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The mandate and powers of the ECB in the Covid-19 crisis

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I lift my eyes to the mountains

where does my help come from?

My help comes from the Lord,

who made heaven and earth.

The Lord will keep you from all evil,

he will watch over your life.

The Lord will keep

your going out and your coming in

from this time forth and forevermore.

Psalm 121: 1,2,7,8

Alzo gli occhi verso i monti:

da dove mi verrà l'aiuto?

Il mio aiuto viene dal Signore,

che ha fatto cielo e terra.

Il Signore ti proteggerà da ogni male,

egli custodirà la tua vita.

Il Signore veglierà su di te, quando esci e quando entri,

da ora e per sempre.

Salmo 121: 1,2,7,8

The mandate and powers of the ECB in the Covid-19 crisis

Wally Elisa Ceresato

Abstract

The aim of the thesis is: to outline the strong economic options and response instruments to address the unprecedented COVID-19. The following work displays the actions and roles taken by central banks and national authorities. Like all major crisis, the risk of global recession means that strategies and initiatives of monetary, fiscal, and supervisory policy are vital. If central banks adopt the right solutions, then significant successes might be achieved.

Dedication

I dedicate my dissertation work to my sacred family. An endless thanks to my precious parents Stefania Marchesini and Gianluca Ceresato, who with their unconditional love filled me with every blessing and encouraged me to face any misfortune. A special feeling of gratitude to my brother Erik Fabiano Ceresato, my mentor and supporter, who with his unbroken presence inspired me and travelled by my side for better and for worse. Finally, I want to say thank you to Davide, who motivated me, alleviated my anger, downsized my worries, and changed my life. It is to them, my roots, and my soul, that I devote the fruit of my fears, emotions, and strength. I am grateful to God for giving me this big family, a fixed pillar of existence, and in moments of joy and difficulty for protecting and leading me along the paths of life.

You will eternally live in my heart.

Declaration

This thesis is a presentation of my original research work. Wherever contributions of others are involved, every effort is made to indicate this clearly, with due reference to the literature, and acknowledgement of collaborative research and discussions. The work was done under the guidance of Professor Andrea Minto, at the University of Ca' Foscari (Venice).

Wally Elisa Ceresato

In my capacity as supervisor of the candidate's thesis, I certify that the above statements are true to the best of my knowledge.

Andrea Minto

Date: 12/11/2020

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Introduction

The current Covid-19 crisis is an extraordinary and challenging event, that is rapidly changing health conditions, lifestyle habits, social relations, and economic activities around the world. The consequences seem destined to last for a long time, but central banks, governments, and international organizations are intervening with rapid and abundant measures to overcome the complex situation as soon as possible and avert the risk of a global economic downturn worse than the Great Financial Crisis of 2007-2009. Given the persistency of the topic on the pandemic emergency, I want to give my personal response to the question: how to tackle the Covid-19 crisis? My intention is to write about the specific role of the European Central Bank in managing money needed to assist EU Member States in the unheard-of context. The first part of the study deals with an in-depth exploration on the history of money, which is the cornerstone of every economic system, and arrives at the analysis of central banks field of actions, meaning monetary policy regulation. Just as the heart is important to pump blood and give life to the human body, likewise central banks pump money into the economy to ensure the well-functioning of the economic system. The second chapter continues by describing the history and the institutional framework of the European Central Bank, while the third part of the thesis analyses fiscal stimuli, monetary and prudential supervisory measures adopted in accordance with the ECB mandate and powers. Uncertainty and fear for the future must not hold back the desire to act, but rather encourage to roll up sleeves and get busy conceiving and finding solutions to global problems.

Chapter 1 From money to central bank: birth and main evolutionary phases

"It is good to have money and the things that money can buy, but it's good, too, to check up once in a while and make sure you haven't lost the things that money can't buy".[1]

The analysis carried out is aimed at deepening and understanding a topic on the agenda, which concerns the daily life of all us: money. During its existence money as we conceive it today has played different roles and functions. The evolution of money is analysed and differentiated into three main phases. The first focuses on the importance of the presence of money within a trading system and what is really meant by this term. The second phase looks at the forms of payment and monetary systems employed over time. While the third one explains the role of central banks in controlling the circulation of money and, in so doing, helping world economies to face and overcome periods of crisis, such as the coronavirus disaster we are currently experiencing. Money, in the physical sense, asserts itself as a means of payment and an intermediary of exchanges. It is recognized in any place and period of time by everyone, because it is able to constitute the simplest way to attribute value. In summary, money can exchange a multitude of negotiable goods between a plurality of subjects. Anything can take on the function of money, as long as it is recognized by all with the same value and within an economy. It can be said that money has three main functions: (i) store of value, (ii) unit of account and (iii) medium of exchange. As regards the store of value, money allows the transfer of purchasing power from today

[1] George Horace Lorimer

to a specific future date. Money can be spent in different points in time, possibly earning with the relative movements. As a unit of account, it represents a unit of measurement with which the values of goods are expressed, and various economic transactions are carried out. Finally, about the medium of exchange, money allows us to buy goods and services. The ease with which money can be transformed into all goods and services available on the market is called liquidity. Today, we tend to give little importance to this function, but in the past, it allowed people to obtain an asset without necessarily having to exchange it for another. The history of money starts from the darkest phases in which the economy was centred on bartering up to the twentieth century, where the currency convertible into gold (representative currency) was replaced by the currency based on a trust system (fiduciary or legal tender currency). The experiences of banking crisis gradually led to the affirmation of the banknotes' monopoly in all countries. Initially the banknotes were issued by a plurality of banks, and some of these operated with less prudence by issuing large volumes of money. The magnitude of banknotes issued, with respect to the deposits of metallic money, put the banks in the risky condition of not being able to meet the conversion requests. It was difficult for economic operators to assess the reliability of banknotes issued by different institutions. This activity became the exclusive prerogative of a particular institution: the central bank. The latter's role varies by country and by law, but in general the main purpose of central banks is to regulate monetary policy, trying to achieve goals set by their distinctive mandates. "Monetary policy" is the control of the amount of money available in the economy and money is the foundation of the central banks field of action. Exactly for this reason, the entire excursus that I propose on the nature of money will be extremely relevant to understand and grasp the modern tasks played by central banks.

1.1 Definition and origins of money

Currency is the first financial instrument accepted and recognized by the masses as means of exchange for goods and services. The term "currency" refers to anything that is used as primary method of payment to trade and purchase items. In short, it is money in the form of paper (banknotes) or coins that is issued by central banks in the modern world. Money,[2] as I want to demonstrate in this thesis, is an essential tool for the functioning of the economy and central banks regulate the quantity in circulation by issuing money[3] and purchasing securities, mostly government bonds. But since not all objects have the effect of money,[4] only those with very particular characteristics can be used with this intent:

- First, an object must be able to measure the market value of a product and therefore be a unit of value. This unit of value must be divisible in smaller units or sub-units, so that it can also be used as a remainder.
- The object must be comfortable to use and transport, so that to facilitate exchange between people.
- The object must be made of a material that lasts over time and does not deteriorate or change in shape.

First and foremost, there is a distinction to be made between currency and money: the former term refers to circulating money issued by the state, while the second one is usually employed to invoke a store of value. Currency is wealth that the state can produce easily and in large quantities, but the greater the quantity the greater the loss of value over time. If an object is present in

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[2] European Central Bank. *"What is money?".* In: European Central Bank Explainers, June 20, 2017.

[3] Rebecca Burn-Callander. *The History of Money: from barter to bitcoin. The Telegraph*, 20 October 2014.

[4] Bank, Julian Hodge, and Glyn Davies. *A History of Money: From Ancient Times to the Present Day*. University of Wales Press, 2002.

large quantities, then it intrinsically becomes less rare and loses value. Money, on the other hand must maintain its value over time even after long periods. There is a thin line separating the two terms “currency” and “money”. They are often used interchangeably, but they have very different economic implications in the real world. Currency derives from the Latin word “currere” which means to “run”, to “flow”. It is a tangible asset in nature represented by any form of money circulating in the economy, but it is also a medium that we own to carry out daily payments; it does not have an intrinsic value and as a consequence it cannot be a store of value. On the contrary money refers to the actual value of goods and services traded; it is intangible and subjective in nature, has an intrinsic value and hence can be a store of value. In ancient times, the currency was made of precious metals such as gold, silver, and copper, and in terms of money the rarity of these materials conferred a value that is maintained over time.

Why the term “money”?[5] One of the questions that I frequently asked myself regarding the term “money” is why it is called this way. The origins of this name are to be found in ancient times and more precisely in the history of our country; the birth of the term coincides with a fascinating legend that took place in 390 B.C. in Italy (imperial Rome): “the story of the Capitoline geese”.[6] The legend tells that at that time the Romans were at war against the Gauls of Brenno, who were besieging the city in a brutal and violent way. One night, the Gaul enemies attempted to take over the city, but the geese began to flutter vigorously at the temple of Juno where they were raised. The geese located on the citadel of Capitoline, were the main form of subsistence for the Romans with their meat and eggs and further proved to be excellent

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[5] Alessandro Guerani. *“Piccola storia della moneta, fra miti e realtà”.* Il Sole 24 Ore, April 7 (2019).

[6] Gianfranco Fabi.“*La moneta cattiva (del debito) scaccia la buona*”. Il Sole 24 Ore, May 13 (2010).

guards. The former consul Marco Manlio awakened in his sleep by the noisy geese could raise the alarm and save the city. Since that day, the goddess Juno was defined with the epithet of "money", from the Latin verb "monere", which means precisely to "warn". The Romans thought that it was the goddess herself who woke up the geese, indirectly helping to thwart the attack. In 260 B.C. exactly for this reason the mint[7] was erected right next to the Juno temple on the Capitol, where today is situated the Basilica of Santa Maria in Aercoli. The money usable by the citizens was produced precisely in this place, guaranteeing to the exchange tool the common name universally used nowadays.

1.2 Barter and commodity-currency

As we have seen the origins of money[8] have their roots in very ancient times, but before the events just mentioned concerning the goddess Juno, trade took place with other methods such as barter, natural goods and working metals. When the currency was not yet in circulation, exchanges and trade took place through barter. The currency gradually evolved only with the passing of time, adapting to the management of increasingly complex commercial and exchange systems. Bartering was undoubtedly the first and simplest widespread payment method. The modus operandi consisted in exchanging goods or objects deemed to be of fair value by the parties involved. This type of transaction did not allow to put savings aside, rather the goods had to be exchanged as quickly as possible to prevent them from losing value. This form of exchange had many limits. Bartering involved high information costs for traders, who had to find who was interested in their product and at

[7] Andrew Meadows and Jonathan Williams. "Moneta and the Monuments: Coinage and Politics in Republican Rome". *Journal of Roman Studies* (2001), Vol. 91, pp. 27-49.

[8] Odoardo Bulgarelli. "Alle origini della moneta". In: *Rivista di Storia Economica* (2009), Vol. 25(1), pp.11-18.

the same time attracted by a specific good. For this reason, bartering was functional only in very small economies characterized by few transactions. Later, with the growing demand and the greater number of negotiations, other forms of payment were introduced: barter had to give way to the commodity-currency.[9] With the passing of generations, the increase in trade and a more articulated commercial system led to the use of commodity-currencies[10] and wares to make payments. It became one of the most popular payment methods as it allowed to receive a product or service in exchange for goods or whatever. First, this made it possible to establish prices for the various products and then the concept of savings began to spread. While at the beginning the price of bartering was marked by the judgement of the participants, only with the goods could the actual value be established. People used only goods with their own intrinsic value, in such a way as to be able to evaluate by themselves if the price was right or wrong. For example, it was commonplace to use shells[11] as trading goods in Chinese markets. Shells used as currency were common also in Africa, South East Asia, and North America. There was also the necessity to introduce agricultural products, salt, and livestock as commodity-currency. In Japan, for example, rice used as a commodity-currency remained valid until 1868. In Iceland, the value of all goods was established by equating it to dried fish. The characteristics of the commodity currency or natural currency were the following:

- Be available in a widespread, but not abundant, and divisible way.
- Be non-perishable, to ensure conservation in the event of future and verifiable exchanges.

[9] Odoardo Bulgarelli. *Il denaro alle origini delle origini*. Spirali, 2001.
[10] Benjamin Geva. "From Commodity to Currency in Ancient History: On Commerce, Tyranny and the Modern Law of Money". In: *Osgoode Hall Law Journal* (1987), 25 (1), pp. 115-158.
[11] Bin Yang."The Rise and Fall of Cowrie Shells: The Asian Story". *Journal of World History* (2011), Vol. 22, No. 1, pp. 1-25.

Only very few goods possessed such characteristics. Some goods used as commodity-currency did not meet the divisibility criterion, as in the case of a garment made of cattle. Or again, other goods such as rice did not meet the availability criterion, which was limited to only that country (Japan). Undoubtedly among the most used goods there were working metals, which were considered very precious and could be exploited for the realization of tools, weapons, and objects of all kinds. With the passing of time, people moved from working metals to precious metals.[12] For example, starting from the second millennium, Jewish people used the "kikkar" (a ring) as unit of measurement. Indeed, precious metals[13] have a much longer longevity over time compared to any other goods. In addition, they are divisible and have very particular structural characteristics that allows to use them in the form of ingots, bars, powders, or objects. However, the payment system based on precious metals has two drawbacks: the first one is that who receives the payment must always verify that it is correct, instead the second problem concerns quality. First off those who buy are forced to always go around with a scale because the payment is based on the ingot's weight; in the second case the risk is that the matter is not pure, and so it is always necessary to have a comparison metal or stone. The payment system based on precious metals proved not to be convenient in different circumstances, showing quite a few deficiencies. This was the reason why the ancestors started looking for other solutions to make trade easier and faster.

[12] Alain Bresson. *The Origin of Lydian and Greek Coinage: Cost and Quantity.* In: Historical Research (2006), 5, pp. 149-165.
[13] Roberto Santi. "Do monetary systems rediscover precious metals in the era of 'bitcoins?". *Substantia (2019),* Vol 3, No. 1, pp. 49-52.

1.3 Metal coins and bimetallism's monetary system

The first coin[14] was invented and minted in the seventh century before Christ by King Croesus of Lydia (the present-day Turkey). The value of the coin, defined as "intrinsic value", was represented by the material contained within each metal. Initially the coin was made with the three precious metals of the time, namely copper, silver, and gold and subsequently also with aluminium and electro. The introduction of the monetary system called "bimetallism", expressed on the basis of a certain amount of gold and silver, made it possible to evolve international exchanges.[15] The coin began to spread throughout the Persian empire, the western Mediterranean and in India, together with the tradition of minting and using it. Bronze was immediately accepted as an exchange currency of lower value in some countries of the time. In some states of today's China, it was preferred the use of silver coins, while gold always prevailed as the most valuable metal in the western world. All the three metals were used in the Middle Ages both in Europe and in the Middle East: gold was used for the most valuable coins that ordinary people did not possess, silver coins were used for intermediate transactions and finally the bronze ones for small daily transactions. Throughout this journey from the ancients to the Middle Ages, the coin was nothing more than a metal disc bearing the seal of the empire or state.[16] This type of custom made it possible to avoid weight and quality checks, because through the seal the state promised to accept the coins as valid a priori. Nonetheless, this type of law gave rise to a widespread phenomenon called

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[14] Donald Kagan "The Dates of the Earliest Coin". *American Journal of Archaeology* (1982), Vol.86, No. 3, pp. 343-360.

[15] Milton Friedman. "Bimetallism revisited". *Journal of Economic Perspectives* (1990), Vol. 4, No. 4, pp. 85-104.

[16] Miriam S. Balmuth. "The critical moment: the transition from currency to coinage in the Eastern Mediterranean". *World Archaeology* (1975), Vol. 6, No.3, pp. 293-298.

"coin shearing": people pulled away small amounts of precious metal from the coin with the purpose of reselling it and earning more money. Moreover, the exchange rates were regulated by the state on the basis of new mines and deposits' discoveries. If the type of currency was different, it could still be accepted because after being melted it had the opportunity to be transformed into another currency. Bimetallism constituted a fundamental phenomenon for the evolution of economies and trade.[17] However, there were still two relevant limits. The first was associated with the control of the money supply. The use of coins minted with precious metals had the great weakness that the increase in trade had to correspond to an increase in the money supply, which was almost impossible to obtain. In fact, this was a variable that could hardly be controlled, as it depended on exogenous phenomena such as the production in mines, the discovery of any deposit and inflows and outflows resulting from international trade. Therefore, a possible excessive inflow of money would have significantly increased demand compared to supply, causing inflation in prices. Another significant limit, related to metal coins, was constituted by the difficulty of transporting large quantities of them, due to their excessive weight. This increased the risk of theft, as it became difficult not to be noticed even during the transport of significant quantities of money.

1.4 Paper money and the "gold standard"

The development of the economy in the Renaissance period allowed money to evolve to a later stage: those who owned precious metal ingots could take them to the mint and turn them into money. Despite that, the system presented an important problem concerning the management of large

[17] Barry Eichengreen and Nathan Sussman. *The International Monetary System in the (Very) Long Run.* International Monetary Fund (2000), Working Paper No. 00/43.

capitals: those who moved with large amounts of money in the form of coins could be robbed. Specifically for this reason, the first paper money,[18] already used in the Middle Ages in China,[19] began to spread and be appropriate to use. It took another 300 years to see the first banknotes in Europe. The first printing took place in 1661 in Sweden to compensate for the scarcity of metals. However, its original use dates back to a few centuries earlier. In 1438, a commander of the Spanish Royal Fleet paid the crew with pieces of paper, because he had no cash with him. The term banknote derives from "bank note", a real document issued by the bankers-goldsmiths as collateral for the gold deposited. In essence, those who deposited gold received in exchange a document that gave them the right to recoup at any time the amount of gold. The banknote was accepted by convention according to its face value[20] and could also be deliberately exchanged. Progressively,[21] the first banks were created with the objective of giving ordinary people the opportunity to store their savings in a safe place, without the risk of being easily robbed. They began printing paper money for an amount greater than the value of the gold held in their reserves. This risky procedure was encouraged by the fact that the number of payments dropped significantly to give way only to paper money. No one had an incentive to turn the banknotes into gold and therefore the banks used gold reserves to file trade balance deficits. In this way they could obtain unjust profits through loans and received interests. It was established that the monetary authorities could issue money up to a maximum number of times compared to the gold held

[18] Robert U. Ayres. "Money as Printed Paper". In: *On Capitalism and Inequality* (2020), Springer, Cham, pp. 73-76.
[19] Marco Polo gave us this information with the story of his travels.
[20] In economics and finance, the "nominal value" or "face value "refers to the theoretical value associated with a particular asset, while the "market value" is influenced by the supply and demand for the asset in question.
[21] Starting from the eighteenth century.

in their reserves. Silver lost its importance completely and bimetallism[22] was abandoned, definitively giving way to the gold system called "gold standard".[23] In an international congress of 1867, "monetallism" was adopted by all the main European powers, together with Japan and the United States, which joined a few years later. For the first time, there was a real flexibility in the creation of money with the gold standard, and monetary authorities had the power to regulate it. As a matter of fact, the "gold standard" represented a defence tool by central bankers against the pressures aimed at increasing the money supply.

1.5 The gold exchange standard

The gold standard[24] ceased to exist in 1914, in conjunction with the outbreak of the First World War. Several countries had to reduce their gold reserves, with the risk of running out of stock, to meet their negative balance sheet payments. The main consequence of this problem was the currency's devaluation, which caused an unstable situation in all internationally connected economies. The serious imbalances generated by the global conflict made it difficult to return to the gold standard. The increase in public debt, inflation and war reparations entailed a high cost, making it impossible to return to normality. As the prices of the banknotes had risen more than the gold stock held by the central banks,[25] the quantity of the gold stock was not sufficient to guarantee the issuance of banknotes. In April 1922, the International Monetary Conference in Genoa laid the foundations for

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[22] M. C. Marcuzzo, L. H. Officer & A. Rosselli (Eds.). *Monetary standards and Exchange rates*. *Routledge* (2002).

[23] Samuel Knafo. "The gold standard and the origins of the modern international monetary system". *Review of International Political Economy* (2006), Vol. 13, No. 1, pp. 78-102.

[24] In the USA it lasted until 1933.

[25] Barry Eichengreen and Marc Flandreau. "A Century and a Half of Central Banks, International Reserves and International Currencies". In: *Central Banks at a Crossroads: What Can we Learn from History?.* Cambridge University Press (2014), pp.280-318.

innovating the monetary system and sanctioned the adoption of the "gold exchange standard". The new monetary system provided that the reserves of the banks that issued money could consist not only of gold reserves, but also of "key-currencies".[26] This mechanism was aimed at stabilizing the value of gold, as it hoped for greater international cooperation. Nevertheless, central banks were reluctant to cooperate as they were still culturally linked to the previous gold standard. They continued to accumulate gold reserves, helping to increase the phenomenon of deflation. Therefore, the new structure did not leave sufficiently room for manoeuvre and did not prove to be as credible as the previous one. In fact, with the gold exchange standard there was the Great Crisis of 1929.[27] It represented a very hard period for the economy and constituted an unprecedented universal phenomenon. The crisis started in the United States and then hit all the big countries of the capitalist world, as they were linked together by stable economic and financial conditions. The continuous increase in outstanding securities, issued by financial intermediaries and banks, created a speculative fever. It made large institutional investors and small savers believe they were making huge profits in a very short time. The rating associated with the outstanding securities was kept high and stable, amplifying the bubble, and making people blind to a market crush. On that famous Black Tuesday, the market crashed and the first bankruptcy declarations of many banks and stockbrokers began. The financial turmoil gave rise to a crisis of overproduction that spread to the largest economies commercially linked to each other. The collapse of such an important player as the United States of America, would have knocked down all the other countries financially and/or

[26] The key-currencies were legal tenders convertible into gold, such as the mark, dollar, franc, and pound.
[27] Ben Bemanke and Harold James (1991). "The Gold Standard, Deflation and Financial Crisis in the Great Depression: An International Comparison". In: *Financial Markets and Financial Crises.* University of Chicago Press, pp. 33-68.

commercially connected to it. For this reason, in 1931 the various government states decided to suspend the gold exchange standard.[28] There was a lack of sufficient coordination between the various banks and financial intermediaries. On the contrary, an economic-financial rivalry had grown, due to the antagonism between the key-currencies (especially among the dollar, franc, and pound).

1.6 The Bretton Woods Agreements

The monetary disorder of the 1930s brought about the need for a new monetary reform, which was identified and subsequently applied after the Second World War. Thanks to the ideas proposed in the academic field, the Americans and British had hinted at a new international economic system. In some writings of 1942, the economists Harry Dexter White and John Maynard Keynes laid the foundations for an international economic cooperation.[29] The aim was to avoid the emergence of resentments and antagonisms, such as those that occurred during the Great Depression. On the one hand, Keynes proposed the introduction of a "Central Bank" that would have used a currency linked to gold. On the other hand, White made a proposal to set up an "International Stabilization Fund", which would have helped countries in temporary difficulty by granting short-term loans. Clearly, the two economists had the goal of protecting their respective countries: J. M. Keynes wanted to defend England, while H. D. White wanted to safeguard the United States. The former needed credit as it

[28] K. Wandschneider (2008). "The Stability of The Interwar Gold Exchange Standard: Did Politics Matter?". *The Journal of Economic History*, 68(1), pp. 151-181.
[29] International Monetary Fund, (1996). "The International Monetary Fund 1945-1965: Twenty Years of International Monetary Cooperation". In: *International Monetary Fund*, Vol. 3, pp. 3-83.

recorded large imports from other systems, while the second aimed at stabilizing exchange rates, since USA was the largest exporter in the world. Between the two schools of thought, the one that represented the Unites States prevailed and, as a consequence, a process based on the White plan started. In 1944, a conference attended by the representatives of 44 countries was held in Bretton Woods, to discuss about future monetary policies. The main goal of the Bretton Woods[30] creators was to re-establish a fixed exchange rate regime and to structurally control capital movements. The aim was to encourage each country to pursue policies aimed at full employment. The agreements provided the establishment of two bodies: The International Monetary Fund and the International Bank for reconstruction and development, also known as the World Bank. The activities of the two bodies began in 1946, with the aim of stabilizing exchange rate parity, enforcing the rules concerning the functioning of the international monetary system and promoting monetary and economic cooperation. This new monetary system[31] was a reinterpretation of the gold exchange standard. The difference in this new version was the fact that only the US dollar could be converted into gold. With the reintroduction of the fixed exchange rate system, each country had to declare the value of its currency with respect to gold. Moreover, they had to maintain the exchange rate with a margin of one percentage point, positive and negative. If a country was having difficulty[32] maintaining the declared exchange rate, then the International Monetary Fund intervened by modifying the exchange rate or providing the necessary currency. The rates were set in the mid-1940s, but the system only began to work in 1958, when coins could be converted back into other currencies.

[30] Eric Helleiner (2010). "A Bretton Woods Moment? The 2007-2008 crisis and the future of global finance". *International Affairs*, 86(3), pp. 619-636.
[31] P. Kugler and T. Straumann (2020). "International Monetary Regimes: The Bretton Woods System". *Handbook of the History of Money and Currency*, pp. 665-685.
[32] Situations of "fundamental imbalance".

1.7 The Smithsonian Agreement

Even the Bretton Woods accords did not represent the definitive solution. The monetary system, based on a fixed exchange rate regime and centred on the dollar, negatively affected the functioning and operation of the entire international system, causing the abandonment of the reference to gold.[33] The world economies, each with different interests and attitudes, led to the collapse of the system. As a matter of fact, the collapse of Bretton Woods began with the failure of the international monetary system; the United States had to finance military spending abroad, provide aid and economic support to developing countries and invest overseas. Once dollars left the United states, they no longer re-enter the country because the central banks all over the world kept them as reserves. Central banks issued their own currencies and used dollar reserves to make international payments. In this way, around the mid-sixties, many countries converted dollars into gold; the American gold reserves decreased and 75% of the dollars in circulation were no longer guaranteed. This phenomenon was soon followed by a devaluation of the franc and a revaluation of the mark. The fixed exchange rate system had deteriorated, and a new crisis erupted in 1971, coinciding with the fluctuation of the German mark. Richard Nixon[34] had to take the only possible way to relieve American gold reserves: on August 15, 1971, he declared the inconvertibility of gold. In this way, the American President cancelled the commitment to exchange dollars, held by other countries, into gold. The suspension of the dollar's convertibility and the introduction of the floating exchange rate system was an epochal transformation.[35] After hundreds of

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[33] Edwin M. Truman (2017). *The End of the Bretton Woods International Monetary System*. Peterson Institute for International Economics, Working Paper No. 17-11, available at SSRN: https://ssrn.com/abstract=3061914.

[34] President of the United States from January 1969 to August 1974.

[35] W. M. Scammel (1974). "The International Monetary System: The Next Stage". *Journal of Economic Studies*, Vol. 1 No. 1, pp. 30-44.

years, the link between legal currency and gold was officially severed. During the seventies, the world economy was characterized by high and variable inflation rates. These fluctuations were stabilized when monetary policies moved towards greater price stability and exchange rates characterized by frequent fluctuations. An example can be represented by the Smithsonian Agreement, a deal signed in December 1971 by the most industrialized countries of the time. The objective of the stipulated agreement was to restore stability to the international monetary system. In particular, the United States committed themselves to eliminate the additional 10% tax applied on overseas imports. Furthermore, the American continent decided to widen the exchange rate fluctuation margins with respect to the dollar and to devalue the latter against gold. Basically, these choices led to a revaluation of the main foreign currencies,[36] both in terms of gold and dollars.

1.8 Central banks and money in the 21st century

The history of money, as we can see, passes through many changes and alterations that have influenced what has become the currency of our time. Currency has become less and less linked to the value of the metal with which it is made, but more and more symbolic and related to what are its market value and purchasing power. Money has no intrinsic value in modern systems, as a matter of fact we can no longer exchange it for gold, but only accept it as a medium of exchange for goods and services. But how is money linked to a central bank? Metaphorically speaking, when we think of the economy, money comes to mind and a nation's economy is like a human body, in which the heart is represented by the central bank. The most

[36] The countries involved were Germany, Austria, Belgium, Holland, etc.

important organ, namely the heart, works to pump generative blood to the whole human body. And just as the heart gives life, the central bank pumps money into the economy to keep it in good health, vigorous and flourishing. The central bank[37] has the privilege of being the only institution legally capable of issuing money; in addition, it has the burden of keeping the currency's value stable over time. The approaches and plans central banks use to manage the quantity of money in circulation vary depending on the economic setting and powers of the central banks themselves. There are five major world's central banks, the pre-eminent of which is the Federal Reserve, often called Fed, that is the central bank of the United States of America. The remaining significant central banks are: the European Central Bank, the Bank of England, the People's Bank of China and the Bank of Japan. Some of the procedures that central banks use to keep the economy healthy and to control the money supply include: printing money, regulating and affecting interest rates and setting bank reserves requirements. Other strategies central banks[38] adopt encompass the adoption of open market operations and the establishment of quantitative easing programmes, which include buying or selling government bonds and other securities. The supply of money circulating in the economy influences micro and macro-economic tendencies. From the micro point of view, supplying large quantities of money means that more people and companies can spend, since households and businesses can easily get financing and loans. From the macroeconomic point of view, the quantity of money issued in the economy influences interest rates, unemployment rates, gross domestic product, and growth overall. The central banks of the five leading economies are inclined to manage the money supply to impact monetary policy and accomplish

[37] BIS, C (2003). *The role of central bank money in payment systems*. In: BIS CPSS, num 55.
[38] L. Ball, J. Gagnon, P. Honohan and S. Krogstrup (2016). *What Else Can Central Banks Do*?. ICMB International Center For Monetary and Banking Studies.

economic goals. I clearly explain the roles, tasks, and mandates of central banks to illustrate their importance in the support of the economy, especially during crisis like the one we are currently fighting. Money is the foundation of our economy and central banks activities revolve around it. To carry out their work, central banks observe the evolution of money through the so-called monetary aggregates[39] (in jargon defined with the initials M1, M2 or M3). For example, the ECB observes the monetary system through the three monetary aggregates, each with its own definitions and peculiarities.

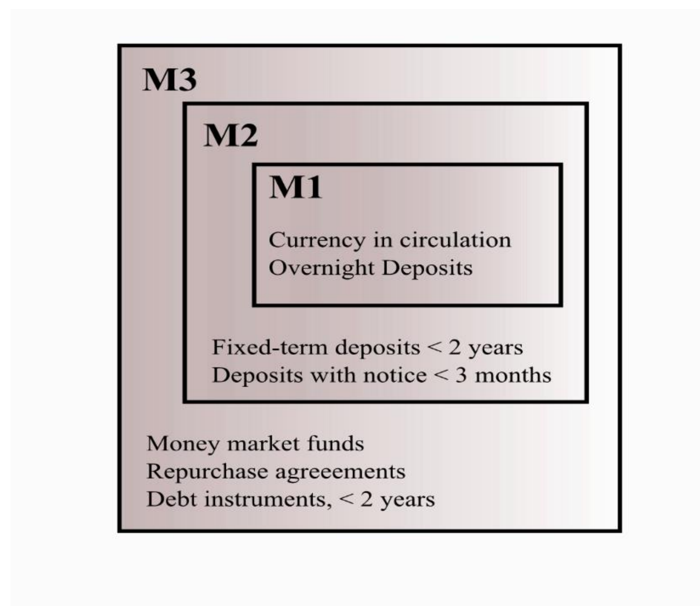

Figure 1.1: Monetary aggregates background

Although physical money has a significant weight in our daily life, banknotes and coins represent only 9,5% of what the ECB considers money. Indeed, money is largely made up of deposits (85%) in the modern monetary system,

[39] C. A. Goodhart (2007). "Whatever became of the monetary aggregates?". *National Institute Economic Review*, 200(1), pp. 56-61.

with sight deposits[40] making up the largest part. The central bank creates[41] money and this means that in the liabilities side the banknote is created, while in the assets side money is accounted for as a cash account (if it remains in a vault), as receivables from banking systems (if it makes loans to the banking system) and as financial fixed assets (if it buys government bonds). Historically the banknote was called in this way because it was placed on the liabilities side of the balance sheet, while on the assets side there was gold. Today there is no more the convertibility of a liability into gold, therefore the money created conventionally remains on the liabilities side of the central bank's balance sheet and cash on the assets side. Until the mid-20th century, nations attached their currency to the gold standard, thus limiting the amount of money they could produce. Now, central banks can increase the circulating money by simply printing all the money they want. However, printing more money can turn out to be a bad method to increase productivity and economic wealth, causing instead inflation problems. For what concerns interest rates, a central bank cannot set them directly, but has the means to push them towards desired levels. Central banks hold the rate at which commercial banks can ask borrowings. If interest rates are low, then depository institutions reduce the cost of loans to their customers. Businesses obtain smoothly accessible financing and households get better mortgages, auto loans and personal loans. This leads to an increased demand for loans and a consequently proliferation of circulating money. Another primary technique used by central banks, in this case to oversight money supply in the economy, is to mandate commercial banks to keep a certain amount of funds in the form of reserve. People leave their money in depository institutions' accounts and, in turn, part of this money is stored in vaults or at

[40] Those immediately convertible into cash.
[41] R. A. Werner (2014). "Can banks individually create money out of nothing? - The theories and the empirical evidence". *International Review of Financial Analysis*, Vol. 36, pp. 1-9.

central banks. Hence, commercial banks must set aside part of the deposits to accommodate the reserve requirement; in doing so, some money is always withheld and never circulates. If central banks need more money circulating into the economy and to lend out, then they just have to reduce the reserve requirement. On the contrary, if central banks want to decrease the amount of money in circulation, then they have to expand the aforementioned reserve. This means that central banks are fussier about issuing loans, and so less money can be lent out to the public. Furtherly, central banks have to fix periodically the reserve requirements[42] they charge on commercial banks. For example, on January 16 this year, small commercial banks with a maximum of $16.9 million in accounts were exempt from keeping a reserve in the United States. Medium size depository institutions, with accounts that hover between 16.9 and 127.5 million dollars, had to retain 3% of the deposited funds in the form of reserve. Finally, institutions with more than $127.5 million in accounts had a 10% reserve requirement. Central banks also affect the magnitude of money in circulation through the engagement in a process[43] known as "open market operations" (OMO); government bonds or other securities are bought or sold from commercial banks and institutions. If central banks spend, then they have more cash to loan in response to an expansionary and easing monetary policy. The opposite happens when central banks are looking for shrinking the amount of money from the system. Open market operations are an extensively used tool as they are adjustable, straightforward to use and efficient. The Federal Reserve is an example of a central bank that uses open market operations to arrive at a desired federal funds rate.[44] The parties involved negotiate rates with each

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[42] On March 26, 2020, the Fed reduced the ratios to 0%, thus eliminating the reserve requirements for all American depository institutions.
[43] Narayan Bulusu (2020). *Why Do Central Banks make Public Announcements of Open Market Operations?*. Bank of Canada, Working Paper No. 35.
[44] The interest rate at which commercial banks and institutions lend money to each other.

other and the average of the two constitutes the federal funds rate, which affects all the other interest rates. Moreover, in times of economic crisis, the open market operations are extended by establishing programmes of quantitative easing. Central banks create money by purchasing assets and securities; in turn, this money is received by depository banks and institutions, which are encouraged to deliver more loans. Following the Great Recession of the years 2007-2009, the Federal Reserve and the Bank of England were the first central banks that launched quantitative easing programmes.[45] Subsequently, the European Central Bank and the Bank of Japan intervened disclosing quantitative programmes. On the other hand, commercial banks guarded money in all its forms: they managed debt and credit relationships among economic actors such as families, businesses, and public institutions. In summary, the quantity of money in circulation is pivotal to securing a strong, balanced, and imperishable economy. John Kenneth Galbraith once said: <<when money is bad people want it better, but when it is good, they think of something else>>. This is to say that if today we think of something else such as saving, investing, and consuming, it is because our currency (the euro) is all in all good.[46]

[45] B.W. Fawley and C. J. Neely (2013). “Four Stories of Quantitative Easing”. *Federal Reserve Bank of St. Louis Review*, 95(1), pp. 51-88.
[46] A. Bris, Y. Koskinen & M. Nilsson (2003). “The Euro is Good after All: Evidence from Corporate Valuations”. Available at SSRN: https://ssrn.com/abstract=424680

Chapter 2 The European Central Bank: role and structure

The second chapter continues concentrating on the European monetary system and more specifically on the management of the European Central Bank (ECB). The study focuses on the recent economic and financial turmoil, as well as on the political and monetary manoeuvres undertaken to face these periods of crisis. The aim is to stabilize the entire European economy, with the main objective of bringing the inflation rate of the Euro area back to a value lower, but close to 2%. Monetary policy decisions naturally depend on the economic situation. The Governor and the Board of the central bank analyse the complex amount of economic data available (the rates of inflation and GDP growth) and, on the basis of these, they outline the monetary policy, meaning the level of interest rates. But before implementing any type of monetary policy, it is necessary to understand what the goal of the central bank is. Basically, we can distinguish two types of objectives attributed to central banks: inflation and economic growth. The latter is peculiar of central banks with a broader mandate, like the Federal Reserve and the People's Bank of China. For example, the statute of the Fed[47] explicitly states that it must effectively promote maximum employment targets, stable prices, and moderate long-term rates. However, both types of central banks are responsible for establishing the stability requirements of credit institutions, as well as monitoring them periodically. Instead, the statute of central banks oriented towards price stability specifies that the only purpose, of the monetary policy they implement, is to maintain the price level low and therefore control the rate of inflation. They are completely indifferent to other macroeconomic variables such as the GDP

[47] W. Thorbecke (2002). "A Dual Mandate for the Federal Reserve: The Pursuit of Price Stability and Full Employment". *Eastern Economic Journal* (2002), 28(2), pp. 255-268.

growth rate or unemployment. The limitation of the mandate to price stability is motivated by the fact that the achievement of the latter implies a good performance of the economy in terms of growth and employment as a natural consequence. The Bank of England, the Bank of Japan and above all the ECB[48] are examples of this kind of central bank.

2.1 The origins of the ECB and the ESCB

The Genesis of the European Central Bank (ECB), today's main responsible for macroeconomic policy, and the European System of Central Banks (ESCB) is closely linked to the origins of the Economic and Monetary Union (EMU).[49] Although the creation of this Union is undoubtedly connected to economic reasons, it responds to a political vision: to pursue economic, financial, commercial integration and monetary relations among the various Member States. For a long time, the Bretton Woods Agreement bestowed supremacy to the United States of America through the centralization of the US dollar, its golden convertibility, and a fixed exchange rate system. The indispensable conditions to maintain the system in equilibrium were: permanent dollar convertibility, no conspicuously inflationary policy, and no accumulation of excessive deficits. But during the sixties, these conditions weakened, and the American economic and monetary policy changed profoundly, especially to meet the military expenses related to the Vietnam War. This was the cause that led to the system's end. The crisis of this agreement forced the formulation of a European solution: the conception of a European monetary order. The Bretton Woods system born in 1944 ended

[48] P. Hartmann and F. Smets (2018). *The first twenty years of the European Central Bank: monetary policy*. ECB Working Paper No. 2219, available at SSRN: https://ssrn.com/abstract=3309645.
[49] ECB and ESCB represent the necessary tools for the creation of the EMU.

up being formally abandoned by the United States in 1971.Thus, the failure of the system paved the way for European theoretical solutions, which resulted in the foundation of the European Monetary Union and the conformation of its central bank. In 1964, the States belonging to the European Economic Community (ECC) established the first form of explicit coordination among the heads of their central banks.[50] More precisely, it was in 1955 as part of the Messina Conference the idea of creating a system capable of coordinating the monetary policies of the Member Countries.[51] Subsequently, the 1957 Treaty of Rome[52] identified in exchange rate policy a problem of common interest. For this reason, a new monetary committee[53] was created with the aim of consulting and promoting the coordination of Member States' policies in the monetary field. The founders of the European Economic Community were driven to seek intensive coordination of the various monetary positions, because the anchorage guaranteed by the dollar system was gradually collapsing. The common belief was that economic integration could not be accomplished without the coordination of monetary policies, supported by the liberalization of trade in goods, services and capital. Nevertheless, in addition to the advisory functions, the Committee could only count on a legal basis of secondary law, as it was not provided by the Treaty establishing the European Economic Community but only by a decision of the Council of Ministers. In the architecture of the prospective monetary union were compared two different visions: on one hand a priority order problem, while on the other an integration level problem. The first question asked whether monetary union should be the completion of a broad and multisectoral economic cooperation or only an instrument to pursue

[50] H. K. Scheller (2004). *The European Central Bank: History, Role and Functions*. European Central Bank.
[51] The aim was to give the opportunity to design and develop a common market.
[52] Lise Rye. "The Legitimacy of the EU in Historical Perspective: History of a Never-Ending Quest". *European Papers,* 5(1), pp. 191-207.
[53] Articles 103 and 108 of the Treaty establishing the European Economic Community.

monetary stability. Secondly, it was decisive to choose whether the Monetary Union should limit its actions to the mere stabilization of exchange rates between European currencies or push for direct control, determining amounts of money and interest rates. The first real attempt to create a monetary union among the EEC countries took the name of "Werner Project".[54] The assumption at the heart of the project was the need to safeguard the stability of the exchange rates between the various currencies, while the establishment of a single central bank appeared to be not so urgent. However, this embryonic monetary union was short-lived, due to the serious repercussions of the 1973-1974 oil crisis and the limitation on the movement of capital.[55] The monetary union[56] was born in 1972 and it was soon abandoned, but not without having first made some negligible results in reducing instability of exchange rates between the currencies of the participating countries. The Agreement[57] of March 1972, also known as "currency snake", introduced a first practical form of European monetary cooperation, albeit for a limited period of time. In April 1973, the Agreement should have taken the institutionalized form of the European Monetary Cooperation Fund, functions that were never entrusted to the organ. In the wake of "The Werner Project", there was also the constitution of what can be considered the anticipator of the Euro: the European Currency Unit (ECU).[58] This currency was composed of all the ones belonging to the ECC Member States, according to certain fixed quantities. The idea of establishing

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[54] The project was named after Pierre Werner, the Luxembourg prime minister who was appointed chairman of the Committee.

[55] The introduction in many countries of capital movements' controls was incompatible with the creation of an effective monetary union.

[56] D. C. Kruse (2014). *Monetary Integration in Western Europe: EMU, EMS and Beyond*. Butterworth-Heineman, Oxford.

[57] The Monetary Union was aimed at containing changes in the exchange rate between the currencies of nine countries: Denmark, Belgium, France, Germany, Italy, Luxembourg, Norway, the Netherlands, and the United Kingdom.

[58] Michael D. Bordo and Anna J. Schwartz (1987). *The Ecu – an Imaginary or Embryonic Form of Money: What Can We Learn from History?*. NBER Working Paper No. w2345, Available at SSRN: https://ssrn.com/abstract=976158.

the European monetary union was not abandoned. In 1979, the governments of France and the Federal Republic of Germany pushed for the creation of the European Monetary System (EMS). In this case fluctuations of each currency's face value were limited, proposing, and reproducing the pattern of the monetary snake. Nonetheless, the agreement could only have been achieved with the strengthening of the monetary policies' harmonization process. In particular, the agreement placed at the ESM's foundations provided the introduction of central banks; Their task was to prevent the difference between two currencies from exceeding the predetermined lower threshold.[59] A reference exchange rate was assumed for each pair of currencies that was considered, accompanied by two additional rates, respectively 2,25% higher and lower. The involvement of the central banks, through the sale and purchase operations, took place when the nominal value of a currency had gone beyond the two margins. The whole construction marked progress on monetary integration, but beyond the reciprocal and intertwined agreements between states and central banks it could not count on an actual constitutional basis. The technical tools proved to be inadequate too, because of setting error that affected their failure. According to the French setting, the costs of rebalancing the excessive appreciation of a given currency had to be borne by the relative economy. But as it was soon found, the system followed an opposite direction: the Bundesbank monetary policy imposed the heaviest sufferings on the weakest currencies. Moreover, Member States' intention to transfer 20% of the gold reserves held by their central banks to the European Monetary Cooperation Fund was not followed up. Not even the idea of creating a European Monetary Fund[60] came to

[59] If the difference in value between two currencies (following the mutual appreciation or depreciation) exceeded a certain limit, the central banks of reference had to intervene by buying the weakest currency and selling the strongest one.
[60] The European Monetary Fund should have been the real institutional basis for the European Monetary System (EMS).

fruition. Unlike the provisions of the formal agreements, the German central bank became the center of the monetary system thanks to its determination and effectiveness in maintaining monetary stability. Evidently, a monetary system of continental ambitions could not function adequately through an organ, such as the Bundesbank, structurally linked to a national dimension. Anyhow, the balance between the exercise of the German leadership and its acceptance by the other Member States of the system would have ceased, especially with the disappearance of the mutual coincidence of interests. The implementation of the European single market and the liberalization of capital movements made the creation of a shared institutional framework even more urgent. A change was therefore necessary, moving from an agreement-based cooperation system to a centralized and supranational structure, in charge of managing monetary policy. The interstate agreement on monetary policy management, with attention to the relationship between different currencies and their respective exchange ratios, leaves each country a margin of discretion and in so doing undermines the system itself. Thus, with the emergence of divergences and contrasts, the more or less painstakingly constructed cooperation is put at risk. As noted, the European experience had repeatedly shown that the collaboration between the different systems worked as long as there was a substantial coincidence of interests. The economically dominant country, that owned the most efficient monetary policy, and other countries participating in the system would have continued to join forces only with a conformity of common interests. But the centralization of monetary policy also depended on the type of economic relations that was being built between European States: economic relations in contrast with effective monetary sovereignty. An important step was the approval of the Single European Act,[61] which continued along this path. It

[61] G. Tsebellis and G. Garret (2001). "The institutional foundations of intergovernmentalism and supranationalism in the European Union". *International Organization*, 55(2), pp. 357-390.

entered into force on 1st July 1987 and gave a further impulse to overcome physical, technical, and fiscal barriers existing between the various countries of the Community. Signed in 1986, it aimed at the complete realization by 1992 of an area of free movement of goods, services, people, and capital. At this point, the agreement that had given rise to the European Monetary System proved its inadequacy. The EMS, based on a regime of fluctuation of currencies 'value making up the ECU's basket, prevented individual states from pursuing their own monetary policy. Free trade and capital mobility cannot effectively coexist with a system characterized by fixed exchange rates and national autonomy in monetary policy choices. Here arises the need to push towards a strong and true monetary union. Outside the specific European context, a situation of structural incompatibility took place between a national monetary sovereignty and an economic and legal regime based on the opening of national markets. As it happened, the liberalization in trade of goods, services and capital was greatly facilitated by developments in technology, transport, and information. On the other hand, it was also capable of heavily influence the monetary policy of states, both at the economic and political level. The state's monetary policy cannot fail to consider the capital flows that naturally arise in an open economy. The opening of the system is one of the essential and indispensable characteristics that the structure owned and continues to possess. This could only lay the conditions for an inevitable centralization of monetary policy, as a necessary condition not only for its development but also for its conservation. The requirement found a first and fundamental answer in the document produced in 1989 by the Committee for the Study of Economic and Monetary Union. The document[62] took the name of "Delors Report" from the President of the European Commission Jacques Delors from which it was chaired. The

[62] N. Thygesen (1989). "The Delors Report and European economic and monetary union". *International Affairs*, 65(4), pp. 637-652.

Committee, made up of the governors of the 15 countries which were part of the European Community, was instituted on the strong impulse of the President and of the European Council. The Committee was entrusted with the task of preparing a plan for the realization of the Economic and Monetary Union. The central idea of the Delors Document is the impossibility of realizing an effective Monetary Union, due to the lack of an institutional basis consisting of a single currency and a single central bank.[63] Between the late eighties and the early nineties a sudden change of context was taking place; on that occasion the Delors Report proved decisive for the creation of the inevitable and necessary future monetary union. On 9 November 1989, the Berlin Wall fell, radically changing the European geopolitical context, and paving the way for Germanic reunification. The reorganization of relations between East and West took place in October 1990 along the former "iron curtain". The Balkan tragedy on one side, and the downsizing of the military role in Europe on the other were further reasons for greater European integration. The European Council also had the initiative of setting up two intergovernmental conferences to grant a new political, economic, and monetary structure on the future European Union. One of the two conferences was specifically designed to create a monetary economic union, but both formulated the essential structure of the agreements constituting the Maastricht Treaty. The birth of the Economic and Monetary Union, under the guidance of a single central bank,[64] had been subject of important reflections in the context of the Delors Report; but the project took certain institutional forms only with the Treaty concluded in the Dutch town. In the implementation of the plan's stages, a decisive role was assigned to the Union's institutions: to control economic policy objectives and ensure that

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[63] The European Central Bank and the Euro currency both find their origin in the Delors Report.

[64] According to the American economist Paul Samuelson, never before had a large and powerful group of countries entrusted its macroeconomic fate to a multinational body such as the European Central Bank.

States comply with known convergence criteria and parameters. According to the system outlined by the Maastricht Treaty,[65] the introduction of the single currency had to be accompanied by support on an organizational, administrative, economic, and accounting level. The increase in cooperation among the various Member States' central banks had to go hand in hand with a tendential uniformity of budget policies. In June 1997, this homogeneity was sought through the introduction of a Stability Pact by the European Council. In the end it was completed with two further regulations, concerning the supervision of state budgets and the adjustment of infringement procedures. The ESCB and the ECB were set up in accordance with Article 8 of the Treaty establishing the European Community (EC Treaty). They perform their tasks and carry on their activities within the limits imposed by the Treaty and the Statute of the European System of Central Banks and the European Central Bank (Statute of the ESCB/ECB), which are the primary sources of law. According to the Maastricht Treaty, the ESCB was not endowed with legal personality but it was a system made up of the ECB and the 15 central banks of the Euro countries of that time. Before the Lisbon Treaty, the ESCB constituted an unprecedented example of discipline among sovereign states; It was able to create a federal-type structure capable of handling monetary policy. It was the first time that sovereign states spontaneously renounced monetary sovereignty; they also created a monetary union before a full political union. Anyhow, the discrepancy between monetary sovereignty's cessation and lack of political union assumed peculiar characteristics. The sectors of international trade, competition and banking financial intermediation are strongly permeated by European denomination regulations. During the term of the Maastricht

[65] J. M. Grieco (1995). "The Maastricht Treaty, Economic and Monetary Union and the neo-realist research programme". *Review of International Studies*, 21(1), pp. 21-40.

Treaty, important political issues[66] were already subject of cooperation between European and national institutions. At the time of the single currency's introduction, the European Union did not present the characteristics of a confederation or even a federation of states, but it remained in its nature as a "new political organization".[67] In 1994, the European Monetary Institute (EMI) played an important role in structuring the future ECB. The first discipline of the European Central Bank is precisely due to the EMI: its task was to promote coordination in the monetary policies of member states and check that the European monetary system was working. On 1st June 1998, the European Central Bank (ECB) was established as the central institution of economic and monetary Union. In accordance with the provisions of the Maastricht Treaty, the European Monetary System was liquidated. On January 1, 1999 it became fully operational and responsible for the monetary policy of the Euro area. The ECB and the national central banks of all the member states of the Union constitute the European System of Central Banks. The main objective of the European System of Central Banks is to maintain price stability, while the main task of the ECB is to contain the growth of inflation and to ensure the continued stability of the currency's value.[68]

2.2 The organizational structure of the ESCB

<<The ESCB shall be governed by the decision-making bodies of the ECB>>. [69] And again, *<<the decision-making bodies of the ECB shall be the*

[66] On top of the list of big questions there was the problem related to the management of state budgets.
[67] This is how it was qualified by the jurisprudence of the Court of Justice.
[68] According to this model, the task of establishing employment levels does not fall to the European central bank. Moreover, reducing the economic differences between territories or societies is another task that does not belong to the ECB.
[69] Article 8 of the Statute of the European System of Central Banks and of the European Central Bank, *General principle.*

Governing Council and the Executive Board>>.[70] The aforementioned provisions sanction the institutionalization of the unified European monetary policy and the unification of the various national currencies, through the establishment of the European Central Bank. This implementation was the most relevant political and institutional innovation generated by the Maastricht Treaty.

2.2.1 The Governing Council of the European Central bank

The Central Bank's Governing Council is primarily responsible for European monetary policy. According to the Article 282.2 TFEU, the most important purpose of the ESCB is to ensure price stability. In fact, it determines the fundamental lines of monetary policy mainly through the regulation of interest rates. In accordance with Article 10.1 of the ESCB Statute, the Governing Council shall comprise the members of the Executive Board of the ECB and the governors of the national central banks. The system for attributing the right to vote is identified in Article 10.2 of the ESCB Statute and it varies as the overall number of euro area components changes. The current number of national central banks governors is 19 and Article 10.3 of the ESCB Statute states that: <<each Member of the Governing Council shall have one vote. Save as otherwise provided from this Statute, the Governing Council shall act by a simple majority. In the event of a tie, the President shall have the casting vote>>. The simple majority rule is an instrument to guarantee the independence of the European Central Bank from national interests. Each member is assigned only one vote, regardless of its economic size, to avoid agreements between states. In

[70] Article 9.3 of the Statute of the ESCB.

other words, the simple majority rule tends to facilitate the pursuit of the general interest rather than that of the individual member states. The Central Bank's Governing Council plays a major role in defining the basic lines of European monetary policy. Furthermore, it must make decisions related to the determination of the official interest rate, i.e. the cost incurred by commercial banks to obtain financing from the ECB. The role of the Governing Council is crucial in the restriction and expansion of monetary policies, in the supervision of the payment system and in the management of official currency reserves. In addition, it monitors the operations of the foreign exchange markets and checks that credit institutions hold a percentage of deposits in the form of a reserve requirement. In any case, national central banks continue to play an important role: they implement the directives issued by Frankfurt, collect, and analyse financial and economic information. In addition to the task of guiding the European monetary policy, the ESCB Statute assigns other relevant functions to the Governing Council. In the first place, the Governing Council is entrusted with the task of defining the autonomy of the ECB, especially through the approval of regulations that define its internal functioning. In particular, Article 12 of the ESCB Statute provides that <<the Governing Council shall adopt Rules of Procedures which determine the internal organization of the ECB and its decision-making bodies>>. Both national and European Union authorities are required to consult the ECB when drafting regulatory projects related to monetary policy. The Governing Council takes care of the opinions requested from the ECB: <<the Governing Council shall exercise the advisory functions referred to in Article 4>>.[71] In turn, Article 4 letter a) of the ESCB Statute specifies that <<the ECB shall be consulted by national authorities regarding any draft legislative provision in its field of

[71] Article 12.4 of the ESCB Statute.

competence, but within the limits and under the conditions set out by the Council in accordance with the procedure laid down in Article 42>>. Article 4 letter b) of the Statute adds that <<the ECB may submit opinions to the appropriate Community institutions or bodies or to national authorities on matters in its fields of competence. Amendments of the Statute are another role of the Governing Council: the definition of the ECB's competences affects the prerogatives of national parliaments. Peculiarly, amendments of the Statute require the involvement of the Member States' parliaments. Only in some cases, changes to the statute can be reserved to governments exclusive competences, meaning only with the adoption of the simplified procedure. More specifically, provisions governing statistical powers of the ESCB can be adopted with a simplified procedure. But again, provisions regarding the determination of income coming from the issue of money and those concerning the definition of monetary policy. In conclusion, it must be considered that the European System of Central Banks does not work in a "closed world" but develops important international relations. Once again, the responsibility of the Governing Council is to define the type of international cooperation to be undertaken. In different situations of cooperation between countries and economic systems, the ESCB's representation can be assigned to both national central banks and the ECB. Nonetheless, the ECB finds favour in the limitations of national sovereignties: <<in the field of international cooperation involving the tasks entrusted to the ESCB, the ECB shall decide how the ESCB shall be represented>>.[72] Paragraph two of the previous article adds that: <<the ECB, and subject to its approval, the national central banks may participate in international monetary institutions>>.[73] As regards the Council's responsibilities, the provisions of Article 138 TFEU remain unaffected: <<in

[72] Article 6.1 of the ESCB Statute (international cooperation).
[73] Article 6.2 of the Statute of the European System of Central Banks

order to secure the euro's place in the international monetary system, the Council, on a proposal from the Commission, shall adopt a decision establishing common positions on matters of particular interest for economic and monetary union within the competent international financial institutions and conferences. The Council shall act after consulting the European Central Bank>>. According to the following paragraph: <<The Council, on a proposal from the Commission, may adopt appropriate measures to ensure unified representation within the international financial institutions and conferences>>.[74] In this field, it can be noted that no competence can be attributed to the European Parliament.

2.2.2 The Executive Board of the European Central Bank

The Executive Committee, the second body of the ECB, is composed of the President of the ECB, the Vice-President and four other members.[75] The members of the executive committee must meet certain characteristics of competence and professionalism, summarized as follows: <<the President, the Vice-President and the other members of the Executive Board shall be appointed from among persons of recognized standing and professional experience in monetary or banking matters by common accord of the governments of the Member States at the level of the Heads of State or Government, on a recommendation from the Council after it has consulted the European Parliament and the Governing Council>>.[76] It is also considered that: <<only nationals of Member States may be Members of the

[74] Article 138.2 TFEU. Ex Article 111(4), TEC.
[75] Article 11 of the Statute of the European System of Central Banks, Paragraph 1 (The Executive Board).
[76] Art. 11.2 ESCB Statute.

Executive Board>>.[77] In Accordance with the provisions of Art. 11.1, second line, ESCB Statute, the Members of the Executive Committee <<perform their duty on a full-time basis>>. In addition, there is a general principle of incompatibility against them that assumes: <<no member shall engage in any occupation, whether gainful or not, unless exemption is exceptionally granted by the Governing Council>>. Only citizens of member states can be appointed representatives of the Executive Board and for a non-renewable period of eight years.[78] In accordance with Article 11.5 of the Statute, <<*Each member of the Executive Board present in person shall have the right to vote and shall have, for that purpose, one vote*>>. Normally, the resolutions of the executive committee are taken by simple majority and the presidential vote is decisive in the event of a tie. Moreover, <<*the voting arrangements shall be specified in the Rules of Procedure referred to in Article 12.3*>>. [79] As anticipated, this provision assigns the task of adopting Rules of Procedures <<which determine the internal organization of the ECB and its decision-making bodies>> [80] to the Governing Council. First, the Executive Board [81] is responsible for managing the current affairs of the central bank, such as internal security, IT equipment, administration, and personnel management. The Executive Board represents the link between the ECB and the national central banks. It is responsible for implementing monetary policy decisions, made by the Governing Council, and giving the national central banks the appropriate instructions. Analogously, Article 12.2 ESCB Statute states: <<the Executive Board shall have responsibility for the preparation of meetings of the Governing Council>>. It is easy to understand that it is an assignment of a certain calibre, as it can influence the

[77] Art. 11.2, third line, ESCB Statute.
[78] Art. 11.2 ESCB Statute.
[79] Last period of Article 11.5 of the ESCB Statute.
[80] Article 12.3, ESCB Statute.
[81] Article 11.6 of the ESCB Statute.

deliberations of the Board of Directors. Preparing the meetings of the Executive Board means to select the topics to be submitted to its study and to prepare all the necessary documentation. Where the Governing Council decides, specific powers may be conferred to the Executive Board.[82] The ESCB dedicates only a few, although not negligible, provisions to the President of the ECB. Obviously, the choice of the European legislator is not a random result. The ESCB is governed by collegial bodies (the Governing Council and the Executive Board), which aim to give body to the federalist spirit that informs the ECB's construction. Therefore, the President's powers are limited to the role of double presidency (of both the Governing Council and the Executive Committee)[83] and representation outside the ECB.[84] The power of attorney is further defined in Article 39 of the ESCB Statute: <<*The ECB shall be legally committed to third parties by the President or by two members of the Executive Board or by the signatures of two members of the staff of the ECB who have been duly authorized by the President to sign on behalf of the ECB*>>. In order for monetary policy to be conducted efficiently, the system that governs it must have an adequate structure. In this context, it is useful the introduction of the Eurosystem's notion, that pursuant to Article 1 ESCB Statute, is made up by the European Central Bank and the national central banks of those Member States whose currency is the euro. The overall activity of the Eurosystem is developed in two phases: the first one includes the definition and direction of monetary policy, while the second one comprises the consequent implementation. The management phase is centralized and entrusted to the care of the central bank, while the implementation phase is decentralized and falls within the competence of the various national central banks. The Eurosystem has specific characteristics

[82] Article 12.1, second line, last period, ESCB Statute.
[83] Art. 13.1 of the Statute
[84] Article 13.2 ESCB Statute.

which differentiate it from other federal-type systems, such as the US or German systems prior to the birth of the euro. Even without constituting an organ of a federal state, the European countries have renounced a segment of sovereignty and gave birth to a well-functioning system. In the division of powers between the ECB and national central banks, the legislator has appropriately considered the experiences acquired over time by the various national central banks, respecting their history and enhancing analysis skills, knowledge, and operational experience. It can therefore be iterated that, while the general direction of monetary policy is entrusted to the ECB (and more specifically to the Governing Council), a large decentralization was carried out in terms of analytical re-elaboration and operational translation of the monetary policy directives. Furthermore, there is no discontinuity between the two levels, but reciprocal and necessary integration. The summit of each national central bank is an integral part of the ECB. Moreover, the national central banks participate in central bank activities through specialized committees. These structures provide the necessary support to governors, by enabling them to participate in the deliberations of the Governing Council with full knowledge of the facts. Going more specifically, one of the competences of the national central banks is the compilation of monetary and financial statistics. National central banks are the first providers of valuable data, which is re-aggregated by the ECB and constitutes indispensable material for a correct and efficient monetary policy. The "incoming data" is produced by the individual central banks' structures, while the implementation of their translation into directives is responsibility of the individual national central banks. This attribution finds a precise textual reference in Article 12.1, ESCB Statute: <<The Governing Council shall formulate the monetary policy of the Union (…) and shall establish the

necessary guidelines for their implementation>>. [85] It provides that; <<the extent deemed possible and appropriate and without prejudice to the provisions of this Article, the ECB shall have recourse to the national central banks to carry out operations which form part of the tasks of the ESCB>>. The assignment of operational tasks to national central banks takes place on an equal level, while considering the differences in terms of size and operational capabilities. Operational decentralization must always take place <<to the extent deemed possible and appropriate>>.[86] Otherwise, in case of particular circumstances, the direct intervention of the European Central Bank is required. In some peculiar cases, there are operations that require speed and effectiveness of intervention, but that national central banks are not able to guarantee. They have to do with foreign exchange intervention through the purchase or sale of currency. Or again, the intervention on the internal liquidity of the euro area, which is relevant for the proper functioning of the payment system. In these cases, the role of the ECB becomes particularly crucial.

[85] Art. 12.1, first line, ESCB Statute.
[86] Article 12.1, third line, ESCB Statute.

Chapter 3 The Covid-19 crisis: policy responses and measures

The coronavirus crisis or COVID-19 pandemic is an anomalous and unheard-of event in the history of the world. The economic consequences brought by this phenomenon are the result of political decisions aimed at preventing a public health catastrophe. Central banks, international institutions, and supervisory authorities are facing the obscure challenges placed by these hard times with readiness and determination. The demand side is discouraged by postponements of consumer's spending, the supply side suffers a slackening in production and the financial markets are experiencing a tightening in short selling and financial conditions. The policy responses aim to avoid hardships in the real economy and in the financial markets. A further unexpected arrest in the economic activity, with reference to spending and production, together with a trauma in the functioning of the financial markets, could leave everlasting wounds. The pandemic emphasizes therefore the pre-eminent role of central banks, international organizations, and community leaders in mobilizing urgently, to manage the crisis and safeguard economic and financial stability. The extraordinary measures designed and implemented by central banks and national governments concentrate on interest rate cuts, large-scale purchases of government bonds, purchases of corporate debts, credit support for households, support provisions for small and medium-sized enterprises (SMEs), postponement of supervision deadlines, relaxation of capital requirements for banks and flexibility in international accounting rules. In these first stages of the pandemic, the policy actions are showing successes, but in the long-run boundaries must be established between the overlapping monetary and fiscal policies. The European Central bank cannot intervene directly purchasing an extensive amount of government debt for an extended

period. The objective behind policy decisions should not deviate too much or even derail from the mandates of price and financial stability. Monetary policy measures are aggressive and necessary, but because of their limits in the long run they should be implemented with extreme care. A strong intervention by the world's central banks should come from fiscal and structural policies that could boost potential growth rates, increase investments, avoiding bankruptcies of healthy corporations, and sustain global supply chains and free trade.

3.1 European Union and Member States responses

The COVID-19 pandemic[87] is imposing rising health, social and economic costs all over the world. The primary goal of governments and countries around the globe is to protect human lives and allow the functioning of health care systems. Therefore, lockdowns and widespread isolation, together with social distancing turn out to be necessary measures to delay or even prevent the spread of the virus. The creepy image of empty streets and squares as at the end of a war conflict, closed shops and bars, deserted restaurants, and hotels, overflowing hospitals with infected people, and failed companies, all wrapped in a deafening silence would leave anyone speechless. In addition, firms in different industries have slowed down or decreased production, schools have closed their doors and carried out home teachings, theatres, cinemas, and museums have cancelled concerts, film programming and events, leading to a heavy loss of earnings and income. As a direct consequence, these affected sectors are no longer able to pay their

[87] Covid-19 pandemic is the name given by the World Health Organization (WHO) to the coronavirus disease of 2019, which is caused by the "Severe Acute Respiratory Syndrome coronavirus-2" (SARS-CoV-2). It was previously known as the "2019 novel coronavirus".

employees, suppliers, creditors, banks, and governments in the form of taxes. This is the result of an unprecedented and dreadful health crisis;[88] whose impact has major repercussions on economic activity. According to an International Monetary Fund's computation, the world economy will lose $12.5 trillion compared to the growth projections made in January 2020 and it is expected to decline substantially more than the 1930s or the 2007-2009 financial crisis, that is by 3% in 2020. The International Organization has also predicted respectively a 6,1 % and a 7,5% contraction in advanced economies and in economies of the Euro area, nicknaming the coronavirus crisis "The Great Lockdown". On the other hand, the European Commission is foreseeing a Eurozone recession of 7,7%.[89] The nature and ways in which this serious slowdown will unfold, as well as the duration, depend on unpredictable factors such as: the route of the pandemic, the magnitude and effectiveness of containment measures, supply interruptions, changes in consumers' spending, alterations of financial markets state of affairs and speed in finding treatments and vaccines. Policymakers and central banks are responsible for extensively intervening with monetary, fiscal, and prudential supervisory measures, for the purpose of buffering the serious blow inflicted on the real economy and on the financial system. Besides to the uncertain end of the downturn, the outset of the recovery [90] and the projected economic growth are unknown. Again, the IMF forecasts a worldwide economic growth of 5,8% in 2021, with a 4,5% growth in advanced economies and a 6,6% growth in emerging markets and developing economies. However, a strong resumption is only possible if significant

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[88] As Senior Vice President and Chief Investment Strategist at Charles Schwab, Liz Ann Sonders, recently declared: "We have a monster mash-up of the Great Depression in size, the crash of 1987 in speed, and 9-11 attack in terms of fear".
[89] In the Spring 2020 Economic Forecast, The European Commission predicts "a deep and uneven recession, and an uncertain recovery".
[90] It is not possible to predict whether the economic recovery will be a V-shaped, U-shape or L-shaped.

policy actions are deployed across the world. Citizens of every nation and culture have been trapped in a long period of quarantine and regional lockdowns. The uncertainty and fear of contagion caused many layoffs and workplace closures, especially in the aviation, transport, travel, tourism, hospitality, and entertainment sectors. This plight therefore represents an opportunity for politicians, legislators, and decision-makers to rekindle the faith in workers, employers, households, companies, the real economy, and finance through sound and concrete help.[91] There must be forceful, collective and integrated actions both nationally, at European and international level.[92] The majority of operations, like public health and national security policies, are taken at national level,[93] but a great deal of work is going ahead at the European level. For example, the European Central bank has set up a series of monetary and fiscal policy measures to placate the impact of the coronavirus on the euro area economy. The European Commission set in motion for the first time the Stability and Growth Pact's General Escape Clause, helping the neediest Member States with unparalleled fiscal and financial power. In order to bolster the health care system, an Emergency Support Instrument (ESI) and a rescEU medical equipment capacity were advanced. On 13 March 2020, the Commission also came up with the Coronavirus Response Investment Initiative (CRII). It has a dual purpose: on one hand it empowers Member States in supporting small businesses with liquidity and short-term work schemes, while on the other it helps professionals and health care systems through the Cohesion and Policy Fund. Public health emergencies were also dealt with the protraction of the EU

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[91] Providing and distributing medical and protective equipment, making sure businesses stay afloat and people have job and livelihood, granting access and food and other basic needs to the most disadvantaged and financing research for vaccines.
[92] According to Elke König (Chair of the Single Resolution Board), covid-19 forces us to be physically isolated, but only cooperation will help us get through these difficult challenges.
[93] According to some IMF's reckoning, national governments have already spent £8 trillion in the form of fiscal actions and broadly speaking 8000 billion to limit the crisis.

Solidarity Fund. Likewise, a new EU-wide programme, called SURE, was proposed to preserve workers from losing their jobs or incomes and make sure businesses keep their personnel. The ECB alleviated the clauses on longer-term refinancing operations (LTROs) and targeted longer-term refinancing operations (TLTRO III). Moreover, it introduced novel pandemic emergency longer-term refinancing operations (PELTROs) to supply higher liquidity to banks, firms, and households. To make matters better, the Central Bank of the European Union promoted a pandemic emergency purchase programme (PEPP) to push down cost of financing, while extending and intensifying lending in the Eurozone. Lastly, the ECB enlarged the set of assets that can be used as collaterals by banks, attenuating their acceptance thresholds and incrementing the volume of borrowing money. The Eurogroup agreed on the creation of the "Recovery Fund", an innovative financial instrument that lends money to corona-annihilated economies. Another contribution from the Eurogroup concerns the foundation by the European Investment Bank (EIB) of a pan-European guarantee fund, which allows small and medium-sized enterprises to access bank credit. Finally, not Eurobond or Corona bonds but a Pandemic Crisis Support called European Stability Mechanism (ESM) was established by the Eurogroup. Through this credit line, Eurozone countries can borrow money to restore their health care systems and economies. The strict monetary and fiscal policies have also been accompanied by regulatory and supervisory measures, fundamental to safeguard the stability and resiliency of the financial system. The exceptional context generated by the covid-19 crisis points out how important it is the evolution of reforms at the EU level. We need to progress with the completion of the Banking Union (a common deposit insurance scheme), the realization of the Capital Markets Union, the creation of a stronger centralised fiscal policy and the adequate functioning of a common resolution framework for banks. From the regulatory point of

view, the European Banking Authority (EBA) is spurring supervisory authorities to use capital and liquidity buffers, granted by the Capital Requirements Regulation, with elasticity. Differently, on the supervisory side the European Commission together with EBA is supporting small and medium-sized enterprises through the attenuation of International Financial Reporting Standards (IFRS 9) and the postponement of the leverage ratio's application to 1 January 2023. Other measures taken by EU financial regulators (ECB, EBA, ESMA, EIOPA) are postponements of supervision deadlines, imposition of short-selling limits, interruption of dividends distribution, share buybacks, bonuses allotments and finally flexibility in non-performing loans evolution. It is truly remarkable the magnitude and quickness with which the European Central Bank, National Authorities, regulators, and supervisors are stepping in the global crisis; the purpose of all these measures is to guarantee and witness that the economic crisis does not disclose into a financial crisis.

3.2 The ECB support to the Euro Area economy

The advancing Covid-19 pandemic proved to be an unequalled event with dire social and economic repercussions around the world. At the global level, the economic policy interventions[94] were swift and abundant: governments, central banks and international organizations combined a considerable amount of fiscal policy measures, monetary policy measures, and provisions related to financial stability, such as micro and macro-prudential banking supervisory regulations. Although the content of the measures was practically the same all over the world, there was no active international

[94] See R. Baldwin and B. Weder di Mauro (2020). *Economics in the Time of COVID-19*. In: Center for Economic Policy Research (CEPR), a VoxEU.org Book.

cooperation and no effective coordination among states. Every country acted following its own operational strategy, thus showing less cohesion and compactness in solving problems of common interest. The way of dealing with negative situations was completely different in the past. For instance, during the 2007-2009 Global Financial Crisis (GFC), government representatives addressed the economic downturn with solid, incisive, and unanimous decisions. In addition, the heads of states, together with international financial bodies such as the Financial Stability Board (FSB), the Basel Committee on Banking Supervision and the International Organisation of Securities Commission (IOSCO) acted collectively and uniformly compared to the current pandemic crisis. The question that naturally comes to mind is why in the past the interventions were more dynamic and supportive, while in the present days they are less integrated, harmonized and collaborative. The reason is that times have changed, the nature of the two crisis is different, and so peculiar measures and divergent methods are required to intervene in distinctive situations. The two events originated in a distinct fashion and are currently placed in different contexts: the Covid-19 crisis is a pure "black swan" erupted because of a health emergency, while the great financial crisis was caused through the failure of the banking sector. Moreover, in the past crisis the prevailing concern was the bailout of banks. While today, credit institutions have increased their capitalization and liquidity with the Basel III agreements,[95] and the attention has shifted and focused on saving companies within the real economy. In the European Union,[96] with respect to the above-mentioned global and

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[95] C. Gortsos (2019). *The Evolution of European (EU) Banking Law under the Influence of (Public) International Banking Law: A Comprehensive Overview (Second Fully updated edition)*. Available at SSRN: https://ssrn.com/abstract=3334493, pp. 60-63, 94-96, 105-124.

[96] Busch, D. (2020). "Is the European Union going to help us overcome the COVID-19 crisis?". *Capital Markets Law Journal*, 15(3), pp. 347-366.

international point of views, the 27 Member States arranged and implemented the total amount of measures in a unified and collaborative way. Even if the level of cooperation was not flawless and superlative, the EU community considered and envisaged the possibility of a country's bankruptcy, with consequent and plausible repercussions in the correlated Euro area economies. Following this line of thought, through the principle of solidarity,[97] they pledged to help each other, with particular attention to the most trouble EU countries, and to restore confidence wherever it was lost. The measures,[98] projects and proposals launched by all countries involved in the crisis and presented by the European Central bank encompass four areas of action: 1) support the health care system 2) sustain and preserve the real economy and employment 3) protect monetary and financial stability and finally 4) pave the way to recovery. Shortly, I will analyse this schedule of measures; Some of the economic supports will last until the end of the coronavirus crisis and will be removed later on, others will continue functioning in the medium to long run. The first ECB's field of action regards the provision of financing to meet public health expenditures and necessities. The second noteworthy support has to do with the supply of funding for businesses within the real economy, above all for small and medium-sized enterprises. The European Central Bank, by means of monetary policies, and thanks to an ingent set of prudential banking rules,[99] wanted to influence banks to implicitly lend out to firms and households, in such a way to keep the real economy afloat and to avoid the emergence of imbalances, or even financial uncertainties and vulnerabilities. Furthermore, substantial

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[97] Christos Gortsos (2020). *The EU Policy Response to the Current Pandemic Crisis through the Lens of the Eurogroup Report of 9 April 2020: Overview and Assessment* (Cut-Off Date: 14 April 2020). Available at SSRN: https://ssrn.com/abstract=3579010.
[98] C. V. Gortsos and W. G. Ringe (2020). "*Pandemic crisis and Financial Stability*". European Banking Institute (EBI), Frankfurt.
[99] Examples of micro and macro prudential banking regulations are the relaxation of capital requirements and liquidity buffers.

measures were advanced and enforced to keep the employment sector alive, while the third area of aid includes measures to guide and reinforce the economy's recovery.

3.2.1 Fiscal policy measures

The European Central Bank is an official institution with a dual role: on one side it is a monetary authority that implements monetary policy decisions within the Euro system. On the other side, it is a banking supervisory authority, which operates in close collaboration with the European Banking Authority (EBA) in applying micro and, especially, macro-prudential regulations. From now on, all sorts of measures implemented by the ECB will be presented: fiscal policy measures, monetary policy measures and prudential supervision measures. Regarding fiscal measures,[100] the European Central Bank has proved to be flexible in its application, but also adaptable in the installation of already existing mechanisms and in the formulation of new instruments. The multitude of fiscal measures and rules consists of:

1) Activation of the general escape clause of the Stability and Growth Pact (SGP).[101]

In a video message[102] of March 20, 2020, the European Commission judged that the conditions to activate the general escape clause, that is a severe economic downturn in the Euro area or the European Union as a whole, are

[100] C. Hadjiemmanuil (2020). "European economic governance and the pandemic: Fiscal crisis management under a flawed policy process". In: C. V. Gortsos, *Pandemic Crisis and Financial Stability*. European Banking Institute, pp. 175-243.
[101] Brussels, 20.03.2020. COM (2020) 123 final. Communication from the Commission to the Council on the activation of the general escape clause of the Stability and Growth Pact.
[102] Council of the European Union (2020). *Statement of EU ministers of finance on the Stability and Growth Pact in light of the COVID-19 crisis*. Available at: https://www.consilium.europa.eu/en/press/press-releases/2020/03/23/statement-of-eu-ministers-of-finance-on-the-stability-and-growth-pact-in-light-of-the-covid-19-crisis/.

met. The purpose of this intervention is not to suspend the procedures of the Stability and Growth Pact; the aim is to allow the European Commission and the European Council to undertake economic policy instruments and measures to respond adequately to the crisis, while departing from the budgetary obligations that would normally apply under the European framework of the Pact. The clause[103] was introduced in 2011 as part of the "Six-Pack" reform of the Stability and Growth Pact and takes into account the teaching left by the last economic and financial crisis. Past events have emphasized the importance of peculiar provisions in the EU's fiscal rules to deviate from the normal requirements for all Member States and to tackle the crisis in a Semester of necessary policy coordination.[104] The Stability and Growth Pact is founded on two pillars: the preventive arm and the corrective arm. Articles 5(1), 6(3), 9(1) and 10(3) of Council Regulation (EC) 1466/97 constitute the preventive arm, while Articles 3(5) and 5(2) of Council Regulation (EC) 1467/97 incorporate the corrective plan. According to the preventive procedures, the general escape clause allows Member states to undertake budgetary measures to deal appropriately to such situation, as explicitly stated in Articles 5(1) and 9(1) of Regulation (EC) 1466/97: <<in periods of severe economic downturn for the euro area or the Union as a whole, Member States may be allowed temporarily to depart from the adjustment path towards the medium-term budgetary objective, provided that this does not endanger fiscal sustainability in the medium term>>. Instead about corrective provisions, namely Articles 3(5) and 5(2), the Council may also decide, at the suggestion of the Commission, to adopt an overhauled fiscal route. In summary, the activation of the general escape

[103] The general escape clause is established in Articles 5(1), 6(3), 9(1) and 10(3) of Council Regulation (EC) 1466/97, and also in Articles 3(5) and 5(2) of Council Regulation (EC) 1467/97 to facilitate the coordination of budgetary policies in times of severe economic downturn.

[104] The Semester was introduced on November 16, 2011, by the Council Regulation (EU) No 1175/2011. The latter amended Council Regulation (EC) 1466/97.

clause of the SGP gives the opportunity to ensure coordination in establishing guidelines to achieve an adequate budgetary position and protect European citizens and firms while tackling the Covid-19 enemy.

2) Adoption of a Temporary Framework for state aids.[105]

The first proposal communicated on March 20, 2020, was followed by another proposition: the Commission's endorsement of a temporary framework for State aid,[106] in order to publicly support companies and even guide credit institutions.[107] The Communication has been amended twice: the first time on April 3, 2020, to expand the Temporary Framework to research and field testing, while the second time on May 8, 2020 to design measures[108] in the fight against the coronavirus crisis.

3) Endorsement of the Coronavirus Response Investment Initiative (CRRI).

Starting from 1st April 2020, the European Parliament and the European Council rapidly endorsed two packages of measures, namely the Coronavirus Response Investment Initiative[109] and the Coronavirus Response Investment Initiative Plus (CRII+).[110] The set of measures just mentioned was advanced by the European Commission to help Member States overcome the current disease and its economic consequences. In particular, the money made available, which derived from unspent reserves of the European budget, provided instant liquidity necessary for spending in the healthcare, to support SMEs working capital and to underpin the labour

[105] The Temporary Framework for State aid is based on Article 107(3)(b) of the Treaty on the Functioning of the European Union.
[106] Communication on "Temporary Framework for State aid measures to support the economy in the current COVID-19 outbreak".
[107] The temporary framework is aimed also to credit institutions with extraordinary public financial support in the form of liquidity and recapitalisation.
[108] Recapitalization measures and subordinated debt for credit institutions.
[109] At the end of July 2020, a total of 26 EU countries put into place the CRRI.
[110] At the end of July, 18 Member States upheld a total amount of 97 programme amendments.

market. The first package of measures included €8 billion of immediate support and the advancement of €38 billion of public investment. Likewise, the package contained €28 billion of unallocated Cohesion funds within the 2014-2020 Cohesion policy programmes.[111] On April 2, 2020, the second package of measures[112] was put forward to integrate and complete the first project with the full mobilisation of the unused European Structural and Investment Funds.[113] Furthermore, the CRRI+ package extended the support of the Funds, allowed the transfer of money between the three cohesion funds and the simplification in amending and implement operational programmes.

4) Allocation of the European Solidarity Fund (EUSF).

The EU Solidarity Fund was established in 2002,[114] because of the floods that occurred in Central Europe. It was set up to express solidarity to those European regions which were severely hit by natural disasters. Since summer 2002, the fund has been used to help 24 countries for a total amount of €5 billion and has responded to a range of 80 calamities covering catastrophic incidents, such as floods, earthquakes, storms, forest fires and droughts. On 1 April 2020, the EUSF has been broadened to include and support major public health emergencies,[115] with an aid of more than €800 million.

5) Adoption of a "dedicated Covid-19 instrument".[116]

[111] Cohesion policy rules facilitate Member States in the use of funds to meet Covid-19 related expenses.

[112] The second package of measures entered into force on April 24, 2020.

[113] There are three cohesion policy funds: the European Regional Development Fund, the European Social Fund, and the Cohesion Fund.

[114] Council Regulation (EC) No 2012/2002 of 11 November 2002 establishing the European Union Solidarity Fund.

[115] Regulation (EU) 2020/461 of the European Parliament and of the Council of 30 March 2020 amending Council Regulation (EC) No 2012/2002 in order to provide financial assistance to Member States that are seriously affected by a major public health emergency.

[116] Financial support in the EU health care systems in response to the coronavirus crisis.

Following Article 122[117] of the Treaty on the Functioning of the European Union (TFEU), the Council adopted two instruments to support Covid-19 emergencies. Indeed, Article 122(1) TFEU clearly states: <<the Council, on a proposal from the Commission, may decide, in a spirit of solidarity between Member States, upon the measures appropriate to the economic situation, in particular if severe difficulties arise in the supply of certain products>>.[118] The first measure was created to provide grants and financial aids to the EU healthcare systems. On 14 April 2020, the Council adopted Regulation[119] (EU) 2020/521 to activate the emergency support under Regulation[120] (EU) 2016/369 and amend its provisions regarding the Covid-19 pandemic.

6) Adoption of the Support to mitigate unemployment risks in an emergency (SURE).

On 19 May 2020, the Council adopted the second instrument set up to finance EU Member States, following Regulation[121] (EU) 2020/672. The instrument, under Article 122(1)-(2) TFEU,[122] provides financial support through loans granted on auspicious conditions and lasts until the end of the of the crisis. The European Union lends up to 100 million euros to Member States, in order to protect workers and jobs in the employment sector.

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[117] OJ C 326,26.10.12, p. 98-98.

[118] Article 122(1) TFEU, (ex-Article 100 TEC).

[119]"Council Regulation (EU) 2020/521 of 14 April 2020 activating the emergency support under Regulation (EU) 2016/369, and amending its provisions taking into account the COVID-19 outbreak". OJ L 117, 15.4.2020, p. 3-8.

[120]"Council Regulation (EU) 2016/369 of 15 March 2016 on the provision of emergency support within the Union". OJ L 70, 16.3.2016, p. 1-6.

[121] "Council Regulation (EU) 2020/672 of 19 May 2020 on the establishment of a European instrument for temporary support to mitigate unemployment risks in an emergency (SURE) following the COVID-19 outbreak". OJ L 159, 20.5.2020, p. 1-7.

[122] Article 122(1) TFEU specifies the EU financial assistance to Member States, while Article 122(2) pays attention to the planning and administration of the lending plan.

7) Enforcement of the Pandemic Crisis Support[123] by the ESM.

On 9 April 2020, the Eurogroup proposed the foundation of a Pandemic Crisis Support,[124] as a means of responding to the Covid-19 crisis. It consists of a credit line worth €540 billion available to all euro area Member States. On May 15, 2020, the European Stability Mechanism (ESM)[125] Board of Governors activated the above-mentioned instrument, with the aim of financially supporting euro area countries[126] in dealing with direct healthcare expenses and indirect Covid-19 related costs.

8) Establishment of the Pan-European Guarantee Fund (EGF)[127] by the European Investment Bank.

The Pan-European Guarantee Fund[128] was created by the EIB Group to tackle both the health and economic consequences of the Covid-19 pandemic. It consists of a €25 billion fund to help small and medium sized companies (SMEs) have sufficient short-term liquidity. The goal is to increase the support up to €200 billion, in order to guarantee the growth and development of companies in the medium and long term.

9) Creation of the Recovery Fund.[129]

On 21 July 2020, the President of the EU Council Charles Michel announced on Twitter that the 27 Member States finally reached an agreement

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[123] The credit line follows the provisions of the ESM Treaty, which are adapted to the nature of the pandemic crisis and will be available until the end of 2022.
[124] The Pandemic Crisis Support provides financial assistance, through loans or by purchasing government bonds, to all Euro Member States.
[125] It is the highest decision-making body in the European Union, composed of 19 Euro area finance ministers.
[126] The credit line grants a guarantee of 2% of the respective Member States' gross domestic product (GDP) as of end-2019.
[127] The EGF forms part of the comprehensive measures recognized by the Eurogroup on 9 April 2020 and endorsed by the European Council on 23 April 2020.
[128] The Pan-European Guarantee Fund was arranged on 26 May 2020 and now it is in place until 31 December 2021.
[129] The Recovery Fund is an instrument of macroeconomic crisis management necessary to help hard-hit countries.

concerning the content of the Recovery Fund.[130] After four days of negotiations, EU leaders finally reached an epochal deal[131] on a €750 billion plan to soften the coronavirus-induced economic downturn. Approximately €390 billion of the total amount, borrowed in the financial markets, will be distributed in the form of grants, while the remaining €360 billion in the form of loans. The biggest recipient of the Recovery fund will be Italy, with €209 billion in aids,[132] followed by Spain with €140 billion.[133]

10) Introduction of stability bonds (Eurobonds or Coronabonds).[134]

Stability bonds, also called Eurobonds, were first proposed in 2011 to tackle the European sovereign debt crisis and were subsequently requested in March 2020[135] with the epithet of "Coronabonds" to respond to the Covid-19 pandemic. They are common debt instrument issued to EU's Member States in order to obtain credit at favourable conditions and strengthen eurozone economies. Nine EU countries, namely Italy, Spain, France, Greece, Portugal, Ireland, Slovenia, Belgium and Luxembourg demanded the sharing of European national debts, but the main opponents[136] (Germany,[137] together with Austria, Finland and the Netherlands) rejected the issuance of such instruments. The reason for the decline of these bonds by the German government is the plausible incompatibility with Article 125 TFEU on the "bail out clause".[138] Shortly, Article 125 asserts that EU

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[130] J. Brunsden, S. Fleming and M. Khan (2020). *EU recovery fund: how the plan will work*. Financial Times, 21/07/2020.
[131] B. Hall (2020). *Two cheers for Europe's €750 billion recovery fund.* Financial Times, 21/07/2020.
[132] Of the entire sum, €81 billion will be in grants and €127 billion in repayable loans.
[133] Italy and Spain are the countries most affected by the pandemic and economic setback.
[134] Eurobonds and Coronabonds are debt mutualisation instruments; their low interest rates would avoid hitting countries with high public debt even more.
[135] On 26 March 2020, Germany and the Netherlands excluded the issuance of Coronabonds.
[136] They are also known as the "Frugal Four" and have no interest in paying a portion of risk of third country insolvency.
[137] Germany asserted that EU Member States should keep their finance adjusted, instead of asking the issuance of common debt.
[138] (ex Article 103 TEC) OJ C 326, 26.10.2012, p. 99-99.

Member states cannot take on the debts of other EU countries. However, it does not rule out the possibility that Member States bail out other countries by simply lending to them, neither there is no clause prohibiting loans restructuring. States generally spend more than they collect and this difference between income and expenditure is the so-called deficit. The taxes paid by citizen and businesses are not enough to support public spending and therefore countries borrow money in the financial markets. For this purpose, each nation issues government bonds, which are purchased by households and institutional investors, such as banks, investment funds, insurance companies and so on. Subsequently, the State must pay the amount borrowed[139] plus interest, which changes based on a country's credit risk. The more solid a country is, the less interest it will have to pay. Instead, countries that have a high public debt, such as Italy,[140] pay higher interest rates because their bonds are considered riskier. In this particular context, the introduction of Coronabonds would have been a panacea. The hypothetical European government bonds guaranteed by all the countries of the Union would be fundamental, with their low interest rates, in avoiding the increase of public debt in certain EU countries. Unfortunately, they are invoked as "saviors of the economy" in times of crisis, but risk not being implemented. Their introduction, that pools the accumulated debts of European countries, was never finalized in the past and hardly will be, until Europe establishes a single tax system.

[139] The amount of money that the State must return to lenders and bondholders is called public debt.
[140] In 2019, the Italian public debt was €2.409 billion, equal to 134% of GDP and it is expected to increase by 160% of GDP.

3.2.2 Monetary policy measures

The ECB has been very operative and effective since the beginning of the Covid-19 crisis. On March 19, 2020, the president of the European Central Bank, Christine Lagarde, said on a Twitter post: "*Extraordinary times require extraordinary action. There are no limits to our commitment to the euro. We are determined to use the full potential of our tools, within our mandate*". And so it was, the ECB disclosed a considerable number of measures, ranging from granting loans to intensifying the purchases of government debt. Due to the inevitable economic consequences across the Euro area, the ECB intervened with dauntless monetary policy:[141] both conventional monetary policy measures (general framework) and unconventional monetary policy measures (temporary framework). The aim was to guarantee an unbroken provision of credit to the EU economies and to cushion the negative effects of the crisis with financial support measures. The provisions were adopted following the Eurosystem's primary objective,[142] namely price stability, and the transmission mechanism of monetary policy.[143] The list of conventional monetary policy measures coming from the European Central Bank include:

1) Establishment of key interest rates.[144]

On 18 September 2019, the ECB Governing Council fixed the interest rates of the main transactions: -0,50% for the deposit facility, 0% for the main refinancing operations, 0,25% for the lending facility.

2) Establishment of swap lines.

[141] C. V. Gortsos and W. G. Ringe (2020), op. cit., pp.286-297.
[142] The primary objective of the ESCB is formulated in the first line of Article 127(1) TFEU.
[143] It is the process through which monetary policy decisions affect the economy. In addition, it identifies the factors driving price trends.
[144] The Governing Council of the European Central Banks foresees that they will remain constant or will reach lower levels that coincide with the target inflation level of almost 2%.

On March 15, 2020, the ECB announced that it was ready to offer foreign currencies to banks in the euro area. The established swap lines with the Federal Reserve, allowed the European central bank to provide weekly US dollar operations for a total amount of $130 billion.

3) Adoption of a third series of targeted longer-term refinancing operations (TLTRO-III).

On 16 March 2020,[145] the European Central Bank, amending Decision (EU) 2019/1311,[146] adopted a third series of targeted longer-term refinancing operations to support credit institutions in granting loans to SMEs. The ECB Governing Council changed three criterions of TLTRO III: modified the financing limit, increased the borrowing limit from 30% to 50% and allocated an early reimbursement option[147] for borrowings obtained 12, and not 24, months after the settlement. In addition, on April 30, 20, was announced by Decision[148] (EU) 2020/614 a further temporary decrease in interest rates attached on TLTROs-III.

4) Implementation of the Eurosystem monetary policy framework and the valuation haircuts.

On April 7, 2020, the Governing Council endorsed Decision[149] (EU) 2020/506 to amend the guidelines on the implementation of the Eurosystem monetary framework and the valuation haircuts applied to it. The objective

[145] Decision (EU) 2020/407 of the European Central Bank of 16 March 2020 amending Decision (EU) 2019/1311 on a third series of targeted longer-term refinancing operations (ECB/2020/13). OJ L 80, 17.3.2020, p. 23–24.

[146] Decision (EU) 2019/1311 of the European Central Bank of 22 July 2019 on a third series of targeted longer-term refinancing operations (ECB/2019/21). OJ L 204, 2.8.2019, p. 100-122.

[147] Only from September 2020.

[148] Decision (EU) 2020/614 of the European Central Bank of 30 April 2020 amending Decision (EU) 2019/1311 on a third series of targeted longer-term refinancing operations (ECB/2020/25). OJ L 141, 5.5.2020, p. 28-36.

[149] Decision (EU) 2020/506 of the European Central Bank of 7 April 2020 amending Guideline (EU) 2015/510 on the implementation of the Eurosystem monetary policy framework and Guideline (EU) 2016/65 on the valuation haircuts applied in the implementation of the Eurosystem monetary policy framework (ECB/2020/20). OJ L 1091, 7.4.2020, p. 1-6.

of the first amendment to Guideline[150] (EU) 2015/510 was to advance temporary measures necessary to relax the rigid collateral selection and eligibility criteria, and in so doing allow participants obtain liquidity. For example, according to the amended Article 93,[151] the credit claim submitted by the applicant must be of a minimum amount, or larger, established by the home-country central bank.[152] Instead, according to Article 141, paragraph 1,[153] the percentage limit for uninsured debt instruments passed from 2,5% to 10%. Moreover, the aim of the second amendment to Guideline[154] (EU) 2016/65 was to provisionally take more risks in providing credit. Especially, the valuation haircuts attached to collaterals were decreased by a fixed amount.[155] For instance, a downward valuation of 4% was applied to asset-backed securities, covered bonds and unsecured debt instruments. A further valuation haircut of 6,4% was applied to debt instruments with a credit quality levels 1-2, a 9,6% valuation haircut to covered bonds with a credit quality step 3, and finally a valuation haircut of 25,2% to non-marketable retail mortgage-backed debt instruments.[156]

The European Central Bank implemented a wide range of conventional monetary policy measures in line with the "General framework" of the Eurosystem legal framework for monetary policy instruments. In addition, it put into force an array of unconventional monetary policy measures in compliance with the "Temporary Framework" to support the economy in the

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[150] Guideline (EU) 2015/510 of the European Central Bank of 19 December 2014 on the implementation of the Eurosystem monetary policy framework (ECB/2014/60). OJ L 91, 2.4.2015, p. 3-135.
[151] Amendment to Guideline (EU) 2015/510 (ECB/2014/60), Article on "Minimum size of credit claims".
[152] The credit claim minimum size is €0, while it is €500 000 for transnational usage.
[153] Amendment to Guideline (EU) 2015/510 (ECB/2014/60).
[154] Guideline (EU) 2016/65 of the European Central Bank of 18 November 2015 on the valuation haircuts applied in the implementation of the Eurosystem monetary policy framework (ECB/2015/35). OJ L 14, 21.1.2016, p. 30-35.
[155] It is referred to Article 2(1) of the Decision (EU) 2020/506 amending Guideline (EU) 2016/65 (ECB/2015/35).
[156] Article 4(2) of the Decision (EU) 2020/506.

light of the serious pandemic crisis. The agenda of the unconventional monetary policy measures includes:

1) Creation of the Pandemic Emergency Purchase Programme (PEEP).

On March 12, 2020, the ECB spread lockdown measures in a multitude of Eurozone countries and cut the rate of its targeted longer-term refinancing operations and LTROs by 25 basis points below the deposit rate. On 25 March 2020, the ECB executed the €750 billion Pandemic Emergency Purchase Programme, established in Decision (EU) 2020/440.[157] The programme, based on Article 1(3) of the Decision (EU) 2020/440, allows Euro area central banks to buy specific type of assets. The extraordinary purchases by the European Central Bank are realized considering the exceptionality of the measures and the mandate's observance. The first category of assets includes, in accordance with Decision[158] (EU) 2020/187, eligible covered bonds. The second type of assets encompasses, in correspondence with Decision (EU) 2020/188,[159] eligible marketable debt securities. The third one comprises, in accordance with Decision (EU) 2016/948,[160] eligible corporate bonds and other marketable debt instruments, while the last one, based on Decision[161] (EU) 2015/5, embraces eligible asset-backed securities. In addition, there is an eligibility criterion according to which marketable debt securities must have a residual expiration date of

[157] Decision (EU) 2020/440 of the European Central Bank of 24 March 2020 on a temporary pandemic emergency purchase programme (ECB/2020/17). OJ L 91, 25.3.2020, p. 1-4.
[158] Decision (EU) 2020/187 of the European Central Bank of 3 February 2020 on the implementation of the third covered bond purchase programme (ECB/2020/8). OJ L 39, 12.2.2020, p. 6-11.
[159] Decision (EU) 2020/188 of the European Central Bank of 3 February 2020 on a secondary markets public sector asset purchase programme (ECB/2020/9). OJ L 39, 12.2.2020, p. 12-18.
[160] Decision (EU) 2016/948 of the European Central Bank of 1 June 2016 on the implementation of the corporate sector purchase programme (ECB/2016/16). OJ L 157, 15.6.2016, p. 28-32.
[161] Decision (EU) 2015/5 of the European Central Bank of 19 November 2014 on the implementation of the asset-backed securities purchase programme (ECB/2014/45). OJ L 1, 6.1.2015, p. 4-7.

at least seventy days and at most thirty years at the time of purchase.[162] Furthermore, the allocation of their net purchases is based on the corresponding NCB's subscription to the ECB' s capital. In a nutshell, purchases are carried out in a flexible way across asset classes, among jurisdictions and over time. To conclude, on 4 June 2020, the Governing Council established to increase the PEPP's amount to €1,350 billion in order to facilitate the monetary policy framework and support households and businesses in the real economy. The programme was extended until June 2021, while the Governing Council will continue the asset purchases until the end of the crisis.[163] Thanks to the granting of favourable interest rates, on 20 June 2020, the GC communicated the continuation of the asset purchase programme (APP) with an amount of €20 billion per month, and it will only end when key ECB interest rates go up.[164] In addition, under the Asset Purchase Programme (APP), the ECB announced the purchase of €120 billion[165] in government, regional and local bonds, covered bonds, corporate bonds, and asset-backed securities.

2) Amendment of the corporate sector purchase programme (CSPP).[166]

The ECB extended, in accordance with Decision (EU) 2020/441,[167] the field of eligible assets to non-financial commercial papers, thus allowing the purchase of all those with a minimum credit quality.

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[162] The admission of assets with an expiration date of 364 days and 30 years is only to simplify implementation.
[163] European Central Bank, (2020). *Monetary Policy Decisions.* In: ECB Press Release, points (1) and (2). Available at: https://www.ecb.europa.eu/press/pr/date/2020/html/ecb.mp200604~a307d3429c.en.html.
[164] European Central Bank (2020), op. cit., point (4).
[165] The €120 billion are additional to the €20 billion that the ECB has been spending every month since even before the outbreak of the coronavirus.
[166] The CSPP is part of the expanded asset purchase programme (APP), together with the third covered bond purchase programme, the asset-backed securities purchase programme, and the secondary market public sector purchase programme.
[167] Decision (EU) 2020/441 of the European Central Bank of 24 March 2020 amending Decision (EU) 2016/948 of the European Central Bank on the implementation of the corporate sector purchase programme (ECB/2020/18). OJ L 91, 25.3.2020, p. 5-6.

3) Introduction of additional temporary measures relating to Eurosystem refinancing operations and eligibility of collateral.

On 7 April 2020, the ECB approved Guideline[168] (EU) 2020/515 to soften the detrimental impact of bad credit ratings on collateral eligibility. The aim of the legal provision is to loosen the strict eligibility criteria attached to collaterals, and in so doing give all applicants the opportunity to receive liquidity. Moreover, the Governing Council decided to mitigate the dire consequences derived from the pandemic crisis on Greek financial markets. However, the measures identified in the amendments are temporary and their extension must be evaluated on a continuous basis until the end of the year to guarantee the proper functioning of the monetary policy transmission mechanism. Again, on 7 April 2020, the European Central Bank adopted Guideline[169] (EU) 2020/634. The aim of the measure was again: << to mitigate the adverse impact on Eurosystem collateral availability of potential rating downgrades resulting from the economic fallout of the COVID-19 outbreak and to ensure that Eurosystem counterparties remain able to maintain and mobilise sufficient collateral in order to be able to participate in Eurosystem liquidity-providing operations, and that therefore the Eurosystem is in a position to support the provision of credit to the euro area economy>>.[170] In addition, the EU GC declared that: <<the Eurosystem may temporarily continue to admit as collateral marketable assets and the issuers of these assets that fulfilled minimum credit quality requirements on 7 April 2020 notwithstanding a deterioration in the credit ratings decided by the credit rating agencies accepted in the Eurosystem, as long as the ratings

[168] Guideline (EU) 2020/515 of the European Central Bank of 7 April 2020 amending Guideline ECB/2014/31 on additional temporary measures relating to Eurosystem refinancing operations and eligibility of collateral (ECB/2020/21). OJ L 110I, 8.4.2020, p. 26-29.
[169] Guideline (EU) 2020/634 of the European Central Bank of 7 May 2020 amending Guideline ECB/2014/31 on additional temporary measures relating to Eurosystem refinancing operations and eligibility of collateral (ECB/2020/29). OJ L 148, 11.5.2020, p. 10-15.
[170] Guideline (EU) 2020/634, point (2).

remain above a certain quality level>>[171] and that << they should apply until the first early repayment date under the third programme of targeted longer-term refinancing operations (TLTRO-III)>>.[172]

4) Extension of deadlines for the reporting of statistical information.

On 15 April 2020, the ECB announced, in accordance with Regulation[173] (EU) 2020/533, the extension for a certain period of the deadlines for statistical information's reporting. In this regard, the Executive Board was appointed to extend the deadlines to specific activities: payment statistics,[174] statistical reporting requirements for pension funds[175] and insurance companies.[176] In addition, the Executive Board had to consider the exigency of data collection, the frequency of reporting and the transmission of statistical information from national central banks to the European Central Bank.[177]

3.2.3 Micro and Macro-prudential supervisory measures

In addition to playing a fundamental role as monetary authority in the definition and implementation of monetary policy strategies for the euro area, the ECB has the power to further fulfil its mandate ensuring the stability

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[171] Guideline (EU) 2020/634, point (4).
[172] Guideline (EU) 2020/634, point (5).
[173] Regulation (EU) 2020/533 of the European Central Bank of 15 April 2020 on the extension of deadlines for the reporting of statistical information (ECB/2020/23). OJ L 119, 17.4.2020, pp. 15-17.
[174] Regulation (EU) No 1409/2013 of the European Central Bank of 28 November 2013 on payments statistics (ECB/2013/43). OJ L 352, 24.12.2013 p. 18-44.
[175] Regulation (EU) 2018/231 of the European Central Bank of 26 January 2018 on statistical reporting requirements for pension funds (ECB/2018/2). OJ L 45, 17.2.2018, p. 3-30.
[176] Regulation (EU) No 1374/2014 of the European Central Bank of 28 November 2014 on statistical reporting requirements for insurance corporations (ECB/2014/50). OJ L 366, 20.12.2014, p. 36-76.
[177] Regulation (EU) 2020/533 (ECB/2020/23), Article 1(8).

of the financial system as a banking supervisory authority. The European Central Bank provided, in accordance with Regulation[178] (EU) No 575/2013 and Directive 2013/36/EU,[179] flexibility to activities associated with the prudential supervision of credit institutions and investment firms. In the capacity of banking supervisory authority within the SSM and thanks to Council Regulation (EU) No 1024/2013, the ECB adopted specific banking supervisory measures to encourage credit institutions to lend out to families and businesses. In challenging and uncertain times like the present one, stemming from the coronavirus crisis, flexibility turns out to be the best remedy. In this regard, the ECB adopted measures concerning the relaxation of capital and liquidity buffers, the analysis of non-performing loans (NPLs) with the help of the European Banking Authority, the recommendation in adopting temporary rules on international accounting (IFRS9), and the temporary prohibition of dividend payments by credit institutions. The list of macro-prudential banking supervisory measures taken by the ECB within the Single Supervisory Mechanism (SSM), together with the European Banking authority (EBA), consists of:

1) Relaxation of capital and liquidity buffers.

On 12 March 2020,[180] the ECB implemented the release of capital and liquidity buffers attached to the micro and macro-prudential banking regulatory framework. First of all, these measures gave credit institutions the opportunity to operate temporarily below the capital level delineated by the

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[178] Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms. OJ L 176, 27.6.2013, p. 1-337.

[179] Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms. OJ L 176, 27.6.2013, p. 338-436.

[180] European Central Bank (2020). *ECB Banking Supervision provides temporary capital and operational relief in reaction to coronavirus.* In: ECB Press Release. Available at: https://www.bankingsupervision.europa.eu/press/pr/date/2020/html/ssm.pr200312~43351ac3ac.en.html.

Pillar 2 Guidance (P2G),[181] the capital conservation buffer (CCB)[182] and the liquidity coverage ratio (LCR).[183] In addition, more flexibility was given with the relaxation of institution-specific countercyclical capital buffer (CCyB),[184] and with the authorization to limitedly adopt capital instruments not classified as Common Equity Tier 1 (CET1). In a few words, the measures[185] undertaken by macroprudential authorities and banking supervisors amounted to a total amount of €20 billion Common Equity Tier 1 capital owned by credit institutions, which prove to be beneficial to the real economy. Both in the past with the Great Financial Crisis of 2007-2009 and in the present with the covid-19 crisis, credit institutions created and applied capital and liquidity buffers to ensure price stability. Thanks to the introduction of the "Basel III regulatory framework",[186] which specifies the relevance of the capital and liquidity buffers, credit institutions can collaborate in the improvement of the economic activity and in the reconstruction of a stronger EU.

Based on the announcement of 12 March 2020, the European central bank showed flexibility in the formulation and application of specific banking supervisory measures. The implementation of macro-prudential regulatory requirements was subsequently extended to micro-prudential supervisory measures on 20 March,[187] and on 16 April 2020. In the same way the

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[181] The P2R is determined via the Supervisory Review and Evaluation Process (SREP).
[182] The CCB is guided by Article 129 CRD IV.
[183] The LCR is guided by Article 412 CRR.
[184] The CCyB is guided by Article 130 CRD IV.
[185] B. P. Joosen (2020). "Balancing macro- and micro-prudential powers in the SSM during the COVID-19 crisis". In: C.V. Gortsos and W. G. Ringe, *Pandemic Crisis and Financial Stability*, p. 339-360.
[186] It is also called "Basel III impact" and was introduced by the Basel Committee on Banking Supervision.
[187] European Central Bank, (2020). *ECB Banking Supervision provides further flexibility to banks in reaction to coronavirus.* In: ECB Press Release. Available at: https://www.bankingsupervision.europa.eu/press/pr/date/2020/html/ssm.pr200320~4cdbbcf466.en.html.

European Banking Authority announced[188] the deferral of the 2020 stress test throughout the European Union. Again, on 12 March 2020, the EBA held the same course of action taken by the ECB on the application of supervisory instruments, though clarifying the methods of implementation and the risks induced by the covid-19.[189] Finally, the EBA released, based on Article 16 of Regulation[190] (EU) No 1093/2010, a sequence of Guidelines, especially with respect to public and private moratoria on loan repayments[191] and gaps in reporting data and public information.[192] The ECB, in the role of prudential banking supervisory authority disclosed a wide range of measures to alleviate banks from stringent capital requirements. The set of micro-prudential banking supervisory measures undertaken by the ECB within the SSM, and alongside the EBA, includes:

1) Introduction of Regulation amending the CRR and the CRR II.

On 28 April 2020, the EU Commission submitted a Proposal[193] for a Regulation amending the CRR and the CRR II and on 20 May 2020 it was

[188] European Banking Authority (2020). *EBA statement on actions to mitigate the impact of COVID-19 on the EU banking sector*. In: EBA News and press. Available at: https://eba.europa.eu/eba-statement-actions-mitigate-impact-covid-19-eu-banking-sector.

[189] European Banking Authority (2020). *EBA provides further guidance on the use of flexibility in relation to Covid-19 and calls for heightened attention to risk*. In: EBA News and press. Available at: https://eba.europa.eu/eba-provides-further-guidance-use-flexibility-relation-covid-19-and-calls-heightened-attention-risks.

[190] Regulation (EU) No 1093/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Banking Authority). OJ L 331, 15.12.2010, p. 12-47.

[191] European Banking Authority (2020). *EBA publishes Guidelines on treatment of public and private moratoria in light of COVID-19 measures*. In: EBA News and press. Available at: https://eba.europa.eu/eba-publishes-guidelines-treatment-public-and-private-moratoria-light-covid-19-measures.

[192] European Banking Authority (2020). *EBA publishes Guidelines to address gaps in reporting data and public information in the context of COVID-19*. In: EBA News and press. Available at: https://eba.europa.eu/eba-issues-guidelines-address-gaps-reporting-data-and-public-information-context-covid-19.

[193] Proposal for a Regulation of the European Parliament and of the Council amending Regulations (EU) No 575/2013 and (EU) 2019/876 as regards adjustments in response to the COVID-19 pandemic. COM/2020/310, final.

confirmed by the ECB's Opinion.[194] In summary, the legislative act encompasses tailor-made provisions linked to some aspects that I am going to expose and explain below. First and foremost, the computation of banks' leverage ratio[195] will be changed on a specific basis and the application of the respective buffer will be deferred to January 2023.[196] Secondly, the special treatment of non-performing loans (NPLs) will be broadened to publicly guaranteed loans through the amendments of minimum capital requirements.[197]And again, capital deduction instruments contemplated for loans backed by income and pension, non-defaulted SMEs exposures and exposures to infrastructures and public services support will be promoted to boost credit circulation.[198] Lastly, the temporary provisions[199] attached to the IFRS9's application will be extended for two years to alleviate the adverse impact of expected credit losses' intensification.

2) Recommendation on temporary banning dividends payment by credit institutions.

On 27 March 2020, the ECB released a Recommendation[200] in which it prohibited the payment of all forms of dividends at least until 1 October 2020 and refrained the share buy-backs by credit institutions for this financial year. The Recommendation was also aimed to nominated and national competent authorities prone to apply it to smaller supervised entities and groups. All the credit institutions and investment firms that do not comply with the Recommendation, on account of the "comply or explain principle", are

[194] Opinion of the European Central Bank of 20 May 2020 on amendments to the Union prudential framework in response to the COVID-19 pandemic (CON/2020/16) 2020/C 180/04. OJ C 180, 29.5.2020, p. 4-9.
[195] Amendments to Article 429a CRR, Article 1 point 2 of the proposal.
[196] Amendments to Article 92(1a) CRR, Article 2 point 2 of the proposal.
[197] Also called "prudential backstop". Article 1 point 2 of the proposal.
[198] Amendments to Article 123, 501 and 501a CRR, Article 2 point 1 of the proposal.
[199] Amendments to Article 473a CRR, Article 1 point 2 of the proposal.
[200] Recommendation of the European Central Bank of 27 March 2020 on dividend distributions during the COVID-19 pandemic and repealing Recommendation ECB/2020/1 (ECB/2020/19) 2020/C 102 I/01. OJ C 1021, 30.3.2020, p. 1-2.

forced to motivate their conduct. Finally, the proposed Recommendation of 27 March 2020 was bolstered by the EBA with the suggestion to comply with the prudential supervisory policies on the prohibition of dividend payments and shareholders remuneration.[201]

[201] A. S. Alibrandi and C. Frigeni (2016). "Restrictions on Shareholder's Distribution in the COVID-19 Crisis: Insights on Corporate Purposes". In: C. V. Gortsos and W. G. Ringe. *Pandemic Crisis and Financial Stability*, p. 429-454.

Chapter 4 Conclusion

The illustration of the birth and evolution of money, starting from barter up to the present century, was fundamental to make understand that this "object" represents the foundation of our economies. We use money to buy goods and services, to pay salaries, bills, and taxes, to invest and so on. In the first chapter, I exposed the history of money to emphasize its importance in all times and in the everyday life of billions of people. The overview of its origins and the implementation of several monetary systems was to complement the explanation on the role of central banks in managing money supply and means of payment. The aim of these issuing institutions is to regulate monetary policy, maintain stability in the economic and financial systems and achieve the objectives established by the different mandates. In the second chapter, particular attention was given to the European Central Bank, with its institutional framework, the price stability mandate in the Euro area and the specific operational tasks. The third chapter deepened the ECB responses to the Covid-19 pandemic: it intervened swiftly and boldly in its dual role as monetary authority and banking supervisor with fiscal, monetary, and prudential supervision measures. The economic policy interventions to tackle the pandemic crisis were targeted to support the healthcare system and the real sector of the economy (businesses and employment). The goal was also to preserve monetary and financial stability and navigate the recovery. In its conventional monetary policy framework and following its primary objective, the ECB retained key interest rates at low levels, established swap lines, adopted a third series of targeted longer-term refinancing operations (TLTRO III) and implemented the Eurosystem legal framework and valuation haircuts. With respect to unconventional monetary policy measures, the European Central Bank created the Pandemic Emergency Purchase Programme (PEPP) for public and private sector

securities, amended the 2016 Corporate Sector Purchase Programme (CSPP), introduced additional temporary measures to refinancing operations and eligibility of collaterals and extended the deadlines of certain reporting of statistical information. Speaking about financial stability measures within the SSM and together with the EBA, the European Central Bank ensured the ability to give credit to households and firms. It relaxed capital and liquidity buffers, supported the Regulation amending CRR and CRRII, demonstrated flexibility in the treatment of NPLs and recommended the temporary banning on dividend payments. In a few words, the ECB complies with the mandate of preserving price stability and thanks to its powers tries to support the real economy and the financial system. Even if some limitations put by the TFEU, regarding the purchase of government bonds and bills in the primary market, should be revised, the ECB intervened in the current crisis with a variety of extraordinary measures. Most of them are temporary but will cease to exist depending on the duration of the Covid-19 crisis and on macroeconomic developments. One thing is certain: every crisis forces humans to learn from mistakes and teaches how to prepare for a better future.

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