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Explaining the response of the ECB to the COVID-19 related economic crisis: inter-crisis and intra-crisis learning

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ABSTRACT
The economic effects of the Covid-19 pandemic have placed a renewed strain on the economic governance of the European Union (EU). The European Central Bank (ECB) was a key player in the EU's response to the crisis induced by the pandemic. This paper adopts a theoretical approach focused on policy learning to explain how and why the ECB responded to the crisis in 2020–2021. By drawing on speeches, newspaper articles and interviews with policy-makers, the paper finds that the ECB was able to rely on earlier crisis experiences in the euro area in forming its response to the pandemic crisis. Although the sovereign debt crisis and the pandemic crisis had both similarities and differences from one another, the ECB was able to engage in inter-crisis and intra-crisis learning. Its learning concerned objectives, instruments as well as an awareness that timely and forceful response was crucial, so that the member states and other EU institutions had time to act.

KEYWORDS COVID-19; European Central Bank (ECB); monetary policy; pandemic; policy learning; sovereign debt crisis

Introduction

Although the Covid-19 pandemic began as a public health emergency in early 2020, its immediate economic effects were devastating, leading to the worst economic recession since World War II: a contraction in 2020 of 3.5 percent worldwide, soaring unemployment and deteriorating public finances (World Bank, 2021), although the immediate recovery in the EU, following the sharp recession, was also unprecedented (Cardani et al., 2021). Historically, pandemics have led to public unrest, as they require difficult decisions about redistribution and public restrictions (Barrett & Chen, 2021). Within the euro area, crises have given rise to questions about

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solidarity among member states (Genschel & Jachtenfuchs, 2021; Schelkle, 2017). These political and economic dimensions of the pandemic crisis have placed a renewed strain on the economic governance of the European Union (EU). Faced with these challenges, the EU responded by adopting a vast array of measures (for an overview, see Quaglia & Verdun 2023).

The European Central Bank (ECB) was one of the first EU institutions to respond to the outbreak of the pandemic, thus playing a key role in shaping the EU's initial economic response to the pandemic crisis. In this paper we focus in particular on the actions taken in the first year of the pandemic and to some extent in the year 2021 and why this course of action was chosen. We also reflect on how its choices have affected the role of the ECB in the economic governance of the euro area and the EU at large. We leave outside of the scope of this paper the challenges raised by increasing inflation or the effects on stability and inflation caused by the invasion of Ukraine in February 2022.

There is not much political science literature yet that examines the role of the ECB in dealing with the economic challenges posed by the pandemic. The scant available studies deal with it in a cursory fashion (Jones, 2021; Schmidt, 2020) or focus on different ECB support of individual member states (Spielberger, 2022). However, the previous crises are of interest in this regard. Scholarly works that have examined the ECB's response to previous crises, notably, the sovereign debt crisis, have each mostly concentrated on one specific facet, be it the role of the ECB in the Troika (Heldt & Mueller, 2021; Henning, 2017; Lutz et al., 2019), in the establishment of Banking Union (Epstein & Rhodes, 2016; Glöckler et al., 2017), as lender of last resort (Ban, 2020) and 'saving the euro', namely, the ECB's 'whatever it takes' policy (Hodson, 2013; Schoeller, 2018; Verdun, 2017), including its asset purchase programme (Lombardi & Moschella, 2016) or sorting out the hierarchy of origins of the crisis (Jones, 2015). Some authors have explained the ECB's role from a neo-functionalist perspective (Niemann & Ioannou, 2015); or have used a principal-agent approach (Diessner & Genschel, 2021) to account for the ECB's actions during crises. Others have pointed out the leadership of the ECB (Schoeller, 2017; Verdun, 2017), its self-empowerment (Heldt & Mueller, 2021), its infrastructural power (Braun, 2020) and its ideational and institutional power, especially in the so-called 'slow burning phase' of the crisis (Carstensen & Schmidt, 2018; Schmidt, 2016).

We contribute to this body of scholarly work on the ECB by drawing on the literature on policy learning in order to garner a better understanding of the ECB's response to crises.[1] We use the concepts of 'inter-crisis' and 'intra-crisis' learning as well as 'single-loop' and 'double-loop' learning (e.g., Dunlop & Radaelli, 2018; Kamkhaji & Radaelli, 2017; Ladi & Tsarouhas, 2020; Matthijs & Blyth, 2018). Using these concepts, which are discussed in more detail below, and drawing the connection with the previous euro area crises, we investigate what was learnt by the ECB, how and why. We argue that the ECB's response to the outbreak of the pandemic was timely and substantial, adopting a variety of policy measures with continued loose monetary policy and committing additional sums for bond buying.

The explanation we offer for this speedy and forceful action is that the ECB had already learnt important lessons from these previous crises (hence, inter-crisis learning), coupled with intra-crisis learning that took place during 2020–2021. The ECB's learning concerned policy objectives (double-loop) as well as instruments and strategies (single-loop). Most of the learning about objectives and, more generally, about the role of the ECB in EU economic governance, was inter-crisis: a fundamental shift takes time to happen. Moreover, there was inter-crisis learning about instruments because the tools deployed by the ECB in 2020–2021 resembled those adopted by the ECB to deal with previous crises. There were also instances of intra-crisis learning concerning, for example, the use of new instruments or the recalibration of existing ones so as to deal with the specific economic challenges posed by the pandemic.

This paper is organised as follows. The next section discusses the analytical framework of the paper, examining key concepts that inform the empirical analysis in the second part of the paper. The third section discusses the main economic challenges that ensued from the pandemic and the measures adopted by the ECB in that context. We focus on monetary policy measures, i.e., those taken by the ECB as central bank, not as banking supervisor. The penultimate section explains the ECB's response through the lens of policy learning. Finally, we draw some conclusions.

Analytical framework and research design

To investigate the ECB's response to the pandemic crisis, we adopt the analytical lens of 'policy learning' defined as the 'updating of beliefs or policies based on lived or witnessed experiences, analysis or social interaction' (Dunlop & Radaelli, 2013, p. 599; cf. Moyson et al., 2017, p. 161; see also Hall, 1993). The EU is often regarded as fertile ground for learning both in ordinary times (Sabel & Zeitlin, 2008) as well as in crisis situations (Seabrooke & Tsingou, 2019) and various scholars examined policy learning during the sovereign debt crisis (Kamkhaji & Radaelli, 2017; Matthijs & Blyth, 2018) and the pandemic crisis (Ladi & Tsarouhas, 2020). We consider this approach to be useful to apply to the ECB as there seems to be a clear connection between the earlier and the later crises in terms of learning.

There can be different types of learning (for overviews, see Bakır, 2017; Bennett & Howlett, 1992; Dunlop & Radaelli, 2018), depending on *who* learns, for instance, individuals, organisations, specific groups or the society at large; *what* is learnt, i.e., whether learning concerns the fundamentals of a policy or its instruments, or it is simply the acquisition of new information, akin to Bayesian learning; *when* and *how* learning takes place, i.e., inter-crisis and intra-crisis learning, as well as contingent learning (Kamkhaji & Radaelli, 2017). The literature distinguishes between *double-loop and single-loop* learning (Argyris & Schön, 1978; Ladi & Tsarouhas, 2020). Double-loop learning is a deeper form of learning, which alters the objectives of a policy or an organisation (this is akin to what Hall (1993) labels as 'third order changes' as a result of learning). Single-loop learning leaves the fundamentals of a policy or an organisation untouched and instead concerns the use of new instruments or strategies (similar to Hall (1993) 'second order changes' as a result of learning). Single-loop learning can subsequently pave the way for double-loop learning. For instance, Ladi and Tsarouhas (2020) note that single- and some double-loop learning took place during the sovereign debt crisis leading to more learning of both types during the pandemic. The literature also distinguishes between *inter-crisis* and *intra-crisis* learning, i.e., learning across crises and learning within a crisis (Deverell, 2009).

Operationalisation

This paper focuses on the ECB, not so much at the individual level, but rather considering the intersubjective process whereby human interaction leads to understanding within the organisation. In so doing, we focus in particular on reflexive and epistemic learning (Dunlop & Radaelli, 2013, p. 603). We regard the ECB as a unitary actor, even though within the ECB and its decision-making bodies there are sometimes different views, as briefly mentioned in the penultimate section. We examine the official measures taken by the ECB (technically, those approved by the Governing Council of the ECB and the Executive Board of the ECB) as well as statements provided by interviewees about official policy. We see the ECB (or any central bank) as a non-majoritarian institution (a bureaucracy) that wants to keep the delegated power bestowed on it, and therefore needs to perform effectively (Majone, 2001). It cannot 'shirk' its responsibility (Elgie, 2002; Savage & Verdun, 2016). Therefore, it needs to avoid what in the principal-agent literature would be called 'drift' or other 'opportunistic behaviour' (Hodson, 2009, p. 460). Learning at the ECB is therefore embedded into its agency relationship (Pollack, 2007) and therefore the willingness to learn is included in the institutional structure of the bank.

We operationalised policy learning at the ECB by seeking to understand better why certain measures were adopted, that is, the reasoning underpinning the ECB's actions: what were the main problems identified by the ECB (*problem framing*), what were the objectives that the ECB wanted to achieve, the range of measures that the ECB considered and why were certain instruments eventually deployed to deal with the challenges at hand (*problem solving*). We consulted ECB policy documents and speeches given by members of the Executive Board. We also carried out seven semi-structured elite interviews with senior ECB officials and their counterparts in other EU institutions (see questions in the online appendix). Interviewees had at least 20 years of experience with ECB policies and could reflect on both the current and past crises; many were familiar with the very early days of the ECB. The questions we asked included, for instance, how the earlier euro area crisis influenced the ECB decisions taken regarding the Covid-19 pandemic crisis, the role of the ECB in the crisis, the short-term and long-term challenges facing the ECB as a result of the pandemic and how did they (or their prioritisation) evolve. The interviews lasted about one hour and both authors were present at each (virtual) interview with the respondent or respondents. We took the information collected through these confidential interviews as partial information and triangulated them with a systematic analysis of publicly available documents and a detailed survey of financial press coverage. We differentiate between the perceptions of these interviewees and statements in the public domain. Given the confidentiality of the interviews, we are unable to use them to attribute policy change. For that, we point to the official statements and policy documents. The interviews provide us with an insight into how interviewees perceive changes in beliefs (epistemic or reflexive learning). Our null hypothesis was that there is no impact from learning on the ECB's response.

A potential critique of the policy learning approach is that it overlooks politics (Bennett & Howlett, 1992, p. 292), i.e., interests, power and bargaining. Thus, an alternative theoretical angle to explain the ECB's response to the pandemic would be to focus on power politics, i.e., the material (economic) interests of the main member states, their bargaining power and intergovernmental negotiations, as opposed to policy learning by a supranational institution. The argument would be that the most powerful actor in the EU gets its way. Since Germany is often regarded as a 'reluctant hegemon' (Bulmer & Paterson, 2013, p. 1387) that has constrained veto power (Donnelly, 2018, 2021; Matthijs, 2016; Matthijs & Blyth, 2018) or is capable of a potential leadership role (Schoeller, 2017) on matters related to EU economic governance, the expectation would be that the measures taken by the ECB reflect the preferences of German policy-makers, be they the German government or the German central bankers in the ECB. Although we do not engage in competitive theory testing, we briefly discuss the analytical leverage of this power politics perspective in the penultimate section.

The measures adopted by the ECB to deal with the COVID-19 related economic crisis

The pandemic quickly morphed into an economic crisis, which was characterised by the ECB and the European Commission as a *symmetric shock* that hit all the member states of the EU, and did not discriminate between those that had performed policies well or less well. Yet, its effects were not fully symmetric, due to a variety of factors, including the state of the economy prior to the pandemic. Of concern was the sustainability of the fiscal situation of member states in the southern euro periphery – Greece, Italy, Portugal, and Spain – which was reflected, *inter alia*, by the widening of the spreads between the government bonds of these countries with those of core countries. In terms of *problem framing*, there was an understanding at the EU level (including at the ECB) that those member states that did not have fiscal space needed to obtain support from other member states to deal with the public health emergency and economic fallout of the pandemic. In the absence of that, there would be negative spill-overs for the entire euro area (interview 3). At the same time, some member states felt that governments receiving the support needed to be encouraged to undertake reforms that had already been deemed necessary before the pandemic. However, unlike during the sovereign debt crisis, the pandemic was seen as originating from outside – it was a common symmetric shock (interview 6) – a *force majeure* (interview 1) – it was not seen as self-inflicted, or the fault of individual member states (interviews 1, 4, 5, 7). There was a shared understanding that in reacting to this common shock, there was the need to protect the monetary union, the single market, and the functioning of the economy (interview 6). In particular, allowing the pandemic to call into question the integrity of the single currency was an absolute no-go (interviews 1 and 4).

In terms of *problem solving*, the *goals* of the ECB's response to the pandemic were manifold: to provide access to funding to banks at favourable rates; to keep under control the spread on the bond yields of the euro area member states; to buy time and provide some breathing space for other EU institutions and the member states to act (interviews 1, 3, 4, 5). The idea was to encourage member states to work in an 'ambitious and coordinated fashion' by undertaking 'joint and concerted' action on the fiscal side to complement the ECB's monetary policy measures (ECB, 2020a).

The ECB's *instruments* deployed to respond to the crisis involved monetary policy as well as banking supervision, which had become the responsibility of the ECB, following the establishment of Banking Union in 2015 (for an overview, see Howarth and Quaglia (2016)). Most of the monetary policy instruments used in 2020–2021 built on – and further developed – the policy instruments that the ECB had deployed during the sovereign debt crisis (e.g., Glöckler et al., 2017; Schoeller, 2017; Verdun, 2017). Furthermore, the ECB had experienced that monetary policy had become less effective in recent years because the lower bound had been reached on various occasions. Once inflation is very low, monetary policy instruments are less effective. One policy-maker noted that when the Covid-19 crisis began, the

ECB already had a set of instruments in place that were quite diversified. Thus, the ECB was able to build on these policies in a way that it had not been able to do when the financial crisis erupted in 2007 (interviews 3 and 6). By contrast, the ECB did not have previous direct crisis experience on the supervisory side.

On the monetary policy side, the ECB adopted conventional and unconventional measures. First, the ECB kept its key interest rates at historically low levels, so that borrowing costs remained low. Second, the ECB established the Pandemic Emergency Purchase Programme (PEPP): a non-standard monetary policy measure that was a temporary asset purchase programme of private and public sector securities (ECB, 2020b). By December 2020, the PEPP programme totalled €1,850 billion (ECB, 2020c). The programme aimed to reduce borrowing costs and increase lending in the euro area by buying several different kinds of assets. All asset categories eligible under the existing Asset Purchase Programme, which had been initiated in 2014 in response to the sovereign debt crisis, were also eligible under the PEPP. The ECB bought corporate bonds, thus providing companies with an additional source of credit. By purchasing government bonds, the ECB effectively contributed to closing the yield spread between government bonds of fiscally sound and less fiscally sound member states. The ECB also purchased bonds directly from banks, which in turn could use the funding to lend to households and businesses. Various interviewees indicated the PEPP was a 'game changer' or a 'big bazooka' (respectively, interviews 4 and 5). Others regarded it as an extension of an existing ECB's policy toolkit when yet another massive shock hit the economy.

Third, the ECB eased its standards for collateral that banks could offer in return for funding: it expanded the list of collaterals and lowered the haircuts applied in targeted longer-term refinancing operations (the TLTRO III), which took place throughout 2020. Targeted longer-term refinancing operations (TLTROs), which had been first put in place in 2014, were operations that provided financing to credit institutions. By offering banks long-term funding at attractive conditions, they preserved favourable borrowing conditions for banks and stimulated bank lending to the real economy. The TLTROs, therefore, reinforced the ECB's accommodative monetary policy stance. Moreover, the pandemic emergency longer-term refinancing operations (PELTROs) were introduced to serve as a liquidity backstop to the euro area banking system throughout 2020. The amounts of these measures were considerable.

Explaining the ECB's response to the COVID-19 crisis

By adopting a policy learning approach, this section spells out w*hat was learnt, when, how and why*. We first tackle the null hypothesis, that is to say, that there is no impact from learning on the ECB's response. We are able to dismiss this hypothesis at the outset as all interviews mentioned learning from the previous crisis as an important factor that informed ECB's actions during the pandemic. All interviewees made reference to, and hence provided the links between, the earlier euro crisis and the pandemic crisis.

We found that the measures adopted by the ECB to deal with the pandemic were the result of inter-crisis and intra-crisis learning undergone by the ECB concerning objectives and instruments. Specifically, the ECB underwent *double-loop* learning concerning its *objective*s. Since this type of fundamental learning generally takes time to unfold, it was mostly inter-crisis. The ECB has a treaty-based mandate, first and foremost, to secure price stability. Without prejudice to this primary objective, the ECB is also required to support the 'general economic policies' and 'objectives' of the Union (e.g., full employment and balanced economic growth). By contrast, the ECB has a less clear mandate on how to deal with crises more generally (Diessner & Genschel, 2021). Following the global financial crisis, the euro area crisis and the establishment of Banking Union that assigned the responsibility of euro area banking supervision to the ECB, it became clear that the ECB needed also to contribute to the protection of overall financial stability, which became a secondary objective of the ECB. The 'whatever it takes' statement by Draghi (2012) was implicitly an acknowledgement of this commitment. During the pandemic crisis, President Lagarde (2021) specified that 'our new strategy explicitly considers the interactions of price stability and financial stability, reflecting our belief that each is a precondition for the other.'

The ECB had also learnt from previous crises that, when central banks are the only (or main) 'game in town' (El-Erian, 2016), they should act as lender of last resort to banks and sovereigns with a view to protecting financial stability. In the early years after its establishment, the ECB maintained deliberate ambiguity as to how it would behave towards crises (interview 7). Yet, it acted fast as lender of last resort to banks during the 2008 international financial crisis and as lender of last resort to sovereigns during the sovereign debt crisis (Ban, 2020; Buiter & Rahbari, 2012). Thus, when the pandemic struck, the barrier to innovate and cross those lines was much lower than in the past (interviews 2 and 7). Moreover, the ECB had learnt from the sovereign debt crisis that its commitment to the integrity of the euro area – the 'whatever it takes' statement – had led to the required result of pivoting back to stability. Although known in central bank circles, the importance and the extent of the value of verbal commitment was something that was learnt during the euro crisis (interviews 1 and 7).

Lagarde also had a single-loop learning moment during the crisis. On 12 March, in responding to a question by a journalist, she remarked that 'we are not here to close spreads' (Reuters Staff, 2020). This answer contradicted the message she had given in the formal presentation prior, sent markets into a frenzy, and infuriated the Italians (Reuters Staff, 2020). The mistake needed to be corrected. She gave another interview soon after (Clinch, 2020) and apologised for the mistake (Arnold, 2020). Some further communication measures were taken (a blogpost was started[2]) and the ECB came up with the PEPP a week later (see Jones (2020)). Lagarde's statement on Twitter on 18 March 2020 that 'extraordinary times, require extraordinary measures, … our commitment to the euro is unlimited' was a reiteration of Draghi's statement that the euro was irreversible and the ECB would do whatever it takes to that effect. The yield spreads started dropping, right after the announcements on 18 March.

Second, the ECB had learnt from previous crises that it should act quickly during economic crises (interviews 1, 2, 3, 6). The reason is that, in the absence of a supranational fiscal counterpart, which is the case in the euro area and the EU more generally, the ECB, as an EU-level actor could and perhaps should take the lead. Doing so provides time and breathing space for other EU policy-makers, acting intergovernmentally or supranationally. Member state governments can, in principle, move fast, but if they want to coordinate within the EU institutional structure, they are slower moving. It takes time to coordinate EU member states and EU institutions so that they agree on response measures. Furthermore, the EU budget, as such, is limited in size and scope. Prior to 2020, the EU's budgetary power for crisis management had been very small (Rhinard & Boin, 2022), even though the European Stability Mechanism (ESM) was established in 2012 to provide financial assistance (i.e., loans) to euro area member states in financial difficulty (Gocaj & Meunier, 2013; Smeets et al., 2019; Verdun, 2015). During the sovereign debt crisis, the ECB was therefore a more effective actor in being able to provide an immediate response than member state governments were, as they were seeking to operate collectively in the Council of the EU and the European Council.

Furthermore, the ECB also underwent some intra-crisis learning. Whereas, in previous crises, the ECB had to carry more than its share of the weight in responding to economic downturns, safeguarding financial stability and preserving the euro, during the pandemic, the ECB was adamant that there should be more 'shoulders' to carry that weight (interview 1). The ECB should not be the only game in town and the fiscal authorities had to step in (interview 4). Thus, the ECB bought time (interview 2), but made clear that the fiscal authorities had to act at the national and European levels (interviews 1, 3 and 5) (see also Buti & Fabbrini, 2023).

Several reasons account for the stance of the ECB concerning the monetary-fiscal policy mix during the pandemic (interviews 2 and 6). Over time, the Bank had learnt that monetary policy is less effective when it is close to the lower bound – when interest rates are close to zero (interviews 1 and 4). Instead, in those circumstances, national fiscal policy could be used more effectively (see ECB (2020a)). Moreover, the ECB became more relaxed about its relationship with governments as time went by. For several years after its establishment in 1999, the ECB maintained that there must not be *ex-ante* coordination of monetary and fiscal policy, reaffirming central bank independence (interviews 1 and 7). By the time the pandemic hit, however, the ECB had firmly established its independence and it had become less concerned about the monetary-fiscal policy mix. During the course of the previous crises and even more so during the pandemic, it became evident that the ECB's actions were indeed considered independent from, yet interconnected with the actions of governments because of the way the economy worked. The independence of the ECB was not put into question. Enough reputation had been built over the years that enabled the ECB to be more confident that it could engage in debates of monetary-fiscal policy mix with national governments without being fearful to compromise its independence.

The ECB engaged in *single-loop inter-crisis* and *intra-crisis* learning about *instruments*. Several tools deployed by the ECB in 2020–2021 resembled those adopted by the ECB to deal with previous crises, including Quantitative Easing in 2014–2015, which provided quite an array of non-standard instruments to the central bank (interview 2). In fact, there was a strong reliance on the existing toolkits (interviews 2, 3 and 6). As mentioned above, building on the experience with its asset purchase programme as part of its unconventional monetary policy, the ECB established the PEPP as a new instrument. The ECB used long-term refinancing operations (LTROs III), which also had already been set up in response to the sovereign debt crisis.

As the Covid-19 crisis progressed, the ECB introduced a new type of instrument, the PELTRO, which built on the LTROs. Thus, certain instruments that had been unconventional in the past, became conventional. Internationally, the ECB reactivated and expanded international swap and repo lines, first established during the 2008 international financial crisis (Spielberger, 2022). Overall, the measures that the ECB took in 2020–2021 were not totally new: several measures that the ECB already had in place prior to the pandemic were adapted, scaled up, reinterpreted and redesigned (interviews 1, 2 and 6). Interviewees emphasised that, in an emergency, one looks at the tools in one's toolkit to see how today's challenges can be solved with tools developed before (interview 2). Most of the intra-crisis learning concerned the calibration of tools, given the nature of the shock and the uncertainty about its implications for the economy if no action was taken. Thus, it was learning about the nature of shocks, the use of certain instruments, the reaction functions of various stakeholders, and thus the need for speedy and forceful action.

Learning is important because it facilitates changes in the institutional evolution of the Bank. When the ECB was established, it focused on a narrow interpretation of its mandate. It was concerned that it did not yet have sufficient credibility and legitimacy to act in any other than in a very predictable way. Moreover, in the early years of the ECB's existence, there were two internal positions – named after two influential members of the ECB's Executive Board at that time, Otmar Issing and Tommaso Padoa-Schioppa – concerning the role of the ECB vis-à-vis national governments. Issing (2008) wanted the ECB to be protected from governments, whereas Padoa-Schioppa (2004) worried about the 'loneliness' of the ECB (Mabbett & Schelkle, 2019), arguing that there was the need for a fiscal counterpart to the ECB as well as cooperation between the monetary and fiscal authorities in the euro area. 'Issing won in the short-term, Padoa-Schioppa won in the long-term' (interview 7). More generally, whereas the ECB was first coloured by the success of the Bundesbank and its heritage, over time, the ECB focused increasingly on comparing itself to other central banks, such as the Federal Reserve Bank, the Bank of England and the Bank of Japan (interviews 2, 3). The ECB's response to the pandemic represented its 'coming of age' (interview 7).[3]

The ECB has undergone important institutional changes over the two decades that it has been in operation. It has expanded its policy space, moving away from its initial narrow focus on price stability and exploring unconventional monetary policy. Moreover, the ECB has openly taken responsibility for market stabilisation,[4] as well as for contributing to safeguarding financial stability. The Bank has added to its toolkit new tools, including, 'big bazookas' ('ECB and Bank of England Deploy Their Big Bazookas,' 2020). It has become a more mature central bank; a more self-assured institution, not afraid of engaging with the fiscal authorities. Whereas at the outset the ECB was eager to keep arm's length distance from the political (fiscal authorities), it reluctantly and to no avail called for fiscal action during the sovereign debt crisis, and it eventually openly engaged with the fiscal authorities during the pandemic crisis (Vanhercke & Verdun, 2022). Thus, while the ECB as an 'agent' was lonely during the sovereign debt crisis (Mabbett & Schelkle, 2019), this was not the case in the second crisis (Covid-19 crisis) (Diessner & Genschel, 2021).

We do not regard learning as a linear process or a pre-determined one. Especially at the outset, there was considerable uncertainty about the magnitude and evolution of the pandemic and its economic effects. Indeed, many at the ECB (as elsewhere) took the view that it might resemble previous health emergencies such as the SARS and MERS:[5] a deep dip followed relatively quickly by a very strong recovery (interview 1). But it became soon clear that it was difficult to identify the nature and the magnitude of the shock (interviews 1, 2, 4). Moreover, we do not know whether the kind of learning we have discussed here is permanent or temporary, in other words, whether lessons can be unlearned. For instance, it is possible to question whether the ECB may have learnt from previous crises in which it was directly involved, but collectively forgotten the lessons of the 1970s and 1980s, which were periods of high inflation.

Would a power politics perspective do a better job than one focused on policy learning to explain the ECB's response to the pandemic? Taking a power politics perspective would emphasise that the actions of the ECB are influenced primarily by the preferences of German policy-makers (e.g., Bulmer & Paterson, 2013; Donnelly, 2018; Matthijs, 2016; Matthijs & Blyth, 2018; Schoeller, 2017), not only the German government, but also the Bundesbank and German central bankers in the ECB. As for the German government, the treaty-based independence of the ECB should formally insulate it from the political pressure of national governments, including that of Germany. The votes of German central bank officials who are members of the Governing Council have the same formal weight as others on that Governing Council; the same follows for those sitting on the Executive Board. Yet, they have an influential voice in the ECB (Ferrara et al., 2021). They were often on the winning side of the argument during the first decade following the ECB's establishment, as mentioned above for example Issing's view about the (non)cooperation between monetary and fiscal authorities in the euro area. German central bankers wanted the ECB to be very similar to the Bundesbank also concerning the conduct of monetary policy (interviews 3 and 4). Hence, they were often critical of the unconventional monetary policy adopted by the ECB (Arnold, 2019). There was sometimes disagreement in the Governing Council and Executive Board between 'doves and hawks', which prevented internal consensus and inhibited or delayed action by the ECB (Marsh & Ortlieb, 2021; Moschella & Diodati, 2020).

However, especially from 2011 onwards, German central bankers were sometimes outvoted in the ECB's decision-making bodies. Indeed, three German members of the ECB's Executive Board (Jürgen Stark, Jörg Asmussen, and Sabine Lautenschläger) and one President of the Bundesbank (Axel Weber) resigned, according to various reports, because they disagreed with ECB's policies over the last ten years (Blackstone, 2013; Bloomberg, 2019; Reuters, 2014). In 2021, the President of the Bundesbank, Jens Weidman, also stepped down. He had become increasingly uneasy that the ECB had been moving away from its mandate defined more narrowly. He wrote 'A stability-oriented monetary policy will only be possible in the long run if the regulatory framework … [ensures] the unity of action and liability [and] monetary policy respects its narrow mandate and does not get caught in the wake of fiscal policy or the financial markets,' (as quoted in Treeck, 2021). Overall, there is little empirical evidence that the ECB's response reflected the preferences of Germany – the member state traditionally considered to be the most powerful in EMU. Therefore, the chosen path, the eventual policy outcome - was not the result of power politics in the EU, even though one had to be aware that for the ECB to expand its policy space, it needed the support from other institutional actors, including the EU member states, especially the most powerful one.

Conclusions

Whereas, during the sovereign debt crisis, it took a process of trial and error for the ECB to come up with effective policies, the ECB responded to the outbreak of the pandemic with fast and substantial measures: it committed a large budget for bond buying and continued its loose monetary policy. This paper argues that the ECB's action can be explained by the process of policy learning gained from its experience with previous crises in the two decades prior (inter-crisis learning). During the course of the Covid-19 crisis (even in the early months), it also learnt valuable lessons (intra-crisis learning). The ECB's learning concerned policy objectives (double-loop), including its function as lender of last resort to euro area banks and sovereigns and instruments (single-loop) to deploy in crisis management, such as asset purchase programmes, liquidity provisions via LTROs and international swap lines. It also learnt the importance of timing (quick action). Learning was important because it produced concrete effects by informing the ECB's actions during the pandemic. In turn, the ECB's action was one of the cornerstones of the EU's responses to the crisis.

This paper focuses on the ECB as an organisation – it lacks the space to delve into the internal dynamics of the Bank or to consider the role of the ECB as a bureaucracy or the role of individual bureaucrats. As a next step, it would be worth investigating how and why learning takes place within the ECB by examining its internal decision-making process and exploring learning at the individual level or in various parts of this institution. One broader interesting finding in applying this approach to account for the actions of the ECB concerns the importance of its institutional evolution over time. Given the ECB's evolution and that of its policies, as well as the crucial role of the ECB in the economic governance of the EU in general and EMU in particular, the time may be ripe for a long-term, longitudinal analysis of the ECB since its inception. The policy learning approach could provide a useful way to frame this kind of analysis. Future research could also use the policy learning approach to examine the actions towards the Covid-19 pandemic of the main counterparts of the ECB, such as the Commission, the Council and the national governments. Finally, new and emerging challenges (see Anghel & Jones, 2023), including the war in Ukraine, rising inflation, and economic sanctions against Russia beg the question of how the ECB will deal with those.

Notes

1. Although the literature on the ECB and its policies is extensive in law and economics, we limit our discussion here to works in the realm of political science. For

some representative works on the ECB, see, *inter alia*, Dyson and Marcussen (2009), Howarth and Loedel (2005), Quaglia (2008); for more recent works see for instance Ferrara et al. (2021), Mabbett and Schelkle (2019), Macchiarelli et al. (2020), Moschella and Diodati (2020), Schulz and Verdun (2022), Tortola (2020).
2. https://www.ecb.europa.eu/press/blog/html/index.en.html.
3. As one interviewee noted, the ECB is 'mature enough' to engage in the coordination of policies with the member states also with the fiscal authorities, without having to fear that that would be seen as threatening the ECB's independence (interview 7).
4. For instance, the ECB's chief economist Philip Lane (2020) argued that "Liquidity provision and asset purchases by central banks can limit self-fulfilling overshooting dynamics and the associated risks to financial stability".
5. SARS and MERS were coronaviruses that caused disease in the earlier part of the 21st century.

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List of interviews

The seven interviews conducted by both authors and experts explicitly for this project (all conducted via Zoom) were held with these individuals on this date.

Interview 1, ECB official, 28 July 2021
Interview 2, ECB official, 29 July 2021
Interview 3, ECB official, 17 August 2021
Interview 4, European Council official, 15 September 2021
Interview 5, economist at Bruegel, 22 September 2021
Interview 6, ECB official, 9 November 2021
Interview 7, European Commission official, 3 December 2021

The interviews lasted about one hour. This research design was approved by the Human Ethics Board of the University of Victoria.

The questions asked during the interview are as follows:

List of questions

Preamble. We would like to discuss the measures that have been taken by the European Central Bank (ECB) to deal with the COVID-19 pandemic crisis.

1. Could you comment on and if applicable add to what is described there as to the measures of the ECB to deal with the COVID-19 pandemic crisis?
2. In your view, how did the earlier euro area crisis influence the ECB decisions taken regarding the COVID-19 pandemic crisis?
3. In relationship to the member states governments and other EU institutions, what is, in your view, the role of the ECB to deal with the COVID-19 crisis?
4. We noticed that there have been immediate actions taken to deal with the COVID-19 crisis. What were the main short-term and long-term challenges facing the ECB as a result of the pandemic and how did they (or their prioritization) evolve over time?
5. What is your view of the recent ECB strategy review? In your response, please reflect on the situation generated by the COVID-19 crisis as well as also any lessons learnt from the previous crisis?
6. Do you have anything else to add to this conversation in light of this research project? Can you recommend someone for us to talk to?