THE EUROPEAN FINANCIAL SUPERVISORY SYSTEM: STRUCTURE AND POLICIES, THE CMU PLAN

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Preface

This dissertation represents an expansion of the previews work done in 2018 as a final written paper for the 2017/2018 MOSFI edition. The written paper was focused only on supervision principles and European supervisory architecture. The intent of this final work is to expand the perspective and give a brief overview about the actions which have been taken in several sectors to ensure the application of supervision principles in the EU capital market. Examples of these principles are transparency, market integrity and stability, investor protection, etc.

The 2018 work will be the first part of this dissertation and it will be the foundation which will provide as an introduction to the core of the entire dissertation. The second part will cover two application fields of the supervision concepts. On one hand, in the first section, an example of investment funds stress test simulation (conducted in 2019 by ESMA, the European Securities and Markets Authority) will be reported to better understand how in practice these principles are applied in supervisory monitoring; introductory topics will be treated as a guide for the comprehension of the terms used in the funds test. On the other hand, a regulatory point of view will be provided, with the purpose of highlighting the general regulation framework which is being setting up regarding the European Capital Markets Union Institution. Having a view of the regulation measures that have been implemented and identifying the tools used also helps to see how these principles shape the regulation framework.

The conclusions of the dissertation will comment the stress test results and sum up the actual scenario which is facing important changes since the 2008 crisis. An ongoing amelioration process, from many points of view, is taking place to guarantee market integrity and investor protection in the new playing field that is being created: the European single financial market.

Table of contents

PART ONE:

Supervision and Architecture

1 SUPERVISION, DEFINITION AND OBJECTIVES

1.1 *Supervision of the financial system: general definition*

The term “supervision” refers to the set of activities performed by regulatory authorities, whose function is to monitor the sectors under their jurisdiction. This monitoring activity takes form of implementation of measures aimed at pursuing the regulatory objectives established ex-ante (and considered essential for the correct performance of the activities and operation of the supervise sector) through actions to develop the system or correct it if necessary. These actions are defined as supervisory tools, whose categories will be discussed below.

The need for regulation and supervision stems from the fact that the financial system interacts with any economic operator (companies are a case in point), whose economic-financial necessities[1] affect the policy decisions on the distribution of internal resources that determine the investments. These decisions concurrently have an impact in the overall structure of the system, shaping their behaviours and economic cycles. Another reason for which regulation and supervision is necessary is that the financial distress of a single intermediary can easily be conveyed to others with a more or less close relation with it, thereby causing a systemic crisis that would involve repercussions elsewhere This repercussion is typically channelled by loss of wealth and the contraction of the trading volumes as a whole).

In order to avoid all these harmful events, the aim of the supervisory activity is to pursue several objectives which ensure the proper functioning of the whole system. The next paragraphs will provide a general definition of the most important objectives pursued.

1.2 *Objectives pursued*

1.2.1 *Transparency*

The objective of transparency is to reduce as much as possible asymmetric information phenomena within the system (a factor that limits the productive and allocative efficiency, which will be discussed later) and place the supervisory bodies in the position to intervene in the event of irregularities.

By distinguishing between the two main levels (systemic and individual), we can define how at the systemic level the objective of transparency is to guarantee the disclosure and dissemination of as much information as possible[2] to the market (especially with reference to trading platforms) and to the wider community, so as to get as close as possible to a high degree of information efficiency of the markets (which also entails a level playing field for market operators); the closer we get to this degree, the greater the level of allocative and productive efficiency (not to be confused with the previous one) of the existing resources.

If we look at the problem from the individual point of view, we can define it as the duty that the individual (understood as the single financial intermediary) has to provide all relevant information to the client in order to allow this latter to make a choice that is as informed as possible (transparency of behaviour between the parties, i.e. intermediary and client). For instance, the need to ensure the reliability of accounting data calls for the introduction of proper internal controls. This enables potential clients, who decide to invest their resources, to do so in the best possible way.

1.2.2 *Integrity and stability of the markets*

The stability and integrity of the markets are crucial objectives of the supervisory bodies. A market responding to these characteristics is certainly more attractive to operators and capital flows than one subject to uncertainties (such as continuously changing regulatory framework, excessively relaxed entry standard, supervisory bodies that are too weak and inefficient, recurring crises periods in the market, etc.).

[1]Namely, management of sources and requirements, optimization and smooth management of collection/payment cycles or simply extra-ordinary speculative operations.

[2] Information that may relate to the operating performance (accounting data and financial statements) or more generally to the corporate life during the current financial year or the future ones (business plan)

Here, too, it is possible to identify two levels at which the supervisory objective can be pursued: individual stability and systemic stability. Looking at the individual level, stability is achieved through a prudent and balanced management of the supervised activity, which requires consideration of the type and level of risk that is assumed within the corporate assets portfolio. Generally, asset portfolios (the term is used in a broader sense, from a business, corporate finance and financial prospective) that are poorly diversified – both in terms of content and risk profile – and inefficiently composed may represent critical issues that undermine resilience, both individual and systemic. In particular, in the field of securities there is the risk of incurring cash-flow problems and the consequent default risk, which would prevent pursuing the supervisory objective.

At a general (systemic) level, stability is understood as the ability to limit the degree of risk and have a system that is sufficiently resilient to prevent crises that could propagate down the chain from one operator to another and that can have devastating domino effects.

The system's stability must be maintained over time by making continuous use of the optimal combination of supervisory tools, a combination that may vary depending on the context or contingent needs; in this case we are talking about system's dynamic stability.

A concept already in use before, and developed after the crisis, is that of the one with the characteristics mentioned previously, namely the macro-stability. The idea is to prevent as much as possible the recurrence of situations such as those of 2007.

As we will see later, new tools have been created and many of the existing ones have been adapted in order to establish and develop practices according to the new logic of macro-prudential supervision; a paradigm that has put the problem of stability and resiliency in a quite different light.

1.2.3 The efficiency of the markets

With regard to market efficiency, this can be understood in three main ways:

- 'allocative efficiency', i.e. the ability of the market to assign the existing resources to investment projects which, with the same level of risk, guarantee the highest expected returns. The allocative efficiency must be maintained over time; in this case, we are talking about system's dynamic allocative efficiency. The allocative efficiency is ideally achieved through the 'law of price', an economic principle that establishes that within the price of an asset is embedded all the information pertaining to it;
- 'production efficiency', i.e. the intermediary's technical capacity to produce the best possible result by minimizing costs and maximizing returns for a certain level of risk assumed given the available input;
- 'information efficiency', partly discussed previously, defines the capacity of the price to reflect as much available information as possible and its rate of change if new ones are produced.

It is important to note how the amount of available information and transactions within the system (particularly applicable for secondary markets) affects the liquidity of the market itself. The more liquid is the market, the closer will be delta prices and waiting times between a transaction and the next one. Minimising did and ask price spread triggers a virtuous circle which will facilitate the entry of new investors and operators with new orders, with consequent injection of new capital, to the benefit of the market prosperity and its yields. This will also lead to deeper markets and, since the price difference between a transaction and the next is very small, it will take a large number of transactions before seeing significant variations of the same, and the more of them are needed within a reasonable time, the more the market will be deep and liquid.

1.2.4 Competition within the markets

Complementary, but not less important, to the efficiency of the markets is competition. Through the pursuit of this objective it is also possible to increase their efficiency.

At international level, one of the main ways to promote competition is to reduce as much as possible (if not remove altogether) transnational barriers. The example closest to us is that of the Single European Market, where companies compete with each other and the financial markets are no exception.

This entire process would first require the elimination of borders and the consequent permission to intermediaries of other nations to operate in the domestic market (thus relying on supervisory checks carried out by equivalent authorities of other states) and the willingness to transfer part of the regulatory, supervisory and sanctioning sovereignty to a foreign national supervisor institution (or series of institutions).

Always with reference to the European Market, investment firms have the authorization to perform their financial services throughout the EU territory (so-called European passport). This is possible thanks to an ongoing standardization of the applicable rules, at least in its fundamental principles.

In some sectors (banking and investment firms) it has been possible to increase the degree of competition by making entry barriers less restrictive and, in some way, by softening prudential regulations, as for example the mandatory request for the authorization to open the first bank branch in a foreign state of the EU but not for the successive ones; a situation that could lead to a conflict of interests between the competition objectives and markets integrity. The entry of new operators can bring benefits in terms of competition and thus also in terms of allocative efficiency, but it can be a source of instability if the entry rules and those who enforce them (so-called gatekeepers) are weakened and scarcely effective.

1.2.5 Possible conflicts in the pursuit of the various objectives; an example

Financial supervision may lead to conflicts between different institutional objectives. The inability to properly manage these conflicts may on its turn result in suboptimal outcomes, which often go unnoticed to the same supervisor. Typically, ineffective supervision may come from either positive or negative conflicts of responsibilities.

Such conflicts can occur when the objectives to be monitored are entrusted to various authorities poorly coordinated with each other. One example is when supervision and central banks are separate. Let's assume that in country "A" the central bank is by statute to ensure stability at the systemic level (systemic stability). In such circumstances it is possible that, in having the overall picture of the situation, the bank may be less reluctant to let fail banks if this is the least bad option (causing the least damage to the system or less than it would have been by saving it)[3]. A body in charge of transparency and micro-stability supervision, which is mainly focused on the stability aspect, concentrates more of its resources for this purpose at the expense of other one, and most probably has the interest in avoiding the disclosure of the data in case of distress condition of the bank.

If on the one hand the behaviour of the central bank acts as a counterbalance of moral hazard[4], on the other it is clear that this gives rise to conflicts between the various supervisory bodies. All this creates potential deadlock situations or, worse, leads to situations of crisis in case the supervisory body – in an attempt to gain time in order to internally deal with the crisis – may somehow focus less on transparency and omits critical information that would reveal the actual state of crisis.

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[3]For more details about the topic in question, see the complete publication "*Il ruolo delle banche centrali nella vigilanza prudenziale*" which can be found here:
https://www.ecb.europa.eu/pub/pdf/other/prudentialsupcbrole_it.pdf?ca3af23b9f27de2cf9e7c04fb004f3ac

[4]Recent cases has shown quite the opposite situation, in this frame central banks, which act as a LOLR (Lender Of Last Resort), has been a moral hazard increase factor, both Veneto Banca and Banca Popolare di Vicenza have been saved by selling the good assets and the commercial network through the symbolic price of 1€ (50 Cent each) to the "Intesa San Paolo" group, leaving bad and non-performing assets to a public participate Italian firm named SGA S.p.A., financial firm which is specialized in managing non-performing assets. It happened in June 2017.

1.2.6 Conflict between administrative and criminal proceedings; a reference to the principle of 'bis in idem'

In addition to the issue of conflicts linked to the protection of the various objectives, it is possible that colliding situations may arise when, during the enforcement activity, both administrative and criminal proceedings are initiated in parallel for sanctioning the unlawful offences.

Such situation – once the decision on one of the two proceedings brought before the court has become final – would give rise to the issue of the 'bis in idem', as no one can be tried twice for the same offence. For the participating Member States, this principle is guaranteed by Article 4 Protocol No. 7 of the European Convention on Human Rights. Article 50 of the Charter of Fundamental Rights provides the same principle for the European Union. The issue has recently become more problematic in the prosecution of market abuse. The European legislation stipulates that individual states have discretion in not initiating administrative proceedings for market abuse if their internal legal system also foreseen criminal proceedings for the same fact (Article 30 (1) (2) MAR[5]). Some states, such as the United Kingdom (which is in any case under no obligation to mandate criminal punishment, as it has opted out of the MAD II), have opted to give discretion to internal supervisory bodies to decide whether to pursue the offence under criminal or administrative law. Others, like Austria, establish from the outset predefined thresholds to separate the two proceedings. In the Italian legal system, a UK-like solution would be hardly being in line with the mandatory nature of criminal prosecution under the Constitution, while the absence of predefined threshold makes the occurrence of parallel proceedings a regular scenario. This may lead to a *bis in idem* once one of the two proceedings is closed by a judicial decision having the force of *res iudicata*.[6]

A very important decision that stirred a debate both in Italy and in Europe was that issued by the European Court for Human Rights in the 'Grande Stevens and others v. Italy' case. The court cleared Grande Stevens who appealed against the criminal court's ruling issued after the civil judgement and therefore redundant with respect to the sanctions already imposed by Consob (the Authority for the Financial Markets in Italy).

Following this ruling and in the contest of the implementation of MAR the Italian consolidated law of finance was amended to enable Consob and the criminal judge to take into account each other's decision when applying their own sanction (Art.187 terdecies)[7].

[5] Regulation (EU) No 596/2014 of the European Parliament and of the Council of 16 April 2014 on market abuse (market abuse regulation) and repealing Directive 2003/6/EC of the European Parliament and of the Council and Commission Directives 2003/124/EC, 2003/125/EC and 2004/72/EC Text with EEA relevance
OJ L 173, 12.6.2014, p. 1–61 (BG, ES, CS, DA, DE, ET, EL, EN, FR, GA, HR, IT, LV, LT, HU, MT, NL, PL, PT, RO, SK, SL, FI, SV)

[6] For further details, refer to: Avoiding 'bis in idem' in market abuse enforcement after Grande Stevens: the case of Italy, Matteo Gargantini, International Journal for Financial Services, 1/2015

[7] Public enforcement of market abuse bans, the ECtHR Grande Stevens decision, Matteo Gargantini, Journal of financial regulation, 1/2015

2 SUPERVISORY TOOLS

In pursuing their supervisory objectives, the competent authorities operate within a complex regulatory framework. In the European framework, alongside the regulations and directives of level 1 there are more detailed regulations, of level 2, that define the supervisory criteria and the rules of conduct.

The remainder of this Section will analyse some of the supervisory tool available to financial supervisors. This series of tools falls under the name of regulatory supervision (a definition that is more suited to the Italian framework than the international one), i.e. the power of the authorities to enact and promote provisions which define the rules of conduct of the supervised subjects.

As it is easy to understand, since there is no single philosophy in the implementation of the supervisory tools, there are numerous possible combinations in adjusting at will their application intensity. These tools tend to be used together as the time goes by and can become more complex in their implementation forms. The categories – not always clearly defined but often merging together – of the tools used can be classified as follows.

2.1 Structural supervision

This category includes all the measures and actions that are aimed at defining the structure (as the name suggests) of the market. The structural characteristics of the market affect the conduct of its operators.

For instance, in a market with a high level of concentration of operators (structural aspect) it is possible to expect an increase in collusive behaviours (such as manipulation of purchase/sale prices or cartel agreements aimed at setting a minimum price for certain services), which would benefit a certain category of operators to the disadvantage of many others. In such a market, the degree of allocative and productive efficiency would be significantly affected, resulting rather low. As an opposite example, an excessive competition in the markets may result in the massive departure of operators who cannot be sufficiently efficient, thus opening the way to scenarios of marked and persistent instability.

Going from the more general level to a first superficial level of details, some supervisory interventions can be traced back to:

- actions aimed at influencing the entry into the market of operators – with particular attention to new ones and the opening of new premises of the existing ones – by setting requirements for their access;
- measures aimed at ensuring that the company's organization complies with sound and prudent management criteria;
- supervision with respect to mergers and other corporate transactions involving substantial changes to the ownership structure;
- the form and variety of business activities that the various categories of intermediaries can undertake;
- provisions by the supervisory bodies which influence transactions volumes, e.g. change in pricing, limit of maximum orders that can be made. Usually this type of interventions is performed in the early stages of markets development in order to direct the dynamics and/or address particular categories of actual users.

2.2 Information monitoring

It is defined as the power that the supervisory authority has to request and receive in the established manners, standards and terms, flows of ad hoc and periodic information (financial statements, company news and any other information requested in order to allow the authority to continuously monitor the market and intermediaries). The supervisory authority also has the power to publicize, or to ask for direct publication of, data and news to the benefit of those who may be interested (i.e. subjects who operate in the market and use, or potentially use, its services).

The underlying principle of the information monitoring tools is to reduce the phenomenon of information asymmetry present in the markets, which may result in instability and episodes of market failure:

situations in which the market mechanisms are not able to function properly, leading to suboptimal results and, in some extreme scenarios, to systemic consequences.

The types of information that can be exchanged and shared vary from one context to another and may be different in nature, gathering methods and scope. Within the markets, for instance, ongoing transaction information is provided to investors and/or supervisory bodies, while within the context of a negotiation, or potential negotiation, the information relates to the characteristics of the transaction taking place (particularly as regards the relationship established between intermediary and client), so as to allow the counterparties involved to carry out as full an assessment as possible of the risks involved and the relative inherent yields. An important category of information relates to possible conflicts of interest between investment services provider and their clients.

The consequence of these measures is to increase the degree of transparency and ensure fairness between the parties.

2.2.1 On-site supervision

On-site inspections often enable detection of violations. On-site supervision tools are those (as easily guessed) that lead the competent body to carry out periodic monitoring (in a free and discretionary manner by the supervisory authority) in the financial intermediaries' offices; monitoring may be carried out on-site or remotely with appropriate protocols[8].

This type of tools is also used following the failure by the supervised subject to respond to the request by the supervisory authority for the transmission of information. They can therefore be a direct consequence of the ineffectiveness of the information monitoring operations.

2.2.2 Sanctioning power

As a direct result of the on-site supervision and information monitoring process, in case of non-compliance with the provisions in force, the authority has the power to impose sanctions which have a social control function, obliging the supervised subject to maintain a course of action in compliance with current regulations. It is necessary to find the correct balance between the extent of the offense and the sanctions imposed in order to make the supervisory activity, as a whole, authoritative and credible.

2.3 Protective supervision[9]

Particular attention is paid by the protective supervision tools to that class of investors with little financial knowledge. These supervisory measures are focused on protecting them by means of tools designed to prevent possible crises or provide special protection if they occur.

Market inefficiencies also have an impact to institutional investors and these measures partly protect their positions.

In the pre-crisis case, one of the tools used (found also in the 'information monitoring' category) is the retrieving of information about the subject supervised in order to avoid potential distress situations. Another protective measure is to support institutions (banks, in this specific case) that are experiencing a period of difficulty (illiquidity) through funding from lender of last resort, which is a role played by the central bank.

In the more advanced and serious stages of the crisis, the tool used is that of changing the management structure (one or more board members) and subsequently (if the measure has no effect) taking over the management of the institution (see 'regulatory supervision'. Measures taken in this regard may include the removal of one or more members of the business management team in case their presence is in contrast with a sound and prudent management of the institution/organization/intermediary. There is also the possibility of imposing administrative sanctions, initially to the liable company and, in case of qualified contribution to the violation, also to the natural persons accountable for the offenses. In the event of a full

[8] See: http://www.consob.it/web/investor-education/la-vigilanza-su-intermediari-finanziari

[9] For a better understanding on the subject of consumer protection see: Giovanna Morelli 'Il sistema finanziario fra risparmio e investimento', "il Mulino, Rivista bimestrale di cultura e di politica" 5/2007, pp. 833-843, doi: 10.1402/25200

crisis, the measure referred to above is extraordinary administration, which results in the replacement of the administrative and executive management in office at the starting of the proceedings.

If the institution is not salvageable, thus declaring an irreversible crisis, the implemented measures are aimed at the greatest possible protection of the weaker groups (savers), having regard to the need to ensure that the crisis does not expand further, becoming thereby systemic.

2.4 Prudential supervision

The concept of prudential supervision has been used for several years in the international regulatory framework, as confirmed by the Basel Committee documents and the subsequent agreement of 1988. It particularly focuses on the intermediaries' management decisions and on the quantity and quality of the risks assumed.

The nature of these interventions aims at directly influencing the operating conduct of the supervised subject; the tools in question – regulatory, in this case – are implemented beforehand (in other words they define ex-ante the strategy rules) and try to obtain as a result a general reduction of risk stemming from the lines of business that the intermediary pursues. The idea underlying the whole philosophy is that by adapting to a given minimum capital level and by keeping within a range of values for some budget ratios (such as the solvency ratio) it is possible to limit the level of risk, which would imply a greater capacity to cope with periods of crisis and, at worst, reduce the costs arising from a possible insolvency. With reference to the banking scenario, this involves the building and maintenance of regulatory capital through: the verification of minimum capital requirements (CET1+AT1+T2); their revision based on the combination and extent of risks assumed; the subsequent validation of the proceedings by the relevant supervisory body. There are also measures to counterbalance the pro-cyclicality of some measures (still with regard to regulatory capital) such as the creation of further regulatory capital provisions during periods of growth to be released when they are needed most, as in times of economic contraction or difficulty.

The objective (with regard to capital requirements) is to limit the moral hazard phenomena of owners and management of entities that may be triggered by the existence of the deposit guarantee system. By being able to count on a deposit insurance, the top management is more likely to take higher risks, and the introduction of the concept of minimum capital requirement seek to allocate in an optimal manner the risk measure among owners, depositors and the public sector (that in many cases can be the guarantor of the deposits).

All these principles apply – as mentioned above – to the various versions of the Basel agreement (now in its third version), a not legally binding agreement but adopted by almost all the financial institutions and that has heavily affected and shaped the various national and supranational supervisory laws.

The appointed supervisory bodies have the right to issue provisions regarding: capital adequacy; professionalism and integrity of the company's Board of Directors; requirements of good standing for relevant shareholders; containment of risk; cross-holdings that can be held; assets and concentration limits (both corporate and in assuming portfolio's risks); limits on amount of debt through leverage; rules of conduct; compliance and corporate governance.

2.4.1 In summary:

Category	Provisions/measures	Pursued objectives
Structural supervision	-Entry requirements -Antitrust provisions -Risk acceptance Limits -Restrictions on exercisable activities -Order and quantity limitations	Stability and integrity Efficiency
Information monitoring	-Transmission of periodic information and, upon request, to the supervisory authority -Periodic and random inspections -Sanctioning power	Stability and integrity Efficiency Transparency
Protective supervision	-Lenders of last resort -Client protection in case of crisis -Extraordinary administration	Stability and integrity
Prudential supervision	-Minimum capital requirements -Solvency ratios -Additional assets (buffer)	Stability and integrity Efficiency

3 SUPERVISORY MODELS

In the following paragraphs the supervisory models in use today will be examined. It should be noted that, although clearly itemised and defined, it is possible that more than one of these models is applied simultaneously, as they can be integrated with one another within the organizational framework that has been set.

An easy example is that of the Bank of Italy, the institutional supervisory body for the Italian banking sector that also pursues the stability of investment firms by adopting the supervisory model by objectives (or finalities) in cooperation with Consob that deals with transparency, and with the antitrust authority that pursues the objective of competition policy. Both Consob and the antitrust authorities are also indirectly involved – through their measures – with the efficiency of the markets. This section will cover the more general part of the supervisory principles, while in section 5 it will be seen how these principles define various possible models of supervisory framework (or at least those that have greater importance).

3.1 Institutional supervision

The institutional supervision model is probably the most immediate that comes to mind in any analysis on the supervisory architecture. It consists in creating a supervisory body for each category of subjects; banks, for example, will have their supervisory body (e.g. the central bank), as the securities sector and the same for the insurance sector. At first sight this approach seems to be the most clear and effective, i.e. capable of monitoring a category of operators in their entirety without conflicts of responsibilities and with the further advantage of lowering regulatory costs compared to other configurations. At a closer look, however, we can define this model of intending supervision as less developed and subject to significant flaws.

The problem with this approach lies in the phenomenon called 'regulatory arbitrage'. Let us suppose, for example, that banks and insurance companies provide the same financial product, which could be (and most likely will be) regulated in two different ways, with the result that one will necessarily be more advantageous than the other. We could then have two scenarios: the first is that one of the two products will lose out to the one subject to the most advantageous regulation; the second is that actors of one of the two categories of institutions will recruit members of the other (or create their own ad hoc institutions) in order to supply their products just with a different label.

Another problem, probably more serious than the first, is that of the capture of the regulator (or regulation), a phenomenon that occurs when the public supervisory body (which, due to the type of supervisory framework, is unique for each subject), that supposedly works for the benefit of the community, expresses the interests of the sector subject to supervision. When such behaviour occurs, it is obvious that the supervisory action is distorted, and the supervised companies will not have any problem as regards the possibility of producing negative externalities. This phenomenon goes under the category of *state failures*, situations that arise when one of its actions causes an allocation of goods or services less efficient than it would have been without doing nothing.

3.2 Supervision by activity (or functional)

This model assigns a supervisory authority for each type of activity (as the name suggests) present in the financial system, where the individual authorities are responsible for each specific activity. By way of example, if we look at the 'investment services' category, when an institution starts providing them, it will be most likely subject, regardless of its nature, to first fulfil certain entry requirements, and then to the supervision of the competent authority for investment services.

The merit of this supervision model is that the controls will be homogeneous among the financial activities/services offered, thus eliminating the issue of regulatory arbitrage. What matters is the type of service and not who provides it, thus ensuring that everyone is subject to the same relevant regulation, without any advantage for anyone. In this way, we are also faced with economies of specialization within the different supervision sectors. Remaining with the previous example, the authority involved only with investment services will have a thorough knowledge of this sector in not having to be involved with other categories.

The downside of this model is that an institution may be subject to the control of various supervisory authorities due to the different activities or services it provides and there would be an overlapping of controls for the same institution, which could cause a certain degree of confusion.

3.3 Supervision by objectives (or scope)

Supervising individual objectives means that, unlike the previous models, each supervisory authority will be tasked with protecting one of the objectives seen previously (transparency, stability, efficiency and competition), thus enabling the supervisory authorities as a whole to ensure compliance with these principles throughout the entire financial system.

The adoption of this model offers several advantages. A very important aspect is that supervision by objectives does not seem to be affected by problems of authority's capture, nor it is subject to regulatory arbitrage phenomena. Another advantage (which this model shares with the institutional model) is that each authority, in pursuing the objective assigned to it, can use the whole range of tools deemed appropriate, enabling to build an optimum mix in line with the adopted approach.

Potential problems that could arise using this scheme are the possibility of incurring higher costs for the development of the regulation – also defined as 'horizontal', and the possible shedding of responsibility on the part of the supervisory authorities, focused at looking only at their respective objectives, leaving aside the overall picture. This may be due to the fact that in pursuing the objectives there could be an overlapping of responsibilities among the various authorities or, in the opposite case, the creation of a supervisory vacuum.

3.4 Comparing supervisory models

From the analysis of the various models it is possible to see how the starting points of the approaches are significantly different, leading these models to be complementary to each other. The institutional model seems to be, on paper, the one that suffers the most from the pros and cons analysis, raising concerns about a possible 'government failure'[10] (due to the limits of the 'compartmentalized' framework), making its involvement harmful. The model by activity and the model by objectives can somehow be combined together as long as they act on different levels. One way to do this could be following an approach by objectives at a higher level (macro-regional) and an approach by activity at a second (lower) level which in a federal model could represent the regional one.

The general tendency, despite some resistance due to inertia or lobbying activities, is to evolve the institutional model into a mixed model with the inclusion of elements from the other schemes. Other solutions are to adopt the model by objectives and merge it with some activities of the second model involved.

A further model that will be discussed later is the centralized one, as it coincides with a type of model based on an organizational framework. Everything rests with a single authority tasked with the pursuit of the objectives by means of all the available tools, covering all types of activities. There are several examples of single authorities with rather spectacular failures such as that of the FSA (Financial Services Authority), established in 2001 and abolished in 2013, which will be discussed later.

[10] *Government Failure*: situation characterized by the impossibility for the public operator to eliminate all causes of distorted functioning of the market and guide the economic system towards an optimal allocation of resources. Roland McKean, 1965.

4 MACRO-PRUDENTIAL SUPERVISION, THE POST-CRISIS *INNOVATION*, THE PRINCIPLES AND MODEL UNDER CONSTRUCTION AT GLOBAL LEVEL

4.1 The crisis and its legacy

In the immediate pre-crisis period (although in a rather cautious and little considered way) and then again later, a new regulatory vision has emerged: the concept of financial stability was being seen from a broader perspective, no longer from the point of view of individual actors who operate (operators stability or micro-stability) but from a global point of view, so-called 'system stability' (or systemic). Since 2009, important steps have been taken in this direction, suggesting a possible way of intervention precisely by using this regulatory approach.

Many sectors of the economy have been hit through the rapid spread of the crisis, from the financial economy (generated by an erroneous modelling of reality) to the real economy, bringing them to their knees as a result of the credit crunch.

From the experience gained, operations are now being implemented to put into practice the idea of macro-stability of the system. Looking at the current context, i.e. that of markets increasingly integrated and dependent on each other, it is considered that there is the need for an equally globalized regulation, at least with regard to fundamental concepts and principles, capable of impacting the systemic risk component. The challenge is finding the right compromise in the creation of a minimum standard at a global level, respecting as much as possible the institutional systems of the nations.

4.2 From micro to macro, from local to global

As it can be easily guessed, the challenge is very demanding from different perspectives. First, the level of difficulty concerning the technical aspect, namely that of having to develop a legal framework shared as much as possible, not to mention the time needed to set it up. Then there is the political aspect, as negotiations between the states involved are always a delicate matter due to the different confronting visions and to the balance of powers at play. Further difficulties stem from the fact that the current international regulatory framework (which is enforced by supranational bodies that operate as standard setters) does neither appear to be persuasive and powerful and therefore with little authority, and nor very efficient as a whole[11].

With this awareness, many initiatives are under way on a global scale with the declared aim of pursuing the objective of systemic stability. Bearing in mind what has been previously said, the paradigm has evolved: no longer micro, but more and more macro. Given all this, when speaking of stability, it will always be with reference to the global scale of the issue.

Traces of this view can be found in the 'Declaration on strengthening the financial system' issued by the G20 leaders, which states "*…all systemically important financial intermediaries*, [...] *should be subject to an appropriate degree of regulation and oversight*". In addition, the Financial Stability Board (hereinafter "FSB") asserts in its reports perfectly overlapping concepts by directly mentioning the concept of macro-prudential supervision.

4.3 The status quo and the coming years

From a normative point of view, the extent of these developments has emphasized the strengthening of existing structures rather than rebuilding the entire framework. To date we can count three institutions concerned with the financial system. The first is the G20, the second is The International Monetary Fund (IMF), and the third is the FSB based in Basel, whose goal is to create and coordinate a universally accepted standard.

Measures that could be cited are:

- the Basel agreements;

[11] See: '*The international financial regulation system: a perspective analysis*', diritto.it: https://www.diritto.it/stampa-articolo/?articolo_id=29992

- recognition of institutions acting as point of reference for the financial systems, such as the G-SIFIs (Global-Systemically Important Financial Institutions), which includes the G-SIBs (banks) and G-SII (insurance), and the D -SIBs (where D stands for domestic);
- tightening of capital adequacy criteria, introduction of the bail-in mechanism;
- other measures.

The critical issue from now on will be to have these regulatory developments concerning the general principles ratified at national level with the concurrent balancing of the international regulators' scope of action (modes and jurisdictional limits).

This approach should ensure an arrangement intermediate between the imposition of a single standard (which is not desirable since the aforementioned model would not be flexible and would undermine national authorities) and the complete legislative fragmentation; actual "state of play" which is worth to ameliorate.

Conceivably, the success of this major project cannot but come from the cooperation of the subjects involved: regulators (national and international), supervisory bodies at the various levels of the developing framework, and institutions that will benefit from the newly created context (financial institutions and investors).

5 ORGANIZATIONAL MODELS OF THE SUPERVISORY FRAMEWORK

5.1 Centralized model

In a centralized model, the supervisory authority has competence over all financial institutions, as well as over any activity carried out by them and on all objectives. This organizational model originates even before others that will be established subsequently (such as the institutional model), when the financial systems were still in their infancy and it was relatively simple to incorporate everything under a single supervisory authority.

Around the year 2000 the centralized model was rediscovered, partly as a consequence of the United Kingdom's decision to implement it with a view to following up on the development of increasingly integrated markets. Today this model has been adopted by northern European states, where it was resumed following the internal crisis occurred in the past. The reason for this reconsideration is that centralized supervisors are expected to better control the subjects who originated and developed by the fall of the regulatory boundaries concerning the various activities carried out, i.e. financial conglomerates. The single authority should also implement supervisory measures in a more comprehensive and consistent manner, as well as carry out the supervisory and regulatory processes in a more streamlined manner in order to integrate all the functions without facing the risk of inconsistencies among different authorities. An important factor worth mentioning is that integrated regulation and supervision process can benefit from a cost reduction through economies of scope and scale – although the actual size of such benefits is debated, because of the difficulty of precisely quantifying these benefits to the system.

Some disadvantages of this model may be the lack of plurality of supervisory bodies which could lead to the absence of checks and balances and exacerbate conflicts between the different objectives protected within the same authority. There are nations that prefer a different model due to the substantial difficulties involved in its construction and development.

One of the most delicate aspects is the division of powers within the body. Usually the creation of this single authority is achieved by merging previously existing bodies but this process inevitably carries with it overlapping responsibilities of the different bodies. The difficulty in actually setting up a truly integrated system – not only on paper but in practice – is very high; the greatest danger is to put together the system only in a formal and non-substantial manner, with the added costs of creating the superstructure without reducing those for the functioning of the individual bodies, and above all without solving the problems that arise when separate institutions coexist.

responsibilities

In creating a single authority, the scale and complexity of the financial system to be supervised must be taken into account: authorities that are too large may be difficult to manage and may nevertheless overlook entire areas that must be monitored (shadow banking is a case in point), thus exposing the system to huge vulnerabilities.

5.1.1 Centralized model's critical issues, the British FSA case

The origin of the Financial Services Authority (hereinafter "FSA") dates back to June 2000 and its functions, defined in the Financial Services and Markets Act, date also back to the same year. Its aims were to unify the functions performed by the Bank of England and other existing institutions. As per definition, it was responsible for all aspects of supervision, including powers of sanction. In the new set up, the FSA was not alone, as it was expected to work in cooperation with the Bank of England, which had the role of lender of last resort, and with the Treasury acting as the state guarantor, establishing a Tripartite Authority[12].

Unfortunately, things did not go as planned and the authority encountered various problems, such as: unclear prioritization of the objectives to be pursued; communication was poorly and badly organized; coordination with the Bank of England, which in acting as lender of last resort and in having to also protect the stability of the financial system needed a continuous flow of detailed information, now reserved to the

[12] For a brief definition see: http://lexicon.ft.com/Term?term=tripartite-system

FSA. As evidence shows, the FSA was incapable of transferring this information in its entirety. The paradoxical aspect is that in contrast with its role of single authority, among the objectives to be pursued set by the Financial Services and Markets Act 2000, that regarding the stability of the financial system was not included, as it remained under the Bank of England's control.

The scandal that put the Authority in difficulty and that led to its demise in 2013 was the failure to exercise supervision and avoid the collapse of Northern Rock, a small bank which had rapidly become one of the top ten UK banks. The bank's activity had mainly become that of providing loans up to 125% of the collateral's value, which increased the bank's need of liquidity than other banks with extensive use of securitizations.

As a result of the financial crisis, the bank immediately found itself in difficulty and very quickly went bankrupt. As a contributory factor for the failed supervision by the regulatory body there is the lack of cooperation mentioned above. The FSA underestimated the risk facing Northern Rock in considering the bank safe and sound and thus not worthy of due attention.

The Authority gave priority to compliance with the rules of conduct rather than using prudential tools, and relied on lenient risk based supervision[13]. The reason for this choice was also due to the regulatory body chronic lack of funds, personnel and (as emerged by the internal investigation on the Northern Rock case) appropriate expertise. Another rather fundamental mistake was to have relied exclusively on the supervisory bodies of the supervised subjects without carrying out throughout external checks[14].

The FSA case seems to be a concrete example of all the disadvantages of the centralized supervision model. The expected benefits were not seen and in 2013, the Authority was abolished in favour of the Financial Conduct Authority (FPC) and the Prudential Regulation Authority that, with the assistance with the Bank of England, is mainly concerned with macro-prudential supervision.

5.2 Alternative/hybrid models

Between the two extremes, the centralized model and the institutional model, there is an intermediate large-scale combination in implementing them. One of the most promising models 'by objectives' and worthy of a brief analysis is the model with two supervisory authorities placed on equal footing, the so-called twin peaks model. Evolutions of the same model[15] to more 'peaks' have been considered but the first is the one deserving more attention.

5.2.1 The 'Twin Peaks' model

This model is essentially based on three assumptions that were reinforced during the crisis and in the following period. The first assumption is that the institutional model (i.e. that referring to banks, insurance companies and markets) is now outdated and that in its place a new, more suitable framework 'by objectives' should be preferred; the second is that each authority should have a purpose clearly defined beforehand; the third is that the regulatory framework must effectively respond to the structure of the financial system. For instance, if we think of the case of companies defined as 'too big to fail' (TBTF), we would expect that the regulatory framework will take into account the context and put in place the appropriate regulations for that type of operators[16].

On this basis, the system essentially consists of two authorities[17] of equal rank, each dealing with a different objective: the first authorities deals with the protection of financial stability by means of prudential

[13] For further details, see the report: http http://www.fsa.gov.uk/pubs/other/nr_report.pdf

[14] Principles of Financial regulation, J. Armour et al, 2016, Oxford Press University p. 583 and p. 602 et seq

[15] For further information on models with more peaks, see: Di Giorgio, Giorgio and Di Noia, Carmine (2001) '*Financial Regulation and Supervision in the Euro Area: A Four-Peak Proposal.*' [Working Paper]. p. 30. Center for Financial Institutions Working Papers (No. 01-02)

[16] See: 'Twin peaks: a regulatory structure for the new century', Michael W. Taylor, 1995, CSFI report

[17] See also: 'Twin peaks revisited… a second chance for regulatory reform', Michael W. Taylor, Sept 2009, CSFI report

supervision tools, the second with consumer protection. In this configuration, the central bank plays a decisive role in being also concerned with market stability, but from the point of view of macro stability. Under this organization of responsibilities, the body in charge of for protecting market stability, which would be responsible for issuing regulations, would a spinoff of the central bank itself.

The issue of TBTF companies is a prevailing factor in the conception of an appropriate regulatory framework and model update. The required framework is the one that recognizes this group of companies, previously erroneously equated to all others and considered fallible without major consequences for the system stability, as deserving specific rules.

Regarding the treatment of these companies, various ideas are being put forward for limiting their number as they tie their vulnerabilities with those of the system. The two main proposals (which are not mutually exclusive) are to impose capital requirements higher than those of other operators (thus making more expensive maintaining this position) or oblige them to finance a guarantee fund in order to somehow ensure the stability of the system through an insurance mechanism.

The reason that led to the conception of this framework is the one that runs throughout this work: the ongoing markets integration, the increasing recourse through the years of financial conglomerates and the simultaneous functional de-specialization, namely that process that leads to being on the market with a wide range of activities by offering services not previously provided.

6 THE EUROPEAN ORGANIZATIONAL MODEL

6.1 Model structure

The structure of the European supervisory model is in continuous transformation. The model is based on categories that cover both the Member States belonging to the single currency (Eurozone) and those that belong to the EU but are not part of the Eurozone.

At a wider (and higher) level of the structure there is the 'European System of Financial Supervision' (hereinafter "ESFS"). Its establishment occurred, also in this case, in the aftermath of the 2007 crisis and is due to the need to adopt a model that would respond to the challenges identified and to the increasingly integrated Union market.

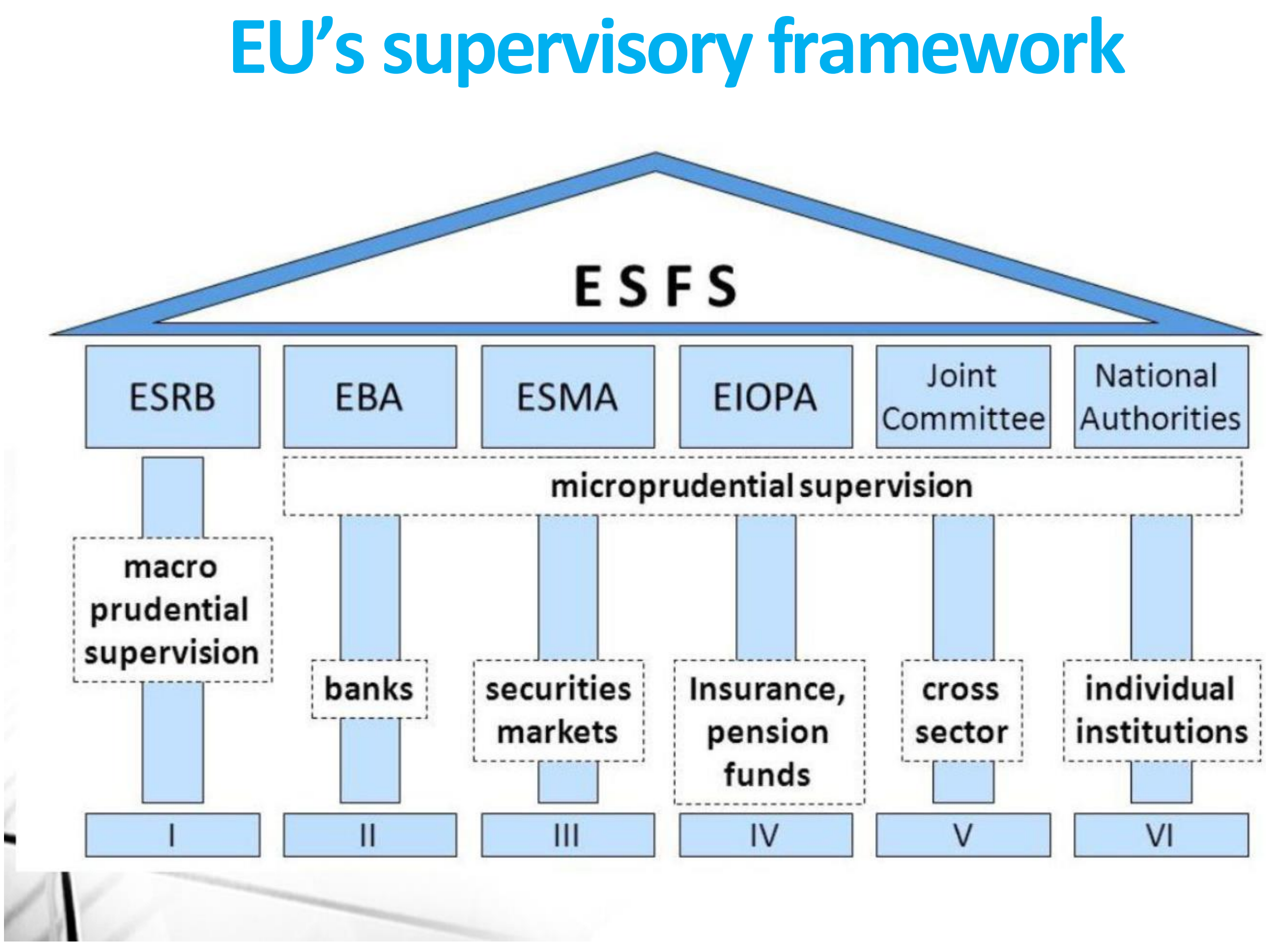
In its report[18] dated 2009, the working group, chaired by Jacques De Larosière, recommended the creation of a harmonized supervisory system that could also be integrated with member states' systems, while at the same time promoting cooperation among these latter. Its framework is structured according to an institutional division of powers, and consists of EBA (European Banking Authority) based in London but about to be relocated to Paris, ESMA (European Securities and Markets Authority) also in Paris, and EIOPA (European Insurance and Occupational Pension Authority) based in Frankfurt.

All authorities are empowered to issue measures of a binding nature that, once ratified by the European Commission, acquire the status of European regulation. The supervision of the various financial institutions is performed by the respective national authorities, with the exception of credit rating agencies and registries of transactions in the OTC (over the counter) markets whose responsibility falls within the ESMA's remit.

These authorities also have the power to issue non-binding guidelines and promote cooperation between the EU Member States (as envisioned by the De Larosìere report). ESFS replaced the previous system, consisting of non-permanent committes, set up following the adoption of the euro in 2001.

As a result of the crisis, a new supervisory organization, the European Banking Union, was set up at the Eurozone level with the aim of creating a single vertical supervisory authority (at least as regards the banking sector). The European Banking Union consists of three bodies that by working together should ensure greater supervisory effectiveness. The three bodies are the 'Single Resolution Mechanism' (SRM), the 'Single Supervisory Mechanism' (SSM) and the 'European Deposit Insurance Scheme' (EDIS).

[18] The high-level group on financial supervision in the EU, 25th February 2009



European supervisory framework. C. Di Noia, LUISS 'Market law regulation Lecture', 3rd May 2018

6.2 Functions of the institutions

6.2.1 ESRB (European Systemic Risk Board)

The establishment of ESRB is laid down in EU Regulation 1092/2010. It is based in Frankfurt and its purpose is to act as macro-prudential supervisory body. The idea is that of an institution where data, information and risk analysis are collected and used to implement preventive crisis management policies.

During the process of analysis, risk assessment and reporting, ESRB has the power to issue non-binding recommendations (in order to prevent any potential risks) to: EU Member States; the European Commission, which may endorse the recommendations through the issuance of European directives; the competent European Supervisory Authorities.

Following the issuance of these recommendations, ESRB monitors the effectiveness of the measures adopted, always under the indirect mandate to act as a 'collector' of information and 'think tank' for the development of measures to ensure the stability of the system.

In addition to active participation in the process of elaboration and implementation of the recommendations, ESRB's cooperation with the European Supervisory Authorities includes the classic information monitoring tools (request for information in both specific and aggregate form), and is also reflected in the analysis and identification of possible sources of systemic risk (through data collection and development of scenario simulations, such as, for example, stress tests).

6.2.2 The ESAs (European Supervisory Authorities)

The framework of the ESAs is composed by three agencies which are competent in different sectors: ESMA for markets and sesurities, EBA for banks and EIOPA for Insurances, institutional investors and pensions.

Established in January 2011, the three ESAs take the place of the previous three “level three committees” (3L3) that were they predecessors, namely the Committee of European Securities Regulators (CESR), the Committee of Europan Banking Supervisors (CEBS) and the Committee of European Insurance and Occupational Pensions Supervisors (CEIOPS) set up in 2001. They all originate from the experience of the 2007/8 crisis, part in some ways of the numerous efforts towards an overall reform of the supervisory bodies, sparked by the De Larosière report of 2009.

The three ESAs are structured along the same lines. They are primarily composed of two decision-making bodies. The first one is the Board of Supervisors (decision-making body) comprising representatives of the competent national supervisory authorities of the Europe of 28, observers of the European Commission, representatives of ESFS and, as non-voting members, Norway, Iceland and Liechtenstein. It is responsible for the continuance of the mandate given to the Authority. The second is the Management Board, accountable for the budget and the agenda and that performs functions of support to the Supervisors; the Executive Director (a full-time independent professional), responsible for the annual work program; and finally, the Chairman (a full-time posting incompatible with other national positions), in charge of preparing the Supervisors’ work and chairing its meetings.

The ESAs are regulatory authorities with rule-making powers, given their significant commitment to integrate the Single EU Rulebook on financial, banking and insurance markets. To support its action there are permanent committees (chaired by representatives of different European nations) that prepare drafts and proposals to submit to the ESAs for examination and possible approval.

Consistently with the aim of promoting cooperation between the system components, the states and the competent European Supervisory Authorities (ESAs), the ESAs are open to suggestions from the various players in the banking sector through an internal body called the ‘Stakeholder Group’. Following the examination of the material arrived and through a cost /benefit analysis, the suggestions can become EBA documents leading to the afore mentioned binding and non-binding measures.

The tasks conferred to ESAs are: the development and implementation of technical standards, the dissemination of guidelines and recommendations, the supervision of stakeholders and the issuance of related measures, the indication of procedural arrangements to other National Competent Authorities (NCAs), the development of criteria for the evaluation of insurance and pension products and their effects once they have been placed on the market. Also EIPOA has within it the Stakeholder Group. Recently, in late 2019 a review of the ESAs functions has been done, more attention has been paid to the ESMA role[19]

6.2.3 Function of ESAs

EBA main task is to be responsible for the regulatory supervision within the EU by harmonizing the regulatory framework through the enactment of binding rules, recommendations and interpretative guidelines, so as to ensure the protection of consumers, investors and depositors.

EBA also has the responsibility of monitoring the European banking system and detect possible vulnerabilities and risk situations. it and also provides support to the ESRB in periodic risk assessments and contributes to the development of stress tests in the banking sector.

ESMA is the Authority responsible for protecting the stability and integrity of financial markets and promotes (like all, or almost all the supervisory authorities) the cooperation between the competent national authorities. With its regulatory action, the Authority pursues three objectives: investor protection, system stability and the proper functioning of the market and its components.

EIOPA[20] has as objective the supervision of institutional investors[21], insurance companies and occupational pensions. Its purpose is to guarantee the protection of the public interest since its core responsibilities concerns pension funds and pension benefits products.

[19] EU Regulation 2019/2175 published on December 18th, 2019: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R2175&from=EN

[20] See: https://europa.eu/european-union/about-eu/agencies/eiopa_it

[21] I.e. insurance and re-insurance companies, see Directive 2007/36 EC

The tasks conferred to EIOPA are: the development and implementation of technical standards, the dissemination of guidelines and recommendations, the supervision of market participants under its competence and the issuance of related measures, the indication of procedural arrangements to other National Competent Authorities (NCAs), the development of criteria for the evaluation of insurance and pension products and their effects once they have been placed on the market. Also EIPOA has within it the Stakeholder Group.

6.2.4 SSM (Single Supervisory Mechanism)

The Single Supervisory Mechanism (hereinafter "SSM") started its operations on 4 November 2014, this institutional architecture places the European Central Bank stronger position than it was since up to now, overseeing the stability of the banking system of participating Member States.

Its creation was decided during the Eurozone summit at the end of June 2012, with the precise intention to move towards a less fragmented supervisory framework, so as to better respond to the developments in the financial sector and to possible future difficulties.

It was established as part of the wider European Banking Union and designed to cooperate with the Single Resolution Mechanism (SRM) and the European Deposit Insurance Scheme (EDIS). Also in this case the objectives of the 'mechanism' are consistent with those of macro-prudential supervision: stability and soundness of the European banking system and definition of a minimum supervision level (minimum playing field) for all participants, which implies the adoption of standards common to all supervised subjects, both in terms of practices and existing data management, data which is useful for sending reports. The division of competences is as follows: to the SSM/ECB are assigned the so-called systemically important banks (G-SIBs), which are about 120 and which count for over 80% of the total European banking activities, while to National Central Banks (or NCAs, as the case may be) are assigned the remaining institutions, i.e. smaller ones with limited market share (approximately 6000 throughout the Eurozone).

Its functioning is based on the creation of a system composed of NCAs that co-supervise together with the SSM, which has the final decision-making authority in matters of supervision. The SSM may at any time it deems appropriate replace the national supervisory authorities by taking up the powers of NCAs. As it is easy to realize, national central banks provide a support role to the SSM action by often arriving where the Central Bank would fall short, even though the experience sometimes has shown the opposite (i.e. Veneto Banca and Banca Popolare di Vicenza cases). Another aspect is that the ECB, through the creation of this structure, relies on the resources and expertise of the individual National Central Banks (i.e. NCAs) which have the best knowledge of the individual situations at the micro-systemic level. NCAs are also responsible for the day-to-day supervision through the process of review and prudential assessment, applied – to the same extent – to 'significant' institutions.

The decision-making process is based on the non-objection procedure: if the Supervisory Board proposes a provision and the Governing Council does not object to it within ten working days that provision is considered implemented.

As mentioned before, participation to the SSM is automatic and mandatory for all Member States within the Eurozone (the scope of the single system is geographically limited to it), while it is on voluntary basis for states outside it (both EU and non-EU members). Participation of states outside the Eurozone is granted under the 'close cooperation' treaty, which establishes that states opting to join will be subject to the SSM supervisory standards but in return they will obtain a representative position with voting rights in the Supervisory Board, like the Eurozone Member States. Via this system, the ECB, consistently with macro-prudential supervisory principles, monitors the risks to which the banking system is exposed and conducts periodic stress tests on the institutions under assessment. In the event of any problems arising from the simulations performed, or highlighted during ordinary supervisory activities, the ECB has the powers to intervene through the implementation of corrective measures. If instead it is too late with consequent likely risk of failure, the case is taken over by the SRM (see below).

6.2.5 SRM (Single Resolution Mechanism)

The Single Resolution Mechanism is the second pillar of the European Banking Union. It is the institution concerned with the management of crisis in the banking sector within the Eurozone.

Its objectives are mainly three: breaking the cause and effect relationship between the intermediaries' crisis and the consequent sovereign debt crisis involving a state (as it was the case in 2010), limiting the moral hazard phenomena (encouraged by public bailout policies), and lastly, reducing the costs that a banking crisis can unload on to society.

The 'innovation' that this approach introduces is the concept of 'sharing' the losses among European banking institutions (through the establishment of special funds) and the idea of transferring the costs of saving them first to shareholders and creditors through the bail-in mechanism, and then leave the residual cost to the public sector.

The purpose of the SRM is not to liquidate banks but to manage more effectively potential bank failures in order to ensure a resolution and allow them to continue operating, with minimal costs for taxpayers.

The internal board that takes responsibility for managing the crisis is the Single Resolution Board (hereinafter "SRB") within which are represented all participating states. The SRB is deliberately intended as the only authority able to exercise decision-making power during the resolution stages of the crisis.

The cases in which the SRM intervenes are essentially three:

- During the reorganization of institutions whose situation is not irremediably compromised through the planning of a preventive strategy. In this case, timely measures are taken to prevent more critical situations developing (recovery plans, just to a name a few).
- At a more advanced stage of distress, early intervention powers bestowed on the SRM can step in. At this stage the institution sees its activities deteriorating but does not yet have solvency problems, even if the continuation of this state could lead to insolvency. The powers granted to the SRM (through the SRB) are most disparate and varied and include replacing the Bank's Board of Directors and placing it under extraordinary administration.
- At the stage in which the bank shows an endemic crisis very close to the state of insolvency, the SRM intervention is more intrusive and made explicit through the use of resolution tools (not to be confused with bankruptcy), which can also affect the stakeholders' interests (like shareholders dividend distribution policy, or decision/voting power). Given the intrusiveness of the interventions, two conditions must be met for their implementation: the back shall be on the verge of bankruptcy and there must be a public interest to be protected. The final decision rests with the ECB, which assesses the existence of these two conditions.

The resolution tools that are commonly used are the following:

- Sale en bloc of the bank to a third party. In this case the business is forcibly sold as a whole.
- Separation of healthy activities from unhealthy ones. 'Bad' activities are channelled into a vehicle company (bad bank) that manages the critical issues which is hoped will be solved by making them profitable again over a longer period of time or liquidated otherwise.
- Sale of the business (or part of it) to the state acting as a bridge institution (good bank). The nature of this provision must be temporary as the purpose is to reorganize the institution for reselling it to the private sector when the conditions exist, possibly deriving some profit from the operation.
- The **bail-in**. This tool consists in the reduction of the rights of the property and creditors to payment, through a hierarchy defined before the declaration of insolvency. One exception to this is represented by deposits guaranteed (those up to €100,000, typically held by small savers notoriously unable to monitor the degree of risk of a potential crisis) which, in fact, are entirely protected. This is expected to prevent bank runs by depositors and make the situation even worse for the failing bank, and in fact irreversible.

The concept behind the bail-in is that the consequences of a bank's crisis and its costs should be mainly passed on to the shareholders and major creditors and then, in the event, on the community. By writing down the claims of these stakeholders, the bail in tool is expected to reduce the extent of the failure and prevent bankruptcy.

In support of these measures, is also envisaged the establishment of a single EU resolution fund. This fund is created with the contribution of all banks participating to the SSM/SRM. This fund is not intended as a safety net for the losses incurred but as an aid to support the resolution costs that may arise. The contribution is a necessary condition for participation in the SRM (and consequently to the right to use the resolution fund in case of need).

The SRM does not seem to be without its problems as, for example, there could be a conflict of competences between authorities at different stages of the resolution process. The difficult determination of the ailing bank assets (and, to a lesser extent, liabilities) could lead to indecisions on the right tool to use. The loss of time resulting from this impasse could determine the end for the failing bank.

Another set of problems is strictly related to the bail-in: first, it is very difficult to establish an appropriate conversion rate that will make the measure advantageous with respect to the result deriving from a hypothetical bankruptcy proceeding; second, the price of bank bonds might fall because deemed more risky (compared to a system guaranteed by the state, even if not explicitly), with the connected difficulties in finding resources by the institutions; third, the devaluation of receivables due does not automatically guarantee the effectiveness of the procedure. The devaluation allows to reduce the financial requirements (which is positive), but it does not act on what an undertaking in a state of insolvency needs most: liquidity. This shows that the bail-in must necessarily be accompanied by other measures to remedy the situation and limit the risk of spreading the instability to other institutions.

Another problem highlighted relates mainly to an issue of ethical nature, i.e. that of involving part of the depositors in the bank's rescue process by also passing on to them responsibilities (and often faults) belonging to the management of the institution itself. Such responsibilities may be wrong corporate policies, investment strategies too risky for the depositors' profile, or worse, management incompetence in administering the business. The consequence of this is also that the part left uncovered by the credit protection measures may trigger a bank run and nullify any rescue attempt.

The resolution tools (especially the bail-in tool) must be handled with care as savers may consider the system untrustworthy and the states unable to cope with crisis situations. This could exacerbate tensions within sovereign debt markets by involving and dragging also financial intermediaries and turn it into a situation that the institutional framework has as its stated goal to avoid. We would thus find ourselves with a remedy that instead of curing the disease aggravates its effects.

6.2.6 EDIS (European Deposit Insurance Scheme)

The European Deposit Insurance Scheme[22] is the last (and still developing) of the three pillars that complete the Banking Union project underpinning the consolidation of the European supervisory framework.

The EDIS was introduced in November 2015 and it is the large-scale evolution of the national protection funds. The intention is to replicate the tool at the macro level, always following the logic of resolving the vulnerabilities of individual states and improve the so-called 'resilience' of the financial system, namely the ability to withstand sudden, more or less unpredictable shocks. Also in this case special attention is given to the minimum level playing field concept, i.e. a minimum level of protection for everyone with a view to an overall strengthening of the system.

The mechanism is based on the logic of national guarantee funds already set up by law in each EU Member State (Deposit Guarantee Scheme or DGS) and regulated according to Directive 2014/49/EC. The

[22] For further details on its functioning, see: https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/european-deposit-insurance-scheme-assessing-risk-absorption-symbol-jrc-working-papers

main purpose of the DGSs is to reimburse depositors of a failed institution, i.e. a safety net for covering depositors’ losses up to €100,000.

The objective of fixing the limit to €100,000 is to ensure a timely savers' protection as the reimbursement period cannot in fact exceed seven business days. The measure is primarily aimed at avoiding possible bank runs by depositors in order to render the system more stable even during difficult periods.

The fund has a dual role: as liquidity provider, by promptly reimbursing covered deposits, and as preferred creditor of the failing institution. Any sums that the fund is unable to recover from debtors will be recorded as operating loss.

As mentioned above, the creation of the European guarantee fund remains work in progress with the EDIS’ contribution set to increase over time through a three-phase plan.

The period for increasing the degree of mutualisation will last a total of seven years and will be divided into a first reinsurance phase, followed by the co-insurance phase, and from the eighth year onwards the fund will be fully operational.

- *Reinsurance phase:* during this period that should last until 2020, the national guarantee funds will still be directly responsible for reimbursing deposits. Only in the event that national funds cannot fully cover the repayments, the EDIS will intervene with its resources (a sort of lender of last resort), but its coverage will only be partial and the part not covered even by the EDIS will be lost (‘loss not covered’).
- *Co-insurance phase:* in this second phase (2021-2023) the European fund’s intervention will be greater and the EDIS will cooperate closely with the national guarantee funds and its intervention will be increasingly common. In other words, for every euro due to be repaid the European fund will bear a share that will grow over time during the implementation period of this regime.
- *Mutualisation phase:* from 2024 onwards the reimbursement of guaranteed deposits will be borne by the EDIS fund as part of the roadmap to complete the banking union in its entirety and will act as currently done by the national guarantee funds.

The reason for the creation of the whole system, which is also described in the analysis of the other pillars of the Banking Union, is obvious. The guiding principle arising from the events occurred from 2008 onwards is always the same, preventing history from repeating itself through the adoption of macro-prudential supervisory tools in order to ensure a more stable system and common basic rules for all market participants.

PART TWO:

European supervisory policies, the Capital Markets Union project

7 THE AIM OF ESMA AND EXAMPLES OF TOOLS IMPLEMENTED, CONDUCTION OF A STRESS TEST

7.1 A look at ESMA's work, transparency and stress tests

As we were able to see in the first part, the ESA, the European authorities exercising micro-prudential supervision, are responsible for protecting the efficiency and stability of each of the relevant sectors. The European Securities and Markets Authority (ESMA) is the regulator that contributes to safeguarding the stability of financial markets and promoting the cooperation between the national authorities responsible for these matters. ESMA's Board of Supervisors is composed of the heads of 27 European national authorities, observers of the European Commission, representatives of the ESFS[23] and, as non-voting members, Norway, Iceland and Liechtenstein.

The ESMA (together with EBA and EIOPA) is the result of the experience of the 2007 crisis, triggered by the strong pressure for a comprehensive reform of the supervisory bodies, originating from the De Larosière report of 2009. Its operations began in January of 2011 and takes the place of the CESR[24] which had been established in 2001.

The Authority acts as a regulatory supervisor that through the issuing of binding technical regulations and implementing rules (hard regulations) complements the EU single financial markets regulation. In support of its action, there are permanent committees (chaired by representatives of different EU countries) which prepare drafts and proposals to be submitted to ESMA for review and possible approval.

In pursuing its objectives, ESMA acts in its capacity as supervisor with regard to four closely related operational areas:

- Investor protection and system stability. Vulnerabilities, potential growth opportunities and risk factors are identified so as to promptly act in both directions (of risk or opportunity) with appropriate measures.
- Creation of a single regulation for European financial markets, such as the EMIR regulation on a central counterparty (CCPs). The purpose of ESMA is to create a minimum regulatory regime for all actors involved and constantly improve it through the introduction and development of technical standards while also acting as a direct consultant for European institutions on legislative matters.
- Supervisory convergence on the EU territory in collaboration with national authorities (NCAs) and the other European Supervisory Authorities (ESAs). Also in this case the joint action both at vertical (territorial scale) and horizontal level (between the various financial sectors) aims to create a common supervisory regime. Collaboration between authorities contributes to the development and sharing of best practices in supervisory governance and allows, through the joint action, to act more efficiently when necessary.
- Correct functioning of the market and its components through the direct supervision of financial institutions. The Authority has sole jurisdiction over rating agencies and deals with their registration and monitoring (based on the CRA Regulation[25]), sets the technical standards and reserves itself the right to entrust national authorities with the enforcement action, while maintaining its sanctioning power.

In addition to the control functions delegated to the competent national authorities, ESMA issues a series of recommendations and publishes supervisory briefings on the interpretation of both primary and secondary regulations, issued by the Commission and the Council of the European Union (these measures are so-called soft regulations). Secondary regulations are generally created and/or developed by ESMA – in

[23] **ESFS**, European System of Financial Supervision

[24] **CESR**, Committee of European Securities Regulators

[25] Credit Rating Agencies Regulation, refer to the following web site: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2009.302.01.0001.01.ENG&toc=OJ:L:2009:302:TOC

collaboration with EBA and EIOPA if the regulation concern transversal subjects – and then submitted for approval to the Commission which publishes them in the form of delegated regulations.

Subsequently, ESMA closely follows the development of the securities sector and verifies that the rules are properly applied. Regulations are accompanied by documents that help their interpretation. For instance, concerning transparency, the most common documents relate to recommendations.

Another important document, which is periodically updated, is the Q&A, consisting of a series of questions and answers organised by topics, whose purpose is to clarify the proper ways for applying the regulations. The reason for the periodic updates is the arising of doubts which could lead to the incorrect interpretation of the regulatory framework. Requests for clarification are sent to ESMA which replies through the regular republication of the Q&A document. Recently (on 5 December 2019) the Q&A[26] on transparency has been updated with reference to the MiFID II and MiFIR framework. The document ranges from exchange platforms transparency to equity instruments and markets, and from general enquiries to questions regarding systematic internalisers, multilateral trading systems and regulated markets.

Other publications from ESMA are the macroeconomic studies that it carries out to assess the health of the securities market. In pursuit of the objectives of system stability and investors protection, also in view of the of the Capital Markets Union project currently under development, ESMA produces these studies to identify weaknesses and act accordingly. In addition to up to date studies, stress tests are developed with the aim of testing the resilience of specific sectors of the financial system. Their outcome is forwarded to the competent national authorities involved in micro-prudential supervision, who decide whether or not to undertake further investigative work.

One notable example is the recent test[27] that ESMA carried out to assess the resilience of the entire EU UCITS sector in the event of a shock due to a strong wave of redemptions. The event, defined as redemption shock, was set on different levels of intensity. Once the unfavourable event had taken place, an analysis of the average degree of liquidity of the funds was carried out. In paragraph 1.2 of this section is provided a general overview of terminology and concepts, and in paragraph 1.3 is examined the method applied for carrying out the simulation. The results will be shown with their main components in the third section, which will also include the conclusions of this work.

7.2 Liquidation of funds and strategies implemented by managers

A part of ESMA's studies and simulations (an example of which is shown below) deals with verifying the integrity of sectors or individual markets through future projections of possible scenarios. One of the tools used is the stress test that tests a sample of subjects by simulating a sudden negative shock. Among the assumed scenarios, which appear plausible, an example is that of a sudden lack of liquidity due to the sudden and large requests for redemption (so-called redemption shock) of shares in an investment fund. Specifically, it is analysed the loss following the redemptions, the capital loss suffered by the funds on the assets in portfolio and the propagation towards second-level stakeholders and the market[28]. Once the redemption race has been triggered, the fund manager must decide which asset liquidation policy should be implemented. Depending on the policy implemented, the repercussions on the value of the fund, or on the market (depending on the size of the fund), will be quite different. The simulations take into account the type of policy that is used, and based on that make a loss projection. Usually, managers cannot arbitrarily decide which strategy to put into practice, as they must follow the liquidation methods provided for in the fund's prospectus.

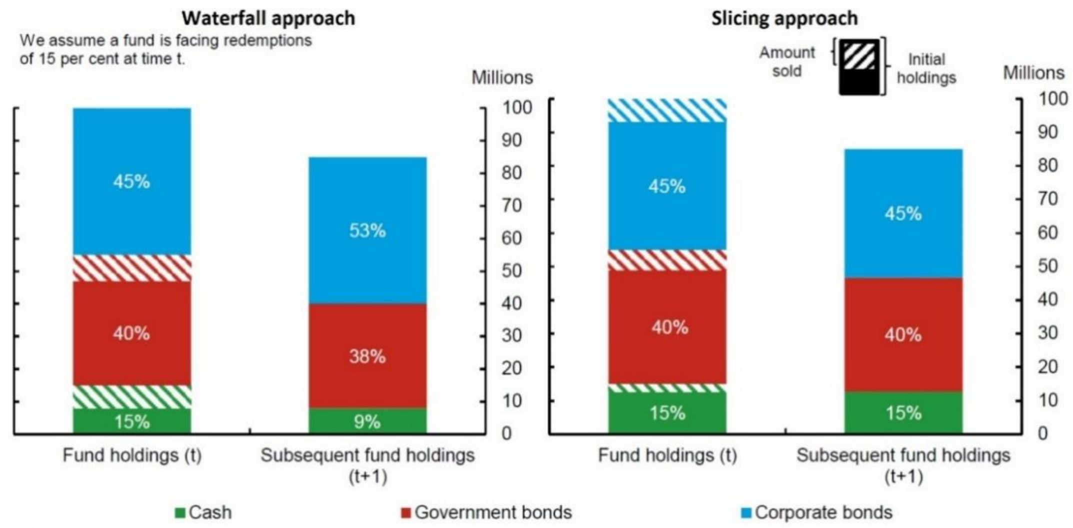
[26] The document may be retrieved on the ESMA website at: https://www.esma.europa.eu/sites/default/files/library/esma70-872942901-35_qas_transparency_issues.pdf

[27] September 5th 2019, ESMA Economic report, *Stress simulation for investment funds 2019*. the report can be consulted at: https://www.esma.europa.eu/sites/default/files/library/esma50-164-2458_stresi_report.pdf

[28] These implications are defined as "Second round effect", consequences which have taken in the market once the redemption shock has been triggered.

The liquidation of a fund, or part of it, may have consequences for its stakeholders. In addition to the just mentioned reduction in value, the fund can spread the liquidity crisis to depository credit institutions, especially if their number is not high and/or if the financial sector represents an important part of the country's GDP. As a result, the massive cash outflow increases the degree of financial exposure and with it the risk within the affected depository institutions. The combination of liquidity issues and loss of value of the portfolio following the forced sale reduces the return for investors, creating a situation that generates further negative pressure on the fund, triggering new redemption orders for the fund's shares in a potentially dangerous vicious cycle (second round effect). The loss of value affects in turn the direct holders of the assets in which the fund had invested, acting as a transmission belt for their decrease in value.

There are two main liquidation policies for funds, even if in some cases they can be combined depending on the prospectus or arising market conditions. The single implementation or combination of the two generates a different pressure on market prices and thus in the next two paragraphs will be briefly addressed the two strategies and their impact on the portfolio at the same disposal value.



Example of the two approaches

7.2.1 Slicing Approach (vertical slicing or pro-rata)

The strategy under appraisal aims to keep the structure of the portfolio unchanged as the shares will be returned to investors by selling the combination of assets that best respect the original composition. Assuming that a fund receives redemption requests for a value equal to 5%, the manager will sell 5% of each category of assets in the portfolio, thus maintaining unchanged the fund's structure once liquidated.

This strategy is used when special attention is paid to investor protection. By maintaining the structure of the assets portfolio constant, the same treatment is guaranteed to each subscriber, avoiding triggering the mechanism that favours the first investors who request the share redemption. This protection is also extended to the market when investment funds are such that they are able to cause large price fluctuations. An equitable disposal of the portfolio distributes the decrease in value on multiple classes of financial assets, thus mitigating the effect and not penalising a class with respect to another in secondary markets.

It has been seen how this strategy is used by funds focused towards retail clients in periods of macroeconomic uncertainty. During these periods the probability of selling more or less liquid securities remains constant[29], allowing selling potentially problematic assets and maintaining substantially unchanged the liquidity profile of the fund. The main problems arise when the portfolio is composed of less liquid asset

[29]Deutsche Bundesbank discussion paper no 11/2019, *Redemption and asset liquidations in corporate bond funds* (ENG Version):
https://www.econstor.eu/bitstream/10419/195582/1/1663477027.pdf

classes and there is the risk of encountering considerable difficulties in selling part of the portfolio due to very thin markets; a factor that significantly affects the meeting point between sale and purchase price in the books of accounts.

7.2.2 Waterfall Approach (horizontal slicing)

The liquidation strategy of "cascading" investments follows the logic that the first to be sold are the more liquid financial asset classes, i.e., it is sold what the market absorbs faster in order to cash in more money in the shortest possible time. The sale order assumed in the simulations reflects the liquidity ratios adopted in the HQLA[30] classification. This method is used mainly by US equity funds to reduce the impact on the secondary markets of mutual funds, usually composed of a larger portion of bonds and of the securities that make it up.

The critical element inherent in this approach is to prefer the speed of implementation over the stability of the portfolio. By immediately selling the most liquid assets there is, in the short term, a lower reduction in their selling price but, in the medium term, this leads to a portfolio imbalance tipped towards greater illiquidity which could have a negative impact in case of need to sell on the markets other portions of the fund (even though, theoretically, the remaining less liquid securities should guarantee higher returns, but which may be unlikely when a redemption shock occurs). To limit the liquidity problems that could arise at a later time, fund managers can implement a protective measure so-called "cash hoarding". This measure consists in the sale of a greater portion of the portfolio with respect to redemption orders, guaranteeing a liquidity buffer that could be useful in case of need to redeem further shares in the future.

This occurrence benefits first movers: i.e., those who promptly request the redemption of their respective shares will recover their investment faster and with less losses than those who arrive later. The advantages of this strategy are basically two: the first concerns the transaction costs which are lower than with the slicing approach, the second refers to the immediate action to be taken in the event of a rapid deterioration of the financial scenario so as to have the least drop in prices and thus a higher redemption value to the advantage of their investors.

In these cases, the sale of bonds follows later as managers prefer to use the more liquid assets such as cash or instruments of equal liquidity. Market prices are thus less affected than with the slicing approach due to the greater use of the cash class involved.

7.2.3 Liquidity assessment in the EU according to HQLA classification

In the stress tests on the liquidity of investment funds that ESMA conducts, the methodology is inspired by the requirements to which banks are subject based on the Basel III agreements. The method of classifying assets is the analysis of the high-quality liquid assets (HQLA), which are assessed on the basis of a value that defines their degree of liquidity.

These liquidity ratios are used to calculate the liquidity coverage ratio (LCR), which assesses the ability of banks to sustain liquidity stress over a 30-day time period using only high quality liquid assets. The LCR is calculated through the ratio between this class of assets and the outflows during the first 30 days. For the purpose of calculating the funds' portfolio liquidity index, the values of interest are only the liquidity ratios of the asset classes present in the numerator, but for completeness' sake it is good to express the formula for the just described LCR (of which later we will see a variation known as RCR[31]):

$$LCR = \frac{HQLA}{Total\ net\ cash\ outflow\ amount}$$

The class of HQLA is divided into three subgroups of decreasing liquidity: level 1, with liquidity ratio equal to 100%, level 2A with ratio equal to 85% ratio and level 2B with ratio equal to 50%. To each financial instrument falling into these three classes is assigned the related liquidity ratio. For mutual funds, the index is calculated by multiplying the liquidity ratio of an instrument in the portfolio by the weight (also in

[30] **HQLA**, High quality liquid assets

[31] Redemption Coverage Ratio

percentage) of the instrument within the fund. The sum of the indices obtained will define the liquidity index of the investment fund. The weighted average formula will be as follows:

$$Liquidity\ portfolio\ index\ (LPI) = \sum_{i=1}^{n} l_i \times s_i$$

The factor l_i indicates the liquidity ratio of the financial instrument, while s_i indicates its percentage with respect to the value of the entire fund.

The flexibility of the calculation tool lies in the possibility of applying the ratio principle to the single instrument or to the entire class. The liquidity ratio values are taken from the Basel III tables for the 1, 2A and 2B classes, or obtained by different method if needed as, for instance, in the case where it is decided to apply the liquidity ratio instrument-by-instrument. Another aspect in favour of this index is that its ease of calculation allows to have an immediate idea of the situation.

The debate on the nature of the cash category arises because there is no guarantee that in the event of redemption requests all the necessary liquidity will be made available to investors, as a part of this may be used for the fund's operational needs. Therefore, assigning a weight (s_i) equal to the part of the cash (or equivalent) class within the fund would be incorrect as it would be necessary to exclude the portion used for operational needs or categorise it as a sum to be used in case of emergency through a different ratio .

According to this method of calculation, it is easy to see how funds entirely targeted (or tipped) towards less liquid instruments are negatively affected in the final result. In some cases the value obtained would not correspond to the true facts so as not to adequately represent the actual situation and other methods may be preferable, such as the TTL[32] method, which, however, has difficulty falling to the level of individual portfolio instrument since the impact on the price for each would be difficult to model.

Despite these limits, the HQLA approach allows to compare different funds in terms of strategy and composition, and highlights which of them may perform worse in stress tests and is likely to have greater liquidity problems in the future. To different values of the liquidity index will necessarily correspond different portfolio management strategies, and in line with what one would expect, the funds composed of high-yield bonds (also known as junk bonds), which have a lower rating, are also those with the lowest index values.

[32]Time To Liquidation Model

7.3 Stress tests

The use of stress test tools is quite widespread in the banking and insurance industry. The most common tests are those that put to the test the liquidity and solvency of these institutions. The test ground for conducting the tests on the investment funds' liquidity is quite new as there are no established practices and regulations in this regard are still evolving. Thus the model applied by ESMA could be a way forward.

In any event, as known, the general structure of a stress test consists in simulating an unfavourable event and analysing its direct impact (on funds in our case) and indirect impact (on secondary securities and funds markets with a spill-over effect on investors).

In order to precisely define the event triggering the stress situation, it is necessary to introduce some concepts that will be useful for understanding the definition of redemption shock. The concepts briefly analyse are the following:

- NAV, the total net asset value of the fund which is calculated using the following formula:

$$NAV = \sum_{i=1}^{n} (security\ market\ price_i \times quantity_i) + liquidity$$

- Net flow of capital at time t, i.e. the change in value that the fund undergoes in a certain arbitrarily established time interval, can be estimated as follows:

$$Flow_t = NAV_t - \left(NAV_{t-1} \times (1 + R_t)\right)$$

As can be seen in the formula, the NAV value at time t-1 was capitalised for the rate of return on assets over the same period, so as to net out its performance during the time period considered.

- Flow percentage with respect to the net value of the fund:

$$flow_t = \frac{Flow_t}{NAV_{t-1}}$$

The percentage may be calculated, individually for each fund, according to historical data in order to set the shock on a fund-by-fund basis; we speak in this case of the heterogeneity of the event in the simulation.

We should at this point mention the concept of fund resilience, i.e., the ability to cope with the shock with the liquidity of the available portfolio. This concept can be defined thanks to a formula that relates the amount of liquidity of the fund to the net outflows due to the shock:

$$RCR = \frac{Liquid\ assets_{t-1}}{Flow_t} = \frac{NAV_{t-1} \times LPI^{33}}{Flow_t} = \frac{\frac{NAV_{t-1} \times LPI}{NAV_{t-1}}}{\frac{Flow_t}{NAV_{t-1}}} = \frac{LPI}{flow_t}$$

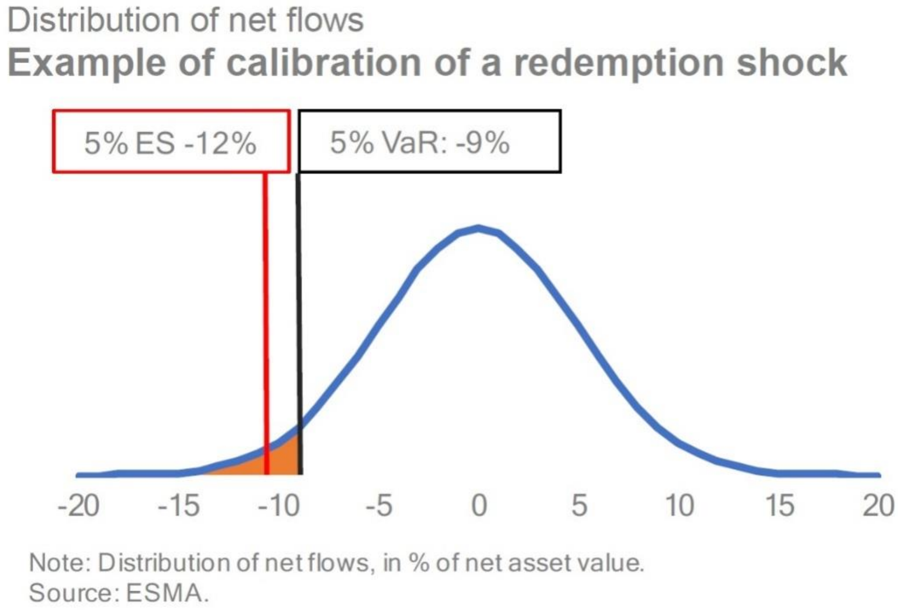
The ratio indicates the number of times that liquidity is able to cover the outflows, which multiplied by 100 returns the liquid assets as a percentage of the flows. If the value of the ratio is greater than or equal to 1, the fund is able to cope with the outflows due to the shock with liquidity, otherwise additional fund's assets will have to be sold to cope with the event. This requirement is measured by taking the difference between the outflows and the liquid assets. In the stress test results shown in the conclusions, liquid assets are calculated according to HQLA classification, and what on the graph is called "HQLA measure" is the LPI term of the above formula. On the basis of these concepts it is possible to introduce the definition of redemption shock which will be used for testing the degree of liquidity of the funds under examination.

7.3.1 Definition of Redemption shock

In the previous paragraph we have seen how the flow value is dependent on the change in purchase orders of the fund's portfolio and not on the performance of the latter. The variation of the NAV value from one period to another (and hence the flow, which from now on will be represented in its percentage form

[33]Liquidity portfolio index, seen on the previous pages of the dissertation

with respect to the NAV) can be treated as a random variable and construct on the basis of the historical data of the flows the frequency graph. From these data it is possible to derive a density function that best approximates the flow distribution. The graph below helps to visualize the concept.



Once the density function is obtained, the probability of shock can be defined and the consequences on the fund assessed.

From the graph it is possible to derive the definition of redemption shock connected to its level of intensity based on the probabilistic distribution. This is a particularly negative event that sees the occurrence of a very high outflow that lowers the net value of the fund. Through the density function it is possible to calculate the shock value according to two methods: the VaR (Value at Risk) or the ES (Expected Shortfall) criterion.

In this case the threshold value is equal to 5%, in other words the worst results that the fund could obtain in 5% of the cases are taken. Choosing the VaR or the ES method implies different results. According to the VaR, the worst that can happen (having as confidence interval 95% of the possible cases) is to have a negative net flow of 9% compared to the NAV, while what happens in 5% of the worst cases is ignored by the model. The ES approach is the opposite as this method calculates the average value of the loss within 5% of the tail (orange area). In so doing, the ES takes into account possible peaks (absent in this example) which may be present in the frequency distribution[34] (tail effect). Moreover, the ES proves useful even where the distribution tails are thicker (fat tails), in this way also extreme events are weighted. In the graph above, the ES approach shows that in 5% of the worst cases we would have a shock with an average reimbursement of 12% compared to the fund's NAV.

In the stress tests carried out, this last approach examined is usually preferred as it best meets the principles of prudence and investors protection pursued by the supervisory authorities. In summary, according to the VaR the shock would be 9%, while according to the ES method of 12%, and this for the same threshold value of the fifth percentile.

7.3.2 STRESI framework

STRESI is the simulation-based approach used by ESMA which combines both micro and macroeconomic visions. Depending on the emphasized vision, the simulation can return two types of results which are not necessarily conflicting: the ability of the funds to resist a negative shock and the dynamics of propagation of this shock on the market. In other words, which funds could be more likely to spread the event to the market and with what intensity.

[34] Hence in the obtained density function

As usually happens, the simulations that are conducted by the supervisory bodies are carried out with a "top-down" logic with basic rules and assumptions (such as reference sample or intensity of the shock) established by the test conductor. The approach does not take into account mitigating or defensive behaviours implemented by the targets of such studies.

In the specific case of investment funds, the mitigating behaviours that are not taken into account are those strategies that managers utilise to reduce the amount of shares redemptions. A couple of examples are redemption gates[35] or increased fees on outgoing transactions. The aim of the study is to observe the mere consequences that the shock would have on the fund's liquidity net of strategies that may prevent or attenuate its course.

The result that the STRESI simulation returns is primarily the resilience of investment funds through the degree of retained liquidity. Thanks to these results, ESMA keeps several aspects and risk factors under control, e.g., industrial sectors, country credit risks, strategies unsuitable for the funds' risk profile, etc.

The findings of the tests are sent to the competent national authorities involved in the micro-prudential supervision, who then decide whether or not to undertake further investigations as it might be necessary to analyse the situation in more detail given the difficulty of the test to produce evaluations at individual fund level. Even though this would be possible to do, it would however require such mass of data as to make the process more complex; data which, moreover, would be difficult to obtain with accuracy and in reasonable times.

Another limitation concerns the macroeconomic vision of the simulation-based approach. STRESI looks at the funds (or classes of funds) as if there was no interaction between them. This compartmentalised vision does not take into consideration the category as a single entity. If there were offsetting of flows from some funds to others, the simulation would not be able to capture their impact (a dynamic actually quite frequent). The systemic risk is then measured by the analysis of the shock propagation to the various sectors concerned (second round effect), assuming an identical reaction by all players involved. It is therefore taken into account the worst-case scenario, i.e., the one in which everyone sells and there is no fund that supports prices through the buyback of assets.

The results of the recent UCITS stress test conducted in September 2019 are however encouraging. According to the simulation, the system seems to hold rather well and the funds maintain an acceptable level of liquidity without excessive negative effects on securities market prices. ESMA aims to use this type of simulation-based approach as a standard for measuring risk in the funds' market. The conclusions of this work will explain the outcome in more detail.

The next section will deal with the impressive project (at least in the idea) that the EU has set itself as its objective: creating a single market for the movement of capital and capital instruments. This project is called the Capital Markets Union (CMU) and will hopefully have important repercussions on the Community's economic and financial development.

[35] Definition of redemption gate from the Black Rock website: A *redemption gate* is a temporary measure that may be implemented by a fund's board of directors, under certain circumstances, that limits redemptions in a fund for a short period of time (up to 10 business days in a 90 day period). Its purpose is to prevent a run on a fund in times of market stress.

8 CAPITAL MARKETS UNION (CMU)

8.1 *Introduction*

The Capital Markets Union (CMU) represents the direct enactment of one of the founding principles of the European Union: the free movement of people and capital. Despite about 50 years have now elapsed since the creation of the EU, the degree of development of the European market is somewhat low and very fragmented when compared with economies and dimensional scales such as that of the United States market, more advanced and cohesive.

We need to create and develop a common platform for the 27 Member States where capital can be exchanged and flow without many of the frictions that have an impact on its overall efficiency.

The CMU aim is to support the European Banking Market, strengthen the EU monetary union and at the same time rebalance the power relations between the two financial circuits in order in turn to reduce the dependence of the economic-financial circuit on banks. Currently, in the EU panorama, the banking circuit is predominant, providing the vast majority of loans within the European Community. Adding an advanced system where capital instruments can be exchanged makes the market more efficient and resilient. The presence of different financing circuits dialoguing with each other diversifies the investment channels. This context allows banks to raise funds on different platforms, reduce the problem of deteriorated loans and share or lower the credit risk they might be exposed (through a transparent securitisation system). The lowering of the degree of risk to which banks are exposed impacts on the financial leverage and the regulatory capital required while the diversification (and consequent reduction of the risk) allows absorbing fewer resources to be set aside, freeing the others for credit or investment activities. An efficient secondary market for debt securitisations would be of considerable help to banks' operations as it would allow risks to be quantified more accurately by establishing adequate prices, increasing transparency and reducing the volatility and probability of shocks within it.

From the choice point of view, any category of investors (private, institutional, pension funds, etc.) will have a larger market where they can stock up. The single market should promote competition between the instruments provided, promote the emergence of new ones, lower operating costs and contribute to the overall stability of the system (topics that will be dealt with in greater detail in the next paragraphs). The work done so far in this direction seems to repay for the efforts made, the total capitalisation of listed firms in the EU is higher than the pre-crisis levels and the IPOs of the firms in this market are around 30% of those at world level and in the case of equity instruments issued by non-financial firms they went from 36% in 2014 to 41%[36] in 2018, while the percentage for debt securities rose from 8% to 10% during the same period.

8.2 *Obstacles to market integration (legislative framework, fiscal and post-trade structures)*

What is slowing down the establishment of the single capital market is a series of causes to which answers must be found with a comprehensive and consistent approach. The origin of these obstacles lies in the diversity of the various regulatory frameworks (source of legal arbitrage), in the tax regulations in force in the Member States (a phenomenon capable of channelling large amounts of capital towards markets where withholding taxes are less burthensome) and in the various laws on insolvency. Other impediments are also the need for legal certainty in case of bankruptcy proceedings, the difficulty arising from uncertainty on the legal framework to apply in the event of credit enforceability and the lack of a level European platform regulating the post-trading phase. These issues will be addressed in the following paragraphs which will deal with the action plan (and revisions made as the work proceeded) that the European Commission is implementing to complete the establishment of the Single Capital Market.

[36] Percentage related to EU GDP

8.3 The CMU within the EU investment plan (Juncker Plan)

The CMU project is part of the European investment plan. The plan is a general measure acting on 3 strategic areas defined as pillars, through as many packages of dedicated measures that act jointly. The general purpose is to promote investments in the real economy and improve the economic environment

The objectives that the plan seeks to achieve are: growth and consolidation of the level of employment, better competitiveness of European firms, strengthening of infrastructure networks and increase in the productivity of the system.

The three pillars on which it is based are as follows:

1. Establishment through the EIB[37] – which guides the management and defines the access requirements – of a strategic investment fund so-called EFSI, whose objective is to increase its investment target to €315 billion, of which around €240 billion for sustainable infrastructure projects (a result largely achieved to date).
2. Ensure that funding is actually channelled towards the real economy. For this purpose and in support of this operation are to be created the European Investment Advisory Centre, aimed at assisting various projects with the help of the EIB, and the European Investment Project Portal, designed for matching the project promoters (demand) and investors (supply).
3. **Remove any obstacle that slow down or hinder the schedule of investments** (the most important "pillar" for the purposes of this work) through the harmonisation of current regulations, especially in the infrastructure sector. The Capital Markets Union represents one of the infrastructures that will play a decisive role in the success of the process of removing obstacles and facilitating investments.

As regards the third pillar, the action plan for the development of the CMU (in the course of its determination, implementation and revision) aims to create a forum for discussion among the EU Member States which can promote relationships leading to the definition of the best practices to be adopted for achieving the objective.

8.4 The Capital Markets Union action plan

The action plan for the development of the capital market[38] (or "Capital Markets Union") is a document that draws up a series of measures that the European Commission intends to adopt for establishing the CMU. The original document was first published in 2015 with the aim of completing it by 2019. A general revision was carried out in 2017 (see paragraph 2.4.1) to take stock of the situation: more than half of the measures originally planned (20 out of 33) had been approved while for the remaining, some completion dates were postponed to after 2019. This package of measures, part of the Juncker Plan, sets the direction that Europe intends to take in the future and is one of several existing programs whose aim is to innovate the European Union. It is worth briefly mentioning the "Horizon 2020[39]" program, whose vision translates into a series of commitments ending in 2020, which also have repercussions on the Capital Markets Union action plan.

The outline of the action plan is rather linear: tackling the simplest problems first and then deal with larger and more complex issues. This method of approach should also increase the degree of general confidence in the markets (in the light of the crisis that started in 2007) and bring both an increase in investment volumes and new EU and non-EU investors, making the CMU attractive also outside Europe.

Through the markets union, the relationship linking the savings held and economic growth will be consolidated. There will be greater choice and better returns on investment projects which will see a greater flow of capital. On 15 March 2019, the European Commission published a communication on the progress

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[37] European Investment Bank

[38] Refer to https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52015DC0468&from=EN

[39] Horizon 2020, The European program for the Innovation and scientific research, one of the largest programs which are taking place in the EU. The program aims to improve scientific and economic growth in a sustainable way. This program promotes high quality scientific research development, involving public and private sector. Such program could lead to an increase of the occupation in the scientific sector, of the competitiveness of the Euro Region and an important advance in techno-scientific knowledge.

achieved so far in implementing the action plan. Of the 19 legislative proposals under study, 3 were adopted, namely, the legislation concerning the prospectus for SMEs, the amendment to the Solvency II framework for prudential treatment (reduction of the capital requirement) on long-term investments and the rules on securitisation, while 10 reached a political agreement and 6 are under discussion. The following table provides a schematic overview of what has been currently done. In the Commission communication there are references to the near future and the actions to be taken in view also of the United Kingdom's exit from the EU and the resulting impact.

OVERVIEW OF THE PROGRESS ON THE LEGISLATIVE FILES OF THE CAPITAL MARKETS UNION[40]		
POLICY DESCRIPTION	European Parliament	Council of the European Union
CAPITAL MARKETS UNION		
Securitisation	Adopted	Adopted
Prospectus	Adopted	Adopted
European venture capital funds (EuVECA)	Adopted	Adopted
Pan-European personal pension product (PEPP)	Political agreement	Political agreement
Covered bonds	Political agreement	Political agreement
Crowdfunding	Negotiating mandate	No agreement
Cross-border distribution of collective investment funds	Political agreement	Political agreement
Investment firms review	Political agreement	Political agreement
Preventive restructuring, second chance and efficiency of procedures	Political agreement	Political agreement
Promotion of SME growth markets	Political agreement	Political agreement
Applicable law to third-party effects of assignment of claims	Negotiating mandate	No agreement
European Supervisory Authorities review, including reinforced anti-money laundering rules	Negotiating mandate	Negotiating mandate
European market infrastructure regulation (supervision)	Political agreement	Political agreement
SUSTAINABLE FINANCE		
Sustainable finance: Taxonomy	No agreement	No agreement
Sustainable finance: Disclosure	Political agreement	Political agreement
Sustainable finance: Low-carbon and positive carbon impact	Political agreement	Political agreement
OTHER PROPOSALS OF RELEVANCE TO THE CAPITAL MARKETS UNION		
Common consolidated corporate tax base	Report adopted	No agreement
European market infrastructure regulation (REFIT)	Political agreement	Political agreement
Recovery resolution of central counterparties	Negotiating mandate	No agreement

8.4.1 Improvements introduced and review of the program made in 2017

Favourable circumstances led to a gradual economic growth in the Eurozone and the 2017 review takes note of this situation, aware that a contraction in the economy may always be expected, especially in a context where average investments are below the pre-crisis level, element which in itself slows down the economic recovery.

The review had as main objectives the simplification of cross-border investments and the creation of advanced contexts in the capital markets of the EU. In its introductory phases, it acknowledges how important it is to focus even more on the CMU and include it among the priority projects of the European Union, given its crucial role in solidly cementing the third pillar of the investments plan for Europe.

An element of concern mentioned in the document is the United Kingdom's exit from the EU, which currently represents its "current major financial centre" and among the most important worldwide. The challenge will be to guarantee financial stability and access to the most important markets to the CMU community. This aspect will be addressed through future evaluations and reviews on the functioning mechanism of the Capital Markets Union.

[40] CMU Legislative initiatives State of play, table taken from the Eu Commission communication no.136. The pdf can be retrieved at: https://ec.europa.eu/transparency/regdoc/rep/1/2019/EN/COM-2019-136-F1-EN-MAIN-PART-1.PDF

As part of its strengthening and development process, on 13 December 2016, through a joint declaration by the European Parliament, Council and Commission, was highlighted with the approval of a regulation then adopted during 2017[41], the need to implement security and transparency in the securitisation market. Another important point addressed was that of the review of the prospectus legislation[42] mentioned earlier.

A first analysis of the implementation of the plan considers several points, such as the need for greater financial support for start-ups, the greater awareness that capital and debt instruments are not widespread among individual investors, and the contraction in banks lending which is still underway (despite a slight improvement) and which has greatly reduced the banks' financial exposure compared to the pre-crisis level.

There is also a still weak investment activity by small investors who prefer placing their savings in bank accounts, as well as a low level of cross-border investments hampered by various regulatory barriers that make the market inefficient and which are an obstacle to an efficient allocation and diversification of capital and consequent lowering of risks.

As regards institutional investors, it is clear that there is still reluctance to invest in long-term assets such as infrastructure. This makes somewhat difficult financing ongoing projects and make the sustainable conversion that the EU is pursuing. It is necessary to increasingly involve private savings in order to provide greater impetus to the transformation.

The 2017 review has evidenced the fact that the CMU creation process was well underway with more than half of the measures already implemented compared to those laid down. Particular attention was paid to the firms' growth cycle and to the type of resources that they need in the early business stages. These measures took into account the start-up phase with the establishment of the EuVECA and EuSEF funds' regulations, the selection of managers for European privately managed funds and the study of tax breaks for business angels. Once firms have grown sufficiently, at the stage of raising capital from the markets, the regulatory framework for SMEs prospectus has been simplified, the pan-European online database of which ESMA is the data holder has been created, and the withholding tax system which facilitated third party equity instruments compared to one's own has been rebalanced. In the same way, for larger firms, attention was focused on the study of bond markets (the main financing source in this evolutionary stage) to identify adequate measures to make them more liquid.

Further agreements of principle and intent have been reached, as, for example, that on simple and standardised securitisation (translated into a European regulation), on the removal of obstacles by setting out a general timetable, on the amendment (later occurred) of the Solvency II regulation and on the possibility to provide second chances in the restructuring of firms in difficulty subject to insolvency procedures where the good faith of the proprietor is evident.

With an eye to innovation, the review looks at the evolution of FinTech that will provide more efficient solutions and services in both trading and post-trading (and in other segments) and "green" investment projects that will help reshape the European economic development model; these projects will also receive tax incentives. For example, in line with the path taken, the EIB, as from the end of 2021, will no longer finance investment projects based on fossil fuels, setting aside its resources only for those who will use renewable energy sources.

Supervisory measures have also been taken, some of which have already been dealt with in the first part of this dissertation and which go in the direction of a convergence of supervisory policies and reduction of the phenomena of legal and regulatory arbitrage with reference to persons, services and products.

8.4.2 Support for the integration of markets and financial circuits

In recent decades, numerous efforts have been made to develop national markets and make the European market increasingly cohesive. More and more will be done in the near future with the creation of Community advisory structures aimed at consolidating the evolutionary level of domestic regulatory

[41] EU Regulation 2017/2402, which came into force on January 1st, 2019
[42] EU Regulation 2017/1129

frameworks by proposing possible reforms, including structural ones, which will develop them in a converging direction. As already mentioned, an integrated market will lead to economies of scale and competitiveness of services, products and costs for all players operating within it. Its full integration includes the removal of customs duties, cross-border legal and administrative costs, and the convergence of supervisory actions (both from the legislative, inspection and application of sanctions point of view) and the drafting of insolvency rules common to all States.

Homogeneity does not mean only expanded sources of capital at European level (or new opportunities from the investors point of view), but the single market will also result attractive to investors established outside the EU as its ability to channel foreign investment (Eurocentric perspective) ensures that firms can benefit from capital coming (theoretically) from all over the world, continuing the innovation process even if there may be a slowdown in European capital flows.

The Commission also cooperates with countries outside the European Union within international organisations and cooperation frameworks for developing policies that can converge and partially replicate what is happening in Europe, i.e. support the development of world capital markets with a view to progressive integration. Collaborations with the OECD are underway and concern the codes for the liberalisation of capital movements[43] by firms in IOSCO countries.

Integration is not intended only at national level, but also for the choice of types of financial instruments and circuits. We are in a situation where the role of banks is still central as most of the financing provided comes from credit institutions and, for this reason, the Commission is also reviewing the banking regulatory framework. It should be noted that in several Member States, SMEs use non-profit cooperative credit institutions, created precisely with a view to offer mutual financing to firms participating in the consortium. In this case, the current regulation for banks could be an obstacle to cooperative credits due to their simpler structure. In compliance with the general rules, they should establish internal control bodies designed for higher risk levels which would make difficult their functioning. In some European States, the legislation applicable to cooperative credits did not take into account the capital requirements imposed by the previous European directive. The relevant directive and regulation (CRR II and CRD V) have been modified to make the risks assumed by this type of credit institution less burdensome so as to be in line with States with the most permissive regimes.

For the purposes of integration, it is important that also banks participate in the capital market. To this end, the Commission intends to strengthen the simple, transparent and standardised securitisation instrument, which, on the one hand, proposes to ease the debt burden on banks' balance sheets and acquire greater liquidity and, on the other, provide a further investment choice (which by virtue of its construction is intended to be safer and more transparent than pre-crisis securitisations). This is a considerable challenge, given the mistrust (as is the case of the securitisations on American sub-prime mortgages) which has arisen following the financial crisis and which compromised the functioning of its market. This type of instrument would increase credit availability and would decrease the cost of debt towards third parties, transferring risks and improving the capital structure. The Commission, through the creation of the STS[44] (which will be discussed later), intends to provide a well-defined and as safe as possible instrument.

Similarly, through various legislative measures already adopted[45], efforts are being made to absorb the least possible regulatory capital in order to unlock additional resources (see below) in banks' balance sheets. A single market for covered bonds and a bond market dedicated to SMEs is being created to guarantee them a direct investment channel with investors. The regulations issued are based on the best practices already adopted in European countries with the most advanced capital markets.

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[43]The referred code can be found at:
http://www.oecd.org/daf/inv/investment-policy/OECD-Code-capital-movements-2019-EN.pdf

[44]**STS**, Simple, Transparent and Standardised securitisations

[45] Delegated regulation 2015/35

8.4.3 *Promote the meeting between institutional and private players*

Studies and data show that, in recent years, households in Europe[46] save more and more and invest less and less. Savings have gone from 13% to 13.3% respectively in the first and second quarter of 2019, while in the same time period investments have dropped from 9.2% to 9%. Households' savings refer also to the sums set aside in pension funds or life insurance which are needed at the end of the working life cycle or in case of unexpected needs. As is widely known, the propensity to invest and the trust in the markets by small savers increases proportionally with the degree of transparency, simplicity in understanding the instruments and the quality of advice provided by professional operators. Important information on investment products must be made accessible and their reliability proven, and thus the course taken had been to reform the regulation on reporting obligations (MiFID II). The aim of the reform is to improve and make the obligations more effective, while uniformly and coherently establish a regime of necessary transparency requirements to be met avoiding leaving areas where rules are not defined (or duplicated) that a fragmented regulatory framework may cause.

Although it may not seem immediate from the small investor's perspective, a key role is also played by the mechanism of the "European passport" (topic that will be discussed in the next paragraphs), which must be improved in order to only authorise firms with high reliability standards. All of this would place the various financial firms in a scenario of healthy competition, supplying, in principle, better products for investors.

In the last decade there has been a general recalibration of the investment portfolio by institutional investors (which by nature invest in the long-term) geared towards a medium-term horizon. The European Union has every interest in creating the environment for channelling the financial resources of institutional investors over the long-term[47], ensuring prudent risk management in order to offer the best solutions for achieving long-term performance objectives. In doing so, institutional investors would have long duration portfolios in line with the pension products they offer by guaranteeing the performances contractually agreed in the past.

A solution designed to give more choice was the establishment of the PEPP (Pan-European Personal Pension), a personal pension scheme portable between EU Member States. A single market for individual pension schemes goes in the right direction towards offering standardised European products and makes it easier for workers to move between different EU countries (topic that will discussed in a following paragraph).

In Europe, investment funds are the most active category of instruments in cross-border transactions even if the markets fragmentation (legislative, fiscal and partly supervisory) render the situation more complex. The system-inherent obstacles that partially undermine free trade and direct investments are gradually being removed. The ongoing process of removing barriers is making things simpler by making it easier to market products in Europe with reduced costs for investors.

If we examine the situation from a general point of view, from the distribution and retail brokering side, there is little incentive for small investors to operate on the market as the costs attributable to these two stages will have a significant impact on their final returns. New instrument distribution models are emerging through the evolution of the FinTech sector along with the expansion of channels available for use on the internet. This could lead to a further benefit in terms of commissions applied as the proliferation of new platforms of online consultancy services would lead to a reduction in costs and make investments more attractive.

The evolution of financial technology is of crucial importance especially for business models (usually very young) who make extensive use of them (or make them their core business) and whose reason to exist is precisely due to the development of the sector. The problem that would arise is that of national supervisory regulatory frameworks which could limit the development, the capacity of innovation or even the survival of

[46] Eurostat report 4th oct, 2019 no.150/2019: https://ec.europa.eu/eurostat/documents/2995521/10143764/2-04102019-BP-EN.pdf/9a6ea00b-eaab-e1d1-88a3-b5e47612ecda

[47] Investing into infrastructural projects and into SMEs

the business. With regard to the provision of financial services or products between States, the difference between two regulatory frameworks could lead, for instance, to different information requirements or the need to obtain operating licenses for each State in which the business operates. These regulatory frictions would create difficulties which are inversely proportional to the size of the business.

It is important to closely follow these innovations and use best practices that can protect investors under the most favourable conditions possible. The Commission is currently studying this issue with the aim of supporting this evolution with an appropriate regulatory framework and policies.

8.4.4 *Increasing transparency and financial culture*

Whilst much has already been done in order to create the CMU, this has not produced the hoped-for results. Many of the problems originate, in addition to the difficulties mentioned above, in the lack of trust that investors, especially in the retail segment, have in the market. It is necessary, furthermore, to take into account that the average level of knowledge in the financial sector among small savers is very low or almost nil. The lack of knowledge on the subject accompanied by a general mistrust of something unknown is the perfect combination that can affect the functioning of the market and miss the long-term targets that the EU has set itself.

From this it is clear that the strategy to be pursued must be simultaneously based on two fronts: promoting programs that can provide a minimum foundation of knowledge to investors and make all negotiation stages as clear as possible. These measures take the form of both regulatory and non-regulatory provisions.

In the various European services efficiency rankings, the financial ones are at the bottom of the list and have the sad record of being opaque and difficult to understand. The paradox derives from the fact by reason of transparency, so much information is being provided that make difficult understanding which is the most important. In the impossibility of sorting it out by importance, having all this amount of data is often equivalent, for the saver, to having none at all. It is important to be able to find the right balance following a principle of proportionality that distinguishes the professional investor from the individual private one and that provides both categories of investors with the appropriate set of information (the Key Information Document under the PRIIPs framework will be addressed at the end of section 2).

The issue of financial training is rather neglected with evident results: according to a Consob report published at the end of 2019[48], families' culture in the field of finance is closely related to the level of education and social class of their members; financial planning is not that common and functional when undertaking expenses of a certain importance. A slightly higher knowledge on the matter would permit a more ready understanding of the information documents in order to best support the consumer in the decision-making process. The Commission should promote programs aimed at training citizens and at sharing the best practices to adopt when approaching the issue.

Transparency is required above all in those areas where the crisis had its origins, namely that of securitisations. A new type of transparent and standard securitisation is emerging, which will be discussed in greater detail below.

Interventions to increase transparency are also invoked with regard to sustainable investments. The direction taken by Europe places at the centre this type of projects, which it is hoped will be subject to a strict regime of dissemination of information. Investors in ESG[49] products are usually more sensitive to what their finances will be used for as greater transparency also equates to a greater attractiveness of the product. The harmonisation of the regulations on the publication of information is fundamental in order to avoid imbalances in the type of data available as this would lead issuers to disclose what is most convenient without reference to any objective criteria and where information would not be comparable with each other, thereby triggering, to the disadvantage of savers, the most classic of information asymmetry cases. In a scenario where information obligations operate and socially responsible investments are encouraged, even asset managers would place these products into their funds or other structured products and this could act a driver for the entire business sector.

[48] 2019 November 8th, Refer to: http://www.consob.it/documents/46180/46181/rf2019.pdf/b3a1763b-a869-4aca-8930-9ae370a0aa90

[49] Environmental Social Governance

As regards the method to be used, a centralised European system would help improve the collection and processing of data with the aim of making them usable and comparable with each other. Given the level of technological progress achieved, especially in the FinTech sector, this system is both implementable and close at hand, and although not easy and immediate to build, it is certainly realistic and feasible.

8.4.5 Promoting stability through the convergence of system supervision

The first part of this work was focused particularly on the principles, aims and instruments of supervision, with a subsequent overview of the European supervisory framework. The creation of this supervisory system is functional to that of the single banking and capital market in order to promote various financing channels. There will be two opposite effects: if, on the one hand, the CMU will be fundamental (alongside the banking system) in increasing the degree of resilience of the European financial system, on the other, this single market will inevitably be the source of potential risk and instability factors, which are inherent in a capital market as we know it. Sharing market shocks will lead to a better risk distribution which will in turn reduce the vulnerability of the business system against hypothetical credit crunch scenarios, thanks to the presence of the single securities market.

The supervisory regulatory framework and its development will be fundamental for the success of the CMU project. The highly integrated supervisory architecture was shaped with a view to cope with the European structure and was recently updated (ESAs review) in the light of the needs encountered following the economic development of the releant framework[50].

As previously analysed, to make markets safer, attract investors and in turn increase liquidity, a high degree of transparency is essential for choosing more consciously and selectively. The European Union has issued regulations and reforms for this purpose, such as for example, the EMIR regulation on OTC[51] derivatives, on central and financial counterparties and trade repositories, which introduces trading and clearing rules which should make the market safer, or the MiFID directive with its major MiFID II revision entered into force on 1 January 2018, which should have shown its effects in 2019, but which seems not to have achieved part of the expected results (ESMA is thinking of corrective measures for the future).

Important steps have also been taken by implementing the directive[52] which brings together all European Alternative Investment Fund Managers (AIFMs) and the Securities Financing Transactions Regulation (SFTR[53]), which deals with the transparency of financial transactions with the creation of collaterals[54]. Periodic reviews of the regulations are issued thanks to proposals in the technical-regulatory area (RTS[55]) with a view to develop standards (ITS[56]) in order to bring together the regulatory frameworks.

As discussed in the first part, the Commission continuously cooperates with the ESRB[57] so as to find any vulnerability and assess any potential risk of lack of transparency, instability or liquidity of the markets; this is done in a macro-prudential perspective in order to always ensure efficient supervisory tools.

It has become clear the necessity to have authorities that deal with the sectors falling within the European financial system (ESMA, EBA and EIOPA), among which, in terms of single capital market, ESMA's role is predominant. The consultations undertaken at European level have placed the need to have ESMA play an increasingly incisive role on the markets and bring to conclusion the convergence process on supervisory rules.

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[50] EU Regulation 2019/2175 published on December 18th, 2019: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R2175&from=EN

[51] Over The Counter

[52] EU Directive 2011/61/EU (ENG version): https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32011L0061&from=EN

[53] EU Regulation 2015/2365 on Security Financing Transaction Regulation

[54] The collateralization contract binds (guarantee) a specific asset which could be sold if the debtor does not perform the obligation stated in the main contract.

[55] Regulatory Technical Standard

[56] Implementing Technical Standard

[57] European Systemic Risk Board

There is a need for reliable and equal criteria for all, and such key process is currently being jointly developed by both ESMA and the European Commission with the purpose of finding the best strategies that can work together.

8.4.6 Harmonisation and simplification of the European regulatory framework

The lack of homogeneity of the European regulatory frameworks must be regarded, to all intents and purposes, one of the most prominent obstacles to overcome, especially in situations of difficulty that businesses may face, such as insolvency, whose procedures in countries may differ greatly from each other. Harmonising the multiple insolvency and corporate restructuring procedures would increase the degree of legal certainty, promote cross-border investments and make interventions faster where action is required.

The European Commission's guidelines[58] encourage Member States to develop regulatory frameworks that provide for early restructuring measures and that incorporate the second chance principle for bankrupt entrepreneurs not charged with fraudulent misconduct. These recommendations (which, however, are not currently fully implemented) establish principles that should be common to all stages of European bankruptcy procedures in order to reduce costs and duration to the benefit of SMEs, which are a major focus of the Juncker plan.

8.4.7 Tax barriers and diversity of treatment within the EU

If on the one hand it is important that the regulatory framework is as uniform as possible, on the other it is just as crucial that the fiscal framework follow the same path. Different tax treatments heavily influence cross-border investment opportunity decisions. The most significant tax barriers encountered are: withholding taxes by the country of the issuing firm (along with the domestic withholding tax) which are impossible to recover and that will reduce the overall rate of return of the operation, and taxes (sometimes arbitrary) in the insurance/social security sector which are imposed on pension funds or life insurances.

The Commission's intent is to promote uniform procedures for the refund of withholding taxes which are the same for everyone, up to their final exemption. The process of promoting such measures also goes through various studies that the Commission has undertaken to identify the best practices to be adopted for achieving the goal.

From an analysis by the European Commission, in 2015 there were about 200 bilateral cross-border investment treaties. The objective was to significantly reduce their numbers to harmonise the situation by legally proceeding against these treaties. At the same time, the Commission started a process of collaboration with all Member States for assessing (just as done for the other analysis and intervention areas) the best practices and introduce possible additional actions for the protection of investments and investors and encouraging exchanges to free up the single market liquidity.

8.4.8 Small/Medium-sized Enterprises and their financing

Small and medium-sized enterprises are one of the primary reasons for the establishment of the CMU. They employ 2/3rds of Europe working population and create a value of around 60 cents on every Euro invested. Financing conditions need to be as favourable as possible and this can only occur by increasing the choice of products with which SMEs obtain finance. Given the current market situation where 70% of the financing comes from the banking sector, with the unification and support of the single securities market it is hoped for an efficient mobilisation of capital. Since they represent the backbone of the productive system with approximately 80% of the share of the industrial sector, SMEs can benefit most from the establishment of the single market and have access to financing channels otherwise precluded.

As known, SMEs have difficulty financing themselves in capital markets, and the difficulty also lies in managing this financing channel. Often there is no awareness of the evolutionary stage at which the company is and it is not possible to identify the time horizon more suited to the needs, nor the technical form, or the

[58]European Commission, C(2014)1500 final, 2014, 12th march

management of flows or the return on loaned capital[59]. Other problems arise from to the small size of the enterprises under analysis. The process of raising capital in the markets, usually done through an IPO, involves very high costs. In particular, the enterprise's prospectus preparation requires research, processing and production of data that consumes economic resources and necessitates a lot of time, which swells the costs charged by the advisor who oversees the entire process. The EU Regulation 2017/1129 moves in this direction and, in this regard, introduces the "growth prospectus", whose aim is to make it easier for growing companies to bring in new funding. A simplified prospectus, with leaner information requirements but still in compliance with the information requirement that transparency in the markets requires. It should be remembered that SMEs are unlikely to resort to the capital market through IPOs, and if they were to decide to do so it could be the first and only time that they would face a situation of this scale. Such process is more expensive than operations of this kind for large companies and the attractiveness of the operation is not very high from the investment banks' point of view. The Commission's objective was to simplify the rules on prospectuses, in order to make the process less expensive and more standardised. The EU Directive 2014/65 also established the "SME Growth Market", an idea that has its origins in the 2020 Entrepreneurship Action Plan, launched by the Commission in 2012 and consisting of a multilateral trading system that should help SMEs raise capital on the market. Another instrument approved in June 2015 is the European Fund for Strategic Investments (EFSI) which started with €21 billion (totalling €315 billion in 2018) with a management completely independent from EU Member States.

The Commission analyses the objective difficulties encountered by SMEs during listing on the markets or the issuance of debt instruments such as bonds and is committed at establishing specific Community advisory structures in order to assist and support companies that decide to obtain financing in the markets.

Among the different funding channels available, also funding through venture capital is an aspect to be considered. It is important to support this channel because it is the one most used by start-ups where there are mature markets. These are usually businesses with a high growth rate but with still limited financial resources. For these companies resorting to bank financing (whether medium/long-term loans or current account overdrafts) means paying a higher cost of the debt than the business could bear, or simply take away the internal resources for business growth, as instead an optimal debt structure will allow to do.

The EU is planning to establish European funds that can also, and especially, channel capital deriving from private investments, using the tax-break mechanism. Usually the venture capital structure is configured as long-term investment funds that finance a basket of start-ups, allowing diversification of risk. Here too, the size of the phenomenon is relatively small and the following image shows the 2018 (2017) distribution of venture capital activities.[60]

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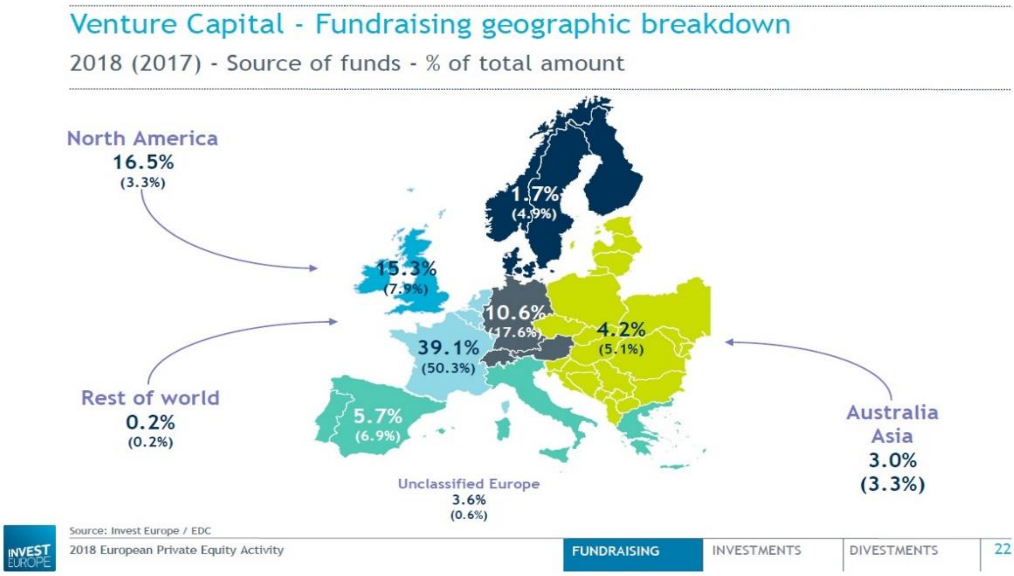
[59] The process is defined as "funding escalator", raising funds, checking the type of financing and monitoring the debt, for a little bit more see the following article:
https://startups.co.uk/the-funding-escalator-how-to-raise-finance-and-keep-control/5/

[60] The following presentation can be found at:
https://www.investeurope.eu/research/publications/?keyword=European%20Private%20Equity%20Activity%20Report%20and%20Data%202018#search-filter-container



As can be seen, the greatest concentration of investments is in Central Europe (Germanic and Francophone countries) and in the United Kingdom, with the southern and eastern countries far behind.

In the light of this situation, efforts are being made to create the conditions for a development in terms of numbers, a more homogeneous distribution and a good functioning of the market. The establishment of European funds for venture capital (known as EuVECA) and European funds for social entrepreneurship (so-called EuSEF) go in the direction of promoting this form of financing. The regulations[61] introduced lay down the conditions under which the funds can be distributed to institutional investors (insurance and pension funds) and private individuals, given the greater degree of risk of the investment. Here, too, tax leverage is one of the methods that is planned to be used: financing start-ups with capital instruments eligible for favourable tax treatment would be advantageous and would act as a driver for the growth of this type of investments.

In recent times, especially after the crisis, alternative financing channels such as crowdfunding have spread, namely a method for raising funds starting from the bottom (the crowd). Such channel enables entrepreneurs and start-ups to raise capital for an idea/project to be submitted to the community which in turn decides whether to contribute any amount of money (according to one's possibilities.) and whether it is deemed worthy or not. The Commission is evaluating the evolution of the situation. The reason for this attention derives from the intention of monitoring existing processes so as not to inadvertently "strangle" this segment with legislative initiatives that are too strict and/or do not respond to innovation needs. At the same time, there is a need not to leave an entire sector in a twilight zone and protect investors. The Commission's monitoring work also concerns the assessment of national legislative regimes that are springing up in order to identify, as usual, the best practices to be adopted to ensure an appropriate development.

The platforms hosting crowd-funding sites are currently regulated by the countries in which they operate. These countries are attempting to better frame this type of financial initiatives and clarify the operational scope, some of which (securities-based crowd-funding) are regulated by the MiFID and if they meet the requirements they are authorised to operate throughout Europe (European passport principle).

Further alternative investment solutions are also peer-to-peer lending and business angels: wealthy individuals, often businesspeople, who invest in companies (usually in the start-up phase) and also cover the

[61]For EuVECA: Eu regulation EU 345/2013; for EuSEF: Eu regulation EU 346/2013. Both modified with the same Eu regulation EU 1991/2017

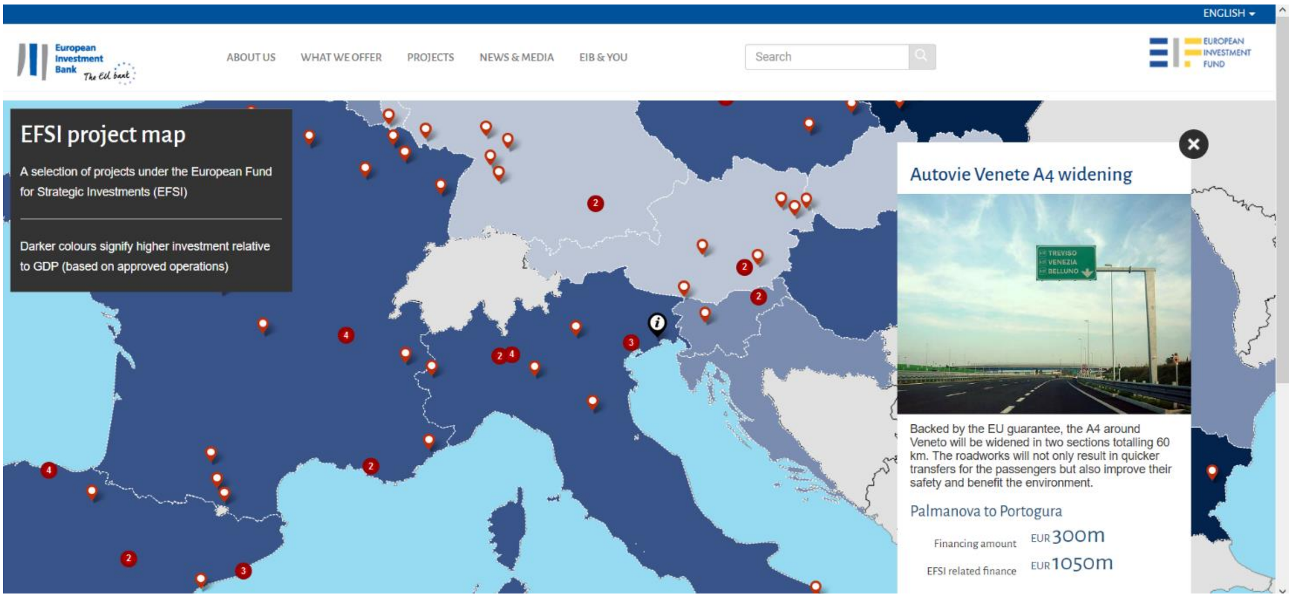
role of consultants. This is a marginal phenomenon in the European context, although the Commission intends to promote its diffusion. Most of the funding provided is in the United Kingdom, France and Spain.

8.4.8.1 Informing SMEs of available solutions

The lack of appropriate information can lead SMEs to always resort to the same financing channels, namely those within the banking circuit. Looking a bit deeper, the reason for this may also derive from the costs that are incurred during the search for alternative methods that both SMEs and investors support and which have a significant impact on the balance sheets.

The need that arises is to inform the parties of their mutual needs: inform SMEs on the various financing channels other than banking ones and inform investors of the possibility of investing in them.

It is important for SMEs to be informed through methods promoted and encouraged by EU structures as well as by markets. Another critical aspect is to promote the growth of consultancy services. This sector is continuously expanding, especially in the most advanced European markets, and the Commission's purpose is to foster best information exchange practices in the EU. One of the first results of this sharing process is the creation of a projects map, available on the European Fund for Strategic Investments website, which shows country by country the investment projects and the amount of each[62]. The website is above all a showcase allowing project promoters (based in the EU territory) to make themselves known and converse with potential investors by explaining them their projects that require financing.



Screenshot from the financed EFSI investment projects

In addition to the EFSI, the European investment Advisory Hub[63] has been created to provide support and guidance on European infrastructure investments.

Another important step is to create a platform where it is possible to be informed on projects for investing directly by connecting companies and investors so as to match supply and demand for capital. This platform would allow to build a voluminous and homogeneous database to be consulted and for comparing the worthiness of the projects.

As it has emerged that the nature of the available data is quite heterogeneous, it is necessary to move further in the direction of standardisation. The European AnaCredit[64] dataset, a project launched in 2011 by the ECB, whose final regulation was approved in 2016 and which began collecting data in 2018, goes in this direction. The data are collected by the national risk centres and provide a detailed database for monitoring

[62] For a complete overview of the map consult the EFSI website: https://www.eib.org/en/efsi/map/index.htm#
[63] Please refer to the hub website: https://eiah.eib.org
[64] For further information please refer to: https://www.ecb.europa.eu/stats/money_credit_banking/anacredit/html/index.en.html

the situation by analysing and processing the data from a statistical point of view. The dataset is functional for further developing macro-prudential supervision and helps implementing the most appropriate economic policies.

Part of the work has been done through the establishment of the SME Growth Market. This platform serves to connect European lenders and SMEs through the multilateral trading system created.

As additional support has been created the Enterprise Europe Network, which provides advice to SMEs that intend to grow, obtain funding and operate within the EU territory. All this serves to provide the best possible advice by informing companies on different aspects, from contractual to patents, from updates on current European legislation and standards to the best business management practices of the moment. Of course, it provides support in the process of finding finance and advises on energy savings, suggests possible improvements and the network companies suitable for carrying them out and also gives advice on any local funding programs for specific energy efficiency requirement.

8.4.8.2 Corporate bonds in the European area

Bonds are another of the possible financing instruments (even if mainly used by large companies). The low interest rates of recent years have allowed companies to find low-cost third-party capital, which is why total issuance has doubled in the post-crisis period. The problem that emerged is the poor liquidity of the secondary market. Despite the huge issuance volumes, the bonds purchased are not traded on the secondary market, and this makes it harder for anyone wanting to buy them at a later date, increasing the risk premium paid on the securities. This situation, if persistent, will drive investors away making it difficult for companies to finance themselves through the use of bonds, unless willing to provide a higher interest rate; a situation that becomes worse if companies face periods in which their creditworthiness deteriorates. Measures are being studied to incentivize the liquidity of the bond market and harmonise tax treatment so as not to favour certain securities compared to others issued in different EU countries. Their adoption would make the system more stable and protected from negative shocks while also protecting investors.

8.4.9 Long-term investments, green economy and sustainable development

The post-crisis period highlighted the need for long-term investments (on large infrastructures or large territorial scale) to re-launch entire sectors of the industrial and services industry. Europe needs investment projects that are sustainable in the long term, especially from an environmental point of view. There is the need for tools that reflect this vision, such as for example, financial instruments (bonds in particular) that meet ESG[65] criteria and so-called "green" that comply with the ICMA[66] guidelines. This transfer of resources is in line with the policies dictated by the 2030 energy and climate agenda. The approach that the European Union is determined to give to the regulatory framework is that of a balance between economic growth and

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[65]Environmental, Social and Governance criteria, see also "The green bond principles" on the ICMA website (2018 version): https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/June-2018/Green-Bond-Principles---June-2018-140618-WEB.pdf

[66]The **ICMA**, International Capital Market Association is a self-regulatory institution, based in Switzerland, participated by operators in the banking, financial and insurance system. Its function is providing services to members and producing and promoting best practices through the drafting of guidelines devoted to the proper functioning of the financial sector. The association has its origins in the bond market with the creation of Eurobonds, which saw Autostrade as the first entity to issue bonds to finance infrastructure in the first half of the '60s.

ICMA currently has four areas of interest: primary and secondary markets, repo and sustainable markets. For example, concerning green bonds, there is no globally recognized standard. The criteria which are taken as a comparison are those suggested by ICMA: the identification of the recipient of the investments, compliance with a category list of projects that can be financed by ICMA itself, the guarantee of maximum transparency and the frequent creation of reports to be submitted to investors on the status of funded projects.

ICMA also work closely with government agencies through consultancy and production of regulatory proposals that are submitted to them. The regulations originate from the close collaboration between the members who discuss the legal framework through dedicated sessions. Such members implement the best practices used due to the experience in the reference sector.

risk protection (in macro-prudential key) that in no way is an impediment to economic initiatives and/or innovations in the broad sense[67], so as to provide predictable and stable rules to investors.

It is essential to identify the right measures to bring in new private capital. Public support for the investment plan for Europe (i.e. the "Juncker Plan" which sees the EFSI as the financial arm of the operation which proved to be a successful program) is certainly necessary, but not sufficient to sustain the growth. One of the initiatives undertaken was the review of the "Solvency II" regulation, in particular the Delegated Regulation 2015/35 (also known as Solvency II DA) approved in 2014, which deals with re-calibrating downwards the risk attributed to infrastructure investments so as to require less capital and updates the legislation on simple, transparent and standardised securitisations. In the same way, also for the banking sector the risk ratio for the same type of investments is being recalibrated so as to absorb less regulatory capital and encourage investments. The intervention must take place in an organic manner so as not to create differences between a class of investor and another.

The path that Europe intends to pursue is that of the transition to a paradigm of more environmentally friendly low-emission options. All transition processes to this type of economy (conversion and creation) can stimulate and lead to the birth of new businesses, new industrial sectors and/or allow existing ones to innovate, support new projects and maintain their employment levels. Naturally, this requires financial resources that can be found among the various investors (institutional, private, funds, etc.). Europe has put in place large-scale infrastructure interventions involving more Member States, hence the need to make cross-border investments as efficient as possible. In addition to the existing ESI[68] (European Structural and Investment) funds, the instrument imagined by the EU is that of the ELTIF[69] (European Long-Term Investment Fund) whose strength is the possession of the European passport and the peculiarity of being able to channel capital belonging to small investors towards long-term investments by optimising the risk profile based on the expected return. The range of possible investments increases and gives access to projects typically financed by large investors such as insurance institutions and large investment funds. The tax treatment for these instruments will be fundamental for their success, with the hope of the Commission that the same regime (or at least as similar as possible) will be adopted by all European countries.

As seen above, one of the most important measures has been to calibrate downwards the absorption of capital required by institutions investing in these products to facilitate their viability and diffusion. In order to clarify the context, a precise definition of infrastructure investment has been provided: an investment that is a source of defined long-term cash flows and with well identifiable and manageable types of risk. Given the considerable size of this type of investment, also banks are involved in this area. In this regard, the so-called "Banking Package", the Capital Requirements Regulation (CRR II[70]) and the Capital Requirements Directive (CRD V[71]) have been amended. Among the various amendments there are also updated criteria regarding the absorption of regulatory capital at various levels, as already done with the Solvency II reform. According to the EIB estimates, around €2 trillion would be needed in the period 2013-2020 to cover the overall liquidity needs for infrastructure investments, and obviously the establishment of the EFSI alone is not enough. This calls into question the need to involve institutional and private investors, parties which, moreover, show a growing interest in these investment opportunities.

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[67] Innovation concerning financial instruments, securities, fin tech industry, etc…

[68] For further information about funds data visit:
https://cohesiondata.ec.europa.eu/,
otherwise, to have a general overview of the structure refer to:
https://ec.europa.eu/info/funding-tenders/funding-opportunities/funding-programmes/overview-funding-programmes/european-structural-and-investment-funds_en

[69] EU Regulation 760/2015, which has created this type of funds

[70] EU Regulation 876/2019 approved on May 20th, 2019

[71] EU Directive 878/2079 approved on May 20th, 2019

[72] European Investment Bank

8.4.10 *The principle of home country control and the concept of European passport*

In order to fully implement the CMU, it is important that financial assets are able to freely flow and this is possible by applying the "European passport" principle. This principle is commonly used by EU law and has relatively far origins; it derives from the need for system integration and is based on the principle of mutual recognition of national regulations.

As the work of European economic integration and cooperation begins to take shape, the need has emerged to balance the Member States' autonomy, especially in the field of economic policies, with the need for basic coordination at central level through legislative harmonisation measures. The conditions have re-proposed (in some cases) thinking orientations and discussions that already existed during the exchange rate regime established in the Bretton Woods agreements.

In the situation just outlined, the European Court of Justice played a strategic role in promoting the principle of mutual recognition and downsizing that of harmonisation, considering the first, as well as being more efficient, more suited to the needs of the EC panorama[73]. The reason why there has been a move towards this direction is to be found in the intention of the European legislator to promote a competitive environment that encouraged the improvement of products and services offered and that allows companies and people to operate from places most favourable to them (see competition between States). The events of the sub-prime crisis, which had very heavy repercussions also in Europe, and the huge imbalances in tax matters (see favourable taxation in Ireland) or in the financial markets (as the case of Luxembourg) that gradually arose, made it necessary to implement measures aimed at regulatory harmonisation, thus ensuring a common ground level from which to start again. These imbalances have led to situations of dominance over other countries, which, today as yesterday, are cause for controversy. These phenomena, if prolonged, can undermine a sound integration. A minimum tax harmonisation would be desirable to create precisely that common ground level mentioned above and limit imbalances and situations of regulatory arbitrage.

Around the mid-1980s, the principle of home country control gradually took the place of host country control, which saw the importing country of products/services having the power of refusal according to domestic legislation. This especially occurred in the banking circuit[74] where, based on the principle of mutual territorial recognition, the Member States' banks started to open branches throughout the EU because allowed under the national legislation of origin. It is in this scenario that the concept of a European passport takes shape, a system also known as "single license". Even then there was a need to set standards through the process of "minimum regulatory harmonisation" that would put a clear marker in the banking supervision sector.

The instrument of the European passport is therefore well suited to the principle of free movement, the founding pillar of the European Union enshrined in its founding treaty, provided that it is supported in parallel by the described harmonisation process. The supervisory authorities of the various countries are considered equal and communicate through an extensive communications network, guaranteeing a mutual and constant flow of information that ensures the resilience of the architecture. In fact, in order to start operating in another State, it is sufficient to notify the corresponding supervisory authority, which authorises it on the basis of the silent consent mechanism. According to this mechanism, the importing country must accept the goods and services and market them unless there are suspicious or unlawful situations that must be promptly reported to the supervisory governing bodies and to the supervisory authority of the country of origin. Any rule which effectively prevents mutual recognition is to be considered invalid or prohibited. It is important to underline that without harmonisation it is not possible to apply mutual recognition. The goods or services that obtain clearance on the basis of less stringent requirements prescribed in other countries create an imbalance that seriously affects the system; it is the logic according to which bad money drives out good and, consequently, all operators will establish themselves in the country where requirements are lower, compromising stability and security and rendering useless any effort going towards integration.

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[73] Mario Sarcinelli, Moneta e Credito,Vol. 164, 1988

[74]Due to the 2nd banking directive

8.4.11 Legal certainty throughout the EU

As mentioned, the security, efficiency and stability of post-trading infrastructures are of vital importance for the purpose of a truly functioning CMU. During the consultations launched by the European Commission in 2015, among the many critical issues identified, the main one was the need to establish the principle of legal certainty within the EU territory, which until that moment was evidently not present.

Due to the different nature of national legal systems, difficulties have been encountered in determining the ownership of the securities in situations where issuers and investors reside in different Member States. Situations of similar uncertainty also occur when financial instruments are owned by financial institutions in different EU States.

One of the consequences is the complication resulting from the difference in treatment regarding the rules on enforceability by the legal systems, especially in the disposal of credits. The differences on their disposal render them problematic, especially when used as collateral in cross-border transactions. In many cases, this difficulty involves the impossibility for investors to calculate with certainty the risk level of the instruments, especially if these are debt instruments such as bonds.

It is essential to adopt measures and provisions (a process which resulted in the drafting of the Green Paper[75] through the consultation and participation of various entities) which make absolutely clear the criterion that establishes the national legislation to be applied in each of the cross-border financial transactions.

The EMIR[76] and CSDR[77] regulations, as well as the MiFID II directive, have contributed to simplifying the the regulatory environment and removing the impediments for clearing houses regarding securities clearing and settlement operations between different States. Nonetheless, these improvements, including the European securities settlement platform established by TARGET2-Securities, also known as T2S, need to be restructured as a whole.

1.1.1.1 The Target2-Securities platform

The Target2 platform (hereinafter the "T2S") constitutes the securities settlement system promoted by the Commission, produced by Eurosystem and used in the EU. Its technical implementation was entrusted to the so-called 4CBs (the central banks of France, Germany, Spain and Italy) under the supervision and coordination of the ECB, as part of a contract for the provision of services.

It is a multi-currency platform (jointly managed by Italy and Germany) that settles transactions at the same conditions, tariffs and protocols in any national EU market, settling everything in Euro, whatever the country of origin of the investor .

The creation of the T2S responds to the needs expressed by the operators and the objectives pursued by the Commission: efficient transactions settlements, integration of the markets (post-trading phase in this case) and above all the merger of accounts held by the various clearing houses used for settling transactions across all European securities markets.

As it is easy to realize, in having the whole territory of the EU as operating market, the adoption of a single solution favours economies of scale, allowing to lower costs and reduce the times for clearing and settling operations.

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[75]Green Papers are defined as "... reflection papers on a specific political issue published by the Commission. First, they are documents intended for all those - both organizations and individuals - who participate in the consultation and debate process ».

These are press releases in which the European Commission provides an overview of a specific sector to be regulated and sets guidelines on some issues. They are foreseen by the EEC Treaty and a Green Paper is present as regards the creation of the Single Capital Market. The referred paper can be found at this web site (ENG version):

https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52015DC0063&from=EN

[76]EU Regulation 648/2012, concerning European Markets Infrastructure

[77] EU Regulation 909/2014, concerning central securities depositories and settlement

By relying on the T2S, the depositaries entrust the securities settlement process to the platform while retaining custody and management of the securities. A complicated phase which took place between 2015 and 2017 was that of the migration of the depositaries of the individual countries to T2S, which saw the Italian Monte Titoli among the first to complete the transition process under the supervision of the Bank of Italy.

8.5 The SME Growth Market

The previously discussed simplified prospectus regime to which SMEs will be subject and which is oriented to focus on the proportionality criterion applied with respect to the size of the businesses is being put into practice also through the creation of markets dedicated to them. The establishment of the SME Growth Market is one of the main measures envisaged by the action plan for the creation of the CMU. The measure allows SMEs to access the capital market without excessive burdens and charges for their size, which are instead applied to large companies that finance themselves through the same channel. The measure, anticipated in 2017[78] with a change in the legislation concerning the prospectus, was announced during the review of the action plan of the same year with the aim of facilitating capital injections for SMEs. The measure aims to promote the use of the capital market also for those companies discouraged from doing so due to size and costs, In fact, through the MiFID II regulation it is strived to equate the Multilateral Trading Facility to the regulated markets. The path followed is to align the transparency standards and operating methods of the Multilateral Trading Facility to those of traditional stock exchanges and create competition between the two financial channels.

This trading facility was introduced by the MiFID II regulation[79] which defines it as a "Multilateral Trading Facility" (MTF), while the SME Growth Market is defined as part of the subset of European MTFs under the qualification given by the MiFID II. The SME Growth Market is such if it complies with Article 33 of MiFID II. According to Article 33(3a): "*at least 50% of the issuers whose financial instruments are admitted to trading on the MTF are SMEs at the time when the MTF is registered as an SME growth market and in any calendar year thereafter*". If the criterion of SMEs quota in the market is not respected, the "SME Growth Market" qualification is not lost if there is a good chance and reasonable conditions that the requirement can be met again at the beginning of the following year. Another condition is to guarantee a constant flow of information even after being admitted to trading. In case of cancellation of registration for the SME Growth Market qualification (by the MTF manager's or failure to meet the requirements), the national competent authority must inform the ESMA which will promptly update the designated register. Article 4(13) of the same directive defines the size of what must be considered as an SME: an enterprise that during the previous three calendar years had an average market capitalisation of less than €200 million calculated on the quotation at the end of the year.

The principal of creating a single market is established in Article 33(7), which states that if an instrument is traded on one of the European SME Growth Markets it can also be traded on another equivalent market within the EU, provided that the issuer has been informed of the intention to trade said instrument also on other markets and has not objected. This veto mechanism could limit the desired free movement of financial instruments pursued through the CMU action plan and not encourage cross-border capital raising.

Alongside the European legislation of the passport on the prospectus[80] (which aims at stabilising the framework) and on European disclosure, there are other measures (below) that when combined go in the direction of simplification in favour of SMEs and their needs. In addition to the simplification of the documents to be presented for accessing the platform (the so-called "admission document" is required

[78] EU Regulation 2017/1129

[79] MiFID II Regulation (ENG Version): https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0065&from=EN

[80] EU Regulation 2017/1129 (ENG Version): https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R1129&from=EN

instead of the prospectus), that in any event ensure the necessary amount of information for protecting investors, simplifications have also been introduced on preventive measures with regard to market abuse, with the result that the SMEs' costs for the "management of privileged information" in their possession will be lower, the rules on keeping the insider list[81] will be less restrictive, the regime to which SMEs will be subject will be more streamlined and less burdensome . The reason for these simplifications lies in the fact that the amounts financed are lower than for large companies. Even with a higher investment risk, it would not make sense, according to the Commission, burdening SMEs with the same costs borne by large companies as this would reduce their growth potential and discourage fundraising on the market, so as to become an out-of-reach operation.

As regards financial statements, for SMEs that keep their accounts according to the IAS/IFRS principles it will be possible to have access, through the simplified regime valid for admission to the SME Growth Market, also to the traditional exchange platforms (through the IPO or admission to trading).

8.6 PEPPs[82], European personal pension funds

In a scenario where average life expectancy becomes higher, it is increasingly difficult to set aside sufficient funds to guarantee pensions in line with future needs. The Commission has examined this matter, and since it believes that the EU's financial circuit must be able to also perform this function, it has created the conditions for this to happen. This was done through the establishment of European supplementary pension funds, PEPPs, which go alongside the various national public systems. The creation of these voluntary supplementary pension plans, with clearly defined rules, goes in the direction of reducing fragmentation, optimising costs, adopting economies of scale and reducing further the risks.

The growth of the European pension products market can have a direct impact on the increase of long-term investments, which are chosen by institutional investors who package these products. In this way, the markets would be more liquid, deeper and efficient. With the impulse that this type of institutional investor could give, it would open the way to new employment, guiding Europe towards sustainable investment policies.

The function of the PEPP regulation is to create a single supplementary pension scheme leading to an improvement in the performance of national pension funds by levelling out the differences at Community level. Their simplicity and transparency should make them understandable in terms of return/risks, to the benefit of the subscribers' protection.

The need to create such a market should not only be seen from the point of view of stimulating investments through the channelling of European private savings, as the need also arises from the demographic trend of the population in the next decades. EU estimates see the population's retirement age doubling compared to that of working age in the next 50 years, a phenomenon that calls for a structural reform of the legislative frameworks of the Member States. According to ANIA's[83] estimates, the European index of dependence of the elderly[84], which in 2015 was 30%, will rise to 56% in 2050. In other words, if in 2015 the pension benefits of ten pensioners were paid by about 34 workers between 20 and 64 years of age, in 2050 the proportion of taxpayers will drop to less than 18. This decrease in number, without the necessary parameters adjustment, will begin to generate an increasingly marked deficit. PEPPs will therefore ease the pressure on public finances by ensuring a certain replacement rate in the provision of benefits.

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[81] The insider list is a register log in which all inner subjects who have access to privileged information about a certain issuer must be listed. The function of this register is to manage privileged information flows and confidentiality obligation. This tool is used by supervision authorities in order to monitor the level of compliance to market abuse regulation.

[82] Pan-European Personal Pension Product

[83] Italian Association of Insurance Companies

[84] Ratio between "over 65" and "20-64" working force, the obtained ratio has to be multiplied by 100

Always according to projections (this time from the EU but in line with previous figures), the future demographic scenario will raise pension expenditure by around 8% of the Eurozone's GDP. Despite the increase, the situation should be counterbalanced thanks to the measures that are being implemented such as the decrease in the replacement rate[85] or of the coverage ratio.

Another study by the Commission estimates that the value of personal pension plans is currently around €700 billion. Once fully operational, the PEPP tool could provide a strong boost to the market. In a scenario set in 2030 where PEPPs do not exist, the market would be worth around €1,400 billion, whereas with the addition of PEPPs, assuming the creation of favourable domestic tax regimes[86], the value of the same market would rise to €2,100 billion.

The challenge to overcome is to grow a market with enormous potential, but which at present appears partitioned, both territorially and legally, and where the dissemination of these instruments is uneven from one EU Member State to another. The reason lies partly in the poor financial culture and in the low level of development of the domestic markets, as well as in the mentioned legal framework. In some States the choice is wide while in others it is practically non-existent. The task of the PEPPs will be to unify a fragmented market for a regulated cross-border pension product thanks to a wider and more widespread offer, also through online distribution.

8.6.1 The PEPP project and the characteristics of the product

In the framework of the CMU included in the action plan, the integration of the pension products market is regarded as crucial to the development of the system of financing instruments with long-term horizons. The foundations have been laid since the early stages, where were adopted measures on which the main reform would have based upon a proposal for a regulation scheduled by the end of June from the review of the same plan dated 2017.

The project started as scheduled on 29 June 2017 thanks to a proposal for a Commission regulation accompanied by a series of recommendations inviting all Member States to make the new product subject to an equal tax treatment (if not more favourable) with respect to their existing national arrangements.

In the explained framework, the PEPP regulation, which is a pivotal element, has its foundation in Article 114 of the TFEU[87] and is subject to the ordinary legislative production process which sees the legislators of the European Parliament and Council at par.

The proposed regulation[88] was approved by the European Parliament on 4 April 2019 and by the Commission on 1 July of the same year. It was published in the Official Gazette on 25 July and come into force on 14 August always in 2019. The application of the regulation is subject to the publication of the delegated regulations, which must be based on the technical proposals suggested by the EIOPA. The European Insurance and Occupational Pensions Authority has until 15 August 2020 for the presentation of projects on technical regulations. One year after the publication of the delegated regulations, the PEPP regulation will be deemed fully implemented and the first products are expected to be seen between the end of 2021 and the first quarter of 2022.

From the product's point of view, the PEPP is an individual pension product subscribed to voluntarily, which aims at expanding the choice of capital accumulation programs in the market and at being more competitive than the existing alternatives. The companies that will be able to create and distribute them are manifold: banks, insurance companies, sectoral funds, etc. The structure of the product will have a standard base and portability between EU Member States.

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[85] The replacement rate is the percentage ratio, calculated net or before taxation, between the first full annuity of the pension and the last full annual income immediately preceding

[86] Domestic taxation regime recommended by the Commission through its published recommendation documents.

[87] Treaty of Functioning of the European Union, (ENG version): https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:12012E/TXT&from=EN

[88] Eu Regulation 2019/1238, (ENG version): https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R1238&qid=1575422157527&from=EN

In addition to the basic rules which are the same for everyone, the product must be basically cheap. The "basic" version (called in fact "basic PEPP") must not exceed 1% in annual costs compared to the accumulated capital and will provide protection to the same through guarantees or risk hedging mechanisms. The overall cost plan is outlined in the KID (Key Information Document) which must accompany all PRIIPs (Packaged Retail Investment and Insurance-based Investments Products) marketed and sold and which must be provided before the conclusion of the contract. In its most complex forms, the cost will depend on each producer and/or distributor of the service.

A complete and personalised mandatory advisory service will be provided which will guide the saver in the decision-making process on the purchase of the pension product. The advisory service will also be provided before retirement to help decide the method of collection that best suits the subscriber's needs. To the standardisation principle in the basic form previously mentioned is also combined a certain degree of flexibility to meet the differences between States, especially in tax matters, so as to make the product always convenient.

In order to promote competition between PEPPs developers, it is envisaged that the saver can, every 5 years, change originator if better costs or returns conditions exist on the market; a mechanism that should push for greater economy and profitability in the market. The PEPPs were part of the action plan for the consumer financial services that the Commission presented in March 2017 and which followed the process described at the beginning of the paragraph. The plan was designed to encourage the use of this type of product from a young working age. It is estimated that only 27% of the European workforce joined a non-public pension fund. Based on this and on the fact that the PEPPs are mainly targeted at young audiences, the product will also be distributed and sold on the internet, to intercept the changes in habits that occur in society.

The instrument will be portable between EU Member States and savers can continue accumulating in the same product even when moving to another State thanks to a system of "sub-accounts" that after three years from the approval of the PEPPs regulation will have to be opened directly or indirectly by the producers. These "sub-accounts", each created for a specific Member State, will have to serve at least two countries and will have to take into account the various tax relief schemes in the relevant countries. Where this is not possible, the originator can be changed for free or carry on paying into the PEPP of the country of the previous residence. This mechanism of position portability is consistent with the principle of free movement of people and capital in the EU as portability favours the cross-border movement of workers across Europe.

The customer segment particularly suited to subscribe a similar product is composed of those workers who are not registered with national pension funds or sectoral funds, in particular, as seen before, young people, whose early subscription would guarantee a higher income after retirement thanks to a more substantial capital.

The PEPPs' quality is also recognised by institutional investors, given that the economies of scale and the efficient cross-border diffusion should guarantee, in the light of a competitive regime which is hoped will be effective, a wider market with higher revenues for management costs.

1.1.1.2 The PEPPs' distribution process

In order to sell PEPPS, managers/promoters/developers must be authorised according to the European legislation (Solvency II Directive for insurance companies) or according to the specific UCITS directive. The second step is to obtain approval from the EIOPA which will evaluate the product design to detect any non-conformity with the requirements prescribed by the PEPP regulation. Once authorisation has been obtained, the EIPOA will register the PEPP in the appropriate list and publish the updated inventory.

The distribution process of the PEPPs in the EU may be performed by the issuer or by another distributor authorised according to the MiFID II and IDD directives. In turn, the authorised distributors, always in accordance with the mentioned regulations, will be able to market products from different suppliers. The PEPPs can be distributed online on the products' producers/distributors websites.

1.1.1.3 Investors protection

A low-risk and low-cost investment structure has been set up to protect savers (see the basic PEPP above) with the aim of reducing the loss of capital and protect investors from excessive agency costs. The "packaging" will be left to the producers, who will choose the most suitable way of protecting savers. The presence of a "basic form" does not imply the impossibility of offering more sophisticated or risky products, as it is down to the customer to choose these alternatives (and not the producers), who must always be assisted by the appointed consultant and informed on the nature of the risks involved as a result of the decision. The investment strategy can be changed during the lifecycle to adapt it according to the subscriber's preferences and the change can be made every 5 years. Upon signing the contract or any substantial modification to the type of investment the KID must be provided in accordance with the PRIIPs regulation.

8.7 Simple, Transparent, and Standardised (STS)[89] securitisation

The series of measures that gave rise to STS securitisations was developed to re-launch the securitisation market within the European Union and boost loans to SMEs, which shrank considerably during the crisis due to the credit crunch. According to figures provided by the European Commission, the securitisation of loans to SMEs has gone from €77 billion in 2007 to just under half in 2014, i.e. €36 billion. Due to the fall in the securitised amounts during the crisis period, the number of SMEs that in 2013 were not financed as a result of refused requests was 35%. Future projections indicate that if the level of securitised loans returned to pre-crisis levels, resources between €100 billion and €150 billion could be "freed" for financing. The CMU action plan, and subsequent review, has dedicated a great deal of attention to the issue and the focus had been to produce a clear regulation on the matter and introduce more transparent and less risky products.

In order to fully understand the situation it is important to make a brief general digression on how a securitisation works: the credit securitisation process allows to pool together credit activities that have not yet shown positive cash flows (e.g. long-term loans), even of different nature and with different risk profiles, in a single security that is sold to an investor, who benefits, over time, from the cash inflows linked to the loans included in the security.

It is possible to understand how this type of instruments is very attractive for institutions that provide loans such as banks or financial companies, given that securitisations allow to immediately obtain the liquidity otherwise provided according to the various amortisation plans or future maturities foreseen by the contracts and to transfer credit risks and distribute them on the market or, on a larger scale, on the entire financial sector. Usually those who assume these risks just generated by the new securities are institutional investors, such as for example, other banks, insurance and/or reinsurance companies.

The advantage that derives from this type of transaction lies in the possibility of releasing the sum of capital allocated to the reserve pursuant to the law and attributable to the loans contained in the transferred securitised security. This "released" capital could be used for other financing operations or more generally for the institution's operations.

Regulation (EU) 2017/2402, which entered into force on 1 January 2019, is the result of a political agreement reached on 30 May 2017 between the European Parliament and the Council on the proposals on securitisations and capital requirements. The agreement reached on the two regulations on the matters just mentioned concerns common rules on securitisations on the whole, therefore establishing the necessary framework for the creation of the STS securitisation regime subsequently introduced by Regulation 2017/2402. This regulation represents a fundamental measure aimed at regulating the general class of securitisations through the definition of an updated framework to which they will be subject. The purpose is to precisely define securitisations so as to prevent the formation of operations that are too complex and that increase the opacity and difficulty of quantifying the risk they incorporate. The same regulation established a subclass of products that are simpler in structure and understanding, with a homogeneous risk profile and

[89] EU Regulation 2017/2402, (ENG version): https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R2402&from=EN

consequently less difficult to manage. This should help generate the creation of new investment spaces for the benefit of investors.

When looking at what defines an STS securitisation, we find the three requirements that make up this acronym. These requirements are defined in Articles 20, 21 and 22, respectively *Simplicity*, *Standardisation* and *Transparency*. The *simplicity* of the securitisation lies in the fact that the security credit activities are all of the same type and that the security cannot in turn be re-securitised. The *transparency* of the operation relates to the documentation, which must be clear and easy to understand (or at least as much as possible). This documentation must be prepared according to a well-defined and identical (hence standard) approach for all STS securitisations, setting out the structure, methods of incoming flows and other aspects, and serves to ensure the comparability of all transactions belonging to the category.

According to Article 5(1d), it is established that the net economic interest must not "*in any event be less*" than 5%. This measure sees the raison d'etre of these instruments in making them investments in all respects and not just a pretext for downloading credit risk onto other subjects, thus recognising the interests at stake of all parties involved.

Rules regarding the emergence of potential conflicts of interest are in fact substantiated in the responsibility of all those participating in the certification process of STS status. The responsibility falls on the originators, sponsors, original lenders and companies acting as vehicle in the securitisation. This could be a weak point of the regulatory system given that, in the absence of a certification validation process, those who certify a security as STS would not be third parties but in fact the product sponsors. This means that the ESMA's inclusion of the securitisation in the register does not certify that the transaction comply with the STS criteria, seeing that there is a three-month grace period if the sponsor uses inappropriately the marking in good faith. At present there are no stronger protections and the running-in period of this new regime will verify the validity of the measures implemented by the regulation.

The advantage of holding these securitisations will be the better price that the market is likely to assign to the instrument category[90] and the lower risk weight to which institutional investors will be subject. From May 2020 these instruments will be valid for calculating the liquidity covered ratio as high-quality liquid instruments.

[90] With respect to non STS securitisation

8.8 PRIIPs and their regulation

As discussed in paragraph 2.4.4 on the issue of raising the level of transparency on financial products, a considerable effort is being made to protect investors (especially retail ones) and produce uniform rules across the EU. In particular, the attention was focused on the sale of instruments that carry with them complex structures and risks worthy of consideration. The PRIIPs Regulation adds an important element to the framework governed also by the MiFID II and IDD[91] directives. The approach of the regulation is to act transversely so as to create a homogeneous framework that includes those products (insurance, financial and hybrid), different in contractual and/or legal nature, but which are in fact overlapping with each other in terms of risks, returns and structure. The importance of this intervention lies in the intention of contrasting and reducing phenomena of legal and/or regulatory arbitrage that are possible with the existing regulatory framework.

Regulation (EU) 1286/2014 (PRIIPs Regulation) establishes a new category of financial and insurance instruments, named PRIIP, whose initials stand for "Packaged Retail Investment and Insurance-based Product". These are products (generally medium-long term oriented) offered "as is" to retail investors, which are not modifiable and which can be subscribed or not. The class that covers this type of product has been deliberately made very large. In it are included all those products for which, regardless of the contractual nature of the investment, the amount repayable to the investor is linked to the performance of a benchmark or to the performance of an instrument that the investor does not own directly, or those products in the insurance sector whose performance depends on market trends. One aspect that defines the PRIIPs is that of being designed in such a way as to have a structure, costs, and exposures other than those that would be in place with respect to directly holding the reference asset. The PRIIPs category includes, for example: mutual investment funds, unit-linked insurance products, structured products, convertible bonds, derivatives and products issued by a special purpose entity, etc., whereas, for example, shares, bonds and supplementary pension funds, do not fall into the PRIIPs category.

PRIIPs can be divided into two main categories: they can be "*non-insurance based* products" (PRIP[92]) where "*the amount repayable … is subject … to reference values or to the performance of one or more assets which are not directly purchased by the investor*" or "*insurance-based investment products*" (IIP[93]) "*which offer a maturity or surrender value and where that maturity or surrender value is wholly or partially exposed, directly or indirectly, to market fluctuations*".

Once again, it should be underlined that is not so much the legal form that the product adopts, but the fact that they are instruments with a certain degree of complexity and a considerable level of risk. This is the reason for which the MiFID II directive requires to create, alongside existing prospectuses, a new one, the Key Information Document; a document that must be easy to understand (or at least that is the intention) in order to help investors in their choice and which will be discussed in the next paragraph.

8.8.1 The KID (Key Information Document) legislation

The new mandatory Key Information Document (hereinafter the "KID") was introduced and is governed by the EU Regulation[94] published on 9 December 2014 and by the related Delegated Regulation[95] published on 12 April 2017. The just mentioned Regulation sets out the structure that this document must have, specifying the content in all its parts. This key summary document must contain clear and concise information relevant for a clear understanding and comparison with other products of the same type.

[91] Insurance Distribution Directive
[92] Packaged Retail Investment Product
[93] Insurance Investment Product
[94] EU regulation 1286/2014, (ENG version):
https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R1286&from=EN
[95] EU Delegated Regulation 2017/653 (ENG version), very similar to the final RTS previously published:
https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R0653&from=EN

The Commission has made great efforts to make the document as concise as possible (it cannot exceed three sides of A4), as already done with regard to the KIID (Key Investor Information Document) governed by a regulation of 2010[96] relating to the UCITS sector. The creation of the KID is the manifestation of the principles laid down in the MiFID II directive regarding transparency. The KID document is to serve as support and will not replace existing prospectuses in an attempt to provide greater protection for investors.

During the creation of the legislation, the impact that such a measure might have had on the offerors of these products was also considered. The Commission, in one of its impact assessment studies, estimated that the initial cost for the various bodies (and/or consultants) suitable for creating the document would have been around €160 million, with an annual cost of about €14 million if the KID would become current practice. Due to these organisational difficulties, the entry into force of the regulation had been postponed by one year with respect to the scheduled timetable, setting the date at 1 January 2008.

Always according to data from the European Commission, the amount of investments at stake as regards the PRIIPs market, is reported to be around €10 thousand billion. This figure makes it clear how important it is for the Commission to stimulate investments in this direction. The new impetus that must be given to these markets involves above all the protection of investors who can make more informed choices regarding investments.

This regulation apply to PRIIPs: PRIP (non-insurance-based), IIP (insurance-based), UCITS[97] (from 1 January 2022), AIF[98], some categories of insurance products (see unit-linked products) and some categories of derivatives; in contrast, they do not apply to securities issued by government and non-government bodies, to supplementary occupational pension products, non-life insurance products and products that are not linked to benchmarks or to the yield of securities not purchased by the investor (not PRIIPs).

Going to the specific case of the KID, besides the brevity, the document must be prepared by the originator in the language of the Member State in which the product is distributed. It must also contain all the information requested in a precise and easy-to-understand language. The exposition of the various parts must not be misleading in order to always guarantee the transparency of the operation. In accordance with the regulation, the information reported in the KID must be consistent with all other documents concerning the investment (contractual terms, offer prospectus, etc.). Its nature as a “separate” document implies that it cannot contain commercial or advertising content and any information of commercial nature must not contradict the data in the KID. In addition, the method of finding the document must be included in the offer promotional material. Pursuant to the European Regulation, it is possible to refer to other documentation if it contains information required in the KID.

The actual delivery of the KID (it is not sufficient to inform the investor of its existence) must be made free of charge on a durable medium before the conclusion of the contract and sufficiently in advance to allow the investor to fully evaluate the information contained therein.

The document must be updated on an annual basis unless there are changes affecting the information contained in it. The revision of the document with the modifications made must be promptly published on the originator’s website.

The document’s parts mentioned above are codified by regulation and ordered as follows:

The first part must contain the name of the PRIIP concerned, the developer's contacts, information regarding the competent supervisory authority and the warning about the complexity of the product being purchased (given that it is a financial asset with medium to high risk profile).

The second part deals with explaining the product in as simple terms as possible. In order to reply to the question “What is this product?”, the document provides details about the type, purpose and duration of the investment. This part must contain information regarding the underlying and/or reference benchmarks and

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[96] EU Regulation 583/2010, (Eng version): https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32010R0583&from=EN

[97] Undertakings for Collective Investment in Transferable Securities

[98] Alternative Investment Fund

how they affect product performance. It will also be necessary to specify the customer segment to which the PRIIP is addressed and the details if it is an insurance-based product.

The third part is the core of the document and deals with the risk profile and product performance. In compliance with the second and third Annex of the Delegated Regulation, the risk profile must be synthesised according to a Synthetic Risk Indicator (SRI) which includes seven increasing levels. This indicator takes into account the credit risk of the product and the systemic market risk. In addition, the purpose and any reliability limits must be explained where the investor is unable to understand all the risk factors to which the same could be exposed. In this case, the remaining factors must be included and explained in the document. In this section, also the duration of the investment plays an important role: there must be a note on the recommended investment duration for the product and it will be necessary to clearly specify whether a different duration would significantly increase the level of risk of the investment, as well as indicate any risks due to low liquidity. At the end of the section on risks, the maximum loss must also be indicated according to a confidence interval, specifying the criterion used (VaR at 97.5%). After dealing with the risk, there is the need to analyse the rate of return that the security can obtain over different periods by projecting plausible scenarios (Annex IV and V of the Delegated Regulation) at 1, 3 and 5 years with three different trajectories for any time horizon: unfavourable, moderate and favourable; also in this case, if it is believed that these scenarios are insufficient to capture particular situations, the originator has the option of adding the projection that best traces their progress. However, the exposure of a further scenario regarding derivatives and insurance is mandatory.

The next part concerns the consequences in case of originator's insolvency: it is necessary to specify if there is a danger of loss of assets and the mechanisms that may limit the amount and in what way.

Moving towards the end of the document, there is the part concerning the scheme (Annex VI and VII of the Delegated Regulation) which includes all types of costs, direct and indirect, according to two distinct categories: ongoing costs and one-off costs. The costs must be indicated in absolute value (in the currency used) and relative to the amount of the investment (as a percentage of the notional amount invested in the product). The distribution costs, as specified in the information document, will be indicated by the commercial division staff responsible for distribution and sale.

The last three parts deal with the recommended minimum retention period of the investment, which must be motivated by appropriate reasons and which must be consistent with the register used, deal with issues or complaints in relation to the product, the originator or the staff responsible for marketing and distributing it and, finally, deal with the possible addition of further documents to refer to, insofar as their inclusion is necessary.

Far from being perfect, this is a new, leaner and more understandable information concept that could significantly increase the trust between producers/dealers and investors. Although there are many doubts as regards the processing of some data (such as the calculation of the SRI, the construction methods of future forecasts or simply a "scale" of complexity of the instrument in question), this document seems to be an important step forward towards new means of investors' protection, especially in the case of complex and on average risky instruments such as PRIIPs. The following table is a schematic overview of the various sections and content of the KID.

Summary table of the structure required for the KID[99]

SECTION	CONTENT
Title	The wording "Key Information Document" must appear on the first page of the document.
Purposes	All information relevant to the purpose of the document must be included or referenced.
Product and originator information	Information relating to the product (ISIN or other identifying name), the product's originator and contacts (including phone number and website) and the competent Supervisory Authorities must be provided. The date of completion of the document or of its latest revision must also be included.
Notice concerning the product difficulty of understanding	If the product is difficult to understand, an appropriate warning must be included drawing attention to the fact that the investor is in the process of purchasing a product that is difficult to understand.
What is this product?	The type of product, its objectives, the target of investors and the method of calculating rates and other benefits must be clearly indicated.
Which risks do I take and what do I get for taking them?	A Summary Risk Indicator (SRI), as well as a diagram that combines market risk and credit risk on a scale of 1-7 must be included in addition to other risk factors not considered in the SRI (including the liquidity risk). The methodology for determining the SRI varies from product to product.
What happens if the PRIIP's originator is in breach of the obligations assumed?	A description of the possible coverage of the product with a compensation regime or guarantee must be included. In this case, information on the same (including the guarantor's name, which risks are covered and which are excluded) must be provided.
Which are the costs?	A summary of upfront and ongoing costs must be included. The breakdown of costs is indicated in the specific table in Annex VII of the final RTS.
How long is the duration? Can I withdraw early?	The minimum duration period and the possible consequences as a result of withdrawal must be indicated.
Who can I call for assistance	Information and contacts must be indicated.
Other relevant information	Information must be provided on the additional documentation available to the investor.

[99] https://www.eversheds-sutherland.com/global/en/what/articles/index.page?ArticleID=en/Financial_institutions/PRIIPs_e_PRIIPs_KID

9 GENERAL CONCLUSIONS

The work of the European institutions whose aim is to strengthen and integrate the Community's financial market has included various areas of intervention, especially areas open to critical issues during the crisis that broke out in 2008. On the one hand, action has been taken by reforming the supervisory architecture (up to the last revision of the ESAs at the end of 2019) and, on the other, efforts have been made to make the system more stable, interconnected and transparent. The idea that a larger market is better able to absorb the impact of a shock is strongly shared by regulators and actors. Market integration, which could be a source of risk propagation, must be accompanied by interventions that make the system safer. Transparency, financial innovation, inventiveness for economic development and supervision are the key factors that guide the European reform process. In the following paragraphs are presented the final considerations on the three topics covered in this work as it is obvious that the importance of the three areas is fundamental. Although under-addressed, the stress tests form part of those monitoring tools that could serve as data to support enforcement measures, including observations on changes in economic policies or regulatory frameworks.

9.1 Considerations on the supervisory architecture

Throughout the first part, we have seen how the supervisory objectives to be protected and their level of priority can change over time. In some cases, the effectiveness of some approaches (as the centralised model, for example) that were considered unsuitable in the past have been rediscovered and today with the adoption of new points of view are found useful. This is due to traumatic events such as the recent crisis, but also to innovations in the financial system, to the emergence of new supervision methods or to the evolution of existing ones.

The mix of supervisory tools varies according to the balance of the pursued objectives, which in turn depends on the type of supervisory framework adopted. Tools, objectives and organisational forms of supervision are variables that mutually affect each other and that are an expression of the degree of sophistication of the system, of the regulators' economic and political choices and, remarkably, of past events.

Inevitably, the 2007 crisis has triggered a review processes on the direction to be taken in supervising financial entities and on the analysis of possible flaws in the system. What has been understood from these events is that it is not enough to think only at the individual level, as there is the need to focus on the stability of the system. Thus, concepts such as transnational cooperation, minimum level playing field and macro-stability have become highly relevant among national regulators and a core priority for the European Union agenda.

The recently revived debate has strengthened the conviction that the macro-prudential stability concept, originated just before the crisis, could be one of the possible solutions for correcting the vulnerabilities of the system, namely to address the issue according to a macro-systemic supervision perspective. The creation and adoption of a supervisory system according to this criterion seems to be the main lesson that the regulators and supervisory bodies have drawn from the crisis. Great steps have also been taken towards international cooperation, as without cooperation at the supranational level it is not possible to put in place a set of rules (at least in terms of fundamental principles) which allow to create a common ground and harmonise the various jurisdictions.

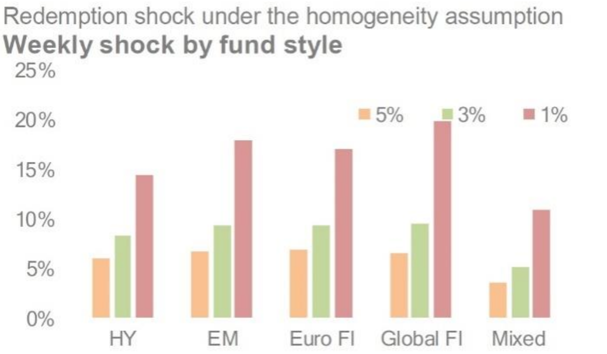
The European effort is committed in the establishment of a framework that runs on two parallel tracks, this commitment should achieve a reconciliation between the regulatory equilibriums already existing among the countries, the needs arose from the crisis and the latest financial tool sophistications developed until now. The two tracks are composed as follows: the first deals with macro-prudential supervision with the creation of the ESRB, while the second, which deals with supervision at the micro level, is divided according to the areas of competence (banking, insurance, securities and financial conglomerates) and is assigned to the ESAs, the Joint Committee and the National Authorities. The system turns out to be a hybrid between 'twin peaks' and 'institutional' elements. The hope is that such framework and the recent European Banking

Union will be able to protect the market and its components from future shocks and break the link between intermediaries and sovereign debts. This would increase the resilience of the system by reducing the commitment of national States that operate through taxpayers' money.

9.2 ESMA UCITS stress test

The stress test mentioned in the second part dealt with the level of liquidity risk of the UCITS in Europe. As discussed previously in the dedicated section, the important function of these tools allows to verify, through simulation, the integrity of the sector and, if necessary, implementing corrective measures

The procedure started from the collection of data on the net flows at the level of individual funds with the aim of arriving at their distribution divided by fund's investment area (high-yield, emerging markets, Eurozone, etc.). The approach used to quantify the redemption shock was that of the expected shortfall, since more suitable for quantifying the phenomenon (see section 1 of the second part). The levels set were three, at 1%, at 3% and at 5%, in order to analyse the variance in the degree of shocks as the thresholds change. The results are shown in the following image[100]:



Note: Weekly redemption shock calibrated using the expected shortfall at different levels (5%, 3%, 1%), based on the homogeneity assumption (all fund flows by fund styles).
Sources: Morningstar, ESMA.

Calibration of shocks

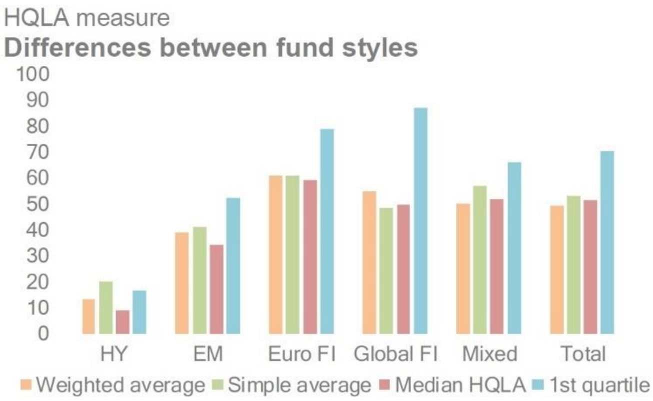
Redemption shocks by fund styles (% of NAV)

Fund style	ES 5%	ES 3%	ES 1%
HY	6.0	8.2	14.4
EM	6.7	9.4	17.9
Euro FI	6.8	9.3	17.1
Global FI	6.6	9.6	19.8
Mixed	3.6	5.2	10.9

Note: Redemption shock defined using the ES approach, based on all individual funds flows for each fund style (homogeneity assumption).
Sources: Morningstar, ESMA.

From the results it is possible to observe that the test has drawn a window going from a minimum shock for mixed funds which stands at 3.6% of the NAV with a threshold of 5%, to a maximum of 20% for global fixed income funds with 1% threshold, event much less likely than the other evaluated extreme.

The following chart measures the liquidity level of the funds divided by investment area according to the HQLA approach:



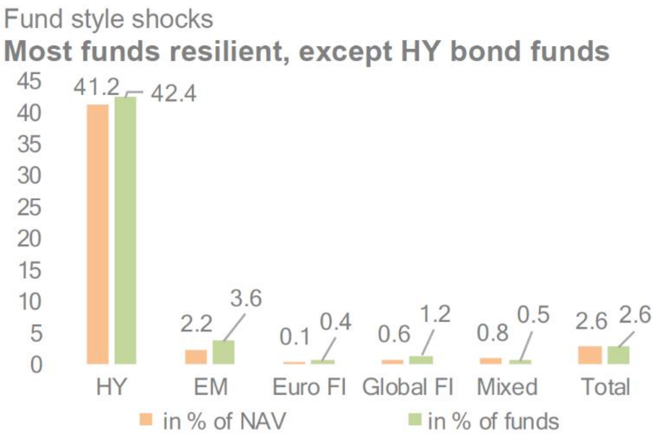
Note: HQLA measure by fund style, in % of NAV.
Sources: Morningstar, ESMA.

The chart shows how the liquidity level of the fund varies according to the investment area. It is possible to notice how the high-yield funds are the least liquid ones, with an average value (depending on the calculation criterion adopted) around 15%.

Once the shock has occurred (for convenience, only the case with threshold set at 3% is being considered), knowing the liquidity values, it has been seen that the degree of resilience of the funds is rather

[100]All quoted charts of this section are taken from the UCITS stress-test published on September 5th, 2019

good. The chart below shows, always for the investment strategy, the percentage of funds that have an RCR value lower than 1:

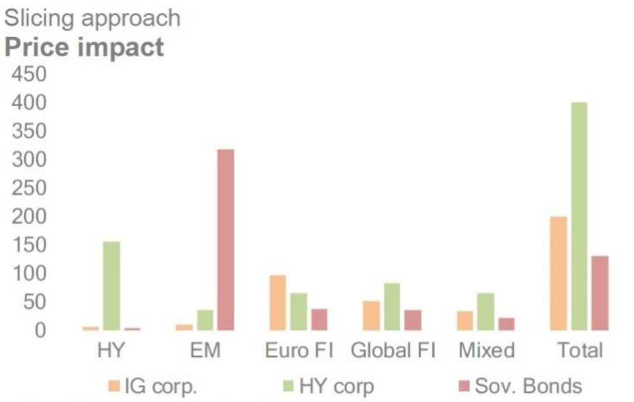


Note: Share of funds with a RCR<1, by fund style.
Sources: Morningstar, ESMA.

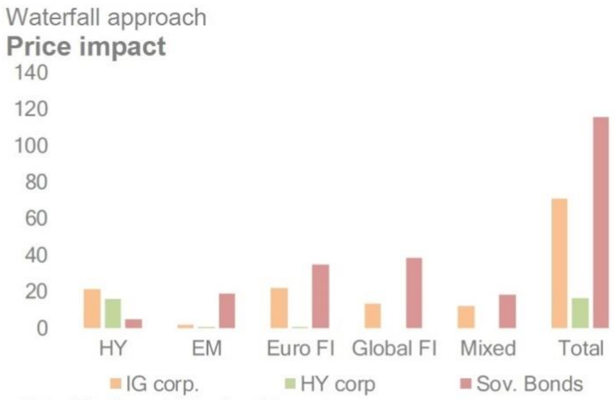
From the chart it is possible to see how the percentage of funds that as a result of the shock were not able to cope with liquidity alone is very low. The exception concerns funds that invest in high-yield bonds, where around 40% have failed in the task in having been forced to divest other assets in the portfolio.

The divestment of assets generates pressure on the secondary markets as this wave of sales produces a negative impact on the market price. On the basis of such a scenario, price changes on the secondary bond markets were estimated, and the assumption is that fund managers need to divest all the necessary assets in one trading day, in line with what happens for the UCITS.

The price impact on the markets varies depending on the type of liquidation strategy implemented. The next two charts will show the change in prices that, according to the simulation, the slicing and waterfall strategy would alternately generate:



Note: Price impact in basis points.
Source: ESMA.

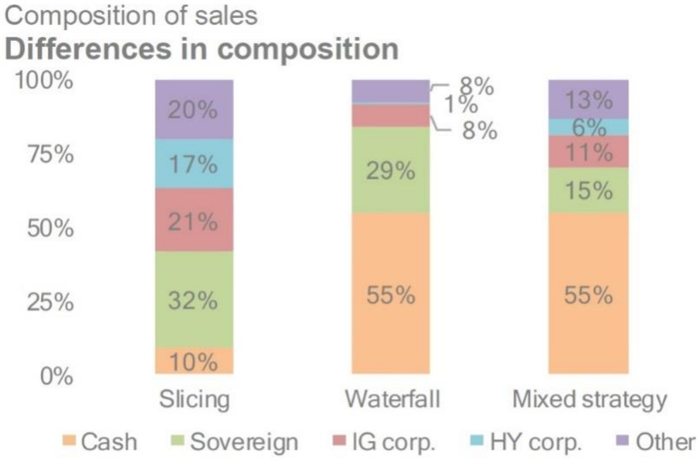


Note: Price impact in basis points.
Source: ESMA.

The most interesting thing to note is how the scale is different. In the left chart the impact in terms of basis points is greater: with the slicing strategy the amount of bonds sold would be around €130 billion, and this value translates in an average reduction that starts from 40 basis points for IG[101] bonds and from 80 basis points for HY bonds. By looking at the impact that the waterfall strategy has on the market, it can be seen that the scale is much lower. With this strategy the estimation of the bonds sold stands at €70 billion, with an average reduction on the markets that never exceeds 40 basis points. The reason for this lies in the fact that the largest divestments are made on the most liquid instruments, i.e. "cash or equivalent" category. It

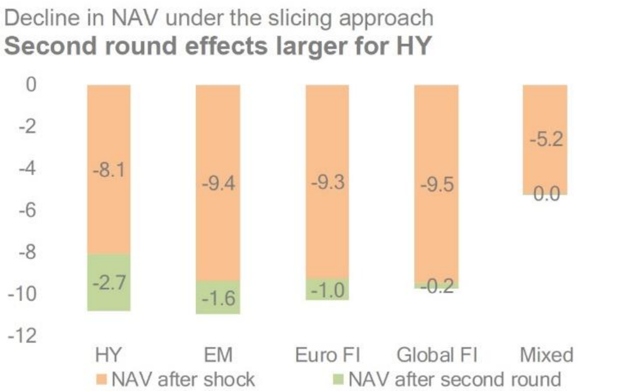
[101] Investment Grade, BBB- or higher according to Standard & Poor's or Fitch ratings, Baa3 according to Moody'sv

should be noted that the value of the divested assets is the same, with the difference in variation due only to the different strategies implemented. The following chart traces the proportions:

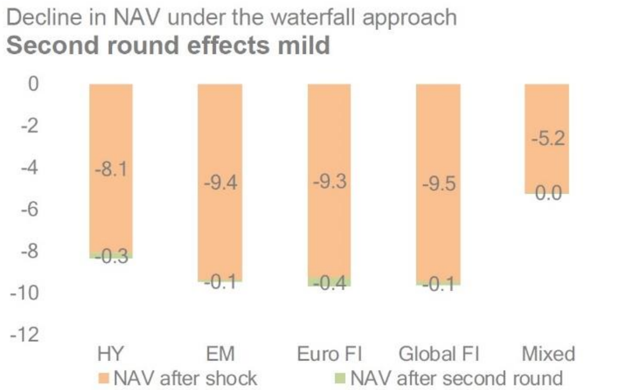


Note: Composition of asset sales by liquidation strategy.
Source: ESMA.

In addressing the second-round effect, the next two charts show the reduction in the NAV due to the use of the two liquidation strategies that are, in turn, responsible for the reduction in the value of the bonds:



Note: Change in NAV by fund style resulting from the redemption shock and second round effects.
Sources: Morningstar, ESMA.



Note: Change in NAV by fund style resulting from the redemption shock and second round effects.
Sources: Morningstar, ESMA.

The two charts above clearly show how, as a result of the shock and consequent reduction in the value of the fund due to the disposal of bonds, the further reduction in the NAV caused by the drop in prices is very different based on the approach applied. The use of the slicing strategy (left chart), namely the constant sale of small portions of all asset classes in the portfolio, causes a greater reduction (highlighted in green) of the NAV compared with the waterfall strategy, which aims to sell the more liquids assets with lower impact on prices. The drop in return is significantly lower and this happens for the reasons given above on the impact that strategies have on prices in secondary markets.

To sum up, according to the simulation, the UCITS' performance is rather good, the funds have proven to be fairly solid and many of them would be able to withstand a shock of up to 10% on a weekly basis without great difficulties. Some problems would arise if slicing strategies were to become predominant, while another focus of attention are the category of funds that invest in HY bonds, which suffer from greater liquidity problems: in 4 cases out of 10 they cannot cope with shocks with their level of immediately available liquidity and would have to sell less liquid assets.

9.3 The future of the Capital Markets Union

The process of creating the Capital Markets Union seems to be continuing as scheduled. The action plan launched in 2015, and the subsequent review carried out in 2017, took stock of the situation and helped to better focus needs and priorities of the system which were involved in the process.

Many measures have been adopted and primary regulations and related delegated regulations have been published. Political agreements have been reached on many issues, and on others the negotiation process still seems to be going ahead. Despite these efforts, the impression is that the approved regulations have not had the desired effect. The entry into force of the MiFID II Directive, the highly anticipated provision that should have been a major step forward especially towards the protection of small savers, seems not essentially effective, so much so that a further revision is being considered.

The next two years will be very important for the voluntary supplementary individual pension market, and the PEPPs' introduction will be an effective way to test the progress of integration of the Capital Markets Unions. The PRIIP legislation is in some ways innovative and consistent with the concept of supervision by function or activity, given that it includes both financial and insurance products of Community origin, but which in essence have very similar structures, mechanisms and risk profiles. The KID could represent a very useful tool for retail savers seeing that this document should facilitate the understanding of the essential components of investment products in a simple and concise way.

The plan for the implementation of the CMU has among its focal points enterprises of more modest size or that are going through their start-up phases, and most of the measures are central to their support, especially if among the reasons for their existence there is the development of environmentally sustainable projects. The creation of the SME Growth Market and the rules on the simplification of the prospectus are tangible proof of this and represent a key step towards greater ease of finding capital. The revisions made in 2015 and 2017 have acknowledged the progress achieved but also ascertained that much remains to be done to facilitate integration and growth. Sustainable development is the path that Europe has adopted through its administrative and financial bodies. Other programs such as Horizon 2020 coexist alongside the Juncker Plan (of which the CMU is an important part) and several initiatives projected towards 2030 and beyond are emerging.

In the light of today's events, also in relation to the United Kingdom's exit from the European Union, it will be crucial that all the approved measures are put into practice and that the players that make up the system collaborate in the success of the project. It is necessary for the supervisory bodies to be alert and there must be more transparency so as to instil greater confidence in the markets which will translate into higher investments, especially from retail investors. Greater investments can give life to those projects aimed at transforming Europe and making progress continuously.

The active participation of the banking and financial markets will make integration possible, even though certain things must be corrected and are being corrected through various attempts, such as, for example, the intention to create a minimum common ground regarding tax treatment in Europe. A minimum harmonisation approach is required in order to avoid regulatory imbalances and unfair competition through legal and tax arbitrage (the cases of Ireland and the Netherlands low corporate tax rate and the more generous capital markets requirements in Luxembourg, which are also supported by a more favourable tax regime, are well known).

The transformation process is still in progress, and the success will be attained and sustained if Member States, institutions and operators remain on the course already mapped out. This shows that there is a need for an integrated EU that can express the enormous potential of its Member States, which are among the most advanced in the world and with similar socio-economic levels. Europe's development will benefit everyone, despite the emergence of nationalist policies that find fertile ground in some areas and which could somehow slow down the general pace. There is still plenty to do and plenty to develop, not only from an economic and financial point of view, but that is not a sufficient reason for not pursuing the goal.

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