above. To the best of our knowledge, the most recent analysis in this regard is offered by Chenet et al. (2021), who claim that the emerging policy framework for dealing with climate-related financial risks has largely focused on market-based solutions that seek to reduce perceived information gaps that prevent the accurate pricing of climate-related financial risk (CRFR). This approach has a limited impact because CRFR is characterised by radical uncertainty, making “efficient” price discovery impossible. Therefore, Chenet et al. (2021) propose an alternative “precautionary” financial policy approach that draws upon two existing concepts — the ‘precautionary principle’ and modern macroprudential policy — and justifies the full integration of CRFR into financial policy, including prudential, macroprudential, and monetary policy frameworks.

2.3. The impact of climate risk on financial assets will affect the financial system in terms of losses for individual institutions and the financial system as a whole. Climate change will likely have important adverse effects on firm defaults, bank leverage and the prices of financial assets based on these institutions’



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relative exposure to climate disasters (Dafermos et al., 2018; Dietz et al., 2016). This will likely lead to financial instability and, to the extent that central banks are responsible for financial stability, eventually lead central banks to adopt new measures.

Several papers assess the transmission of climate risk to the financial system. Monasterolo et al. (2017) assess greenhouse gas (GHG) exposure in different sectors. After manufacturing, the financial and banking sectors are the most exposed. The most GHG-intense sectors are electricity, gas, steam and air-conditioning supply. The actors most exposed to these sectors are governments owing to their ownership or participation in utility and extraction companies. The latest ECB Financial Stability Review (Alogoskoufis et al., 2021) points out that banks and non-bank financial institutions alike are faced with the task of managing the implications of climate change over the medium to long term. The ECB analysis suggests that such risks appear to be particularly concentrated in certain sectors, geographical regions and individual banks, which exacerbates the related implications for financial stability. At the same time, data and methodological gaps still need to be addressed to comprehensively evaluate climate-related risks.

Battiston et al. (2017) look at how climate-policy risk might spread through the financial system, and find that direct and indirect exposure to climate-policy-relevant sectors represents a large portion of investors' equity portfolios, especially for investment and pension funds. An early and stable policy framework would allow for smooth asset-value adjustments, and lead to potential net winners and losers. In contrast, a late and abruptly introduced policy framework could have adverse systemic consequences. Similarly, the ESRB Advisory Scientific Committee (2018) distinguishes between a benign scenario and an adverse scenario. In an adverse scenario, the transition to a low-carbon economy occurs late and abruptly. This adverse scenario could affect systemic risk through three main channels: (i) the macroeconomic impact of sudden changes in energy use; (ii) the revaluation of carbon-intensive assets; and (iii) a rise in the occurrence of natural catastrophes.



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Dafermos et al. (2018) analyse: (i) the effects of climate change on financial stability, and (ii) the financial and global warming implications of a green quantitative easing (QE) programme. First, by destroying the capital of firms and reducing their profitability, climate change is likely to gradually deteriorate firms' liquidity, leading to a higher rate of default that could harm both the financial and the non-financial corporate sectors. Second, climate-change damages can lead to portfolio reallocations that cause a gradual decline in the price of corporate bonds. Third, climate-induced financial instability might adversely affect credit expansion, exacerbating the negative impact of climate change on economic activity. Semieniuk et al. (2020) contribute to the conceptual understanding of transition risks by developing a consistent theoretical framework of the drivers, transmission channels and impacts of the phase-out of carbon-intensive industries on the financial system. In this regard, Battiston et al. (2021) discuss the key research challenges related to the analysis of the relation between climate risks and financial stability. They point out that embedding climate change in macroeconomic and financial analysis using innovative perspectives is fundamental for developing a comprehensive understanding of risks and opportunities in the era of the climate crisis.

One of the most recent analyses on this topic is found in Bosetti et al. (2021), who study the interactions among climate change, credit and economic dynamics, and test a mix of policy interventions. They show that climate damages to firms make the banking sector more prone to crises, and they test a set of "green" finance policies to address these risks: i) green Basel-type capital requirements, ii) green public guarantees for credit and iii) carbon-risk adjustments in credit ratings. These three policies moderately reduce carbon emissions and the resulting climate impacts. Although their effects on financial and real dynamics is not entirely positive, the combination of all three policies leads to a virtuous cycle of (mild) emission reductions, stability in the financial sector and high economic growth. Bosetti et al.'s (2021) results highlight the importance of complementing financial policies addressing climate-related risks



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with mitigation policies aimed at curbing emissions from real economic activities.

2.4. Although different in some ways, all of the previous papers highlight the risks of climate change for the stability of the financial system and push for public intervention, especially from central banks.

The Carney (2015) speech was key for steering central bankers' attention to the climate-change problem, especially as the relevance of the issue for central banks' strategies and policies became clear. Although most central banks have focused on the link between climate change and financial stability, the immediacy and gravity of the situation demonstrate that these steps are merely preliminary and much still needs to be done. In addition, there is variation among central banks in their focus on this issue – East Asian countries have already implemented active environmental policies, while Western countries are falling behind. Especially in recent years, more academics have tried to assess the risks of climate change for financial stability and examined the role of central banks in this regard.

2.4.1. Several papers have investigated whether central banks should play an active role in mitigating climate change from both economic and legal perspectives. For instance, Volz (2017) examine the extent to which environmental factors affect central banks' conventional goals. The author provides a theoretical analysis for and against central banks' efforts to respond to environmental and sustainability challenges. The paper explores the ways in which central banks (and financial regulatory authorities) influence investment decisions as well as the creation and allocation of credit. While arguing that central banks should play a proactive, "sustainable-development role", the paper also discusses the risks of overstretching central banks' mandates and vesting too much power in unaccountable institutions.

Batten at al. (2016) identify different ways in which climate change and policies on carbon emissions could affect central banks' objectives. They highlight the potential to generate significant balance-sheet losses and financial instability,



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which could affect central banks' abilities to maintain inflation close to their targets. Similarly, Economides and Xepapadeas (2018) suggest that climate change and the use of instruments to mitigate its detrimental effects affect the design of monetary policies. They conclude that monetary policies should be adjusted when climate change is taken into account and energy or carbon taxes are present.

McKibbin et al. (2017, 2020) claim that climate disruptions will increase the frequency and severity of negative supply shocks, making it more difficult for central banks to forecast output gaps and, therefore, to forecast inflation. Furthermore, the interaction between climate policy and monetary policy suggests that considering each regime separately can easily lead to policies that seem acceptable in isolation but perform poorly in practice. They conclude that these policy spheres should be explicitly brought together and that more appropriate macroeconomic modelling frameworks should be developed.

Monnin (2018a) explores the policy options central banks can use to contribute to the transition to a low-carbon economy. The studies presented in that paper suggest that as climate change represents a potential risk for the stability of the financial system, central banks should develop a comprehensive evaluation of climate-related systemic risks in the financial sector. They should also consider regulatory measures to mitigate those risks by implementing higher capital requirements for loans related to carbon-intensive economic activities and increasing capital levels, thereby strengthening the financial system's stability.

Dikau and Volz (2018) claim that responsibility for financial and macroeconomic stability implicitly or explicitly lies with the central bank, which should address climate-related and other environmental risks on a systemic level. In addition, central banks are in a powerful position to support the development of green finance models, and to enforce the adequate pricing of environmental and carbon risk by financial institutions. They discuss the reasons why central banks should be concerned with aligning finance with sustainable development. However, Volz (2017) claims that central banks should only focus on fixing capital misallocation in the green economy and that using tools to address negative



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environmental externalities should be a secondary policy.

2.4.2. Academics have extensively discussed whether direct involvement in tackling climate change lies within central banks' mandates. These studies have highlighted the benefits of having the environmental transition backed by central banks as well as the risks of having central banks overloaded with tasks related to the transition. Campiglio et al. (2018) point out that a smooth, low-carbon transition will require the implementation of a comprehensive set of policies, some of which might require the collaboration of central banks and financial regulators. This cooperation will not require a modification of the central banks' mandate. In fact, supporting the development of more comprehensive measures of financial risk to include climate physical and transition risks is well within central banks' present mandate to ensure the effective functioning of financial markets. Similarly, Bolton et al. (2020) explore how central banks can, within their mandate, promote unprecedented collective action and coordination efforts among various actors to tackle climate change. They point out that although central banks can help prevent environmental risks and mitigate their consequences by, for instance, developing scenario analyses, these initiatives will not be sufficient on their own.

Similarly, Schellhorn (2020) suggests that as timely and effective climate action is a precondition for the stability of the global financial system, and as the Federal Reserve and other central banks share responsibility with legislative and regulatory authorities for maintaining financial-system stability, the Fed shares responsibility for effective climate action. The new low-interest-rate monetary policy environment favours sustainable long-term but high-risk investments. Market participants need timely guidance and support from regulatory and supervisory authorities, including the Federal Reserve to expedite global fund allocations to low-carbon assets.

D'Orazio and Popoian (2020) evaluates the determinants of each central bank's involvement in the green transition. They point out that a decision to



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implement green regulations is not exclusively related to the central bank’s mandate, but to the central bank's independence and to the structure of the interaction between monetary policy and prudential policy. Moreover, higher exposure to climate-related adverse events plays a crucial role in the adoption of green prudential regulations. To avoid potential conflicts between monetary policy and green prudential regulations caused by intertwined transmission mechanisms, the analysis highlights the importance of having a central bank that hosts the green prudential regulations under its governance roof. This paper has the greatest number of similarities to our analysis in terms of data and methodology. However, while its focus is on macroprudential policies, we are interested in the central banks’ overall green sensibility. We provide more details on this difference in the data section.

Dikau and Volz (2021) point out that the extent to which central banks adopt a more active approach to support a government’s sustainability objectives is ultimately a political decision. Nevertheless, climate change and mitigation policies will have profound impacts on economies with potentially significant implications for macroeconomic and financial stability. These aspects need to be addressed by central banks within their core responsibilities. According to these authors, a central bank that does not address climate risks is failing to do its job.

2.4.3. The past few years have brought a rapid increase in the amount of attention central banks pay to climate change. This may have been triggered by the worsening of the impact of climate change on economic growth, or by the increase in attention paid to the issue by citizens and Institutions. Dikau et al. (2019) chart the rise of central banks’ and supervisors’ actions on climate change and sustainability issues. They highlight that a clear evolution in central banks’ market signalling on climate and sustainability issues can be identified in the speeches of central bank governors since 2015. These speeches have progressively become more active and have transitioned from mere acknowledgments of climate change to calls for binding decisions.



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As the need for central bank involvement in climate policies has become more obvious, Dikau et al. (2021) assess which policies are the best options given available toolkits. Central banks and supervisors need to adopt a systemic perspective, and address both micro- and macroprudential risks over a much longer time horizon. Monetary and financial authorities must play a pivotal role in shaping the tools, methodologies and data systems required for the net-zero economy. Dikau and Volz (2018) review the tools and instruments central banks and financial regulatory agencies use to address environmental risk and promote green finance and sustainable development. They also provide a brief review of green public financial governance initiatives.

D'Orazio and Popoyan (2019) analyse green financial policies as well as the conditions under which they could help tackle climate change and promote green lending while limiting climate-related financial risks. They suggest policy instruments similar to those proposed in previous papers, but also point out that existing tools in the framework of Basel III can be destabilising for the financial system. They therefore ultimately suggest alternative strategies. In addition, according to these authors, financial risks related to physical, liability and transition risks do not seem to be adequately considered by financial institutions, regulators or markets in the current financial framework. Similarly, Dafermos and Nikolaidi (2021) identify the transmission channels through which the green differentiated capital requirements (GDCRs) can affect credit provision and loan spreads. They show that GDCRs can reduce the pace of global warming and, thereby, decrease the physical financial risks. This reduction is quantitatively small but is enhanced when implemented in combination with green fiscal policies. McConnell et al. (2020) discuss potential green monetary-policy instruments to identify those most appropriate for supporting the transition process. They identify adding collateral "haircuts" based on assets' carbon intensity to the central bank's collateralised lending framework as the most promising conduit of green monetary policy. In addition, adjusting the collateral framework and introducing a carbon tax reduces the burden of the transition.



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Finally, we note that the research agenda on climate change and central banking has been affected by the Covid-19 pandemic, as is true for most other policy areas. In this regard, Dikau et al. (2020) find a divergence between current crisis-response measures and wider efforts to promote sustainable finance. Authorities in Europe and East Asia are the most active in terms of these sustainability efforts. This highlights the potential for convergence in the next phase. Importantly, many of the instruments that are being applied by central banks and financial supervisors during the pandemic could be calibrated to better account for climate- and other sustainability-related risks and objectives.

2.4.4. In the previous sections, we have discussed in mostly general terms the policies central banks can adapt and use to smooth the environmental transition. In this section, we consider research exploring green policies implemented by central banks worldwide. However, most of these policies have been implemented in East Asian and developing countries. Although the number of central banks that have implemented green policies is limited, an analysis of those policies can help to shed lights onto which policies can best help prevent the climate crisis.

Dikau and Ryan-Collins (2017) provide a detailed list of central banks that have begun addressing the risks of climate change, presumably owing to their higher climate risk and their shallower financial markets. In addition, the central banks that are more active on green initiatives have a less binding focus on price stability. These central banks use three categories of intervention: i) green credit-allocation instruments; ii) green regulatory instruments and iii) other green central banking activities, such as the development of green finance guidelines or the establishment of green bond markets. Dikau and Ryan-Collins (2017) highlight that as global private markets are not sufficiently financing the transition to the green economy, the experiments conducted in these countries may provide valuable lessons for developed economies, especially in the aftermath of the financial crisis that led central banks to be more active and to adopt unconventional policies.



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Campiglio (2016) highlights that the use of these policies requires moving beyond current central banking practices in high-income countries, which have previously used reference interest rates as their sole policy tool. Hence, the adoption of measures aimed at controlling credit allocation is likely to prove challenging and controversial.

Among the papers reviewing existing central banks' green financial policies, Dikau and Volz (2021) make an important contribution to the literature by collecting information on all of the green activities central banks around the world have carried out or planned. This study is particularly important, as it provides up-to-date information on existing green policies. In addition, these authors claim that as climate risks can directly affect central banks' traditional core responsibilities, all institutions should incorporate climate-related physical and transition risks into their policy frameworks in order to safeguard macro-financial stability. However, the ways in which central banks will address the climate emergency will inevitably differ.

Recently, the ECB (2021) pointed out that policy actions may be required to ensure the resilience of the financial system to climate-related risks. Enhanced climate-related disclosure requirements, including companies' forward-looking emission targets, and deeper, more effective green financing are essential steps in a smooth transition towards a sustainable economy and a general reduction in climate-related vulnerabilities. At the same time, possible market failures can stem from data gaps, which would raise the risk of greenwashing. The upcoming ECB climate stress test will analyse trade-offs in a forward-looking manner, thereby providing an additional basis for future policy discussions. Ultimately, given the systemic dimension, considerations about how to mitigate climate-related risks in the financial system require a macroprudential perspective to be effective and to ensure cross-sector consistency.

Moreover, it is worth mentioning an interesting analysis by Hansen (2021), who compares the effect of green fiscal and monetary policies, and points out that monetary policy is a weak substitute for fiscal policy. Central banks that overstate



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their ability run the risk of losing their distance from the political arena and providing false hope to public actors trying to effectively tackle climate change.

Finally, in investigating the effects of existing policies, several authors have tried to assess the effects of current purchase programmes on green bonds issues. As green bonds are not usually explicitly required in purchase programmes, some authors discuss steps that can be taken to align monetary policies with environmental policies.

Matikainen et al. (2017) show that the corporate-bond purchase programmes of the Bank of England and the European Central Bank have been skewed towards carbon-intensive industries, while renewable-energy companies are not represented at all. This has prompted calls for the greening of quantitative easing. Dafermos (2018) claims that the implementation of a green corporate purchase programme can reduce climate-induced financial instability and limit global warming, although such a programme is not sufficient in itself. The effectiveness of this programme depends on the responsiveness of green investment to changes in bond yields. Monnin (2018a) also investigates the imbalance in central banks' purchase programmes towards carbon-intensive sectors, and points out that central banks should further assess these biases and ensure that climate-related risks are adequately reflected in their own balance sheets as well as their collateral frameworks. For these reasons, De Grauwe et al. (2019) suggest that when bonds bought during the ECB's quantitative easing programme come to maturity, the ECB should replace traditional bonds with “environmental bonds" while not creating new money.

Bremus et al. (2021) analyse the effect of the ECB's Corporate Sector Purchase Programme (CSPP) and the recent Pandemic Emergency Purchase Programme (PEPP) on the yields of eligible green bonds. They find that both programmes significantly improve financing conditions for eligible green bonds, thereby increasing the attractiveness of these instruments to issuers, although the effects of the CSPP and PEPP are heterogeneous. In this regard, Solana (2019) discusses whether aligning the ECB's CSPP with EU environmental commitments



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may be legally binding. The author claims that Article 11 of the TFEU integrates environmental objectives into the mandate of the Eurosystem, and requires that those objectives be taken into account when designing and implementing monetary policy. The author concludes that, other than a distinctive source of legal obligations, Article 11 of the TFEU represents an opportunity for the Eurosystem to contribute to improving the understanding of the relationship between climate change and financial stability.

Macaire and Naef (2021) carry out one of the first empirical analyses on the effect of central banks' green policies on the yield spread between green and non-green bonds. Specifically, they use a policy by the People's Bank of China (PBoC) that includes green financial bonds in the pool of assets eligible as collateral for the medium-term lending facility. Using a difference-in-differences technique to compare pairs of green and non-green bonds issued by the same institutions, they show that the policy lowered the spread between the pairs of instruments by 46 basis points.

Finally, Schoenmaker (2021) focuses on evidence highlighting the market bias towards carbon-intensive companies. This paper develops a method to tilt the ECB's asset and collateral framework towards low-carbon assets. The author finds that a medium tilting approach reduces carbon emissions in the ECB's corporate and bank bond portfolio by more than 50%, and shows that a low carbon allocation can be achieved without undue interference with the transmission mechanism of monetary policy.

With regard to the effects of central banks' policies on the effects of climate change, the adoption of environmental-related policy tools might provide a framework for natural experiments aimed at assessing whether there is an impact on firm profitability and green investments. To the extent that some central banks are starting to adopt such measures, researchers may be able to estimate the effects of these policies by analysing the differences between these countries and those that have yet to adopt such measures. As pointed out by Campiglio et al. (2018) and D'Orazio and Popoyan (2018), many low-income and



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developing countries are adopting instruments to channel credit towards the green sector, while developed countries seem to be falling behind in this regard. This is particularly important for the design of future analyses.

3. Our review of the economic literature highlights a key fact – in the past few years, central banks have progressively increased their focus on including environmental sustainability considerations in their actions for economic reasons that correlate climate change with macroeconomic outcomes. Consequently, a research question naturally arises: Is this motivation sufficient? Our answer is negative. We start from a general assumption that central bankers' choices have endogenous outcomes given the rules of the game that govern their interactions with other relevant players (i.e. citizens and politicians). Therefore, political incentives can also play a role.

In investigating potential economic and political drivers of a central bank's "green" sensibility, it seems effective to utilize a principal-agent setting. In the last thirty years, the economic literature has systematically analysed interactions between central bankers and politicians using principal-agent settings. More specifically, we draw inspiration from two-tier theoretical settings in which two different and subsequent events occur: a "political" event and an "economic" event (Herrendorf and Lockwood, 1997; Drazen, 2002; Aghion et al., 2004; Hughes Hallet and Weymark, 2005, 2007; Alesina and Tabellini, 2007; Hefeker and Zimmer, 2011; Miller 2019). In the first event, the citizens first delegate to the politicians a political task, which in our case is to build up a "political green voice" that can influence the central bank's decisions. In the second event, the central bank defines its own "economic green voice", which incorporates climate change considerations into its policy framework as well as the possibility that citizens and politicians can exert pressure to include or discard such considerations. In other words, given that any green policy affects welfare, we assume that citizens – both households and firms – are the "ultimate" principal agents (Ferrari and Pagliari, 2021) to whom politicians and central bankers respond. This is described in more



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detail in the following.

3.1. The potential relevance of the relationships among society preferences, political pressure and green central banking can be discussed in a systematic way using, on the one hand, a standard-stylized macroeconomic model that includes climate-change effects and, on the other hand, a two-tiered setting that governs central banking, where incumbent politicians can influence central bankers' decisions.

Our starting assumption is that climate change can influence growth, employment and inflation through three main channels. First, climate change can be considered as a supply shock that leads to a change in productive capacity, which in turn produces higher inflation and lower output growth (McKibbin et al., 2017; Economides and Xepapadeas, 2018). More specifically, temperature shocks due to increased emissions can lead to inflationary pressure (Mukeerjeel and Ouattara, 2021). Second, the use of taxation to deal with the effect of climate change can trigger further fluctuations in prices and output (McKibbin et al., 2017; Economides and Xepapadeas, 2018; IMF, 2019; NGFS, 2020). Third, as discussed in our literature review, climate change can be associated with financial instability (McKibbin et al., 2017; Shoenmaker, 2021). All in all, climate change is likely to affect the real economy (Tol, 2009; Hsiang et al., 2017; Nordhaus 2017) and the financial sector (Allen et al., 2020; Pagliari, 2021).

In order to capture these three channels in the most simple and general way, we assume that: 1) output growth is determined by a simplified supply curve with nominal and wage rigidities,[1] where $\sigma > 0$ represents the sacrifice ratio when the aim of central bank policy is to influence output growth, which can also be a proxy of the trade-off between flexibility and credibility in the central bank's action;[2] 2) aggregate demand depends crucially on central bank choices via the

[1] Barro and Gordon (1983), Backus and Driffill (1985). For the sake of simplicity, here the natural rate is zero, as in Rogoff (1985).
[2] Rogoff (1985).



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expectations channel[3] without frictions and lags;[4] and 3) financial instability shocks can influence both aggregate demand and aggregate supply.

Our key assumption is that central banks have a medium-to-long term perspective and are fully mindful of their impact on climate change, including their influence on financial stability (Shoenmaker 2021). At the same time, how central banks should respond to climate change is subject to opposing views. On the one hand, the doves support green monetary policies while, on the other side, the hawks strongly reject such as perspective (Financial Times, 2019). In the middle if price stability continues to be a primary goal of a central bank, climate-related considerations should be taken into account (Schnabel, 2021). In other words, we can assume that, when defining their decisions, central bankers can have heterogeneous green preferences.

We use inflation targeting, which is a goal-based rule, as a metric to summarize the central bank's decisions. The same decisions can be described using interest-rate rules, which are instrument rules, in line with Taylor,[5] or money rules, in line with McCallum.[6] These two specifications – goal-based rules and instrument rules – can be used alternatively without any loss of generality provided that the inflation-expectations channel results in changes in the real interest rate.[7] In other words, the model used for business-cycle analysis consists of three equations that include financial frictions:[8] aggregate supply and aggregate demand curves together with a central bank rule. The descriptions of the aggregate supply and aggregate demand curves are as follows:

$$y = \sigma_E(\pi - \pi^e) \tag{1}$$

[3] Clarida et al. (1999).
[4] Schellekens (2002). On monetary policy uncertainty, see the seminal works by Friedman (1968), Poole (1970), and Cukierman and Meltzer (1986).
[5] Taylor (1993).
[6] McCallum (1987) and (1993).
[7] Clarida et al. (1999), Tillmann (2012). More generally, the effects of monetary policy actions can be transmitted either through changes in the nominal interest rate or variations in the quantity of money. See McCallum (1997), Ireland (2004), Nelson (2005), Favara and Giordani (2009), Caraiani (2016), and Belongia and Ireland (2019) for more detailed discussions.
[8] See, for example, Sims and Wu (2019), where a four-equation model with financial intermediation collapses to the above-mentioned standard three-equation model using simple parameter restrictions.



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and $y = \pi^e$ . (2)

All else equal, we assume that $\sigma_E$ represents the climate-change sacrifice ratio (i.e. the inflationary costs of any central bank policy that accommodates climate-change needs). Given these assumptions, two subsequent events occur: a political event and an economic event. In the first event, the politicians decide the relevant features of their climate-change voice, considering their own political cost and benefit analysis, which in turn depends on citizens' preferences. In the second event, the central banker defines her green sensibility given the political attitude, which is summarized by the green political voice.

3.2. Starting from the political event, let us describe the delegation framework between citizens and politicians (Alesina and Tabellini, 2007). The green voice is captured through a parameter $\Omega > 0$. The intuition is that the higher $\Omega$ is, the higher the political pressure on the central banker will be.

Citizens care about the green voice's effectiveness according to a classic well-behaved concave function $U = U(\Omega)$ in which social welfare increases with the optimal voice level. The green voice is a proxy for the country's environmental policy, which depends on institutional, political and economic factors (Hahn 1990, Congleton 1992, Joskov and Schmalesee 1998, Neumayer 2002, Pearce 2005, Fredricksson and Millimet 2007, Bernauer and Koubi 2009, Del Rio and Labanderia 2009, Bailer and Weiler 2010, Marques et al. 2010, Chang and Berdiev 2011, Holzinger and Sommerer 2011, Jenkins 2014, Dolphin et al. 2020). Finding the optimal voice level is not a trivial task, given that both social benefits and costs are present. Moreover, any climate policy creates winners and losers, and distributive climate conflicts may arise (Vogel 1997, Daugbjerg and Svendsen 2001, Battig and Bernauer 2009, Meckling 2011, Bailey et al. 2012, Aklin and Urpelainen 2013, Cheon and Urpelainen 2013, Stokes 2015, Hughes and Urpelainen 2015, Lachapelle and Paterson 2013, Lachapelle et al. 2017, Genovese and Tvinnereim



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2018, Genovese 2019, Mildenberger 2020, Aklin and Mildenberger 2020, Kennard 2020).

Linear preferences are used:

$$U(\Omega)=\Omega . \tag{3}$$

The politician's reward is based on how she carries out her job. We assume that our politician wishes to please the citizens. Alternatively, we could assume that the politician aims to please specific constituencies (e.g. the lobbies). Nevertheless, we adopt the *helping hand view* of the politician's type – she wishes to please citizens rather than a particular constituency or lobby (the *grabbing-hand view*) (Shleifer and Vishny 2002). This assumption allows us to show the conditions under which the final political decision - the actual level of $\Omega$ – can differ from the socially optimal one despite the politician's desire to please the citizens.

The level of $\Omega$ is determined by the politician's ability, $\Phi$, and by her effort, *a*:

$$\Omega=a+\phi . \tag{4}$$

In the first political moment, the sequence of events is as follows: a) society chooses to delegate the task of expressing its green voice on the central bank's policy stance to the politician; b) the politician chooses her effort, *a*, before knowing her ability, $\Phi$, with regard to implementing this particular task (developing a green voice on the central bank's stance is not a typical task); c) the politician defines her voice, thereby revealing her ability, $\Phi$; and d) citizens listen to the voice but not consider the relationship between effort and ability, as they



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cannot distinguish innate talent from contingent effort. They then reward the politician.

The politician's utility function, denoted by $L = L(R, C)$, is defined as:

$$L = R(U) - C(a) , \tag{5}$$

where $R(U)$ is the reward function and $C(a)$ is the cost function. The political reward is a function of the social utility, while the political costs are a function of the effort needed to implement the task. The politician evaluates every task assignment while considering the political rewards and costs of each task. Let us describe the three crucial features of the politician:

i) Ability: The ability of the politician is a random variable with a normal distribution, where we denote the mean with $\Phi_{AV}$, and

ii) Political reward: The incumbent politician wishes to be re-elected. The politician therefore needs to provide the majority of voters with enough utility. As such, her utility function is associated with the social welfare function $U = U(\Omega)$.

In general, the politician wishes to please voters and her goals are aligned with those of the citizens. Each delegated task (i.e. each specific alignment) can be more or less convenient in terms of political gains from the politician's point of view. We denote the political value she assigns to fulfil the specific task of offering a green voice on central bank policy by $\beta_L$, with $0 \leq \beta_L \leq 1$. Therefore:

$$R(U) = \beta_L U . \tag{6}$$



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The alignment of incentives between the politician and the citizens is a necessary and sufficient condition for finding the politician's optimal behaviour. The political reward differs from the social reward so long as $\beta_L \neq 1$. From the politician's point of view, the political gains of a green voice are associated with the expected benefits in terms of consensus. Moreover, the reward will be useful if the citizens' utility exceeds the minimum threshold of utility, $W$, that they expect from an incumbent politician. The political competition condition can be defined as follows:

$$R_L = \beta_L \Pr(U \geq W). \quad (7)$$

The usefulness of the political reward will depend on this condition.

iii) Political costs: The politician knows that expressing a green voice on a central bank's choices has an implicit cost, as it is likely to occur when a policy position is taken. The politician's cost function can assume the following specification:

$$C(a) = c_L a^2, \quad (8)$$

It follows that the politician maximizes social welfare net of the costs of executing the task and taking into accounting the political reward:

$$\max L = R(U) - C(a) = \beta_L U - c_L(a_L) = \beta_L(a_L + \Phi) - c_L a_L^2. \quad (9)$$

From the first-order condition, the optimal effort will be:

$$\frac{\partial L}{\partial a_L} = \beta_L - 2ca_L = 0,$$



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which implies that:

$$a_L = \frac{\beta_L}{2c_L}. \qquad (10)$$

Given $a_L$, the politician's effective political reward will depend on the condition of political competition:

$$R_L = \beta_L \Pr(U \geq W). \qquad (11)$$

Citizens are rational. They realise that the alternative to the existing policymaker is another politician with average ability. Given their expectations, $a^e$, for effort, it follows that:

$$W = a^e + \Phi_{AV}. \qquad (12)$$

Then:

$$R_L = \beta_L \Pr(\Phi + a_L \geq \Phi_{AV} + a^e) = \beta_L \Pr(\Phi - \Phi_{AV} > a^e - a_L. \qquad (13)$$

Nature determines the ability of the incumbent $\Phi_L$. It follows that:

$$R_L = \beta \Pr(\Phi_L - \Phi_{AV} > a^e - a_L). \qquad (14)$$

When rational expectations are matched (i.e. $a^e = a_L$), the effective political reward will be positive if the ability of the incumbent politician is above average:



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$$\Phi_L > \Phi_{AV} . \tag{15}$$

Given condition (15), the equilibrium level of voice will be determined by the politician’s ability and effort:

$$\Omega_L = a_L + \Phi_L = \frac{\beta_L}{2c_L} + \Phi_L . \tag{16}$$

Given the exogenous politician’s ability, the level of voice will depend on the political preferences, which can differ from the socially optimal preferences.

Exploring the politician’s preferences is essential for understanding how and when the green voice is implemented. Voice is an endogenous variable. Various hypotheses can be advanced to explain the genesis of the political preferences. In our framework, the endogeneity of the preferences can easily be captured if we assume that the political parameters $\beta_L, c_L, \Phi_L$ depend on well-identified drivers. In the empirical section, we explore the possible relevance of a political green sacrifice ratio. In other words, we assume that:

$$\Omega_L = f(\sigma_P). \tag{17}$$

3.3. The definition of the political voice realizes the setting that can influence the central banker decisions. With the aim of highlighting the relationship between central bank policy and political voice, let $V_{cb}(t_{cb}, \pi)$ be a standard utility function of an independent central banker:[9]

$$V_{cb}(t_{cb}, \pi) = B(t_{cb}, \pi) - C(t_{cb}, \pi) = \frac{2\pi^{0.5}}{t_{cb}} - \frac{1}{2}\sigma\Omega_L t_{cb}\pi^2 , \tag{18}$$

where $B(t_{cb}, \pi)$ and $C(t_{cb}, \pi)$ are the individual benefits and costs,

[9] Here we use the utility function proposed by Favaretto and Masciandaro (2016), and assume that the central banker’s independence is constant and normalized to one.



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respectively, and σ$\Omega_L$ is the effect of the political voice. We can assume that the central banker's individual perception of the convenient green sacrifice ratio depends on the political voice. Therefore, this relationship can be either positive or negative. Finally, $t_{cb} > 0$ is the degree of central bank conservatism.

Why can the green political voice influence an independent central banker? The reasoning is as follows: political pressures on the central bank may be relevant for shaping the actual monetary policy decisions if the government in charge can threaten the central banker's role. For example, if the institutional setting is such that any incumbent government in extraordinary times can retain the option to override the central banker's decision, the central banker can be tempted to accommodate the political wishes to avoid being overridden (Lohman 1992).

On the one hand, we assume that the individual benefits are increasing and concave in the inflation rate:

$$\frac{\partial B(t_{cb},\pi)}{\partial \pi} = \frac{1}{\sqrt{\pi} t_{cb}} > 0 \; ; \; \frac{\partial B^2(t_{cb},\pi)}{\partial \pi} = -\frac{1}{2\pi^{3/2} t_{cb}} < 0 \; . \quad (19)$$

As we already know, inflation can be a beneficial tool for macro stabilization from the central bank's point of view. Moreover, central bankers are bureaucrats who may consider inflation ( i.e. seignorage) as a financial source for their organisations.

On the other hand, we assume that individual costs are increasing and convex in the inflation rate, given that the central banker cares about her personal reputation:

$$\frac{\partial C(t_{cb},\pi)}{\partial \pi} = \sigma\Omega_L t_{cb}\pi > 0 \; ; \; \frac{\partial C^2(t_{cb},\pi)}{\partial \pi} = \sigma\Omega_L t_{cb} > 0 \; . \quad (20)$$

Finally, for the sake of completeness, we assume that the central bankers are heterogeneous with respect to their degree of conservatism, which is common knowledge.[10] Notably, as we stressed above, the degree of conservatism –

[10] For more information on uncertainty and central banker's preferences, see Beetsma and Jensen (1998), Muscatelli (1998), Lossani et al. (1998), Tillman (2008), Sorge (2013), and Morimoto (2018).



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hawkishness versus dovishness – can influence the central bank's attitude towards climate change. Then, central bankers can be indexed, such that more conservative central bankers bear higher marginal costs and/or enjoy lower marginal benefits from any given policy, given that the implementation of an overly inflationary policy is costly for a conservative central banker:

$$\frac{\partial B(t_{cb},\pi)}{\partial \pi} = -\frac{2\sqrt{\pi}}{t_{cb}{}^{2}} < 0 \; ; \; \frac{\partial C(t_{cb},\pi)}{\partial \pi} = \frac{\sigma \Omega_L \pi^2}{2} > 0 \; . \tag{21}$$

The central banker's preferred inflation rate, $\pi_{cb}$, is such that the marginal benefits match the marginal costs:

$$\frac{\partial B(t_{cb},\pi)}{\partial \pi} = \frac{\partial C(t_{cb},\pi)}{\partial \pi} \; ; \; \frac{1}{\sqrt{\pi} t_{cb}} = \sigma \Omega_L t_{cb} \pi \; . \tag{22}$$

Then:

$$\pi_{cb} = \frac{1}{t_{cb}{}^{4/3} \sigma \Omega_L{}^{2/3}} \; . \tag{23}$$

Finally, we can explicitly consider the third channel between climate change and macroeconomic performances – the role of climate change as a source of financial stability uncertainty in the decisions of central bankers. The question then becomes: How do central bankers make their choices when there is a source of financial stability uncertainty that can affect their overall decisions?

The simplest way to sketch out such a situation is to consider a central bank's policy choice when a source of financial stability uncertainty can change the overall expected outcomes. Monetary policy and financial stability are associated with one another, but their true relationship is unknown. On the one hand, for any level of the inflation rate, $\pi$, the benefits depend on a random variable, $\Psi$ (i.e. the gains from central bank involvement in financial stability issues). On the other hand, losses from the central banker's involvement in financial stability can occur. The size and likelihood of such as losses are captured through another random variable, $\Delta$. The central bankers know the distributions of both benefits and costs. We assume that financial stability uncertainty



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influences only the central banker's benefits. However, uncertainty can affect both benefits and costs with different weights without any changes in our results.

Focusing on the role of financial stability uncertainty, the central bank function becomes:

$$B(t_i, \pi, \Psi, \Delta) = B(t, \pi, \Psi, \Delta) \quad (27)$$

The utility of the central banker becomes:

$$V_j(t_j, \pi, \Psi, \Delta) = \frac{2\pi^{0.5}\Psi}{t_j \Delta} - \frac{1}{2} t_j \pi^2 \quad (28)$$

From the optimality conditions, the preferred inflation rate will be:

$$\pi_j = \frac{\Psi^{2/3}}{t^{4/3}\Delta^{2/3}} \quad (29)$$

Therefore, in defining an optimal policy stance, the central banker must address the unpleasant and uncertain trade-off between expected costs and benefits, so that the sensibility toward climate-change issues is implied. Again, such sensibility can be a function of the political green voice.

All in all, a central bank's green sensibility can be associated with political voice, and more active politicians can influence the central bank's attitude on climate-change issues. The political voice can increase or decrease the central bank's perception of the optimal green sacrifice ratio. In other words, the nature of the association between a central bank's green attitude and the political voice depends on the direction of the politician's activism. In turn, the political green voice depends on the political sacrifice ratio. Moreover, each central bank's attitude toward the relevance of climate change can matter.

In conclusion, the role of central bank sensibility in influencing its decision as well as the exploration of the relevant drivers of such a sensibility becomes a genuinely empirical issue. Therefore, the development of a relevant metric is needed.

3. As we highlighted in the literature review, although several central banks



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have started to adopt green policies, adoption is not homogeneous. Therefore, rather than focusing only on actual policies, we decided to assess the central banks' more general "green sensibility", which includes green policies as well as participation in green networks, involvement in green initiatives, and research and announcements on future initiatives. We made this decision because, as we mentioned above, and only a fraction of all central banks have sincerely adopted green policies, while many others have only started to assess the effects of climate change on their operations.

As we are interested in what drives central banks to account for climate change and the environmental transition, we decided to focus on sensibility rather than actual policies. This allows us to include central banks that are in different stages of this transition. In addition, as central banks that are more active on this topic are, on average, from developing or Eastern countries, considering sensibility rather than policies allows us to have a broader and more heterogeneous sample. This is particularly important for the econometric analysis, as it allows us to have more variability in our data.

4.1. As we are interested in what determines central banks' involvement in environmental policies, we first need to design a quantitative measure to capture this effect. We therefore created the Central Bank Green Sensibility Index (CBGSI) – a metric of how much central banks signal being concerned with the effects of climate change on both the real economy and the financial system.

We built the index based on Dikau and Volz (2021), who provided a comprehensive and up-to-date list of all green policies and initiatives adopted by central banks. D'orazio and Popoyan (2020), the paper most similar to ours, uses a similar metric, but their variable differs in two aspects. First, D'Orazio and Popoyan (2020) focuses on actual green prudential regulation policies. We instead account for the broader "green sensibility", which includes a wider variety of actions that are planned or implemented. Second, D'Orazio and Popoyan (2020) use a dummy variable equal to 1 if the central bank has adopted green prudential



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regulation policies (0 if under discussion), while we built an index as an interval variable.

The D'orazio and Popoyan (2020) dummy is based on the Green Prudential Instrument Index by D'Orazio and Popoyan (2019a), which can be found in a dataset made available by the authors. The D'Orazio and Popoyan (2019a) dataset includes two indexes: the "Green Macroprudential Index" [0;…;2] and the "Green Prudential Instrument Index" [0;…;10]. Both indexes are built as nominal variables – the order does not have any quantitative meaning and, therefore, they cannot be used in our analysis. Apart from the mentioned aspects, we choose to use Dikau and Volz (2021) as a source for our data, because they have a larger sample of both proper policies and other initiatives (e.g. reports, networks ), which creates more variability in the index.

After collecting the information contained in Dikau and Volz (2021), we built a dataset of all central banks that had adopted or announced green initiatives, and then classified them according to the authors' classification:

1. Green Network participation;
2. Incorporation of ESG criteria in central banks portfolio management/TCFD supporter;
3. Integration of climate risk into macroprudential policy (implemented or under development);
4. Guidelines on environmental risk management, disclosure requirements or stress tests for financial institutions;
5. Green bond support programmes; and
6. Green lending guidelines/guidance or "promotional/directed" credit policies for financial institutions.

To these, we added three categories:

7. Green reports or announcements (involvement in green research or initiatives);



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8. Mandate updated to incorporate green activities; and
9. Incorporation of sustainable practices into their functioning as a corporation and efforts to reduce their ecological footprint (also “leading by example”).

For each central bank in our dataset, we assigned a value of 1 for each category for which it had designed, or planned to design, a relevant policy or initiative. Equation 1 reports the mathematical formula of the CBGSI. As we have nine categories, the CBGSI can take values in the interval [0;…;9]. Dikau and Volz (2021) considered a total of 135 central banks. Of these, 70 had an explicit or implicit environmental mandates,[11] while 65 did not have any environmental requirement in their mandate. We make this distinction because some central banks have a mandate that explicitly includes the promotion of sustainable growth or development as an objective, while others are tasked with supporting their governments’ national policy objectives. Thus, by “implicit environmental mandate”, Dikau and Volz (2021) referred to the implications that most central banks will have to incorporate climate and mitigation risks into their core policy implementation frameworks to efficiently and successfully safeguard prices and financial stability, even if their mandates make no explicit reference to sustainability:

$$CBGSI = \sum_{i=1}^{9} D_i \quad (30)$$

Importantly, Dikau and Volz (2021) show that environmental “sensibility” does not strictly depend on the mandate. Although 48% of the central banks in the sample had no explicit or implicit sustainability objectives, many of them had begun to engage in various green activities.

[11] Of these 70 central banks, 16 had an explicit environmental mandate (i.e. included an explicit objective for the promotion or support of “sustainable” economic growth or development) and 54 have support for government policies in their mandate (mandated with the objective of supporting the government’s policy priorities).



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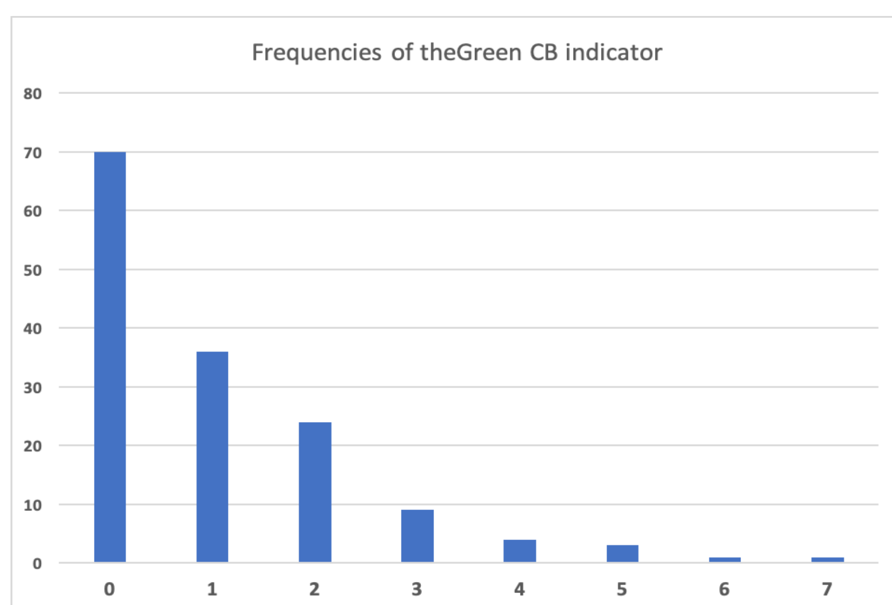
Our sample differs from Dikau and Volz (2021). Whereas central banks that have adopted or planned to adopt environmental policies are the same in both samples, central banks that lag in this regard (i.e. those with a CBGSI equal to 0) are those found in Masciandaro and Romelli (2018). We decided to use their sample in order to have a larger number of central banks not engaging in green initiatives for the sake of ensuring more variability in the data. Figure 1 reports the frequencies of the CBGSI. As we can see, the distribution is right skewed with the majority of central banks characterized by low values of the index, a few with high values, and none with the maximum value (i.e. the maximum value of the index is 7/9).

Figure 1




One of Dikau and Volz (2021) main findings is that although 48% of the investigated central banks have no direct or indirect mandate demanding the central bank's engagement with climate change-related topics, numerous central banks without mandates on sustainability or support for government policy had begun to address climate-change-related risks and sustainability challenges. Figure 2 shows the frequencies of the CBGSI divided between central banks with and without a "green mandate". Notably, in both samples most central banks have a



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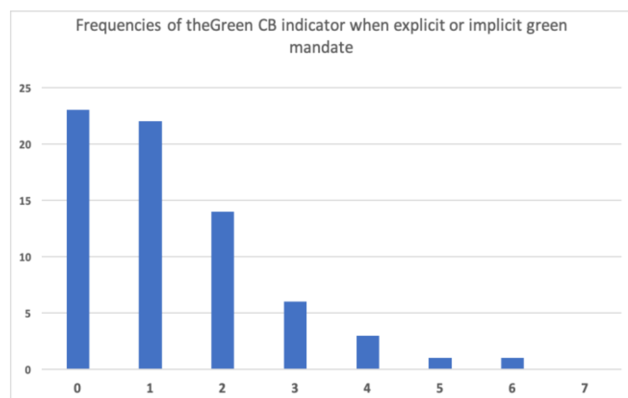
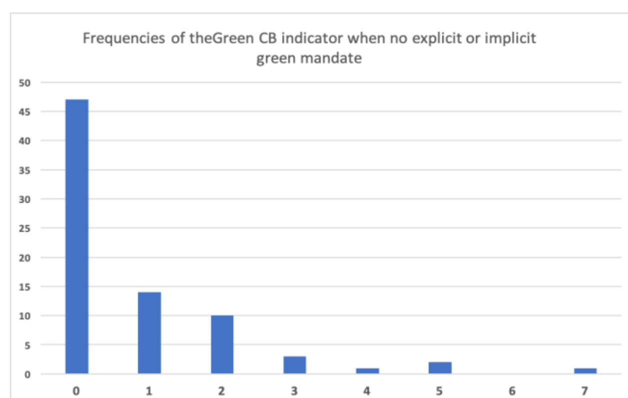
value of 0 for the CBGSI, meaning that no green initiatives had been planned or implemented, although in the “no mandate” sample this value is twice as big. This confirms that the central bank’s sensibility to the climate-change crisis does not completely depend on the mandate.

Figure 2




Given that the decision to adopt green monetary policies does not depend totally on the mandate, there may be drivers for green policies not related to legal aspects. This paper aims to explore which of these drivers may affect central banks’ decisions to adopt such policies.

To extend our analysis, we design and build the panel index for central banks’ green sensibility, which is once again based on the data provided by Dikau and Volz (2021). However, in contrast to the cross-country version of the index,



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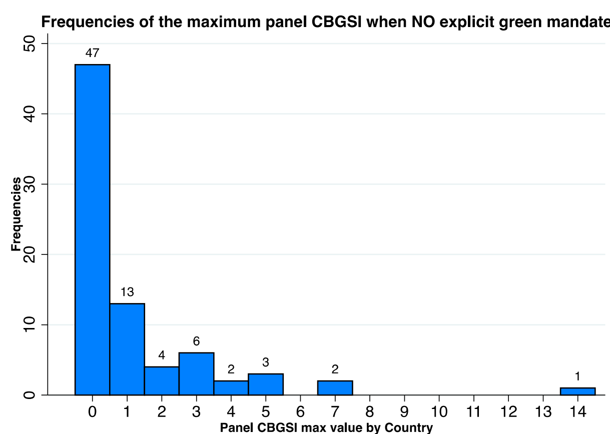
we do not aggregate policies or initiatives according to authors' classification. Instead, we sum them up over the years they have been enacted or announced. Hence, the formula for the panel CBGSI is:

$$PCBGS_t = \sum_{t=0}^{t} D_{t,} \tag{31}$$

where $D_t$ is equal to the total number of policies or activities designed or planned in each year regardless of their classification. Figure 3 shows the distribution of the maximum (over the considered timespan) for the panel CBGSI at the country level. We plot the maximum to harmonize the panel CBGSI with its cross-country version, making the comparison more reliable. Figure 3 is mostly in line with Figure 1, which implies that the two indexes follow a similar right-skewed distribution. However, by construction, the panel index has a longer tail and is more dispersed.




Thus far, we have only shown the cross-country dimension of the index. We now assess the panel dimension. Figure 5 plots the yearly average evolution of the panel CBGSI. As shown in the previous figures and mentioned in the previous section, most central banks have null or low indexes. For this reason, we chose not to include these countries when calculating the average; otherwise, the values would be underestimated by the presence of these countries (i.e. biased towards



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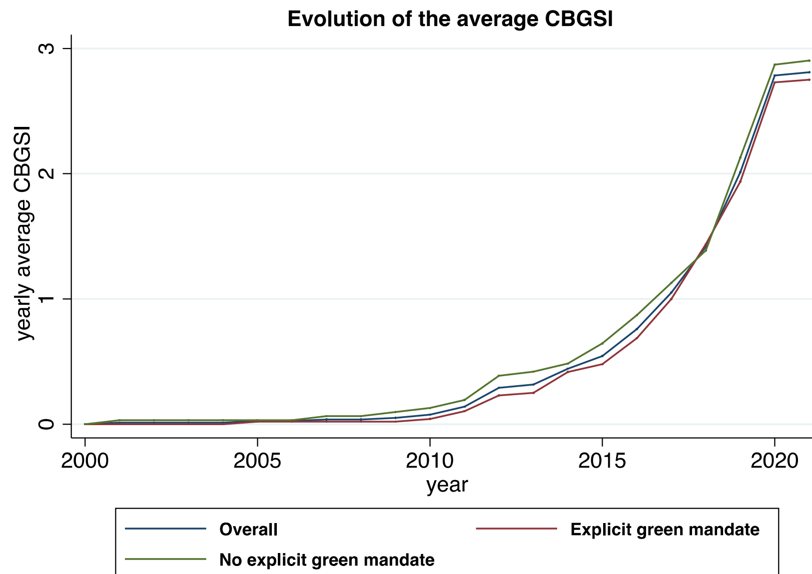
0).

Figure 5




As expected, Figures 5 and 6 show that even the central banks leading the environmental transition only started being active in this regard in 2010. The most important increase in central banks green sensibility is visible in 2015, the same year as the Carney (2015) speech. This trend is confirmed when dividing the sample according to the presence of a central bank with an explicit or potentially implicit green mandate. In addition, the Figure below shows an unexpected result: the average CBGSI is slightly higher for central banks without an explicit or potentially implicit green mandate than for central banks with a green mandate. This result is mainly driven by the presence of countries whose central banks are leading the environmental transition in the "no mandate" sample, including Bangladesh, China, Lebanon and Hong Kong. Given that central banks have been heterogeneous in the face of the environmental transition, we plot the evolution of the index for the most active countries from this perspective. To do so, we classified central banks with the maximum value of the panel index equal or higher than 5 as highly sensible. As shown in Figure 6, these central banks follow



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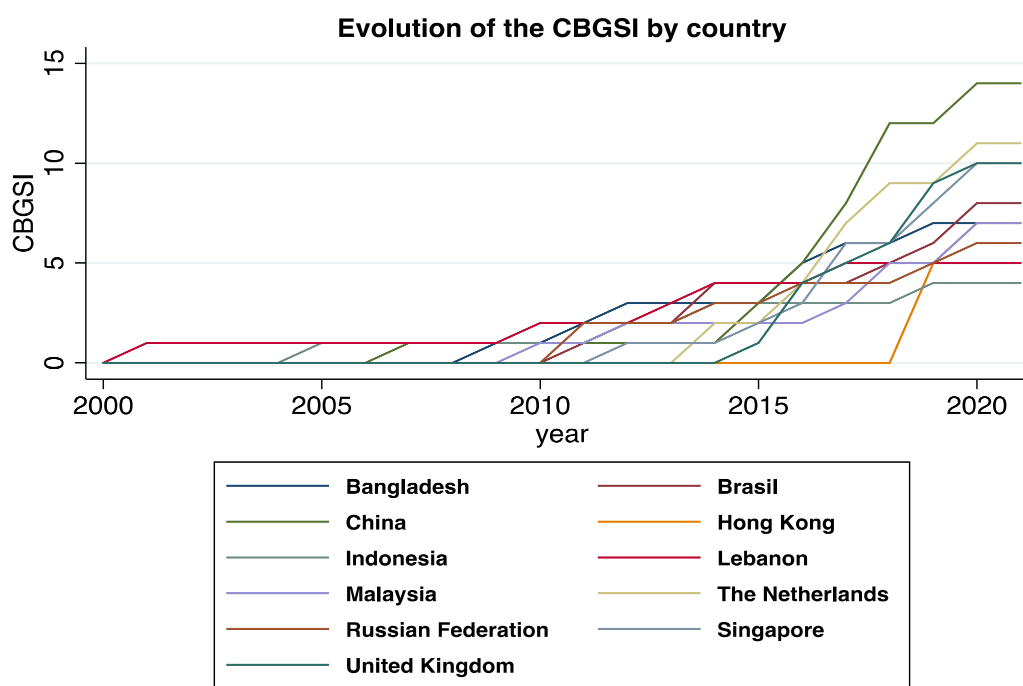
the overall path shown in Figure 3.

Figure 6




5. Central banks around the world seem to be increasingly committed to further incorporating climate-change considerations into their policy design. Additional questions arise: How are aspects, such as commitment, measured? Which factors are its drivers? This paper represents a first step in exploring these research questions. We reviewed the extant literature on climate change and central banking, and we developed a metric to evaluate central banks' sensibility in addressing climate-change issues. Further steps are needed, and we are convinced that as central banks are public agents, the metric will be useful in analysing their relationships with their principals (citizens and politicians) to uncover which economic and political drivers influence central bank activism on climate change and environmental sustainability.

Future research could assess which, if any, variables lead central banks to adopt green-focused policies using our Central Bank Green Activism Index as the



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dependent variable. As regressors, such studies could use a set of climate change data (Kling et al. 2020, Kotz et al. 2020, Volz et al. 2020, Eckstein et al. 2021) as well as political variables (Volkens et al. 2020).

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# STATE AIDS AND BEYOND

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ABSTRACT: *The paper deals with the state aid measures adopted in the aftermath of the pandemic. The essay's approach aims to highlight the lights and shadows of the discipline. These rules have been seen as a possible new frontier of the state aid framework: in reality, from a substantive point of view, there are no significant changes in the use of the application criteria. More than anything else, the measures are designed as a remedy for the exceptional situation, even if there may be hints of a project for the construction of an orientation mission that "suggests" a political line on certain areas of intervention. The suspension of the rules of the Stability and Growth Pact has favoured this process even if the differences between the budgets of the member states have obviously left the situation of the economies of the individual states unchanged. The authorization criteria are analysed, also by comparing their application in the context of the 2007 crisis. Ultimately, a new configuration of state aid does not appear to emerge from the temporary framework, nor does the Commission's discretion appear to have diminished.*

SUMMARY: 1. The reasons for the provision of the temporary state aid framework: a possible new approach? – 2. Helping enterprises for development: an opportunity not to be missed. A new season for economic planning functional to the development of European businesses. The suspension of the rules of the Stability and Growth Pact as a condition for the recovery. – 3. The criteria for the authorization of aid and procedural simplification. – 3.1. Containment measures and indemnities. – 3.2. The discretionary scrutiny. Old rules for new situations. The Commission's counterpower. – 3.3. Flexible procedure, same criteria. – 4. Not only temporary rules. – 5. Nothing changes in the legal notion of state aid. – 6. Elements of innovation. Some indications for the future of state aid policy. – 7. "Temporary" final remarks.

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1. The asymmetric impact on the economy and labour markets caused by the pandemic[1] has produced sensitive effects especially on those who were already in a state of difficulty such as vulnerable people. Indeed, this unprecedented situation reflects the differentiated situation between EU territories not attributable to the pandemic[2].

The economic crisis is configured in terms of reduction in the supply chain, decrease in demand, uncertainty on investment programmes and liquidity problems for enterprises and world financial markets of all types and sizes. The European Commission has underlined the magnitude of the crisis and has reiterated that the crisis affects the Union as a whole: that's why it estimated that its coordination action should have been necessary to provide for a common response and to ensure a level playing field[3].

The set of activities affected by the crises covers almost all sectors of the economy and every type of enterprise, both private and public. State intervention, therefore, would have been a basic instrument to deal with a situation that was immediately considered to be of long duration. One of the legal bases of the interventions adopted is contained in art. 175 of the TFEU which, by virtue of the principle of solidarity, authorizes the Union bodies to intervene in reducing territorial disparities and promoting equal development[4].

The flexibilization of the rules on State aid control was the measure that, in the first place, saw the Commission committed to drawing up a legitimating legal framework, mainly making use of procedural simplification (in terms of speeding

[1]Cf EUROPEAN COMMISSION, *European Economic Forecast*, Spring 2020, International Paper 125, Luxembourg, 6 May 2020.

[2]See CONTE, LECCA, SAKKAS, SALOTTI, *The territorial economic impact of Covid-19 in EU. A Rhomolo analysis*, in *Territorial development - JRC Policy Insights*, July 2020, available at: https://ec.europa.eu/jrc/sites/default/files/jrc121261.pdf.

[3]EUROPEAN COMMISSION, *Coordinated economic response to the COVID.19 outbreak*, Brussels, 13.3.2020, COM(2020), 112 final.

[4]See ECHEBARRIA FERNANDEZ, *A Critical Analysis of the European Union's Measures to Overcome the Economic Impact of the Covid-19 Pandemic*, in *European Papers*, n. 3, 2020, p. 1401, p. 1404.



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up the timing of the decision)[5] and indicating the ways in which it would have authorized the aid according to the consolidated screening criteria.

It is significant that the general framework offers not only a justification for measures that can buffer the crisis but, for the first time, the aim is also to prevent negative long-term developments, not only for enterprises but also for their employees.

The precautionary and, at the same time, promotional nature of the measures contemplated by the Commission reflects the awareness that the recession must be countered through a joint action to strengthen economy. Through state aids the aim is not only to "restore" enterprises that are in a state of economic difficulty at that moment but, precisely, to prevent other entities, perhaps not in crisis at the time of the outbreak, that may find themselves in difficulties. With respect to the latter profile, one of the criteria to which the Commission refers to is the "common interest" and, of course, the temporariness (this means that the time of exit must also be indicated in the entry documents of the State).

It is, on the one hand, a substantial element with a strong political value, and on the other, an indication of the Commission's intentions in a particular moment of difficulty: not a definitive renunciation to the competition rules but a need to make available temporary wider powers of intervention in the economy. Indeed, the "common interest", which often referred to situations connected with the compatibility of certain measures with competition law, in this case takes on a broader scope, which cannot be placed in the context of negative integration – such as efficient functioning of markets[6] – but rather in the perspective of the Europeanization of interventions, for the purpose of protecting community interests, fighting the pandemic, building common development. A strategy that unravels between the *European Champions* and the control of foreign investments that

[5] On procedural profiles, see LENAERTS, MASELIS, GUTMAN, *UE Procedural Law*, Oxford, 2014, p. 173 ss., *passim*.
[6] See KAVANAGH, ROBINS, *Introduction to State Aid Law and Policy*, in BACON (ed.), *European Union Law of State Aid*, 3rd ed., Oxford, 2017, p. 14.



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combine the revival of national sovereignties and the competitiveness of European companies on a global scale[7].

State presence in enterprises is not excluded if temporary and subject to market evaluation. It echoes the criterion of the private investor in a market economy[8] as a parameter for evaluating the "goodness" of the investment made by the State. Credible and strategically significant interventions would not prevent, for example, the recapitalization of major companies in support of airlines. This is not a new circumstance, which refers to a strategy of strengthening public companies as an instrument of interventionist competition policy (so-called theory of functional competition)[9]. The limit of the mentioned approach lies in the methods of financing those measures that will have to be complemented by national liquidity measures[10] because the EU budget is unable to sustain an impact of this magnitude.

On this front, in any case, we are witnessing important changes on the political level, which have a historical significance in the context of EU policies. Not without, however, the contrasts that have always characterized both the use of resources and the prospect of mutualisation of the debt. The divisions between States had not allowed, in the past, the adoption of common policies; a guideline known as austerity had prevailed[11]: financial rigor, conditionality within the Euro-

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[7]See MARESCA, *Globalization and the role of the public in the company as a function of growth and competitiveness* (*Globalizzazione e ruolo del pubblico nell'impresa in funzione della crescita e della competitività*), in TUFANO, PUGLIESE, D'ARIENZO (eds.*), Supranationality and sovereignty in the time of COVID-19 (Sovranazionalità e sovranismo in tempo di COVID-19),* Bari, 2021, p. 399 ss.

[8]See NIEMEYER, *State Aids and European Community Law*, in *Michigan Journal of International Law,* vol. 15, issue 1, 1993, p. 193 ss.

[9]See LUCHENA, *A new state aid policy? Instant aid in the context of the Covid-19 emergency between overall coherence and unprecedented profiles* (*Una nuova politica degli aiuti di Stato? Gli aiuti istantanei nel contesto dell'emergenza Covid-19 tra coerenza d'insieme e profili inediti*), in *Concorrenza e mercato*, vol. 26/27, 2019-2020, p. 17 ss.

[10]See J. ECHEBARRIA FERNANDEZ, *supra*, p. 1416.

[11]See CAPRIGLIONE, *The EU in search of new balances between regulatory harmonization, economic convergence and sovereignty* (*L'Ue alla ricerca di nuovi equilibri tra armonizzazione normativa, convergenza economica e sovranismi)*, in ANTONUCCI, DE POLI, URBANI (eds.),



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pean Stability Mechanism, reduction of public expenditure, increased tax burden. These policies have been supported by an "array" that, so to speak has cornered the less financially virtuous countries, essentially forcing them to place themselves under the protective wing of the control system operated by the so-called *trojka* (Commission, European Central Bank, International Monetary Fund).

During the pandemic, the changed alliances have fostered unexpected developments because the political action of the EU has taken on a perspective of sharing the strategies in place. Precisely the insufficiency of the resources of the individual states to finance the economic recovery has led the European Union to prepare a series of complementary measures to state aids that can strengthen action to combat the crisis through a common financial commitment.

The launch of the Recovery fund[12] aims at renewing EU policy which, for the first time, carries out a common and coordinated programming of financial interventions[13] through direct non-repayable loans and loans (with very low rates and with some conditionalities and governance that restores significant decision-making powers to the Commission in the event of any conflict on the control side).

Alongside the state aid instantly granted, the economic support provided for the "future generations of the EU" will be of a consistency not comparable with other initiatives. Furthermore, the guidelines contained in the programme have many similarities with the measures that can be favoured through state aid to enterprises: green transition, digital policies, small and medium-sized enterprises and so on.

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*The places of the economy. The dimensions of sovereignty* (*I luoghi dell'economia. Le dimensioni della sovranità)*, Torino, 2019, p. 167 ss.

[12]See HINAREJOS, *Next Generation EU: On the Agreement on A COVID-19 Recovery Package*, in *European Law Review*, 2020, p. 451; MOTTA, PEITS, *The EU Recovery fund: An opportunity for change*, in BÉNASSY-QUÉRÉ, WEDER DI MAURO, *Europe in the Time of Covid-19*, London, 2020, p. 78 ss.

[13]See CAPRIGLIONE, *Covid-19. What solidarity, what Cohesion in the EU? Uncertainties and fears*, in *Law and Economics Yearly Review*, n. 1, 2020, p. 43, available at: https://www.laweconomicsyearlyreview.org.uk.



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2. The derogating legislation on public aid to enterprises aims to free the States from a system of restrictions and prohibitions which, in conditions of "legal normality", significantly limits State intervention in the economy. This is an approach aimed not only at supporting economy: it traces an investment policy strategy never attempted before in the European Union. Of course, all efforts attempted «will remain ineffective in the absence of common measures adopted by EU political leaders»[14]. That's why, despite the differences in terms of competition between the various countries of the Union, a common policy for the European economy seems to have been undertaken. An opportunity not to be missed for the States that can, in this way, plan economic development, in harmony with the indications coming from the Commission. This is a temporary situation that can make it possible to free up resources for long-term investments, also in the perspective of a broader project, that is, to reform capitalism in a green, sustainable, and social perspective[15].

The regulatory framework on State aid gives rise to an unprecedented multi-level programming: States and the European Union come into play as active parts of a single relaunch process, not as "protectors" of non-existent economic borders or as market fixer. The ascending parable proposed by the bodies of the Union aims, above all, at coagulating in a single objective a series of interventions and tools to give back to future generations a renewed integration project closer to the needs of the economy and the community.

On this front, there is a path of adaptation of the temporary legislation which highlights the progression of the discipline according to general objectives. The political line contained in the communications adopted up to now[16] is the

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[14]See CAPRIGLIONE, *Covid-19. What solidarity, what Cohesion in the EU? Uncertainties and fears*, supra, p. 36.

[15]See MAZZUCATO, *Mission Economy: A Moonshot Guide to Changing Capitalism (Missione economia. Una guida per cambiare il capitalismo),* Roma-Bari, 2021.

[16]See DEBROUX, *State Aid & Covid-19: a swift response to a massive challenge*, in *Concurrences*, 16 April 2020; WILSON, GNATZY, *COVID-19 and UE State Aid Recapitalization*, in *Kluwer Competition Law Blog*, 15 May 2020; NOWAG, IACOVIDES, *Covid-*



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bearer of elements of originality that it would be useful to preserve and re-propose in a legal framework of possible long-term policy.

Of course, it is not a *boulevérsement* of European politics, which in its basic lines remains unchanged, but it could represent a *viaticum* to welcome the idea of a possible rethinking of certain disciplinary rigidities (legislation on State aid impeding planning, financial rules, austere public policy, prevailing monetary policies) which, over time, have not allowed European enterprises, especially medium and small ones, to stably compete in the European scenario.

The States have been able to support enterprises in a massive way thanks to the activation of the general safeguard clause of the Stability and Growth Pact, thus interrupting the spiral of financial rigor imposed on States bound to respect invasive parameters[17]: a necessary measure to allow the planned interventions to be financed in deficit deviating «from the budgetary target assumed before the outbreak of the coronavirus contagion»[18]. A circumstance that, however, will bind the States in the next future when it will be necessary to return to the budgetary financial parameters. It should be noted that the general escape clause does not suspend the validity of the Stability and Growth Pact but allows for deviations from the path of recovery from situations of deficit or excessive debt contained in the EU Council recommendation[19].

A serious recession in the EU context was confirmed[20]: a circumstance that made it necessary, therefore, to activate the clause. A provision that allowed the

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*19 and the transformative power of State aid: a framework for a democratically legitimate recovery*, in *Kluwer Competition Law Blog*, 28 May 2020.

[17]See CAPRIGLIONE, *The financial system towards a sustainable transition (Il Sistema finanziario verso una transizione sostenibile),* in *Riv. Trim. Dir. Dell'Econ*., n. 2, 2021, p. 247.

[18]See CAPRIGLIONE, *Covid-19. What solidarity, what Cohesion in the EU? Uncertainties and fears*, *supra*, p. 36.

[19]EUROPEAN COMMISSION, *Communication from the Commission to the Council on the activation of the general escape clause of the Stability and Growth Pact*, Brussels, 20 March 2020, (COM)2020 123 final; HAUPTMEIER, LEINER-KILLINGER, *Reflections on the Stability Growth Pact's Preventive Arm in the Light of Covid-19 Crisis*, in *Intereconomica*, 2020, vol. 55, n. 5, pp. 296-300; LADI, TSAROUHA, *EU Economic governance and Covid-19: policy learning and windows of opportunity*, in *Journal of European Integration*, 2020, vol. 42, issue 8, p. 1041 ss.

[20]INTERNATIONAL MONETARY FUND, *World Economic Outlook Update*, June 2020.



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Italian government to recourse to the rule referred to in art. 81, c. 2, of the Italian Constitution, which allows for the approval of budget variances with an absolute majority of the members. The decline in real GDP, estimated in the Update to the Economic and Financial Document at –9 % compared to the forecast of the Economic and Financial Document, has forced the Italian authorities, like those of all European countries, to take great impact on the economy but also on the deficit and public debt.

State aid framework has been perfected over time and made flexible in the face of the pandemic, a discipline that corresponds to a sequence of communications adopted at a continuous pace and constantly updated. In each of them, the Commission completes the discipline by expanding the admissible forms of aid and the various operational possibilities: regular monitoring and at the same time modulating the events that gradually occurred during the crisis.

The first communication (March 2020)[21] is the one that opened a breach in the application rigidity of the discipline and traced the directives to the States, so to speak, providing a first immediate orientation as far as the identification of activities and sectors that would have been "in line" with the Commission's policy is concerned. It should also be emphasized that in this communication the Commission addressed, so to speak, an appeal to the banking system as an additional, one would say subsidiary, contribution to the fight against the pandemic.

The Commission has specified, *inter alia*, that the aid in question does not have the objective of preserving or restoring the liquidity or solvency of the banks which, in this case, are considered essential as a lever to contribute to the solution of the crisis as a liquidity vehicle: it hopes, so to speak, that the banks will place themselves in a perspective of active cooperation in solving the crisis, avoiding subjecting companies to credit limitations, keeping the flow of credit constant. States can of course provide incentives for banks to continue to perform their

[21]See BUENDIA, DOVALO, *State Aids versus Covid-19. The Commission Adopts a Temporary Framework*, in *European State Aid Law Quarterly*, n. 1 2020, p. 3 ss.



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primary function and to support economic activities. Financial support in terms of liquidity recapitalization or measures for impaired assets will not be attributable to the assumptions contained in Directive 2014/59/EU[22] on the procedures for the recovery and resolution of banks and investment institutions, nor will it be assessed based on the regulations specification on aid to the banking sector. Unlike the case of direct support for which art. 32, §4 (d), points i), ii), iii) of the directive concerning failing or likely failing banks.

Subsequent communications (April and May 2020) specified the contents of the temporary framework considering the developments of the pandemic and the increased needs of the States, extending its effectiveness until the end of 2022.

The third modification of the temporary framework took place, among other things, to facilitate the granting of aid to small and medium-sized enterprises, even for those that encountered financial difficulties as of 31st December 2019, thus extending the discipline for numerous entities required by previous communications. The premise of the grant is that these companies are not subject to insolvency proceedings, have not received rescue support in the form of non-repaid aid or that they are not subject to measures under the restructuring provisions as set out in the singular framework. Furthermore, the communication cited above has also reformulated the discipline of recapitalization measures if private subjects contribute to the capital increase of the companies together with the participation of the State.

The following communication of 2nd July 2020 postponed the planned modification of the validity of the so-called non-emergency measures, i.e., the ordinary ones, which would expire at the end of 2020. At the same time, it opened the public consultation on any proposals for integration or modification of the ordinary

[22]Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, and Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and Regulations (EU) No 1093/2010 and (EU) No 648/2012, of the European Parliament and of the Council.



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legislation also considering the effects that the covid emergency has determined in the period. The further extension of the temporary framework is indicative not only of the "needs" highlighted by the economy in crisis but also of the guidelines that the Commission is likely to try to maintain for the foreseeable future, at least until previous conditions are re-established. The recapitalization measures which are further extended to 30th September 2021 as well as those aid schemes intended to support fixed costs that companies have not been able to cover due to the events caused by the pandemic are exceptions to the extension scheme.

3. The criteria for authorizing aid[23] are the result of a functional, or factual, interpretation of art. 107, §3, (*c*), TFEU emerged during the 2007 crisis[24]. In that circumstance it was a question of "grasping" the regulatory basis for the purposes of authorizing aid that would have been granted by the States. In the absence of regulatory provisions established for a systemic crisis, the provision referred to in art. 107, §2, TFEU relating to «exceptional events» did not appear enough to cover – alone – the extent of the planned interventions. The «serious disturbances of the economy» that occurred during the 2007 crisis that plagued Europe were the motive that led the Commission to use this criterion as the legal basis for the authorization of state aid to enterprises.

During the 2007 crisis, the Commission never gave up on applying the aid

[23]See, in general, case T-358/94, Air France v Commission, ECR 1996-II-2109; case T-298/97 etc., Mauro Alzetta v Commission, ECR II-2319; cases T-92/00 and 103/00, Territorio Histórico de Álava v Commissione, ECR 2002-II, 1385; case C-482/99, Stardust Marine, ECR I-4397; case C-66/02, Italy v Commission, ECR I-10901; case C-272/12 P, Commission v Ireland, EU:C:2013:812; case T-384/08, Elliniki Nafpiogokataskevastiki v. Commission, EU:T:2011:35; case C-242/13, Commerz Nederland, EU:C:2014:2224; case T-385/12, Orange v Commission, EU:T:2015:117; case C-270/15 P, Belgium v Commission, EU:C:2016:489; case C-586/18 P, case C 148/19 P, BTB Holding Investment SA v Commission, EU:C:2020:354; Buonotourist srl v Commission, EU:C:2020:152.

[24]See JAEGER, *How much flexibility do we need?,* in *European State Aid Law Quarterly*, n. 3, 2009, p. 3 ss.; LOWE, *State Aid Policy in the context of the financial crises*, in *Competition Policy Newsletter*, n.2, 2009, p. 3; D'SA, *"Instant" State Aid Law in a Financial Crisis – A U-Turn?,* in *European State Aid Law Quarterly*, 2009, p. 13; RUTKIEWICZ, *State Aid in the European Union Competition Policy in the Context of the Financial Crisis*, in *Equilibrium. Quarterly Journal of Economics and Economic Policy*, 2011, vol. 3, n. 6, p. 43.



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authorization criteria even though it had to authorize many subsidies in a plurality of sectors affected by the crisis[25]. With the application of the exceptions referred to in art. 107, §3 (c), in the absence of a specific discipline, the launch of a package of rules followed, which introduced a new disciplinary cycle in the sector of aid to banks[26]. Also at that stage, the acceleration of decisions by the Commission was envisaged precisely to allow States to give immediate impetus to support measures.

Temporary measures of a horizontal nature, however without renouncing the prerogatives in terms of control which, in fact, on more than one occasion has proved particularly severe. The outlined experimental discipline was, so to speak, of help for the purposes of preparing the "new temporary framework" set up to deal with the pandemic emergency, since it proved useful as a legal experience in terms of application of the criteria provided for by the provisions of the Treaty.

The emergency model has been replicated to the new situation, with further and more precise elements of programmatic orientation in relation to the preference for certain economic sectors. From an application point of view, the Commission has provided the States with indications on how to verify compatibility, without modifying its evaluation criteria which remain substantially unchanged. The legal bases are, as mentioned above, those contained in art. 107, §2 and §3, of the Treaty on the Functioning of the European Union, following, so to speak, the "operational tradition" in terms of application of the rules on state aid[27]. It is obviously the clear signal of non-abdication with respect to the ordinary rules on state aid and they specify the usual *modus agendi* as regards the merit of

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[25]See MAGGIOLINO, *EU State Aid Law in the Banking Sector: The Story of a Revelatory Change*, in *Law and Economics Yearly Review*, n. 1, 2019, p. 64 ss., available at: https://www.laweconomicsyearlyreview.org.uk.

[26] The recent report by the European Court of Auditors on state aid to the banking sector has highlighted certain shortcomings in the emergency legislation which do not always allow the assessment of the «serious disturbance of the economy»: available at https://op.europa.eu/webpub/eca/special-reports/state-aid-banks-21-2020/it/#chapter4.

[27]See BOUCHAGIAR, *State aid in the context of the COVID outbreak, including the Temporary Framework 2020*, in *EUI Working papers*, RSC, n. 3, 2021, p. 4.



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the evaluation.

The Commission's view does not seem to concern only the immediacy of the situation but aims to cover a much longer time which, likely, will have a substantial impact on the economy. The outcome of this process could restore a different Europe after the crisis, giving rise to a renewed stage of the integration process, which has experienced a certain slowdown precisely because of the sequence of crises that have occurred over the last decade.

3.1. As for the discipline referred to art. 107, §2, TFEU[28], the aids arranged by the States must compensate for the damage caused by the pandemic such as, for example, those triggered by a quarantine regime that prevented the potential beneficiary from continuing to carry out its economic activity. These are containment measures, therefore, which have required, in many countries, the adoption of the interventions, which are, moreover, very substantial from the viewpoint of the use of resources that have involved certain budgetary variances and consequent indebtedness.

Those provisions have the function of pure support of enterprises: although considered legal aid, this category of aid to companies has substantially changed its configuration. An ever more detailed standardization expanded the sphere of control by the Commission. Failure to comply with the conditions may therefore be susceptible to investigations in terms of compatibility.

In the context of the discipline referred to in §2 of art. 107, TFEU, the temporary framework also includes rules concerning refunds to consumers for cancelled transport services or tickets not refunded by operators. In this direction, the Commission has published a guidance note - it could be called a sort of interpretative circular - regarding the application of the directive on tourist packages.

[28]See NICOLAIDES, *State Aid to Combat Covid-19*, in *Luiss SEP*, Policy Brief 13/2020, April 4, 2020, p. 4.



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3.2. As far as the «serious disturbance of the economy» is concerned[29], the measures must cover a broader scope, which relates precisely to the economic crisis caused by the pandemic. The application of this criterion was, until 2008, restrictive in the sense that it was "accepted" only in exceptional circumstances and had to concern the situation of economic difficulty in several countries and its application was not considered suitable for saving financial institutions individually.

It should be emphasized, in this regard, that the application of the criterion sub §3, art. 107, TFEU, indicates a clear element of continuity in the use of the Commission's discretionary power, which firmly maintains the verification of the compatibility of the measures with EU law among its exclusive functions[30].

Indeed, paradoxically, the use of this discretionary criterion seems to indicate not so much (or not only) the desire to establish extraordinary rules for an exceptional situation, but just like the affirmation of a counter-power as a brake on the obvious state needs to support domestic businesses. Indeed, it is a form of resistance to the loosening of the links opened by the activation of the safeguard clause of the Stability and Growth Pact: on the one hand, the opening of the strings of state stock exchanges is allowed, on the other, the balance between powers I re-established. The increased spending capacity inevitably clashes with the rules of the market which, even in this circumstance, remain protected from possible alterations deriving from an excessive use of state aid to enterprises.

Moreover, the provisions of the temporary framework are, of course, valid for all States which, however, have different budgetary capacities: countries with more solid budgets can grant a greater number of aids, those already in difficulty must maintain spending at levels compatible with available resources. Thus, the balance between economic forces and between powers is re-established: the

[29]See NICOLAIDES, *supra*, p. 5.
[30]See TUFANO, *Introductory remarks. Beyond sovereignty: rethinking the relationship between institutions and states for a new idea of supranationality* (*Considerazioni introduttive. Oltre il sovranismo: ripensare il rapporto tra Istituzioni e Stati per una nuova idea di sovranazionalità),* in TUFANO, PUGLIESE, D'ARIENZO (eds.*),* supra, p. 15.



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principle of proportionality acts as a brake on expansions of expenditure: a typical carrot-and-stick approach.

The explosion of the economic emergency would certainly have induced the States to prepare increasingly incisive measures to support the economy and, in a certain sense, the Commission has brought the matter of State aid back to its exclusive competence: the criterion referred to §3 (c), art. 107 has certainly satisfied the need for "calling to the centre" of competences in State aid law.

The EU Court, for its part, has been able to fully define the meaning to be attributed to the notion of «serious disturbance of the economy of a member state». In fact, it must be a disturbance that must affect the entire economy of a country or a significant part of it[31]. Looking back at the Commission's decision-making practice, a rather consolidated approach emerges on this point which lives up to its wide discretion in the matter[32]. Anyway, it envisages exceptional situations and exceptional temporary measures.

It is significant to remember that the impact, as regards the compatibility of aid, does not concern compatibility itself (always available to the Commission) but rather the procedure which has been significantly accelerated. This may mean that what facilitated the granting of more aid was not the relaxation of the evaluation criteria but rather the adoption of simplified procedural criteria: they are certainly fit for the purpose but did not in any way affect the Commission's discretion. This seems to confirm that the power to maintain the balance between extra state spending and control of financial dynamics remains firmly in the hands of the EU bodies. In some way it could only have been like this when the financial resources subsequently made available for the relaunch became a "common European heritage" and a European public good.

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[31]Case C-301/96, Germany v Commission, ECR I-9919.

[32]Case C-730/79, Philip Morris Holland BV v. Commission, ECR 2671; case C-169/95, Spain v. Commission, ECR I-135; KAVANAGH, ROBINS, *Introduction to State Aid Law and Policy*, supra, p. 6.



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3.3. The criterion of selectivity[33], which has always represented the most incisive and sophisticated element for identifying prohibited aid is made flexible by the contingent situation. It seems that the Commission has temporarily raised the white flag in the face of selective forms of aid, making them compatible with the internal market in crisis.

If we look at the amount of aid authorized during this phase of the pandemic, all aids are selective but, at the same time, proportionate: legally, one of the conditions to allow for a positive assessment of the aid. Ultimately, this is proof that the selectivity – it could be called a sort of "natural selectivity", given the circumstances – is set aside in the light of the fact that those who are interested in the aid can only be «certain companies or certain productions»". In this way, the possibility that the aid will be viewed favourably is very high. Not only. But the profile of the adequacy of the measure makes it possible to save other judgments of a legal nature, shifting attention to the political level: in this case, the theme, already highlighted above, of the Commission's discretion in evaluating aid as "adequate" is clear.

The element of adequacy, therefore, indicates a prospect of political verification of the intervention that brings back the compatibility check in the context of the competition regulations: this confirms the substantial non-difference of the choices made by the Commission with respect to the general legal context. After all, it could only be so, because precisely the discipline on state aid is the one that, more than the others, allows a political control of the intervention in the economy through a nucleus of very stringent legal rules and made adaptable to any situation (including an epoch-making economic crisis). No novelty, therefore, from a substantial point of view, but a very significant commitment in making possible a rapid assessment of the measures consistent with the general legal framework,

[33]Cases C-6/69 and C-11/69, Commission v France, ECR 523; case C-173/73, Italy v Commission, ECR 709; case C-241/94, France v Commission, ECR I-4551; case C-75-97, Belgium v Commission, ECR I-367; case 143/99, Adria-Wien Pipeline and Wietersdorfer, ECR I-8365.



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following the indications of the Commission in reference to the sectors to be privileged in the choice of the state and trust in short time examinations (but not superficial).

The two different areas of intervention outline the concrete perspective of state overfilling. All the aid in terms of compensation for the economic damage ensures a scope that "covers" a wide range of support set up to face the crisis. The subsequent criteria do not limit themselves, so to speak, to repairing the damage but draw a political line for the future clearly linked to the Next Generation EU initiative. The selective measures that can be granted to deal with a disturbance of the economy in a Member State are not only used by the States to try to restart the economy but also by the Commission to check whether the interventions are proportionate and harmless from the viewpoint of the compatibility with the competition rules.

4. The States can continue to activate measures in application of the regulation of exemption from prior notification that assigns the potential compatibility license to aid granted by states in a very substantial number of categories of aid[34]. Add to this, the wide operational spectrum allowed by the regulation on *de minimis* aid[35], to that of the fishing and agricultural sector[36], and to the guidelines for aid to companies in difficulty.

The ordinary disciplinary framework is valid and exploitable: it is an option that remains available for the purposes of planning forms of intervention that may go beyond the context of the crisis and be part of a long-term planning strategy.

Above all, it is precisely the horizontal aid categories that represent a way in which the profile of collaboration between the States and the Commission is appreciated in the perspective of multilevel programming which, in this phase of

[34]See BACON, *The General Block Exemption Regulation,* in BACON (ed.), *supra*, p. 153 ss.
[35]See BACON, *The Definition of Aid*, in BACON (ed.), *supra*, p. 89 ss.
[36]See BACON, *Agriculture and Fisheries*, in BACON (ed.), *supra*, p. 399 ss.



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the history of European integration, appears not only appropriate but also necessary. The legislation envisaged by the exemption regulation, in fact, outlines the contours of the stably structured sharing of policies regarding certain categories of aid which extend the range of action of state initiatives (those categories of aid are potentially admissible because they do not undermine competition).

The disciplinary framework is, therefore, overall structured in part by elements of extraordinary nature, in another by the ordinary legislation, consolidated from both a substantive and procedural point of view.

As for the novelty profiles, the "new" discipline contains elements worthy of mention from various points of observation. It is certainly so for the types of measures to be considered potentially admissible, for the operational "warnings" also in relation to the sectors that the Commission is likely to deem "consistent" with its policy on economic development and the quantitative aspects connected to it. Never has the Commission prepared a disciplinary complex that speeds up the procedure to determine the approval of a state aid measure in such a short time: it is the adaptation of the legal framework to the contingent situation[37].

5. In times of crisis, or in any case of transition, the evolution of the concept of state aid followed a certain aid policy[38]. Often, in fact, the notion of aid[39] has been, so to speak, enriched with new elements or integrated through the elabora-

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[37]See RIEDEL, WILSON, CRANLEY, *Update on the UE's State Aid Response to COVID-19*, in *Kluwer Competition Law Blog*, 11 April 2020.

[38]See PIERNAS LÒPEZ, *The Concept of State Aid under EU Law. From internal market to competition and beyond*, Oxford, 2015, p. 13 ss, *passim.*

[39]See QUIGLEY, *The Notion of State Aid in the EEC*, in *European Law Review*, 1988, p. 242 ss.; BACON, *State Aids and General Measures,* in *Yearbook of European Law,* vol. 17, 1997, p. 269 ss.; SCHÖN, *Taxation and State Aid in the European Law*, in *Common Market Law Review,* 1999, p. 911 ss.; NICOLAIDES, *Fiscal Aid in the EC. A Critical Review of Current Practise,* in *World Competition*, 2001, p. 319 ss.; PLENDER, *Definition of Aid*, in BIONDI, EECKHOUT, FLYNN (eds.), *The Law of State Aid in the European Union,* Oxford, 2004, p. 5; BIONDI, *State Aid is Falling Down, Falling Down: an Analysis of the Case Law in the Notion of Aid,* in *Common Market Law Review*, 2013, p. 1732 ss.; JENNINGS, *State Aid Modernization – Trying to Do More with Less*, in *CPI Antitrust Chronicle*, n. 2, 2014, p. 2 ss.; CRAIG, DE BURCA, *EU Law*, 6th ed., Oxford, 2015, p. 1087 ss.



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tion of sub-criteria, sometimes more incisive than the criteria themselves (see, for instance, fiscal aids[40]).

The substantive legislation is not new. The notion of aid is contained in the 2016 communication[41] with which the Commission dictated a *guide* for the States that intend to grant measures to support the economy. The *Communication* is «the definitive expression of the Commission's position on what constitutes State aid»[42]: no changes have come.

The experience of the Commission and the contribution of the EU Court have represented the basis on which to crystallize the evolutionary processes of the notion, now stabilized, coherent, and at the same time dynamic and open: therefore, it remains unchanged in its features and its contents. A possible deviation (integration) from the notion may be possible after the settlement determined by the effect triggered by the new measures and any further innovations introduced during the pandemic (above all: golden powers[43], state presence in enterprises, and so on).

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[40]See CHESAITES, *Tax Incentives as State Aids*, in TOMLJENOVIC, BODIROGA-VOKOBRAT, BUTORAC MALNAR, KUNDA (eds.), *Eu Competition State Aid Law Rules. Public and Private Enforcement*, Berlin Heidelberg, 2017, p. 253 ss.; PIERNAS LÒPEZ, *The Concept of State Aid under EU Law. From internal market to competition and beyond*, supra, p. 59 ss.

[41]EUROPEAN COMMISSION, *Commission Notice on the Notion of State aid as referred to in Article 107 (1) of the Treaty on the Functioning of the European Union*, OJ C 262, 19.7.2016; GALLETTI, BIONDI, STEFAN, BUENDIA SIERRA, *Comments on the Draft Commission Notice on the Notion of State Aid Pursuant to Article 107(1) TFEU*, available at http://ec.europa.eu/competition/consultations/2014_state_aid_notion/uk_cel_en.pdf.

[42]NICOLAIDES, *State aid undercovered. Critical analysis of developments in State aid 2016,* Berlin, 2017, 13.

[43]See BASSAN, *From Golden Share to Golden Power: The European Shift of Paradigm for State Intervention in The Economy (Dalla golden share al golden power: il cambio di paradigma europeo nell'intervento dello Stato nell'economia)*, in *Studi Integr. Eur*., n. 1, 2014, p. 57 ss.; SACCO GINEVRI, *The strengthening of golden powers regulation between sovereignty and globalization (L'espansione del golden powers fra sovranismo e globalizzazione*), in *Riv. Trim. Dir. dell'Econ*., n. 1, 2019, p. 151 ss.; LUCHENA, *Is the so-called liquidity decree a threat to liberalism? Brief notes on the "new" golden power (Il c.d. decreto liquidità è una minaccia per il liberismo? Brevi note sul "nuovo" golden power)*, in *www.dirittifondamentali.it,* 1 May 2020; ANNUNZIATA, SACCO GINEVRI, SAN MAURO, *The Golden Powers between State and Market (I Golden powers fra Stato e mercato),* in MALVAGNA, SCIARRONE ALIBRANDI (eds.), *Post Covid-19 production and financial system: from efficiency to sustainability. Voices from economic law (Sistema produttivo e finanziario post Covid-19: dall'efficienza alla sostenibilità. Voci dal diritto dell'economia),* Pisa, 2021, p. 433 ss.



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The network of derogations cannot be considered in isolation from the general context. Take, for example, the issue of financing aid from national budgets. The resources of the States are manifestly different from each other, and this may favour those who can boast greater solidity and more fiscal freedom[44]. It is sufficient to note the amount of aid provided by some states to see how this statement is true. The suspension of the application of the deficit / GDP limit of 3 percent has opened the possibility of debt (with also important repercussions on the internal constitutional plan); aid measures for businesses can only be taken through this channel. And, probably, the question of aid (not only their quantity but also certain forms) will recur at the time of the negotiation phase in the European semester which, through the preventive control over state budgets, constitutes an indirect procedure for also regulating the state aid with a view to coordinating economic policies (think of the policies for supporting strategic infrastructures included in the Italian Economic and Financial Document).

Moreover, the notion of state aid makes explicit reference, precisely, to aid granted by states or through state resources: which, as is well known, indicates not only the material disbursement of money but also behaviour omissions or the waiver of certain tax revenues. This naturally also applies to the resources that pass through the state budget (everything is recompressed in the notion of state resource): this will obviously also be the case for the "complementary" line of support deriving from the use of EU funds, unspent or other financial sources that will come from other institutions.

Unlike what has happened in the history of integration, in this case, therefore, the notion of aid has not undergone any upheavals. Over time, in fact, in other economic crises, the legal notion of aid had been enriched with elements that made it possible to "settle" it. The pandemic crisis has not changed the notion of aid: this aspect confirms both the extraordinary and temporary nature of the in-

[44]See MOTTA, PEITZ, *State aid Policies in Response to the Covid.19 shock: Observation and Guiding Principles*, in *Intereconomica*, vol. 55, n. 2, 2020, p. 221.



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terventions and the unchanged legal framework.

6. The validity of the individual ordinary disciplinary frameworks has been extended in a diversified manner by sector: the guidelines on state aid for regional purposes, the guidelines governing risk finance, those for the environment and energy, the communication on the implementation of common European investment projects and the one on credit and export insurance until 2021; the so-called *de minimis* regulation, that exempts certain categories of horizontal aid from prior notification (GBER[45]), the guidelines for aid for restructuring financial firms in difficulty up to 2023 and, lastly, the guidelines on aid for the agricultural sector and forestry and rural areas and those, still in the same sector, relating to the period of application and temporary changes due to the pandemic.

This initiative aims to develop the debate not only on the rules whose effectiveness was destined to fade at the end of 2020 but also on the future of aid regulations in this sector. In fact, it will be necessary to verify both the effectiveness of the rules adopted so far and the perspective of the provisions regarding the granting criteria for "expiring" aid. Such a time span will be very useful for reflecting on certain categories of aid also in the light of the experience that will accrue during the crisis, also, possibly, for the purpose of the overall redefinition of a specific singular legislation.

In general, the policy aimed at promoting economic, social, and territorial cohesion[46] according to a rational and targeted use of aid seems to hit the mark. The expected effects are, for the most part, aimed at avoiding the creation of further gaps between territories and areas of Europe.

Certainly, a complex and ambitious operation because, in this phase of Eu-

[45]Commission Regulation (EU) no. 651/2014 of June 2014 *declaring certain categories of aid compatible with the internal market in application of Article 107 and 108 of the Treaty*, OJ L 187 26.6.2014.

[46]See PONGERARD-PAYET, *La politique régional et de cohésion: étude rétrospective d'une politique-clé au service de l'Europe,* in *Revue de l'Union européenne*, n. 619, 2018, p. 351 ss.



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ropean integration, there are signs that seem to indicate a different course than in the past: the abandonment of austere finance and the use of incentives for the purposes of technological and economic development.

Among the most significant elements of innovation, although within the consolidated framework of the legal notion of aid[47] as outlined in the Communication from the Commission on the notion of State aid, there are those concerning certain intervention sectors in which the Commission "advises" to invest. The green transition, the spread of broadband and support for innovative start-ups are, among others, policies that the Commission urges to implement by promoting the (temporary) flexibility of state aid control and, at the same time, supporting the state budgets, which according to what is established by the temporary framework, will have to be the main sources of financing for the support measures (which, in all likelihood, will come with the resources deriving from the investment plan of the Recovery fund).

States are therefore required not only to support liquidity and access to finance but also to try to transform the legal framework into an operational horizon aimed at addressing the challenges that the post-pandemic future will bring to the European economy. The new paradigm would concern the abandonment of the logic that has hitherto guided European policies (austerity, restrictive monetary policies, renunciation of an employment policy) – «the pre-Covid economic orthodoxy»[48] – consisting, ultimately, in an «excess of confidence in the markets»[49] and in the theory according to which the State would have discharged its duties simply by controlling inflation, deficit and debt and the launch of a new path to use the lever of aid to companies conditional on actual needs of the community, such as

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[47]See SCHUTTE, HIX, *The application of the EC State Aid Rules to Privatization: The East German Example,* in *Common Market Law Review*, 1995, p. 222 ss.
[48]See MAZZUCATO, SKIDELSKY, *Toward a New Fiscal Constitution*, in *Projet Syndicate*, 10 July 2020, available at: https://www.project-syndicate.org/onpoint/new-fiscal-constitution-job-guarantee-by-mariana-mazzucato-and-robert-skidelsky-2020-07.
[49]See STIGLITZ, *Rewriting the Rules of European Economy (Riscrivere l'economia europea. Le regole per il futuro dell'Unione),* Milano, 2020, p. 71.



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increased employment, environmental protection, technological innovation. In this way, above all, state aid to enterprises would contribute to increasing the social value of public intervention in terms of beneficial distributive effects. In this way, state action in the economy would regain a certain appeal from both a social and entrepreneurial point of view, also considering that the state has regained strength as an active subject in the economy by taking on certain initiatives on its own, entering the corporate structures of large groups, defending its strategic assets, intervening in the planning of infrastructures[50].

7. The measures adopted thanks to the temporary framework, unlike those identified during the 2008 crisis[51], not only present defensive mechanisms but outline an overall strategy by the European Union. In addition to the already experienced facilitation in obtaining authorization through a simplified procedure, the EU bodies, together with the States, have prepared a real programme of common action which, together with further financial initiatives, appear to outline a renewal project for the Union itself.

This is certainly a new approach to the issue of the economic emergency, but, as we have tried to outline, essentially in the wake of tradition. The temporary framework will remain an exceptional intervention. If it is true that the simplified procedure has accelerated the authorization of a considerable number of aids, it is equally true that the Commission has provided precise indications to the States regarding the methods of verifying compatibility, without modifying its evaluation criteria which remain unchanged. Faced with a growing state aid policy, the Commission has "re-established" parallel relations of power, confirming its substantive criteria and rising to the role of programmer. The Commission is once again the main protagonist, together with the European Central Bank, of Union

[50]See LUCHENA, CAVALIERE, *New Issues Related to State Aid in EU Law (Le nuove frontiere in materia di aiuti di Stato),* in *Studi Integr. Eur*., n. 2, 2020, p. 303 ss.
[51]*Nicolaides, supra*, p. 14.



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policies: the link between economic and monetary policies lies in the convergent action of the measures taken to support economy.

States are being suggested a strategy within the framework of a concerted programming at European level through the Recovery fund that, anyway, it doesn't exclude state aid control[52]. The "sensitivity" towards the environmental issue, for example, has gradually become the most consistent chapter in the history of an emergency that has been going on for many years and which has seen institutional subjects and intermediate bodies engaged in changes. The ecological transition has become a transition towards technological innovation with an inter-sectoral approach with the aim of building a sustainable society. Indeed, sustainable development has become the emblem of a global mission that concerns the achievement of ambitious goals by 2030 such as, for example, the project to create an accessible and ecologically compatible energy system.

This transition process attempts to shift the perspective from the ecology of claims to the concrete implementation of a convergent global environmental law policy, in which state sovereignties cooperate for the realization of a common goal that requires the abandonment of the intergovernmental logics that have hitherto, so to speak, governed the economic-environmental processes in the global juridical-institutional architecture. The fund for support in favour of areas falling within the so-called *just transition* aims to support the process of economic conversion of the territories concerned with a particular focus on research and technological innovation, environmental remediation, clean energy, the qualification and retraining of workers, assistance programs in the search for employment and the active integration of those seeking employment.

But even in this case, the legislation on state aid intervenes, so to speak, to bring every possible action to reconvert the economy under the aegis of environmental sustainability into the framework of the competition rules. The criteria for

[52] Regulation (EU) 2021/241 of the European Parliament and of the Council of 12 February 2021 establishing the Recovery and Resilience Facility, *OJ L 57, 18.2.2021, p. 17–75.*



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authorizing state aid, in any case, cannot be superimposed on other measures relating to interventions in the environmental field.

In any case, the logic underlying the discipline of state aid control is very different from that of the recovery plan. In the first case, the basic objective is to protect competition: the aid must be notified to the Commission or fall within the scope of the regulation on exemptions from prior notification and in any case must not cause actual or potential damage to trade in the internal market. In the second, the rules to favour the ecological transition are mostly focused on the principle of progression and respond to a programming logic that goes beyond the concrete cases inherent in the control of aid. In fact, this principle responds to a logic not immediately imputable to the economic matrix but broadens its applicative horizon to wider situations.

Another area of intervention is that of technological innovation. Increasing investments in infrastructure, research and technological innovation is a fundamental element of the European Union's challenge, if it wants to reverse the course followed so far. In fact, the resources allocated by the Next generation EU will be directed towards a series of infrastructures - without prejudice to compliance with the rules on state aid - which should deliver a new structure to the member states.

Ultimately, it is a question of setting the paradigm for development in terms of "investment planning" as a stimulus to achieving full employment. A fundamental contribution to achieving this goal is the support action promoted by public development banks such as, for example, the European Investment Bank, the World Bank (once critical of national development banks) and the various regional banks such as the African Bank of development or the Inter-American Development Bank.

The revaluation of the State as an economic actor seems to be taking shape, especially in the perspective of an entrepreneurial State: not (only) correc-



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tor of market failures but as a promoter of economic policies with reference to the impulse that can be determined by technological innovation which represents a factor enhancement of the European economic constitution and a privileged tool for pursuing its interests.

Technological innovation promoted by the State, in fact, constitutes a significant profile of European political action to the extent that it generates added value in terms of public services and the development of economic activities for social purposes, as well as, of course, of promotion of competition. If we look at what happened during the last crisis, the countries that suffered the most from its consequences were precisely those that invested the least in innovation. Above all, spending on innovation does not only concern the supply side but also the revenue side. The logic of restricting public investments to prepare states for periods of crisis, or in any case of lean periods, with deficit and debt reduction policies, has nourished the policies implemented up to now in the European plan. Now, that model can no longer be supported, and it is for this reason that the drive towards innovation is encouraged by the so-called good debt.

A targeted and wide-ranging action, therefore, which aims to restore credibility to the European Union itself as a political entity that fosters competition in a dynamic sense and is not limited exclusively to keeping financial parameters under control – also important for the purposes of overall growth of the EU itself in the context of commercial globalization and related technological challenges at a global level.

Moreover, it is no coincidence that there was no resistance from some States when the Commission adopted the temporary frameworks precisely because the condition of the possibility of preparing aid schemes was (and is) linked to the budgetary capacities of each country (through deficit financing). Firm oppositions which, on the other hand, arose at the time of the launch of the European financial plan to support state policies, albeit coordinated and conditioned, be-



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cause, of course, shared resources came into play.

In short, the possible indication of novelty in the field of State aid lies not only in the procedures for simplifying and accelerating decisions but in the absorption of the tasks of the Commission in terms of authorization in the more general ones of political direction of the crisis that, for the first time, having temporarily abandoned the austere financial policy for a short-term period has the ambition to restore dignity to an authentically Europeanist shared project that can contribute to the revitalization of the European project in which sovereignties are placed at the service of the supranational entity and do not hinder the achievement of common goals.



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# THE STATE-OF-THE-ART OF NPLS IN THE POST COVID WORLD: AN ONGOING CONCERN FOR THE FUTURE

Mariateresa Maggiolino * - Robin Morgan ** - Maria Lucia Passador ***

ABSTRACT: *The paper notes how the economic gridlock due to the pandemic could generate new flows of impaired loans and discusses how the current rules for managing these assets may not be the best suited to handle a problem that ttoday, differently from what happened in the past, is not attributable to any failure of the banking system.*

SUMMARY: 1. Introduction. – 2. Why do we fear NPLs crises? – 3. The causes of NPLs crises. – 4. The Covid-19 crisis and measures to limit its impact of new flows of NPLs. – 5. The calendar provisioning mechanism and its effects in a nutshell. – 6. Other measures to improve the development of the secondary market for NPLs. – 7. The data: Methodology and Results. – 8. Concluding remarks.

1. The purpose of this article is to examine the current situation of non-performing loans (NPLs) in the EU from a diachronic perspective, with a special focus on the regulatory and factual events relating to the Covid-19 pandemic.

Although we agree with Cicero that "Historia vero testis temporum, lux veritatis, vita memoriae, magistra vitae, nuntia vetustatis",[1] our reflections on the status of NPLs in Europe are necessarily more nuanced. History can serve as a powerful guide, but the greatest disruptive scenarios require a conscious and consistent adjustment by people and regulations. Specifically, they must seek to cope with unforeseen developments that differ from those faced in the past, requiring

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[1]Cicerone, *De Oratore*, II, 9, 36.



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continued awareness and flexibility.

To this end, it is necessary to proceed step by step and begin with a thorough review of the rationale and goals of NPL-related measures taken so far.

First of all, it is necessary to examine and recall the critical role played by banks in the economy and how they are able to absorb losses up to a certain amount. It is equally important to note that they cannot cope with heavy losses, which often occur in situations where their ability to lend credit and their reputation on the market cannot shield them from the impact of both pathological NPL flows and the inadequacy of their NPL management structures (paragraph 2).

Meanwhile, it should also be recalled that the cause of the most recent NPL crisis was linked to the sub-prime crisis, which taught us that the hardest risk to foresee is the probability of default even by normally well-paying debtors (paragraph 3). The current situation faced by EU Member States is filled with yet more uncertainty, but we are far better prepared now than we were then. The post-Covid era will benefit from the many safeguards which have already been implemented, including: the prohibition of profit distribution by banks recommended by the EBA; greater flexibility in the interpretation of financial statement criteria (IFRS) and the classification of NPLs; and some essential measures to streamline the functioning of the secondary market for selling or restructuring NPLs (paragraphs 4-6).

Against this background, empirical evidence can show us which direction we are moving in (paragraph 7). It shows that we should not to drop our guard, but rather keep a watchful eye on the situation and act promptly and swiftly if/when needed.

More precisely, following the NPL regulatory framework developed by the EU and several nations in the mid-2010s, NPL ratios and the aggregate amount of NPLs consistently dropped between 2015 and the first quarter of 2021, with the one exception being the first quarter of 2021 which saw a slight uptick in the aggregate number of NPLs.

Moreover, corporate and household debt levels across some of the more



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traditionally problematic financial markets in the EU remain relatively healthy, at least compared to 2013 levels. However, government debt-to-GDP levels have increased substantially (almost doubled) in 2020 compared to the mid-2000s and are at their highest ever recorded levels across Member States. This may limit Member States' capacity to intervene in the event of a financial or economic crisis.

We do not say this to cause alarm, but rather present it as a warning to keep alertness levels high and interest in the topic alive. It is anything but outdated, and anything but solvable, with the helpful although rather rudimentary tools that history itself has provided.

2. Lending activities always expose financial intermediaries to the risk that they will not repay the full amount due on the agreed terms and conditions. Indeed, non-performing loans arise not only when debtors default, but also when debtors' creditworthiness deteriorates.

However, banks are *physiologically* predisposed to absorb a certain amount of these impaired exposures. Based on experience, statistical models and indications from rating companies, banks can in fact calculate the prices and contractual conditions of their credit products, so as to discount the expected losses as well as the variance of these losses around their average. Consequently, as a rule, the fact that financial intermediaries record NPLs on their balance sheets should not– and, in fact, does not– cause fears or alarm.[2]

Instead, the occurrence of quantitatively disproportionate flows of NPLs, say *pathological* flows of NPLs, is and should be a cause for alarm. These flows jeopardize many of the virtuous mechanisms on which banks function. More specifically, they:

- Diminish revenue and increase costs for banks.
- Negatively impact the maturity transformation mechanism.
- Increase the requirement for regulatory capital which every bank must meet

[2] MAGGIOLINO, *La disciplina giuridica della gestione dei crediti deteriorati nella prospettiva delle banche: profili critici*, Milano: Egea, 2020.



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in accordance with the regulations dictated by the CRR[3] and CRD IV[4] since they both reduce the values of the assets (i.e., profits and losses) which can be included in regulatory capital and increase the value of the credit risk weighted assets.

- Increase the costs that banks must bear to raise capital since they compromise a bank's reputation by making it appear worse than its competitors at identifying adequately or, at least, loans that are profitable enough to not to fuel losses.

If we believe that the smooth functioning of the banking system and its ability to lend credit is crucial in supporting the economic development of a country,[5] then whatever undermines banks' ability to function is a problem. Especially if said flows end up affecting many intermediaries or banks of systemic importance, the contraction of money available to the banking system translates into a reduction of the credit that is provided to operators that could develop profitable economic activities.[6]

But there is more.

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[3] Regulation (Eu) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012, available at https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/? uri=CELEX:32013R0575&from=it.

[4] Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC, available at https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri= CELEX:32013L0036&from=it.

[5] CAPRIGLIONE, *La governance bancaria tra interessi di impresa e regole prudenziali,* in *Riv. Trim. Dir. Econ*., 2014, 66 a 69.

[6] ACCORNERO, ALESSANDRI, CARPINELLI, SORRENTINO, 'Non-performing loans and the supply of bank credit: evidence from Italy', *Quaderno di Economia e Finanza No. 374*, 2017, available at https://www.bancaditalia.it/pubblicazioni/qef/2017-0374/index.html?com.dotmarketing.htmlpage.language=1.



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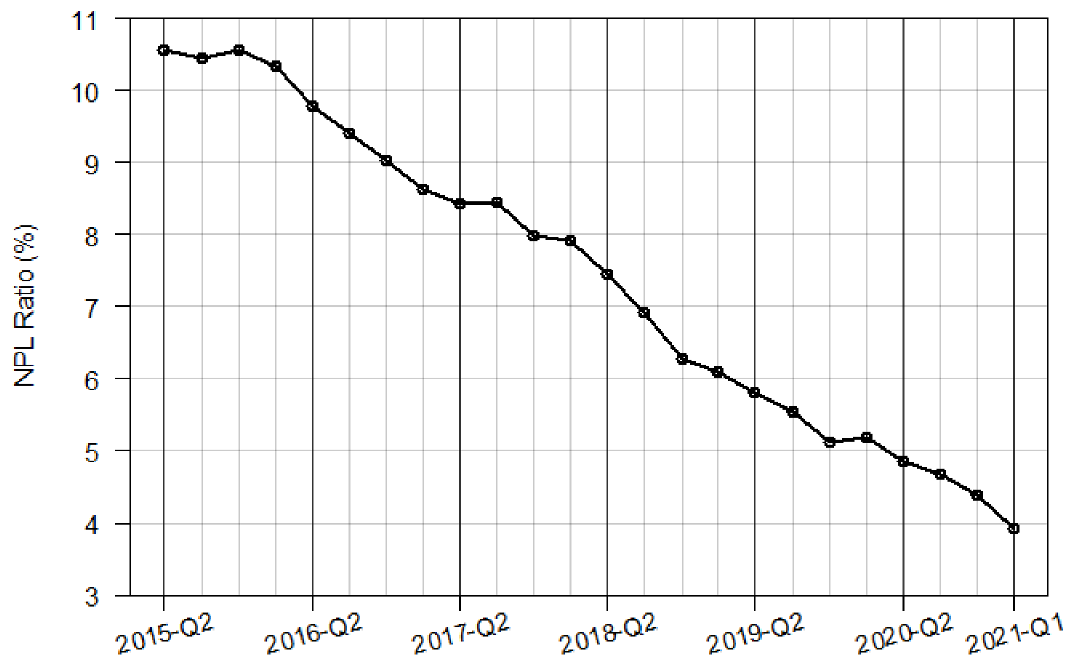
**Figure 1: Mean NPL Ratio across Member States**




Source: IMF Financial Soundness Indicators, Central Banks, EBA Reports.

Banking intermediaries can experience serious difficulties in the management of pathological NPLs flows. Banks may not have the skills, structures or resources to either liquidate or restructure NPLs. This state of affairs causes a bank to continue to be the owner, potentially for several years, of piles of bad debt; in other words, it creates huge stocks of NPLs that are pathological not only in terms of their amount, but also their maturity. For example, Figures 1 and 2 show how NPL ratios were high following the 2013-2014 debt crisis, including hitting almost up to 50% of all loans for Greece and Cyprus, taking years to return to lower levels.[7]

[7] In terms of EU-wide results, our sample includes all EU countries except the Czech Republic, Denmark, and Sweden. The same is true for the figures that follow, except when noted otherwise.



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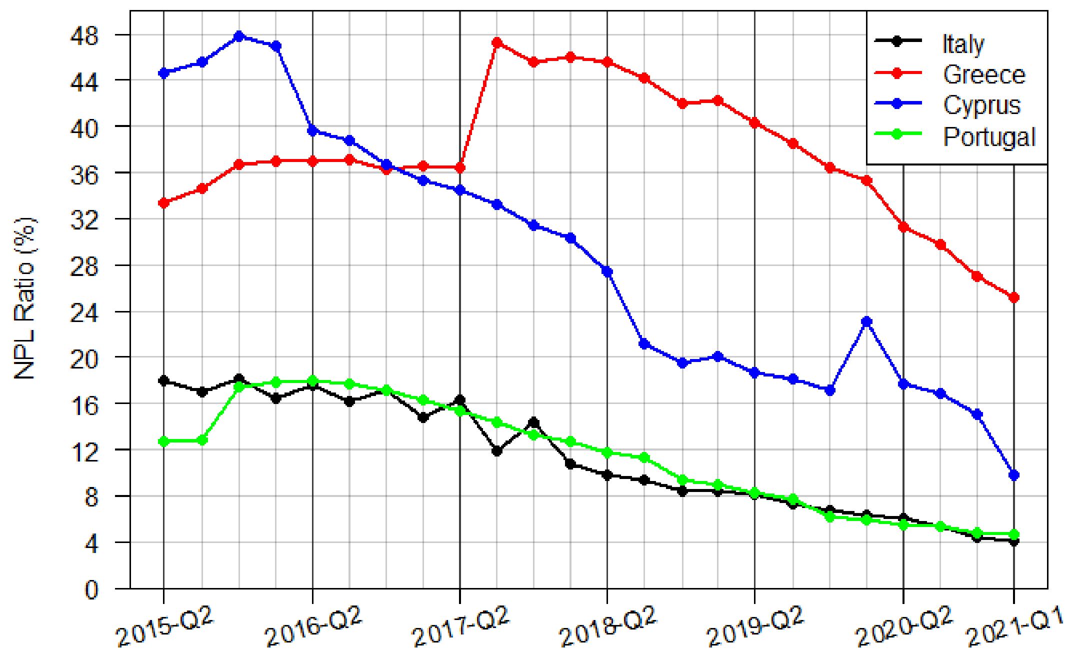
**Figure 2: Italy, Greece, Cyprus, and Portugal Mean NPL Ratio**




Source: IMF Financial Soundness Indicators, Central Banks, EBA Reports.

Pathological stocks of NPLs also produce two negative effects which hinder a bank's ability to properly function.[8] First, they can potentially harbour new flows of NPLs. While NPLs are stoked, their value may be subject to further reductions, either because their initial valuation was too optimistic or because new loss events have occurred. Each of these write-downs is equivalent to a new flux of NPLs and, hence, implies the negative consequences seen above. Second, as the market perceives the estimated value of NPLs stocks as an opaque and ambiguous balance sheet item, investors can consider banks burdened with pathological NPLs stocks as less transparent and reliable than their rivals to the further detriment of the banks' reputation and, therefore, of their ability to raise capital from the market.

Overall, the costs caused by pathological flows of impaired exposures can become much higher when the failure to liquidate or restructure them gives rise to stocks of NPLs, which become more pathological as they become more mature. These stocks, in addition to potentially becoming generators of new flows of

[8] Ibidem.



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impaired exposures, weigh on the balance sheets of intermediaries, presenting them as fragile and unreliable and thus further increasing the costs of raising funds.

But what can cause pathological flows and stocks of NPLs?

3. What happened since the sub-prime crisis has taught us a few lessons. In particular, it showed that NPLs crises result from the combination of many different factors.

First, financing policies that pay little attention to the creditworthiness of clients expose intermediaries to the risk of allocating many of their funds to investments that are unable to generate adequate profits or, at least, large enough profits to not cause significant losses. Similarly, widespread delays and a marked reluctance to recognize and identify all NPLs prevent intermediaries not only from controlling the full extent of the credit risk that has now materialized, but also from "recovering" a good number of clients so that they can return to honour their commitments.

Second, some institutional factors, such as specific accounting rules or the rules regulating the secondary market for NPLs, make the management of NPLs difficult and hence significantly contribute to increase the stocks of NPLs. For example, the provisions governing pledges or enforcement actions determine all the timescales within which banks can recover owed debts.

Third, and more importantly, the post-2007 experience has shown that it is precisely the contraction of the economic cycle that explains why many debtors, some of whom were very reliable when the credit was granted, may suddenly find themselves in the unexpected position of having income insufficient to pay back their debts in due time, whether such income is earned from work, business, or even real estate.

Although a percentage of the pathological flows of NPLs can be attributed to occasionally unwise and careless granting of credit and recognition of bad loans by banks themselves, and despite the fact that some number of accumulated NPLs can



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be traced back to the existence of certain rules, it is probable that in the event of a financial or economic crisis even good payers will default or, in any case, see their creditworthiness worsen, which to a large extent explains why flows of impaired exposures can grow to a pathological extent.

4. Bearing in mind the role that the performance of the real economy plays in determining the increase in impaired exposure flows,[9] we now expect that the strong setback experienced by the economic cycle due to the (right) pandemic containment measures will significantly increase the number of impaired exposures recorded by banks.

More precisely, the ECB estimates that in a severe but nevertheless plausible scenario impaired exposures of Eurozone banks could reach a record 1.4 trillion euros, well above the levels of past crises.[10] In particular, there is a widespread belief that this phenomenon will also occur to the detriment of banks that have adopted sound and prudent lending policies and that have complied with the guidelines indicated by the ECB in March 2017 for the identification and management of NPLs.[11] In other words, many believe that following 2021 there will be a significant rise in NPLs despite the efforts made at an international level to introduce new rules for diminishing the rise and accumulation of NPLs.

Not by chance, in the very first months of the crisis and in light of the State aid granted via the Temporary Framework of the EU Commission,[12] the EBA and ECB

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[9] MARTINO, *Non-performing Loans in European Banks. Management and Resolution*, Milano: Franco Angeli, 2019.

[10] ENRIA, 'ECB holdouts dissented on new policy guidance, minutes show', *Financial Times*, 26 October 2020.

[11] EUROPEAN CENTRAL BANK, *Guidance to banks on non-performing loans*, March 2017, available at https://www.bankingsupervision.europa.eu/ecb/pub/pdf/guidance_on_npl.en.pdf. The document has been updated in the following May 2018, *Addendum to the ECB Guidance to banks on nonperforming loans: supervisory expectations for prudential provisioning of non-performing exposures*, available at https://www.bankingsupervision.europa.eu/ecb/ pub/pdf/ssm.npl_addend um_ 201803.en.pdf.

[12] EUROPEAN COMMISSION, *Communication from the Commission - Temporary Framework for State aid measures to support the economy in the current emergency of COVID-19*, COM (2020) 1863 final, OJ C 91 I, 20 March 2020, 1, § 15



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adopted several measures to limit the outburst of NPLs.

*First of all*, some of these measures have aimed to increase the capital available to banks, so that intermediaries can first and foremost transfer liquidity to businesses and households. Specifically, in March 2020, the ECB recommended two sets of measures to allow significant banks[13] to draw on greater volumes of capital and, in particular, valuable capital, such as paid-in capital and profits.[14] In particular, it recommended banks not proceed with distribution of profits accrued during 2019 and 2020, while also recommending the adoption of prudent and forward-looking approaches with regard to the remuneration policies of directors and senior executives, the ultimate aim of preventing the shareholders of those banks and their boards of directors from depriving the intermediaries of liquid funds that, during 2021 and subsequent years, could be used to cover large losses and/or provide new financing to the economy. Furthermore, the ECB has declared that, if necessary and until further notice, banks will be able to carry out their activities by interpreting the rules on regulatory capital requirements with greater flexibility. In particular, they will be able to erode both the so-called Liquidity Coverage Ratio (LCR) pursuant to Article 412 of the CRR, and the Capital Conservation Buffer (CCB) pursuant to Article 129 of the Capital Requirements Directive (CRD) IV. Moreover, if all banks will be able to operate by refraining from committing the valuable funds routinely required by the Pillar 2 Guidance ratio, significant banks will also be able to anticipate the rules on the composition of the Pillar 2 Requirement (P2R) that are expected to come into force in 2021 with Directive (EU) 2019/878, also known as CRD V—rules that require this ratio to be balanced by also employing funds other than primary Tier 1 capital and that, in essence, are already in place with respect to banks subject to the

[13] The criteria for determining whether banks are considered significant – and therefore under the ECB's direct supervision – are set out in Article 6 of the SSM Regulation.

[14] BANCA D'ITALIA, *Proroga dei termini e altre misure temporanee per mitigare l'impatto del COVID-19 sul sistema bancario e finanziario italiano*, 20 March 2020, available at https://www.bancaditalia.it/media/comunicati/documenti/2020-01/Proroga-termini-COVID-19.pdf.



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supervision of the Bank of Italy.[15] Furthermore, the ECB granted temporary relief on capital requirements related to market risk for at least six months, in order to maintain the ability of banks to provide liquidity and continue market making activities in response to the extraordinary levels of volatility observed in financial markets during this period. Finally, and again in order not to weaken banks at a time when they must transfer as much capital as possible to the real economy, European institutions encouraged intermediaries to make use of Article 473 CRR which, although being adopted to prevent the introduction of IFRS 9 from significantly eroding own funds, foresees that the supervisory authorities authorize an individual bank to calculate a decreasing percentage over time of the difference between the accounting adjustments identified on the basis of IFRS 9 and the accounting adjustments identified on the basis of IAS 39 as part of primary Tier 1 capital. In relation to all these extraordinary measures, the ECB has highlighted how, as a result of the greater flexibility granted in terms of capital requirements, significant banks alone will be able to take advantage of around 120 billion euros which, due to leverage, should be able to finance loans to the economy for 1.8 trillion euros.

*Secondly*, among the new guidelines set out by legislators and regulators to react to the crisis imposed by Covid-19, there have been indications regarding the interpretation of the International Financial Reporting Standard, more precisely, of the IFRS 9, as well as recommendations regarding the correct classification and management, also for prudential purposes, of impaired loans or loans subject to concessionary measures. In other words: in order to prevent the automatic application of ordinary rules on the balance sheet and the classification/management of impaired loans from worsening the health of banks, either by forcing them to offer an excessively pessimistic representation of their economic and financial conditions, or by forcing them to bear unnecessary burdens, supranational and national authorities have decided to grant three forms of flexibility.

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[15] As to the Italian market specifically, *see* the extensive and updated study performed by PRICEWATERHOUSECOOPERS, *The Italian NPE Market. Reshuffling the Cards*, July 2021, available at https://www.pwc.com/it/it/publications/npl/doc/pwc-the-italian-npl-market-lug2021.p df.



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*The first one concerns flexibility with respect to the application of the financial statement criteria valid in the ordinary way*. As of January 1, 2018, IFRS 9 governs the identification and quantification of impairment losses on loans. Due to the adoption of the calendar logic introduced by Regulation (EU) 630/2019, although such impairment losses affect the operating results recorded in the income statement and although they change the value of loans appearing in the balance sheet, they are no longer used to establish the value of loans to be included in regulatory capital. Unlike International Accounting Standard 39 (IAS 39), IFRS 9 has adopted a forward-looking approach, whereby any write-downs on receivables must be estimated on the basis of the expected losses to be quantified in relation to the increase in credit risk. Thus, if the pandemic has produced not only peaks of panic, but also a more widespread and generalized uncertainty that makes it difficult to estimate future scenarios, banks could project the difficulties of the moment into the long term, embracing extremely pessimistic, not to say harmful, representations, capable as such of eroding not only the profitability of banks, but also of undermining their reputation, thus making the entire financial sector more fragile, to the detriment of the intention to limit the effects of the crisis to the short/medium term and to have a banking system that is sufficiently solid to transfer liquidity and capital to businesses and families. Hence, there have been three indications:

- The ECB, following in the footsteps of the IASB[16] and the EBA,[17] has drawn up a series of recommendations, all of which seem to be aimed at normalizing forecasts of future scenarios, so as to avoid these forecasts being too conditioned by the negative economic situation. For example, the ECB has

[16] INTERNATIONAL ACCOUNTING STANDARDS BOARD, *IFRS 9 and Covid-19. Accounting for expected credit losses applying IFRS 9 Financial Instruments in the light of current uncertainty resulting from the covid-19 pandemic*, 27 March 2020, available at https://cdn .ifrs.org/-/media/feature/supporting-implementation/ifrs-9/ifrs-9-ecl-and-coronavirus.pdf?la= en. In the same vein, BASEL COMMITTEE ON BANKING SUPERVISION, *Measures to reflect the impact of Covid-19*, 3 April 2020, available at https://www.bis.org/ bcbs/publ/d498.pdf.

[17] EUROPEAN BANKING AUTHORITY, *Statement on the application of the prudential framework regarding Default, Forbearance and IFRS9 in light of COVID-19 measures*, 25 March 2020, available at https://eba.europa.eu/eba-provides-clarity-banks-consumers-application-prudenti al-framework-light-covid-19-measures.



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invited banks to use available historical information "but only to the extent that it is (...) unbiased (...) and representative of the long-term horizon"; moreover, the ECB has suggested that, where historical data depend on macroeconomic variables, it will be necessary to use "information that covers at least one or more complete business cycles or [information] that is otherwise adjusted to exclude biases, for example in favour of more recent data". Furthermore, in reiterating the importance of informed judgements, the ECB has recommended considering not only the effects of lock-downs, but also the hopefully positive consequences of the measures taken to support the real economy and, in addition, expressly states twice in a document of only four pages that it will not raise objections if intermediaries judge the economic recovery to be possible by the end of 2020 and, in any case, if they revert to formulating their expectations using average and long-term GDP growth rates;[18]

- In addition, and again in order to avoid pro-cyclical effects, i.e., not to worsen the situation by offering an excessively negative representation of the credits appearing in the balance sheets of the banks, the aforementioned authorities have taken care to maintain that the facts connected with Covid-19 could also not justify a significant increase in credit risk. For example, the EBA and the European Commission have pointed out that the application of public or private moratoria should not automatically be considered as an indication of increased credit risk.[19] Similarly, the European Commission has even specified

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[18] EUROPEAN CENTRAL BANK, *IFRS 9 in the context of the coronavirus (COVID-19) pandemic*, SSM-2020-0154, 1 April 2020, available at https://www.bankingsupervision.europa.eu/ press/ letterstobanks/shared/pdf/2020/ssm.2020_letter_IFRS_9_in_the_context_of_the_coronavirus_COVID -19_pandemic.en.pdf.

[19] EUROPEAN BANKING AUTHORITY, *Statement on the application*, 4 and EUROPEAN COMMISSION, *Commission Interpretative Communication on the application of the accounting and prudential frameworks to facilitate EU bank lending. Supporting businesses and households amid COVID-19*, COM(2020) 169 *final*, 28 April 2020 (hereinafter, *Interpretive Communication*), available at https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52020DC0169 &from=IT, at 7, claiming that «Loans should not automatically be considered to have suffered a SICR simply due to becoming subject to private or statutory moratoria. Moratoria reset the date compared to which the ‘days past due’ of borrowers should be calculated 28 . Moratoria do therefore impact the 30-days



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how guarantees on new loans neither increase nor reduce the risk of default by the debtor, but rather, by the very effect of the cover, reduce the amount of credit losses in the event that the debtor actually defaults.[20] However, it should be noted that these reassurances – which are entirely acceptable – do not dispel the real problem, namely, the fact that the world economy is about to experience a major contraction which, as such, could also affect subjects currently *in bonis* and thus reduce expectations regarding the creditworthiness of many debtors.

- Finally, as if to take note that perhaps the banks would have – for the reason just mentioned – in any case proceeded with a reclassification *in pejus* of their loans, the European Central Bank together with the aforementioned authorities nevertheless invited the banks to take advantage at this juncture of the transitional regime introduced by Regulation 2395/2017[21] which, now translated into Article 473-bis CRR, grants banks the option to consider as Tier 1 capital elements a portion of the difference between the adjustments calculated on the basis of IFRS 9 and those established in accordance with IAS 39. Thus, at present, subject to agreement with the competent supervisory authorities, banks could also continue to count as regulatory capital a part of the adjustments induced by Covid-19.[22]

*The second one is about flexibility regarding the classification of NPLs*. As is well known, from 2013 onwards European authorities have been committed to an

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rebuttable assumption to consider a SICR, as well as the 90 days past due to consider a default of the borrower. However, loans which performed well prior to the COVID-19 crisis and which are subject to a temporary private or statutory moratorium would not automatically result in significantly higher expected ECL provisions under IFRS 9».

[20] EUROPEAN COMMISSION, *Interpretative Communication*, 7-8.

[21] Regulation (EU) 2017/2395 of the European Parliament and of the Council of 12 December 2017 amending Regulation (EU) No 575/2013 as regards transitional arrangements for mitigating the impact of the introduction of IFRS 9 on own funds and for the large exposures treatment of certain public sector exposures denominated in the domestic currency of any Member State, GU L 345, 27 December 2017, 27-33.

[22] EUROPEAN CENTRAL BANK, *FAQs on ECB supervisory measures in reaction to the coronavirus*, 18 June 2021, available at https://www.bankingsupervision.europa.eu/ press/publications/html/ssm.faq_ECB_supervisory_measures_in_reaction_to_the_coronavirus~8a631697a4.en.html.



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intense activity of standardization of criteria for banks to recognize the deterioration of the creditworthiness of their customers. This was done with several goals in mind: supporting lending activities and related monitoring of credit risks; making financial results comparable, to the benefit of market integration and competition among intermediaries; and protecting against opportunistic uses of differentiated metrics. However, the potentially contingent nature of the crisis and the determination to diminish possible pro-cyclical effects of an excessively negative representation of the state of bank assets have led the EBA to adopt a more flexible approach to the classification of credit and, above all, to the possibility that credit subject to public and private moratoria are not automatically qualified as credit subject to forbearance measures. At the same time, having introduced this form of flexibility, the supervisory authorities have made it clear that in the period immediately following the moratoria banks will have to pay particular attention to loans that have benefited from the facilities granted, since some of those receivables could continue to present anomalies that will have to be subject to in-depth and timely assessment, based on reliable information. In addition, the authorities have specified that the above-mentioned indication regarding credit subject to public or category moratoria says nothing about the possibility that a bank may change the qualification of a credit following a specific investigation and/or for reasons other than the mere "passage of time".[23]

*The third one is flexibility with regard to the treatment, including prudential treatment, of NPLs*. The ECB has allowed banks to postpone reports that banks must normally present annually detailing how they intend to recover or liquidate NPLs. Additionally, the ECB has accepted that banks can review these strategies and that they can deviate from what they have undertaken to do, since the closure of the

[23] EUROPEAN BANKING AUTHORITY, *Final report Guidelines on legislative and non-legislative moratoria on loan repayments applied in the light of the COVID-19 crisis*. EBA/GL/2020/02, 2 April 2020, available at https://www.eba.europa.eu/sites/default/documents/ files/document_library/ Publications/Guidelines/2020/GL%20amending%20EBA-GL-2020-02%20on%20payment%20moratoria/960349/Final%20report%20on%20EBA-GL-202002%20Guidelines%20on%20payment%20moratoria%20-%20consolidated%20version.pdf.



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courts and the more general worsening of the incomes of businesses and families have slowed down credit recovery operations. Regarding banks subject to its supervision, the ECB has provided that if the loans granted during the pandemic and covered by public collaterals should ever deteriorate, then for prudential purposes they should be considered in the same way as loans covered by guarantees granted by Export Credit Agencies (ECAs). Consequently, despite the calendar logic imposing the progressive adjustment of the value of impaired receivables to be computed to the regulatory capital, for prudential purposes the values of credits guaranteed by the State or its agency should not be neutralized pro-rata by a certain date, but should be annulled, that is, adjusted in full, only seven years after their passage to impaired exposures. Finally, the European Commission has also chosen to accept the second pillar approach indicated by the ECB, elevating it to a first pillar rule and therefore proposing a consequent reform of the CRR which should result in the introduction of Article 500-bis.

These Covid 19-related measures added to a system of rules that was already in place to incentivize banks to get rid of their stocks of NPLs.

5. For the purpose of prompting banks to clean up their balance sheets of NPLs stocks, in March 2018 and April 2019, respectively, the ECB and the EU Parliament introduced the "calendar provisioning" mechanism. Within the terms established in Regulation 630/2019, this mechanism applies to exposures that any bank in the EU has recognized as impaired starting from April 26, 2019.[24] It incentivizes banks to decide what needs to be done with their NPLs as soon as possible because, from year to year, the percentage that needs to be written down for prudential purposes increases, up to 100% in the period set for that specific type of exposure, as the following table shows.

[24] VIOTTI, 'Verso una disciplina europea dei crediti deteriorati: riflessioni a margine del Regolamento (UE) 2019/630', in *Banca borsa tit. cred*., 2020, I, 116 ff.



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| Years of NPE classification | BCE Addendum | | EU Regulation 630/2019 (also called EU Prudential Backstop) | | |
|---|---|---|---|---|---|
| | Unsecured NPE | Secured NPE | Unsecured NPE | Secured NPE | |
| | | | | Real estate guarantees | "CRR eligible" guarantees |
| Over 1 year | 0% | 0% | 0% | 0% | 0% |
| Over 2 years | 100% | 0% | 35% | 0% | 0% |
| Over 3 years | 100% | 40% | 100% | 25% | 25% |
| Over 4 years | 100% | 55% | 100% | 35% | 35% |
| Over 5 years | 100% | 75% | 100% | 55% | 55% |
| Over 6 years | 100% | 85% | 100% | 70% | 80% |
| Over 7 years | 100% | 100% | 100% | 80% | 100% |
| Over 8 years | 100% | 100% | 100% | 85% | 100% |
| Over 9 years | 100% | 100% | 100% | 100% | 100% |

Amount of prudential adjustments pursuant to EU Regulation 630/2019.

The strategies that banks may adopt to manage their NPLs are numerous. For example, an intermediary may wish to keep (some of) those loans in the portfolio in order to recoup a part of their value, either through their liquidation or through actions intended to make the connected debtors return *in bonis*. Alternatively, each intermediary can take steps to ensure that (some of) its NPLs are removed from the balance sheet, transferring the risk associated with them to third parties, through transfer and/or securitisation operations and given that these third parties can then either attempt to achieve the highest possible realisation value by liquidating these exposures, or can act to restructure the debtors holding those receivables.

Multiple factors affect the determination of the mix of behaviours by which



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each bank may decide to manage its NPLs;[25] but one thing must be noted: if a bank divests its stocks of NPLs, it enjoys an increase in share price (if and as long as the values of NPLs, no longer having to be reported in the balance sheet, can no longer burden it with the opacity and unreliability that distinguishes them), a reduction in its risk-weighted asset (to the extent that the bank has effectively freed itself of the risk associated with the exposures sold/securitised), but also significant losses.[26]

This last point is due to the illiquidity of the market for NPLs. Such a market is illiquid since it is characterized by a limited number of transactions and by a significant difference between the price at which an asset is offered and that at which it is required – the so-called bid-ask spread. There are several non-accounting causes of this phenomenon for the market of impaired exposures. A first is the limited presence of (institutional and non-institutional) investors interested in placing themselves on the demand side and, therefore, an important oversupply that produces produce deflationary effects on transfer prices. A second is important information asymmetries between investors and banks, causing the former to suffer significant uncertainty with respect to the profitability of the portfolios of exposures they might acquire a still reduced presence of servicers, that is, subjects specialised in that activity of credit recovery whose effectiveness has such an impact on the profitability of the portfolios acquired. A third and final cause is the (far too long) time taken to manage impaired exposures, even when it would be convenient to get the debtor back to produce income.[27]

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[25] Consider, for example, the type of exposure considered; the type of collateral associated to the exposure considered; the type of skills available within bank; the amount of the expenses to bear to manage NPLs; as well as the benefits and costs of placing impaired exposures into the market.

[26] In fact, the sale price at which impaired exposures are placed on the market is always and by far inferior to the net value (NBV) at which the said exposures are entered on the balance sheet. Therefore, banks that sell their stocks of NPLs incur significant losses. In addition, the existence of such losses can lead to the recording of further adjustments to the balance sheet for exposures similar to those placed on the market, but not yet sold or securitised, as well as (though solely for banks that have equipped themselves with internal risk calculation models) the increase in the so-called loss given default (LGD), that is the estimated value of the losses on defaulted receivables.

[27] CIAVOLIELLO, CIOCCHETTA, CONTI, GUIDA, RENDINA, SANTINI, *Quanto valgono i crediti deteriorati?*, in *Note di Stabilità Finanziaria e Vigilanza*, Banca d'Italia, 2016.



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6. During and after the Covid 19 crisis, beyond the measures adopted to limit the advent of new fluxes of NPLs, EU institutions have developed measures to prevent the accumulation of new stocks of NPLs. In other words, they have precisely worked on the tools that should allow banks to quickly sell NPLs, leaving the operations meant to restructure some of them without any specific form of control.

In particular, before the pandemic, in October 2019, the EBA had already published an opinion on the regulatory treatment of NPL securitisations,[28] noting that while securitisations can play an instrumental role in reducing the stock of NPLs on the balance sheets of credit institutions, certain provisions of the European regulatory framework were not conducive to this objective. Action by the European Commission (EC) was therefore appropriate, and its proposed amendments came in July 2020 as part of its capital markets recovery package. These were formalised in Regulation (EU) 2021/557 and Regulation (EU) 2021/558 ("the Quick Fix Regulations"),[29] published in the Official Journal of the EU on 6 April 2021 and in force from 9 April 2021. Essentially aimed at preventing the future accumulation of NPLs on bank balance sheets across Europe as a result of the pandemic, the Quick Fix Regulations relaxed some of the regulatory restrictions in SR that made it more difficult to securitize NPLs and made NPL securitizations more feasible, in effect making it easier for market participants using securitization to sell, buy, finance or otherwise service NPL exposures.

Soon after, on June 30, 2021, the EBA also launched public consultations on draft

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[28] EUROPEAN BANKING AUTHORITY, *Opinion of the European Banking Authority to the European Commission on the Regulatory Treatment of Non-Performing Exposure Securitisations*. EBA-Op-2019-13, 23 October 2019, available at https://www.eba.europa.eu/sites/default/documents/files/document_library/Opinion%20on%20the%20regulatory%20treatment%20of%20NPE%20securitisations.pdf.

[29] Regulation (EU) 2021/557 of the European Parliament and of the Council of 31 March 2021 amending Regulation (EU) 2017/2402 laying down a general framework for securitisation and creating a specific framework for simple, transparent and standardised securitisation to help the recovery from the COVID-19 crisis. PE/70/2020/REV/1. OJ L 116, 6.4.2021, p. 1–24, available at https://eur-lex.europa.eu/eli/reg/2021/557 and Regulation (EU) 2021/558 of the European Parliament and of the Council of 31 March 2021 amending Regulation (EU) No 575/2013 as regards adjustments to the securitisation framework to support the economic recovery in response to the COVID-19 crisis. PE/73/2020/REV/1. *OJ L 116, 6.4.2021, p. 25–32,* available at https://eur-lex.europa.eu/eli/reg/2021/558/oj.



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revised regulatory technical standards on risk retention requirements that include specific provisions related to NPL securitization.

Among other things, the originator, original lender or sponsor of a securitization is required – in order to ensure an alignment of interests – to maintain a material net economic interest in the securitization of not less than 5 percent. Specifically, the new regulation allows the risk retention requirement to be calculated based on the discounted price paid for the exposures, provided the discount is non-refundable. This allows an investor who purchases a portfolio of NPLs and raises financing by securitizing the portfolio to claim lower risk retention, making NPLs much more attractive to buyers and sellers. In addition, by addressing a legislative weakness, namely the fact that the servicer could not retain risk in securitization transactions, it has now been established that the servicer that will manage the loan portfolio – the one that therefore retains the greater risk until, as experienced in servicing exposures of a similar nature to those securitized and the application of documented and adequate policies – is incentivized to maximize recovery on loans. But the Quick Fix Regulations also change the criteria for granting credit, eliminating the test (compliance with which is admittedly difficult to assess) that requires "robust and well-defined criteria for granting credit" and effective systems to ensure their application, instead allowing buyers of NPLs who intend to use securitization to be satisfied that they have done enough due diligence and subsequently applied robust standards in selecting and pricing exposures. Different due diligence requirements are also applied to institutional investors, and institutional investors are required to verify, in the case of non-performing exposures, that sound standards are applied in the selection and pricing of exposures, thereby making NPL securitizations easier by having not only a less difficult due-diligence standard in general, but also one that reflects the commercial reality of NPLs.

The Quick Fix Regulations even provided an initial definition of an "NPE securitisation", i.e. a securitisation backed by a pool of non-performing exposures,



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within the parameters of Article 47a(3) of the CRR, the nominal value of which constitutes not less than 90% of the nominal value of the entire pool at the time of origination and at any time thereafter when assets are added to or removed from the underlying pool due to reconstitution, restructuring or any other material reason. In other words, meeting the definition of an NPE securitization is necessary to qualify for the flexibility provided by the risk retention and due diligence exceptions discussed above.

In response to the need to put in place measures to help the economic recovery after the COVID 19 crisis, the amendments to the regulations presented by the European Commission on 24 July 2020 included, *inter alia,* the extension of the STS regime for on-balance sheet synthetic securitisations, which would allow banks to transfer some risks to the market, allowing the bank itself to benefit from a prudential treatment that reflects the real risk of these instruments and, as far as directly relevant for our purposes, the removal of regulatory impediments to allow the securitisation of non-performing loans (NPLs), to allow banks to improve their regulatory capital position and enable them to lend to small and medium-sized enterprises and households.

A few months later, precisely on 16 December 2020, in order to prevent a future accumulation of NPLs in the EU, the European Commission presented a strategy,[30] in line with what was previously implemented in the context of the 2017 Economic and Financial Affairs Council NPL Action Plan, with the following main objectives:

1. The development of secondary markets for distressed assets, which will allow banks to move NPLs off their balance sheets, while providing further enhanced protection for debtors. This is also in line with the swift agreement of its proposal for a directive to allow banks to move NPLs off their balance sheets

[30] For a preliminary analysis, see Martin Ebner, *European Commission publishes its non-performing loans strategy in response to the COVID-19 crisis*, 18 December 2020, available at https://www.schoenherr.eu/content/european-commission-publishes-its-non-performing-loans-strategy-in-response-to-the-covid-19-crisis/.



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and to ensure protection for debtors in the secondary market;[31]

2. The creation of a Europe-wide data hub to serve as a data repository accessible to key NPL market participants and the development of a guide for NPLs sellers on a "best execution" sales process;
3. Overcoming regulatory barriers to NPL sales by banks, which can be achieved through concerted action by the European Commission and the European Banking Authority, in which the latter will apply an appropriate approach to the regulatory treatment of defaulting assets purchased and to the risk weights (currently higher for NPLs than for sellers) that banks must apply to calculate capital requirements under the Standardised Approach to credit risk;
4. The reform of European legislation on corporate insolvency and debt recovery, through a process of harmonisation of insolvency law and accelerated out-of-court enforcement of collateral, the subject of a proposal for a directive[32] facilitating legal certainty and recovery for both creditor and debtor, transposition at national level of EU Directive 2019/1023 on preventive restructuring frameworks and raising consumer protection standards;
5. Sharing of European practices and experiences leading to the creation of genuine cooperation networks between national Asset Management Companies (AMCs) at the EU level,[33] *e.g.* allowing impaired commercial real estate and large corporate exposures to be transferred to an AMC, supporting interested Member States in setting up national AMCs through the existing AMC Blueprint (which explains how an AMC can be created, the conditions for

[31] Proposal for a directive of the European Parliament and of the Council on credit servicers, credit purchasers and the recovery of collateral. COM/2018/0135 final - 2018/063 (COD), available at https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A52018PC0135.

[32] COUNCIL OF THE EUROPEAN UNION, *Proposal for a Directive of the European Parliament and of the Council on accelerated extrajudicial collateral enforcement mechanism - Mandate for negotiations with the European Parliament*, COM(2018) 135 final, 22 November 2019, available at https://data.consilium.europa.eu/doc/document/ST-14261-2019-ADD-1/en/pdf.

[33] See AVGOULEAS et al., *Non-performing loans – new risks and policies? What factors strive the performance of national asset management companies: PE 651.386* (2021), available at https://www.europarl.europa.eu/RegData/etudes/STUD/2021/651386/IPOL_STU(2021)651386_EN.pdf.



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the transfer of assets and the effective functioning of an AMC), implementing precautionary public support measures to ensure the continued financing of the real economy under the European Bank Recovery and Resolution Directive and State aid frameworks.

In conclusion, the European Commission acknowledges that Member States through various policies have indirectly protected banks from potential credit losses, but that only the implementation of the proposed amendments to the Securitisation Regulation will provide the market with a long-awaited response. However, it is unlikely that there will be any increase in NPL volumes as a result of the regulatory changes, at least in the medium to long term.

In the face of this new framework it is clear that the success of national and European measures will also depend, to a large extent, on the legal acts harmonising the legal frameworks in all Member States. It is welcome that the Commission is considering the impact of COVID-19 on NPLs from an evolutionary perspective, and proposes to work with stakeholders and EU bodies to develop ways to assist banks in reducing the risks associated with NPLs. In some jurisdictions, like Austria, the concerns relate mainly to the degree of compatibility between the proposed provisions and those on privacy.[34] In other jurisdictions, like Ireland, the proposals are in line with some actions already taken by Irish banks, which over the years have completed deleveraging projects mandated by the EU and which demonstrate an institutional familiarity with the processes of sale and securitization of NPLs.

On the contrary, the Bank of England Prudential Regulation Authority (PRA) has produced a consultation document on the implementation of prudential standards agreed by the Basel Committee on Banking Supervision (BCBS),[35] whose proposed

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[34] See EBNER, *European Commission publishes its non-performing loans strategy in response to the COVID-19 crisis*, 18 December 2020, available at https://www.schoenherr.eu/content/ european-commission-publishes-its-non-performing-loans-strategy-in-response-to-the-covid-19-crisis/.

[35] BANK OF ENGLAND, *Implementation of Basel standards: Non-performing loan securitisations. Consultation Paper 10/21*, 9 August 2021, BANK OF ENGLAND, *Implementation of Basel standards: Non-performing loan securitisations* https://www.banko fengland.co.uk/prudential-regulation/publication/2021/june/implementation-of-basel-standards-non-performing-loan-securitisations.



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application would be from 1 January 2022, which articulates some proposals for securitisation of non-performing exposures. More concretely, the proposal envisages the addition of a new Non-Performing Exposure Securitisation Part to the PRA Rulebook, and amendments to Supervisory Statement (SS) 10/18 "Securitisation: General requirements and capital framework" (Appendix 1).

7. To properly showcase the effects of the development of the regulatory framework on NPLs, we present macroeconomic timeseries data on EU member states at both an aggregate EU and region-specific level.

In terms of methodology, our preferred approach to data collection relies primarily on IMF data while filling any missing values with data from central banks and the EBA.[36] Studies of NPLs in Europe have been typically done by using either IMF or EBA, ECB, and Eurostat data.[37] Our approach is similar, but very slightly different, since we take our data predominantly from the IMF Financial Soundness Indicators dataset and complete any missing information with EBA, ECB, and Eurostat. We likewise present data derived entirely from the EBA to compare with our preferred approach. In doing so, we show that measurements of NPLs across Europe in the IMF and EBA dataset are very similar as one would expect (see Appendix 2, Figure 6).[38]

Household and corporate debt to GDP ratios are taken exclusively from the IMF Financial Soundness Indicators database. Not all countries have full datasets: for example, Italy only provides half-year instead of quarterly results. To minimize

[36] IMF data taken from Financial Soundness Indicators and Worldwide Economic Outlook databases (https://data.imf.org/?sk=51B096FA-2CD2-40C2-8D09-0699CC1764DA and https:// www.imf.org/en /Publications/WEO).
[37] Available at the following webpages: https://www.europarl.europa.eu/RegData/ etudes/STUD/2 021/651388/IPOL_STU(2021)651388_EN.pdf;https://www.europarl.europa.eu/RegData/etudes/STU D/2021/651387/IPOL_STU(2021)651387_EN.pdf;https://www.ecb.europa.eu/pub/economic-researc h/resbull/2020/html/ecb.rb200527~3fe177d27d.en.html;https://www.imf.org/en/Publications/WP/Issu es/2019/12/06/The-Dynamics-of-Non-Performing-Loans-during-Banking-Crises-A-New-Database-48 839.
[38] Our data and associated scripts are available at https://github.com/Robin-Morgan/NPL-state-of-the-art-empirical.



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estimation errors, we use a spline approximation method for missing values. To prevent excessive deviations from actual values for endpoints which would be generated by cubic splines, for those countries that are missing endpoint values we simply copy the last relevant value. For example, if Country X is missing data for Q1 of 2010, but the Q2 2010 datapoint exists, we repeat the Q2 value as the Q1 value. This is done to minimize swings in changes in average debt ratios across sampled EU countries.

The data provides several interesting conclusions. First, it seems that EU NPL policy, and those of several nation states, have successfully managed to reduce NPL ratios – see the general downward trend presented in Figure 1. For some countries, notably the especially problematic Southern EU nation states, the decrease in NPL ratios has been dramatic. Italy, for example, reduced NPLs from almost 18% to just below 4% between the second quarter of 2015 and the first quarter of 2021 (see Figure 2), with breakdowns by regions presented in Appendix 2, Figure 7. Similar success stories exist for Portugal, Greece, and Cyprus. Overall, the level of NPLs in the EU fell from about 10.5% in Q2 of 2015 to just under 4% in Q1 of 2021, but the aggregate monetary amount of NPLs did increase in the first quarter of 2021 (see Figures 1 and 3, respectively).[39] A one-quarter increase is not necessarily dispositive, but does suggest close monitoring should continue.

[39] Note Figure 3 is aggregate data across the EU based on the data available to the EBA, including the countries previously listed as being excluded from the sample above (namely Sweden, Denmark, and the Czech Republic.



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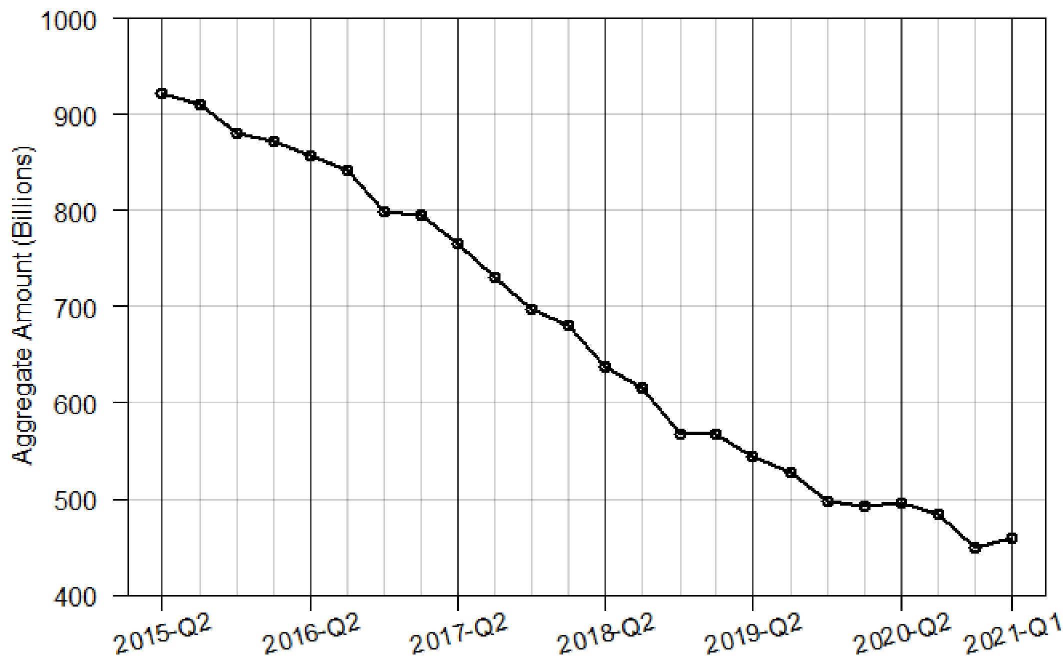
**Figure 3: Aggregate Amount of NPLs Across the EU (Euros)**




Source: EBA Reports.

The development of secondary markets and the novel regulatory framework promoted by the EU and member states make prior econometric studies a bit uncertain in their application to future crises. These reforms sought in part to promote the development of national NPL markets, and from an overview of the data appear to have been successful in reducing national NPL levels. However, the development of NPL markets is a significant change in the NPL landscape for two reasons. First, by generally increasing market liquidity banks may be better able to liquidate NPLs during times of crisis, or at least prevent the buildup of NPL stocks (or suspected NPL stocks) before such a crisis materialises. Second, it can increase the amount of aggregate NPLs in the economy. While the exact impact of these factors on NPL crises is difficult to estimate or discuss ex-ante, they would probably change the extent of the applicability of prior econometric studies in the European context.



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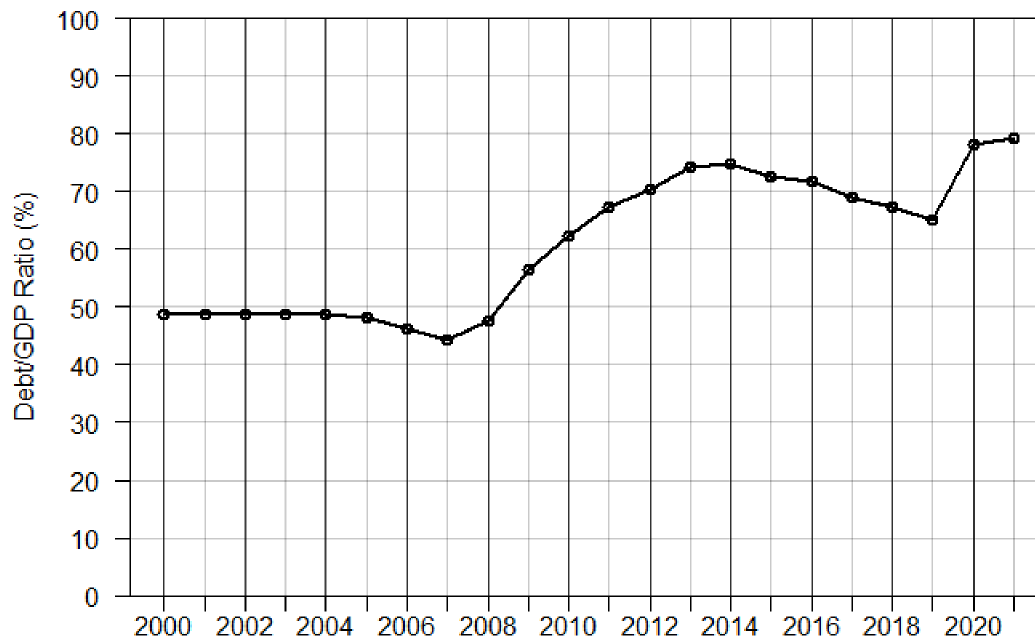
**Figure 4: Mean Debt-to-GDP Ratio across Member States**




Source: IMF World Economic Outlook. 2021 datapoint based on IMF estimates.

What is more worrisome is the presence of risk factors, identified in prior literature, that can exacerbate NPL crises.[40] Specifically, debt-to-GDP levels in the EU have risen substantially since 2008 to an average of about 80% in 2020, which we present in Figure 4. Debt-to-GDP levels differ by region, with Southern EU Member States having a significantly higher ratio than other regions (Figure 5). Greece, for example, has a debt-to-GDP ratio above 200%, with some select for country-specific data presented in Appendix 2, Figure 8. This has been exacerbated by Covid-19 related stimulus and related shocks in the real economy leading to GDP contraction, but it may nonetheless act as a fiscal limit to how strongly member states can intervene in the event of an NPL crisis. However, corporate and household debt levels across some of the more traditionally problematic financial markets in the EU remain relatively healthy, at least compared to 2013 levels (see Appendix 2, Figures 9 and 10

[40]ARI, CHEN, RATNOVSKI, *The Dynamics of Non-Performing Loans during Banking Crises: A New Database*. IMF Working Paper, No. 272, 2019. *See also* ARI, CHEN, RATNOVSKI, 'The Dynamics of Non-Performing Loans during Banking Crises: A New Database with post-COVID-19 implications', *J. of Banking and Finance,* April 2021, 106140.



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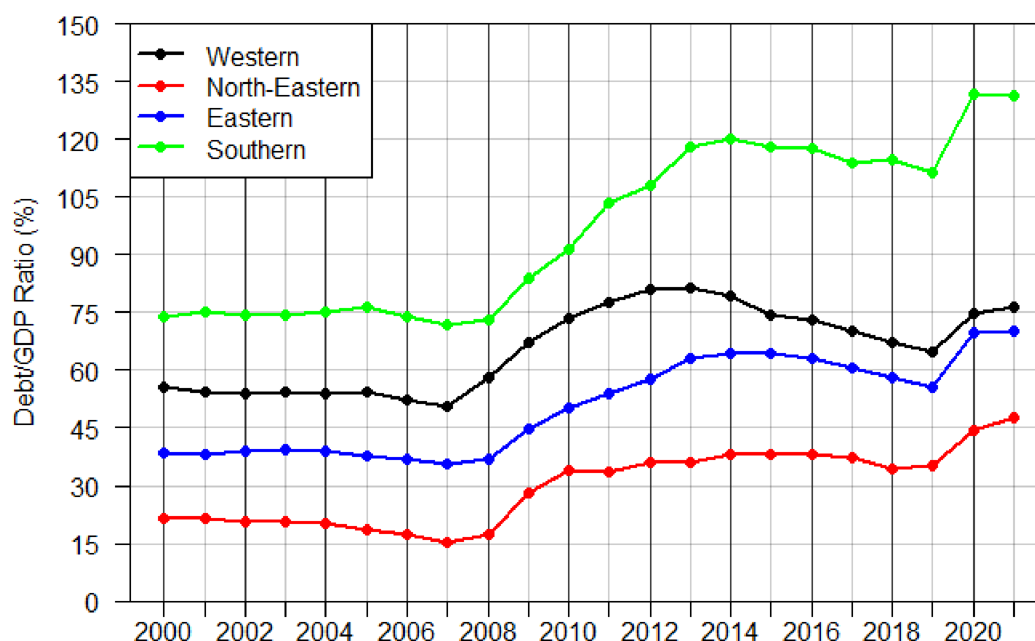
for household and corporate debt levels for some of the more problematic EU Member States).

**Figure 5: Mean Debt-to-GDP Ratio by EU Region**




Source: IMF World Economic Outlook. "North-Eastern" includes Lithuania, Latvia, Estonia, and Finland. 2021 datapoint based on IMF estimates.

8. Following the analysis of the above-mentioned regulatory developments and related empirical data, we can draw out some important lessons.

As far as regulatory developments are concerned, it is essential to elaborate on the legal framework. The above explanation regarding the challenging functioning of the secondary market suggests that the creation of an EU data hub would be very useful for the pricing of NPLs and the possibility of determining homogeneous packages of credits across Member States. In short, the creation of an effective transparency network and an equally effective supranational coordination has the merit of setting up a more competitive single market.

On a different level, the EU Commission has taken a cue which had already been put forward at the institutional level and considered the idea of setting up either a European bad bank or a network of national bad banks that would work to



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quickly take over the impaired exposures that will be recorded from 2021 onwards. In fact, it seems reasonable to imagine that the entering of a new and probably major participant in the market of impaired exposures would increase liquidity since:

- It would represent, in line with what happened in Italy through the creation of the Fondo Atlante, an additional point of contact to which banks - and, above all, those that find themselves in difficulty in identifying possible investors - could turn to mitigate the effects of excess supply;
- It could produce, similarly to what occurred in relation to GACS, a transparency effect, introducing best practices that lead banks to standardize information on the composition and characteristics of the portfolios subject to transaction and, thus, going to reduce that risk premium that investors are currently wishing for precisely because of the aforementioned information asymmetry;
- It could make an effort to select efficient servicers that increase the profitability of the portfolios acquired;
- It could turn profit on the portfolio of positions transferred to it since it is not subject to the timetable logic and as the experience of SGA (now AMCO) shows, it would have all the time necessary to recover what is due or to restructure transferred debts;
- It would end up establishing uniform practices between member states, provided it were free to act within the European market. It would do so through a single bad bank or a centralized network of national bad banks, overcoming national breakdowns that would contribute to the excess supply and information asymmetries mentioned above.

In a nutshell, the entrance of a bad bank or a network of bad banks, while making the market of impaired exposures more liquid, would generate an inflationary push on the transfer price, because it would essentially offer investors grounds to request a lower risk premium and, therefore, to reduce the bid-ask spread. Under these conditions, therefore, the bad bank should not take over the



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impaired exposures at a price higher than the market price. This is especially relevant for the purposes of applying the discipline of State aid and, indirectly, the rules on the recovery and resolution of credit institutions (BRRD).

As the EU Commission itself pointed out in its December 2020 Strategy[41] the State Aid Rules prohibit Member States from granting an economic advantage on a selective basis, attributable to the State and directly or indirectly financed through the use of public resources, to an entity qualifying as an enterprise under Community law, provided that such aid could distort competition and affect trade between Member States. However, there are circumstances in which measures undertaken by Member States may nevertheless be considered compatible with the internal market either de jure or on a discretionary basis, i.e. because the Commission considers that those measures achieve general objectives of European interest like financial stability. Therefore, State Aid regulation would not apply if the bad bank described above acted on the market without using resources attributable to the State and without being financed, directly or indirectly, by public funds; or, while requiring the use of taxpayers' money, acted as a private economic agent and as a result revealed the impaired assets at a price equal to that of the market.

Nevertheless if the bad bank at issue made use of public resources to acquire the impaired exposures at a price higher than the market price, thereby relieving the banks of the transfer losses mentioned above, this would represent a form of State aid which the EU Commission could consider compatible with the single market provided that, inter alia, the transfer price, even if higher than the market price, were to be:

- Less than or equal to the real value of the impaired exposures, where the latter is the estimate of the cash flows that the impaired exposures will be able to generate in the long term; or
- Even higher than this real value, but still lower than the NBV, since the

[41] FORREST, VON BONIN, 'Tackling the post-COVID European NPL 'problem': a State aid perspective', 26 March 2021, available at https://riskandcompliance.freshfields.com/post/102gu60/tackling-the-post-covid-european-npl-problem-a-state-aid-perspective.



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Commission expects the bank and its shareholders to bear at least part of the impairment cost. In this case the Commission expects the intermediaries to undertake, through the restructuring plan, the obligation to return the difference between what they received and the real value of the impaired exposures transferred to the bad bank.[42]

But there is more. The BRRD provides that a bank can benefit from a State aid consisting in the processing of its impaired assets, such as NPLs, in only two cases: when the bank, presenting negative net worth, is undergoing either compulsory liquidation due to the absence of public interest or resolution in the presence of such interest. In other words, the BRRD does not include the handling of impaired assets among the tools that banks can use to prevent (the risk of) their failure. Consequently, in the lack of amendments to the BRRD, the usefulness of a European bad bank or a centralized network of national bad banks could be limited to the peculiar case in which its intervention does not qualify as State aid. Such circumstances can include if the bad bank operates without using public resources or, in any case, resources directly or indirectly attributable to the State, or if, even under these conditions, it offers a transfer price equal to the market price.

As the European Commission explains, under the BRRD one could always assume that a bank (neither at risk or in a state of insolvency) would request aid in the form of precautionary recapitalisation (i.e., availing itself of a measure of extraordinary public support) and use part of the funds obtained this way to cover the losses from the transfer of its impaired exposures to a bad bank. In effect this combination of operations excludes that said bad bank acquires NPLs at a price higher than the market price, i.e. excludes aid in the form of treatment of impaired assets, while allowing the bank to receive public money to contain the transfer losses, qualifying that money as aid in the form of recapitalization.[43] However, it

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[42] EU COMMISSION, *Communication from the Commission on the treatment of impaired assets in the Community banking sector*. OJ C 72, 26 March 2009, p. 1–22, § 41.

[43] EUROPEAN COMMISSION, Temporary Framework for State Aid Measures to Support the Economy in the Current Covid-19 Outbreak, 18 Janurary 2021, available at https://ec.europa.eu/



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seems unlikely that a bank would agree to see other shareholders enter its capital to deal with the impaired assets. Moreover, the precautionary forms of capitalisation under the BRRD were designed to manage unusual situations, not as a measure to be taken systematically for all NPLs that might emerge as a result of the pandemic.

In terms of our empirical findings, most of the NPL data provides a snapshot of a healthy financial sector. However, this may be a bit inaccurate considering almost all NPL data relies exclusively on bank balance sheets and generally ignores secondary market participants. In fact, the European Commission is progressively paying greater attention to the secondary market. This is partly because the timetable logic imposed by the ECB in 2017 and endorsed by the European lawmakers in 2019 induces banks to get rid of NPLs. However, the EU Commission's job is not over yet: alongside rules that better regulate securitizations and the desire to create transparency, there is still a shortage of rules on the characteristics that NPL buyers should possess, including for consumer protection purposes. Proper econometric studies on the status of NPLs in Europe will necessarily have to take such secondary market transactions and holdings by non-bank entities into consideration to properly assess the health of the overall NPL market.

Going forward there are a few warning signs, namely the slight increase in aggregate NPLs in the first quarter of 2021 and the rise in debt to GDP ratios, which should be monitored closely. But the current regulatory framework has been very promising, and the data suggests that it is to be considered a policy success. In contrast to the previous crisis, as previously highlighted, the point is that such NPLs are by no means responsible for the banks' irresponsible lending policies. Consequently, on the one hand, now more than ever banks should not bear the burden of having to find a way to free themselves from such NPLs. In other words, now more than ever the model of the bad bank should be used, given the limitations

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competition/state_aid/what_is_new/TF_informal_consolidated_version_as_amended_28_january_2021_en.pdf, paragraph 7. The document has been amended several times, as detailed at https://ec.europa.eu/competition/state_aid/what_is_new/TF_informal_consolidated_version_as_amended_28_january_2021_en.pdf.



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mentioned above. On the other hand, it remains true that Member states most at risk will be those which have higher debt to GDP ratios, and those will likely be the ones who have the highest difficulties in financing bad banks. This probably means that an EU-wide bad bank, or at least EU funds, would be needed.

Appendix 1: Additional Supporting Figures

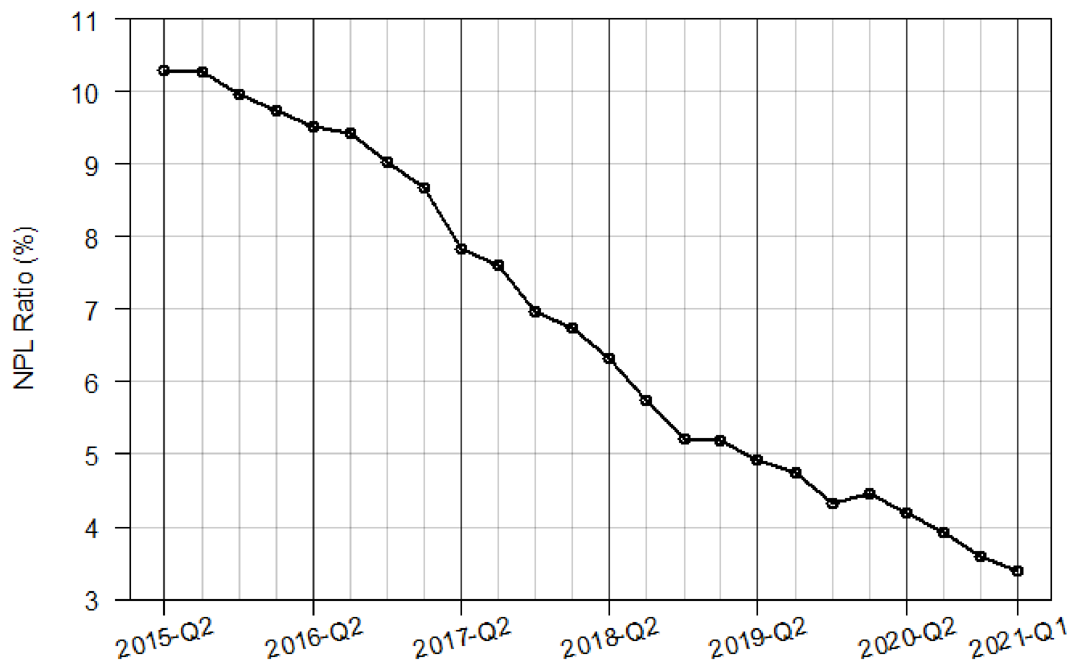




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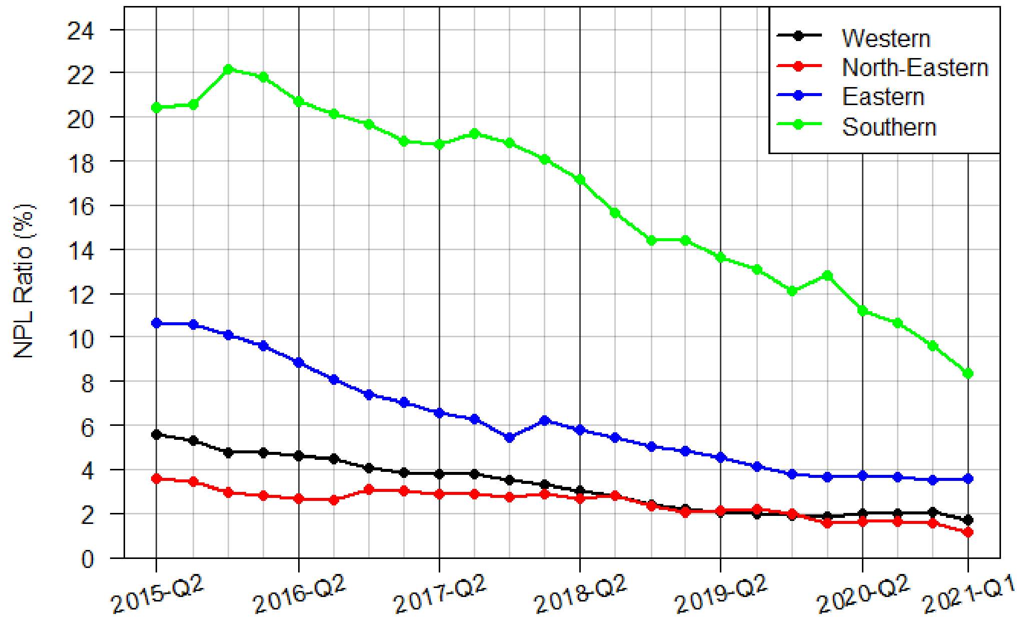
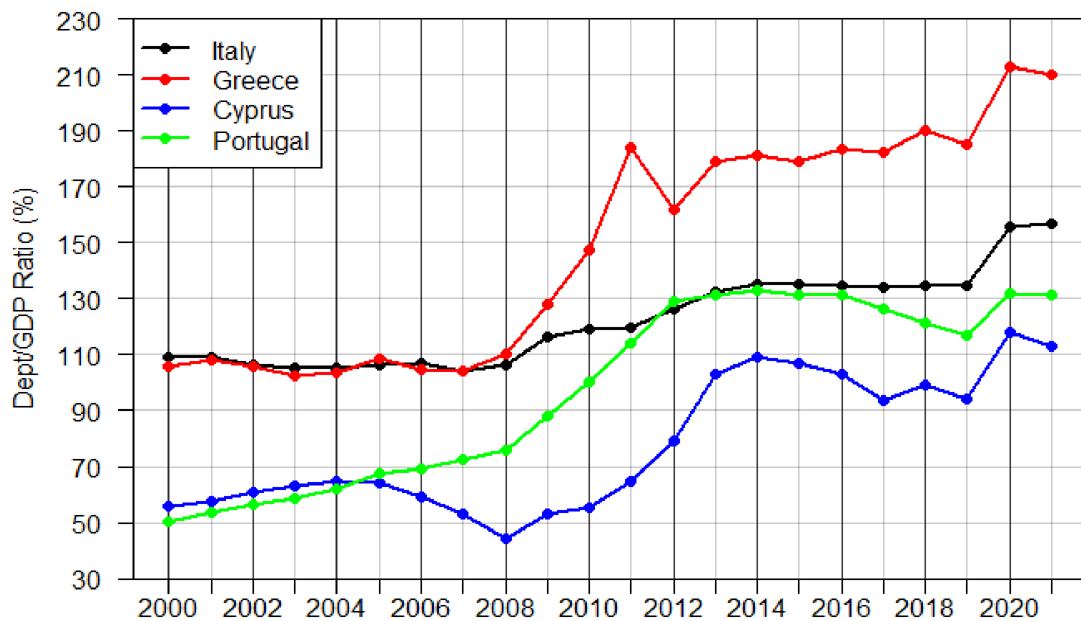
**Figure 7: Mean NPL Ratio by EU Region**




Source: IMF Financial Soundness Indicators, Central Banks, EBA Reports. "North-Eastern" includes Lithuania, Latvia, Estonia, and Finland.

**Figure 8: Italy, Greece, Cyprus, and Portugal Debt to GDP Ratio**




Source: IMF World Economic Outlook. 2021 datapoint based on IMF estimates.



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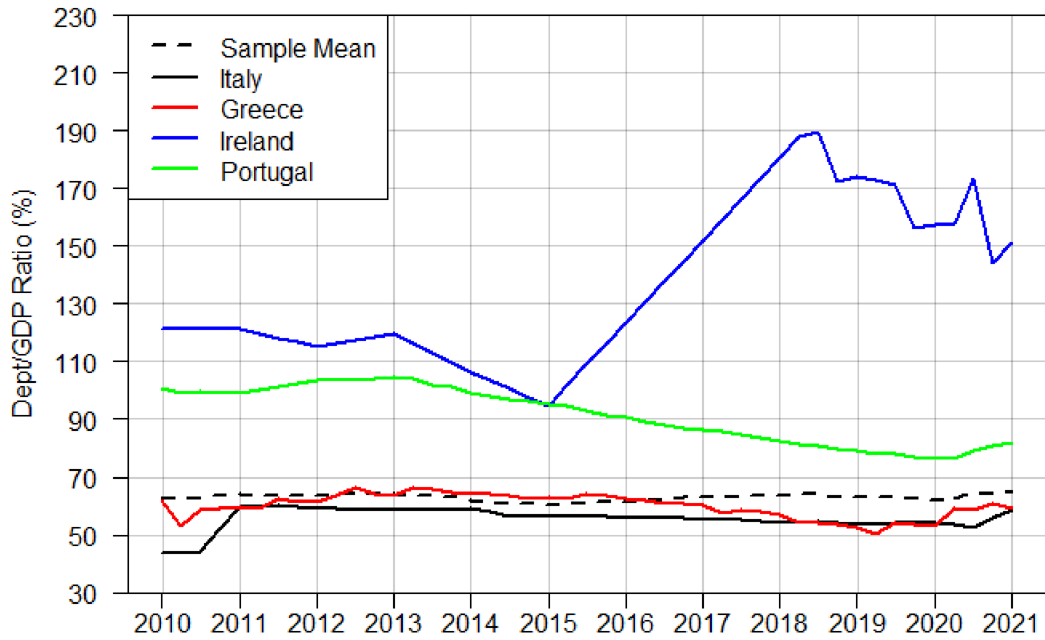
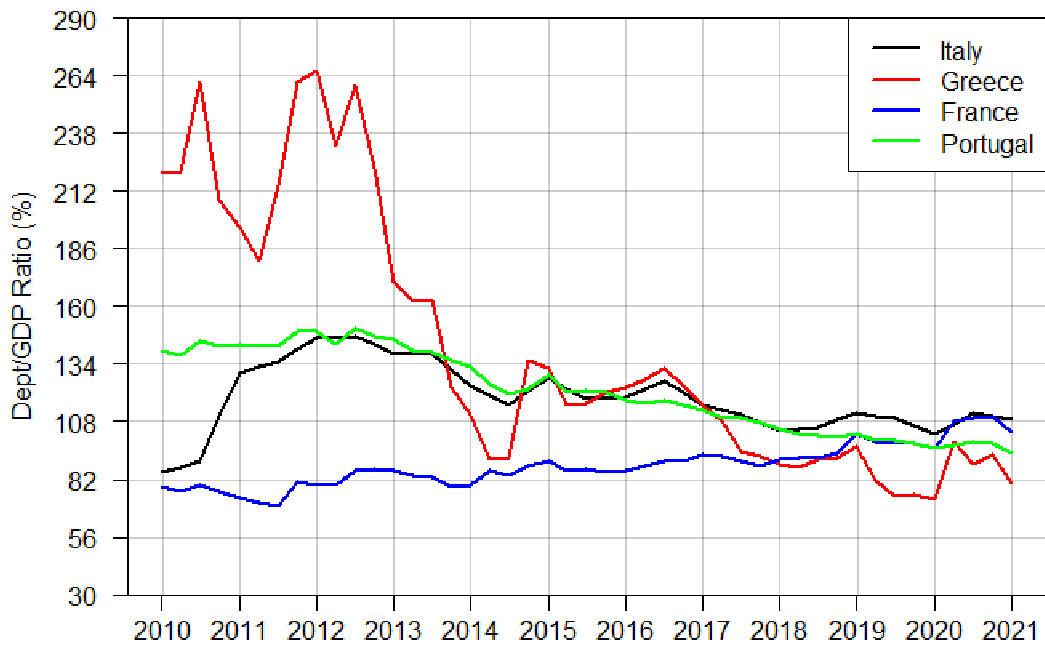
## Figure 9: EU Country Sample, Italy, Greece, Ireland, and Portugal Household Debt to GDP Ratio




Source: IMF Financial Soundness Indicators.

## Figure 10: Italy, Greece, France, and Portugal Corporate (Nonfinance) Debt to GDP Ratio




Source: IMF Financial Soundness Indicators.



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# ZOOMING IN ON THE "INDIVIDUAL PORTFOLIO MANAGEMENT OF LOANS" IN THE AMBIT OF THE REGULATION ON EUROPEAN CROWDFUNDING SERVICE PROVIDERS

Nina Dietz Legind [*] - Andrea Minto [**]

ABSTRACT: *During recent years, crowdfunding platforms have settled into the marketplace, becoming a real alternative mean to raise funds. In approaching the recent Regulation (EU) no. 2020/1503 on "European Crowdfunding Service Providers" (ECSPR), the article aims to examine the individual portfolio management of loans due to its peculiar characteristics which single this service out from those generally offered by lending-based crowdfunding platforms.*

*The individual portfolio management of loans entails the allocation of a predetermined amount of funds of an investor to one or multiple crowdfunding projects, in accordance with a specific mandate. Unlike what generally happens with the credit provided through the traditional banking intermediation, therefore, the client is not directly selecting the project they want to invest in. Rather, the client indicates the parameters against which the crowdfunding service provider will sort out how to allocate the funds. The mandate thus becomes an extremely relevant factor as it allows, ex ante, the choice of investment and, ex post, the evaluation of the results produced by the management activity, provided that the crowdfunding*

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*service provider does not take any risk of its own, and, thus, the risk remains entirely on the investor.*

*Such interesting relationship between the crowdfunding service provider offering individual portfolio management of loans and the investor eventually calls for an enhanced level of investor protection which translates into a wide set of transparency obligations and disclosure requirements.*

SUMMARY: 1. Introduction. The Regulation on European Crowdfunding Service Providers (ECSPR) – 2. The crowdfunding intermediation and the lending-based crowdfunding – 3. The features of the individual portfolio management of loans – 4. The disclosure obligations and requirements for the crowdfunding service provider offering individual portfolio management of loans – 5. Concluding remarks.

1. During recent years, financial innovation has brought about significant changes in how markets function as well as in the breadth of products targeting financial users[1].

Recent studies and surveys show that the scale of crowdfunding platforms is still relatively small as activity and, most importantly, remains confined to the national market with very little cross-border activity[2]. This creates differences in

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[1] See W. S. FRAME, L. D. WALL and L. J. WHITE, *Technological change and financial innovation in banking: Some implications for fintech*, 2018; see also M. QAMRUZZAMAN, J. WEI, *Financial innovation, stock market development, and economic growth: an application of ARDL model*, in *International Journal of Financial Studies*, 2018, 6.3: 69; with regard to financial innovation in the ambit of crowdfunding see G. FERRARINI, *Regulating fintech: Crowdfunding and beyond* in *European Economy*, 2017, 2: 121-142; W. L. HARRIS, J. WONGLIMPIYARAT, *Dynamics of crowdfunding and FinTech challenges* in *International Journal of Business Innovation and Research*, 2020, 23.4: 501-514; A. MUNEEZA, N. A. ARSHAD and A. T. ARIFIN, *The application of blockchain technology in crowdfunding: towards financial inclusion via technology* in *International Journal of Management and Applied Research*, 2018, 5.2: 82-98; F. AKINBAMI, *Retail financial products and the global financial crisis*, available at *SSRN 2087548*, 2012; V. CAIVANO, M. GENTILE, N. LINCIANO, and P. SOCCORSO, Report on Financial Investments of Italian Households. Behavioural Attitudes and Approaches, *CONSOB Statistics and Analyses*, *Survey (October 22, 2018).*

[2] T. ZIEGLER, R. SHNEOR, K. WENZLAFF, A. ODOROVIĆ, D. JOHANSON, R. HAO, L. RYLL, Shifting paradigms. The 4$^{th}$ European alternative finance benchmark report, University of Cambridge 2019; P. BELLEFLAMME, N. OMRANI and M. PEITZ, *The economics of crowdfunding platforms* in *Information Economics and Policy*, 2015, 33: 11-28; A. ROSSI; S. VISMARA. *What do crowdfunding platforms do? A comparison between investment-based platforms in Europe*, in



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national regulations, which, in turn, increase transaction costs and exacerbate problems of regulatory fragmentation[3]. This shortcoming inevitably represented an obstacle for crowdfunding platforms wishing to operate in a cross-border fashion, as they were relentlessly faced with different regimes and requirements from Member State to Member State[4].

Among the phenomena that have been closely scrutinised by policy and law makers, crowdfunding platforms are most certainly ranking on the top list along with crypto assets[5]. On 20 October 2020, the *Regulation on European Crowdfunding Service Providers* was enacted (Reg. (UE) no. 2020/1503, which will be referred to as

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*Eurasian Business Review*, 2018, 8.1: 93-118; J. GERA and H. KAUR, *A novel framework to improve the performance of crowdfunding platforms*, in *Ict Express*, 2018, 4.2: 55-62.

[3] G. FERRARINI and E. MACHIAVELLO, *FinTech and Alternative Finance in the CMU: The Regulation of Marketplace Investing* in D. BUSCH, E. AVGOULEAS and G. FERRARINI (eds)., Capital Markets Union in Europe,
Oxford University Press, 2018; S.N. HOOGHIEMSTRA and K. DE BUYSERE, *The Perfect Regulation of Crowdfunding: What Should the European Regulator Do?* in O. GAJDA and D. BRÜNTJE (eds.), Crowdfunding in Europe – State of the Art in Theory and Practice, Springer, 2015. See also, amongst the many reports, European Commission, Legislative proposal for an EU framework on crowd and peer to peer finance – Impact Assessment, 30 October 2017; European Commission, Assessing the potential for crowdfunding and other forms of alternative finance to support research and innovation, available at: https://publications.europa.eu/en/publication-detail/-/publication/3190dbeb-316e-11e7-9412-01aa75ed71a1; ESMA's Opinion and Advice are available at: https://www.esma.europa.eu/sites/default/files/library/2015/11/2014-1378_opinion_on_investment-based_crowdfunding.pdf and https://www.esma.europa.eu/sites/default/files/library/2015/11/2014-1560_advice_on_investment-based_crowdfunding.pdf, respectively; EBA's Opinion is available at https://www.eba.europa.eu/sites/default/documents/files/documents/10180/983359/f6106173-dc94-4d22-ade8-d40fce724580/EBA-Op-2015-03%20%28EBA%20Opinion%20on%20lending%20based%20Crowdfunding%29.pdf?retry=1 .

[4] For instance, in Italy, the current crowdfunding regime is based on the provisions set out in art. 50 *quinquies*, 100 *ter* and 190 *quater* Italian Consolidated Financial Act, as well as − on a regulatory level − in Consob Reg. no. 18592/2013.

[5] Among the various phenomena subject to regulation, considerable importance is undoubtedly attached to the recent proposal for a Regulation known as MiCA (Market In Crypto-Assets), published by the European Commission on September 24, 2020 to regulate crypto-activities not falling within the scope of EU legislation on financial services. See e.g. O. MCDONALD, "*New Cryptocurrencies and New Developments*", in *Cryptocurrencies: Money, Trust and Regulation*, 25-48. Agenda Publishing, 2021, *https://doi.org/10.2307/j.ctv1wgvbcz.6*; D. A. ZETZSCHE, F. ANNUNZIATA, D. W. ARNER and R. P. BUCKLEY, *The market in Crypto-Assets Regulation (MICA) and the EU Digital Finance Strategy,* 2020; S. T. OMAROVA, *New tech v. new deal: Fintech as a systemic phenomenon*, in *Yale J. on Reg*., 2019, 36: 735; A. FERREIRA, P. G. SANDNER, T. DÜNSER, *Cryptocurrencies, DLT and Crypto Assets – the Road to Regulatory Recognition in Europe* (April 1, 2021). Forthcoming in: Handbook on Blockchain, Editors: My Thai (University of Florida), Duc A. Tran (University of Massachusetts), Bhaskar Krishnamachari (University of Southern California), Publisher: Springer Nature (Spinger Series on Optimization and Its Applications: https://www.springer.com/series/73, Available at SSRN: https://ssrn.com/abstract=3891401 or http://dx.doi.org/10.2139/ssrn.3891401; E. NOBLE, Crypto-Assets: Overcoming Challenges to Scaling-An EU Approach, available at *SSRN 3748343*, 2020.



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ECSPR hereafter), which introduces important elements of novelty regarding the authorisation regime, the rules of conduct and other investor protection requirements. The ECSPR will apply from November 2021 (except for a one-year transitional regime for platforms that already provide crowdfunding services) and will introduce a common framework for all crowdfunding platform operators, assimilating – on a general level – investment-based and lending-based crowdfunding[6].

Such piece of legislation will most certainly make history (as the *Market in Crypto-Assets Regulation* – MiCAR – will!) for a good set of reasons. Not only will it regulate an emerging segment of the financial markets with its own features[7]. It will also raise extremely delicate coordinating challenges with the existing articulated financial legislation[8]. As much commendable as the work of the EU legislators could be in (eventually) regulating, say financial innovation, it casts some doubts on whether and how legal certainty and legal clarity could be affected as the entire body of EU financial law grows bigger and bigger[9]. The very success of this gigantic corpus

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[6] See E. MACCHIAVELLO. '*What to Expect When You Are Expecting'a European Crowdfunding Regulation: The Current 'Bermuda Triangle'and Future Scenarios for Marketplace Lending and Investing in Europe*, 2019; and see also *The European Crowdfunding Service Providers Regulation: The Future of Marketplace Lending and Investing in Europe and the 'Crowdfunding Nature'Dilemma*, in *European Business Law Review*, 2021, 32.3. For more details on lending platforms, see D. CHEN; A. S. KAVURI; A. MILNE, *Growing pains: The changing regulation of alternative lending platforms*, in *The Palgrave Handbook of Technological Finance*. Palgrave Macmillan, Cham, 2021. p. 441-475.

[7] The introduction of a common regime, on a European level, for the different forms of crowdfunding, is therefore a factor of market development and investment incentive, as it allows crowdfunding service providers to apply for a European passport under a uniform regulation. For more details see S. N. HOOGHIEMSTRA, *Will the Proposed European Crowdfunding Regulation Lead to a "True" European Market for Crowdfunding?*, in *CROWDASSET: Crowdfunding for Policymakers*, 2020, pp. 413-436.

[8] See A. SCIARRONE ALIBRANDI, G. BORELLO, R. G. FERRETTI, F. LENOCI, E. MACCHIAVELLO, F. MATTASSOGLIO, F. PANISI, and P. MUNAFÒ, *Marketplace Lending. Towards New Forms of Financial Intermediation?,* July 1, 2019. CONSOB Fintech Series No. 5, available at *SSRN: https://ssrn.com/abstract=3685318or http://dx.doi.org/10.2139/ssrn.3685318;* J. LERNER; P. TUFANO*, The consequences of financial innovation: a counterfactual research agenda,* in *Annu. Rev. Financ. Econ., 2011, 3.1: 41-85.*

[9] The complexity of the current body of EU law is the inevitable result of a huge number of sources: there are more than 80 acts in place at legislation level 1 (i.e. approx. 50 Regulations and 30 Directives), around 300 acts at legislation level 2 (approx. 290 RTS AND 9 ITS) and more than 170 documents at level 3 legislation. This increase in the amount of sources and pieces of law is also reflected at the international level. Indeed, it is worth noting that, over time, the Basel standards



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of law rests – to our mind – on a very precise and tight coordination between the constellation of laws and regulations that form the EU financial law universe[10]. The overlapping regulatory frameworks established under the ECSPR and other pieces of EU financial and banking law, thus, might increase the risk of regulatory arbitrage and have a disruptive effect on access to finance and the development of capital markets in certain countries[11].

Lending-based crowdfunding platforms, as it is known, represent an alternative to traditional financial intermediation. They do that by putting in direct contact to those who offer credit (so-called lenders), on the one hand, and those who ask for it (so-called borrowers); although their use is still very limited[12], in some markets, they are acquiring an increasingly disruptive role, to the point of representing a real alternative to bank credit and on the other hand representing a new investment alternative to the lenders[13].

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passed from a document of 60 pages (Basel I, in 1988) to a document of 251 pagers (Basel 2 to the 1626 pages of Basel III in 2013.

[10] See e.g., M. HOBZA and A. VONDRÁČKOVÁ, The New Financial Crowdfunding Regulation and Its Implications for Investment Services under MiFID II (November 6, 2020). Charles University in Prague Faculty of Law Research Paper No. 2020/III/2, available at *SSRN*: https://ssrn.com/abstract=3725997 or http://dx.doi.org/10.2139/ssrn.3725997.

[11] It is worth noticing that this problem is acknowledged by the same ECSPR (see for instance recital n. 17 and, quite significantly, recital n. 9 that specifies the following: "To avoid regulatory arbitrage and to ensure their effective supervision, crowdfunding service providers should be prohibited from taking deposits or other repayable funds from the public, unless they are also authorised as a credit institution in accordance with art. 8 of Directive no. 2013/36/EU of the European Parliament and of the Council. However, Member States should ensure that national law does not require an authorisation as a credit institution or any other individual authorisation, exemption or dispensation for project owners or investors where they accept funds or grant loans for the purposes of offering or investing in crowdfunding projects"). On regulatory arbitrage and the possible actions to be undertaken by policy-makers, see e.g. A. MINTO, S. PRINZ, M. WULFF, *A Risk Characterization of Regulatory Arbitrage in Financial Markets* in European Business Organization Law Review, 2021, vol. 3, pp. 1-34; V. FLEISCHER, Regulatory arbitrage, in Texas Law Review, 2010, pp. 227-289; F. PARTNOY, *Financial derivatives and the costs of regulatory arbitrage*, Journal of Corporate Law, 1997, pp. 211-227; F. PARTNOY, *The law of two prices: regulatory arbitrage, revisited*, in Georgetown Law Journal, 2019, pp. 1017-1043; E. MACHIAVELLO, *The European Crowdfunding Service Providers Regulation and the Future of Marketplace Lending and Investing in Europe: the 'Crowdfunding Nature' Dilemma.* Forthcoming in European Business Law Review 2021.

[12] For example, in the UK, business loans facilitated by crowdfunding platforms amounted to 15% of total small business loans in 2016, up from less than 1% in 2012. See e.g. ZHANG, BRYAN ZHENG, *et al*. *Entrenching Innovation-The 4th UK Alternative Finance Industry Report*, available at *SSRN 3084570*, 2017.

[13] For a classification of virtual platforms also in consideration of the national legal context, from those falling within the perimeter of application of art. 100-*ter* of the Italian Consolidated Financial



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2. The ECSPR applies to crowdfunding intermediation (namely, "*crowdfunding services*") operated through a digital platform open to the public that matches – or facilitates the matching of – prospective investors or lenders with businesses that seek funding[14]. According to art. 2, par. 1, lett. a), crowdfunding service means "the matching of business funding interests of investors and project owners through the use of a crowdfunding platform and […] consists of any of the following: (i) the facilitation of granting of loans; (ii) the placing without a firm commitment basis, as referred to in point (7) of Section A of Annex I to Directive 2014/65/EU, of transferable securities and admitted instruments for crowdfunding purposes issued by project owners or a special purpose vehicle and the reception and transmission of client orders, as referred to in point (1) of that section, in relation to those transferable securities and admitted instruments for crowdfunding purposes".

The notion of crowdfunding service has therefore been designed to capture both lending-based crowdfunding ("the facilitation of granting of loans") and investment-based crowdfunding (the placing without firm commitment basis of transferable securities and admitted instruments for crowdfunding purposes issued

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Act to those aimed at putting supply and demand for credit directly in relation to each other, see e.g. G. P. LA SALA, *Intermediazione, disintermediazione, nuova intermediazione: i problemi regolatori*, in M. CIAN – C. SANDEI (ed.), *Diritto del Fintech,* Wolters Kluwer-Cedam, 2020, 16 – 21; D. SICLARI – G. SCIASCIA, *Innovazione finanziaria e rafforzamento del mercato unico per i servizi finanziari retail: sfide, rischi, risposte della regolazione*, in *Riv. Trim. Dir. Ec*., 2016, p. 200 ss.; ARGENTATI, Le banche nel nuovo scenario competitivo. Fintech, il paradigma *Open banking* e la minaccia delle *Big Tech companies*, in *Mercato concorrenza regole*, *20*(3), pp. 441-466; L. B. JUNGE, I. C. LAURSEN, K. R. NIELSEN. *Choosing crowdfunding: Why do entrepreneurs choose to engage in crowdfunding?*, in *Technovation*, 2021, 102385.

[14] See T. JOVANOVIĆ. *Crowdfunding: what do we know so far?,* in *International Journal of Innovation and Technology Management*, 2019, 16.01: 1950009; J. PASCHEN, *Choose wisely: Crowdfunding through the stages of the startup life cycle*, in *Business Horizons*, 2017, 60.2: 179-188; B. K. ADHIKARY, K. KUTSUNA, T. HODA, *Crowdfunding − Types and Models*, in *Crowdfunding*. Springer, Singapore, 2018, pp. 9-20; D. CUMMING; L. HORNUF (ed.). *The economics of crowdfunding: startups, portals and investor behavior*. Springer, 2018; K. TAEUSCHER, R. BOUNCKEN, and R. PESCH, *Gaining legitimacy by being different: Optimal distinctiveness in crowdfunding platforms,* in *Academy of Management Journal*, *64*(1), 2021, 149-179; O. HAVRYLCHYK, *Regulatory framework for the loan-based crowdfunding platforms,* 2018. See also art. 1 ECSPR that reads as follow: "This Regulation lays down uniform requirements for the provision of crowdfunding services, for the organisation, authorisation and supervision of crowdfunding service providers, for the operation of crowdfunding platforms as well as for transparency and marketing communications in relation to the provision of crowdfunding services in the Union" (see also recital no. 1).



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by project owners or a special purpose vehicle ('SPVs') and the reception and transmission of client orders with regard to those transferable securities and admitted instruments for crowdfunding purposes)[15].

Unlike, for example, the banking business where both the activities of "taking of deposits or other repayable funds from the public" *and* "granting credit for its own account" have to be performed by the entity for it to qualify as a credit institution[16], the crowdfunding platforms are not required to provide both activities jointly. Despite the circumstance that lending-based and investment-based are included in the notion of crowdfunding, the platform could most certainly limit its activity to either financing or offering financial instruments[17]. Consistently, art. 12 ECSPR on "the authorisation as a crowdfunding service provider" requires the applicant/prospective provider to draw up a "programme of operations" setting out "the types of crowdfunding services that the prospective crowdfunding service provider intends to provide and the crowdfunding platform that it intends to operate, including where and how crowdfunding offers are to be marketed" (see art. 12, par. 2, lett. d))[18].

Both in the case of lending-based crowdfunding and investment-based

[15] Recital 1 ECSPR points out that "Crowdfunding represents an increasingly important type of intermediation where a crowdfunding service provider, without taking on own risk, operates a digital platform open to the public in order to match or facilitate the matching of prospective investors or lenders with businesses that seek funding. Such funding could take the form of loans or the acquisition of transferable securities or of other admitted instruments for crowdfunding purposes. *It is therefore appropriate to include within the scope of this Regulation both lending-based crowdfunding and investment-based crowdfunding, since those types of crowdfunding can be structured as comparable funding alternatives*" (emphasis added).

[16] See art. 4(1), point 1, letter (a) of Regulation (EU) No 575/2013 (CRR) and European Banking Authority, *Opinion of the European Banking Authority on elements of the definition of credit institution under Article 4(1), point 1, letter (a) of Regulation (EU) No. 575/2013 and on aspects of the scope of the authorisation*, 18 October 2020.

[17] See CHIOMENTI, ITALIAFINTECH, *Position Paper Il Regolamento UE 2020/1503 relativo ai fornitori europei di servizi di crowdfunding per le imprese*, 7 May 2021, available at https://www.chiomenti.net/public/files/0/Position-Paper-Crowdfunding-IF.pdf.

[18] Another important element worth mentioning is that there is no requirement for an exclusive corporate purpose, and crowdfunding service providers may also offer activities other than those covered by the Regulation, provided that – obviously – relevant applicable EU and/or national law are complied with. For further information, see S. PANAGIOTIS, *'The European Union Proposal for a Regulation on Cross-Border Crowdfunding Services: A Solemn or Pie-Crust Promise*?', 2020, 31, in *European Business Law Review*, Issue 6, pp. 1047-1122, available at *https://kluwerlawonline.com/JournalArticle/European+Business+Law+Review/31.6/EULR2020039*.



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crowdfunding, three types of actors are involved: the project owner that proposes the project to be funded, investors who fund the proposed project and an intermediating organisation in the form of a crowdfunding service provider that brings together project owners and investors through an online platform[19].

In line with the aim of this article, the analysis will be confined to lending-based crowdfunding only.

As said, the "lending-based crowdfunding" consists in facilitating the granting of loans. The ECSPR does not define what "facilitation of granting of loans" means. It does specify, though, that such notion includes services such as presenting crowdfunding offers to clients and pricing or assessing the credit risk of crowdfunding projects or project owners. Favouring a more elastic and flexible approach over an (unrealistic) narrow definition of "facilitation of granting loans" ensures – to our mind – that different business models enabling a loan agreement between one or more investors and one or more project owners (and concluded through a crowdfunding platform) come within the scope of application of the regulation. This could surely be framed a well-done attempt to strike a balance between technological neutrality and legal certainty[20]. Loans included within the scope of the ECSPR should be loans with unconditional obligations to repay an agreed amount of money to the investor, whereby lending-based crowdfunding

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[19] See recital n. 2 ECSPR and HOOGHIEMSTRA S.N., The European Crowdfunding Regulation – Towards a harmonised framework for crowdfunding in Europe?, in ACE Comptabilité, fiscalité, audit, droit des affaires au Luxembourg, 2021/4, p. 12.

[20] The EU Commission is still requesting advice from the European supervisory authorities (ESAs) on how to address technological neutrality issues that can be sum up in the principle "*same activity, same risk, same rules*". In this regard, see *https://ec.europa.eu/info/sites/default/files/ business_economy _euro/banking_and_finance/documents/210202-call-advice-esas-digital-finance_en.pdf*. For more information about technological neutrality, see D. KWAK, *No More Strategical Neutrality on Technological Neutrality: Technological Neutrality as a Bridge Between the Analogue Trading Regime and Digital Trade*, in *World Trade Review*, 2021, 1-15; M. AMSTAD, *Regulating fintech: Objectives, principles, and practices*, in *Asian Development Bank Institute Working Paper Series*, 2019, 1016; D. W. ARNER, D. A. ZETZSCHE, R. P. BUCKLEY AND J. N. BARBERIS, *FinTech and RegTech: Enabling innovation while preserving financial stability*, in *Georgetown Journal of International Affairs*, 2017, 47-58; G. FALCONE, *Tre idee intorno al c.d. "Fintech",* in *Rivista di diritto bancario, https://rivista.dirittobancario.it/sites/default/files/pdf_c/giovanni_falcone;* N. LINCIANO, P. SOCCORSO, *FinTech e RegTEch: approcci di regolamentazione e di supervisione*, in M.T. PARACAMPO (a cura di), *Introduzione ai profili giuridici di un mercato unico tecnologico dei servizi finanziari*, Torino, 2017.



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platforms merely facilitate the conclusion by investors and project owner of loan agreements without the crowdfunding service provider at any moment acting as a creditor of the project owner (see recital n. 11).

In line with the objective of drawing clear lines between reserved activities – and consequently overcoming the mentioned problems of regulatory arbitrage – the facilitation of granting of loans that falls within the scope of ECSPR is to be kept separated from the activity of a credit institution, which grants credits for its own account *and takes deposits or other repayable funds from the public*.

This, in turn, brings us to the notion of "loan", which, for the purposes of the ECSPR, refers to "an agreement whereby an investor makes available to a project owner an agreed amount of money for an agreed period of time and whereby the project owner assumes an unconditional obligation to repay that amount to the investor, together with the accrued interest, in accordance with the instalment payment schedule" (see art. 2, par. 1, lett. b)).

By avoiding a definition of "facilitating the granting of loans", the "lending-based crowdfunding" thus ends up revolving around the notion of loan. The ECSPR opted for a regime governing the intermediation of direct financing only, that is, financing from the investor to the company promoting the project to be financed. Consequently, platforms that may be engaging in activities of facilitating the purchase and sale of receivables (so-called invoice trading platforms) therefore appear to be excluded from the scope of application of the ECSPR[21].

3. The individual portfolio management of loans is defined in the ECSPR as "the allocation by the crowdfunding service provider of a predetermined amount of funds of an investor, which is an original lender, to one or multiple crowdfunding projects on its crowdfunding platform in accordance with an individual mandate given by the investor on a discretionary investor-by-investor basis" (see art. 2, par. 1,

[21] For a description of the invoice trading platforms, see e.g. V. ANNONI, *Financing Italian Firms Throught Invoice Trading Platforms*, in International Journal of Economics and Finance, 2020, Vol. 12, No. 3, pp. 78-85.



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lett. c).

The individual portfolio management of loans should be singled out from the general lending-based crowdfunding. Indeed, this type of crowdfunding, unlike the one mentioned above, is characterised by the discretion of the service provider in the allocation of the client's resources for the financing of one or more crowdfunding projects, in accordance with the instructions contained in the investor's mandate. Therefore, the service amounts to something much more sophisticated than merely facilitating the granting of loans, and someone could question indeed whether this service should be referred to the general category of the lending-based crowdfunding.

The novelty of the individual portfolio management of loans, as well as the practical implications and relevance that such service might have on the marketplace, could be implicitly drawn from the specific provisions that are dedicated to such service. Indeed, on top of the general rules and principles applying to all crowdfunding service providers, a wide array of additional requirements characterise the provision of such service.

This is clearly the case, for instance, of one of the guiding provisions of the ECSPR, namely art. 3 regarding the provision of crowdfunding services and organisational and operational requirements of crowdfunding. This provision sets out a series of general principles applying to all crowdfunding services (individual portfolio management of loans, too). The principles span from imposing that crowdfunding services shall only be provided by legal persons which are established in the Union and that have been authorised as crowdfunding service providers to requiring the crowdfunding service providers to act honestly, fairly and professionally in accordance with the best interests of their clients (see paras. 1 and 2). Art. 3, par. 4, then, sets out that "crowdfunding service providers may propose to individual investors specific crowdfunding projects that correspond to one or more specific parameters or risk indicators chosen by the investor. Where the investor wishes to make an investment in the suggested crowdfunding projects, the investor shall



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review and expressly take an investment decision in relation to each individual crowdfunding offer". The second subparagraph of the same par. 4 elaborates further by specifically tackling individual portfolio management of loans and specifying that those crowdfunding platforms "shall do so in adherence to the parameters provided by the investors and shall take all necessary steps to obtain the best possible result for those investors. Crowdfunding service providers shall disclose to investors the decision-making process for executing the received discretionary mandate".

Par. 5 closes up on this by specifying – rightly so – that "*by way of derogation from the first subparagraph of paragraph 4,* crowdfunding service providers providing individual portfolio management of loans *may exercise discretion on behalf of their investors within the agreed parameters without requiring investors to review and take an investment decision in relation to each individual crowdfunding offer*" (emphasis added).

Consequently, while a crowdfunding service provider, generally speaking, may propose to individual investors specific crowdfunding projects that correspond to one or more specific parameters or risk indicators *insofar* the investor reviews and expressly takes an investment decision in relation to each individual crowdfunding offer, the provision of the individual portfolio management of loans entails that the crowdfunding service provider may exercise discretion and basically act without the investors reviewing each individual crowdfunding offer[22]. In line with the very wording of this provision, the crowdfunding service provider of an individual portfolio of loans *may* exercise discretion and, consequently, bypass investors' involvement. How this discretion could be actually exercised – and to what extent – will be relentlessly dependant on the very content of the mandate that establishes the contractual relationship between the investor and the crowdfunding service provider.

[22] According to recital n. 20 ECSPR, the so called "auto-investing" should be considered individual portfolio management of loans. Auto-investing refers to business models using automated processes whereby funds are automatically allocated by the crowdfunding service provider to crowdfunding projects in accordance with parameters and risk indicators predetermined by the investor.



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In making an offer and setting the relative price, the crowdfunding service provider should perform a (credit) risk assessment which resembles pretty closely the scrutiny undertaken by credit institutions when granting credit[23]. In this case, the lending activity rests on the parameters that the client is providing to the crowdfunding service provider. Unlike what generally happens with the credit provided through the traditional banking intermediation, the client is thus not directly selecting the project they want to invest in. Rather, the client indicates the parameters against which the crowdfunding service provider will sort out how to allocate the funds[24]. In other words, the parameters design the contours of the mandate that the client is giving to the crowdfunding service provider. Nature of the delegation and parameters will be strictly intertwined since the exercise of the delegated powers is subject to strict review in the light of objective criteria determined by the delegating party (the client).

The fact that the mandate is at the epicentre of the provision of the individual portfolio management of loans is most certainly confirmed by art. 6 ECSPR, which is the provision precisely concerned with the "individual portfolio management of loans" and its legal characterisation. This provision in fact qualifies this service by the very mandate given by the investor. This mandate indeed postulates the parameters that the service provider must abide by in providing the service. Those parameters must include at least two of the following criteria that every loan in the portfolio will have to comply with: "(a) the minimum and maximum interest rate payable under any loan facilitated for the investor; (b) the minimum and maximum maturity date of any loan facilitated for the investor; (c) the range and distribution of any risk

[23] See art. 4, par. 4 ECSPR and, for the similarities with the approach used in the banking intermediation, EBA, *Guidelines on loan origination and monitoring*, 29 May 2020, EBA/GL/2020/06. The EBA, however, is entrusted by the same Reg. (EU) no. 2020/1503 with the mandate to develop a RTS project (which will be flanked by that concerning the adequate disclosure of information) on the need for crowdfunding service providers to have an appropriate framework for the assessment of credit risk, loan pricing and risk management techniques (art. 19, par. 7, ECSPR). This must be done in close cooperation with ESMA.

[24] See A. MANFROI, A. MIORELLI, *Il nuovo servizio di gestione individuale di portafoglio di prestiti*, in Dirittobancario.it, 17 June 2021, available at http://www.dirittobancario.it/news/capital-markets/il-nuovo-servizio-di-gestione-individuale-di-portafoglio-di-prestiti.



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categories applicable to the loans and (d) if an annual target rate of return on investment is offered, the likelihood that the selected loans will enable the investor to achieve the target rate with reasonable certainty" (see art. 6, par. 1).

For the crowdfunding service provider to meet those requirements, an adequate internal governance system should be put in place. Indeed, operationalising the mandate stipulated with the investor rests on a sound set of internal processes and methodologies and on appropriate data which could be collected by the crowdfunding service provider itself or sourced from third parties[25].

In discharging the mandate, the crowdfunding service provider should establish internal arrangements in terms of policies and procedures for the detection of relevant factors that may have unfavourable effects on the performance of the loans. Indeed, the crowdfunding service provider bears a great deal of liability for the management of credit risk and the related financial modelling for that provision of services. Namely, the crowdfunding service provider must examine i) the credit risk of the individual crowdfunding projects that have been selected for the investor's portfolio; ii) the credit risk of the investor's portfolio, at an aggregate level and iii) the credit risk of the project owners selected for the investor's portfolio by verifying the prospect of the project owners meeting their obligations under the loan. Further, the crowdfunding service provider is asked to provide a description of the method used for those three assessments to the investor.

The very characteristics of the individual portfolio management of loans, and its legal characterisation in relation to the underlying mandate, instinctively recall the service of "portfolio management" as provided for under MiFID II. Such investment service entails in fact "managing portfolios in accordance with mandates given by clients on a discretionary client-by-client basis where such portfolios include one or

[25] See art. 6, par. 2, ECSPR. See also art. 4 ECSPR regarding specifically "effective and prudent management" of a crowdfunding service provider. Once again, on top of the general principles set out of the generality of crowdfunding service providers, par. 2 (second subparagraph) singles out those engaging in individual portfolio management of loans, which have to put in place "adequate systems and controls for the management of risk and financial modelling for that provision of services and that it complies with the requirements set out in Article 6(1) to (3)".



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more financial instruments" (see art. 4, par. 1, point 8 and Annex I, point 4 of Directive 2014/65/EU, and art. 25 for the suitability test).

The contract of portfolio management is centred around the mandate given to the intermediary. Indeed, it is substantiated in the service whereby the client delegates the intermediary to carry out i) the investment choices relating to a given portfolio (consisting of a set of fungible values whose investment can be diversified on the basis of the client's financial needs) as well as ii) the set of activities necessary for such choices to be translated into operational terms[26].

In the case of portfolio management of loans, the law is much more detailed in indicating the parameters that inform the mandate underlying the service, which, to a certain extent, finds its reason on the circumstance that the crowdfunding service provider does not take any risk on its own, and, rather, the risks remains entirely on the investor[27].

Despite the clear, and meaningful, differences between those two services, in both cases, the information collected from clients is essential[28], and in the case of the individual portfolio management of loans, the disclosure obligations are particularly demanding as the next paragraph will show.

4. Where a crowdfunding service provider offers individual portfolio management of loans, it is subject to a very tight set of transparency and disclosure obligations. First off, in line with the relevance of the mandate, the provider must keep record of the mandate given and of every loan in an individual portfolio (see art. 6, par. 3)[29]. In order to fill in the asymmetric gap between the weak and the

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[26] See R. LENER, *Le società di gestione del risparmio nel regolamento Consob di attuazione del T.U.F.*, 1998, p. 1121 ss.

[27] See EBA Consultation Paper on the Draft Regulatory Technical Standards on Individual Portfolio Management of loans offered by crowdfunding service providers under art. 6(7) Regulation (UE) 2020/1503, (EBA/CP/2021/22), p. 4.

[28] For portfolio management, see ESMA, Guidelines on certain aspects of the MiFID II suitability requirements, 06 November 2018 | ESMA35-43-1168.

[29] The crowdfunding service provider must keep records of the mandate and of every loan for at least three years after its maturity date on a durable medium.



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strong party to the contract[30], and thus make sure that the investor is always aware of what risks they are exposed to and promptly informed, the crowdfunding service provider is required to provide a wide set of pre-contractual information as well as other relevant information during the execution of the contract. As for the pre-contractual phase, besides the marketing communications (which are regulated in art. 27 and 28 ECSPR for all crowdfunding service providers), the crowdfunding service provider offering individual portfolio management of loans must draw up, and make available to prospective investors, a key investment information sheet (KIIS) at platform level containing a very detailed set of information about the provider itself and its service (see art. 24 ECSPR[31]).

The key investment information sheet at platform level must be fair, clear and not misleading. It must be presented on a stand-alone, durable medium that is clearly distinguishable from marketing communications. Furthermore, the crowdfunding service provider is asked to keep the key investment information sheet

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[30] See e.g. N.M. MOLONEY. *How to protect investors: lessons from the EC and the UK*. Cambridge: Cambridge University Press, 2010, pp. 194 –196; P. ŠEVČÍK, *Financial Contracts and the Political Economy of Investor Protection*, in *American Economic Journal: Macroeconomics* 4, no. 4, 2012, pages 163–97. *http://www.jstor.org/stable/23269723*; D. M. IBRAHIM, Underwriting Crowdfunding (February 18, 2020), in *Stanford Journal of Law, Business, and Finance*, Vol. 25, 2020, available at *SSRN: https://ssrn.com/abstract=3540296;* C. STEPHEN, *Regulating Investors Not Issuers: A Market-Based Proposal, 88 CAL. L. REV. 279, 283 (2000) ("[A]n investor who lacks information on individual issuers might have good information on intermediaries, such as broker-dealers, mutual funds, or exchanges. Such investors will select intermediaries that offer desired investors protections.")*.

[31] See also Annex I on the "key investment information sheet". Part i) is dedicated to the information on individual portfolio management of loans to be provided by crowdfunding service providers: "(a) Identity, legal form, ownership, management and contact details of the crowdfunding service provider; (b) The minimum and maximum interest rate of loans that may be available to investors' individual portfolios; (c) The minimum and maximum maturity date of loans that may be available to investors' individual portfolios; (d) Where used, the range and distribution of risk categories that loans fall into, as well as the default rates and a weighted average interest rate per risk category with a further break down by the year in which the loans were granted through the crowdfunding service provider; (e) The key elements of the internal methodology for credit risk assessment of the individual crowdfunding projects and for defining the risk categories; (f) If a target rate of return on investment is offered, an annualised target rate and the confidence interval of this annualised target rate over the investment period, taking into account fees and default rates; (g) Procedures, internal methodologies and criteria for selection of the crowdfunding projects to the individual portfolio of loans for the investor; (h) Coverage and conditions of any applicable capital guarantees; (i) The servicing of portfolio loans, including in situations where a project owner does not meet its obligations; (j) Risk diversification strategies; (k) Fees to be paid by the project owner or the investor, including any deduction from the interest to be paid by the project owner".



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at platform level updated at all times and for the duration of the crowdfunding offer. Consistently, it must immediately inform the investors who have made an offer to invest or expressed an interest in the crowdfunding offer about any material change to the information in the key investment information sheet (see art. 24, par. 3. ECSPR). The relevance of the KIIS and its practical implications are also confirmed by the liability regime. In this case, the regulation is relying on national jurisdictions – as foreseeable, due to the national differences that exist in this ambit – in order to ensure the responsibility of the crowdfunding service provider for the information given in a key investment information sheet at platform level[32]. Indeed, along those lines, art. 24, par. 5 requires Member States to ensure that "their laws, regulations and administrative provisions on civil liability apply to natural and legal persons responsible for the information given in a key investment information sheet at platform level, including any translation thereof, in at least the following situations: (a) the information is misleading or inaccurate; or (b) the key investment information sheet at platform level omits key information needed to aid investors when considering whether to invest through individual portfolio management of loans".

As for the contractual phase, the crowdfunding service provider is required to provide – on a continuous basis and upon the request of an investor – via electronic means at least the following information on each individual portfolio: i) the list of individual loans of which a portfolio is composed; ii) the weighted average annual interest rate on loans in a portfolio; ii) the distribution of loans according to risk category, in percentage and absolute numbers; iv) for every loan of which a portfolio is composed, key information, including at least an interest rate or other compensation to the investor, maturity date, risk category, schedule for the repayment of the principal and payment of interest, compliance of the project owner

[32] See art.24, par. 4, ECSPR. In particular, it states that "those responsible for the key investment information sheet shall be clearly identified in the key investment information sheet at platform level by, in the case of natural persons, their names and functions or, in the case of legal persons, their names and registered offices, as well as declarations by them that, to the best of their knowledge, the information contained in the key investment information sheet is in accordance with the facts and that the key investment information sheet makes no omission likely to affect its import".



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with that instalment payment schedule; v) for every loan of which a portfolio is composed, risk mitigation measures including collateral providers or guarantors or other types of guarantees; vi) any default on credit agreements by the project owner within the past five years; vii) any fees paid in respect of the loan by the investor, the crowdfunding service provider or the project owner[33].

This demanding set of information that the crowdfunding service providers are required to provide to investors in the difference phases of their relationship is crucial as it allows, *ex ante*, the choice of investment and, *ex post*, the evaluation of the results produced by the management activity (by means of the individual mandate that is given by the investor).

In order to ensure adequate and comprehensive investor protection, art. 6, par. 7, ECSPR entrusts the EBA, in close cooperation with ESMA, with the task of developing draft regulatory technical standards to specify the information that must be provided to investors so that they are adequately informed about the risks related to investments made through individual loan portfolio management[34].

In this regard, the EBA's Consultation Paper on "Regulatory Technical Standards on Individual Portfolio Management of loans offered by crowdfunding

[33] See art. 6, par. 4. Furthermore, in case the crowdfunding service provider has carried out a valuation of the loan, it should also provide the investor with the following pieces of information: (i) the most recent valuation; (ii) the valuation date; (iii) an explanation as to why the crowdfunding service provider conducted the valuation; and (iv) a fair description of the likely actual return, taking into account fees and default rates.
It is worth noticing that the crowdfunding service provider may establish and operate a contingency fund for its activity related to the individual portfolio management of loans. In such a case, it must provide additional information to the investors, and namely: i) a risk warning specifying the nature of the contingency fund and the rights stemming from it; ii) a description of the policy of the contingency fund. Additionally, a crowdfunding service provider that has established and operates a contingency fund must also provide information about the performance of the fund to the public on a quarterly basis (in particular in relation to the size of the contingency fund compared to the total amounts outstanding on loans relevant to the contingency fund and the ratio between payments made out of the contingency fund to the total amounts outstanding on loans relevant to the contingency fund). For the all the details about the additional information requirements associated with the contingency fund, see art. 6 parr. 5 and 6 ECSPR.

[34] Art. 6, par. 7, ECSPR mandates the European Banking Authority (EBA), in close cooperation with ESMA, to develop draft regulatory technical standards (RTS) designed to specify the type of information to be provided to investors in order for them to gain an adequate understanding of (i) the potential risks of investments and (ii) the ability of service providers to analyse the credit risk of crowdfunding projects and the owners of such projects, as well as (iii) the methodologies used to assess risk.



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service providers" confirms overtly the connection between the nature of this service, the relevance of the underlying mandate and the importance of the adequate disclosure of information to investor. Indeed, the mandate provides the crowdfunding platform with a number of requirements that the projects to be financed must fulfil, and the service provider will allocate the investor's funds accordingly. Therefore, "when dealing with the allocation of their funds to a portfolio of loans by a crowdfunding service provider, it is important that investors are appropriately informed about the risks they are exposed to"[35]. These risks may originate from the following circumstances: i) investors may underestimate the risks of their investment, assuming that every loan and project within a portfolio is subject to an adequate risk assessment process; ii) as crowdfunding is particularly relevant for small businesses and start-ups, often with little or no credit history, investors relying on these platforms may not be fully aware of

the real quality of borrowers and may find it difficult to appreciate the risks involved for each of the loans in the portfolio[36].

To overcome those risks, the EBA consultation paper puts forward an articulated set of rules projected at protecting the investor through disclosure information. The accuracy and reliability of information provided to investors rest on ensuring that "a. the data used to conduct the assessments of creditworthiness […] are consistent, complete and appropriate; b. The measurement techniques are appropriate to the complexity and level of the risks underlying the single crowdfunding projects and/or the portfolios, are based on reliable data, and subject to periodic validation; and c. The procedures related to data management are robust

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[35] EBA Consultation Paper on the Draft Regulatory Technical Standards on Individual Portfolio Management of loans offered by crowdfunding service providers under art. 6(7) Regulation (UE) 2020/1503, (EBA/CP/2021/22), p. 7.

[36] EBA Consultation Paper on the Draft Regulatory Technical Standards on Individual Portfolio Management of loans offered by crowdfunding service providers under art. 6(7) Regulation (UE) 2020/1503, (EBA/CP/2021/22), p. 4.



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well documented, reliable and regularly updated"[37].

An essential part of those draft RTS is represented by the obligations enshrined in Chapter 2 on the "elements to be included in the description of the method to assess credit risk". Indeed, investors are to be provided with a clear and precise description of the method to assess both credit risk of individual crowdfunding projects within a portfolio and credit risk at investor's portfolio level[38]. The RTS list a comprehensive set of elements to be necessarily included in those descriptions. The crowdfunding service provider must also provide adequate information on the models used for the credit risk assessment of crowdfunding projects, the creditworthiness assessment of project owners, the credit approval and monitoring processes and the composition of portfolios[39].

This compelling amount of information to be provided to the investor is most certainly the result of the major difference that exists between crowdfunding and traditional banking intermediation. The crowdfunding service provider merely facilitates the match between project owners/borrowers and investors but does not take any borrowers' risk of its own. The risk stemming from the creditworthiness of borrowers remains entirely on the investor. Furthermore, the asymmetric information between lenders and project owners may increase the chance that the investor does not adequately consider the riskiness of an investment, possibly since they rely on the risk assessment process undertaken by the platform. This asymmetry of information is exacerbated in the case of the individual management of portfolio of loans, since the crowdfunding service provider allocates a pre-determined amount of funds of an investor to one or multiple crowdfunding projects, in accordance with

[37] EBA Consultation Paper on the Draft Regulatory Technical Standards on Individual Portfolio Management of loans offered by crowdfunding service providers under art. 6(7) Regulation (UE) 2020/1503, (EBA/CP/2021/22), art. 1, p. 15.

[38] See art. 3 and 4 respectively, EBA Consultation Paper on the Draft Regulatory Technical Standards on Individual Portfolio Management of loans offered by crowdfunding service providers under art. 6(7) Regulation (UE) 2020/1503, (EBA/CP/2021/22), art. 1, p. 16.

[39] See art. 6, EBA Consultation Paper on the Draft Regulatory Technical Standards on Individual Portfolio Management of loans offered by crowdfunding service providers under art. 6(7) Regulation (UE) 2020/1503, (EBA/CP/2021/22), art. 1, p. 18.



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an individual investor's mandate. Against this backdrop, the ECSPR and the prospective RTS developed by the EBA devote much effort in enabling the investor to take a well-informed decision about the projects and the project owners they are financing through the crowdfunding platform. This decision rests on information disclosure and on a very heavy set of transparency obligations bearing on the shoulders of the crowdfunding service providers.

5. The advent of crowdfunding services is raising fundamental questions on the "what" and the "how" of modern financial intermediation. What is "investment", and what is "lending/borrowing" when bringing together project owners and investors? How are those three types of actors – the project owners, the investors and the crowdfunding service providers – interacting with each other? The ECSPR might seem to be blurring the traditional "silo thinking" in favour of a consolidated approach focusing on a well-functioning relationship between the three parties involved in the provision of a crowdfunding service. An insightful example of this comes from the individual portfolio management of loans.

The service of *individual portfolio management of loans* is one of its kind and must be regarded separately from the other services provided by crowdfunding platforms. This is straightforwardly demonstrated by the set of provisions building up the general principles applicable to all crowdfunding service providers and the provisions specifically regulating individual portfolio management of loans. As practice will likely show, the characterisation of this service (thus, its legal implications and consequences) derives from the mandate (and the parameters therein) the service provider has to stick to in offering the portfolio management. This will be crucial due to the risks the investor is exposed to. Indeed, it is worth remembering that the investor will be suffering any loss resulting from a borrower's failure to repay a loan.

A traditional and a very well-known problem regarding investor protection is asymmetric information between the investor and the provider of investments



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products. Financial products marketed on crowdfunding platforms are – as the analysis above also shows – not like traditional investments or savings products, and the informational gaps between the crowdfunding service provider and the investor might be even more exacerbated. For this reason, the ECSPR is striving to overcome them by means of a particular stringent regime of disclosure requirements (and also by introducing requirements regarding entry knowledge test and simulation of the ability to bear losses). The ECSPR and the upcoming regulatory technical standards drafted by ESMA and EBA[40] seem designed to favour the integration of crowdfunding service providers into financial markets, demonstrating how important the policy-making strategy and the "regulatory touch" are in deciding the success, or the decline, of a new market trend. The way this emerging segment of the financial markets is regulated might bring in further perspectives to the important policy debates surrounding the completion of the Capital Market Union, in particular with regard to the thorny issues of regulatory coordination and consistency in the multifaceted financial regulatory landscape.

[40] See rtecital 71 ECSPR: "The Commission should be empowered to adopt regulatory technical standards developed by ESMA and EBA with regard to individual portfolio management of loans, complaints handling, conflicts of interest, authorisation as crowdfunding service provider, information to clients, default rate disclosure, the entry knowledge test and simulation of the ability to bear loss, the key investment information sheet and cooperation between competent authorities. The Commission should adopt those regulatory technical standards by means of delegated acts pursuant to Article 290 TFEU and in accordance with Articles 10 to14 of Regulations (EU) No 1093/2010 and (EU) No 1095/2010."



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# SUSTAINABILITY AND FINANCE:
# UTOPIAN OXYMORON OR ACHIEVABLE COMPANIONSHIP?

Marco Bodellini [*] - Dalvinder Singh [**]

ABSTRACT: *At European Union level a number of legislative acts have been recently put in place with a view to favouring the transition towards a sustainable economy and a sustainable society. As to the financial sector, the most relevant legislative acts adopted in this regard are the Taxonomy Regulation and the Sustainability-Related Disclosure Regulation. Together these regulations have created a new system relating to sustainability in doing business through the introduction of criteria against which economic activities and investments will be classified as sustainable and through disclosure obligations. With such a new legislation in place, the financial sector is expected to favour the channelling of capital towards sustainable economic activities. Yet, the two regulations concerned do not prohibit the performance of economic activities that are qualified as not sustainable, which, as a consequence, can continue to be carried out.*

*It follows that the system introduced by the Taxonomy Regulation and the Sustainability-Related Disclosure Regulation is a disclosure-based one which will be effective depending on the market reaction, id est on whether financial service providers and investors will also care about the sustainability of their investments and not only about returns.*

*Still, the critical issue in this regard relates to the timing as international agreements recently signed have set very ambitious environmental and social goals*

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*to be reached in a relatively short period of time. Hence the question arises whether the new disclosure-based system will be enough to achieve such goals or whether a more intrusive policy approach, for example based on tax incentives and tax burdens, will become necessary.*

SUMMARY: 1. Introduction. – 2. The Taxonomy Regulation and its rationale. – 2.1. Environmentally sustainable economic activities and environmentally sustainable investments under the Taxonomy Regulation. – 2.2. The six environmental objectives under the Taxonomy Regulation and the reference to minimum standards concerning human and labour rights. – 2.3. The technical screening criteria to be adopted by the Commission. – 2.4. Enabling activities, transitional activities and significantly harmful activities. – 2.5. The scope of application of the Taxonomy Regulation. – 2.6. The disclosure obligations under the Taxonomy Regulation and the role of national authorities in assessing compliance with them. – 3. The Sustainability-Related Disclosure Regulation (SFDR) and its rationale. – 3.1. Sustainability risks. – 3.2. Adverse sustainability impacts. – 3.3. Sustainable investment(s) under the SFDR. – 3.4. Financial products promoting environmental and/or social characteristics and financial products with sustainable investment as objective. – 4. Concluding remarks.

1. The European Union (EU) is ontologically committed to sustainable development and sustainable growth as well as protection of the environment. Accordingly, article 3(3) of the Treaty on European Union (TEU), referring to an internal market that works for the sustainable development of Europe, recalls the pivotal importance of a balanced economic growth and a high level of protection and improvement of the quality of the environment.[1]

At the international level, sustainability in broad terms has over the last 10 years become one of the main priorities in the policy-makers' agenda;[2] in September

[1] Article 3(3) of TEU states that 'The Union shall establish an internal market. It shall work for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment. It shall promote scientific and technological advance'.

[2] Over time, sustainability has been typically associated with the so-called ESG factors, which, in turn, refer to three different, yet inter-connected, dimensions, namely the environmental dimension, the social dimension and the governance dimension.



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2015, the UN General Assembly adopted the so-called 2030 Agenda for Sustainable Development (the 2030 Agenda) which is a new global sustainable development framework based on the so-called Sustainable Development Goals (SDGs) that cover the three dimensions of sustainability, namely the economic dimension, the social dimension and the environmental dimension.[3]

The UN SDGs are relevant also within the EU framework since the Commission, through its Communication of 22 November 2016 on the next steps for a sustainable European future, has stated that all Union actions and policy initiatives are to take the SDGs on board at the outset and the Council confirmed the commitment of the Union and its Member States to the implementation of the 2030 Agenda in a full, coherent, comprehensive, integrated and effective manner.[4]

Additionally, the EU approved the Paris Agreement adopted under the United Nations Framework Convention on Climate Change (Paris Agreement) with the goal to strengthen the response to climate change by making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.[5]

Sustainability and the transition to a safe, climate-neutral, climate-resilient, more resource-efficient and circular economy are thus key objectives for the EU in that they are crucial to ensuring the long-term competitiveness of its economy as well as the well-being of its people and the improvement of the quality of its environment.

In this regard, the contribution that the financial sector is expected to provide in order for the EU economy, society and environment to be fully sustainable is pivotal since a significant amount of private resources will be necessary to meet the

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[3] See United Nations, Transforming our World: the 2030 Agenda for Sustainable Development, A/RES/70/1, available at https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf.

[4] European Commission, Communications on Sustainable Development: EU sets out its priorities, 22 November 2016.

[5] United Nations, Paris Agreement, 2015, available at https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement.



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goals of the 2030 Agenda and of the Paris Agreement as public money alone will not be sufficient. Accordingly, the financial sector is meant to become economically, environmentally and socially sustainable by channelling capital towards investments in sustainable activities. Over time, such investments should thus become mainstream. This is how the Commission would like the EU financial sector to look like in the next future. For this goal to be successfully achieved, though, a number of measures need to be adopted, some of which have actually already been put in place.

In March 2018, moving from the recommendations of the High-Level Expert Group on Sustainable Finance, the Commission adopted the Action Plan on Sustainable Finance, which set out a comprehensive strategy to further connect finance with sustainability.[6] Such Plan includes 10 key actions, grouped in 3 categories, as follows.

A) The first category of initiatives relates to reorienting capital flows towards a more sustainable economy and the key actions are: 1) establishing a clear and detailed EU taxonomy for sustainable activities; 2) creating an EU green bond standard and labels for green financial products; 3) fostering investment in sustainable projects; 4) incorporating sustainability in financial advice; 5) developing sustainability benchmarks.

B) The second category of initiatives relates to mainstreaming sustainability into risk management and the key actions are: 6) better integrating sustainability in ratings and market research; 7) clarifying asset managers' and institutional investors' duties regarding sustainability; 8) introducing a 'green supporting factor' in the EU prudential rules for banks and insurance companies.

C) The third category of initiatives relates to fostering transparency and long-termism and the key actions are: 9) strengthening sustainability disclosure and accounting rule-making; 10) fostering sustainable corporate governance and attenuating short-termism in capital markets.

[6] European Commission, Communication from the Commission to the European Parliament, the European Council, the Council, the European Central Bank, the European Economic and Social Committee and the Committee of the Regions, Action Plan: Financing Sustainable Growth, Brussels, 8.3.2018 COM(2018) 97 final.



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Against this background, the two main legislative acts adopted so far in the EU with a view to implementing the Commission's Action Plan on Sustainable Finance are the Taxonomy Regulation[7] and the Sustainability-Related Disclosure Regulation (SFDR).[8]

This paper analyses and discusses both regulations with a view to questioning whether the newly introduced disclosure-based system will be sufficient to achieve the goals set by the 2030 Agenda and the Paris Agreement or whether a more intrusive policy approach, for example based on tax incentives and tax burdens, might become necessary. In so doing, the paper is divided as follows. Section 2 deals with the Taxonomy Regulation and its rationale, focusing on the definition of environmentally sustainable economic activities and environmentally sustainable investments, the six environmental objectives, its scope of application and the role of the authorities. Section 3 analyses the SFDR and its rationale, discussing sustainability risks, adverse sustainability impacts and sustainable investments. Section 4 concludes.

2. In order for the financial sector to be able to channel capital towards environmentally sustainable activities it is crucial to clearly define which economic activities are actually considered sustainable from the environmental (and social) perspective(s). Only with a clear understanding of when an economic activity is environmentally (and socially) sustainable, financial institutions and markets can effectively play their key role of supporting and favouring the transition towards environmentally (and socially) sustainable economy and society. In this regard, the main function of the Taxonomy Regulation is thus to provide criteria for determining whether eco-

[7] Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088.
[8] Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector.



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nomic activities are environmentally sustainable.[9]

Accordingly, the Taxonomy Regulation has introduced a classification system through which it will be possible to distinguish between environmentally sustainable activities and other activities, where the former are those activities substantially contributing to an environmental objective without significantly harming the others.[10] Such a legislative innovation is very significant in that it is meant to facilitate sustainable investment, as clearly stated in the title of the Taxonomy Regulation itself. The harmonisation introduced through this Regulation will indeed allow economic operators 'to find it easier to raise funding across borders for their environmentally sustainable activities, as their economic activities could be compared against uniform criteria in order to be selected as underlying assets for environmentally sustainable investments'[11] thereby facilitating cross-border sustainable investments in the Union.[12]

2.1. According to the criteria laid down in the Taxonomy Regulation, an economic activity qualifies as environmentally sustainable if: (a) it contributes substantially to one or more of the six environmental objectives set out in the Regulation itself; (b) it does not significantly harm any of such environmental objectives; (c) it is carried out in compliance with minimum safeguards concerning human and labour rights as laid down in the Regulation; and, (d) it complies with technical screening criteria that the Commission is requested to establish through delegated acts.[13]

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[9] For a legal analysis of the Taxonomy Regulation see Gortsos, *The Taxonomy Regulation: More Important Than Just as an Element of the Capital Markets Union*, European Banking Institute Working Paper Series 2020 n. 80, *passim*.

[10] More precisely, pursuant to article 1, the Taxonomy Regulation 'establishes the criteria for determining whether an economic activity qualifies as environmentally sustainable for the purposes of establishing the degree to which an investment is environmentally sustainable'.

[11] Recital 12 of the Taxonomy Regulation.

[12] In literature, the term sustainable investment is often used as an umbrella term to refer to sustainable, responsible and impact investments; see Liang and Renneboog, *Corporate Social Responsibility and Sustainable Finance: A Review of the Literature*, European Corporate Governance Institute, Finance Working Paper n. 701/2020, *passim*.

[13] Article 3 of the Taxonomy Regulation: 'Criteria for environmentally sustainable economic activities'.



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Based on the distinction between environmentally sustainable economic activities and other economic activities, then investments will be grouped into two main categories, *id est* the ones pursuing environmentally sustainable objectives (so-called environmentally sustainable investments)[14] and the ones which do not pursue such objectives. On these grounds, at a later stage it will become feasible to also label financial products[15] as environmentally sustainable in that they move capital towards environmentally sustainable investments in environmentally sustainable economic activities.

Such an approach is expected to provide investors with clarity as to which investments are environmentally sustainable in that they finance environmentally sustainable economic activities. In fact, these criteria must be applied by Member States and the EU in order to determine whether an economic activity qualifies as environmentally sustainable for the purposes of any measure setting out requirements for financial market participants or issuers in respect of financial products or corporate bonds made available as environmentally sustainable. Clarity in this regard is even more important within the Union in light of the freedom to provide financial services and to sell financial products on a cross-border basis through the so-called European passport.[16] This freedom could indeed be unfairly exploited by financial service providers if a harmonised and Union-wide set of relevant definitions relating to sustainable activities and sustainable investments was missing,[17] thereby leading to so-

[14] In turn, according to article 2 paragraph 1(1) of the Taxonomy Regulation, 'environmentally sustainable investment means an investment in one or several economic activities that qualify as environmentally sustainable under this Regulation'.
[15] For the definition of financial product, the Taxonomy Regulation refers to article 2 paragraph 1(12) of the SFDR, under which 'financial product means: (a) a portfolio managed in accordance with point (6) of this Article; (b) an alternative investment fund (AIF); (c) an IBIP; (d) a pension product; (e) a pension scheme; (f) a UCITS; or (g) a PEPP'.
[16] On the functioning of the European passport for the cross-border provision of financial services in the Union see Bodellini, *Does it still make sense, from the E.U. perspective, to distinguish between UCITS and non-UCITS schemes?*, Capital Markets Law Journal, 2016, 4, p. 528 – 539.
[17] On the risk of regulatory arbitrage in the EU financial services market see Bodellini, *The E.U. regulation on marketing of alternative investment funds: another step towards integration of the E.U. financial market*, Business Law Review, 2016, 6, p. 208 – 219; Bodellini, *The marketing of hedge funds in the U.K.: did the system maintain its attractiveness after the transposition of the AIFMD?*,



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called green-washing practices.[18]

2.2. For the purpose of determining the environmental sustainability of a given economic activity, a list of six environmental objectives is laid down in the Taxonomy Regulation. To be qualified as environmentally sustainable, economic activities must contribute substantially to at least one of the six objectives listed in article 9. Pursuant to article 9, such environmental objectives are: 1) climate change mitigation;[19] 2) climate change adaptation;[20] 3) the sustainable use and protection of water and marine resources;[21] 4) the transition to a circular economy; in this regard circular economy 'means an economic system whereby the value of products, materials and other economic resources is maintained for as long as possible, enhancing their efficient use in production and consumption, thereby reducing the environmental impact of their use, minimising waste and the release of hazardous substances at all stages of their life-cycle, including through the application of the waste hierarchy'; 5) pollution prevention and control; the term pollution has a threefold meaning: (i) the direct or indirect introduction of pollutants[22] into air, water or land as a result of human activity; (ii) in the context of the marine environment, pollution as defined in Ar-

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Business Law Review, 2016, 5, p. 162 – 172; Bodellini and Olivares-Caminal, *The impact of Brexit on the UK alternative investment fund industry*, Law and Economics Yearly Review, 2017, 1, p. 79 – 103.

[18] According to Recital 11 of the Taxonomy Regulation, '…In the context of this Regulation, greenwashing refers to the practice of gaining an unfair competitive advantage by marketing a financial product as environmentally friendly, when in fact basic environmental standards have not been met'.

[19] According to article 2 paragraph 1(5) of the Taxonomy Regulation, 'climate change mitigation' means the process of holding the increase in the global average temperature to well below 2 °C and pursuing efforts to limit it to 1,5 °C above pre-industrial levels, as laid down in the Paris Agreement'.

[20] According to article 2 paragraph 1(6) of the Taxonomy Regulation, 'climate change adaptation means the process of adjustment to actual and expected climate change and its impacts'.

[21] The objective of the sustainable use and protection of water and marine resources should be interpreted in accordance with the sectoral legislative acts laid down in recital (26) and the Commission Communications of 18 July 2007 on Addressing the challenge of water scarcity and droughts in the European Union, of 14 November 2012 on A Blueprint to Safeguard Europe's Water Resources and of 11 March 2019 on European Union Strategic Approach to Pharmaceuticals in the Environment.

[22] According to article 2 paragraph 1(10) of the Taxonomy Regulation, pollutant means a substance, vibration, heat, noise, light or other contaminant present in air, water or land which may be harmful to human health or the environment, which may result in damage to material property, or which may impair or interfere with amenities and other legitimate uses of the environment.



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ticle 3, point (8) of Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (the Marine Strategy Framework Directive); and (iii) in the context of the water environment, pollution as defined in Article 2, point (33) of Directive 2000/60/EC of the same institutions of 23 October 2000 establishing a framework for Community action in the field of water policy; 6) the protection and restoration of biodiversity and ecosystems; in this respect, biodiversity means the variability among living organisms arising from all sources including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part and includes diversity within species, between species and of ecosystems while ecosystem means a dynamic complex of plant, animal, and micro-organism communities and their non-living environment interacting as a functional unit.[23]

Interestingly, in order for an economic activity to qualify as environmentally sustainable, the latter has to comply also with minimum standards concerning human and labour rights. In this regard, a number of international standards are used as benchmarks by the Taxonomy Regulation. These are the OECD Guidelines for Multinational Enterprises, the UN Guiding Principles on Business and Human Rights, including the declaration on Fundamental Principles and Rights at Work of the International Labour Organisation (ILO), and the eight fundamental conventions of the ILO and the International Bill of Human Rights.

2.3. The Taxonomy Regulation delegates to the Commission the adoption, for each environmental objective, of uniform technical screening criteria for determining whether a given economic activity contributes substantially to that objective. Still, it also sets out some general principles for each of the six objectives (climate change

[23] Article 2, points (15) and (13), respectively. According to article 2 paragraph 1(14) of the Taxonomy Regulation, the term 'ecosystem services' is defined to mean the direct and indirect contributions of ecosystems to the economic, social, cultural and other benefits that people derive from those.



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mitigation,[24] climate change adaptation,[25] sustainable use and protection of water and marine resources,[26] transition to a circular economy,[27] pollution prevention and

[24] Under article 10 of Taxonomy Regulation '… An economic activity shall qualify as contributing substantially to climate change mitigation where that activity contributes substantially to the stabilisation of greenhouse gas concentrations in the atmosphere at a level which prevents dangerous anthropogenic interference with the climate system consistent with the long-term temperature goal of the Paris Agreement through the avoidance or reduction of greenhouse gas emissions or the increase of greenhouse gas removals, including through process innovations or product innovations, by: (a) generating, transmitting, storing, distributing or using renewable energy in line with Directive (EU) 2018/2001, including through using innovative technology with a potential for significant future savings or through necessary reinforcement or extension of the grid; (b) improving energy efficiency, except for power generation activities as referred to in Article 19(3); (c) increasing clean or climate-neutral mobility; (d) switching to the use of sustainably sourced renewable materials; (e) increasing the use of environmentally safe carbon capture and utilisation (CCU) and carbon capture and storage (CCS) technologies that deliver a net reduction in greenhouse gas emissions; (f) strengthening land carbon sinks, including through avoiding deforestation and forest degradation, restoration of forests, sustainable management and restoration of croplands, grasslands and wetlands, afforestation, and regenerative agriculture; (g) establishing energy infrastructure required for enabling the decarbonisation of energy systems; (h) producing clean and efficient fuels from renewable or carbon-neutral sources; or (i) enabling any of the activities listed in points (a) to (h) of this paragraph in accordance with Article 16'.

[25] Under article 11 of Taxonomy Regulation '… An economic activity shall qualify as contributing substantially to climate change adaptation where that activity: (a) includes adaptation solutions that either substantially reduce the risk of the adverse impact of the current climate and the expected future climate on that economic activity or substantially reduce that adverse impact, without increasing the risk of an adverse impact on people, nature or assets; or (b) provides adaptation solutions that, in addition to satisfying the conditions set out in Article 16, contribute substantially to preventing or reducing the risk of the adverse impact of the current climate and the expected future climate on people, nature or assets, without increasing the risk of an adverse impact on other people, nature or assets. 2. The adaptation solutions referred to in point (a) of paragraph 1 shall be assessed and ranked in order of priority using the best available climate projections and shall, at a minimum, prevent or reduce: (a) the location-specific and context-specific adverse impact of climate change on the economic activity; or (b) the potential adverse impact of climate change on the environment within which the economic activity takes place'.

[26] Under article 12 of Taxonomy Regulation '… An economic activity shall qualify as contributing substantially to the sustainable use and protection of water and marine resources where that activity either contributes substantially to achieving the good status of bodies of water, including bodies of surface water and groundwater or to preventing the deterioration of bodies of water that already have good status, or contributes substantially to achieving the good environmental status of marine waters or to preventing the deterioration of marine waters that are already in good environmental status, by: (a) protecting the environment from the adverse effects of urban and industrial waste water discharges, including from contaminants of emerging concern such as pharmaceuticals and microplastics, for example by ensuring the adequate collection, treatment and discharge of urban and industrial waste waters; (b) protecting human health from the adverse impact of any contamination of water intended for human consumption by ensuring that it is free from any micro-organisms, parasites and substances that constitute a potential danger to human health as well as increasing people's access to clean drinking water; (c) improving water management and efficiency, including by protecting and enhancing the status of aquatic ecosystems, by promoting the sustainable use of water through the long-term protection of available water resources, inter alia, through measures such as water reuse, by ensuring the progressive reduction of pollutant emissions into surface water and groundwater, by contributing to mitigating the effects of floods and droughts, or through any other activity that protects



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control,[28] protection and restoration of biodiversity and ecosystems)[29] broadly defin-

or improves the qualitative and quantitative status of water bodies; (d) ensuring the sustainable use of marine ecosystem services or contributing to the good environmental status of marine waters, including by protecting, preserving or restoring the marine environment and by preventing or reducing inputs in the marine environment; or (e) enabling any of the activities listed in points (a) to (d) of this paragraph in accordance with Article 16'.

[27] Under article 13 of Taxonomy Regulation '... An economic activity shall qualify as contributing substantially to the transition to a circular economy, including waste prevention, re-use and recycling, where that activity: (a) uses natural resources, including sustainably sourced bio-based and other raw materials, in production more efficiently, including by: (i) reducing the use of primary raw materials or increasing the use of by-products and secondary raw materials; or (ii) resource and energy efficiency measures; (b) increases the durability, reparability, upgradability or reusability of products, in particular in designing and manufacturing activities; (c) increases the recyclability of products, including the recyclability of individual materials contained in those products, inter alia, by substitution or reduced use of products and materials that are not recyclable, in particular in designing and manufacturing activities; (d) substantially reduces the content of hazardous substances and substitutes substances of very high concern in materials and products throughout their life cycle, in line with the objectives set out in Union law, including by replacing such substances with safer alternatives and ensuring traceability; (e) prolongs the use of products, including through reuse, design for longevity, repurposing, disassembly, remanufacturing, upgrades and repair, and sharing products; (f) increases the use of secondary raw materials and their quality, including by high-quality recycling of waste; (g) prevents or reduces waste generation, including the generation of waste from the extraction of minerals and waste from the construction and demolition of buildings; (h) increases preparing for the re-use and recycling of waste; (i) increases the development of the waste management infrastructure needed for prevention, for preparing for re-use and for recycling, while ensuring that the recovered materials are recycled as high-quality secondary raw material input in production, thereby avoiding downcycling; (j) minimises the incineration of waste and avoids the disposal of waste, including landfilling, in accordance with the principles of the waste hierarchy; (k) avoids and reduces litter; or (l) enables any of the activities listed in points (a) to (k) of this paragraph in accordance with Article 16'.

[28] Under article 14 of Taxonomy Regulation '… An economic activity shall qualify as contributing substantially to pollution prevention and control where that activity contributes substantially to environmental protection from pollution by: (a) preventing or, where that is not practicable, reducing pollutant emissions into air, water or land, other than greenhouse gasses; (b) improving levels of air, water or soil quality in the areas in which the economic activity takes place whilst minimising any adverse impact on, human health and the environment or the risk thereof; (c) preventing or minimising any adverse impact on human health and the environment of the production, use or disposal of chemicals; (d) cleaning up litter and other pollution; or (e) enabling any of the activities listed in points (a) to (d) of this paragraph in accordance with Article 16'.

[29] Under article 15 of Taxonomy Regulation '… An economic activity shall qualify as contributing substantially to the protection and restoration of biodiversity and ecosystems where that activity contributes substantially to protecting, conserving or restoring biodiversity or to achieving the good condition of ecosystems, or to protecting ecosystems that are already in good condition, through: (a) nature and biodiversity conservation, including achieving favourable conservation status of natural and semi-natural habitats and species, or preventing their deterioration where they already have favourable conservation status, and protecting and restoring terrestrial, marine and other aquatic ecosystems in order to improve their condition and enhance their capacity to provide ecosystem services; (b) sustainable land use and management, including adequate protection of soil biodiversity, land degradation neutrality and the remediation of contaminated sites; (c) sustainable agricultural practices, including those that contribute to enhancing biodiversity or to halting or preventing the degradation of soils and other ecosystems, deforestation and habitat loss; (d) sustainable forest management, including practices and uses of forests and forest land that contribute to enhancing biodiversity or to



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ing when a substantial contribution is provided. The Commission is then required to further supplement such general principles through delegated acts.[30]

Such criteria in turn should also ensure that the achievement of a given environmental objective is not reached by significantly harming another environmental objective. This requirement is the so-called 'no significant harm principle' (DNSH principle), which aims at avoiding that some investments qualify as environmentally sustainable when indeed the economic activities benefitting from those investments cause harm to the environment to an extent that outweighs their contribution to an

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halting or preventing degradation of ecosystems, deforestation and habitat loss; or (e) enabling any of the activities listed in points (a) to (d) of this paragraph in accordance with Article 16'.

[30] Under article 19 of Taxonomy Regulation, '… The technical screening criteria established pursuant to Articles 10(3), 11(3), 12(2), 13(2), 14(2) and 15(2) shall: (a) identify the most relevant potential contributions to the given environmental objective while respecting the principle of technological neutrality, considering both the short- and long-term impact of a given economic activity; (b) specify the minimum requirements that need to be met to avoid significant harm to any of the relevant environmental objectives, considering both the short- and long-term impact of a given economic activity; (c) be quantitative and contain thresholds to the extent possible, and otherwise be qualitative; (d) where appropriate, build upon Union labelling and certification schemes, Union methodologies for assessing environmental footprint, and Union statistical classification systems, and take into account any relevant existing Union legislation; (e) where feasible, use sustainability indicators as referred to in Article 4(6) of Regulation (EU) 2019/2088; (f) be based on conclusive scientific evidence and the precautionary principle enshrined in Article 191 TFEU; (g) take into account the life cycle, including evidence from existing life-cycle assessments, by considering both the environmental impact of the economic activity itself and the environmental impact of the products and services provided by that economic activity, in particular by considering the production, use and end of life of those products and services; (h) take into account the nature and the scale of the economic activity, including: (i) whether it is an enabling activity as referred to in Article 16; or (ii) whether it is a transitional activity as referred to in Article 10(2); (i) take into account the potential market impact of the transition to a more sustainable economy, including the risk of certain assets becoming stranded as a result of such transition, as well as the risk of creating inconsistent incentives for investing sustainably; (j) cover all relevant economic activities within a specific sector and ensure that those activities are treated equally if they contribute equally towards the environmental objectives set out in Article 9 of this Regulation, to avoid distorting competition in the market; and (k) be easy to use and be set in a manner that facilitates the verification of their compliance. Where the economic activity belongs to one of the categories referred to in point (h), the technical screening criteria shall clearly indicate that fact … The technical screening criteria referred to in paragraph 1 shall also include criteria for activities related to the clean energy transition consistent with a pathway to limit the temperature increase to 1,5 0C above pre-industrial levels, in particular energy efficiency and renewable energy, to the extent that those activities substantially contribute to any of the environmental objectives … The technical screening criteria referred to in paragraph 1 shall ensure that power generation activities that use solid fossil fuels do not qualify as environmentally sustainable economic activities … The technical screening criteria referred to in paragraph 1 shall also include criteria for activities related to the switch to clean or climate-neutral mobility, including through modal shift, efficiency measures and alternative fuels, to the extent that those are substantially contributing to any of the environmental objectives…'.



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environmental objective.[31]

2.4. An economic activity is to qualify as contributing substantially to one or more environmental objectives also when it directly enables other activities to make a substantial contribution to one or more of those objectives. These are the so-called enabling activities that however should not lead to a lock-in of assets that undermine long-term environmental goals, considering the economic lifetime of those assets, and should have a substantial positive environmental impact on the basis of life-cycle considerations.[32]

Even the so-called transitional activities relating to climate change mitigation are relevant. With regard to climate change mitigation, it is stated indeed that 'an economic activity for which there is no technologically and economically feasible low-carbon alternative shall qualify as contributing substantially to climate change mitigation where it supports the transition to a climate-neutral economy consistent with a pathway to limit the temperature increase to 1,5° C above pre-industrial levels, including by phasing out greenhouse gas emissions, in particular emissions from solid

[31] Pursuant to article 17(1) of Taxonomy Regulation, '… taking into account the life cycle of the products and services provided by an economic activity, including evidence from existing life-cycle assessments, that economic activity shall be considered to significantly harm: (a) climate change mitigation, where that activity leads to significant greenhouse gas emissions; (b) climate change adaptation, where that activity leads to an increased adverse impact of the current climate and the expected future climate, on the activity itself or on people, nature or assets; (c) the sustainable use and protection of water and marine resources, where that activity is detrimental: (i) to the good status or the good ecological potential of bodies of water, including surface water and groundwater; or (ii) to the good environmental status of marine waters; (d) the circular economy, including waste prevention and recycling, where: (i) that activity leads to significant inefficiencies in the use of materials or in the direct or indirect use of natural resources such as non-renewable energy sources, raw materials, water and land at one or more stages of the life cycle of products, including in terms of durability, reparability, upgradability, reusability or recyclability of products; (ii) that activity leads to a significant increase in the generation, incineration or disposal of waste, with the exception of the incineration of non-recyclable hazardous waste; or (iii) the long-term disposal of waste may cause significant and long-term harm to the environment; (e) pollution prevention and control, where that activity leads to a significant increase in the emissions of pollutants into air, water or land, as compared with the situation before the activity started; or (f) the protection and restoration of biodiversity and ecosystems, where that activity is: (i) significantly detrimental to the good condition and resilience of ecosystems; or (ii) detrimental to the conservation status of habitats and species, including those of Union interest'.

[32] Article 16 of Taxonomy Regulation.



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fossil fuels, and where that activity: (a) has greenhouse gas emission levels that correspond to the best performance in the sector or industry; (b) does not hamper the development and deployment of low-carbon alternatives; and (c) does not lead to a lock-in of carbon-intensive assets, considering the economic lifetime of those assets'.[33]

The Taxonomy Regulation refers also to some activities which are to be qualified as significantly harmful. These are power generation activities that use solid fossil fuels. With regard to them, article 19(3) states that the technical screening criteria to be developed by the Commission shall ensure that they do not qualify as environmentally sustainable economic activities.

2.5. The scope of application of the Taxonomy Regulation is rather broad since it applies to: (a) measures adopted by Member States or by the Union that set out requirements for financial market participants[34] or issuers[35] in respect of financial products or corporate bonds that are made available as environmentally sustainable; (b) financial market participants that make available financial products; (c) undertakings which are subject to the obligation to publish a non-financial statement or a consolidated non-financial statement pursuant to Article 19a or Article 29a of Directive 2013/34/EU of the European Parliament and of the Council, respectively.[36]

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[33] Article 10(2) of Taxonomy Regulation.

[34] For the definition of financial market participants, the Taxonomy Regulation refers to article 2 paragraph 1(1) of the SFDR, under which 'financial market participant means: (a) an insurance undertaking which makes available an insurance-based investment product (IBIP); (b) an investment firm which provides portfolio management; (c) an institution for occupational retirement provision (IORP); (d) a manufacturer of a pension product; (e) an alternative investment fund manager (AIFM); (f) a pan-European personal pension product (PEPP) provider; (g) a manager of a qualifying venture capital fund registered in accordance with Article 14 of Regulation (EU) No 345/2013; (h) a manager of a qualifying social entrepreneurship fund registered in accordance with Article 15 of Regulation (EU) No 346/2013; (i) a management company of an undertaking for collective investment in transferable securities (UCITS management company); or (j) a credit institution which provides portfolio management'. Also a manufacturer of a pension product to which a Member State has decided to apply the SFDR is considered a financial market participant.

[35] For the definition of issuer, the Taxonomy Regulation refers to point (h) of Article 2 of Regulation (EU) 2017/1129 of the European Parliament and of the Council under which an issuer is 'a legal entity which issues or proposes to issue securities'.

[36] Article 1(2) of Taxonomy Regulation.



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Interestingly, the provision under article 1(2) of the Taxonomy Regulation makes it clear that if measures are adopted at national as well as Union level in relation to the issuance and sale of financial products and corporate bonds qualified as environmentally sustainable then the criteria laid down in the Regulation will apply. This means that in order for financial products and corporate bonds to be qualified as environmentally sustainable, they will have to meet the criteria provided by the Taxonomy Regulation and further implemented by the Commission, thereby leading to a Union-wide harmonisation of financial products labelled as environmentally sustainable corporate bonds and environmentally sustainable financial products. Over time, this will be one of the most important contributions that the Taxonomy Regulation is expected to provide in order to facilitate the transition towards a sustainable economy. In fact, such transition can be successful only if the financial sector plays a key role. Such role is primarily to encourage investors to increasingly invest in environmentally sustainable corporate bonds and environmentally sustainable financial products.

2.6. The successful application of the classification system introduced by the Taxonomy Regulation significantly depends on the effectiveness of the disclosure obligations under articles 5, 6 and 7 of the Regulation. Given that environmentally harmful activities have not been banned *tout court*, then the new taxonomy can reach its goals to encourage and facilitate the channelling of capital towards sustainable economic activities and provide investors with clarity as to the sustainability of the investments underlying financial products only through effective mechanisms of disclosure. In this regard, alignment and coordination between the Taxonomy Regulation and the SFDR are pivotal.

As to pre-contractual disclosure and periodic reports, with regard to financial products that invest in economic activities contributing to an environmental objective, financial market participants shall disclose '(a) the information on the environmental objective or environmental objectives set out in Article 9 of this Regulation to



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which the investment underlying the financial product contributes; and (b) a description of how and to what extent the investments underlying the financial product are in economic activities that qualify as environmentally sustainable under Article 3 of this Regulation'.[37] Additionally, when a financial product promotes environmental characteristics, the above mentioned information shall be accompanied by the following statement: 'The do no significant harm principle applies only to those investments underlying the financial product that take into account the EU criteria for environmentally sustainable economic activities. The investments underlying the remaining portion of this financial product do not take into account the EU criteria for environmentally sustainable economic activities'.[38]

By contrast, when a financial product does not promote environmental characteristics, financial market participants shall include in pre-contractual disclosures and periodic reports the following statement: 'The investments underlying this financial product do not take into account the EU criteria for environmentally sustainable economic activities'.[39]

Also, undertakings which are subject to the obligation to publish non-financial information pursuant to Article 19a or Article 29a of Directive 2013/34/EU shall include in their non-financial statement or consolidated non-financial statement information on how and to what extent their activities are associated with economic activities that qualify as environmentally sustainable. Particularly, they shall disclose: (a) the proportion of their turnover derived from products or services associated with economic activities that qualify as environmentally sustainable; and (b) the proportion of their capital expenditure and the proportion of their operating expenditure related to assets or processes associated with economic activities that qualify as en-

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[37] Article 5 of Taxonomy Regulation also states that such description 'shall specify the proportion of investments in environmentally sustainable economic activities selected for the financial product, including details on the proportions of enabling and transitional activities referred to in Article 16 and Article 10(2), respectively, as a percentage of all investments selected for the financial product'.
[38] Article 6 of Taxonomy Regulation.
[39] Article 7 of Taxonomy Regulation.



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vironmentally sustainable.[40]

To be effective, the Taxonomy Regulation provides that Member States should rely on the competent authorities designated in accordance with the SFDR to ensure the orderly and effective monitoring of compliance by financial market participants with its obligations.[41] They shall also lay down the rules on measures and penalties applicable to infringements of Articles 5, 6 and 7 which should be effective, proportionate and dissuasive.[42]

3. The new EU sustainable finance framework is mostly based on disclosure obligations that a number of recipients are expected to discharge. Among them are obviously financial service providers. In this regard, the SFDR plays a pivotal function by spelling out the disclosure obligations that financial service providers must fulfil depending on the activities they carry out.[43] Accordingly, the SFDR distinguishes between financial market participants[44] and financial advisers,[45] where the former are

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[40] Article 8 of Taxonomy Regulation.
[41] Article 21 of Taxonomy Regulation.
[42] Article 22 of Taxonomy Regulation.
[43] For a legal analysis of the SFDR see Busch, *Sustainability Disclosure in the EU Financial Sector*, European Banking Institute Working Paper Series 2020 n. 70, *passim*.
[44] According to article 2(1) of the SFDR, 'financial market participant means: (a) an insurance undertaking which makes available an insurance- based investment product (IBIP); (b) an investment firm which provides portfolio management; (c) an institution for occupational retirement provision (IORP); (d) a manufacturer of a pension product; (e) an alternative investment fund manager (AIFM); (f) a pan-European personal pension product (PEPP) provider; (g) a manager of a qualifying venture capital fund registered in accordance with Article 14 of Regulation (EU) No 345/2013; (h) a manager of a qualifying social entrepreneurship fund registered in accordance with Article 15 of Regulation (EU) No 346/2013; (i) a management company of an undertaking for collective investment in transferable securities (UCITS management company); or (j) a credit institution which provides portfolio management'.
[45] According to article 2(11) of the SFDR, 'financial adviser means: (a) an insurance intermediary which provides insurance advice with regard to IBIPs; (b) an insurance undertaking which provides insurance advice with regard to IBIPs; (c) a credit institution which provides investment advice; (d) an investment firm which provides investment advice; (e) an AIFM which provides investment advice in accordance with point (b)(i) of Article 6(4) of Directive 2011/61/EU; or (f) a UCITS management company which provides investment advice in accordance with point (b)(i) of Article 6(3) of Directive 2009/65/EC'.



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institutions engaged in manufacturing financial products[46] and the latter are institutions providing investors with financial and insurance advice. More precisely, the SFDR lays down harmonised rules for financial market participants and financial advisers on transparency with regard to: a) the integration of sustainability risks in their processes, b) the consideration of adverse sustainability impacts in their processes, and, c) the provision of sustainability-related information with respect to financial products.

The rationale behind the new SFDR rules is twofold. Indeed, they aim to provide end-investors with disclosure and transparency on the sustainability risks potentially affecting their investments as well as to ensure that financial market participants and financial advisers pay attention to the (potential) impact of their investment decisions on environmental, social and employee matters, respect for human rights, anti-corruption and anti-bribery matters.

3.1. The SFDR defines sustainability risk as 'an environmental, social or governance event or condition that, if it occurs, could cause an actual or a potential material negative impact on the value of the investment'.[47]

As to sustainability risks, financial market participants and financial advisers shall publish on their websites information about their policies on the integration of such risks in their investment decision-making process and in their investment advice and insurance advice, respectively.[48]

Financial market participants and financial advisers must also include in pre-contractual disclosures information about: a) the manner in which sustainability risks are integrated into their investment decisions and investment or insurance advice, respectively; and b) the results of the assessment of the likely impacts of sustainabil-

[46] According to article 2(12) of the SFDR, 'financial product means: (a) a portfolio managed in accordance with point (6) of this Article; (b) an alternative investment fund (AIF); (c) an IBIP; (d) a pension product; (e) a pension scheme; (f) a UCITS; or (g) a PEPP'.
[47] Article 2(22) of SFDR.
[48] Article 3 of SFDR.



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ity risks on the returns of the financial products they make available and they advise on, respectively. If they deem sustainability risks not to be relevant, they shall provide a clear and concise explanation of the related reasons.[49]

Both financial market participants and financial advisers are requested to also include in their remuneration policies information on how those policies are consistent with the integration of sustainability risks and shall publish that information on their websites.[50]

3.2. According to Recital 20 of SFDR, principal adverse impacts are those impacts of investment decisions and advice that result in negative effects on sustainability factors. Sustainability factors, in turn, are defined as 'environmental, social and employee matters, respect for human rights, anti-corruption and anti-bribery matters'.[51]

In this regard, if financial market participants consider principal adverse impacts of investment decisions on sustainability factors, then they are requested to publish on their websites a statement on due diligence policies with respect to those impacts, taking due account of their size, the nature and scale of their activities and the types of financial products they make available. By contrast, if they do not consider adverse impacts of investment decisions on sustainability factors, they are requested to publish on their website clear reasons for why they do take such an approach, including, where relevant, information as to whether and when they intend to consider those adverse impacts.[52]

Similarly, financial advisers shall publish on their websites information as to whether, taking due account of their size, the nature and scale of their activities and the types of financial products they advise on, they consider in their investment advice or insurance advice the principal adverse impacts on sustainability factors. If

[49] Article 6 of SFDR.
[50] Article 5 of SFDR.
[51] Article 2(24) of SFDR.
[52] Article 4(1) of SFDR.



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they do not consider in their investment advice or insurance advice the principal adverse impacts on sustainability factors, they shall publish on their websites information as to why they do not do so, and, where relevant, information as to whether and when they intend to consider such adverse impacts.[53]

At product level, it is provided that for each financial product where financial market participants consider principal adverse impacts of investment decisions on sustainability factors, they shall provide: 'a) a clear and reasoned explanation of whether, and, if so, how a financial product considers principal adverse impacts on sustainability factors; b) a statement that information on principal adverse impacts on sustainability factors is available'. If, on the contrary, financial market participants do not consider principal adverse impacts of investment decisions on sustainability factors, they shall include for each financial product a statement that the financial market participant does not consider the adverse impacts of investment decisions on sustainability factors and the reasons therefor.[54]

3.3. The SFDR provides also a broad definition of 'sustainable investment' referring to two different categories, namely: 1) environmentally sustainable investments, which are investments 'in an economic activity that contributes to an environmental objective, as measured, for example, by key resource efficiency indicators on the use of energy, renewable energy, raw materials, water and land, on the production of waste, and greenhouse gas emissions, or on its impact on biodiversity and the circular economy', and, 2) socially sustainable investments, which are investments 'in an economic activity that contributes to a social objective, in particular an investment that contributes to tackling inequality or that fosters social cohesion, social integration and labour relations, or … in human capital or economically or socially disadvantaged communities'.[55] Though diverse in terms of content, in order to be

[53] Article 4(5) of SFDR.
[54] Article 7 of SFDR.
[55] Article 2(17) of the SFDR.



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qualified as sustainable, both types of investment need to meet some additional common requirements. Accordingly, 1) they must not significantly harm any of the above mentioned objectives (DNSH principle), and, 2) the investee companies must follow good governance practices, by setting, in particular, sound management structures, decent employee relations, adequate staff remuneration while complying with tax laws.[56]

Interestingly, the SFDR defines sustainable investments as the ones that try to pursue ESG goals, by keeping the three dimensions (environmental, social and governance) together. Additionally, under the SFDR, the DNSH principle is broader than the one under the Taxonomy Regulation. While the latter is limited to environmental objectives, the former also encompasses social objectives. All of these elements make the SFDR's structure different from the one of the Taxonomy Regulation, that, in fact, is almost exclusively focused on the environmental dimension. The differences concerning the DNSH principle, in particular, are relevant since they might end up being material, as compliance with it under the SFDR would imply that, if an environmental objective is to be pursued the related activity cannot be carried out by harming social objectives. By contrast, this would not be the case by applying the DNSH principle under the Taxonomy Regulation, since the latter would only cover environmental objectives, thereby possibly disregarding the social objectives.

Yet, the broad definitions provided by the SFDR need to be further refined through secondary legislation in order for financial market participants and financial advisers to be able to clearly identify which investments are actually sustainable as well as to properly discharge the related disclosure obligations.

3.4. On the basis of the SFDR's structure, two types of sustainable financial products, carrying a different level of sustainability, can be manufactured. These are: 1) financial products promoting environmental or social characteristics under article

[56] *Id.*



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8 (so-called light green financial products) and 2) financial products with sustainable investment as objective under article 9 (so-called dark green financial products).

Depending on the category under which financial products fall, different disclosure obligations apply.

Where a financial product promotes, among other characteristics, environmental or social characteristics, or a combination of those characteristics, provided that the companies in which the investments are made follow good governance practices, additional information in pre-contractual disclosures should include: 'a) information on how those characteristics are met; b) if an index has been designated as a reference benchmark, information on whether and how this index is consistent with those characteristics'.[57] It shall also include a description of the extent to which environmental or social characteristics are met in periodic reports.

Where a financial product has sustainable investment as its objective and an index has been designated as a reference benchmark, additional information has to be disclosed as follows: 'a) information on how the designated index is aligned with that objective; b) an explanation as to why and how the designated index aligned with that objective differs from a broad market index'.[58]

With regard to financial products with sustainable investment as objective, financial market participants shall include in periodic reports a description of the following: '(i) the overall sustainability-related impact of the financial product by means of relevant sustainability indicators; or (ii) where an index has been designated as a reference benchmark, a comparison between the overall sustainability-related impact of the financial product with the impacts of the designated index and of a broad

[57] Article 8 of SFDR.

[58] Article 9 of SFDR also states that where a financial product has sustainable investment as its objective and no index has been designated as a reference benchmark, the information to be disclosed shall include an explanation on how that objective is to be attained, while where a financial product has a reduction in carbon emissions as its objective, the information to be disclosed shall include the objective of low carbon emission exposure in view of achieving the long-term global warming objectives of the Paris Agreement.



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market index through sustainability indicators'.[59]

For each financial product that promotes environmental or social characteristics and financial products having sustainable investment as their objective, financial market participants shall publish on their websites: 'a) a description of the environmental or social characteristics or the sustainable investment objective; b) information on the methodologies used to assess, measure and monitor the environmental or social characteristics or the impact of the sustainable investments selected for the financial product, including its data sources, screening criteria for the underlying assets and the relevant sustainability indicators used to measure the environmental or social characteristics or the overall sustainable impact of the financial product; c) the information referred to in Articles 8 and 9; d) the information referred to in Article 11'. Such information shall be clear, succinct and understandable to investors. It shall be published in a way that is accurate, fair, clear, not misleading, simple and concise and in a prominent easily accessible area of the website.[60]

4. The Taxonomy Regulation has created a new paradigm relating to environmental sustainability in doing business. More precisely it has introduced a number of criteria (to be further developed and supplemented by the Commission) against which economic activities will be classified as environmentally sustainable or not environmentally sustainable, with some nuances in between. Additionally, the SFDR has introduced a set of harmonised rules for financial market participants and financial advisers on transparency concerning the integration of sustainability risks in their processes, the consideration of adverse sustainability impacts, and the provision of sustainability-related information with respect to financial products.

Nonetheless, the Taxonomy Regulation does not really go beyond such a classification in that it does not prohibit the performance of economic activities that do not meet the above mentioned criteria and therefore are not environmentally sus-

[59] Article 11 of SFDR.
[60] Article 10 of SFDR.



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tainable. The same holds true with regard to the SFDR which simply requests financial market participants and financial advisers to discharge several disclosure obligations. This means that environmentally harmful (or not environmentally beneficial) activities can continue to be carried out along with economic activities that are not socially sustainable.

Yet, a number of disclosure obligations have been introduced and accordingly financial service providers and large corporates are now requested to release information on the sustainability of their financial products (depending on the economic activities in which they invest) as well as of their economic activities. In this regard, the new rules request financial service providers to clearly disclose when the investments underlying their financial products do not take into account the EU criteria relating to environmentally sustainable economic activities and to a certain extent socially sustainable economic activities. Similar provisions apply to large corporates that are requested to disclose the proportion of their turnover, capital expenditure and operating expenditure associated with environmentally sustainable economic activities.

Against this background, the ability of the Taxonomy Regulation and SFDR to successfully favour the channelling of capital towards sustainable economic activities still needs to be gauged and will mostly depend on the market sensitivity in relation to environmental (and social) sustainability. In other words, it is likely that financial service providers and large corporates will take a proactive approach in favour of the transition towards environmental (and social) sustainability if they perceive the risk that the market will penalise them if they do not do so. By contrast, if their perception is that the market is only (or mostly) interested in high returns irrespective of the potentially negative impact on the environment (and on society) in so doing, they might want to primarily focus on such returns, thereby disregarding the environmental (and social) sustainability of their investments and activities.

The EU legislator looks optimistic about the new legal framework's ability to make financial service providers and large corporates take a novel approach concern-



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ing the environmental and social sustainability of their investments and activities. It is also stated that the new criteria might be able to encourage even economic operators that are not directly affected by the new rules to comply with the related disclosure obligations on a voluntary basis.[61]

All in all, the new system introduced by the Taxonomy Regulation and SFDR is a disclosure-based one which will be effective depending on the market reaction. Nevertheless, it is fair to argue that the current degree of widespread attention towards environmental (and to a certain extent also social) sustainability might eventually push financial service providers and large corporates to adapt to the new paradigm. In other terms, it is reasonable to think that over time the statement 'the investments underlying this financial product do not take into account the EU criteria for environmentally sustainable economic activities' and the statement that the financial market participant does not consider the adverse impacts of investment decisions on sustainability factors that financial service providers are mandated to publish when their investments do not meet the Taxonomy Regulation and SFDR requirements could make the financial products concerned less appealing to investors, who, in turn, might prefer environmentally and socially sustainable alternatives.[62] This is how the financial system is expected to positively favour the transition towards an environmentally and socially sustainable economy.

However, the critical issue in this regard relates to the timing. The 2030 Agenda and the Paris Agreement have introduced some environmental (and social) goals which will not be easy to achieve in a relatively short timeframe. The question thus arises whether the main countries over the world will be able to foster a transition that in turn is able to deliver on these challenging goals. So far, the most significant legal tool adopted to encourage such a transition in the financial sector has been disclosure. For disclosure to be effective and conducive towards the transition, however, a meaningful and decisive market reaction is needed. Yet, if the market will only

[61] Recital 15 of Taxonomy Regulation.
[62] Article 7 of SFDR.



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care about returns, then disclosure might end up being insufficient to reach those goals. If that will be the case, then a more intrusive policy approach might become necessary. In that regard, effective tools which have been used over time to encourage behavioural changes in other sectors are tax incentives and tax burdens. Assuming that it would be counterproductive (and actually not even feasible) to simply ban some environmentally (and socially) unsustainable economic activities over night as this will require some time, then the alternative could be to progressively increase taxation on them and use the arising proceeds to provide sustainable alternatives with incentives.[63] This would be a highly controversial approach, certainly contrasted by the ones penalised in terms of tax burdens, but policy makers need to have a way out should the new disclosure-based system fail to deliver on the internationally agreed sustainable goals. And, in this regard, there is no doubt that a fair and balanced tax system is a key component of a sustainable economy and sustainable society.

[63] See Avgouleas, *Resolving the sustainable finance conundrum: activist policies and financial technology*, University of Edinburgh – School of Law, Research Paper Series n. 2021/02, *passim*.



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