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«They say things are happening at the border, but nobody knows which border» (Mark Strand)

COVID 19. Towards a turning point in the EU integration process

by **Angela Troisi**

Abstract: *The paper considers the "founding fathers' project" for a European Community, having regard to the individualistic tendencies of the Member States and the dangers of regulation unsustainability.*
In this respect, it is worth considering also the lack of a common purpose and the specific problems of the Eurobonds and the ESM, in the light of the evidences arisen at the time of Covid 19.
Then, the focus goes to the Recovery Fund and the need for recovery the socioeconomic emergency in terms of solidarity..

1. The EU needed such an extraordinary event as the Covid 19 pandemic to foster some significant changes in its monetary policies and, more generally, in its attitude. Eventually, this incident might inject new lifeblood in the body of European integration process and make it possible to overcome certain dystonic factors which so called "pro-Europeans" feared would lead to the substantial decline of the original Community design over the last decade. The latter has been identified as the intention to combine "the prospect of mere economic cooperation with the pursuit of objectives of greater importance in the political field"[1] by the doctrine.

The pandemic – which has caused a serious health emergency in many European countries and a severe economic crisis – has acted as a catalyst for the emergence of critical issues in the Union, highlighting its dangerous implications for its future development. It has been acknowledged that is necessary to abandon the longlasting rigidities of the European policies to embrace a different operational strategy based on greater cohesion and solidarity in order to emerge unscathed from the general malaise in which the coronavirus had dragged all Member States.

Hence, the abandonment of the austerity mindset – which promoted dissent among European countries since 2007 – has still to prove its beneficial effect on the Union, despite being widely welcomed by its Members. Certainly, as we will discuss later, the willingness to sustain heavily affected countries' economies is subordinated to the presentation of appropriate spending programs by the applicants. There are still doubts regarding the scope (rectius: tenor) of the checks aimed at verifying the correct use of the funds according to European rules.

It is clear that the Union has reached a moment in its history when it needs to find a rational balance between its members' selfishness, hegemonic tendencies on one side and a responsible behaviour aimed at the well being of everyone on the other. In this context, some countries must also understand that they need to cut some of the long pursued unsustainable welfare policies in view of a renewed commitment to put Europe at the very center of the global geopolitical arena and give new life to the "European dream".

2. The legal and economic doctrine has long dwelt on the analysis of the so-called Manifesto of Ventotene, written by Altiero Spinelli, Ernesto Rossi and Eugenio Colorno, which is based on the need to maintain peace between European people and nations in perennial conflict[2]. This work contains the inspiring principles and future expectations for Europe, which reflect a neoliberal conception aimed at overcoming the difficulties of sharing national development economic policies according to the federalist approach.

On a technical level, the institutional architecture of the European Community owes to the functionalism of Mitrany and the neo-functionalism of Haas and Lindberg[3]; these orientations have shown significant limits over time due to the difficulty of shifting from an integration based on mere pooled economic resources to some sort of political agreement through a spillover mechanism.

More specifically, since the regulatory design in EU institutions is reduced to a simple co-decision technicality(being the Commission to advance regulatory projects, and the Council and Parliament to approve the wording), the contents are drawn up by agreement between the several countries, so the stronger ones obviously end up imposing their view. As it has been authoritatively stated, this "intergovernmental method" does not favour harmony between Member States, allowing forms of prevarication to take place[4]. Nonetheless, it is widely adopted in European institutional bodies[5] as it provides room for individualistic behavior to prevail in bilateral relations.

Actually, the current institutional framework could be considered as an obstacle for the establishment of a cohesive and supportive system by reinforcing the endemic lack of political and economic convergence.

The introduction of a single currency enhanced cooperationin the European Union but also introduced a "technocratic" power, being outside the political decision of the States and its management being entrusted to an autonomous supranational body[6]. In this way, a substantial restriction of national sovereignty is implemented by taking away the monetary autonomy and, therefore, reducing the scope of its power. Moreover, as it will be detailed in the next paragraph, the 'single currency' has

intrinsic limits which will contribute to the rise of policy divergences by negatively impacting on the integration process and resulting in a growing gap between the EU countries.

This situation has been made worst by the crisis of 2007 and following years. To counter its effects, the Union has adopted a strict austerity regime, which is linked to an increase in economic inequality within Europe. In addition, the financial crisis compromised the stability of the credit sector by generating huge amounts of impaired loans. These affected the whole sector, hence the prospect of incurring dangerous pathological situations. The onset of such events did not find a European supervision system able to counteract them adequately; on the contrary, there were significant limits to the supervisory activity not yet assessed by the national authorities, which appeared to be lacking also with regard to the pursuit of a 'joint interventionist action'.

Still, there is a need to overcome the above-mentioned differences within the Union, which are an obstacle to the proper supervisory integration. The debate within the EU focuses on the analysis of the new 'top-level architecture' of the European financial system and its impact on national systemic realities; it is the basis for a redesign of the market's legal order, which is summarised in the achievement of the European Banking Union. Therefore, there is a significant division of competences between central and national authorities, while the ECB performs 'specific tasks of prudential supervision'[7] of credit institutions (reference to Article 127 TFEU).

The technical structure of the Banking Union is aimed at homogenising the banking operations and, consequently, to facilitate banking activity under the control of a single supervisory body. However, when the national authorities lose control of banking supervision, they end up restricting any form of democratic control, with no connection with the policy that is a prerequisite of the latter[8]. In perspective, the ECB might extend its supervision to the whole financial system (i.e. also the non-significant banks), as it can be inferred from a decision from the Court of the European Union of 16 May 2017 (case T-122/15). Eventually, it might be difficult to reconcile the regulations implemented at a domestic level and those imposed by the EU[9].

3. As we discussed above, we acknowledge a technical top-level architecture of the European financial system and a decision-making system in which importance is given to the individualism of each Member States. This reality certainly does not facilitate the achievement of the original community project as desired by the "founding fathers". Historically, relevant difficulties have shown in striking a political balance between the hegemonic tendencies of Germany, supported by a group of satellite states (Holland, Austria, Slovakia, Finland), the ambivalence of Great Britain, the grandeur ofthe French agere andthe difficulties of the Mediterranean countries[10].

In this various framework, countries experienced different speeds in identifying suitable economic development tools or adequate remedies to counteract critical issues (namely recessions) that occurred due to the adverse economic situation at the beginning of the millennium. This phenomenon favoured separatism and an individualistic mindset summarized by the above-mentioned intergovernmental approach; in fact, the European integration has been limited to the economic field by preserving a relational system aimed at safeguarding specific national interests. Indeed, the commitment of the

Member States ends up being essentially correlated to the preferences and benefits that can derive from defending domestic policies.

Little space is given to "convergent policies" despite the fact that intergovernmentalism's liberal[11] theoretical basis is aimed at supporting common growth or forms of greater social cohesion. Actually, EU technical bodies promoted such approach and, therefore, deprived the political bodies, which could represent the will and interests of the European people.

From other points of view, the original organisational structure of the European Community – as mentioned above – has produced a technically oriented decision making, so as to make it appear that the demands of politics are poorly defended.

Specifically, the creation of the European Monetary Union did not achieve the desired effects, being criticized by the doctrine which highlighted the unsustainability of the Maastricht Treaty, the failure to implement the underlying program and, in some cases, even a worsening of economic conditions in the adhering countries[12]. In this regard, doubts have been casted about the validity of the parameters defined in the Maastricht Treaty, as well as about the concrete possibility of implementing the objectives indicated by the European regulator, which should have paved the way for the achievement of a political union[13].

We cannot hide the fact that the systemic structure underlying the 'single currency' appears in some ways contradictory since it focuses on the separation between monetary policy, which is the ECB's responsibility, fiscal and budgetary policy, which is left to the individual Member States. As a consequence, we witness the growing gap linked to different economic and financial conditions. It also explains the asymmetries and structural problems of the Eurozone studied by the doctrine[14], as well as the concept of an economic govenance "not … yet satisfactory from the point of view of its democratic legitimacy", hence the risk of "repeating and widening the long-standing problem of the democratic deficit of the EU"[15].

Also, the regulator has shown a preference for technicality over policy in designing the European Banking Union, as it sought to address systemic criticality (caused by the 2007 crisis) and to give greater stability to the credit sector. Following the same approach for the establishment of the ESFS (European System of Financial Supervision), new authorities had broad supervisory powers in order to create "a single supervisory mechanism for the Euro Area", which is based on the involvement of the ECB, since the latter's action has been perceived as the key tool for avoiding the risks that, at that time, undermined the economic recovery of the Union[16].

The new financial supervisory architecture has allowed Europe to benefit from the global[17] economic growth, but it also proved unsuitable for encouraging the formation of a common purpose within the EU. It is true that the creation of the European Banking Union has contained the critical issues arising from the financial turmoil but it also failed to address the loss of sovereignty by the supervisory authorities of the member states. This eventually turned to a sort of "unresisting attitude"

which has a negative impact on the prospect of homogenisation ofthe credit sector desired by the regulator.

From another point of view, the identification of the strategies to be applied in the supervisory action has been left to technocratic bodies, so it is often an issue for those who look critically at the economic burdens (i.e. increase in costs) imposed on them (here we refer to the small local banks, such as the Italian BCCs); this has inevitable negative repercussions on the their will to take active role in the Union. In fact, the operational directives of the ECB and, more generally, of the EU are sometimes unwelcomed even if aimed at moving towards a common goal. Hence, we see the emergence of a growing gap between the European reformer's intentions and the possibility of a coherent response by the banking market which is coupled with the progressive evanescence of a "political union". The latter appears increasingly limited to a mere, emphatic statement of intentions made by governments.

4. As mentioned above, the European Union has shown unequivocal limits in the creation of a "unitary group" of states, being cohesive and animated by a purpose of unity. The Member States are not able, in fact, to go further in the integration process and go beyond the simple regulatory harmonization oriented to economic development. The commitment of the technical authorities, like the interventions of the ECB, are not able to expand their objectives beyond those of stability. Therefore, only an increased political action can guarantee adequate levels of balance and growth. A widespread climate of uncertainty characterizes the European Union because the constraints on the public debt/GDP ratio and on the deficit/GDP ratio have not given an effective economic response, at least for some countries including Italy[18].

Having a closer look to the issue, perhaps the lack of willingness to "share their destinies" seems to be linked to the malaise that has plagued Europe so far. In fact, some Member States, such as Germany and Great Britain before Brexit, have shown themselves to be aware of the difficulties of "being united in diversity".

The affirmation of democratic consensus, on which the EU was supposedly build, makes unacceptable the opportunity of a single country ruling. At the same time, the Member States cannot refuse to define a common strategic action aimed at the institutional renewal of the entire Community because their refusal would cause a certain drift in the process of Europeanisation.

This reality is fully confirmed in the guidelines of the German Constitutional Court by the judgment known as Maastricht-Urteil. The latter outlines the distinction between "community of solidarity" and "community of stability" and in the most recent decision of 5 May 2020 the Court stressed that the European Union does not establish a "union of peoples". According to the Court, the European Union is "an association of states" and not "a state founded on a European people"[19]. For this reason, the Court has the power to disregard any disciplinary innovation and activities implemented in the EU (including the ECB policies) if they are not deemed to comply with its Basic Law[20].

In a nutshell, the Constitutional Court has claimed the power to review the compliance of EU activities with the German legal system and, at the same time, the Court has expressed the power to

disregard a ruling of the European Court of Justice. In doing so, the Court wanted to reaffirm that the German Parliament holds “functions of substantial political weight”, which certainly contradict the logic of unitary construction and federal statehood to which many European citizens have long aspired to.

In this context, we can easily understand why Germany and other neighboring countries have long opposed the acceptance of financial instruments, such as the Eurobonds, which pursue the objective of sharing the debt burden between Member States thus implying an enhanced participation in the financial needs of each individual State.

In fact, the creation of Eurobonds is supported by the issuance of guarantees by Eurozone Member States. This mechanism would give life to a solidarity process having the purpose of promoting stability and economic integration in the European Union.

It is true that, theoretically, the Eurobonds have been considered several times and their function has been subordinated to the achievement of various goals, such as common growth and mutual trust[21]. However, the Eurobonds have been essentially brought back to the category of the so-called “unavailable principles” (among which we count the autonomous responsibility of each State for its debts) thus preventing the pooling of national debtor exposures or part of them.

The affirmation of the Eurobonds is rooted in value assumptions that are based on unity, cohesion and solidarity. In order to accept these value assumptions, Member States should reach the maturity necessary to overcome national differences and individualisms. The well-being of the Member States would be achieved by joining the project of building a ‘common house’.

From another perspective, the issue could be analyzed by taking into account the European Stability Mechanism, established by the European Council in 2011 in order to preserve the financial stability of the Union. The ESM has significantly expanded its lending capacity to support countries in need from mid-2013, just after it replaced the EFSF.

The ESM provides assistance only to ensure the financial stability of the euro area as a whole and if the requesting state is willing to sign a Memorandum of Understanding on Macroeconomic Adjustment with the Commission. In this way, the applicant State submits itself to a rigorous analysis of the sustainability of its own debt, so accepting the surveillance which is closely linked to the decisions of the Troika.

The history of some Member States, especially Greece, shows the serious and unjustified financial situation that made it necessary for them to have recourse to ESM aid[22]. Although the doctrine has made an assessment about the malaise of Greece, noting considerable contradictions and structural deficiencies[23], Europe as a whole has experienced tough times, sometimes even exasperated by commentators. Actually, the so called “Troika” does not appear to be free from criticism. The events brought to light a delicate “humanitarian issue”: compliance with the macroeconomic requirements imposed by the Troika did not take into account the dramatic deprivation of the population and other tragedies (e.g. numerous suicides). Greece has shown the “dark face” of this institution.

Therefore, we can easily understand the roots of the current discredit that public opinion attributes to the ESM. In fact, the ESM has appeared to many, on the one hand, exactly the opposite of the purpose of unity that must characterize the achievement of the EU's objectives and, on the other hand, in line with Germany's intention to inflict "lessons of rigorous orthodoxy with a strong ideological background"[24] on its partners.

Nowadays, because of this mistrust about the ESM, in Italy some politicians refuse to have access to its loans, which (unlike what happened in the past) are taken away from macroeconomic "conditions" unfavorable for the beneficiary country.

5. As mentioned above, the pandemic outbreak has taken place in a European Union that basically lacks the prerequisites for a cohesive and united action. Nowadays, the absence of real economic and legal convergence in the European Union increases the difficulties related to overcoming the shock caused by Covid 19. As far as the banking sector is concerned, the prudential policies implemented by European and domestic authorities are not yet fully in line with the pursuit of financial system's stability and integrity. Indeed, banking and financial intermediaries are forced to face increasing problems following the great global financial crisis of the years 2007-2008.

Also, the prevalence of national individualism has prevented the completion of the European Banking Union. Some Member States have denied the possibility of implementing "risk mutualisation measures". These States have thus shown a clear unwillingness to accept the fiscal unification project as well as the measures aimed at introducing a logic of solidarity in relation with other Member States[25].

Conversely, many Member States have taken a defensive stance in the face of the danger of contagion, intervening with borders closing, blocking airlines, etc.

Such initiatives seem suitable in terms of health protection, but it again highlights separation and diversity; in this context, Europeists are disappointed and the EU risks implosion. In fact, the timid and uncertain reactions of the Union's institutional leaders have not convinced, especially at the beginning of the pandemic (i.e. when the devastating effects of the pandemic have not yet been fully realised). In this way, according to many commentators, the "European dream" may have come to an end.

The inability of states to give content to a new statehood that goes beyond the models inherited from the past is evident. Therefore, the values underlying the original agreements of the Community seem to have been definitively altered.

In this regard, Massimo Cacciari's considerations regarding the post-coronavirus appear to be precise: "it seems to me that it will be a tombstone [...] (for the Union) [...], although hope is the last to die. [...] it seems to me that by now we must put the European dream away. The coronavirus was the coup de grace for an already compromised situation. I sincerely hope that I am wrong, by the way"[26] .

Fortunately, facing such a catastrophic event as the pandemic, Europe's reluctance was short-lived, as realism and a sense of joint responsibility prevailed! After the shy forms of intervention activated by the ECB alone to provide liquidity to the countries affected by Covid 19[27], other European institutions also reviewed the rigorous positions that had initially inspired their activity. In this respect, the agreement reached on a proposal from the Commission to suspend the stringent fiscal rules laid down in the Stability Pact seemed very useful[28]. As mentioned above, the fears denoted by the scholars appeared to be well-founded. It is necessary to take action to resist and oppose the economic emergency which appears to be of incalculable proportions!

On the other hand, many politicians and businessman appealed for resolute action. The appeal of Sergio Mattarella, President of the Italian Republic, is memorable; he makes an express reference to the need for greater cohesion: "Italy is going through a difficult condition and its experience of combating the spread of the coronavirus will probably be useful for all the countries of the European Union. We therefore rightly expect, at least in the common interest, initiatives of solidarity and not moves that may hinder its action"[29]. Also, the former ECB's President Mario Draghi declared that it is necessary to reach "higher levels of public debt" in order to restart the European economy blocked by the coronavirus[30].

These solicitations did not stay unanswered and, shortly afterwards, the ECB announced "a new Pandemic Emergency Purchase Programme (PEPP) to counter the serious risks posed by the coronavirus" [31]. In addition, the ECB is "broadening the scope of control" by promising banks a flexible interpretation of capital requirements and accounting standards to ensure rapid access to credit for businesses and households[32].

Despite the criticism of some small countries (the Netherlands and Austria), which, in selfish attitude, insist on taking advantage of the ESM[33], this intervention marks a turning point in the strategies of the Union's summits. The latter have understood that it is their task to avoid the harmful consequences of the misalignment between a necessary monetary expansion and the constraints of restrictive regulation. Unfortunately, the decisive step is still difficult to take; in fact, it was only after some hesitation from Germany in implementing a change of course[34] that the EU started to implement the so-called ESM. Recovery Fund which is guaranteed by the EU budget (from 2021 to 2027) and identifies a strong signal against a possible EU solution[35].

6. After the uncertainties shown by the Union in the first phase of Covid 19, the common will to cooperate in overcoming the economic and health emergency emerged after the European countries realized how serious the situation was.

The underpinning thought is that Europe cannot rely on an individualistic strategy, nor on interventions of limited duration. Therefore, long-term remedies based on the creation of "a common debt instrument" are needed. This constructive approach lays the real foundations of a unitary state structure that overcomes the reluctance of some States[36]. An innovative path of the Union could begin, on the basis of the instrument called the Next Generation EU, which could perhaps find that purpose of cohesion lacking right now.

Specifically, a fund of EUR 750 billion (linked to the EU budget for seven years) is to be set up for transfers and loans to Member States (EUR 500 billion and EUR 250 billion respectively). These funds are intended to "strengthen cooperation in the health field" and to provide a common response to the crisis. Some national authorities have welcomed this proposal with enthusiasm. The Italian authorities also had a positive attitude. In fact, they stressed that the Next Generation EU represents "an important opportunity to prepare a common response which, like the monetary measures, is proportionate to the gravity of the crisis"[37].

The launch of this instrument is therefore a proof that the Member States are fully aware that they must react in a united manner to the situation determined by Covid 19, which is now perceived by the European community in its dramatic profiles. In fact, the Governor of the Bank of Italy pointed out that "only joint, strong and coordinated action will be able to protect and relaunch of productive capacity and employment throughout the European economy"[38]. Moreover, Next Generation EU has been accepted by most of the EU countries and, at the same time, it has been strongly desired especially by the countries of the Mediterranean area[39], which got satisfied after some initial indecision of the President of the European Commission, Ursula Von der Leyen and Germany's Angela Merkel[40].

The implementation of the Fund will have to face the process ofa complex procedure design, which should define its operational details. The European Commission has defined a Strategic Guide for the implementation of the Recovery and Resilience Facility in its 2021 Annual Sustainable Growth Strategy (ASGS) [41].

The support provided by these Guidelines sets out the criteria for the use of financial resources that should support the European Union in overcoming the crisis caused by the pandemic event. The main objectives concern environmental sustainability, productivity growth and macroeconomic stability. These objectives must be taken up by Member States in 'recovery and resilience plans', as well as in national reform and investment projects. These national plans must be submitted by 30 April 2021 and under preliminary draft by 15 October 2020.

Therefore, the use of the Recovery Fund is subject to the preparation of national investment and reform programs in line with political criteria. These programs should address the economic policy challenges set out by the EU in country-specific recommendations to enable the transition to green and digital. More specifically, the Commission encourages Member States to consider investment and reforms in certain key areas such as (i) clean technologies and the development of renewables, (ii) improving the energy efficiency of public and private buildings; (iii) broadband services to all regions and citizens; (iiii) digitisation of public administration; (iiiii) education systems to support digital skills and vocational education and training.

Although the Commission has made it clear how the financial resources provided by Europe need to be used, it has not yet specified the practical operational aspects of implementing the policy content of the plans. In particular, there is still no agreement on the methodology to be used when transposing and subsequently using the funds and the schedule in reimbursing them is unknown.

Similarly, the criteria for identifying the exact extent of the necessary contribution by Member States has not yet been identified. In this context, the academic literature has already represented the difficulties regarding the "concrete amount of resources actually made available for our country" [42] with the obvious consequence that there is a substantial indeterminacy in the implementation of the projects.

Undoubtedly, the competent political authorities will have to take into account the close link between the disbursement of funds and the pursuit of the objectives indicated by the Commission. Such an ordinary criterion places an insurmountable limit in the identification of the actual modalities of operation of the Recovery Fund: the financial means made available to the applicant countries may not be used for purposes other than those indicated in the presentation of the recovery plans and, therefore, for the reduction of taxes or other welfare purposes.

EU authorities have a right to verify compliance with the 'guidelines' referred to above, not only when approving programs drawn up by Member States, but also when implementing them in practice. In the event of a mismatch between the commitment made and the way in which it is implemented, the Commission may suspend disbursement, or even (in the extreme case) activate a procedure to reduce the amounts already defined.

The current historical moment appears very complex: the Union needs to realize that the time for postponement in the decision on the quid agendum is over! The pandemic has made it possible to remove the delays, and to understand the need to "change pace". It is an opportunity (perhaps the last one) that Member States cannot and must not let go if they want to keep the "European dream" alive.

7. The Recovery Fund and other measures adopted by the EU will be able to make a major difference to the future destiny of the Union. This consideration leads us to reflect on the extent of the change taking place and, therefore, to evaluate the possibility of bringing to the latter an innovative path in the process of European integration.

Indeed, the "pact" underlying the preparation of the above-mentioned interventions is based on a unified action of the Member States aimed at strengthening the resilience of individual countries. The objectives embrace the green economy, digitalization and innovative forms of entrepreneurship. In this context, relations between Member States should change and should also benefit from regulatory and bureaucratic simplification, as well as appropriate tax and justice changes.

It is time for choices that cannot be postponed further if we want to save a project that, although modified with respect to its original formulation, still shows significant interest. Europe could thus assume a central position in the global geopolitical context. In fact, the aforementioned interventions on the economic sector should counteract the serious effects of the pandemic and, at the same time, lead to a harmonized modernization of the entire European system. In this way, inequalities and diversities will be reduced, finally allowing for a full sharing of pre-ordained objectives to a common goal.

Indeed, German political leaders have also developed this conviction and, at the same time, have overcome the adversities of the so-called frugal countries and the Visegrad group, meeting the demands of the Mediterranean countries, first and foremost Italy.

One wonders, however, whether this attitude is indicative of a change of course in 'solidarity key' or whether, after the adversities of the present moment, national individualisms will still prevail. The latter still finds support in the 'no front' of the frugal countries that do not desist from expressing their obstinate dissent[43].

These doubts can only be dispelled by assessing the future behaviour of EU countries when the new financial measures will be operative. It is hopeful, however, that the program will see the European Commission raising funds on the market through bonds guaranteed by the EU budget, thus building a unified strategy for the EU that was unthinkable a year ago. In anticipation for the difficulties in implementing the Recovey Fund, all the governments of the Member States are also moving to set up national structures that can set a "dialogue with the task force set up within the European Commission and led by the Deputy Secretary-General, Celine Gauer of France"[44].

It is too early to announce a fundamental change in the policy of the EU that could lead to the creation of a federal state. In fact, a process has been launched that cancels the Europe of austerity and excessive rigor, but it is still too early to envisage a return to the original design of the founding fathers. On this point, the doctrine has underlined that the latter could be "traced back to a mere customs union that... ensures a common market of proven utility... (i.e. the possibility of maintaining a monetary union by changing its current parameters of sustainability could prevail)"[45].

The Recovery Fund can therefore be traced back to a reactivation of the "political union" project. However, it is likely very difficult to implement a new reconstruction project: the loss of certain advantages from some Member States (which they have enjoyed to the detriment of the general interest of all participants in the Union) can only be accepted if the purpose of a stronger solidarity is affirmed.

References:

[1] See Capriglione, Covid-19. Quale solidarietà, quale coesione nell'UE? Incognite e timori, on Riv. Trim. Dir. Econ., 2020, p. 176.

[2] The first edition of the Manifesto, published under the title Per un'Europa libera e unita. Progetto d'un manifesto, has been lost; subsequently, 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 of Altiero Spinelli (Gli Stati Uniti d'Europa e le varie tendenze politiche and Politica marxista e politica federalista) written between 1942 and 1943.

Except for few and isolated critics to the federalist ideas contained on the Manifesto, the prevailing view among scholars points out the essential role of the latter for the interpretation of the federalist proposal; see, among others, VOIGT, Ideas of the Italian Resistance on the Postwar Order in Europe, in LIPGENS – LOTH, Documents on the History of European Integration, Berlin-New York, 1985, vol. I, p. 456ss; PAOLINI, Altiero Spinelli, Appunti per una biografia, Bologna 1988.

More recently, the aforementioned document has been analyzed by Frosio Roncalli, L'origine di un idea: il nesso tra federalismo e unità europea nel manifesto di Ventotene, in Storia del Mondo, n. 12, 2003; levi, Altiero Spinelli, founder of the movement for European unity, in appendix a spinelli e rossi, Il Manifesto di Ventotene, Milano 2006, p. 179 ff; napolitano, Altiero Spinelli e l'Europa, Bologna, 2007, in which, analyzing the Manifesto, the author stated that: "It would be arbitrary and wrong to reduce it to a summary appeal for the liquidation of national States. It is worth to recall and highlight the sharpness and modernity of that federalist approach " (p. 77); vassallo G., Per un'edizione critica del Manifesto di Ventotene: prime valutazioni sul stato delle ricerche, in Eurostudium, October-December 2008, p. 61 ff.

[3] See haass e.b., The Uniting of Europe – Political, Social and economic Forces, 1950-1957, London, 1958; id. Beyond the Nation State, London, 1964; lindberg, The Political Dynamics of European Economic Integration, London 1963.

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[5] See savino, La comitologia dopo Lisbona: alla ricerca dell'equilibrio perduto, on Giornale di diritto amministrativo, 2011, p. 1041.

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controlli nell'area dell'euro, in Banca, borsa, tit. cred., 2002, I, p. 154 ff.; Pellegrini, Banca centrale nazionale e Unione monetaria europea, Bari, 2003, passim, but in particular Chapters V and VI; Antonucci, Il credito di ultima istanza nell'età dell'euro, Bari, 2003.

[7] See ex multis Wymeersch,The European Banking Union. A first Analysis, Universiteit Gent, Financial Law Institute, WP, 2012-07, October 2012, p. 1 ff; Capriglione, European Banking Union. A challenge for a more united Europe, in Law and economics yearly review, 2013, I, p. 5 ff; aa.vv., Dal testo unico bancario all'Unione bancaria: tecniche normative e allocazione di poteri [Acts of the conference organised by the Bank of Italy, Rome, 16 September 2013], in Quaderni di ricerca giuridica della Banca d'Italia, n. 75; aa.vv., L'unione bancaria europea, Pisa, 2016; Ibrido, L'unione bancaria European. Profili Costituzionali, Rome, 2017.

[8] See Sepe, EBU and the National Credit Authorities' structure: the Italian case. The role of CICR in the new institutional context, on Law and economics yearly review, 2015, I, p. 161 ss.

[9] See the judgment on Rivista Trimestrale di diritto dell' economia, 2017, II, p. 45 sso, with comment of Lemma, "Too big to escape": a clarification of significant relevance on the scope of the Single Supervisory Mechanism).

[10] See Capriglione – Sacco Ginevri, Politica e finanza nell'UE, Padua, 2015, ch. VII.

[11] See Quaglia, Negoziando il Trattato Costituzionale. Una replica all' antigovernamentalismo liberale, on Riv. ital. di Scienza politica, Bologna, 2007, n. 3, p. 413 ff.

[12] See ex multis di taranto, Le basi problematiche problematiche della moneta europea, in Aspenia, I futuri del capitalismo, 2012, n. 56, 176-183; id., Il salvataggio temporaneo di Atene? Vantaggioso solo per Berlino, on Milano Finanza of 16 March 2012; id., L'Europa tradita, Rome, 2014, passim; id., Così l'Italia può cambiare l'euro (e guadagnarci), interview published online on 19 January 2014, in the section Economia e Finanza de ilsussidiario.net; savona, Serve un piano B per uscire dall'Euro. Da Renzi mi aspetto molto, interview released on 9 March 2014, available on http://www.forexinfo.it.; rinaldi, Europa kaput (S)venduti all'euro, with presentation of savona, Rome, 2013.

[13] See ex multis Guarino, Diritto ed economia. L'Italia, l'Europa, il mondo, Rome, 2011; Savona, Eresie, esorcismi e scelte giuste per uscire dalla crisi. Il caso Italia, Catanzaro, 2011; Masera, Ecco i compiti a casa per l'inconcludente Unione europea, in Il Foglio of 30 November 2011.

[14] See Capriglione – Troisi, L'ordinamento finanziaria dell'UE dopo la crisi, Turin, 2014, p. 130.

[15] See Bilancia, La nuova governance dell'Eurozone e i "riflessi" sui sistemi nazionali, in federalismi.it, December 2012, p. 15.

[16] See in this regard the speech given by President Barroso at the last working session of the Council Summit in which he declared: " "I know that many people were sceptical about the prospects for this

summit. And I hope that they were pleasantly surprised when they heard the news this morning… We have agreed a convincing vision for a strengthened economic and monetary union, and this is a point I would like to highlight particularly, following the report presented to the European Council on the genuine EMU".

[17] See Conclusions of the European Council of 29 June 2012, Euco 76/12.

[18] See Capriglione – Troisi, L'ordinamento finanziario dell'Ue dopo la crisi, cit. p. 132.

[19] See capriglione – ibrido, La Brexit tra finanza e politica, Milan, 2018, p. 89, where reference is made to the decision of the German Federal Constitutional Court in which the compatibility of the Maastricht Treaty with the Basic Law of Bonn was confirmed (2BVerfG 12 October 1993, n. 2159/92, in 89 Entscheidungen des Bundesverfassungsgerichts, 1994, 155 ss). This decision sets the limits for the compatibility of the monetary union with the German Basic Charter and the basic principles of national law, clarifying the extent of Germany's participation in the EMU; for critical assessments, rescigno g.u., Il tribunale costituzionale federale tedesco e i nodi costituzionali del processo di unificazione europea, on Giurisprudenza costituzionale, 1994 , p. 3115 ss.; everling, Zur stellung der Mitgliedstaaten der Europaischen Union als "Herren der Vertrage", on Beyrling, Bothe, Hofmanne Petersmann, Rechts zwischen Umbruch und Bewahrung-Volkr-recht- Europarecht-Staatrecht. Festschrift fur R. Bernhardt, Berlin, 1995, p. 1161 ss.; herdegen, Germany's Costitutional Court and Parliament: Factors of Uncertainty for the Monetary Union?, on European Monetary Union Wtch, XIX, 1996, p. 8 ss.

[20] This is clear from point 111 et seq. of the decision of May 5, 2020, summarized in point 2 of the official maximum: "2. The Court of Justice of the European Union exceeds its judicial mandate, as determined by the functions conferred upon it in Article 19(1) second sentence of the Treaty on European Union, where an interpretation of the Treaties is not comprehensible and must thus be considered arbitrary from an objective perspective. If the Court of Justice of the European Union crosses that limit, its decisions are no longer covered by Article 19(1) second sentence of the Treaty on European Union in conjunction with the domestic Act of Approval; at least in relation to Germany, these decisions lack the minimum of democratic legitimation necessary under Article 23(1) second sentence in conjunction with Article 20(1) and (2) and Article 79(3) of the Basic Law".

[21] The reference to a similar form of bond dates back to the 1960s, when this phrase was used to identify particular financial instruments issued, in foreign currency, by companies in order to raise capital for infrastructure investments.

Also significant is the analysis of the technical forms applicable in the case in point, in which it was used to address the financial problems faced by countries exposed to adverse market conditions.; see ex multis Quadrio Curzio, On the Different Types of Eurobonds, in Economia politica, 2011, n. 3, p. 279 ss.

[22] See Nelson- Belkin -Mix, Greece's Debt Crisis: Overview, Policy Responsens, and Implications, Crs Report for Congress, 2010, 14.5.

[23] See ex multis Rossano D., Ancora in tema di crisi dell'euro. Il caso "Grecia" e le sue implicazioni sulla moneta unica, on Federalismi.it, 2015, n. 5, p. 2 ss.

[24] See Caracciolo, Ma il rigore tedesco e le nostre debolezze rischiano di liquidare anche l'idea di Europa, on laRepubblica, del 7 luglio 2015.

[25] See de polis, La tutela dei depositi bancari nel quadro dell'Unione Bancaria Europea, report held at the University of Rome La Sapienza, Rome 27 April 2016, p. 13.

[26] See the interview by Bedini crescimanni entitled Massimo Cacciari: il coronavirus è la pietra tombale sulla integrazione europea, sarà la Cina a risollevare l'Italia, viewable on https:// it.businessinsider.com/massimo-cacciari-il-coronavirus-e-la-pietra-tombale-sullintegrazione-europ ea-sara-la-cina-a-risollevare-litalia.

[27] This refers to the Quantitative Easing increase programme in anticipation of a massive long-term loan programme, the so-called FTT III, which was accompanied by the forecast of an additional 120 billion euros in assets to be purchased until the end of 2020, while no change is made to interest rates; a decision of immobility that the markets did not like; see https://www.soldionline.it/notizie/economia-politica/diretta-bce-12-marzo-2020#001?cp.

[28] See the editorial entitled Pronti a rivedere la regola del pareggio di bilancio, ha detto Angela Merkel at https://www.agi.it/estero/news/2020-03-11/coronavirus-germania-merkel7435183.

[29] See the Note of the Quirinale 12 March 2020, in http://www.quirinale.it

[30] See l'editoriale di Financial Times intitolato Draghi: we face a war against coronavirus and must mobilise accordingly Free to read visionabile su https://www.ft.com/content/c6d2de3a-6ec5-11ea89df-41bea055720b

[31] See the text of this announcement on https://www.Banca ditalia.it/media/news/ecb-announces-a-new-pandemic-emergency-purchase-programme-pepp-tocounter-the-serious-risks-posed-by-the-coronavirus.

[32] See massaro, Coronavirus, la Bce «libera» 1.800 miliardi per prestiti a famiglie e imprese, viewable at https://www.corriere.it/economia/finanza/20_marzo_20/coronavirus-bce-libera-1800- billion-family-loans-b000a0ac-6abf-11ea-b40a-2e7c2eee59c6.sht.

[33] See the editorial entitled MES: spunta il documento con le condizioni dell'Olanda. Quali sono? available at https://www.money.it/MES-condizioni-Olanda-fondo-salva-Stati-quali-sono.

[34] The perplexities raised by Merkel – at the meeting of the European Council on 23 April 2020 – to resolve the financial problems of countries in serious difficulties by issuing Eurobonds or similar instruments are highlighted, see the editorial entitled Merkel: "Pronti a maggiori contributi Ue in spirito

di solidarietà contro la pandemia", available at http://www.repubblica.it/esteri/2020/04/23/news/ angela_merkel_l_ue_ non_e _niente_solidarieta, in which the Chancellor's words are reported, according to which for the mutualisation of debt we should "modify the treaties" and this requires time and the involvement of parliaments.

[35] The position of the Italian Prime Minister is significant in this regard, as the editorial entitled Eurogruppo, trovato l'accordo sul Mes: unico requisito l'uso dei fondi per spese sanitarie. Conte: "Insufficiente senza Recovery Fund". Maggioranza divisa, M5s: "Inadeguato". Pd: "Così è un'opportunità", viewable on https://www.ilfattoquotidiano.it/2020/05/08/ eurogroup-trovatola accordo-sul-mes-unico-requisito-luso-of-funds-per-spese-healthcare-duration-media-maximum-loans -of-10-years/5795662.

[36] See gagliarducci's editorial entitled UE: perché in realtà non è stato trovato alcun accordo contro il coronavirus, available at https://www.money.it/accordo-UE-su-coronavirusnon-e-stato-trovato.

[37] See Banca d'Italia, Relazione per l'anno 2019, Considerazioni finali, p. 17 of the printing drafts.

[38] See Banca d'Italia, Relazione per l'anno 2019, Considerazioni finali, loc. cit.

[39] Significant in this regard is the position of the Italian Prime Minister in the debate on the application of the ESM without conditions, see the editorial entitled Eurogruppo, trovato l'accordo sul Mes: unico requisito l'uso dei fondi per spese sanitarie. Conte: "Insufficiente senza Recovery Fund". Maggioranza divisa, M5s: "Inadeguato". Pd: "Così è un'opportunità", available on https://www.ilfattoquotidiano.it/2020/05/08/ eurogroup-trovatola accordo-sul-mes-unico-requisito-luso-of-funds-per-spese-healthcare-duration-media-maximum-loans -of-10-years/5795662.

[40] See the editorial EU Commission proposes €750 billion recovery fund in wake of Covid-19 crisis, available at http://www.france24. com /en/20200527-eu-commission-proposes-%E2%82%AC750-billion-recoveryfund-in-wake-of-covid-19-crisis, in which Von der Leyen's words "tomorrow the cost of inaction in this crisis will be more expensive for us" are quoted, from which there is a logic that seems to give priority to the objective of sound management of EU finances, rather than to the intention of reversing relations between Member States in a spirit of solidarity.

Also significant is the initial position of Angela Merkel who – at the meeting of the European Council of 23 April 2020 – opposed a clear refusal to resolve the financial problems of countries in serious difficulties by issuing Eurobonds or similar instruments; see in this regard the editorial entitled Merkel: "Pronti a maggiori contributi Ue in spirito di solidarietà contro la pandemia", available on http://www.repubblica.it/esteri/2020/04/23/news/ angela_merkel_l_ue_ non_e _niente_solidarieta, in which the Chancellor's words, according to which the mutualisation of debt should "modify the treaties" and this requires time and the involvement of parliaments, are reported.

[41] See European Commission, NextGenerationEU: Commission presents next steps for €672.5 billion Recovery and Resilience Facility in 2021 Annual Sustainable Growth Strategy, Brussels, 17 September 2020, available on https://ec.europa.eu/commission/presscorner/detail/en/IP_20_1658.

[42] See caputi, Se l'Europa rischia di gettare via il biglietto vincente, see https:// loccidentale.it/recovery-fund-se-leuropa-rischia-di-gettare-via-il-biglietto-vincente.

[43] See the editorial entitled Il fronte che si oppone al Recovery Fund. Le ragioni dei 'frugali' e del Gruppo Visegrad, available at https://www.agi.it/estero/news/2020-07-18/recovery-fund-paesi-frugali-gruppo-visegrad-9188657.

[44] See the editorial entitled Recovery, per blindare i tempi cabina di regia e poteri sostitutivi, which can be viewed on IlSole24Ore on 1 October 2020.

[45] See Capriglione, Covid-19. Quale solidarietà, quale coesione nell'UE?, on Riv. Trim. di dir. econ., 2020, I, p. 223.

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«They say things are happening at the border, but nobody knows which border» (Mark Strand)

Picking up the gauntlet – Europe's answer to the 'pension problem': the PEPP

by **Hans van Meerten – Andrea Minto – Jorik van Zanden**

Abstract: *Over the recent years, pension policy has become an ever more important topic throughout Europe. This article contains a description on the PEPP and its consumer protection elements, potential uses and its Level 2 measures. The Authors concludes that the PEPP can help break down these barriers as well as contribute to a high level of consumer protection, for example via limiting the costs and providing detailed information requirements.*

1. Over the recent years, pension policy has become an ever more important topic throughout Europe.[1] In several countries, the prevalence and need to reform the pension systems have become the spearhead of political agendas.[2] These reforms are caused, inter alia, by demographic and economic changes.[3] For example, in 2018, 19% of the European population belonged to the 65+ demographic, which is predicted to increase drastically resulting in an old age dependency ratio of 50% in 2050.[4] Of course, this puts severe pressure on national budgets.

Another problem facing the EU regarding pension schemes is the lack of the so-called 'portability' of pension schemes and pension capital.

Portability, meaning roughly speaking the collective or individual transferability of pension rights to another provider (be it in another Member State) [5] has been an issue for several years[6]. The EU legislator tried since the last century to enhance portability for providers and consumers.[7]

Furthermore, there is a growing need of transparency and consumer protection vis-à-vis pension schemes.[8]

An important way to deal with the above-mentioned problems in the EU, is the so-called 'Pan European Pension Product', the PEPP.[9] The Level 1 Regulation was adopted in 2019, the Level 2 measures will be finished by the end of 2020.

The object of PEPP is to lay down uniform rules on the registration, manufacturing, distribution and supervision of personal pension products that are distributed in the European Union under the header of PEPP. PEPP intends to establish a separate regulatory framework for personal pension products on an EU level. According to the European Commission (EC), this will benefit consumers as the proposal envisages more choice for savers, greater market competition, consumer protection via stringent information requirements, distribution rules and a simple default investment option. PEPP savers will be able to switch providers and continue contributing to their PEPP when moving to another Member State.[10] Moreover, the PEPP will be contributing to the development of a Capital Markets Union (CMU). A more developed market for personal pensions in the EU will channel in fact more savings into long-term investments and increase the depth, liquidity and efficiency of capital markets. This will ultimately promote growth and the creation of new jobs in the EU and contribute significantly to achieve a single market for capital in Europe[11].

The tiered law-making process that characterizes financial markets have quite some advantages on stemming from the interplay between levels[12] At level 1, the Council of Ministers (comprising the national ministers) formulate the principles or frameworks. At level 2, EU agencies[13] , make the draft legislation, after which the Commission further elaborates these principles , with the assistance of the second level committees (made up of representatives of the Member States' sector-specific ministries, also referred to as 'comitology'). At level 3, the national supervisory authorities collaborate in advising on the regulation and implementing the supervision. At level 4, the European legislation is implemented by the Member States and the European Commission ensures that this is done correctly, if necessary by commencing an infringement procedure pursuant to Article 258 TFEU.

2. The need for a PEPP has been set out in previous contributions.[14] As said, the EU market for pensions is severely underdeveloped and the IORP I[15] and IORP II[16] Directives where and are far from perfect. Even though the introduction of cross-border possibilities for IORPs, this market remains very small.[17]

Whereas the European Union has made its mark on the legal landscape concerning financial institutions in light of developing and regulating the internal market and addressing risks connected with financial crises, (personal) 'pension' still is left unregulated to a great extent.[18]

Where many legislative financial initiatives mainly focus on prudential requirements and informational provisions, putting in place a legal framework for the providers of financial services,[19] the PEPP takes a different approach.

On the 29th of June 2017, the European Commission launched the proposal for the PEPP, which was completed in the summer of 2019.[20] On the 14th of August 2020, EIOPA finished drafted the Level 2 legislation.

The PEPP is based on the so-called 2nd regime: a new regime alongside the 27 existing regimes of the EU Member States. The 'bonus' of the PEPP lies in the additional character: Member States can maintain their current ways of operating pension schemes, but in addition there is this extra, voluntary[21] framework for pension savings.[22]

This also means – amongst others – that providers of the PEPP are able to opt-in to the Regulation, after which their pension product may be labeled a PEPP but at the same time need to comply with the Regulation. In short: the EU created in theory a 'safeguard' label for a pension product with the (potentially greatly) beneficial European passport which enables the PEPP consumer to move to another Member State while keeping the same pension product. This PEPP-passport might offer the (i) the cross-border worker or for example the digital nomad an easy way to accrue an income for retirement in a single 'pension pot' as well as (ii) pension providers to enter the European internal pension market.

In the next paragraph, we will discuss some of the features of the PEPP and its possibilities and limitations.

3. As stated before, the PEPP is in essence a quality label for personal pension products.[23] As soon as it fulfills the criteria as set out in the Regulation a provider may make an application for a license with its own national competent authority.[24] The regulator will assess if the product complies with the consumer protection elements and social, labor and tax laws of the sub-accounts.

3.1. To understand how the PEPP works, it is important to give an overview of the compartmental approach of the PEPP, called sub-accounts. The Regulation defines a sub-account as follows:

"Sub-account means a national section which is opened within each PEPP account and which corresponds to the legal requirements and conditions for using possible incentives fixed at national level for investing in a PEPP by the Member State of the PEPP saver's residence; accordingly, an individual may be a PEPP saver or a PEPP beneficiary in each sub-account, depending on the respective legal requirements for the accumulation phase and decumulation phase;"[25]

The main idea behind the sub-account is that it complies with the national legislation of the home Member State of the PEPP consumer. Via this approach, a major issue is tackled: the tax hurdle.[26] According to a report of Ernst & Young, the European Union (including the UK) has in place 48 different systems of taxation for personal pension products. As taxation is the competence of the Member States and can only be regulated via unanimity, the PEPP does not contain any rules that interfere with this competence. Rather, the sub-account corresponds to each system of taxation,

bypassing the problem by not addressing it. However, in light of consumer protection and consumer choice, the latter of which is highly influenced by preferential fiscal treatment, it is a shame that the recommendation by the Commission to grant PEPP pension products equal treatment as national products was rejected. In light of consumer protection, this might've been a good step forward.

3.2. There's been a lot of debate concerning the default option of the PEPP. Ranging from having just one option to multiple defaults (sic), the discussion resulted in the adoption of a Basic PEPP, designed to be simple, safe and value for money.[27] As the default option was most likely to be chosen by the PEPP saver and carried a European label of quality, it became an important part of the political discussion revolving around two main questions: what investment techniques are allowed and how should the costs and fees be kept to a reasonable level. The first question comes down to the debate that has been going on for quite some time now around the use of Defined Benefit (DB) and Defined Contribution (DC) schemes. In short; the insurance industry highlighted the fact that the capital accrued by the saver needs to be protected against loss, which could be done by providing a guarantee. However, asset managers (and consumer organizations) pointed towards the high costs of such guarantees and the impact on the returns, stating that a life-cycle investment option was the better choice.[28] In the end and in a political compromise, both options were allowed under the Basic PEPP – with additional requirements elaborated upon by the European Commission.[29]

However, the introduction of life-cycling as a 'pension' product raised concern, especially with politicians from countries that are culturally used to defined benefit schemes, so further compromise was needed. This led to the introduction of the fee-cap of 1%. Although not set in stone and subject to review by the Commission every two years, the fee-cap does put in place a barrier for market entry as the launch of a cross-border product is often expensive. As the schism between DB and DC is still very real, when developing the technical standards on defining what costs fall under the 1% EIOPA had to exclude the costs of providing guarantees from the otherwise all-inclusive fee-cap.[30] Furthermore, the level 2 measures drafted by EIOPA do not contain a definition of a guarantee which means that it remains largely unclear what costs are in and excluded when offering a product on the basis of a capital guarantee: does this refer to a nominal guarantee, net from accumulated fees at maturity? Has the guarantee be calculated on via the methodology of Solvency II?[31]

Ironically, this has led to the situation that the Basic PEPP might not always be the most fitting choice for a consumer, simply due to the fact that alternative PEPPs might offer better products that are even more value for money. This split between consumer and provider interests is one of the reasons the PEPP, for some, did not live up to its potential.

3.3. The right to be informed is a core concept of consumer protection law[32], and plays a major part within the PEPP Regulation as well. Based on the PRIIP and IORP- II Directive, it requires PEPP providers to supply the consumer information before signing the contract, upon signing and send updates every year, including additional advice pre-retirement (a 'wake-up call'). This is done via a PEPP Key Information Document and the PEPP Benefit Statement. The contents of these documents

are quite detailed, but the EU legislator introduced the possibility of 'layering' which could greatly enhance consumer friendliness when purchasing a PEPP online.

Besides information documents, the PEPP consumer needs to receive advice upon selecting his or her investment choice as well.[33] The advice needs to be highly personalized, making the provision of advice a complex matter and a costly endeavor.[34] Since advice is mandatory for all PEPPs, it's noteworthy that the specific fee-cap for the Basic PEPP is applicable in relation to the necessary advice, but not for the alternative PEPPs. However, this may lead to the situation that advising for a Basic PEPP isn't as commercially attractive as the costs of advice are not bound by any cap for alternative PEPPs. Article 12 specifically states that "the costs and fees referred to in article 45 (2) which are the reference to the Basic PEPP saver's accumulated capital at the end of the respective year". As there is no accumulated capital in a Basic PEPP upon conclusion of an alternative one, it seems the costs of advice therefore may be charged to the consumer provided that the costs are adequately disclosed.[35]

However, in light of cost-effectiveness and FinTech solutions, the PEPP Regulation enables PEPP providers to offer robo-advice, as long as it provides the same safeguards as face-to-face advice. This possibility might enable and encourage new parties to get a foothold in traditional realm of pensions as well, which the authors consider to be a welcome innovation. After all, if providers are able to safeguard the consumer interests as stipulated in the PEPP, in our view they offer a superior product with low costs, high transparency and very solid supervision both nationally and via EIOPA. While it's true that some elements of the PEPP hinder a swift uptake (fee-cap, advice) if a provider is able to do so regardless it might become greatly distorting for the pensions market that is currently still expensive.[36]

3.4. When stating that the PEPP is hardly a 'traditional initiative', some other elements of the PEPP deserve mentioning. For a long time, there has been a clear distinction in legal discourse[37] over the position of pension provisions amongst three pillars.[38] If it's state funded it's a first pillar product, if it's via an employer second pillar and an individual product is considered third pillar.[39]

However, as the notion of 'pillars' is already prescriptive (it's not suited to describe systems) it's hard to use it for comparison between countries. On a macro level, this isn't too problematic, as for example the statement 'country X has a strong second pillar which is stronger than country Y' is a valid comparison. However, this statement seems problematic when designing pan-European pension products with a cross-border element. For example, article 6 of the PEPP Regulation enables Institutes for Occupational Retirement Provision to offer the PEPP, as long as their national law enables them to offer personal products. However, as some countries differ in their view which entity 'fits' in the 'second pillar', this might lead to the situation that a Dutch IORP is excluded from offering a PEPP while a, for example, Luxembourg ASSEP (a DC IORP) isn't.[40] Things get even more complicated when, for example, a Luxemburg IORP offers a PEPP with a Dutch sub-account.

Legally speaking, the answer is not so simple. For cross-border provision, IORPs are regulated via article 15 of the PEPP Regulation. If a PEPP provider wants to access a different market for the first

time, the home and host competent authority need to communicate and the sub-account is in accordance with the Regulation, in particular according to article 6 of the PEPP Regulation. However, the Regulation does not offer the possibility to deny PEPP providers such as IORPs their right of freedom of services. According to the applicable rules ex article 3, the PEPP Regulation is applicable as well as the relevant sectorial Union law, laws adopted in implementation of relevant sectoral Union law and measures relating specifically to PEPPs and other national laws which apply to PEPP. However, as the Regulation specifically governs the topic of distribution and enables IORPs that are authorized under their national law to offer the PEPP, there doesn't seem much space to exclude them from other markets that do not allow IORPs to offer personal pension products. The recitals of the PEPP state clearly that

"Under the freedom to provide services or the freedom of establishment, PEPP providers can provide PEPPs and PEPP distributors can distribute PEPPs within the territory of a host Member State after opening of a sub-account for that host Member State."

Alternatively, one may argue that implementing rules on a national level falls under measures specifically relating to PEPPs, thus enabling Member States to exclude IORPs from operating in their territory, but also keeping in place barriers for the internal market.[41]

However, regardless the possibility of classical occupational vehicles to offer the PEPP, a major and often unnoticed element of the PEPP is that it is not individually bought by definition.

Article 2(2): …subscribed to by a PEPP saver, or by an independent PEPP savers association on behalf of its members…

In theory, employers are able to set up an opt-in PEPP scheme (see also the point on borderline case) for their employees, which wouldn't be offered directly by the employer, but rather incentivized as an extra benefit in the terms of employment. The requirement of being independent could be solved by empowering social partners to set up such an opt-in scheme. The great flexibility for switching PEPP providers against marginal fees would enable the PEPP consumer to move away after retirement.

4. The EU has several 'pension problems, for example ageing, poor portability and the lack of consumer protection. Furthermore, the EU internal market for pensions is not sufficiently developed. This not only prevents, for example, a cost-efficient pension build-up of an employee working abroad, but the differences among national rule also restrict a local pension participant in choosing a pension fund established abroad.

The PEPP can help break down these barriers as well as contribute to a high level of consumer protection, for example via limiting the costs and providing detailed information requirements. This article contains a description on the PEPP and its consumer protection elements, potential uses and its Level 2 measures.

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«They say things are happening at the border, but nobody knows which border» (Mark Strand)

Company law during the blockchain revolution. The rise of "CorpTech"

by **Raffaele Lener and Salvatore L. Furnari**

Abstract: *In recent times we have seen cases where business and corporate needs have required the presence in the same place of a crowd of people made up of many shareholders of a well-known bank. This was necessary so they could vote on a capital increase that would have determined its rescue from bankruptcy. At the same time, in these days, health emergencies require that certain corporate actions (such as the shareholder meetings for the approval of the financial statements or for the election of the corporate boards) take place without the physical presence of the shareholders, who are required to remain distant from each other.*

These two examples show how different historical moments create new needs which, in many cases, must be satisfied by applying "old" rules. Indeed, although new technologies allowing the exercise of voting rights in innovative ways exists, our legal system requires times to regulate these new technologies before they could be largely adopted.

This constant pursuit between the old and the new, whose speed is increasing in today's globalized world, requires scholars, on the one hand, to contribute to the elaboration of new rules to allow a safe use of the new technologies. On the other, while waiting for new rules to be introduced, scholars have also the important role to interpret and coordinate (when possible) the old rules with the adoption of such new technologies.

Regarding company law, the reference is to DLT and blockchain technologies and their derivatives (tokens and smart contracts). Here, the neologism "CorpTech" has been created to synthesize the new technological solutions which can allow, in theory, a safer and more effective exercise of corporate rights by shareholder.

For example, some scholars have "theorized" the registration of company shares on a public blockchain to make their transfer easier or to make companies' ownership structure more transparent. Others have suggested to incorporate the rights (or some of them) deriving from the possession of shares within tokens (so-called tokenisation), in order to make their transfer faster, reducing the related formalities. Furthermore, someone else has discussed the possibility of holding shareholders' meetings at distance, exercising the right to vote through special smart contracts.

Beyond the easy enthusiasm that new technologies inevitably arouse, it is necessary to question the compatibility of the new solutions with the regulations in force in our system. And before that, it is necessary to question the risks and advantages of these new technologies.

Summary: 1. Introduction. – 2. DLT and its derivatives: blockchain, smart contracts and tokens – 3. Representation and circulation of shares and quotas using equity token. Is tokenization of company's participations possible under Italian law? – 3.1 Not "issuing" share to issue equity token. – 3.2 Equity tokens, quotas and the Alternative Regime. – 3.2.1 (How to avoid) the "centralized" figure of the Register of Company. – 3.2.2 A DLT solution in the Alternative Regime. – 4. The exercise of rights through DLT systems. – 4.1 Economic rights. – 4.2. Intervention and voting rights – 4.2.1 Voting rights and DLT. – 4.2.2 Solutions to improve the exercise of intervention rights. – 4.2.3 Technological limits of DLT. – 5. DLT system as solution for personal identification. Perils of deepfake technology. – 6. Conclusion. The CorpTech myth can be concrete?

1. In recent times we have seen cases where business and corporate needs have required the presence in the same place of a crowd of people made up of many shareholders of a well-known bank. This was necessary so they could vote on a capital increase that would have determined its rescue from bankruptcy. At the same time, in these days, health emergencies require that certain corporate actions (such as the shareholder meetings for the approval of the financial statements or for the election of the corporate boards) take place without the physical presence of the shareholders, who are required to remain distant from each other.

These two examples show how different historical moments create new needs which, in many cases, must be satisfied by applying "old" rules. Indeed, although new technologies allowing the exercise of voting rights in innovative ways exists, our legal system requires times to regulate these technologies before they could be largely adopted.

This constant pursuit between the old and the new, whose speed is increasing in today's globalized world, requires scholars, on the one hand, to contribute to the elaboration of new rules to allow a safe use of new technologies. On the other, scholars have also the important role of interpreting and coordinating (when possible) the old rules with the adoption of such new technologies, while waiting for new rules to be introduced.

Regarding company law, the reference is to Distributed Ledger Technology (DLT) and its derivatives (blockchain, tokens and smart contracts). Here, the neologism "CorpTech" has been created [1] to synthesize the group of new technological solutions which can allow, in theory, a safer and more effective exercise of corporate rights by shareholders.

For example, Yermack (2016) has theorized the registration of company shares on a public blockchain to make their transfer easier or to make companies' ownership structure more transparent. He has also suggested the incorporation of rights (or some of them) deriving from the possession of shares within tokens (so-called tokenisation), in order to make their transfer faster, reducing the related costs and

formalities [2]. Van der Elst and Lafarre (2017) have discussed the possibility of holding shareholders' meetings at distance, exercising the right to vote using blockchain [3]. Yermack (2016) has also proposed its use also with reference to corporate elections [4].

Beyond the easy enthusiasm that new technologies inevitably arouse, it is necessary to question the compatibility of this new solutions with the regulations in force. New technologies embody the risk that not everything of what could be theorized can, at the end of the day, became true. This is truer from a legal perspective, considering how high is the number of cases of conflict between "traditional law" and "innovation".

In the following pages the implementation of DLT systems within the whole life of a company would be discussed. In section 2, characteristics of DLT will be described, with a specific focus on blockchain, smart contracts and tokens. Section 3 presents the legal problems of representing company's participations using tokens, dealing with the legal possibility of making the dynamics of purchasing and exchanging shares more efficient through DLT. Section 4 deals about the exercise of voting and administrative rights through tokens. Here, in addition to provide practical suggestions for the implementation of DLT systems while respecting the current regulation, we will also study their application limits, highlighting how these limits exist more from a technological point of view than from a legal one. Section 5 shows how DLT can solve identification problems during a company meeting. In particular, the section deals about the perils of technologies that can reproduce in real time the face or the voice of a legitimate participants of those meetings (so-called deepfake video) and how blockchain can be the solution against it. Finally, section 6 concludes the paper, discussing in which terms the "myth" of CorpTech can be considered concrete.

2. A discussion on the compatibility between company law and DLT requires a brief recap of the functioning of blockchain, smart contracts and tokens.

To simplify, we define blockchain a derivative of DLT. Blockchain is, indeed, a particular form of DLT and can be described as a system in which information and data are stored using cryptography. The peculiarity of this innovative database is its decentralization, that is the fact that this "register" is under the control of a peer-to-peer network of participants. A blockchain database can record the transactions made by the system's participants without the need of a unique and central authority that manage it. DLT allows full disintermediation, since each participant of the network, called "node", possess a full copy of the information stored therein. Decentralization is the first but not the only important characteristic of a blockchain.

The second one is transparency. Indeed, to reach the best level of decentralization there is the need to let everyone became a node of this database. This implies the power given to everyone to see (and make a copy) of the information stored in this register using specific tools.

Decentralization and transparency make the use of a DLT a cyber-secure choice to store information. Indeed, who desires to modify the information stored in the distributed register needs a power that is

higher of the 51% of the computational power given by the participants to the system. This means also the approval of (or to attack the PC of) the nodes offering such amount of power.

The innovative functionality of DLT lies in the peculiar kind of things that can be stored in its registers. The firs one is called token. A token is nothing more than a record of information that results in favour of a participant. A token lets his possessor (that is the person that has the power to transfer its transcript in favour of another one) to be recognized by the entity who released the token as the holder of a precise amount and/or kind of rights. So, if from a technical point of view, a token is nothing more than a simple registration, from a functional point of view it can be considered as an informatic instrument that lets participants exercise a precise kind of rights towards the releasing company. Those rights are, often, the subject of an offering to the public in exchange of money to develop an entrepreneurial project (Initial Coin Offering or ICO). The rights conferred by a token includes: the simple right to exchange the token itself (cryptocurrencies); the access to a service provided by the platform (utility token); administrative or economic rights toward the company that offered them (investment token). Hence, tokens are adaptable tools which let almost everything to be represented by them (so-called tokenization process). They are very useful because they can easily be sent to or exchanged with other participants and, notwithstanding their virtual nature, they do not need intermediary to be custodied or transferred.

Token are created by the blockchain protocols in which they are register or by a smart contract. The latter being the last of the DLT derivatives described hereby. Smart contracts were born when some blockchain protocol, such as the Ethereum one, started to use the power of calculation of its participants to run a virtual machine. A virtual machine can be imagined as a big (phantom) computer using the power given by all the computer of the participants to elaborate softwares. Therefore, smart contracts are not contracts, but simply algorithmic sequences elaborated by computer created with the calculation power of the nodes. Being the virtual machine – as every information recorded on the blockchain – under the control of nobody, smart contracts acquire the two following characteristics: unstoppable self-execution and autonomation [5].

As every software, smart contracts are self-executing. If a smart contract is programmed to perform a determined action, it will work until the action is completed. This means also that if a precise mechanism to stop its functioning has not being “programmed” by the party who launched it, nobody can stop its functioning without taking the control of the 51% of all the calculation power alimenting the blockchain.

Autonomation means that smart contracts lack human interaction for their execution. So, above all, they can be used to perform obligations deriving from a real contract that can be written within the smart contract it-self [6]. A contract of this kind could help the managing of a contractual execution since there is no need for interpretation of its terms. At these conditions, parties do not need to trust each other before the conclusion of the agreement since the execution its fully automated. For instance, this principle applies particularly for the collection of money through the launch of an ICO. If the collection of money is managed using a smart contract, this program will automatically deliver the token in exchange of the money received.

In light of all the above considerations, smart contracts can strongly grant the right attached to a specific token. If a token grants the access to a specific service of the issuer, the buyer of the token could be sure that he will enjoy the service he paid for.

To sum up the informatic landscape exposed in brief above, it is possible to describe DLT and its derivatives as follow. Blockchain is the infrastructure on which tokens are placed and interact with other participants using smart contracts without any need for intermediaries.

3. Having described DLT essentials, it possible to see if the law permits those to be exploited by companies.

The first way in which DLT can innovate corporate functioning regards the procedures by which companies shares and quotas are represented and circulates. The possibility for tokens to represent companies' shares (equity token) would represent an incredible opportunity for their shareholders. Indeed, they could enjoy the possibility of exercising the rights tokenized without any intermediation. Within the list of rights that could be exercised, the first is the possibility to trade the shares acquired. Here the lack of intermediation makes the system less costly and not exposed to third party risk. Practically, each shareholder may exercise on its share the same control he has on a physical object.

Before creating too much expectation on what it is possible to do with an equity token, it is necessary to verify if the law consents its creation. To do so, Italian company law will be taken in consideration, focusing on the rules governing the way companies' shares can be represented or can circulate.

The results of the proposed analysis will vary on the basis of the circulatory regime adopted by the company. Within this paper we will consider just two different circulatory regimes for participations of Companies Limited by Shares (società per azioni or SPA) [7] and two other regimes for Limited Liability Companies (società a responsabilità limitata or SRL).

3.1 SPA are the legal structures that suite most the possibility to issue equity token. The procedures regulating creation and circulation of their shares (azioni) seems to be adaptable to a DLT ecosystem.

Shares are the result of an abstract division of the company's authorized capital. They can be incorporated in physical documents to facilitate their circulation. In this case, share certificates are issued and it means that shares are incorporated in a physical document (azioni cartolarizzate). This regime of circulation is referred to as securitization (cartolarizzazione) and it is not mandatory.

In this regime, shares need to be incorporated within a physical "object" to circulate. This fact represents (involuntarily) a formality that can impede the application of a DLT system. Indeed, the difficulty to consider a token as something "physical" seems non compatible with the rules of circulation of nominative shares [8]. Circulation of shares in this regime requires the exchange of something physical. There is strong doubt about the possibility of including in the definition of "physical" a computer program such as a smart contract or, even less, a mere registration such as a token. Indeed,

even admitting that the material support on which shares need to be represented can be different from paper, the possibility to consider a token or a smart contract as a "material" support in which shares can be incorporated has been excluded by their "virtual" nature [9]. Therefore, it is very difficult that in this regime, shares could be tokenized.

As anticipated, being this regime not mandatory, pursuant to Article 2346, paragraph 1, of the Italian Civil Code, a company can decide to not incorporate shares in physical documents (azioni non cartolarizzate). So, share certificates are not issued and their circulation is controlled only by registrations made by the company in the Shareholder Book.

This second regime appears to be more in favour to the adoption of a DLT system. The transfer of non-securitized shares is effective simply when parties agree on it [10] and their consensus does not even need to be formalized in writing [11]. The transfer needs to be registered in the Shareholder Book and this registration seems to require just specific formalities that are considered not necessary for the transfer to be effective [12].

In this circulatory regime a central role is played by the Shareholder Book kept by the company. This book is very similar to a DLT register and can be kept through informatic tools, according to art. 2215-bis of the Italian Civil Code. Among these tools it is possible to include smart contracts.

In light of the above, we can conclude that adopting this circulatory regime it is possible for a company to issue equity tokens. This is true both from a technical and a legal point of view. In order to do that, after having decided to not issue share (i.e. to not incorporate them in physical documents), the Shareholder Book should be created using a smart contract. Then equity tokens representing company's share can be issued. A shareholder will have to connect with a specific section of the company website to transfer his equity tokens. There he could interact with a smart contract programmed with the task of intermediating the circulation of the equity tokens issued. In doing so, this smart contract (being itself the Shareholder Book) could be updated with the information of the new shareholder to whom shares are transferred.

The solution illustrated seems the only legal possibility for a SPA to distribute to the public crypto-assets representing its shares in the form of equity token. However, what is true is that the equity tokens will not really represent the shares of the company. Legally speaking, without a specific intervention of the legislator, this system will only let equity tokens to be a tool whose alienation would activate the mechanism for the updating of the Shareholder Book.

3.2 Equity tokens, quotas and the Alternative Regime.

3.2.1 A completely different analysis needs to be done considering Limited Liability Companies.

SRL participations are represented by quotas. Differently from shares, quotas cannot be incorporated in physical instruments to facilitate their circulation. They can be transferred as effect of the reaching of the consensus between the parties but, to be effective vis-à-vis third parties, the transfer must be

notified to the Register of Companies. The notification must follow precise and mandatory formalities, requiring the intervention of a specific “intermediary” such as a notary or a chartered accountant.

From this quick overview, two are the major obstacles impeding tokenization of quotas.

First, the role played by the Register of Company cannot be avoided. Without the transcription of the transfer within the Register, circulation of quotas has no external effect. This means that a single quota could potentially be sold to more than one person to the damage of the first acquirer. So, the Register of Company has the important task to avoid double spending problems.

In this regard, someone could say that the implementation of equity token can nullify this danger. Indeed, it is known that DLT systems eliminates the double spending problem and that tokens can be transferred just once, notwithstanding its virtual nature.

However, from a legal point of view, these technological guarantees given by DLT are not enough. This because tokenization of quotas has no effect versus the Register of Company. This is also a consequence of the fact that quotas cannot be securitized. Therefore, the quota-holder resulting from the Register of Company will always maintain the right (and the power) to transfer the quotas he owns. For instance, although a quota-holder gives his equity token to the Person A, he could still sell his quotas, through a public notary, to Person B. Holding the equity token, Person A may be the owner of the transferred quotas only for the “token community”, but for the law, after this double-transfer, only Person B is the real quota-holder, being his name the only one resulting from the Register of Company.

The obstacle for Person A to record his purchase on the Register of Company represents the second of the two problems mentioned above. It consists in the fact that the communication did not came from a notary or a chartered accountant. This law provision precludes the possibility of having these communications managed solely by a computerized system. Indeed, their presence introduced within the system a certain decree of centralization that is not fully compatible with the characteristic of DLT.

The mentioned problem does not make the creation of technological solutions for quotas tokenization impossible at all, although its implementation could be quite difficult and will require the necessary participation of a notary or of a chartered accountant.

Similarly, to the one described in paragraph 3.1, a solution could consist in the implementation of a smart contract with the task of intermediating equity token. In addition, here the smart contract should also send the communication to the Register of Company. In doing so, the smart contract should exploit the authorization of a notary or of a charted accountant for communicating with the Register. Considering that today those communications are send using electronic tools, it not possible to exclude that a solution of this kind could be adopted without amending any law regulating these aspects of Italian company law, although with the mentioned difficulties.

3.2.2 According to the above example, without a specific reform of Italian Company Law, it is quite difficult (but not impossible, as we have explained) for SRL quotas to be transferred “using” equity tokens.

The difficulties of transferring quotas between parties are known to the Italian legislator. SRL quotas was not regulated to be offered to the public or traded in regulated markets. Notwithstanding this, SRL is still the cheaper legal form for companies and so the most adopted by start-ups. To foster the development of a secondary market for quotas, Italian legislator created in 2015 a new method for transferring them. The so-called alternative regime [13] was introduced with the clear intention of favouring the development of a secondary market of a specific “kind” of quotas. These are the ones distributed following the conclusion of an equity crowdfunding [14] campaign, an alternative financing instrument with the peculiarity of being very illiquid [15]. In that period, the illiquidity of this financing instrument was caused by the difficulties of secondary market for quotas to develop, due to the mentioned inadequacy of quotas to circulate.

The alternative regime for quotas was introduced with art. 100-ter, paragraph 2-bis of Legislative Decree no. 58/1998 (Testo Unico della Finanza or TUF) [16]. This article provides a solution to the need of communicate each transfer to the Register of Companies using a notary or a charted accountant. The solution consists in the participation to the system of an intermediary authorized to provide investment services. Its role is to acquire the shares offered during the equity crowdfunding campaign in the interest of the investors but not in their name. This implies that, after the conclusion of the funding campaign on the equity crowdfunding platform, the intermediary will notify a request for registration to the Register of Companies for all the quotas subscribed by the investors that decided to opt for this circulatory regime. This intermediary will so become the only quota-holder resulting from the Register of Companies although the quotas are held by him but in the interest of each participant to the equity crowdfunding campaign.

For the alternative regime to function, the intermediary is required to keep a register with the information of the quota-holder he is working for. This mechanism let quota-holder to transfer their participation through a simple communication to the intermediary. When the communication is received, he will only change the name of the investors contained in its register [17]. In this way, there will be no need to notify each transfer to the Register of Companies, considering that the intermediary is the only quota-holder register therein in the place of the investors.

The alternative regime is less formal than the traditional one applicable to participations of SRL. This informality makes it possible to be re-created using DLT in order to “issue” equity tokens. The issuance of equity token in this circulatory regime, however, do not depend only by the will of the company. It is, indeed, necessary the participation of the mentioned intermediary. It is him that should adopt a DLT solution to let companies that concluded an equity crowdfunding campaign have their participations be represented by equity tokens.

In this regard, the intermediary is free (as a private entity) to choose the technological systems that he prefers to manage both the receipt of the transfer communications and the same register in which the

transfer must be recorded. It is so possible to imagine a solution in which there is an agreement between the intermediary and the company to assign to each new investor a token representative of what is written in its own registers. For instance, as already suggested, it could be imposed to quota-holders that the transfers of equity tokens take place exclusively through the interaction with a smart contract (accessible through a simple website) with the task to keep the register and automatically update the records of each quota-holder.

The result would be the creation of a mechanism that allows the transfer of quotas based on the exchange of tokens on a DLT [18].

4. The potential associated with the use of DLT systems is not limited to the mere representation of company participations. Indeed, it can be extended to the exercise of the rights guaranteed by their possession. Having ascertained the possibility, under certain conditions, of issuing equity tokens, there is the need to assess whether, under current legislation, those tokens can be used to exercise the rights associated with such holdings (economic and voting rights) [19].

4.1 Adopting DLT for the exercise of voting rights does not present problems of compatibility with Italian legislation. The regulation does not prevent shareholders to use DLT systems to request the amount of money they have right to. Nor it prevents companies from distributing the profits generated automatically to their shareholders.

The only laws that a DLT solution should respect are the ones regulating when and which amount of money could be distributed. For instance, article 2433 of Italian Civil Code provides that dividends may be distributed only when profits are really achieved, and they result from an approved balance sheet. If profits are distributed in violation of these rules, the assets distributed can be requested back. Rules of the same tone can be found in bankruptcy law. Here the main scope of the regulation is to avoid the alteration of the so-called par condicio creditorum. In brief, when the company enters in a bankruptcy procedure, a precise order should be respected in the division of the remain assets of the company. In addition, specific provisions of bankruptcy law permit, in the interest of creditors, to nullify the effects of money distributions to shareholders, even if the distribution has been made before the bankruptcy declaration.

In light of the above, companies can introduce DLT systems that automatically distributes profits to their shareholders. It will suffice, in fact, to respect the substantive rules governing the conditions for the distribution of sums to shareholders. Indeed, the mentioned rules remind that in some case a company may request back money distributed to shareholders. Its importance it is clearer since mechanisms involving DLT systems are usually irreversible. A company must have clear that automatic distributions of its assets could not be obtained back, not even through the intervention of public authorities.

This means that a system that automatically distributes profits to shareholders could be considered “unlawful” to the extent that the code of the smart contract does not provide for an informatic solution

to comply with the mentioned rules. Differently, its implementation may result in the responsibility of the director and of who has received the task of programming the relevant smart contract.

Considering the possibility that a mechanism compliant with those laws has been implemented, a solution for the automatic distribution of profits to shareholder may consist in a smart contract with the task of collecting the countervalue in cryptocurrencies of the profits available for distribution, so that those sums can be made available to shareholders, subject to the condition of obtaining a precise amount of votes. The greatest advantage of a mechanism of this kind would be its independency from the administrative body, which would be deprived of the possibility of materially influencing distributions already decided. Attributing greater powers of control over the actions of the directors means eliminating at the root the need to request the intervention of the Court in the event of a dispute. This is true considering that within the time a judge reaches a decision, the amount of money to which a shareholder might have right could have disappeared.

However, there is a second important aspect that should be taken into due consideration before implementing the discussed solution: the need to create a strong link between what happens on the DLT networks (on-chain) and what happens outside (off-chain). This link is not provided by the law.

Indeed, a DLT system is not able to manage what "does not exist" on the DLT network. This means that a smart contract cannot control cash flows that are in fiat currency and in a company's bank account. Shareholders may effectively control what a director do with the money of the company only by creating a secure conversion mechanism between on-chain assets (e.g., money in a current account) and off-chain assets (e.g., a precise cryptocurrency). Otherwise, to foster the automatic right granted to shareholders it will be sufficient to intervene on the mechanism that mediates between the different networks. Corrupting this "bridge" will be as if such system has never been implemented [20].

4.2 Intervention and voting rights.

4.2.1 Great attention must be paid also to the compatibility of DLT applications and the exercise of administrative rights. There is no doubt that exercising voting through electronic means can increase shareholder participation. This is true with reference to companies with a particularly widespread shareholder base or in emergency situations. Electronic voting allows the reduction of the costs that the voters (whether investors, shareholders or members of another corporate body) must bear to exercise the rights they have towards the company. Therefore, it can increase voting participation. The implementation of electronic voting has also important benefits for the company. First, it allows a better recording of the votes received. Secondly, electronic vote simplifies the organization costs related to the physical placement of the voters within the same location, especially when the right to vote is granted to many people.

Notwithstanding these advantages, electronic voting systems can be implemented but not in total freedom. On the one hand, article 2370 of the Italian Civil Code makes possible to participate in shareholders' meetings through "telecommunication means" and to "express the vote by correspondence or electronically" [21]. From a technological point of view, this rule is deliberately broad when it refers generically to "means of telecommunications" or "voting electronically". The use of

generic terms responds to a precise choice: by not defining which precise electronic means can be used, the company has the possibility to implement the technical solution that from time to time will be more updated and suitable. This is a correct regulatory choice, considering the speed with which new technologies evolve and create new means that allow the interaction of people in real time. It is precisely this sort of "blank proxy" that can allow the implementation of DLT systems for the exercise of voting rights.

As mentioned before, the use of these systems is permitted under one specific condition. Implementation of telecommunications means to participate and vote in the shareholders' meeting must be provided within company's by-laws. Implicitly, shareholders must have accepted this possibility when they decided to be part of the company. Therefore, it is not the "normality" for shareholder meetings to be held at distance. This fact could be explained identifying a certain distrust towards systems over which it is not possible to exercise total control. This is true given the ease with which electronic voting systems can be altered by the majority, by the directors or by the person who owns the technological voting infrastructure. Those system can be also hacked by third parties that may have some evil interest in distorting the voting results.

If the major concern that prevents the spread of remote voting mechanisms is the danger of a fraudulent modification of the voting results, the implementation of a DLT systems would eliminate this risk. The combined use of cryptography and decentralization makes the results of the data processing unalterable. Voting results recorded in a DLT infrastructure cannot be changed. Its inalterability is inherent also to the fact that decentralization makes this system under the control of no-one.

Therefore, a solution for the implementation of voting system using DLT could easily be find out. Voting right could be exercised through a smart contract that, interacting with voting tokens distributed to the shareholders, allow them to express their vote from whatever place they are, granting that the vote is expressed personally by the token holder.

4.2.2 DLT systems could be also implemented to foster the right of participation, that is the possibility to make a statement during the shareholder meeting and having it recorder within its minute.

There are no technological problems in the possibility of implementing a messaging function to deliver a single intervention. This would be recorded in its entirety and without possibility of alteration. In addition, each intervention could be sent together with a time stamp that would ensure when the message is sent and when it is received. This kind of system could be implemented to require the verbalization of specific interventions or to manage the meeting discussion in real time [22] without any fear that a single intervention could be changed after the meeting [23]. DLT systems could help verbalization operation so to ensure that the intervention of each shareholder in the meeting is not altered during the drafting of the minutes and to avoid disputes on its content.

4.2.3 We have described how a DLT systems could help managing both the right to vote and the right to participate in a shareholder meeting.

However, there is an important issue underlying the implementation of any DLT system in corporate contexts. It concerns the publicity of the information that are recorded within the network; a problem that is related to the specific type of DLT that is adopted by the company.

In particular, the use of DLT permissionless [24] will make information recorded available to everybody [25]. This grade of publicity is in contrast with the secrecy instances of some documents formed during a shareholder meeting. Indeed, the minutes of these meetings are not public documents and cannot be transposed within a DLT permissionless without putting at risk company business strategies.

Those problems could not be solved simply with the adoption of permissioned DLT. Indeed, its adoption, if on the one hand may solve the mentioned privacy problems, brings to the table other problems. These are related to the difficulty of identifying the subjects that could be entrusted with the role of node on a company level [26].

Privacy problems of DLT permissionless could be still solved implementing specific technological solutions. In this regard, it should be enough to introduce a method to encrypt all shareholder's interventions before they are registered on a DLT permissionless. In this way, third parties will not know the content of the company minutes. Only the company or the subjects with an interest in reading the document should have the possibility to decode its content using a password.

However, this solution may still give rise to concerns. These regards who should have the power to have or to give others the password to de-crypt stored information. This, specially, in case of a public control or in case an order of exhibition is made to the company by the Court. Without that password, indeed, those documents would become too much secret and without any possibility to be read.

In order to avoid the introduction of a fully encrypted system (in which information are available only if a password is known), it would be possible to suggest a different solution, adopting a "mixed" system. In order to do so, it would be required to store on the DLT only the encrypted copy of the data exchanged. This would work as a system of ex post verification against possible alterations. The solution of making public only the encrypted "trace" of the minutes, would protect company's needs for secrecy while, at the same time, guaranteeing the interested parties from possible alterations of their interventions made during the meeting. Indeed, by applying the same cryptographic function to the result of the vote or to a certain intervention, they will be able to evaluate the conformity between the vote expressed or the intervention sent and what has been recorded within the DLT. In this way DLT transparency would guarantee from alterations of the results of a meeting in the full respect of the company privacy.

5. At the base of the exercise of the administrative rights, there is the need to correctly identify their owners. For this reason, it seems useful to focus on the importance of a correct identification of those entitled to participate in companies meetings (both shareholder or director meetings), especially when they are held using tools that facilitate the remote participation through audio or video conferencing systems.

Usually the possibility of seeing a person or of hearing its voice guarantees a certain level of security in relation to the fact that the person appearing on the screen or whose voice is heard is actually the one holding the power of decision in a given meeting.

Unfortunately, recent technological developments have put the validity of this guarantee to the test. The reference is to technologies, known as “deepfake”.

Deepfake softwares make possible to replace, even in real time, one person’s face or voice with those of another. Those softwares uses artificial intelligence to faithfully reproduce the characters and voice of someone as if he were in front of the camera, even if he is not there in the reality. To do so, it is sufficient to provide the algorithm with images or videos of the person’s face to be replaced. Images that today are easily available on the internet or through social media. Uploaded those photos on the software, the system will gain the power to replace the face of the person really present in front of the camera with that of the subject whose data has been collected. The possibility to create not a simple image but completely new video material constitutes a serious danger, less dystopian than one can imagine. This fact leads to rethink the instruments used to participate in a meeting at distance.

Therefore, there is a real need to introduce non-alterable systems that guarantee the identity of a participant. As highlighted, “non alterability” is a guarantee of the adoption of a DLT systems. The dangers of a technology that can reproduce and imitate virtual sounds or images can be contrasted only with the adoption of a technology characterized by creating “objects” that cannot be reproduced.

A solution to the danger of deepfake technology could be the use of a crypto-asset with identifying function. For instance, with reference to board meetings, identification tokens could be given to board members at the time of their election. To be safer, it would be possible to connect the given crypto-asset to its holder memorizing biometrical data to prevent its alienation. In this way, before participating in a meeting, a member of the board could just make his token interact with a smart contract with the role of confirming the possessor identity.

A similar solution could be implemented for identification of participants in a shareholder meeting. This is true with reference to those company with a small shareholder base, in which the solutions described in the paragraph 4.2 cannot be adopted.

The exposed solutions are the only ways, in which it could be possible to create a secure and incorruptible system to ensure that the person who is interacting by phone or video call is the actual holder of the right to vote and speak.

6. Under Italian company law, today CorpTech myth seems not real yet. As we have seen, representing company participations through equity tokens is possible, but only under precise circumstances. The exercise of economic and voting rights using DLT systems do not find legal obstacles but only some technological ones that require the company to comply ex post with the law (in case of distribution of assets) or to safeguards company privacy (in case of adoption of DLT permissionless). With regards to

identification issues, DLT systems provides an effective solution against the perils of deepfake technology.

Analysing the relationship between DLT and the law, we find out the following results. On some occasion we have seen that is the law to impede the introduction of DLT innovations (i.e. representation and transfer of company's participations). On others, it is DLT that is not enough "technological" (i.e. exercise of administrative and voting rights). Finally, in other occasions, DLT helps law enforcement, having the power of solving real problems (i.e. against perils of deepfake technology).

Therefore, CorpTech myth is not too far to be realized. However, in order to make the myth concrete, technology (or maybe just people behaviour) need to slightly evolve. For instance, the problems of the missing link between what happen on and off chain could be solved: or (i) by discovering new technologies that could let upload money of a banking account on a blockchain or (ii) more simply, by the adoption of Bitcoin for every day payments.

In conclusion, not always we have to wait the law or the technology to intervene to solve "our" problems. Sometimes, we could just change our habits.

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[1] The term CorpTech seems to be used for the first time in L. Enriques and D. Zetzsche, Corporate technologies and the Tech Nirvana Fallacy, European Corporate Governance Institute (ECGI) – Law

Working Paper No. 457/2019, 2019, p. 9-10 and it has been referred to all technological solution applied to corporate governance systems, not only to those based on DLT.

[2] D. Yermack, Corporate Governance and Blockchains. Review of Finance, Oxford University Press, 2016, p. 17 ss.

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[4] D. Yermack, supra note 2, 2016, p. 23-24

[5] Those characteristics make smart contract suitable to be used for the execution of contracts. It is from this fact that they took their name. For more information on the history, functioning and possible applications of smart contract, please see S.L. Furnari, Validità e caratteristiche degli smart contract e possibili usi nel settore bancario finanziario, in E. Corapi and R. Lener, I diversi settori del fintech, Padova, 2019, p. 89 – 110. See also F. Sarzana Di S. Ippolito and F. M. Nicotra, Diritto della Blockchain, Intelligenza Artificiale e IoT, Milano, 2018, p. 90-114, M. Raskin, The Law and Legality of Smart Contracts, in Georgetown Law Technology Review 1:304, 2017, p. 306 ss, available at: https://ssrn.com/abstract=2959166 and K. Werbach and N. Cornell, Contracts Ex Machina, in Duke Law Journal 67:313, 2017, p. 102 ss. available at: https://ssrn.com/abstract=2936294

[6] To highlight their basic functioning, smart contract has been described as “online vending machines”. Indeed, within the blockchain, they appear as autonomous agents who perform predetermined actions in response of a precise input. See N. Szabo, Formalizing and Securing Relationship on Public Networks, 1997, p. 1

[7] In this paper we will not consider the dematerializationregime, in which the physical document (or just its circulation) is suppressed in favour of communications made by specific intermediaries. Its functioning is very similar to a DLT system. Indeed, the transferring of shares are made possible through the updating of a series of registers kept by the market management company. However, the system works thanks to the inevitable interaction of financial intermediaries (some of them similar to public entities, being their functioning subject to a precise regulation) whose participation is required by the law. This fact makes this system inevitably “centralized” and unsuitable to the adoption of DLT solutions by companies’ will. For more details on the dematerialization regime, please see R. Lener and E. M. Musumeci, La gestione accentrata di valori mobiliari in Montetitoli, Mercati Finanziari, Giuffrè, 1994, p. 10 ss., and R. Lener, La «dematerializzazione» dei titoli azionari e il sistema Monte Titoli, in Il diritto della banca e borsa. Studi e dibattiti, Giuffrè, 1989, p. 6 ss..

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[9] N. de Luca, supra note 8, 2020, p. 110

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[12] On this opinion, please see N. de Luca, supra note 8, 2020, p. 127-130.

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[16] Despite the apparent limitation of applicability of this circulatory regime, it seems still useful to analyse its functioning and its possible application to DLT, considering how similar is equity crowdfunding to an ICO. For the possibility to launch an ICO using the legal regime of equity crowdfunding, please see S.L. Furnari, ICO in Italia: applicabilità della disciplina sull'equity crowdfunding e suoi potenziali benefici, inR., Lener, Fintech: Diritto, Tecnologia e Finanza, Minerva Bancaria, 2018, p. 145

[17] Article 100-ter, paragraph 2-quater, TUF

[18] To be more precise, the token released will not represent a participation of the company. This because, according to article 100-ter, paragraph 2-bis, lett. b), no. 2, TUF, the intermediary can release to participants a mere certificate whose transfer has no effect on the transfer of the property of the quota. For this reason, the tokenreleased should be considered just as a part of the communication mechanism that let the intermediary (and only him) to transfer the property of the quotas with the recording on the register he keeps.

[19] See D. Yermack, Corporate Governance and Blokchains, in Review of Finance, Oxford University Press, e da S. T. Howell, M. Niesser and D. Yermack, Initial Coin Offerings: Financing Growth with Cryptocurrency Token Sales, in Finance Working Paper 564/2018, European Corporate Governance Institute (ECGI), 2018.

[20] This is a widely known problem that limits blockchain potentiality. For instance, in blockchain applications to food traceability, the linking role between what is on and off the chain is usually played by certifying agents. While this solution may solve the problem, on the other hand it introduces new intermediaries in a system that professes itself to be disintermediated, not solving another issue consisting in the possible corruption of those intermediaries. Therefore, in those solutions, the traditional principal-agent problem is just shifted on other subjects.

[21] For more information, please see R. Lener and A. Tucci, L'assemblea nelle società di capitali, Giappichelli, 2000

[22] In this case it will be necessary to choose carefully the DLT most suitable for the concrete needs. This is because each DLT has its own time rules about the recording of information. These rules may require seconds or minutes before votes or interventions are recorded on the database. This is because, like any transaction to be recorded on this infrastructure, all information must be validated by the nodes. The order in which the nodes proceed with the validation depends on the amount of fee the person who sends the transaction is willing to pay.

However, nothing prohibits that these problems can be solved using more performant DLT. This is not a utopia. In this regard it sufficient to consider the improvement in terms of speed of recording information that has been made by Ethereum blockchain in respect to Bitcoin. Here, Bitcoin time of 10 minutes for the addition of a new block (i.e. to record a transaction) has been overcome by Ethereum 15 seconds to perform the same activity.

[23] These systems could be implemented thanks to article 2215-bis c.c., already mentioned, which allows to keep company's books electronically.

[24] Permissionless DLTs can ensure a higher level of security than permissioned DLTs. This is true on the assumption that the more are the nodes, the less is the danger of a takeover of its majority that could alter the information contained therein. In brief, permissionless DLT offer a great level of decentralization. On the other hand, by definition their content is potentially "transparent" and therefore open to public consultation.

[25] For more information with regards to the compatibility between privacy and DLT, please see F. Bassan, Innovazione tecnologica e regolazione nell'Unione Europea. I mercati dell'algoritmo tra concorrenza e protezione dei dati, in S. Dominelli e G. L. Greco, I Mercati dei servizi fra regolazione e governance, Giappichelli, 2019, p. 19-20

[26] As briefly explained in section 2, nodes are those who will have the powers of detention, validation and (potentially) modification of the copy of the register they held. On a company level, it is easy to note that whatever category of subjects will be selected, it is not possible to identify a solution that has not weak points. For instance, in the case in which the holders of the nodes are chosen in all the employees of the company, it is evident how the economic subordination to other company figures involves a serious danger to the independence of the nodes so chosen. A similar problem could arise considering the category of the shareholders. Here the biggest issue concerns the choice on how to divide the "decisional weight" to be given to each node. If, indeed, all shareholders have equal powers in holding the DLT register, it is not difficult to imagine the possibility that the minority, where numerically greater than the majority, could technologically overturn the corporate balance. Similar reasoning, but in the opposite sense, in the event that the majority shareholder also holds the majority of the decision-making power attributed in the possession of the nodes. In this scenario, the majority will be provided with an additional tool to prevail even more easily over the minority. Finally, even the decision to entrust the holding of the nodes to an even wider circle of subjects, i.e. the stakeholders of the company, if on the one hand allows to solve some of the problems raised above, on the other would leave the field open to further uncertainties. The first and most important problem would regard precisely the criteria with which identifying the stakeholders, combining their role (e.g. bondholders, creditors, suppliers) with the existence of the current interest in obtaining access to important and non-public documents that will be chosen to be kept on the DLT register.

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«They say things are happening at the border, but nobody knows which border» (Mark Strand)

"Size & fit" of piecemeal liquidation processes. Aggravating circumstances and side effects

by **Rosa Cocozza and Rainer Masera**

Abstract: *This paper investigates the actual impact of new accounting and regulatory requirements on banks' provisioning policies and earnings management in the context of the capital adequacy of Euro Area (EA) credit institutions. This paper also examines whether loan-loss provisions signal managements' expectations concerning future bank profits to investors. Evidence drawn from the 2011-2019 period indicates that earnings management is an important determinant of LLPs for EA intermediaries. During recent years, small bank managers are much more concerned with their credit portfolio quality and do not use LLPs for discretionary purposes apart from income smoothing. The paper gives evidence of a lack of flexibility in the Balance-Sheet of smaller banks and provides some policy refinement to avoid disorderly piecemeal liquidation.*

1. The concept of proportionality, embedded in all legal systems, aims at keeping the level of public intervention – in the form of rules and restrictions or sanctions – appropriate to what is actually needed to achieve the desired social objectives. In banking regulation, proportionality should ensure that rules are applied in a manner that is appropriate, considering the bank's size and internal organization and the nature, scope and complexity of its activities. The drivers for proportionality are not only the size of banks, but also their business models, complexity, and systemic relevance. In theory, simple and "easy to apply rules" are necessary for small and medium-sized banks, while more sophisticated banks may develop their own systems, tailor-made for the risks of their business and their groups.

Therefore, proportionality is originally a matter of calibration of prudential requirements: the existence of resilient business models should not be put at risk by excessively high requirements or by requirements which are not relevant for some business models. Eventually, proportionality turns into a matter of "costs". Complex approaches are costly to implement, and they may have no added value when it comes to measure the risk incurred by simple activities. In addition, undue complexity is another source of risk for both banks and regulators. Thus, banks with a simple and limited activity should be able to implement simplified approaches to avoid undue complexity. In this perspective,

proportionality, boosting calibrated diversity, contributes to the resilience of the banking sector. Or else, at least, it should.

Ultimately, proportionality poses a question of adequacy of interlocutors and not merely of instruments or procedures. The adequacy regards both the supervisory approaches and the actor's characteristics. As a matter of fact, there is the need for an inner consistency in the financial system, guaranteeing a level playing field for the industry and creating reciprocity between protagonists and antagonists as well as between supervised entities and supervisors, thus giving rise to the concept of "regulatory adequacy framework" (Cocozza, 2019).

The banking crisis discipline cannot be secluded from this framework. Or, once again, at least it should not. Focusing on the crisis management framework for banks, within the European Union legal framework, the resolution procedure can only be used when public interest is at stake. It appears that resolution is available for a small number of large banks. Other banks' crises must be handled through national insolvency procedures. As known, national insolvency regimes normally result in a piecemeal liquidation, which gives no guarantees that exit from the market will take place in an orderly fashion. If interested acquirers cannot be rapidly identified, liquidation will lead to theimmediate disruption of the bank's core activities, to the disposal of assets and collateral at fire sale prices, and to non-insured creditors having a lengthy wait to obtain partial and uncertain reimbursement. Confidence in other banks may be shaken, with possible knock-on effects on the real economy. A disorderly piecemeal liquidation process is clearly not efficient and entails serious concerns, given the social and economic importance of the banking industry. A solution has thus to be found to avoid disorderly piecemeal liquidations for banks, as has been recognized by many authorities and commentators.

Hence, there is a growing concern about the possibility of direct losses arising from mis-marked complex instruments as well as about the implications that disorderly piecemeal liquidation process can have on reputation, and perceived ability to control the business, and about a huge scatter of prospective profit margin originated by banks, because of fire sale prices in case of unduly managed liquidation.

Solutions to avoid disorderly piecemeal liquidation for banks can assume many potential shapes from a policymaker perspective. Nevertheless, solutions must consider coeval conditions that could require a (fine?) tuning of intervention to avoid vicious spillover. Procyclicality is one of the main issues related to the regulatory framework which imposes capital requirements to be calculated as a percentage of bank risky loans: it entails that supervisory capital requirements are higher when economic conditions get worse, and lower in case of economic upturn. Procyclicality is generally considered a sort of acceptable side effect, at least if the context is not extremely severe. On the contrary, if the situation turns to be dangerous, procyclicality could end up "the" risk driver, since capital requirements could become paradoxically "lethal requirements". This is today issue for many reasons. Inter alia, three are the major concerns.

Firstly, the COVID-19 pandemic is inflicting high and rising human costs worldwide, and the necessary protection measures are severely impacting economic activity. As a result of the pandemic, according to

the International Monetary Fund (IMF, 2020b) the global growth is projected at –4.9 percent in 2020, 1,9 percentage points below the April 2020 World Economic Outlook (WEO) forecast. The COVID-19 pandemic has had a more negative impact on activity in the first half of 2020 than anticipated, and the recovery is projected to be more gradual than previously forecast. In 2021 global growth is projected at 5.4 percent. Overall, this would leave 2021 GDP some 6½ percentage points lower than in the pre-COVID-19 projections of January 2020. The adverse impact on low-income households is particularly acute, imperiling the significant progress made in reducing extreme poverty in the world since the 1990s. The risks for even more severe outcomes, however, are substantial. Effective policies are essential to forestall the possibility of worse outcomes, and the necessary measures to reduce contagion and protect lives are an important investment in long-term human and economic health. Because the economic fallout is acute in specific sectors, the IMF recognizes that policymakers will need to implement substantial targeted fiscal, monetary, and financial market measures to support affected households and businesses domestically. Growth in the advanced economy group – where several economies are experiencing widespread outbreaks and deploying containment measures – is projected at -6,1 percent in 2020. Most economies in the group are forecast to contract this year, including the United States (-5,9 percent), Japan (-5,2 percent), the United Kingdom (-6,5 percent), Germany (-7,0 percent), France (-7,2 percent), Italy (-9,1 percent), and Spain (-8,0 percent). In parts of Europe, the outbreak has been as severe as in China's Hubei province (IMF, 2020a). Although essential to contain the virus, lockdowns and restrictions on mobility are extracting a sizable toll on economic activity. Adverse confidence effects are likely to further weigh on economic prospects. In a nutshell, from the banking perspective, credit risk is growing at faster pace than ever.

Apart from the economic downturn, there are two main aggravating circumstances to be considered extremely relevant: the so called "calendar provisioning" and the actual implementation of IFRS9. As part of the prudential framework, the Addendum of the ECB (ECB, 2018) raise the supervisory expectations about prudential provisioning, by imposing a predetermined time horizon for the total impairment of those exposures that are classified – or reclassified from performing to – non-performing, in line with the European Banking Authority's definition, after 1 April 2018, irrespective of their classification at any moment prior to that date, implementing to the so called "calendar provisioning". As a matter of fact, within 2 (7) years of NPE vintage for unsecured (secured) loan, the impairment process has to be terminated.

Moreover, the implementation of the IFRS9 for the accounting periods beginning on or after 1 January 2018. The International Financial Reporting Standards came into effect in January 2005 for the European Union banks. These market-oriented standards are supposed to increase financial disclosure and the overall reliability of financial reporting, if compared to the local generally accepted accounting principles. Furthermore, since they admit a limited number of options and do not allow hidden reserves, their application should make less likely the discretionary use of Loan Loss Provision (LLP) by bank managers (Barth et al., 2008; Leventis et al., 2011). According to the IFRS/IAS 39, loan assessment is based on the amortized cost and LLPs are calculated on the so called "incurred loss", i.e., a loss already occurred or presumed on the basis of an event already occurred, though after the loan was granted. The adoption of a more forward-looking approach to loan-loss provisioning, based on the "expected credit loss" contributes to the additional exacerbation of growing credit risk impact, especially

if, as in our case, the definition/identification of Non-Performing Exposure (NPE) is strictly set by regulators.

Therefore, the economic downturn might be coupled with procyclical effect of contemporary bank capital adequacy regulation and accounting principles[1] and might have significant impact on banks of different size. Among the extreme consequences, we could list “a sort of credit crunch” due to diseconomies of regulation because of procyclicality of capital adequacy, especially in the form of Loan Loss Provisions (LLPs), as well as a fatal impact on different banks with various business model because of the increasing spur – in terms also of moral suasion – towards the reduction of Impaired Loan ratio (IL) “whatever it takes”.

The final target of the study is, therefore, the evaluation of the procyclicality and of the implementation of the IFRS9 on the provisioning policies across banks of different sizes, to evaluate the relative importance of these aggravating circumstances.

The remainder of the paper is organized as follows. In section 2, we briefly summarize the current main trend as from the European Central Bank Supervisory Statistics. Section 3 provides a literature review, developing the rationale for managers to use their discretion in estimating loan-loss provisions. Section 4 describes the data, the sample selection process, and the methodology we adopt in our analysis. In section 5 we present and discuss the empirical evidence. Section 6 concludes the discussion also with policy implication.

2. An insight into the most recent (2015-2020) dynamics of key performance indicators such as Return On Equity (ROE), Return on Asset (ROA) and Cost/Income Ratio (CIR) returns an image of the main current trends in profitability and solvability. According to the ECB Supervisory and prudential statistics[2], the average reducing ROE and ROA exhibit a more relevant shrinkage for medium-large and large banks rather than for medium-small and small institutions whereas the CIR grows more rapidly for small and medium-large banks rather than for the others (Chart 1, Chart 2, Chart 3, Chart 4). The incidence of the impairment (IMP) on the Net Operating Income boosted in the first month of the current year.

If we concentrate on the standard deviation of the series, we observe a noteworthy difference in the variability of the returns, accounting for assorted risk exposure, which appears more relevant for medium-large banks (Table 1).

Table 1

	ROE			ROA		
	Mean	St. Dev.	Slope	Mean	St. Dev.	Slope
TA<30 bln€	4,39%	2,39%	0,07%	0,41%	0,23%	0,07%
30<TA<100 bln€	3,02%	2,55%	0,15%	0,27%	0,22%	-0,13%
100<TA<200 bln€	2,87%	3,40%	-0,13%	0,19%	0,22%	-0,10%

TA>200 bln€	7,04%	1,48%	-0,10%	0,46%	0,10%	0,00%
	CIR	IMP/NOI				
	Mean	St. Dev.	Slope	Mean	St. Dev.	Slope
TA<30 bln€	66,44%	5,08%	0,68%	17,24%	9,09%	-0,79%
30<TA<100 bln€	58,55%	2,48%	0,26%	24,50%	14,47%	-1,44%
100<TA<200 bln€	68,83%	6,37%	0,92%	22,76%	12,07%	-0,86%
TA>200 bln€	63,56%	3,72%	0,35%	13,81%	6,58%	0,19%

As a matter of fact, small banks show more stable figures than medium ones with reference to ROE. Unsurprisingly, large banks are less risky and more capable to control costs, and therefore efficient, according to modern portfolio theory. The resulting allocation of smaller banks under the efficient frontier or, in other words, their meager profitability normally raises question about the overall sustainability of certain business models and ends up encouraging merger and consolidation, as the most effective ways to achieve economies of scale and decrease relative costs. However, banks are aware of the potential hidden consequences of these operations – for example, loss of local focus (particularly when mergers entail the closing of local branches) or risks stemming from the integration of different IT systems. In addition, the cost of performing due diligence on target banks is a considerable side effects of acquisitions.

Chart 1

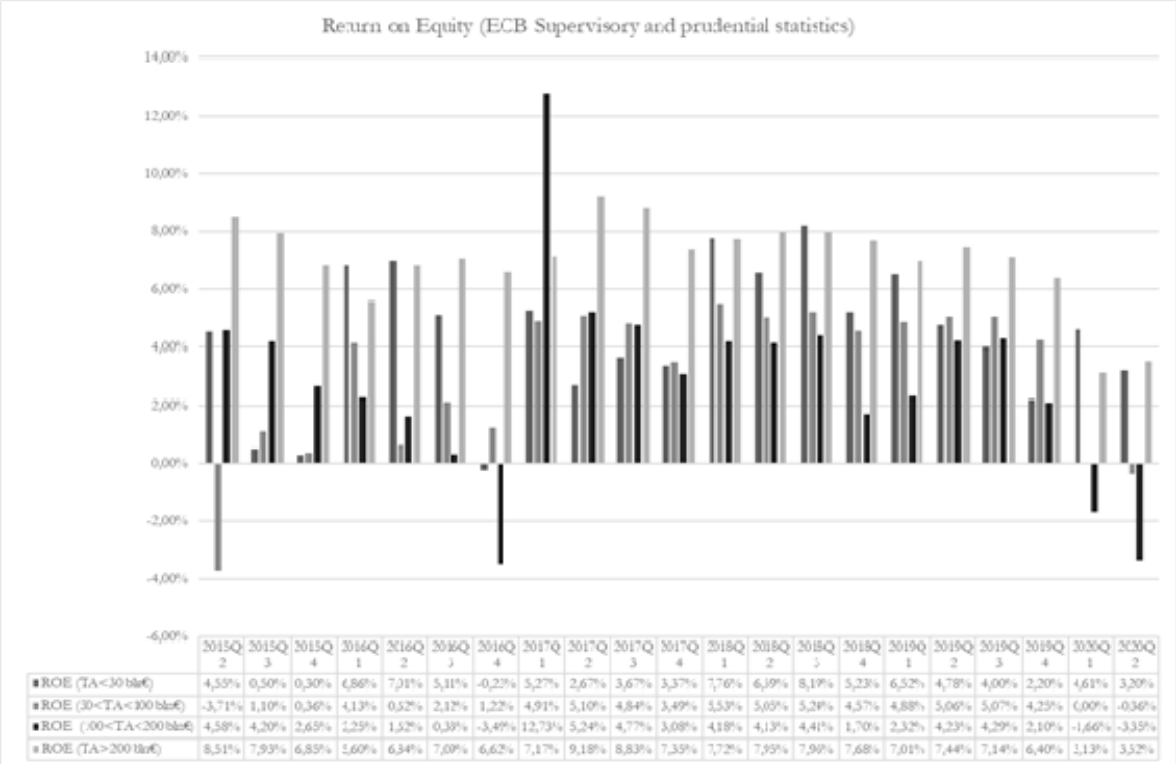
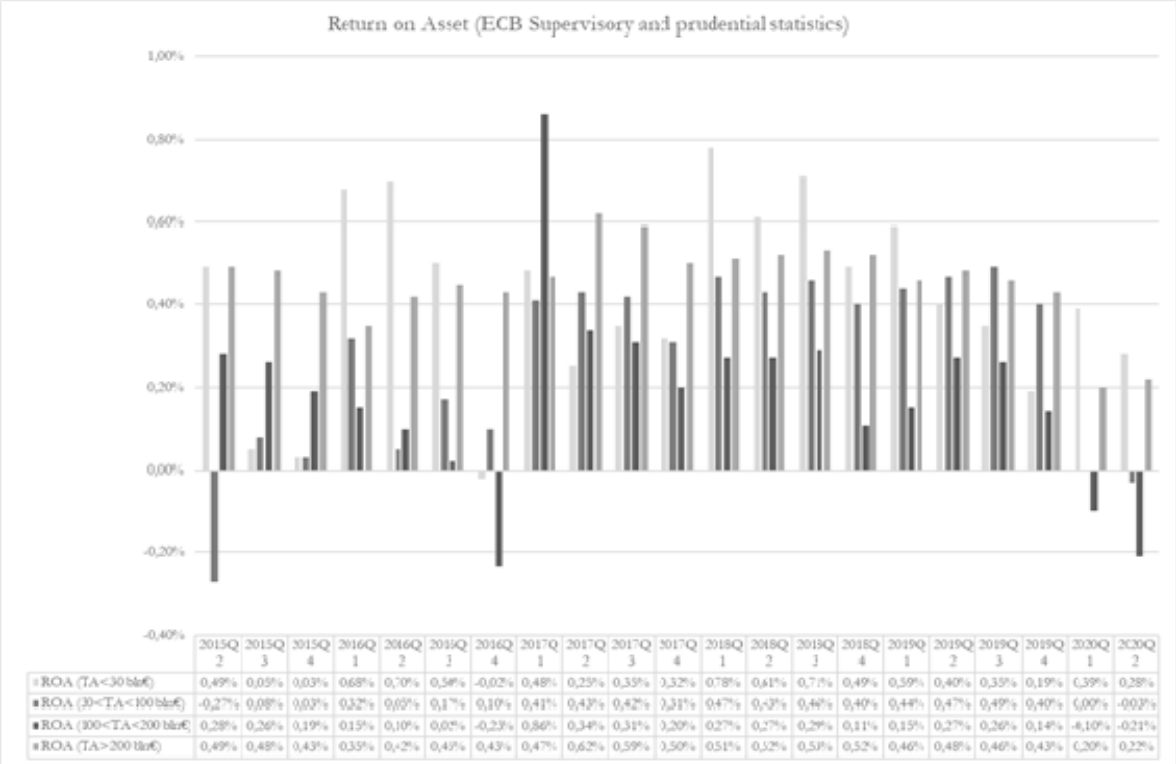
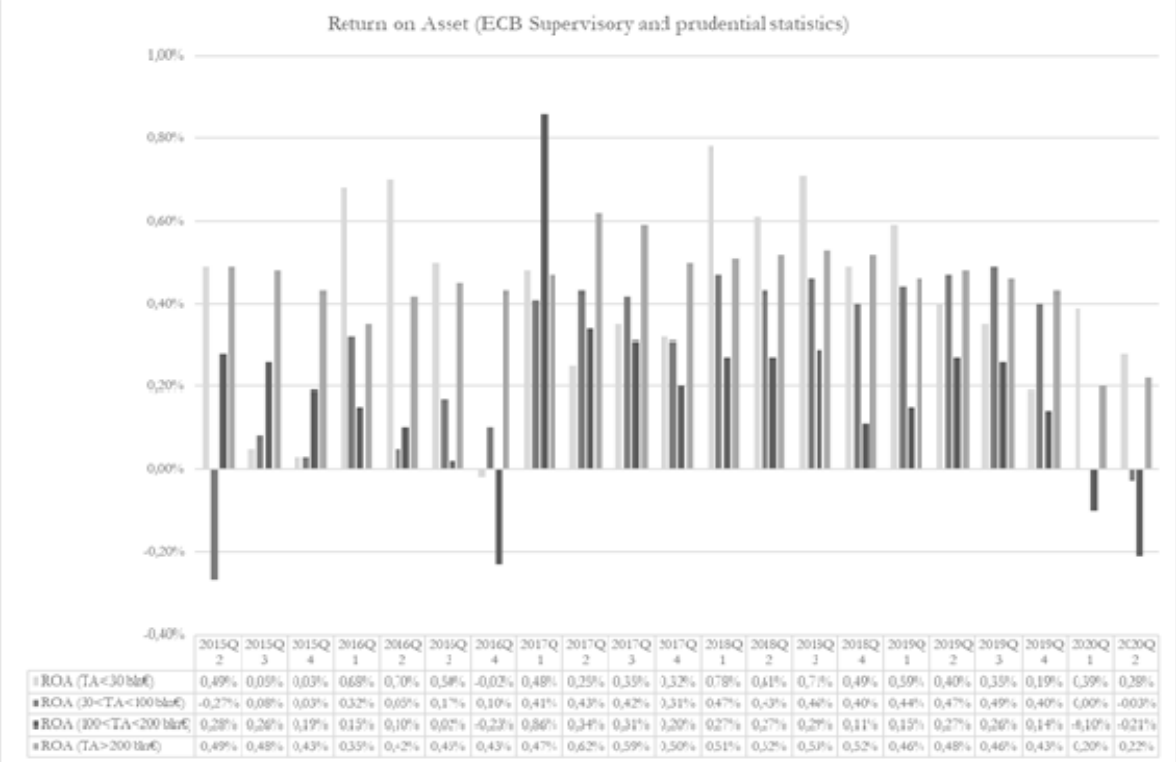


Chart 2



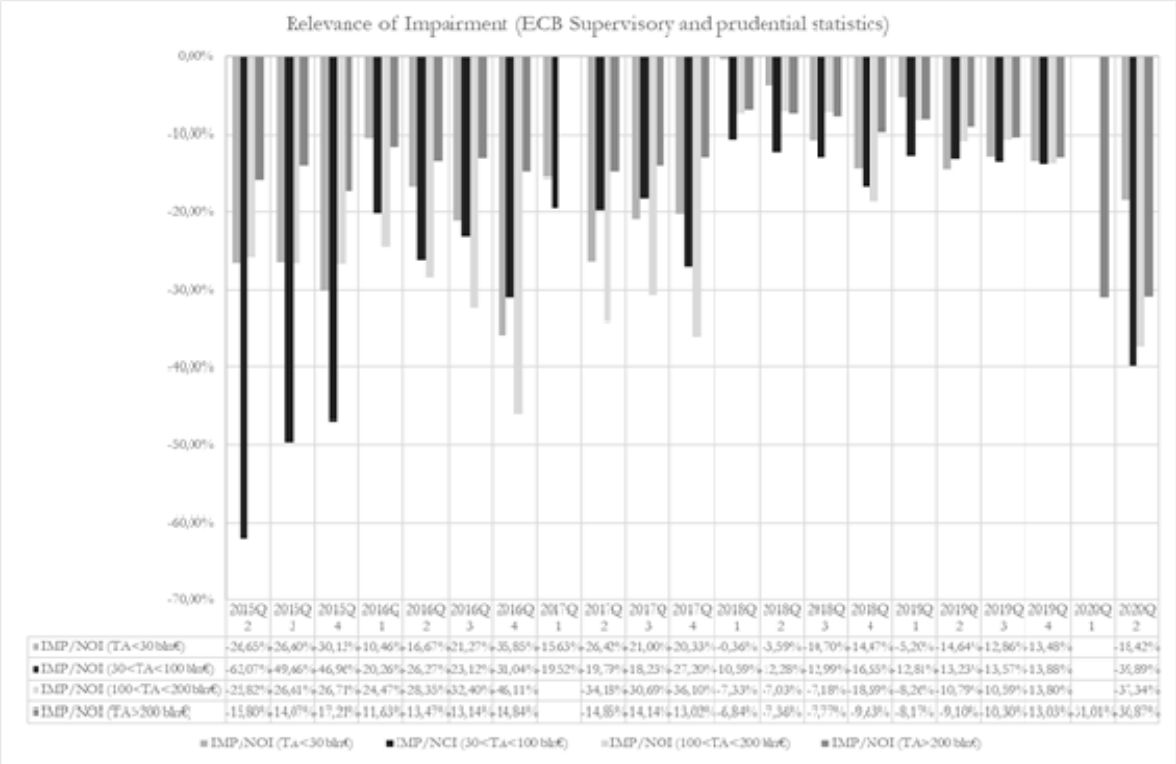
	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2
ROA (TA<30 bln€)	0,49%	0,05%	0,03%	0,68%	0,70%	0,58%	-0,02%	0,48%	0,25%	0,35%	3,32%	0,78%	0,61%	0,71%	0,49%	0,59%	0,40%	0,35%	0,19%	-0,39%	0,28%
ROA (30<TA<100 bln€)	-0,27%	0,08%	0,03%	0,32%	0,05%	0,17%	0,10%	0,41%	0,43%	0,42%	3,31%	0,47%	0,43%	0,46%	0,40%	0,44%	0,47%	0,49%	0,40%	0,00%	-0,03%
ROA (100<TA<200 bln€)	0,28%	0,26%	0,19%	0,15%	0,10%	0,05%	-0,23%	0,86%	0,34%	0,31%	3,20%	0,27%	0,27%	0,29%	0,11%	0,15%	0,27%	0,26%	0,14%	-0,10%	-0,21%
ROA (TA>200 bln€)	0,49%	0,48%	0,43%	0,35%	0,42%	0,43%	0,43%	0,47%	0,62%	0,59%	3,50%	0,51%	0,52%	0,53%	0,52%	0,46%	0,48%	0,46%	0,43%	0,20%	0,22%

Chart 3



	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2
ROA (TA<30 bln€)	0,49%	0,05%	0,03%	0,68%	0,70%	0,58%	-0,02%	0,48%	0,25%	0,35%	3,32%	0,78%	0,61%	0,71%	0,49%	0,59%	0,40%	0,35%	0,19%	-0,39%	0,28%
ROA (30<TA<100 bln€)	-0,27%	0,08%	0,03%	0,32%	0,05%	0,17%	0,10%	0,41%	0,43%	0,42%	3,31%	0,47%	0,43%	0,46%	0,40%	0,44%	0,47%	0,49%	0,40%	0,00%	-0,03%
ROA (100<TA<200 bln€)	0,28%	0,26%	0,19%	0,15%	0,10%	0,05%	-0,23%	0,86%	0,34%	0,31%	3,20%	0,27%	0,27%	0,29%	0,11%	0,15%	0,27%	0,26%	0,14%	-0,10%	-0,21%
ROA (TA>200 bln€)	0,49%	0,48%	0,43%	0,35%	0,42%	0,43%	0,43%	0,47%	0,62%	0,59%	3,50%	0,51%	0,52%	0,53%	0,52%	0,46%	0,48%	0,46%	0,43%	0,20%	0,22%

Chart 4

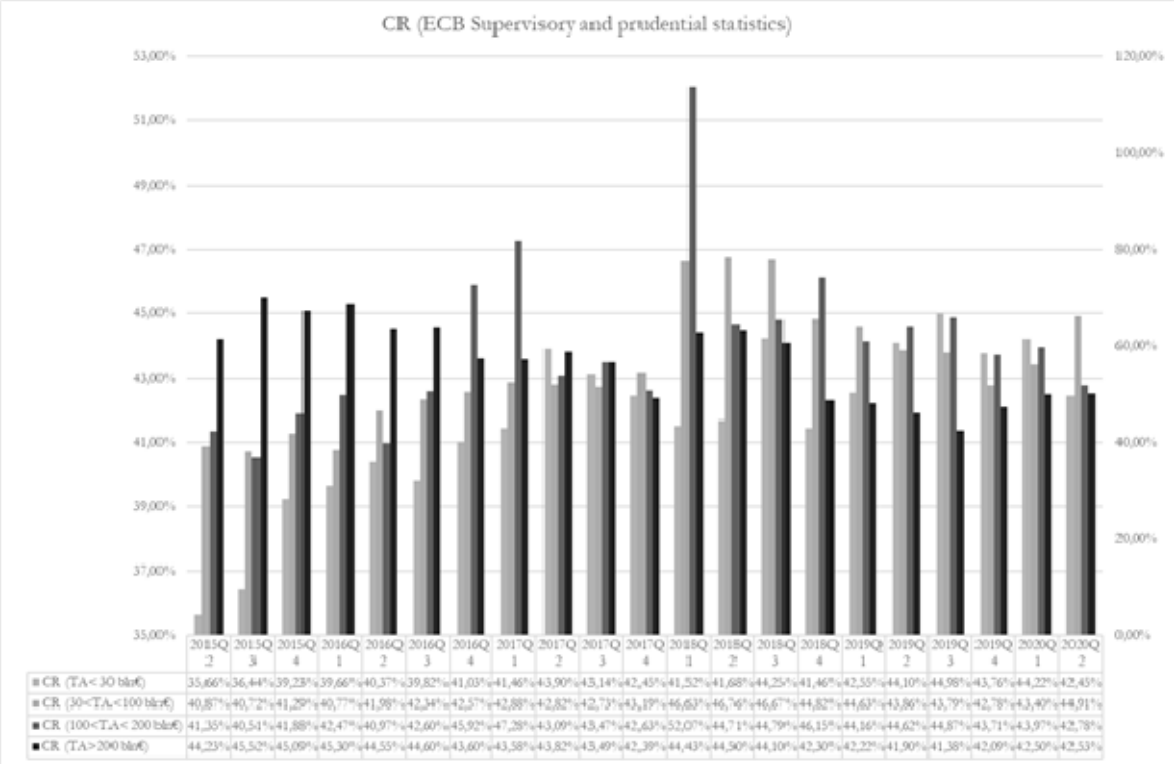


One area of main attention is the asset quality, both for capital requirements and substantial business development. According to the best practice, banks should adopt a formalized strategy for optimizing Non-Performing Loan (NPL) management by maximizing the current value of recoveries. This strategy should be defined based on an analysis of their management capabilities, the external environment, and the characteristics of their non-performing portfolios. It must strike the best possible balance between the various recovery options: internal workout solutions or outsourcing to credit collection specialists; forbearance; foreclosure; legal procedures or out-of-court negotiations; disposals (including securitization transactions) with accounting and prudential derecognition of the assets sold. As a matter of fact, banks have recently devoted their efforts – "whatever it takes" – towards the reduction of NPL, as shown by Chart 5 and Chart 6 depicting both the NPL ratio (NPLR) and the Coverage Ratio (CR).

Table 2

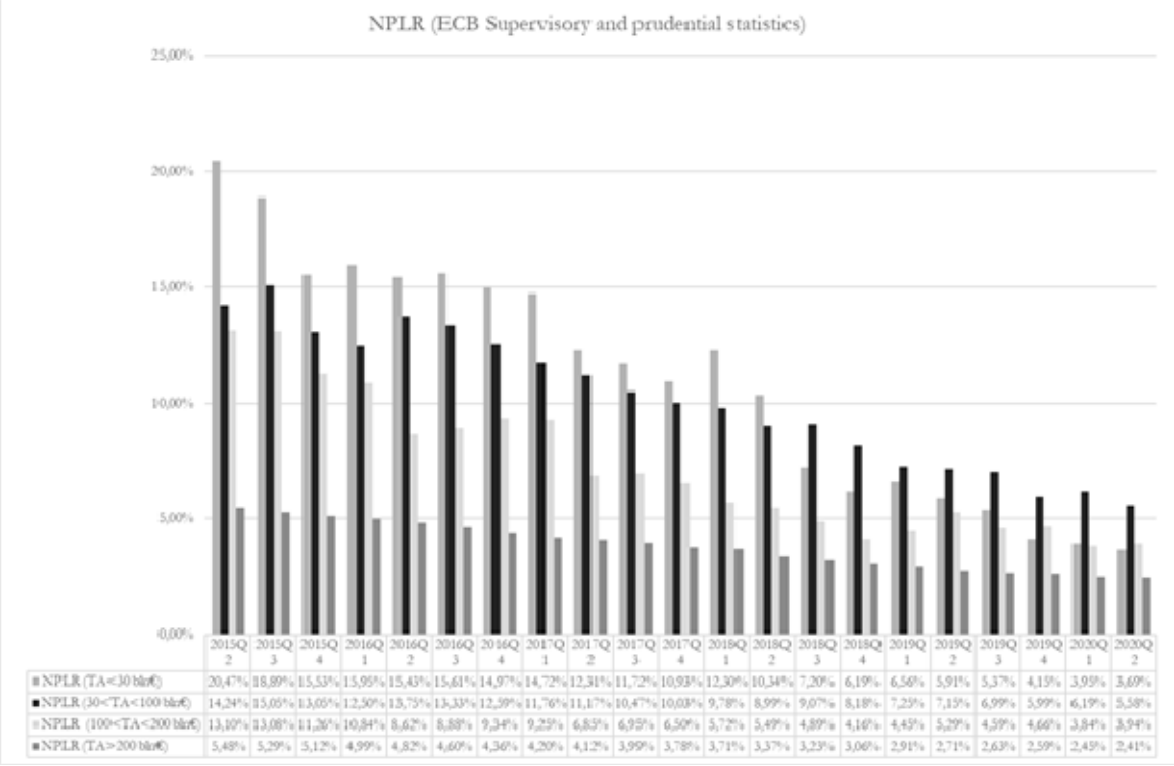
	CR			NPLR			SR		
	Mean	St. Dev.	Slope	Mean	St. Dev.	Slope	Mean	St. Dev.	Slope
TA<30bln€	41,63%	2,48%	0,33%	11,06%	5,18%	-0,82%	20,04%	1,16%	0,02%
30<TA<100bln€	43,35%	1,85%	0,20%	10,15%	2,96%	-0,47%	18,36%	1,55%	0,17%
100<TA<200bln€	44,00%	2,53%	0,15%	7,22%	3,00%	-0,46%	18,30%	0,52%	0,07%
TA>200bln€	43,53%	1,23%	-0,16%	3,80%	1,00%	-0,16%	18,16%	1,36%	0,19%

Chart 5



	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2
CR (TA< 30 bln€)	35,66%	36,44%	39,23%	39,66%	40,37%	39,82%	41,03%	41,46%	43,90%	43,14%	42,45%	41,52%	41,68%	44,25%	41,46%	42,55%	44,10%	44,98%	43,76%	44,22%	42,45%
CR (30<TA<100 bln€)	40,87%	40,72%	41,29%	40,77%	41,98%	42,34%	42,57%	42,88%	42,82%	42,73%	43,19%	46,63%	46,76%	46,67%	44,82%	44,63%	43,86%	43,79%	42,78%	43,90%	44,91%
CR (100<TA< 200 bln€)	41,35%	40,51%	41,88%	42,47%	40,97%	42,60%	45,92%	47,28%	43,09%	43,47%	42,63%	52,07%	44,71%	44,79%	46,15%	44,16%	44,62%	44,87%	43,71%	43,97%	42,78%
CR (TA>200 bln€)	44,23%	45,52%	45,09%	45,30%	44,55%	44,60%	43,60%	43,58%	43,82%	43,49%	42,39%	44,43%	44,90%	44,10%	42,30%	42,22%	41,90%	41,38%	42,09%	42,50%	42,53%

Chart 6



	2015Q2	2015Q3	2015Q4	2016Q1	2016Q2	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2	2018Q3	2018Q4	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2
NPLR (TA<30 bln€)	20,47%	18,89%	15,53%	15,95%	15,43%	15,61%	14,97%	14,72%	12,31%	11,72%	10,93%	12,30%	10,34%	7,20%	6,19%	6,56%	5,91%	5,37%	4,15%	3,95%	3,69%
NPLR (30<TA<100 bln€)	14,24%	15,05%	13,05%	12,50%	13,75%	13,33%	12,59%	11,76%	11,17%	10,47%	10,03%	9,78%	8,99%	9,07%	8,18%	7,25%	7,15%	6,99%	5,99%	6,19%	5,58%
NPLR (100<TA<200 bln€)	13,10%	13,08%	11,26%	10,84%	8,62%	8,88%	9,34%	9,25%	6,85%	6,95%	6,50%	5,72%	5,49%	4,89%	4,16%	4,45%	5,29%	4,59%	4,66%	3,84%	3,94%
NPLR (TA>200 bln€)	5,48%	5,29%	5,12%	4,99%	4,82%	4,60%	4,36%	4,20%	4,12%	3,99%	3,78%	3,71%	3,37%	3,23%	3,06%	2,91%	2,71%	2,63%	2,59%	2,45%	2,41%

Chart 7

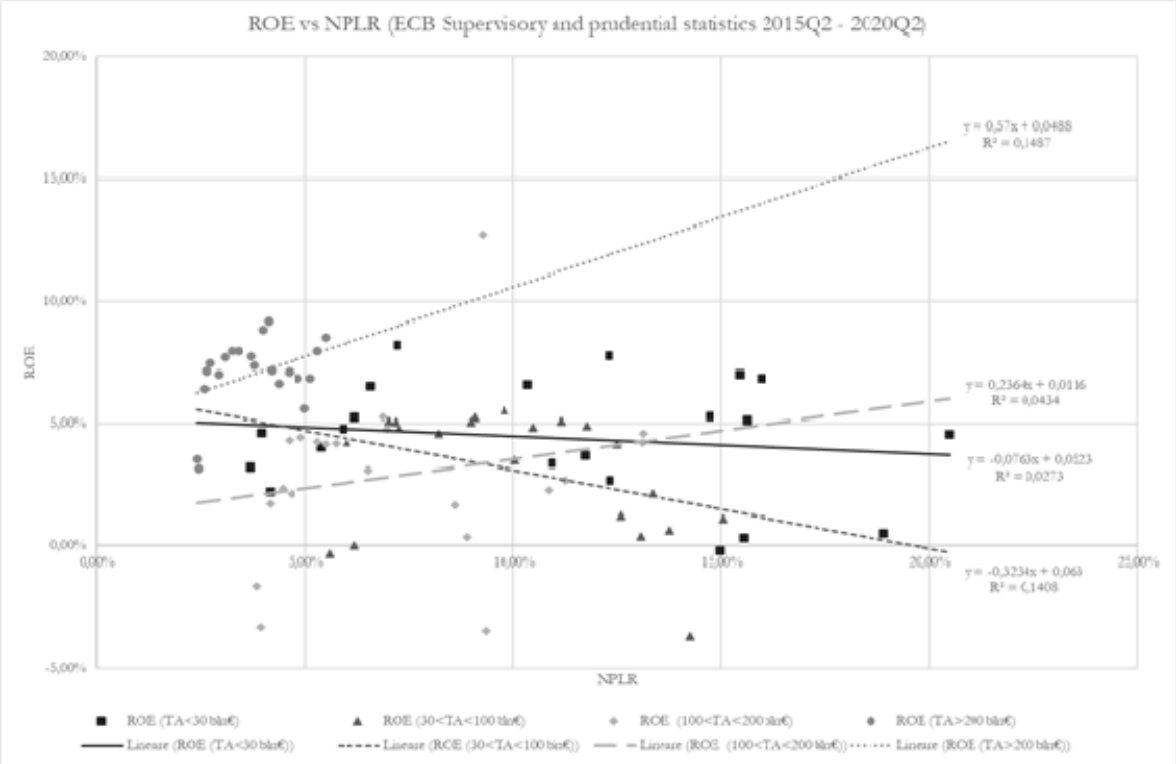


Chart 8

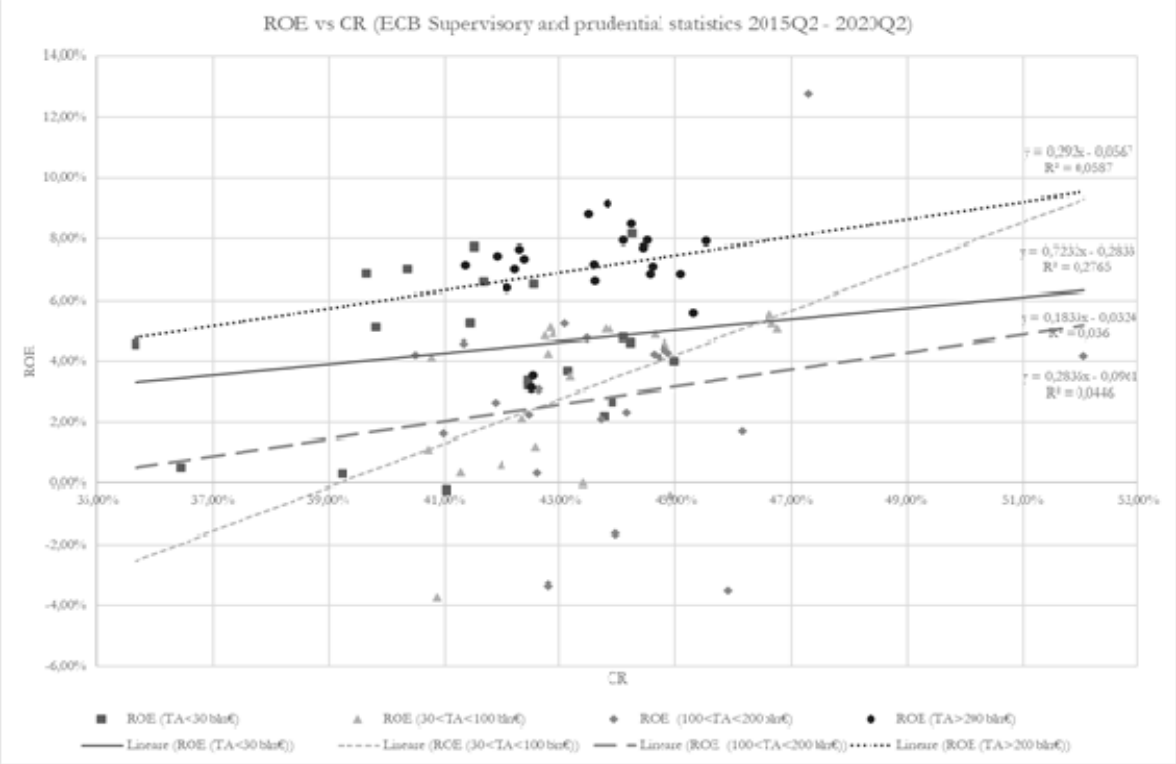
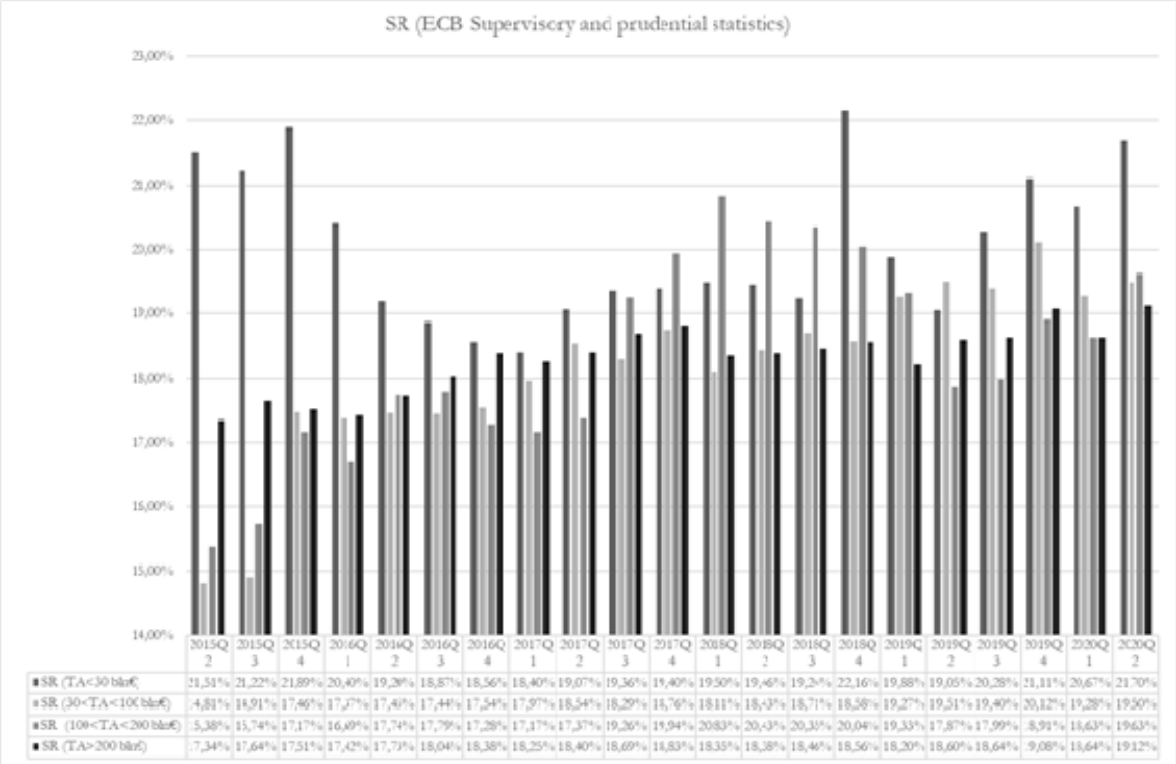


Chart 9



It is also worth mentioning that the drop in the NPLR have dissimilar impacts on the ROE of diverse size banks. As shown by Chart 7, larger banks report a decline in ROE alongside the reduction of NPLR whilst smaller bank face the opposite. This poses a fundamental question on the real economic impact of the NPL cutback, mainly if it is pursued by selling “whatever it takes”. The inverse correlation between the ROE and the NPLR detected for small and medium small banks (Chart 7) could imply that the NPL increase –– forces smaller bank to raise provisioning and reduce, ceteris paribus, profit margin. In other words, we could face a situation in which even more often “the operation was successful, but the patient died”. At the same time, the inverse correlation between ROE and NPLR could account for a business model merely focused on credit supply and, therefore, unable to recover loan loss and provision with other income areas. This could reinforce the belief that larger banks, thanks to a intermediation portfolio less focused on lending, are able to counterbalance the increase in loan loss and provision with other sources of profit, mainly connected to services (commission and fees)[3].

Besides, the prevailing positive relationship between ROE and CR (Chart 8) confirms that bank equity acts as income propeller, providing buffer margin for increasing costs and additional expenses. This role is far sharper in small banks (see slope figure in Chart 8) than in the others, since they show the highest average solvency ratio (SR) over the reported years (Chart 9 and Table 2).

Therefore, we observe a growing stiffness of the balance-sheet architecture for smaller banks. The statement’s anelasticity, due to a limited diversification of the business model and to the supervisor’s imperative towards NPE reduction, makes smaller banks less capable to react promptly to economic

shocks. The COVID-19 pandemic is not only a sudden shock, but a “persisting downturn” and it might be enhanced in its hazardous effect by procyclicality in the capital requirement and prudential provisioning, creating a favorable environment for disorderly piecemeal liquidation.

3. As known, loan-loss provisions (LLPs) are one of the main accrual expenses for banks. The role they play within a bank’s financial statements is crucial, given the sensitive information they convey: LLPs are set aside to face a future deterioration of credit portfolio quality. However, provisioning policy can pursue goals that are different from a fair representation of the evolution of a bank’s loan losses. Prior research suggests four central reasons to explain managerial behavior concerning LLPs: income smoothing, capital regulation, signaling, and taxes. The main purpose of this study is, therefore, to examine the use of loan-loss provisions in managing earnings and regulatory capital ratios and in signaling managers’ private information concerning a bank’s future earnings within the European banking industry as an aggravating circumstances of the piecemeal liquidation processes.

Papers addressing the issue of LLP’s as a key variable in depicting the future bank outcomes detect the potential changes in banks’ behavior in earnings and capital management via LLPs. With reference to European banks, Fonseca and Gonzàlez (2008) study the institutional factors affecting income smoothing via LLPs in banks globally, including a number of European countries, finding that income smoothing is negatively related to: investor protection, accounting disclosure, restrictions on bank activities, and external and internal supervision. Bouvatier and Lepetit (2008) report that poorly capitalized European banks are constrained to expand credit and that loan-loss provisions are made to cover expected future loan losses, intensifying credit fluctuations. On the contrary, LLPs used for management objectives do not affect credit fluctuations. Perez et al. (2006) test the use of loan-loss provisions for income smoothing and capital management within the Spanish banking system, finding evidence that supports income smoothing but not capital management. By examining a sample of 91 listed European banks, Leventis et al.(2011) find that earnings management is significantly reduced after the implementation of the International Financial Reporting Standards (IFRS) and that capital management is not significant in both pre and post IFRS regime. Using a sample of 491 banks over the period 1996-2006, and comparing banks from Euro Area (EA) countries and banks from countries where the Euro currency is not used, Curcio and Hasan (2013) find that: loan-loss provisions reflect changes in the expected quality of banks’ loan portfolio; earnings management is strongly supported for EA but not for non-EA banks; non-EA institutions do use loan-loss provisions to signal private information to outsiders, whereas EA banks do not; and, finally, restrictions on bank activities and stronger creditors protection help to reduce incentives to smooth earnings, especially in the EA banking systems. They also examine for a restricted sample of 195 banks, provisioning policies during the financial crisis. During the 2007-2010 time horizon, they find evidence of a change in banks’ behavior in terms of their use of loan-loss provisions at both EA and non-EA intermediaries. Particularly, loan-loss provisions become pro-cyclical and are not used to smooth bank income any more at EA credit institutions, whereas, contrary to what is observed during the 1996-2006 period, non-EA banks use LLPs as a tool for income smoothing during the crisis, but not for managing their capital ratios or to convey private information to the market.

Provisioning plays a crucial role in ensuring the safety and strength of banking systems and hence is a key focus of bankers and bank supervisors. Asset quality reviews (AQRs) and stress tests (STs) have further highlighted the need for consistent provisioning methodology and adequate provisioning levels across banks. Historically, accounting rules have pursued two alternative goals: the conservative valuation of assets, which is central in the European accounting system, and the accurate measurement of each period's net income, strongly emphasized by the American accounting set of rules.

With reference to Non Performing Exposure (NPE), supervisors foster both adequate measurement of impairment provisions through sound and robust provisioning methodologies and timely recognition of loan losses within the context of relevant and applicable accounting standards (with a focus on IAS/IFRS accounting standards) and timely write-offs. At the same time, they promote enhanced procedures including significant improvement to the number and granularity of asset quality and credit risk control disclosures (ECB, 2017). The adequacy provisioning framework include the identification of individual or, as appropriate, collective assessment of impairment[4] and the estimate future cash flows. The estimate involves a fundamental reference to the appropriate accounting standard (IAS 39/IFRS9), since it lay down the principles for impairment recognition. IFRS 9 financial instruments, which replaced IAS 39 for the accounting periods beginning on or after 1 January 2018, require among other things the measurement of impairment loss provisions based on an expected credit loss ("ECL") accounting model rather than on an incurred loss accounting model as under IAS 39, thus enhancing the anticipation of the actual losses and stressing procyclicality. Potentially, the above described set of rules represents a step forward in the direction of a higher level of accounting transparency. Nevertheless, the new accounting rules could made bank returns more volatile, and lending policies even more pro-cyclical than the past.

As stated, the Addendum of the ECB raise the supervisory expectations about prudential provisioning, by imposing a predetermined time horizon for the total impairment of those exposures that are classified – or reclassified from performing to – non-performing, in line with the European Banking Authority's definition, after 1 April 2018, irrespective of their classification at any moment prior to that date, implementing to the so called "calendar provisioning". According to the Addendum, unsecured NPEs must be totally impaired after 2 years of NPE vintage, while secured NPEs must be entirely impaired after 7 years of NPE vintage. Moreover, if the applicable accounting treatment is not considered prudent from a supervisory perspective, the accounting provisioning level is fully integrated in the banks' supply to meet the supervisory expectation by means of all accounting provisions under the applicable accounting standard including potential newly booked provisions and by means of expected loss shortfalls for the respective exposures in default in accordance the CRR, and other Common Equity Tier 1 deductions from own funds related to these exposures. In any case, if the applicable accounting treatment does not match the prudential provisioning expectations, banks also have the possibility to adjust their CET 1 capital on their own initiative. In other words, under normal conditions, banks must fulfill supervisory expectations "whatever it takes". That is why, calendar provisioning has been addressed as a "nuclear time bomb" if not somehow disarmed in the COVID-19 pandemic times.

Besides, bank provisioning policies can make a system of capital requirements procyclical, depending on what kind of losses capital requirements are designed to face. If it is the only unexpected loss, provisioning policies can reduce capital requirements' procyclicality since banks would increase loan-loss provisions during good periods, with good profit margins, while they would draw from these reserves when the credit loss amount gets higher. If capital requirements are designed to cover also the expected loss, procyclicality stretches to the provisions as well. This is certainly stressed by the combined effect of IFRS9, calendar provisioning implementation and the very bleak expectations for economies[5].

4. Several papers have dealt with bank managers' incentives in using loan-loss provisions as a management tool. Here we examine the results of prior literature along the three main objectives pursued by bank managers via LLPs: regulatory capital management; earnings management practice, aiming at stabilizing bank net profit over time; and, finally, signaling the earnings that management thinks the bank will be able to obtain in the future.

The hypothesis of capital management via loan-loss provisions is based on the idea that bank managers use provisions to avoid the cost associated with the violation of capital adequacy requirements. Given the actual set of rules, an increase in loan-loss provisions has conflicting effects on Tier 1 and Tier 2 capital. On the one hand, higher LLPs diminish, via a reduction in retained earnings, Tier 1 capital; on the other, an increase in loan-loss provisions cause higher loan-loss reserves and, consequently, raise Tier 2 capital. Empirical results on the issue of the use by bank managers of this accounting accrual to manage regulatory capital ratios are not consistent, and are mainly focused on U.S. banks. Research by Ng et al. (2011) investigates the relationship between loan-loss reserves added back as regulatory capital and the risk of bank failure. Particularly, by focusing on the effect of the add-back of loan-loss reserves in 2007 on U.S. bank failures and other performance metrics during the three following years, they show that there is a positive association of these add-backs with bank failure, and that this relationship is especially concentrated for those banks that use add-backs to increase their regulatory capital, thus confirming the paradox that, in some cases, capital requirements might be "lethal".

Using data prior to the period in which Basel I came into effect, some studies concluded that LLPs were a tool for managing regulatory capital (Scholes et al. (1990); Moyer (1990); Beatty et al. (1995); Kim and Kross (1998); Ahmed et al. (1999); Anandarajan et al. (2007)). In contrast with these results, investigating heterogeneity across banks' capital-raising decisions, Collins et al. (1995) find a positive influence of capital on loan-loss provisions, meaning that when bank capital is low, managers tend to decrease loan-loss provisions rather than increase them, and they show that banks use write-offs more than loan-loss provisions to manage capital ratios. Among the others, Bouvatier and Lepetit (2008), investigating banks' pro-cyclical behavior for a sample of 186 European banks, show that poorly capitalized banks use loan-loss provisions to manage regulatory capital. On the contrary, Leventis et al. (2011), focusing on 91 European listed banks, examine the impact of the implementation of IFRS on the use of LLPs to manage bank capital and find no support for the capital management hypothesis.

Earnings management implies the manipulation of reported earnings in such a way that the bottom line of the profit and loss account does represent a "specific" economic result of a bank's activity. A specific

kind of earnings management is income smoothing, aiming at reducing the variability of net profit over time. In order to stabilize net-profit, bank managers will increase (decrease) loan-loss provisions when earnings (before loan-loss provisions) are high (low). Income smoothing incentives can derive from a bank manager's will to adjust a bank's current performance to a firm-specific mean, as pointed out by Collins et al. (1995), or to the average performance of other benchmark-banks, as highlighted by Kanagaretnam et al. (2005). Furthermore, as to the reasons why managers smooth out a bank's income, Bhat (1996) underscores that income smoothing improves the risk perception of a bank to regulators; it helps to stabilize, over time, managers' compensation; it allows managers to grant a steady flow of dividends to bank stockholders; and it maintains bank stock price stable by reducing earnings volatility.

Literature related to industrial firm financial reporting has extensively investigated the income smoothing rationale (Barnea, Ronen and Sadan, 1975; Ronen and Sadan, 1981; Fudenberg and Tirole, 1995; Trueman and Titman, 1988; and Goel and Thakor, 2003), but addressing the banking literature allows us to add a perspective that industrial firms-related literature cannot assume. In fact, in banking, the issue could also be analyzed from the supervisory authority's point of view. On the one hand, banks are required by regulators to set loan-loss provisions aside against expected credit losses; on the other hand, they have to raise an adequate amount of capital to face unexpected credit losses. In this view, regulators' interest is in reducing bank pro-cyclical behavior: banks should increase loan-loss reserves during good times, and draw resources from these reserves when the economy slows down and potential defaults become real. As a consequence, bank earnings management might also be the result of a manager's attempt to meet capital adequacy requirements.

There is a huge collection of banking literature, mainly U.S.-based, regarding the use of loan-loss provisions for income smoothing. This research provides mixed empirical results: Greenawalt and Sinkey (1988) find that regional banks are more likely to be involved in income smoothing than money-centered banks. In a study examining, among other issues, the influence of loan-loss provisions as a tool for earnings management, Ma (1988) shows that U.S. commercial banks used loan-loss provisions and charge-offs to smooth reported earnings. Surprisingly, he finds no relationship between loan portfolio quality and loan-loss provisions. His results indicate that bank management tends to raise (lower) bank loan-loss provisions in periods of high (low) operating income, thus using LLPs as a pure tool for earnings management. Collins et al. (1995) also find a positive relationship between earnings management and LLPs, thus supporting the notion that banks smooth income over time to a firm-specific mean. Bhat (1996) demonstrates that banks are more likely to be involved in income smoothing practices if they are small and in poor financial condition. More recently, Anandarajan et al. (2007) show that Australian commercial banks are engaged in earnings management practices, especially if they are publicly traded.

In contrast, some researches find conflicting evidence: Scheiner (1981), Wetmore and Brick (1994), Beatty et al. (1995), and Ahmed et al. (1999), among others, find no evidence of income smoothing. The latter study, in particular, does not find strong evidence of earnings management via LLPs after Basel I came into effect. This is somewhat surprising, as one would expect to see evidence of more aggressive earnings management since the new capital adequacy regulation removed the constraints associated with earnings management, if compared to the previous regulatory set of rules. Finally, investigating the

cross-country determinants of income smoothing within a sample of banks from different countries, Fonseca and Gonzàlez (2008) find that the incentive to smooth earnings increases in more developed and market-oriented financial systems. Furthermore, according to their results, bank incentives to smooth income are lower in banking systems characterized by higher levels of accounting disclosure and official and/or private supervision, and by stricter restrictions on banking activities. Bouvatier and Lepetit's (2008) evidence on a sample of European banks is not consistent with the income smoothing hypothesis: they find that banks reduce loan-loss provisions when earnings before taxes and loan-loss provisions increase, and this strengthens the cyclicality in loan-loss provisions due to the non-discretionary components since earnings are higher during periods of growth. Leventis et al. (2011) find a general support to the earnings management hypothesis, though this practice is significantly reduced after the implementation of IFRS in 2005.

Prior research documents a positive relationship between stock returns and loan-loss provisions, suggesting that the market could look at LLPs as a signal of bank managers' private information about future earnings rather than as future credit losses. In particular, Beaver et al. (1989) find that, conditional on the reported level of non-performing loans, higher loan-loss allowances are associated with higher market-to-book ratios: in their view, loan-loss provisions can indicate that management perceives the earnings power of the bank to be sufficiently strong so that it can withstand additional provisions. Theory does not unambiguously support the signaling hypothesis.

Loan-loss provisions are made up of two parts: the first, discretionary or unexpected, is under managers' control; the second, non-discretionary or expected, is related to physiological changes in default risk, due to the ordinary growth of loan portfolio. After controlling for unexpected changes in non-performing loans and unexpected charge-offs, Wahlen (1994) finds a positive association between discretionary provisions and both future cash flows and bank stock returns. This suggests that private investors can interpret increases in discretionary LLPs as good news and not as the anticipated deterioration of credit portfolios' future quality; bank managers would try to convey to investors the signal that a bank's future earning capacity can easily bear additional provisions. Liu and Ryan (1995) find that the market reaction to LLPs is positive for banks with a high percentage of large and frequently renegotiated loans, and that the advance market anticipation of LLPs is stronger for these banks. According to Liu et al. (1997), the market interprets higher discretionary loan-loss provisions as good news only if banks appear to experience default risk problems. Beaver and Engel (1996) observe that the valuation coefficients on the discretionary and non-discretionary components of LLPs are positive and negative, respectively, consistent with the signaling hypothesis. In contrast to the aforementioned papers, Ahmed et al. (1999) and Anandarajan et al. (2007) do not find any evidence of signaling behavior by the banks examined in their respective studies on U.S. and Australian banks. Finally, Bouvatier and Lepetit (2008) find evidence supporting the signaling hypothesis for the sample of European banks they analyze.

5. Data used in this study are from Bankfocus database, drawn from the period 2011 – 2019. The sample contains 1648 banks with at least three years of balance-sheet data and it is made up by 117 commercial banks, 1109 cooperative bank, 411 savings bank and 11 bank holding and holding company. From the sample, outliers were secluded by eliminating the extreme bank/year observations when a variable

presents extreme values (bank specific variable less than 1% and higher than 99%). From a geographical perspective, all the banks belong to the most relevant countries within the Euro Area. The majority are from Germany, followed by Italy, France and Spain (Table 3)[6].

Table 3

. tab specialisation countrycode

Specialisation	Countrycode DE	ES	FR	IT	Total
Bank holding & holdin	32	4	3	20	59
Commercial bank	110	98	160	413	781
Cooperative bank	4,392	108	347	2,243	7,090
Savings bank	2,444	46	102	93	2,685
Total	6,978	256	612	2,769	10,615

To explain the dynamic of the LLPs we use a model able to verify the relevance of regulatory capital management, income smoothing, and signaling and procyclicality. The model is set as follows:

$$LLP_{i,t} = a_0 + a_1 GDPGR_{j,t} + a_2 IL_{i,t} + a_3 GL_{i,t} + a_4 EBTP_{i,t} + a_5 TRC_{i,t} + a_6 SIGN_{i,t} + a_7 TA_{i,t} + \varepsilon_{i,t}$$

where:

LLP is the dependent variable and is the ratio of loan-loss provisions to total assets; GDPGR is the GDP growth rate;

IL is the ratio of non-performing loans to total assets;

GL is the ratio of customer loans to total assets;

EBTP is the ratio of earnings before taxes and loan-loss provisions to total assets;

TCR stands for total regulatory capital and takes the value of the total regulatory capital ratio minus 8 and divided by 8 when observations for bank i are in the first quartile and 0 otherwise;

SIGN is the one-year ahead change in earnings before taxes and loan-loss provisions as defined in Bouvatier and Lepetit (2008):

TA is the natural log of total assets.

This model is a modified version of the cross-sectional model used by Ahmed et al. (1999), Anandarajan et al. (2007), Leventis et al. (2011) and Curcio and Hasan (2013).

The variables chosen as predictors are traditionally used to test for procyclicality, income smoothing, capital management, and signaling. The dependent variable of our regression model is LLPi,t, the ratio of loan-loss provisions to total assets at time t for the bank i. Detecting whether bank managers use

their discretion to manage capital and earnings would be easier if we had the opportunity to separate the discretionary component from the non-discretionary part of loan-loss provisions. Prior research proxied the non-discretionary component through variables representing the current level and the dynamics of losses within the loan portfolio (see, among others: Ahmed et al., 1999; Hasan and Wall, 2004; Anandarajan et al., 2007; Fonseca and Gonzàles, 2008; and Bouvatier and Lepetit, 2008). Hence, to control for the non-discretionary component, we use:

ILi,t, the ratio of non-performing loans to total assets that occurred at the bank i at time t. In a loan-loss accounting system which distinguishes between general and specific provisions, non-performing loans can be considered a proxy for the specific component. Loan-loss provisions are expected to be positively related to changes in non-performing loans;
GLi,t, the ratio of the amount of bank i total customer loans to its total assets at time t, which can be thought of as a proxy to capture general provisions. As stated by Lobo and Yang (2001), the influence of this variable on loan-loss provisions largely depends on the quality of incremental loans.
The inclusion of annual growth in the gross domestic product (GDPGR) at constant prices aims at controlling for the pro-cyclical effect of loan-loss provisions and captures the effect of macroeconomic conditions on loan-loss provisions (Laeven and Majnoni, 2003; Bikker and Metzemakers, 2005; Anandarajan et al., 2007; and Fonseca and Gonzàlez, 2008). We expect a negative coefficient because banks will increase loan-loss provisions the event of an economic downturn.

As to the discretionary factors, Ahmed et al. (1999), Moyer (1990), Beatty et al. (1995), and Leventis et al. (2011) all adopt the ratio of actual regulatory capital before loan-loss reserves to the minimum required regulatory capital to indicate the use of loan-loss provisions for capital management. We follow Curcio and Hasan (2013) and use the variable TCRi,t, which takes the value of the total regulatory capital ratio minus 8 and divided by 8 when observations for bank i are in the first quartile of the total capital ratio and 0 otherwise. If poorly capitalized banks are less willing to make loan-loss provisions in order to increase their regulatory capital endowment, we expect a positive correlation between LLPi,t and TCRi,t. Nevertheless, since loan-loss provisions are negatively correlated with Tier 1 capital, which includes equity and retained earnings, and positively with Tier 2 capital, we should underline that accounting relations could also influence the relation between bank capital and loan-loss provisions.

Based on the vast majority of prior literature – see, among others, Ahmed et al. (1999), Hasan and Wall (2004), Anandarajan et al. (2007), Bouvatier and Lepetit (2008), Fonseca and Gonzàles (2008), Leventis et al. (2011), Curcio and Hasan (2013) – in order to test for the income smoothing hypothesis, we consider the variable EBTPi,t, which is the ratio of earnings before taxes and loan-loss provisions to total assets for bank i at time t. This hypothesis is supported if its coefficient has a positive sign, meaning that banks with earnings lower (higher) than their target value tend to reduce (increase) loan-loss provisions to stabilize them.

To test the signaling hypothesis, we include the variable SIGNi,t, which is defined as the one-year ahead change in earnings before taxes and loan-loss provisions, as in Bouvatier and Lepetit (2008). Particularly, this variable can be expressed as follows: $SIGN_{i,t} = (EBTP_{i,t+1} - EBTP_{i,t})/0.5(TA_{i,t} + TA_{i,t+1})$. The use of earnings before taxes and provisions to test for the signaling hypothesis can also be

found in Ahmed et al. (1999) and Anandarajan et al. (2007). Since the signaling hypothesis states that discretionary changes in loan-loss provisions are positively correlated to future changes in future earnings, we expect a positive sign for the coefficient of this variable.

Size has been set taking as small banks those whose total asset are within the first quartile of the distribution of logarithm of total asset and as large those exceeding the fourth quartile. Medium banks are defined by difference (second and third quartile).

Tables 4-7 provide descriptive statistics for the period 2011-2019 for our sample banks. With regards to the credit quality of our sample banks, non-performing loans (IL) are, on average, 5,47% of total assets. As to the profitability of our sample banks, the ratio of earnings before taxes and loan-loss provisions to total assets (EBTP) is 2,97%. Both the variables, as well as the total capital ratio, are, as expected from §2, inversely correlated with bank size.

Table 4 All banks

```
. tabstat LLP1 EBTP tcr TA GL IL, statistics (mean sd p25 p50 p75 max min)
```

stats	LLP1	EBTP	tcr	TA	GL	IL
mean	.0032056	.0297109	18.58935	13.73553	.6214561	.0546922
sd	.0088375	.0138424	5.384106	1.562834	.1481371	.0642516
p25	-.0002263	.0254914	15	12.62802	.5336621	.0155921
p50	.0018853	.0287523	17	13.61364	.6352744	.0301014
p75	.0054031	.0321713	21	14.57072	.7282458	.0672519
max	.1512535	.6457263	58	20.0669	1.036599	.8817816
min	-.0920034	.0083729	10	10.35402	.0066531	.0000315

Table 5 Small banks

```
. tabstat LLP1 EBTP tcr TA GL IL if small==1, statistics (mean sd p25 p50 p75 max min)
```

stats	LLP1	EBTP	tcr	TA	GL	IL
mean	.0032296	.0337498	20.97287	11.89422	.5909907	.0595226
sd	.0104069	.0237767	6.439022	.5087022	.1476293	.0704342
p25	-.0004792	.0277583	17	11.56951	.4902151	.0159365
p50	.0018728	.0308432	19	11.96987	.5952067	.0360609
p75	.0060082	.0347906	24	12.30935	.6901768	.0764829
max	.1512535	.6457263	58	12.62802	.953759	.8817816
min	-.0683812	.0092515	10	10.35402	.0628947	.0001386

Table 6 Medium banks

```
. tabstat LLP1 EBTP tcr TA GL IL if small==0 & large==0, statistics (mean sd p25 p50 p75 max min)
```

stats	LLP1	EBTP	tcr	TA	GL	IL
mean	.003329	.0291744	18.0667	13.62297	.6218093	.058311
sd	.0091543	.0065061	4.827097	.5594759	.1391409	.066142
p25	-.0004245	.0259682	15	13.15052	.541003	.0164003
p50	.0020166	.0289313	17	13.61364	.6323664	.0320021
p75	.0058435	.0319259	20	14.11652	.7171296	.0737685
max	.1001047	.180528	57	14.57071	1.004048	.4717037
min	-.0920034	.0051177	10	12.62895	.0328721	.0000386

Table 7 Large banks

```
. tabstat LLP1 EBTP tcr TA GL IL if large==1, statistics (mean sd p25 p50 p75 max min)
```

stats	LLP1	EBTP	tcr	TA	GL	IL
mean	.0029349	.0267447	17.25094	15.80191	.6512151	.0426257
sd	.0060376	.0095343	4.460019	1.094657	.1595789	.051093
p25	.0001212	.022723	14	14.95152	.5805042	.0140239
p50	.001716	.0261933	17	15.43508	.6830139	.0240594
p75	.0041108	.0293944	19	16.40315	.7666316	.0456058
max	.0489372	.1437	49	20.0669	1.036599	.3377109
min	-.0323341	.0083729	10	14.57072	.0066531	.0000315

The empirical analysis aims at detecting whether different size banks behave differently in the use of loan-loss provisions as a tool for regulatory capital management, for income smoothing, and as a signal to the market, according to the hypotheses described in the previous section. Shedding more light on the existence of differences in provisioning practices is relevant from the banking authorities' perspective, because higher accounting discretionary power can be an important competitive advantage for some banks relative to others and render ineffective the "leveling playing field" objective that international regulators pursue.

The basic model for the comparison is based on previous equation, which is estimated for the whole sample and separately for banks of different size, according to the TA classification stated in § 4. The model has been also estimated secluding the last two years (2018-2019) to evaluate the impact of the implementation of IFRS9.

Table 8 All banks (2011-2019)

```
. xtreg LLP1 EBTP SIGN gdpgr tcr IL GL TA, fe

Fixed-effects (within) regression               Number of obs      =      8608
Group variable: indexnumber                     Number of groups   =      1647

R-sq:  within  = 0.1422                         Obs per group: min =         1
       between = 0.1648                                        avg =       5.2
       overall = 0.1555                                        max =         8

                                                F(7,6954)          =    164.62
corr(u_i, Xb)  = -0.4462                        Prob > F           =    0.0000
```

LLP1	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
EBTP	.2644928	.020998	12.60	0.000	.2233303	.3056553
SIGN	-.218172	.0202023	-10.80	0.000	-.2577747	-.1785692
gdpgr	-.0004744	.000076	-6.24	0.000	-.0006233	-.0003255
tcr	.000095	.0000385	2.47	0.014	.0000195	.0001705
IL	.0443482	.0032325	13.72	0.000	.0380115	.0506849
GL	-.0159358	.0015835	-10.06	0.000	-.01904	-.0128317
TA	.0032936	.000625	5.27	0.000	.0020684	.0045187
_cons	-.0435812	.0090089	-4.84	0.000	-.0612413	-.0259211
sigma_u	.0074414					
sigma_e	.00637264					
rho	.57690772	(fraction of variance due to u_i)				

F test that all u_i=0: F(1646, 6954) = 2.32 Prob > F = 0.0000

Table 9 All banks (2011-2017)

```
. xtreg LLP1 EBTP SIGN gdpgr tcr IL GL TA, fe

Fixed-effects (within) regression               Number of obs      =      8608
Group variable: indexnumber                     Number of groups   =      1647

R-sq:  within  = 0.1422                         Obs per group: min =         1
       between = 0.1648                                        avg =       5.2
       overall = 0.1555                                        max =         8

                                                F(7,6954)          =    164.62
corr(u_i, Xb)  = -0.4462                        Prob > F           =    0.0000

------------------------------------------------------------------------------
        LLP1 |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        EBTP |   .2644928   .020998    12.60   0.000     .2233303    .3056553
        SIGN |  -.218172   .0202023   -10.80   0.000    -.2577747   -.1785692
       gdpgr |  -.0004744   .000076    -6.24   0.000    -.0006233   -.0003255
         tcr |    .00095   .0000385     2.47   0.014     .0000195    .0001705
          IL |   .0443482  .0032325    13.72   0.000     .0380115    .0506849
          GL |  -.0159358  .0015835   -10.06   0.000      -.01904   -.0128317
          TA |   .0032936   .000625     5.27   0.000     .0020684    .0045187
       _cons |  -.0435812  .0090089    -4.84   0.000    -.0612413   -.0259211
-------------+----------------------------------------------------------------
     sigma_u |  .0074414
     sigma_e |  .00637264
         rho |  .57690772   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0:     F(1646, 6954) =     2.32          Prob > F = 0.0000
```

The results show that:

the GDP growth rate (GDPR) is significantly associated with the ratio of loan-loss provisions to total assets for the whole sample. Consequently, we find evidence of banks' pro-cyclical behavior: an economic downturn forces banks to increase LLPs. The rational for such a behavior can be traced back to the awareness that an economic downturn could result in higher credit risk exposure;
the TCR in slightly significant for the LLPs dynamic. As stated, if poorly capitalized banks are less willing to make loan-loss provisions to increase regulatory capital endowment. The small figure of TCR coefficient might therefore be interpreted as limited discretionary in the definition of the LLPs;
the EBTP is positively associated to the LLPs, thus giving raise to the income smoothing usage of LLPs, especially in "rainy day";
the variable SIGN is significant but negative. Therefore, discretionary in loan-loss provisions is correlated to changes in future earnings. Nevertheless, the decrease in the LLPs against EBTP increase might be interpreted either as the absence of the signaling hypothesis or as lack of discretionary in provisioning;
the negative sign on the GL could represent an overall improvement in the credit lending process, probably mainly due to the general drive towards a reduction of NPE even from regulators;
needless to say that LLPs are positively correlated with the impaired loan and increase in TA, thus accounting for a physiological growth in the credit risk according to the loan expansion.
Table 10 and 11 report values of coefficient for all regressions. The barred cell exhibit figures that are not statistically significant at 1% or at 5%.

Table 10: Full period (2011-2019)

	All	Small	Medium	Large
Independent Variable	Coefficient	Coefficient	Coefficient	Coefficient
GDPR	-0,0004744	-0,0002192	-0,0003991	-0,0007009

TCR	0,000095	0,000226	0,000094	-0,000019
EBTP	0,2644928	0,1734691	0,6660653	0,1849566
SIGN	-0,218172	-0,2732727	-0,0689422	-0,0472744
GL	-0,0159358	-0,011315	-0,0190391	-0,0082053
IL	0,0443482	0,048902	0,0477276	0,0482731
TA	0,0032936	0,0028147	0,0096393	0,0037803

Table 11: Restricted period (2011-2017)

	All	Small	Medium	Large
Independent Variable	Coefficient	Coefficient	Coefficient	Coefficient
GDPR	-0,0004354	-0,0002052	-0,0003056	-0,0006301
TCR	0,0000938	0,0001916	0,000091	-0,0000501
EBTP	0,2623675	0,1437928	0,7429283	0,1991897
SIGN	-0,2158839	-0,2640454	-0,0386505	-0,0135444
GL	-0,0151309	-0,007604	-0,0191615	-0,0074526
IL	0,0436339	0,0495342	0,0475869	0,0494596
TA	0,003454	0,0024995	0,0105656	0,0046948

Table 12 Small banks 2011-2019

```
. xtreg LLP1 EBTP SIGN gdpgr tcr IL GL TA if small==1, fe

Fixed-effects (within) regression               Number of obs      =      2207
Group variable: indexnumber                     Number of groups   =       478

R-sq:  within  = 0.1319                         Obs per group: min =         1
       between = 0.3029                                        avg =       4.6
       overall = 0.2668                                        max =         8

                                                F(7,1722)          =     37.37
corr(u_i, Xb)  = -0.1733                        Prob > F           =    0.0000

------------------------------------------------------------------------------
        LLP1 |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        EBTP |    .1734691   .0317736     5.46   0.000     .1111501    .2357882
        SIGN |   -.2732727   .0338031    -8.08   0.000    -.3395722   -.2069732
       gdpgr |   -.0002192   .0001756    -1.25   0.212    -.0005635    .0001251
         tcr |    .000226   .0000735     3.07   0.002     .0000818    .0003703
          IL |    .048902   .0069875     7.00   0.000     .0351972    .0626069
          GL |   -.011315   .0032853    -3.44   0.001    -.0177587   -.0048713
          TA |   .0028147   .0017151     1.64   0.101    -.0005492    .0061787
       _cons |   -.0367583   .0213732    -1.72   0.086    -.0786785    .0051619
-------------+----------------------------------------------------------------
     sigma_u |  .00719121
     sigma_e |  .00754978
         rho |  .47568954   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0:     F(477, 1722) =     1.99                 Prob > F = 0.0000
```

Table 13 Small banks 2011- 2017

```
. xtreg LLP1 EBTP SIGN gdpgr tcr IL GL TA if IFRS9==0 & small==1, fe

Fixed-effects (within) regression               Number of obs      =      2101
Group variable: indexnumber                     Number of groups   =       478

R-sq:  within  = 0.0973                         Obs per group: min =         1
       between = 0.3505                                        avg =       4.4
       overall = 0.2936                                        max =         7

                                                F(7,1616)          =     24.88
corr(u_i, Xb)  = 0.0168                         Prob > F           =    0.0000
```

LLP1	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
EBTP	.1437928	.0335405	4.29	0.000	.0780053	.2095803
SIGN	-.2640454	.0364822	-7.24	0.000	-.3356027	-.192488
gdpgr	-.0002052	.0001804	-1.14	0.256	-.000559	.0001487
tcr	.0001916	.0000806	2.38	0.018	.0000335	.0003497
IL	.0495342	.0079224	6.25	0.000	.0339951	.0650734
GL	-.007604	.0046812	-1.62	0.104	-.0167857	.0015778
TA	.0024995	.0019687	1.27	0.204	-.0013619	.0063609
_cons	-.0335811	.0251294	-1.34	0.182	-.0828708	.0157086
sigma_u	.00716953					
sigma_e	.00756813					
rho	.47297301	(fraction of variance due to u_i)				

F test that all u_i=0: F(477, 1616) = 2.05 Prob > F = 0.0000

Table 14 Medium banks 2011 – 2019

```
. xtreg LLP1 EBTP SIGN gdpgr tcr IL GL TA if large==0 & small==0, fe

Fixed-effects (within) regression               Number of obs      =      4329
Group variable: indexnumber                     Number of groups   =       904

R-sq:  within  = 0.1951                         Obs per group: min =         1
       between = 0.0626                                        avg =       4.8
       overall = 0.1087                                        max =         8

                                                F(7,3418)          =    118.36
corr(u_i, Xb)  = -0.5435                        Prob > F           =    0.0000
```

LLP1	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
EBTP	.6660653	.0479928	13.88	0.000	.5719679	.7601628
SIGN	-.0689422	.038392	-1.80	0.073	-.1442159	.0063315
gdpgr	-.0003991	.0001149	-3.47	0.001	-.0006245	-.0001738
tcr	.000094	.0000642	1.46	0.143	-.0000319	.00022
IL	.0477276	.0048593	9.82	0.000	.0382002	.0572551
GL	-.0190391	.0024354	-7.82	0.000	-.023814	-.0142642
TA	.0096393	.0010915	8.83	0.000	.0074991	.0117794
_cons	-.1399502	.0159884	-8.75	0.000	-.1712979	-.1086025
sigma_u	.00945419					
sigma_e	.00641868					
rho	.6844918	(fraction of variance due to u_i)				

F test that all u_i=0: F(903, 3418) = 2.52 Prob > F = 0.0000

Table 15 Medium banks 2011 – 2017

```
. xtreg LLP1 EBTP SIGN gdpgr tcr IL GL TA if IFRS9==0 & (large==0 & small==0), fe

Fixed-effects (within) regression               Number of obs      =      3974
Group variable: indexnumber                     Number of groups   =       897

R-sq:  within  = 0.1654                         Obs per group: min =         1
       between = 0.0698                                        avg =       4.4
       overall = 0.1006                                        max =         7

                                                F(7,3070)          =     86.89
corr(u_i, Xb)  = -0.5742                        Prob > F           =    0.0000

------------------------------------------------------------------------------
        LLP1 |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        EBTP |   .7429283    .052323    14.20   0.000     .6403367    .8455198
        SIGN |  -.0386505    .040742    -0.95   0.343    -.1185348    .0412338
       gdpgr |  -.0003056   .0001205    -2.54   0.011    -.0005419   -.0000693
         tcr |    .000091   .0000711     1.28   0.201    -.0000485    .0002304
          IL |   .0475869   .0055215     8.62   0.000     .0367607     .058413
          GL |  -.0191615   .0033243    -5.76   0.000    -.0256796   -.0126435
          TA |   .0105656    .001252     8.44   0.000     .0081108    .0130205
       _cons |  -.1550636    .018569    -8.35   0.000    -.1914726   -.1186546
-------------+----------------------------------------------------------------
     sigma_u |  .01001125
     sigma_e |  .00648282
         rho |  .70455981   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0:     F(896, 3070) =     2.53                 Prob > F = 0.0000
```

Table 16 Large banks 2011 – 2019

```
. xtreg LLP1 EBTP SIGN gdpgr tcr IL GL TA if large==1, fe

Fixed-effects (within) regression               Number of obs      =      2072
Group variable: indexnumber                     Number of groups   =       438

R-sq:  within  = 0.1439                         Obs per group: min =         1
       between = 0.2616                                        avg =       4.7
       overall = 0.2318                                        max =         8

                                                F(7,1627)          =     39.07
corr(u_i, Xb)  = -0.4965                        Prob > F           =    0.0000

------------------------------------------------------------------------------
        LLP1 |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        EBTP |   .1849566   .0380833     4.86   0.000     .1102592     .259654
        SIGN |  -.0472744   .0352482    -1.34   0.180    -.1164111    .0218622
       gdpgr |  -.0007009   .0000946    -7.41   0.000    -.0008865   -.0005153
         tcr |   -.000019   .0000533    -0.36   0.721    -.0001236    .0000856
          IL |   .0482731   .0049356     9.78   0.000     .0385922     .057954
          GL |  -.0082053   .0023187    -3.54   0.000    -.0127533   -.0036573
          TA |   .0037803    .000083     3.49   0.000      .001656    .0059046
       _cons |  -.0571385   .0176683    -3.23   0.001    -.0917935   -.0224835
-------------+----------------------------------------------------------------
     sigma_u |  .00523297
     sigma_e |  .00379187
         rho |  .65571053   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0:     F(437, 1627) =     3.41                 Prob > F = 0.0000
```

Table 17 Large banks 2011 – 2017

```
. xtreg LLP1 EBTP SIGN gdpgr tcr IL GL TA if IFRS9==0 & large==1, fe

Fixed-effects (within) regression               Number of obs      =      1780
Group variable: indexnumber                     Number of groups   =       426

R-sq:  within  = 0.1110                         Obs per group: min =         1
       between = 0.2365                                        avg =       4.2
       overall = 0.2115                                        max =         7

                                                F(7,1347)          =     24.03
corr(u_i, Xb)  = -0.5725                        Prob > F           =    0.0000

------------------------------------------------------------------------------
        LLP1 |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        EBTP |   .1991897   .0451829     4.41   0.000     .1105532    .2878262
        SIGN |  -.0135444   .0408192    -0.33   0.740    -.0936206    .0665318
       gdpgr |  -.0006301   .0001012    -6.22   0.000    -.0008286   -.0004315
         tcr |  -.0000501   .0000615    -0.81   0.416    -.0001708    .0000706
          IL |   .0494596   .0058368     8.47   0.000     .0380094    .0609097
          GL |  -.0074526   .0034172    -2.18   0.029    -.0141563   -.000749
          TA |   .0046948   .0012893     3.64   0.000     .0021656    .0072239
       _cons |  -.0721129   .0211725    -3.41   0.001    -.1136476   -.0305782
-------------+----------------------------------------------------------------
     sigma_u |   .0060165
     sigma_e |  .00389832
         rho |  .70431268   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0:     F(425, 1347) =     3.39                 Prob > F = 0.0000
```

Results shows that the GDP growth rate (GDPR) is significantly associated with the ratio of loan-loss provisions to total assets for all the group intermediaries, except for small banks. Consequently, we do find evidence of banks' pro-cyclical behavior, which is somehow unexpected for small banks because of the introduction of IFRS9, although the time length embraces just two years.

For all intermediaries, the coefficient of the ratio of non-performing loans to total assets (IL) is positive and significant. This is an expected result because it confirms the direct relation between LLPs and the considerable institutional and operational effort towards the reduction of the impact of credit risk. The estimated sensitivity of loan-loss provisions to the amount of customer loans is negative and significant even including the IFRS9 years. The negative sign of the coefficient does not confirm the prudent behavior by bank managers highlighted by Beaver and Engle (1996) in their paper on a sample of large U.S. banks. The average value of the coefficient on the IL does not show relevant value differences among groups, providing evidence of a stable contribution to LLPS. This implies that there is no proportionality in the provisioning process.

Although the analysis of the impact of the IFRS9 considers just two years, expected credit loss methodologies might intensify the adverse effect of the prospective negative economic cycle especially for small banks. A confirmation of the judgmental impact of the IFRS9 implementation can be gained by regressing the ROE on IL with IFRS (2011-2017) e without IFRS (2018-2019) (Table 19 and Table 20). As can be easily seen, the last years show a substantial increase in the negative relationship between the two variables, despite the overall improvement in the credit lending process.

Table 18 ROE and IL 2011-2017 (Small banks)

```
. xtreg ROE IL if IFRS9==0 & SMALL==1, fe

Fixed-effects (within) regression               Number of obs      =       2173
Group variable: indexnumber                     Number of groups   =        466

R-sq:  within  = 0.0471                         Obs per group: min =          1
       between = 0.0460                                        avg =        4.7
       overall = 0.0510                                        max =          7

                                                F(1,1706)          =      84.36
corr(u_i, Xb)  = -0.2431                        Prob > F           =     0.0000

------------------------------------------------------------------------------
         ROE |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          IL |  -.3326148   .0362143    -9.18   0.000    -.403644   -.2615857
       _cons |   .0472662   .0023856    19.81   0.000     .0425871    .0519452
-------------+----------------------------------------------------------------
     sigma_u |  .04187187
     sigma_e |  .04022975
         rho |  .51999302   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0:     F(465, 1706) =     5.28                 Prob > F = 0.0000
```

Table 19 ROE and IL 2018-2019 (Small banks)

```
. xtreg ROE IL if IFRS9==1 & SMALL==1, fe

Fixed-effects (within) regression               Number of obs      =        440
Group variable: indexnumber                     Number of groups   =        342

R-sq:  within  = 0.1005                         Obs per group: min =          1
       between = 0.0642                                        avg =        1.3
       overall = 0.0556                                        max =          2

                                                F(1,97)            =      10.84
corr(u_i, Xb)  = -0.5543                        Prob > F           =     0.0014

------------------------------------------------------------------------------
         ROE |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
          IL |  -.5249825   .1594359    -3.29   0.001    -.8414186   -.2085464
       _cons |   .0492241   .0080635     6.10   0.000     .0332202    .0652279
-------------+----------------------------------------------------------------
     sigma_u |  .04986554
     sigma_e |  .03150837
         rho |  .71466586   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0:     F(341, 97) =     2.57                 Prob > F = 0.0000
```

As to the three hypotheses to be tested, the ratio of earnings before taxes and loan-loss provisions to total assets (EBTP) is positively associated with bank loan-loss provisions and is significant in all estimation, thus strongly supporting the income smoothing hypothesis. It is noteworthy that contribution of this independent variable is extremely relevant and shows significant difference across groups. For the whole sample, the EBTP contributes for more than ¼ of the LLPs variability and it does not show any significant figure distinction with the implementation of the IFRS9. Small banks and large appear to be less prone to income smoothing than medium banks where the coefficient provides for 2/3 and ¾ of the LLPs dynamics.

As to the signaling behavior, the coefficient of the variable SIGN is either negative or not significant. Consequently, our analysis does not support the signaling hypothesis concerning the use of loan-loss provisions as a tool to convey information about their future earnings to the market according to the prevailing literature. Nevertheless, the coefficient needs some attention because, as can be easily seen, where significant, it accounts for a relevant quota of the LLPs dynamics. On average for the whole sample the contribution is more the 1/5 and it is significant for small banks with some figure difference both with and without IFRS9 (Tables 10 and 11). This might be interpreted as a substantial tightness of the provisioning both for lack of discretionary and for stiffness of assessment arising from the NPE shrinkage. In this perspective, small banks appear to be no flexible as far as the provisioning is concerned.

Our evidence does not confirm the capital management hypothesis, since the coefficient of TCR is statistically significant only for small banks, thus entailing that these intermediaries can use only slightly LLPs to manage their capital ratios before the introduction of IFRS9.

Finally, coefficients on TA defined as the logarithm of the book value, , always positive, shows an extreme moderate impact of the business growth on the LLPs thus providing evidence of not sufficient diversification of portfolios since, as recently verified, costs of diversification outweigh its benefits, especially for large financial intermediaries (Ciocchetta, 2020), including global systemically important banks (G-SIBs). The coefficient is not significant for small banks, thus confirming once again the stiffness of the provisioning process with and without IFRS9.

Moreover, we add time dummy in the right side of the regression equation to control for different impact for small banks. Specifically, the "small" dummy takes the value of 1 for small banks, defined as stated as the first quartile of the TA distribution, and the null value for all the others. Table 18 presents the results of the estimation on the pooled sample to detect whether we find differences between small banks and the other institutions. The dummy variable "small" is positive and statistically significant, meaning that small banks are characterized by a significantly higher amount of loan-loss provisions to total assets if compared to other banks. This is consistent with the idea that small banks are devoting more resources to the impact mitigation of credit risk in order to reach the target level of exposure.

The interaction term S●GDPGR is statistically significant, entailing that small banks do not show the same of pro-cyclical behavior as others. Regarding the non-discretionary variables, we find that small banks' provisioning decisions based on the amount of non-performing loans do not show differences statistically significant (the interaction term S●IL is not significant). The interaction term S●GL is positive but not statistically significant, entailing that the sensibility of small banks' provisions to changes in the amount of the loan portfolio is equal to other banks.

As to our discretionary management hypotheses, we find evidence of different behavior between small banks and all the others regarding income smoothing, capital management and signaling. Particularly, the coefficient of the interaction term S●EBTP is negative and statistically significant. This provides further support to the difference already highlighted: small banks seem to be less prone to use LLPs to smooth their income. The interaction term S●TCR is characterized by a coefficient positive and statistically not significant, thus confirming the difference already pointed out about the capital management hypothesis. In any case, the effect is negligible given the small magnitude of the coefficient. The same evidence can be found for the signaling hypothesis, since S●SIGN is negative and significant at 1% confidence level, which means that, more than the rest of the sample, small banks do not use loan loss provisions to convey a signal about future earnings due to the burden of the current regulatory constraints on their provisioning policies. Small banks exhibit more rigidity in the balance sheet architecture.

Table 20 Small banks differential analysis 2011-2019

```
. xtreg LLPl gdpgr IL GL EBTP tcr SIGN TA small Sgdpgr SIL SGL SEBTP Stcr SSIGN STA, fe

Fixed-effects (within) regression               Number of obs      =      8616
Group variable: indexnumber                     Number of groups   =      1648

R-sq:  within  = 0.1486                         Obs per group: min =         1
       between = 0.1302                                        avg =       5.2
       overall = 0.1153                                        max =         8

                                                F(15,6953)         =     80.89
corr(u_i, Xb)  = -0.5876                        Prob > F           =    0.0000

------------------------------------------------------------------------------
        LLPl |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
       gdpgr |  -.0005205   .0000894    -5.82   0.000    -.0006958   -.0003453
          IL |    .042441   .0036843    11.52   0.000     .0352186    .0496633
          GL |  -.0172936   .0018352    -9.42   0.000    -.0208912    -.013696
        EBTP |   .4175427   .0343823    12.14   0.000     .3501428    .4849425
         tcr |   .0000567   .0000478     1.19   0.236     -.000037    .0001504
        SIGN |  -.1353067   .0303347    -4.46   0.000    -.1947719   -.0758414
          TA |   .0052321   .0007829     6.68   0.000     .0036974    .0067669
       small |   .0528936   .0211202     2.50   0.012     .0114915    .0942956
      Sgdpgr |   .0003722   .0001663     2.24   0.025     .0000461    .0006982
         SIL |   .0077068   .0056884     1.35   0.176    -.0034442    .0188578
         SGL |   .0035902   .0027094     1.33   0.185     -.001721    .0089015
      SEBTP |  -.2329865   .0419449    -5.55   0.000    -.3152112   -.1507618
       Stcr |   .0001046   .0000698     1.50   0.134    -.0000323    .0002414
      SSIGN |  -.1123113   .0406723    -2.76   0.006    -.1920414   -.0325812
        STA |  -.0039853    .001607    -2.48   0.013    -.0071356   -.0008351
      _cons |    -.07376   .0115716    -6.37   0.000     -.096444   -.0510781
-------------+----------------------------------------------------------------
    sigma_u |  .00830623
    sigma_e |  .00635798
        rho |  .63055286   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0:     F(1647, 6953) =     2.30          Prob > F = 0.0000
```

6. This paper reexamines earnings and capital management, and signaling explanations for the choice, by banks, of loan-loss provisions for a sample of 1684 banks from the main 4 Euro Area countries (Germany, France, Italy, and Spain) over the 9-year period 2011-2019, using data from the Bankfocus database. The paper also develops a comparison between these banks of different sizes in the overall provisioning policies. How banks account for impaired loans has a strategic impact on their reported earnings and capital and has been largely investigated by previous literature.

We investigate whether small banks behave differently relative to other institutions, since a deeper knowledge on provisioning practices can make more effective the supervisory objective of leveling the playing field from the regulators' perspective.

Overall, we find evidence that: (i) loan-loss provisions reflect changes in the expected quality of banks' loan portfolio, measured by the amount of non-performing loans; (ii) earnings management is an extremely important factor affecting provisioning decisions for banks; (iii) the desire to signal private information to outsiders does not explain provisioning policies for sample intermediaries. Though always linked to the credit portfolio quality, EA institutions' LLPs appears to be pro-cyclical and are used to smooth income over time but not for managing their capital ratios or to convey private information to the market.

Besides, we found strong evidence of a considerable anelasticity of the provisioning in small banks, thus giving rise to a fundamental question on the effectiveness of "proportionality principle". The detection of such effect forces us to explore the cause, since it can be traced back to both diseconomies of scale and regulatory diseconomies. This is our main future research prospect.

As far as the expected credit loss (ECL) methodologies are concerned, beyond the general point that IFRS 9 can become procyclical in a severe economic downturn, such as the current COVID-19, we find that there is a judgmental impact for small banks. ECL methodologies have long been promoted by the supervisory community for their potential to enhance the transparency of financial statements and improve the accuracy of reported loan values and associated expected credit losses. In addition, they require banks to provision earlier in the credit cycle, helping to mitigate the excessive procyclicality associated with the incurred loss model. This is certainly true in the prospect of a growing cycle. However, coping with a negative cycle, ECL methodologies could substantially aggravate the profitability for the "anticipation" of prospective losses. In the wake of the Covid-19 pandemic, there have been calls to either delay the application of ECL provisioning frameworks or to apply the standards with greater flexibility. These pleas are premised on the notion that banks should support the real economy in these unprecedented times, and that an overly conservative application of ECL provisioning in the current circumstances could lead to a spike in banks' non-performing loans, thus increasing provisions, lowering earnings and pressuring regulatory capital. This, in turn, may affect the availability of credit to affected consumers and businesses (Zamil, 2020).

Research on the use of loan-loss provisions is meaningful for banking supervisors who will have to ensure that provisions cover expected losses, and that capital is used for unexpected losses. From a prudential point of view, the empirical evidence points out the need for a sound accounting framework. A natural extension to the analysis developed here is the consideration of a more in-depth study that takes account of specific factors and regulatory practices in individual countries. In this area an interesting future research prospect could be a comparison with the US (Masera 2019 and Petropoulou 2020), where One Size Fits All (OSFA) regulation has not be adopted and the ECL methodologies will be mandatory for most banks from 2023. A comparison between the two systems for the same time could offer an insight on some ad-hoc "exemptions" to ECL systems in case of steady economic downturn. More generally a comparison of banks performance on the two sides of the Atlantic should help avoid/contain the pitfalls of non ergodic stochastic systems and there attendant path dependence (Hicks 1980, Tsay 2010 and Peters 2019).

Further research should also attempt to provide evidence on the usefulness of the reform of LLPs, with particular attention to the impact of calendar provisioning, dramatically highlighted by the COVID-19 pandemic.

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[1] The impact of IFRS 9 on the procyclicality of loan loss provisioning is ambiguous. Provisioning for a next economic downturn under the expected credit loss model may be rather abrupt, if an initial turning point in the business cycle is taken to forebode a serious business cycle downturn, triggering large loan loss provisioning in anticipation of future loan impairment. The introduction of the expected credit loss model thus could lead to a concentration of loan loss allowances at the time of an initial economic downturn, with possible negative ramifications for financial stability. Simulations by Abad and Suarez (2017) confirm this by showing that IFRS 9 will concentrate the impact of loan loss allowances on profitability and the CET1 ratio at the beginning of the economic cycle, yielding that banks will face a higher yearly probability of having to be recapitalised.

[2] The list of banks used for Supervisory Banking Statistics comprises banks designated as significant institutions (SIs) and thus directly supervised by the European Central Bank (ECB). Size-based classification (expressed in terms of total assets) is linked to the bank systemic importance and risk-taking. Dataset classification thresholds are defined in such a way as to foster comparability with the existing SSM and European Banking Authority (EBA) practices, distinguishing between global systemically important banks (G-SIBs; as listed by the Financial Stability Board (FSB)), large banks, medium-sized banks (two subcategories) and small banks. The EBA has defined an asset threshold of €200 billion for the identification of large institutions that are potentially systemically relevant. Moreover, since one criterion for identifying banks as “significant” under SSM regulations is that their total assets should exceed €30 billion; this threshold has been used to distinguish “small banks” which enter the SI list via the other criteria. Finally, medium-sized institutions include all those that fall between small and large and are clustered in two buckets separated by a €100 billion threshold.

[3] Nevertheless, it is noteworthy that income-based measures could overestimate the degree to which some credit institutions are engaged in non-credit activities since loans can generate both interest and noninterest income in terms of fees; therefore asset-based measures are more useful for distinguishing between activity categories (Ciocchetta, 2020).

[4] The classification of a loan as an NPL is “objective evidence that the loan should be assessed for impairment”.

[5] The point at issue is that macroprudential and microprudential approaches can lead to different conclusions. The expected loss approach can itself lead to procyclicality in case of extremely adverse economic developments: excessive tightening of credit with further adverse economic consequences. The need for extraordinary fiscal and monetary support measures was predicated precisely because indebted firms may not suffer a fundamental deterioration in the lifetime probability of default. The complex two-way relationship has been recognized by the ECB itself, 2020a and 2020b.

[6] The bank data used in this paper for the estimates are constrained by the availability of information on some variables needed for this research.

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«They say things are happening at the border, but nobody knows which border» (Mark Strand)

Monetary policy in the face of the covid-19 crisis: the interesting case of theUunited Kingdom

by **Marco Bodellini and Dalvinder Singh**

Abstract: *In front of the first signals of the economic crisis caused by the Covid-19 pandemic the Bank of England has immediately intervened trying to limit the negative impact of the measures adopted by the Government to reduce the spread of the virus Accordingly, the British monetary authority has implemented several expansive non-conventional monetary policy measures, with the goal to support economic activities while enabling the banking and financial system to continue properly functioning, facilitating lending to businesses and households and allowing the Government to keep on issuing debt. The Bank of England's initiatives have been both very relevant and innovative with regard to some of the measures adopted. Its experience thus is particularly interesting from an international perspective.*

1. In the face of the Covid-19-provoked crisis, the Bank of England (BoE or the Bank) has performed a fundamental function by quickly intervening with a view to reducing the economic damages caused by the pandemic and by the Government measures aimed at limiting the propagation of the virus.

Through expansive non-conventional monetary policy measures,[1] its aim has been to tackle the economic activities reduction, while enabling the banking and financial system to keep on properly working, facilitating the flow of credit to businesses and households and allowing the British Government to continue issuing public debt.[2]

The BoE's initiatives have been particularly vigorous and, to a certain extent, innovative with regard to the measures implemented; therefore the British experience results particularly interesting.

In discussing the monetary policy measures adopted by the BoE to tackle the Covid-19 crisis, this article is divided as follows; after this introduction, section 2 focuses on the role of the Bank within the British system; section 3 analyses the Bank of England Act 1998 which has granted to the BoE the full independence in monetary policy matters; section 4 deals with the Financial Services Act 2012 and the Bank of England and Financial Services Act 2016; section 5 describes both functions and powers of the BoE, focusing on accountability issues; section 6 looks at the relationships between the Treasury and the Bank as well as on the former's powers of override; section 7 focuses on the BoE's monetary policy measures implemented to tackle the Covid-19 crisis and section 8 provides some concluding remarks.

2. Over the last two decades, the BoE has gone through a number of reforms and structural changes impacting its functions, its powers and its internal organization.[3] Accordingly, its tasks have been significantly expanded, by including prudential supervision and crisis management, in addition to monetary policy and keeping financial stability, thereby transforming the UK system in a central-bank based system.[4]

As a consequence, the BoE is today the British independent authority in charge for: a) micro and macro prudential supervision, b) supervision of market infrastructures, c) resolution and crisis management, d) monetary policy and central banking, e) issuance of bank notes, f) emergency liquidity assistance provision.

Against this background, the BoE has a dual mandate(ortwin mandate) that encompasses both the objective of keeping price stability and the objective of maintaining financial stability (and, secondarily, the objective to support the Government's economic policy, including growth and employment).[5] The Bank's dual mandate is reflected in its internal organization which relies on a number of committees, namely: a) the Monetary Policy Committee (MPC), established in 1998, in charge for monetary policy, b) the Financial Policy Committee (FPC), established in 2012, with the task of identifying, monitoring and removing or reducing systemic risks to protect the financial system, and, c) the Prudential Regulatory Committee (PRC), established in 2016, in charge for making the most relevant decisions of the Prudential Regulation Authority (PRA).[6]

Yet, such reforms were all adopted on the grounds that 'a transparent, accountable and well-governed central bank is essential not only for effective policy, but also for democratic legitimacy'.[7]

3. The BoE was eventually given full independence for monetary policy purposes in 1998 through the Bank of England Act 1998, even though, unlike in the case of other central banks, there is no 'declaration of independence' protecting the Bank from political interference.[8] The fact the Bank's independence is not enshrined in the Constitution can potentially make it easy to repeal it through ordinary legislation, although this is made unlikely by non-legal reasons.[9]

In the 1990s a broad consensus had emerged in relation to the economic benefits arising from granting central banks 'instrument independence' over monetary policy.[10] In this regard, a distinction was made between 'goal independence', referring to the central bank being free to set its monetary policy goals, and 'instrument independence', referring to the central bank being free to choose the means

through which it tries to achieve its goals.[11] The second option was preferred also in the UK and accordingly, with the 1998 Act, the BoE was given statutory objective(s) for maintaining price stability and, subject to that, supporting the Government's economic policy.[12] Against this backdrop, the MPC was created and provided with instrument independence in conducting monetary policy.

On these grounds monetary policy is performed in the UK as follows: '1) Parliament sets the Bank the goal of maintaining price stability;[13] 2) Parliament empowers HM Treasury to define this on an annual basis;[14] 3) the Bank has operational independence in setting policy to achieve price stability (and is accountable to HM Treasury and Parliament for doing so); 4) yet this operational independence is not immutable and can be overridden by HM Treasury in extreme economic circumstances; 5) but should HM Treasury wish to do so, it can only do so transparently and with the approval of Parliament'.[15]

4. As a legislative response to the global financial crisis of 2007-2009, the Financial Services Act 2012 was adopted to give to the BoE responsibility for overseeing the UK financial system as a whole.[16] Accordingly, the FPC was established and a new regulator, the PRA, was set up, at the outset as a subsidiary of the BoE, and then it was incorporated within the Bank itself.[17]

Since with expanded responsibilities 'comes the need for effective transparency, genuine accountability and robust governance arrangements',[18] in 2014 the BoE proposed a series of changes aimed at enhancing its transparency, accountability and governance.[19]

In order to strengthen the ability of the Parliament and of the public to hold the Bank accountable for its actions, the latter proposed: 1) improvements to MPC transparency, including the publication of the minutes of its discussions and its Inflation Report alongside the announcement of its policy decision; 2) the publication of the minutes of Court of Directors meetings; 3) the simplification of the governance and structure of the Bank's Court of Directors; 4) the alignment of the status of the FPC and the PRA Board with that of the MPC.[20]

In relation to MPC transparency, the BoE, by accepting the recommendations formulated by Kevin Warsh, a former Governor of the Federal Reserve, in his Independent Review of the MPC's processes,[21] decided to publish, with an appropriate delay (i.e. 8 years), the transcripts of that part of its meeting at which policy is decided, as well as both the minutes of its policy meetings and the Inflation Report at the same time as its policy decision.[22]

The MPC decided also that it would have continued to meet monthly and to decide the stance of monetary policy at every meeting, but 'from 2016, eight of the twelve meetings will be roughly evenly spaced throughout the year, with one meeting roughly halfway between each quarterly Inflation Report. The remaining four meetings will be used both to decide the monetary policy stance and to hold joint MPC-FPC discussions on topics of mutual interest'.[23]

With regard to the cooperation between the MPC and FPC, both committees considered it appropriate to enhance their interaction by scheduling four joint meetings per year.[24]

Since April 2013, due to amendments to the 1998 Act, the Bank has published the minutes of its Court meetings six weeks after the meeting to which they relate, or, if there is no further meeting within that period, then two weeks after the date of the next Court meeting.[25] However, the minutes from 1914 to March 2013 had remained unpublished. Therefore, with a view to enabling the Parliament, through its Treasury Committee, to hold the Bank to account, the latter decided to publish also the minutes of the historical court meetings.[26]

The Bank also proposed to simplify its governance structure as direction and oversight were split between two statutory Boards, i.e. the Court and the Oversight Committee, with overlapping functions.[27] Based on previous experience gained over 18 months, the BoE thought that a single unitary board could have been more effective both in managing the Bank and in delivering a more convincing framework for accountability.[28]

The MPC was already a Committee of the Bank operating under objectives set in legislation, namely 'to maintain price stability and, subject to that, to support the economic policy of Her Majesty's Government, including its objectives for growth and employment.'[29] This structure was considered very effective and therefore it was suggested that also the FPC and PRC adopted the same structure.[30]

The changes suggested by the BoE that needed legislative action to become effective have been implemented through the Bank of England and Financial Services Act 2016, whose most relevantelements are: 1) improvement of the accountability and governance of the BoE by making its Court of Directors a smaller, more focused and unitary board; 2) implementation of the recommendations of the Warsh Review by moving the MPC to a schedule of a minimum of 8 meetings a year; 3) finalization of the Governor's 'One Bank' reforms by bringing the PRA within the Bank, ending its status as a subsidiary, and establishing a new PRC; 4) changes to the FPC, through making it a statutory committee of the Bank, in line with the MPC and the new PRC; 5) appointment of a new Deputy Governor for Banking and Markets in legislation, adding the position to the Court of Directors and the FPC; 6) bringing the Bank within the purview of National Audit Office (NAO) value for money studies, improving transparency and accountability for its use of resources; 7) further coordination arrangements between the Treasury and the Bank in protecting taxpayers and the wider economy from bank failures.[31]

5. As mentioned, through the legislative initiatives adopted in the aftermath of the global financial crisis of 2007-2009, the BoE has been given a much broader set of functions and consequently of powers than it was previously the case. The Bank is indeed the monetary authority, the lender of last resort, the macro-prudential supervisor, the micro-prudential supervisor, the financial markets infrastructure regulator and the resolution authority. But as well-known, 'with power comes responsibility'.[32] Against this backdrop, accountability plays a pivotal function for a democracy to properly function. Despite its evanescence, accountability has been clearly defined as 'an obligation owed by one person or institution (the accountable) to another (the accountee) according to which the former must give account of, explain and justify the actions, omissions or decisions taken against criteria of some kind, and take responsibility for any fault or damage'.[33] For such an obligation to be properly discharged by

the accountable, which means for this system to work, then an accountee capable of holding the latter to account is needed. And in this regard, the existential question pertains to who can effectively act as the accountee, or in other words, 'to whom should the Bank of England be accountable?'.[34] In a parliamentary democracy, Parliament is regarded as the best-suited institution to play the role of guarding the guardians of monetary and financial stability.[35] Even though this is true from a purely theoretical perspective, in practice typically an issue arises. In fact, for such a check and balance system to effectively function, Members of Parliament (MPs) need to have a deep understanding of monetary and financial matters as, otherwise, the control would simply be ineffective.[36] An efficient mechanism to enable MPs to successfully perform this task, which was proposed back in 1997, is the creation by the Treasury Committee of a sub-committee with the specific role of monitoring the Bank.[37] Of course, this mechanism of control can work if the members of such a sub-committee have 'the technical expertise required to deal with monetary matters' and are multi-partisan, on the very assumption that 'accountability requires knowledge'.[38] Accordingly, those MPs, who are members of the Committee (or sub-committee), are meant to act as a 'filter for the house in holding the Bank of England accountable to Parliament'.[39]

The BoE is accountable to parliament (House of Commons), to judicial review and to audit control. And it should also be accountable to the Treasury.[40] In this regard, the most critical aspect relates to the balance to be struck between the right amount of independence that the Bank should be given and the degree of accountability which should be proportionate to the powers and functions assigned to it. 'Indeed, if too much independence can lead to the creation of a democratically unacceptable 'state within the state,' too much accountability threatens the effectiveness of independence'.[41] The importance of independence arises from the need to de-politicise the 'pursuit of monetary policy and financial stability'.[42] In this regard, 'Parliamentary accountability provides the democratic legitimacy that an independent central bank would otherwise lack'.[43]

Also, for an accountability mechanism to properly work, it needs to clearly set objectives or standards according to which an action or decision is to be assessed.[44] This is to say that 'accountability implies an obligation to comply with certain standards in the exercise of power or to achieve specific goals'.[45]

With specific regard to monetary policy, the BoE is meant to put in place measures with a view to reaching the inflation target set by the Chancellor. Such inflation target, therefore, 'provides a clear quantifiable indicator'.[46] By contrast, in the area of financial stability there are no universally accepted standards to comply with. And this of course creates an issue in terms of accountability, since with no criteria to follow, then the content of the obligation becomes vague and its discharging difficult to assess.[47]

Still, another important component of accountability relates to the distinction between ex ante accountability and ex post accountability, since accountability can be exercised either before/during the process of taking the decision/action, or after that the decision/action has been taken.[48]

Significant is also the relationship between transparency and accountability. In this regard, whereas 'accountability is an obligation to give account of, explain and justify one's actions', differently

'transparency is the degree to which information on such actions is available'.[49] The main issue with transparency is that it can end up creating panic. Accordingly, certain supervisory decisions require a degree of confidentiality, given the psychological connotations of bank panic and contagion.[50] This, by contrast, is not the case in the area of monetary policy where the arguments in favour of transparency largely overcome the ones relating to confidentiality.[51]

A different issue pertains to the hierarchy between the different objectives that the Bank is meant to achieve and the possible conflict of interests between them. 'Performance accountability is facilitated when there is one goal, rather than multiple goals, and when that goal is narrowly defined rather than formulated in broad terms. If there are multiple goals, a clear and unambiguous ranking is better than no ranking at all'.[52]

In terms of procedures or mechanisms to enable parliamentary accountability, the following are regarded as useful instruments: 1) a full annual report of the Bank's operations and accounts to be first debated by the Treasury Committee and then submitted to the House of Commons with an explanatory note drafted by the Committee itself; 2) a report drafted by the Court of the Bank once per year reviewing performances and procedures of the MPC to be presented first to the Treasury Committee and then submitted to the House of Commons with an explanatory note; 3) special reports which could be requested by the Treasury Committee and/or by the House of Commons in emergency situations or special occasions; 4) appearances of the Governor, Deputy-Governors and Members of the MPC before the Treasury Committee and the House of Commons both on a regular basis and in special circumstances; 5) the advice of the Treasury Committee to be requested for the appointment of the Governor and the Members of the MPC; 6) inflation targets, to be set by the Chancellor, should be first discussed by the Treasury Committee and then by the House of Commons.[53]

6. The relationships between the Treasury and the Bank are based on strong cooperation and coordination between the two. 'Accordingly, there is a broad suite of formal and informal mechanisms to manage when different views on issues of policy or a course of action to be taken emerge'.[54]

The BoE operates in accordance with a statutory framework set by Parliament. Such a framework is designed to ensure that the Bank is free from day-to-day political influence and direction. Still coordination becomes particularly important in areas placed at the border between fiscal policy, monetary and financial stability. In this regard a review on the monetary policy framework conducted by the Treasury in 2013 'highlighted that the development of new unconventional instruments (such as Quantitative Easing) should include consideration with Government of appropriate governance and accountability arrangements to ensure that the respective objectives of the government and central bank are clear and transparent'.[55] The need for such fiscal central bank coordination in relation to such instruments is important because the instruments risk blurring the line between monetary and fiscal responsibilities, as such policies can 1) involve credit risk (which ultimately has implications for the taxpayer as governments back the public sector balance sheet) and 2) influence credit allocation (which raises the question about the appropriate role of central banks in such decisions).[56]

On top of all this, a wide range of supporting coordination mechanisms are in place between HM Treasury and the Bank, specifically in relation to the three statutory committees and also more generally.[57]

However, in specified circumstances, HM Treasury has a set of backstop legal powers to override the Bank.[58] The four powers of direction that HM Treasury has over the BoE are: 1) general power of direction 'in the public interest', introduced as part of the post-war legislation that took the Bank into public ownership in 1946; 2) reserve power over monetary policy 'in extreme economic circumstances', retained by the Treasury at the time the Bank was granted operational responsibility for monetary policy in 1998; 3) power to direct the Bank to comply with EU law or other international obligations in the field of firm supervision, granted in 2012; and 4) specific power of direction as a crisis-management tool where public money is at risk, introduced as part of post-crisis legislative reforms.[59]

These powers and their extension have led commentators to argue that 'the Bank of England's independence from HM Treasury is a complicated affair, and one which has evolved over time in a piecemeal fashion'.[60]

7. In the face of the first negative effects of the pandemic on the British economy, the BoE has immediately intervened by taking a number of vigorous monetary policy measures aimed at achieving the price stability objective (inflation target of 2%),[61] on one side, and at limiting the recessive impact of the crisis, on the other side.[62]

The main technique deployed to implement such measures has been the remarkable expansion of the Bank's balance sheet[63] through creating reserves,[64] which has been further justified by the consideration that the BoE is meant not only to keep price stability but also to maintain financial stability, (and secondarily to support the Government's economic policy, including growth and employment).[65]

The most relevant measures so far adopted by the BoE have been: 1) Term Funding Scheme with additional incentives for SMEs (TFSME);[66] 2) Covid Corporate Financing Facility (CCFF);[67] 3) Asset Purchases Facility (APF);[68] 4) interest rates reduction from 0,75% to 0,1%;[69] 5) Contingent Term Repo Facility (CTRF);[70] 6) extension of the Ways and Means facility.[71]

The BoE's action has been supported by HM Treasury since the very beginning. Such close interaction between the two institutions has been particularly important to implement the CCFF, that is a tool meant to provide liquidity to large companies hardly hit by the crisis. The financing takes place through the purchase of commercial papers. The BoE acts on behalf of the Treasury that, therefore, bears the borrowers' risk of default.[72] The CCFF is thus a Government program since it is the Government that decides the amount of the financing, the beneficiaries and the terms. The latter releases a guarantee to the BoE that in turn implements the Government's decisions by creating reserves.[73]

7.1. On 19 March 2020, the MPC decided to increase the size of the quantitative easing program already on-going up to the amount of 645 billion pounds,[74] equal to 7,4% of the British GDP.[75] The main

reason for this decision was the condition in which financial markets ended up in March 2020. Indeed, they experienced a tremendous shock that could be dealt with only through a massive quantitative easing program.[76] Interestingly, the program has been subsequently further increased of additional 100 billion pounds on 17 June 2020[77] and of additional 150 billion pounds on 5 November 2020, reaching the total amount of 895 billion pounds.[78]

The increase of the program is a remarkable element but what is even more significant is the underlying reasoning which supports the inherent decisions. In this regard, it has been argued that in a crisis like the one provoked by the pandemic it is better to err by adopting excessive measures which can then be reduced, rather than to take insufficient initiatives which could leave the economic system paralysed by low or even absent inflation.[79] The reason justifying such an approach is that should the economy stagnate due to low growth and absent inflation, monetary policy would not have effective instruments to intervene to reach the 2% target. Therefore, monetary authorities must act asymmetrically; namely, a reduction of monetary policy measures must be gradual, whereas, should a monetary stimulus be necessary, this should be provided very quickly.[80] Indeed, if thanks to expansive measures the economy were to be able to recover through sustained growth, monetary authorities would have the tools to reduce the measures before that excessive demand could create inflation. In the opposite scenario, by contrast, if the stimulus provided were to be insufficient, the economy would end up in a deflationary spiral almost impossible to handle, which in turn could provoke high costs in the long run, such as business failures and unemployment.[81] In other words, the main concern within the MPC is that the economic recovery could be to slow since this might result particularly expensive due to the inability of the economic system to fully operate.[82]

It is also worth noticing that, although currently in the context of the quantitative easing program the purchase of financial instruments can take place only on secondary markets, the BoE has expressively declared that it will keep on assessing the appropriateness of buying instruments also on primary markets.[83] Such a position has made some commentators argue that the BoE could eventually change paradigm and purchase treasury gilts and corporate bonds at the time of their issuance.[84]

7.2. In this context even the decision jointly made by the BoE and the Treasury to remove the cap to the so-called Ways and Means facility is very significant. The latter is a credit line provided by the BoE to the Treasury which used to be capped to the amount of 400 billion pounds.

Through the removal of such cap, the aim is to enable the Treasury to borrow with no quantitative limitations from the BoE, that is thus meant to finance the former through the creation of reserves. The use of such credit line has been, nevertheless, limited through some restrictions aimed at preserving the Bank's independence. Accordingly, the facility will be available only until the end of 2020 and will allow the Treasury to rely on extra financial resources should the market for Treasury gilts freeze due to the pandemic. This is particularly relevant in light of the massive public intervention put in place by the British Government to support the economy which in turn will determine a significant increase of the deficit and thus of public debt.[85]

From the balance sheet perspective, the way of working of this facility is not different from a quantitative easing program in which public debt is bought by the central bank. In both cases, the central bank issues reserves that are then used to finance the government.

Yet, the very difference is that whereas in a quantitative easing program the initiative is taken by the central bank, in the case of the Ways and Means facility, after its granting and the removal of size limitations, the decision to draw it is made by the Government on its own.[86]

Despite the introduction of some restrictions to its use (primarily its expiration at the end of the year), such a decision has opened up a lively debate among scholars, policy-makers and commentators principally focused on two main interrelated aspects. The first criticality relates to the potentially inflationary effect of such a credit line. The second one is that this measure can end up being pure monetary financing since the BoE creates central bank money to finance (at least potentially) the State's deficit. The most serious concern pertains to the risk that the BoE's independence could be reduced or affected, thereby undermining the very raison d'être of a central bank with monetary policy functions separated by the Government.

Both criticalities have been analysed, discussed and tackled by the BoE. Particularly, according to the MPC, currently, there is no risk of inflation, since the Covid-19 crisis, by negatively affecting both demand and supply of goods and services,[87] will significantly decrease inflation, which could reach its target level of 2% only in 2022.[88] On top of this, because of its limited duration such a credit line will not be able to influence the BoE's monetary policy and thus its ability to reach the inflation target.[89]

In relation to the monetary financing concern, the BoE has publicly intervened arguing that this is mostly an issue of definitions.[90] The term 'monetary financing' is not always understood and interpreted in the same way, and according to the definition used by the BoE, the latter has stated there is no monetary financing taking place in the UK.[91]

According to a commonly accepted interpretation, monetary financing takes place when public expenditures are financed through central bank money instead of through issuing sovereign bonds on the market. However such a characterisation would also qualify other monetary policy measures where the central bank creates reserves to finance the purchase of sovereign debt. Hence, the crucial point relates to the limit above which such a financing technique is no longer sustainable. Before the pandemic, the amount of central bank money in the UK was equal to 12% of the public debt while now it has reached 26%. Nevertheless, in Japan this ratio is 42%. This allows to argue that there is not a commonly accepted threshold beyond which the central bank's financing of public debt is considered excessive. What seems to be relevant in this regard, on the contrary, is the investors' confidence in the public finance of a given country and its sustainability in the long run resulting from the former willingness to keep on buying public debt. A reliable indicator is the interest rate charged to issue public debt.[92]

The main concern in relation to monetary financing pertains to the creation of hyperinflation.[93] Yet, the difference between cases such as the Weimar Republic and cases of effective monetary policy to

reach the inflation target is to be found in the central bank's independence from the government.[94] The risk of hyperinflation could arise when the decisions of the central bank are influenced by the government that tries to pursue fiscal objectives without caring about inflation, thereby creating a phenomenon called fiscal dominance.[95]

On these grounds, the BoE has argued that a facility like the Ways and Means, although without any cap, cannot be qualified as monetary financing since it is temporarily limited and granted by an independent central bank.[96]

8. The BoE has faced the Covid-19-provoked crisis by implementing extraordinary and non-conventional monetary policy measures. Such expansive measures have been adopted also on the grounds that there is no perceived risk of inflation.

The experience of the Bank of England is relevant also in relation to the concept of monetary financing by showing that there are different characterisations of such phenomenon. The latter is typically understood as public expenditures' financing granted through the creation of central bank money. The main concern in this regard is about the risk of creating hyperinflation.[97] However such a risk might arise when the central bank's monetary policy measures are heterodetermined by the government to reach fiscal objectives paving the way to a phenomenon called fiscal dominance.[98]

With regard to quantitative easing programs, nevertheless, it has been observed that they do not automatically qualify as monetary financing[99] since they are mostly a monetary policy instrument used to reach the inflation target and support growth and employment.[100] Such extraordinary measures are typically adopted when interest rates reduction (id est a conventional measure) is no longer possible or it is insufficient to reach the target.

Similar considerations have been advanced with regard to credit lines granted by the central bank to the government. According to the BoE, the crucial point in this regard is the level beyond which this financing technique is no longer sustainable. Since there is no universally adopted threshold, what is relevant from this perspective is the investors' confidence in the country's public finance as well as their willingness to keep on lending money to the government.

References:

[1] See VLIEGHE, Monetary policy and the Bank of England's balance sheet, Speech – Bank of England, 23 April 2020, arguing that 'The ultimate aim of monetary policy, as it always is, is to meet the inflation target, by ensuring that aggregate demand grows sustainably in line with the economy's potential. The economy's potential is severely disrupted at the moment but, once the pandemic is over, and other things equal, in principle it should return approximately to the pre-virus trajectory. A persistent undershoot of the economy relative to its pre-virus trajectory is, in my view, most likely to be disinflationary. So the current priority for monetary policy, with a lot of help from fiscal policy, is to return the economy to that pre-virus trajectory as soon as possible'.

[2] See CAVALLINO – DE FIORE, Central banks' response to Covid-19 in advanced economies, Bank for International Settlements – BIS Bulletin no. 21, 5 June 2020, 1, assessing the measures adopted by central banks in the US, Euro Area, Japan, UK and Canada.

[3] Before that, the Bank was in private hands for the first 252 years of its existence and then nationalized with its capital stock transferred to HM Treasury in 1946; see Bank of England Act 1946, 9 & 10 Geo. 6 c. 27, § 1(1) (UK). The shares are held by the Treasury Solicitor on behalf of HM Treasury. See BANK OF ENGLAND, Who Owns the Bank of England?, available at https://www.bankofengland.co.uk/knowledgebank/who-owns-the-bank-of-england.

[4] See UK Government, Bank of England and Financial Services Bill given royal assent. Parliament passes the Bank of England and Financial Services Act 2016, 4 May 2016, https://www.gov.uk/government/organisations/hm-treasury, stating that 'The Financial Services Act 2012 dismantled the failed tripartite system, putting the Bank of England at the centre of a new framework of financial regulation'.

[5] See LASTRA – ALEXANDER, The ECB Mandate: Perspectives on Sustainability and Solidarity, In-Depth Analysis Requested by the ECON committee of the European Parliament, Monetary Dialogue Papers, June 2020, 8, arguing that 'In the UK, financial stability is a statutory objective of the Bank of England on a par with price stability (twin mandate)'.

[6] See GOULDNING – Abley, Relationship management in banking, London 2018, 137.

[7] See Bank of England, Transparency and accountability at the Bank of England, 11 December 2014, 1.

[8] See Salib – Skinner, Executive Override of Central Banks: A Comparison of the Legal Frameworks in the United States and the United Kingdom, The Georgetown Law Journal, 2019, Vol. 108, 912, who also emphasise that there is 'no oath that its political masters must swear requiring them to respect central bank independence'.

[9] Id., 913 who recall the words of Chancellor Lawson saying that 'there would be a powerful market sanction against that: the mere announcement of the intention to do so would in itself be so damaging to market confidence that any Government would be extremely reluctant to attempt it'.

[10] See Balls – HOWAT – STANSBURY, Central Bank Independence Revisited: After the Financial Crisis, What Should a Model Central Bank Look Like?,13–14, Harvard Kennedy School Mossavar – Rahmani Centre for Business & Government, Working Paper No. 67, 2016, available at https://www.hks.harvard.edu

[11] See Debelle – Fischer, How Independent Should a Central Bank Be?, in Goals, Guidelines, and Constraints Facing Monetary Policymakers: Proceedings of a conference held in June 1994, 195 – 197.

[12] See Salib – Skinner, Executive Override of Central Banks: A Comparison of the Legal Frameworks in the United States and the United Kingdom, supra, 929.

[13] More in general and beyond monetary policy, 'Parliament sets the Bank's statutory objectives in legislation and the Bank then has the operational independence to pursue these objectives, principally through its three statutory committees'; see Salib – Skinner, Executive Override of Central Banks: A Comparison of the Legal Frameworks in the United States and the United Kingdom, supra, 921.

[14] Accordingly, 'Parliament empowers HM Treasury to elaborate on the Bank's statutory objectives. In practice, this takes the form of letters from the Chancellor to the statutory committees, which are issued and published on a regular basis. As one would expect, the scope of the letter varies depending on the committee'; see Salib – Skinner, Executive Override of Central Banks: A Comparison of the Legal Frameworks in the United States and the United Kingdom, supra, 922, who also stress that 'the Chancellor's remit to the MPC, which must be issued at least once every twelve months, defines price stability (since the regime's inception, an inflation target) and specifies the economic policy of the government. Since 1997, the remits have required an exchange of "open letters" between the Governor and the Chancellor if inflation moves away from the target by more than 1% in either direction'.

[15] Id., 931-932.

[16] See Lastra, Accountability mechanisms of the Bank of England and of the European Central Bank, Study for the Committee on Economic and Monetary Affairs, Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament, Luxembourg, 2020, 15.

[17] Id., 15.

[18] See Bank of England, Transparency and accountability at the Bank of England, supra, 1.

[19] Id., 1.

[20] Id., 1, also stating that these changes were expected 'to enhance the Bank's ability to fulfil its mission to promote the good of the people of the United Kingdom by maintaining monetary and financial stability'.

[21] See Warsh, Transparency and the Bank of England's Monetary Policy Committee, December 2014, passim, who identified four distinct objectives of monetary policy transparency, (1. sound policy, 2. effective communication, 3. public accountability and 4. accurate historical record-keeping), and made recommendations with respect to each of them.

[22] See Bank of England, Transparency and accountability at the Bank of England, supra, 2.

[23] Id., 3.

[24] Id., 3.

[25] Id., 4.

[26] See Lastra, Accountability mechanisms of the Bank of England and of the European Central Bank, supra, 16.

[27] Id., 16.

[28] See Bank of England, Transparency and accountability at the Bank of England, supra, 4-5.

[29] Id., 5.

[30] SeeLastra, Accountability mechanisms of the Bank of England and of the European Central Bank, supra, 17.

[31] See UK Government, Bank of England and Financial Services Bill given royal assent. Parliament passes the Bank of England and Financial Services Act 2016, supra, passim.

[32] See Lastra, Keeping tabs on the Bank. Or, as they say, Quis custodiet ipsos custodes?, Parliamentary Brief, July 2011, 20, recalling that 'Lord Acton's dictum resonates in the background of the corridors of power, as a key reminder of the importance of accountability'.

[33] Id., 20.

[34] Id., 20.

[35] See Lastra, Accountability of the Bank of England. First Report. House of Commons – Treasury Committee, Session 1997-1998, London, 27 October 1997, 28, clearly saying that 'in a democracy, an

independent central bank needs to be accountable to the elected representatives of the will of the people, i.e. to Parliament'.

[36] See Lastra, Keeping tabs on the Bank. Or, as they say, Quis custodiet ipsos custodes?, supra, 20, who also stresses that in order to properly perform this task MPs need 'time, information and resources'.

[37] See Lastra, Accountability of the Bank of England, supra, 28-29.

[38] See Lastra, Keeping tabs on the Bank. Or, as they say, Quis custodiet ipsos custodes?, supra, 20, also suggesting that this sub-committee should have either three or five members.

[39] See Lastra, Accountability of the Bank of England, supra, 28, emphasising that the members of the Committee should explain in clear terms to the House whether the Bank has managed to achieve its goals or not.

[40] See Lastra, Keeping tabs on the Bank. Or, as they say, Quis custodiet ipsos custodes?, supra, 20.

[41] Id., 20.

[42] Id., 20.

[43] See Lastra, Accountability of the Bank of England, supra, 28.

[44] See Lastra, Keeping tabs on the Bank. Or, as they say, Quis custodiet ipsos custodes?, supra, 21.

[45] Id., 21, who also underlines that 'the more complex the activity, the more difficult it is to establish clear standards of conduct and specific outcomes. And complexity frustrates accountability'.

[46] Id., 21.

[47] Id., 21, also mentioning some proposals advanced by economists to assess the pursuit of financial stability.

[48] Id., 21, who underlines that 'the appointment procedures of central bank officials, if such procedures require parliamentary approval, and the parliamentary debate of inflation targets (when such a parliamentary debate is required) can be regarded as ways of exercising accountability ex ante'; while 'the reporting requirements and the appearances of the central bank governors or central bank officials in front of parliamentary committees are ways of exercising accountability through control or ex post'.

[49] Id., 21.

[50] Id., 21, ‘for instance, the need for covert assistance in the case of lender of last resort operations is of particular importance to contain a crisis, since the belief in a panic is self-fulfilling and the fact that an institution is known to require official assistance may trigger the very run the authorities are keen to prevent, and thus ‘stigmatize’ the provision of such assistance’.

[51] Id., 21.

[52] Id., 21.

[53] See Lastra, Accountability of the Bank of England, supra, 29.

[54] See Salib – Skinner, Executive Override of Central Banks: A Comparison of the Legal Frameworks in the United States and the United Kingdom, supra, 920.

[55] HM TREASURY, Review of the Monetary Policy Framework, 2013, 4–5, available at https://assets.publishing.service.gov.uk/

[56] See Salib – Skinner, Executive Override of Central Banks: A Comparison of the Legal Frameworks in the United States and the United Kingdom, supra, 922, who argue that ‘a practical example of such coordination is the public exchange of letters between the Bank and HM Treasury when the Bank commenced gilt purchases via its Asset Purchase Facility in 2009. See Letter from Alistair Darling, Chancellor of the Exchequer, HM Treasury, to Mervyn King, Governor, Bank of England (29 January 2009), available at https://www.bankofengland.co.uk/-/media/boe/files/letter/2009/chancellor-letter-290109; Letter from Alistair Darling, Chancellor of the Exchequer, HM Treasury, to Mervyn King, Governor, Bank of England (3 March 2009), available at https://www.bankofengland.co.uk/-/media/boe/files/letter/2009/chancellor-letter-050309. The letters set out the monetary policy purposes and operation of the facility, and the delegation of the instrument of asset purchases financed by the issuance of central bank reserve to the MPC. HM Treasury also undertook that ‘the Government will not alter its issuance strategy as a result of the asset transactions undertaken by the Bank of England for monetary policy purposes’.

[57] Id., 923-924, making the example of an HM Treasury official being permitted to attend and speak at MPC and FPC meetings, yet without voting rights. Additionally, there are formal memoranda of understanding explaining the financial relationships between the two Institutions and their responsibilities regarding resolution planning and financial crisis management.

[58] Id., 909.

[59] Id., 914.

[60] Id., 913.

[61] See BANK OF ENGLAND – MONETARY POLICY COMMITTEE, Monetary Policy Report, May 2020, passim, where it is said that 'The MPC has statutory objectives to maintain price stability and, subject to that, to support the economic policy of the Government including its objectives for growth and employment. In the current circumstances, and consistent with the MPC's remit, monetary policy is aimed at supporting businesses and households through the crisis, and limiting any lasting damage to the economy'.

[62] See SAUNDERS, Covid-19 and monetary policy, Speech – Bank of England, 28 May 2020, 4.

[63] See BAILEY, The central bank balance sheet as a policy tool: past, present and future, Speech – Bank of England, given at the Jackson Hole Economic Policy Symposium, 28 August 2020, 2.

[64] See VLIEGHE, Monetary policy and the Bank of England's balance sheet, supra, 3; see also CAVALLINO – DE FIORE, Centralbanks' response to Covid-19 in advanced economies, supra, 6.

[65] According to the Financial Services Act 2012 the BoE is also meant to pursue the objective 'of protecting and enhancing the stability of the financial system of the United Kingdom'. Furthermore the BoE 'is committed to sustain financial stability whose purpose is to maintain three vital functions of the financial system (1) the payments mechanism (2) financial intermediation (3) insuring against and dispersing risk'; see LASTRA – ALEXANDER, The ECB Mandate: Perspectives on Sustainability and Solidarity, supra, 5, arguing that 'Following the GFC of 2008, the rediscovery of financial stability as a key central bank objective (as well as being an objective for the government and for financial regulatory and supervisory agencies) has inspired legislative reforms around the world'.

[66] See BANK OF ENGLAND, Term Funding Scheme with additional incentives for SMEs (TFSME) – Market Notice, 11 March 2020, available at https://www.bankofengland.co.uk/markets/market-notices/2020/term-funding-scheme-market-notice-mar-2020.

[67] See BANK OF ENGLAND, Covid Corporate Financing Facility (CCFF): information for those seeking to participate in the scheme, 17 March 2020, available at https://www.bankofengland.co.uk/markets/covid-corporate-financing-facility.

[68] See BANK OF ENGLAND, Asset Purchase Facility (APF): Asset Purchases and TFSME – Market Notice, 19 March 2020, available at https://www.bankofengland.co.uk/markets/market-notices/2020/apf-asset-purchases-and-tfsme-march-2020.

[69] See BANK OF ENGLAND, Monetary Policy Summary for the special Monetary Policy Committee meeting on 19 March 2020, 19 March 2020, available at https://www.bankofengland.co.uk/monetary-policy-summary-and-minutes/2020/monetary-policy-summary-for-the-special-monetary-policy-committee-meeting-on-19-march-2020; see also CAVALLINO – DE FIORE, Central banks' response to Covid-19 in advanced economies, supra, 1.

[70] See BANK OF ENGLAND, Activation of the Contingent Term Repo Facility – Market Notice, 24 March 2020, available at https://www.bankofengland.co.uk/markets/market-notices/2020/activation-of-the-contingent-term-repo-facility.

[71] See BANK OF ENGLAND, HM Treasury and Bank of England announce temporary extension to Ways and Means facility, News release, 9 April 2020, available at https://www.bankofengland.co.uk/news/2020/april/hmt-and-boe-announce-temporary-extension-to-ways-and-means-facility.

[72] See CAVALLINO – DE FIORE, Central banks' response to Covid-19 in advanced economies, supra, 5, arguing that 'UK Treasury offered a guarantee of 100% of the stock of commercial paper purchased by the Bank of England through its Covid Corporate Financing Facility (CCFF)'.

[73] See VLIEGHE, Monetary policy and the Bank of England's balance sheet, supra, 12.

[74] See BANK OF ENGLAND – FINANCIAL POLICY COMMITTEE, Interim Financial Stability Report, May 2020, 8; see SAUNDERS, Covid-19 and monetary policy, supra, 4.

[75] See CAVALLINO – DE FIORE, Central banks' response to Covid-19 in advanced economies, supra, 4.

[76] See VLIEGHE, Yield Curve and QE, 2018, Speech available at: https://www.bankofengland.co.uk/speech/2018/gertjan-vlieghe-imperial-college-business-school-london; see also VLIEGHE,Monetary policy: adapting to a changed world, 2019, speech available at: https://www.bankofengland.co.uk/speech/2019/; see HAUSER, Seven Moments in Spring: Covid-19, financial markets and the Bank of England's balance sheet operations, Speech – Bank of England, 4 June 2020, 6.

[77] See BANK OF ENGLAND, Asset Purchase Facility: Gilt Purchases – Market Notice, 18 June 2020, available at https://www.bankofengland.co.uk/markets/market-notices/2020/asset-purchase-facility-gilt-purchases-june-2020, where it is underlined that 'On 17 June the MPC voted for the Bank of England to continue with the existing programme of £200bn of UK government bond and sterling non-financial investment-grade corporate bond purchases, and to increase the stock of purchases of UK government bonds, financed by central bank reserves, by an additional £100bn, to take the total stock of asset purchases to £745bn'.

[78] See BANK OF ENGLAND, Bank Rate held at 0.1% and asset purchases increased by £150bn – November 2020 – Monetary Policy Summary and minutes of the Monetary Policy Committee meeting, 5 November 2020, available at https://www.bankofengland.co.uk/monetary-policy-summary-and-minutes/2020/november-2020.

[79] See SAUNDERS, Covid-19 and monetary policy, supra, 2, arguing that 'The costs of policy error are, to an extent, asymmetric at present. It is safer to err on the side of easing somewhat too much, and

then if necessary tighten as capacity pressures eventually build, rather than ease too little and find the economy gets stuck in a low inflation rut with increased hysteresis costs'.

[80] Id., 11.

[81] Id., 12.

[82] Id., 7.

[83] See BANK OF ENGLAND, Asset Purchase Facility (APF): Asset Purchases and TFSME – Market Notice, 19 March 2020, available at https://www.bankofengland.co.uk/markets/market-notices/2020/apf-asset-purchases-and-tfsme-march-2020.

[84] See SCHOMBERG – MILLIKEN, Bank of England ramps up bond-buying, cuts rates to near zero, Reuters, 19 March 2020.

[85] See GILES – SAMSON, UK public debt exceeds 100% of GDP for first time since 1963, Financial Times, 19 June 2020, passim; see CAVALLINO – DE FIORE, Central banks' response to Covid-19 in advanced economies, supra, 6.

[86] See VLIEGHE, Monetary policy and the Bank of England's balance sheet, supra, 10.

[87] Id., 2.

[88] See SAUNDERS, Covid-19 and monetary policy, supra, 4.

[89] See VLIEGHE, Monetary policy and the Bank of England's balance sheet, supra, 12.

[90] Id., 13.

[91] Id., 13.

[92] Id., 13.

[93] See SARGENT, The Ends of Four Big Inflations, in Inflation: Causes and Effects, University of Chicago Press, 1982, passim.

[94] See VLIEGHE, Monetary policy and the Bank of England's balance sheet, supra, 13.

[95] See BROADBENT, Government debt and inflation, Speech – Bank of England given at the Annual Meeting of the Central Bank Research Association – London School of Economics, 2 September 2020, 2; see VLIEGHE, Monetary policy and the Bank of England's balance sheet, supra, 14.

[96] Andrew Bailey, Governor of the BoE, has described monetary financing as 'a permanent expansion of the central bank balance sheet with the aim of funding the government', see GILES, Bailey rejects monetary financing as tool in virus crisis, Financial Times, 6 April 2020, passim.

[97] See SARGENT, The Ends of Four Big Inflations, supra, passim.

[98] See VLIEGHE, Monetary policy and the Bank of England's balance sheet, supra, 14.

[99] See SAUNDERS, Covid-19 and monetary policy, supra, 13.

[100] See VLIEGHE, Monetary policy and the Bank of England's balance sheet, supra, passim.

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