

COOPERATIVE BANKS, WHAT ECOLOGICAL LEGITIMACY ?

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Abstract: *Since the adoption of the Paris Agreement in 2015, European banks have invested 1.331 billion US \$ in fossil fuels (Banking on Climate Chaos, 2023). The level of profit serves as a key incentive for banks to continue their involvement with fossil fuels. However, some banks have stopped these practices and committed to no longer supporting the expansion of this sector. This article aims to explore the role of banks, particularly cooperative banks, in combating climate change. Our objective is to examine to what extent cooperative banks are better positioned to tackle the challenges posed by climate change. The legitimacy of these banks is demonstrated through their capacity to adapt in a constantly evolving environment, and their foundational characteristics actively contribute to climate action.*

Keywords: *financial institutions, cooperative banks, climate change, environmental change, institutionalism.*

JEL: *E14, F65, G20, L20, M14*

1. Climate risks

This article aims to assess the legitimacy of cooperative banks in addressing climate change. It seems to us that these types of institutions are better positioned to lead the transition phase. In this section, we will analyze the risks resulting from climate change along with the challenges associated with implementing measures to combat it. Second, we will examine the adaptability of cooperative banks during a transition phase, applying DiMaggio and Powell's theory of institutional isomorphism in the context of globalization.

1.1. New challenges for banks

Currently, we are in a climate emergency: the planet continues to warm at an alarming rate, with no signs of slowing down according to environmental experts. European observatory Copernicus has reported that summer 2023 was the hottest one ever measured, with an average temperature of 16,77°C. For the past 30 years, temperature has been constantly rising and it's expected to increase by 0.05°C more compared to the previous year, reaching 1.2°C. The latest IPCC report also predicts a possible exceedance of the temperature limit set by the Paris

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Agreement (2015) of 1.5°C by 2050 if greenhouse gas (GHG) emissions continue to increase at the current rate (IPCC, 2022).

At the end of the 19th century, the industrial revolution, urbanization, and economic growth led to a significant accumulation of greenhouse gases (GHG) in the atmosphere, causing unprecedented climate change (Boissinot et al, 2016). Since then, human activities such as fossil fuel extraction, industrial production, intensive agriculture, transportation, and other sectors have been responsible for a 67% increase in the concentration of GHG emissions from fossil sources (Crippa & al, 2022).

Faced with this worrying situation, it is essential to reverse the upward trend in GHG emissions in order to limit the consequences. The main solution lies in a phased transition, progressively reducing and ultimately discontinuing our reliance on fossil fuels (United Nations). According to the Banking on Climate Chaos report, financing fossil fuels reached 673 billion US dollars in 2022, which is the lowest since 2016 with a decrease of about 16% compared to the previous year. Among the world's 60 largest banks, 16 European banks are included in the report. They provided approximately 11% of total fossil fuel financing, or 73 billion US dollars for the same year. Five cooperative banks (Crédit Agricole, BPCE/Natixis, Rabobank, DZ bank, and Crédit Mutuel) recorded 18 billion US \$, or less than 3% of total financing in 2022. We can note a decrease of 17% in cooperative bank financing compared to 1% for European action banks. In addition, interruptions in financing for the expansion of oil, gas, and coal companies have been observed at Crédit Mutuel since 2016, as well as at DZ Bank and Rabobank since 2018.

Based on these arguments, we can see that the majority of banks that are committed to a real trajectory in the fight against climate change belong to the cooperative model. In this regard, the cooperative characteristics could be responsible for this difference in behavior towards the fight against climate change, as it depends on many other factors such as each bank's internal policies, their commitment to sustainable development, etc.

The evolution of cooperative banks has revealed an adaptive potential within their structure, practices, and activities during the period of globalization in the 1980s. The analysis of the restructuring of cooperative banks during that time shows a capacity for institutional adaptation and flexibility within a changing environment. Furthermore, the cooperative founding principles and values correspond to the characteristics of climate transition and the fight against climate change. In the following section, we will explain the climate risks and emphasize the importance of integrating them into the bank's activities.

1.2. Climate risks

Fighting climate change is a major concern for all organizations because it affects their physical structures, activities, and long-term profitability (Scialom, 2022). Various scientific reports have demonstrated and highlighted the potential damages of climate events on food security, biodiversity, the economy, and the environment worldwide (IPCC, 2021 and 2022; WWF, 2021). For the banking sector, taking action on climate risks could prevent serious consequences for the stability of the financial system (Carney, 2015). Therefore, it is essential

to be aware of potential threats at all levels and to implement necessary precautionary measures to address them. In this section, we will explore the risks arising from climate change and those that banks may incur due to their commitment to fighting climate change and transitioning to more sustainable practices.

To avoid destabilizing the system, banks are required to manage a new risk typology: climate risks (Carney, 2015; NGFS, 2019). Climate risks are divided into three categories: physical risk, transition risk, and liability risk. Physical risk (PR) results, on the one hand, directly from the material destruction caused by climate change which generates short to medium-term extreme weather events such as deadly heatwaves, floods, wildfires and storms, including hurricanes, cyclones, and typhoons as well as extreme precipitation. The latter are becoming more frequent and intense and can have alarming consequences for populations and ecosystems (BCBS, 2021; TCFD, 2022). On the other hand, PR derives from chronic evolution of the climate. It is a slow and progressive climate mutation phenomenon that leads to rising sea levels, increasing average temperatures, ocean acidification, water and heat stress, resource scarcity, loss of biodiversity, and increasing pollution (BCE, 2020). According to the WMO, Europe is particularly affected by these phenomena, which are progressing more rapidly than in the rest of the world (United Nations, 2022). They could cost up to 10% of the EU's annual GDP by 2100, or around 1800 billion euros per year (BCE, 2021). In fact, over the last decade, 12 billion euros have been spent each year in the European economy due to extreme climate damage (BCE, 2021).

The more severe these climate phenomena are, the more financial institutions will be exposed to significant financial losses and a decrease in their profitability. Although the real estate sector is particularly affected, the direct and indirect exposure of credit institutions to extreme climate events and their interconnectivity with other sectors increase their sensitivity to the effects of PR (BCBS, 2021). The financial consequences of PR may include destruction of physical capital, disruption of production and supply, performance of results, and adaptation costs. These risks are mentioned by several sources (Carney, 2015), (TCFD, 2017), (BCBS, 2021), and (BCE, 2020).

According to a 2021 study by the ECB, around 30% of payment defaults on bank loans to businesses in the eurozone will be caused by at least one physical risk (BCE, 2021). Risks include, in particular, floods, heat and water stress, as well as forest fires. The risks of economic damage related to floods vary according to the probability and intensity of the danger. Banks located in Greece, Spain, and Portugal are particularly affected by multiple risks, such as water stress, forest fires, and heat stress. Although the IPCC's climate scenarios predict relative savings for France, the pilot stress test conducted by French supervisors and the ECB highlight significant vulnerabilities associated with the physical risks of climate change. French banks are moderately exposed to climate risks. The first stress test has revealed optimistic conclusions regarding banks' exposure to physical risk by 2050, despite the alarming consequences of climate change (Clerc, L et al, 2021). However, future bank exposures depend on imminent actions to reduce emissions and the degree of adaptation to climate change.

Furthermore, the transition to a low-carbon economy can eliminate some physical risks, but it can also generate, increase, or reduce others, such as transition risk. The latter is influenced by the adoption of low-carbon processes, such as regulatory and technological developments, changes in social norms, individual preferences, and stakeholders (BCE, 2020). These adjustments can lead to transition risks that refer to financial losses when they are not sufficiently anticipated (I4CE, 2019; Bolton et al, 2020; Couppey, 2021). Reducing banks' involvement in fossil fuels results in a loss of value of reserves called "stranded assets" (Bolton et al, 2020). Fossil-type assets are at risk of becoming incompatible with a low-carbon economy, and they may not be replaced by renewable alternatives in time. This incompatibility could lead to a depreciation of value, which unbalances the balance sheets of banks that hold them and exposes them to larger financial losses. Subsequently, these losses could affect the entire financial system (Couppey, 2021).

Finally, the last type of climate risk is reputational or liability risk. It can arise when institutions do not take into account or respond adequately to the consequences of climate change. This risk is directly or indirectly related to physical and transition risks (BCE, 2020) and can expose companies to legal disputes as mentioned in the Final Prudential Guide CPG 229 of 2021. Institutions may be associated with polluting industries, which can lead to damage to their reputation and liability with the public, counterparties, and/or investors.

In conclusion, banks are at the heart of the economy and play a crucial role in financing institutions, society, and in the fight against climate change. Awareness of climate risks and efforts to combat environmental change will have a positive impact by limiting the consequences and slowing them down. The following section focuses on how these risks intersect with the financial and banking sector in particular.

1.3. Climate Risk Mitigation and Resilience Strategies

The banking sector is a crucial element of the economy and is an integral part of a complex and interconnected financial system. Any destabilization within an entity of the system can have far-reaching repercussions, potentially leading to a systemic crisis. As a result, banks must take measures to manage these risks, identify and anticipate them, protect the physical structure and profitability, and enhance the institution's resilience to climate shocks. In this section, we will analyze the measures taken by banks to mitigate climate risks.

Climate concerns can impact the financial system due to its systemic nature (Harrington et al., 2021). This is why Mark Carney, former governor of the Bank of England, emphasized in his speech in 2015 the importance of taking action against this change to prevent financial instability and potential losses in the banking sector. Subsequently, during the COP21 in Paris, the redirection of financial flows towards responsible investments was established in its agreement (article 2.1.c). Other organizations have also recognized the necessity for the banking sector to play a role in combating climate change, which largely depends on their

financing (Plihon, 2020; Oxfam, 2020; Lazaric, 2022). Indeed, they significantly influence the economy through various capital allocation channels and their volume. Depending on the function banks choose to allocate their capital, this can have a positive or negative impact on both the economy and the environment. It is worth noting that the total financing of French banks (deposits, loans granted, and bonds issued) was more than 2.5 times the GDP of the nation in 2021, demonstrating their key role in the climate transition (Oxfam, 2020). Given their role as engines in the financial and economic sector, banks must incorporate these risks into their risk management to avoid systemic consequences (Bolton et al., 2020). They are transmitted to the financial system through macro and microeconomic channels, which respond by transferring these effects to businesses, households, and governments, as illustrated in Figure 1 (Bolton et al., 2020).

As climate change can have various second-order and contagion effects, leading to risks for the entire economic system, these effects can weaken existing risks and create new ones, which can then spread to other sectors and potentially lead to a systemic crisis. This is justified by the recent Covid-19 health crisis. It wasn't just a medical issue, but also a correlation with the degradation of biodiversity due to climate change (Grandcolas, 2020). The consequences didn't stop with the Covid period. The Weather, Climate, and Catastrophe Insight report published in 2023 revealed that global economic losses caused by natural disasters amounted to 313 billion US \$ in 2022 (Dauvergne, 2023). However, any deterioration of our ecosystem is likely to harm economic resilience.

Therefore, banks must incorporate climate risks into their existing traditional risk categories, in line with their risk appetite, while considering banking products and services and loan portfolios. This allows for the identification, measurement, monitoring, and management of indicators. Taking credit risk as an example, it increases when borrowers are unable to repay their debts due to a reduction in their repayment capacity (income effect) or if banks cannot fully recover the value of a loan in a case of wealth effect due to climate risk factors. As for market risk, the value of financial assets may be reduced due to climate risk that is not factored into prices, leading to significant and sudden price adjustments. This risk can also alter correlations between assets or liquidity markets, thereby undermining risk management assumptions. Additionally, stable sources of funding may decrease as market conditions can change based on liquidity levels. Finally, in terms of operational risk, banks may face an increased risk of legal and regulatory compliance associated with their investments and activities, while reputation risk may increase depending on market developments or consumer sentiments.

To illustrate the actions taken to combat climate change, many banks have committed to various initiatives or working groups dedicated to reducing and achieving greenhouse gas (GHG) neutrality within their internal policies (such as the Net-Zero Banking Alliance, the Task Force on Climate-Related Financial Disclosures, Principles for Responsible Banking, etc.). However, these commitments, as stated in their annual reports, are at odds with the overall trend of

increased real financing for fossil fuel companies between 2016 and 2022. What will ultimately make a difference in the long-term climate fight are the imminent exclusion policies that only a few banks have implemented.

Unlike Crédit Mutuel, which has been following a policy of divestment from fossil fuels for several years, in 2020, it announced its decision to cease all financing related to the expansion of the fossil fuel sector by 2030, which represents a major advancement in the fight against climate change (Banking on Climate Chaos, 2023). The French institution is also taking responsibility for reducing environmental impact and encouraging the entire banking industry to reduce its footprint. These initiatives contribute to the reduction of carbon emissions and the promotion of long-term energy transition.

In conclusion, managing climate risks is essential for banks to preserve their stability and the resilience of the financial system. In the next section, we will analyze the ability of cooperative banks to adapt in a changing environment according to the theory of institutional isomorphism.

2. Institutionalism and cooperative banks

In an ever-evolving economic and social context, the adaptability of financial institutions is crucial for their survival. Institutional theory helps explain how institutions are capable of adapting to transitional phases or drastic changes. Currently, the cooperative banking sector holds a significant position in the European economy. It consists of approximately 2,700 cooperative banks, with 89 million members and 227 million customers (EACB). In France, the three major cooperative banking groups (Crédit Agricole, BPCE, and Crédit Mutuel) make substantial contributions to the national economy, accounting for over 60% of retail banking activity (credit and savings). In Germany, this sector represents over 20% of the same activity, while in the rest of Europe, the percentage varies between 10% and 4% (EACB,2022). Given the prominent role these banks play in the economy, it is essential to analyze the reasons for their adaptations to the restructuring of the 1980s.

2.1. Institutional isomorphism

In the 1980s, cooperative banks were facing external pressures due to economic and legal restructuring. The transformation experienced by these banks at that time were predominantly shaped by formal and mimetic pressures. Consequently, the theory of institutional isomorphism emerges as a pertinent framework for explaining the dynamics of change and adaptation within cooperative banks. This theory explores deeply into the underlying motivations behind the adoption of specific practices within these institutions. In the following, we will examine DiMaggio and Powell's (1983) work on institutional isomorphism to understand "why" and "how" cooperative banks adjusted to the challenging restructuring circumstances of the 1980s.

Before analyzing isomorphism, it is interesting to understand the concept of change, as it is essential for the survival of the institution (Hamilton, 1919). Indeed, the economy is in perpetual transition towards something else, that is, continuous change (Schumpeter, 1939; Chabaud et al., 2005). According to Veblen (1901), this instability is linked to the changing conditions imposed by society and life (patterns of thought, historical circumstances, technological innovations). This means that there are two choices for the institution when its external environment undergoes a mutation: change or extinction. If it decides to continue in its organizational field, it must adapt to the new contexts. Thus, adaptation is a process constrained by environmental forces (Hannan and Freeman, 1977; Salancik and Pfeffer, 1978). What are these forces of change, and how do they impact the institution?

The concept of isomorphism is defined by a process of homogenization or resemblance of one institution to another dominant one (DiMaggio and Powell, 1983). The authors have emphasized the importance of this concept because during a phase of innovation, new reforms, and other changes, the diversity among economic actors in the same organizational field tends to gradually converge. New requirements all exert pressure by a dominant institution or organizational field on another, seeking legitimacy. This was highlighted by Hamilton (1932), DiMaggio and Powell (1983), in addition to the pursuit of power and sustainability. However, the primary goal of transformation is organizational optimality, not economic. To survive, institutions *"do not necessarily adopt practices most appropriate to current economic requirements, but those that appear more socially accepted"* (Huault, I. 2009). Indeed, the institutions to which changes apply either adopt them to enhance their competitive positions or to escape threats affecting their well-being (Chabaud et al., 2005). In any case, the mutation is the institution's response to changes of the external environment (Veblen, 1901; Hayek, 1967b; Longuet, 2004).

There are three types of institutional isomorphism: coercive, normative, and mimetic. Coercive isomorphism results from formal and informal pressures, as well as cultural expectations within a society. The application of new laws and regulations can stimulate institutional change. Furthermore, all dominant institutional structures reflect patterns of behavior that can be adopted. It is through this informal channel that legitimacy is often gained (DiMaggio and Powell, 1983). As a result, the more institutions are organized in alignment with the larger or dominant institution, the less they will be constrained by structural techniques.

Normative isomorphism is characterized by a strong emphasis on professionalization, where the profession itself establishes and defines various aspects of its functioning, including working conditions, methodologies, and socialization processes like dress code, language, and staff attitude. This phenomenon serves to confer legitimacy upon the institutional framework. Consequently, employees tend to react in a remarkably uniform manner, driven by their training

to address issues, adhering to standardized policies, procedures, and benchmarks, while also adopting a consistent decision-making approach. In situations where there is non-compliance with these established decisions and standards, decision-makers within the profession may imply a withdrawal of the involved partners.

Mimetic isomorphism occurs when an institution adopts familiar solutions, but not its own, due to uncertainty. In some cases, institutions fail to find innovative or clear solutions to imminent problems, or do not quickly hold new technological innovations. They tend to draw inspiration from dominant institutions in the same field that they perceive as more legitimate or effective. Existing solutions are generally viable, less costly, enhance legitimacy, and generate better competitive efficiency. The more similar institutions become, the more rules become self-legitimized and take the place of technical and economic constraints.

These various forms of institutional isomorphism pressure (coercive, normative, and mimetic) can appear separately or simultaneously to lead to a similarity among institutions within the same organizational field. The terms "similarities," "homogenization," and "resemblance" suggest that the institutions being examined are adapting to the evolving dynamics of their environment. The more closely they align with these changes, the more effectively these changes can take root and produce meaningful results. In the following section, we will examine how cooperative banks are adapting to the challenges of globalization and restructuring while considering the application of isomorphic forms.

2.2. Institutional isomorphism of cooperative banks

During the 1980s, we witnessed the development of markets, the deregulation of economies, the technological and information revolution, as well as the explosion of financial engineering that contributed to globalization (Bancel and Mériaux, 2015; Plihon, 2016). At the same time, the banking sector has gone through multiple changes. Cooperative banks were not spared or distinguished by this restructuring since it affected the entire banking sector with a focus on economies of scale (Richez-Battesti and Hector, 2012). However, they were subject to these structural changes due to increased competition and the dominance of the capitalist model in the market. In this part, we will analyze the events of this period (1980) of economic evolution and link them to the responses of cooperative banks from the perspective of institutional isomorphism.

Initially, the theory of isomorphism is embodied at the coercive (formal) level. Indeed, this period of restructuring is characterized by waves of deregulation, liberalization, and privatization. This allowed for a definitive reorganization of the banking and financial system. The process extends to despecialization and disintermediation, as well as reduced reliance on

state (Richez-Battesti and Hector, 2012). The principle of universal banking is now established. For example, in France, the Debré-Haberer decrees of 1967, coupled with the Banking Law of 1984, supplemented by the one of 1996, eliminated all divisions between activities and by placing all banks under the same set of laws. The German Banking Control Act adopted in 1934 placed the banking system under the same regulatory framework. Thus, cooperative banks became universal banks, both by law and in practice. Also in Italy, laws of 1993 have brought transformations in the cooperative banking sector. Consequently, it becomes evident that regulatory pressure was the first stimulus for change and adaptation of cooperative banks. In response, these institutions had no choice but to adapt to preserve their positions in the market, as the regulations did not take into account their cooperative nature.

Furthermore, regulatory transformation has driven significant financial innovations and banking product developments at the expense of their original activities (Ouyahia and Roux, 2017). Competition among banks has intensified as a result. Thus, in addition to the reconstitution of activity and external growth operations (mergers, acquisitions, absorptions, etc.), concentration, profit maximization, and achieving a critical size have also become priorities. This transformation has been pervasive, encompassing all banks, including cooperative ones, which have adapted to the evolving competitive landscape, as well as the increasing of resources, capital, and clientele. Notably, French cooperative banks have significantly expanded their reach through acquisitions of both private and public banks leveraging their substantial reserves (capital accumulation). The first acquisition occurred in 1998 with the union of Crédit Mutuel and CIC, and the most prominent one was the merger of Crédit Lyonnais and Crédit Agricole in 2003. The latest acquisition occurred in 2009 between Banque Populaire and Caisse d'Épargne. Presently, these banks operate with both cooperative and capitalist principles, transcending geographical boundaries and diversifying their range of services (Bülbul, Schmidt, & Schüwer, 2013). In Italy, cooperative banks similarly expanded their activities and structures without geographical or operational constraints, echoing their French counterparts by pursuing mergers and acquisitions. German cooperative banks, however, have displayed a more conservative approach compared to their Italian and French counterparts, despite facing legal pressures to engage in competition. These banks remain inclusive, serving a diverse clientele, including non-members, and offering a wide variety of services. While they underwent a merger in 1972, they predominantly operate at local and regional levels, maintaining their legal independence.

However, other cooperative banks responded to the challenges of universality in the banking system and competition by abandoning their model in countries such as Serbia, and Italy (Banche Popolari). Indeed, those that couldn't adapt (Serbia and Italy) saw their model fade away and transform into shareholder banks or become nationalized (Daskalov and Mishkova, 2014). Meanwhile, others, like in Bulgaria, practically disappeared (one institution left) due to the unfavorable legal environment that subjected them to the same regulations as their capitalist counterparts (Chroneos Krasavac, Petkovic, 2015).

Let's take a closer look at the cooperative banks that successfully adapted to the new constraints. Through the process of imitation, they found a solution within the capitalist banking model. This is the result of mimetic isomorphism. They adopted ways of acting, practices, management tools, and strategies from conventional banks within their structure (Ouyahia and Roux, 2017). Especially in terms of their introduction within their group, these became joint-stock companies, which in some cases are also publicly traded. This granted them relative legitimacy and organizational efficiency (DiMaggio and Powell, 1983).

A note is important to add here, in this article we will steer clear of delving into the structural and organizational transformation that transpired within cooperative banks post-homogenization. Our intention is not to analyze the aftermath but rather to explore the behavior of cooperative banks in different contexts, discerning their adaptability in the face of change, regardless of any potential outcomes. This issue has subsequently posed challenges, particularly in France, where it resulted in a decline in cooperative values and a surge in capitalistic tendencies. What matters is our evaluation of their capacity to evolve because, without change, our discussion would lack relevance. However, what is significant is their resilience in an ever-changing environment and their capacity to adjust to it. Our goal is to establish the legitimacy of their current situation by obtaining evidence from a prior context, all within a similarly dynamic environment.

Such a shift among cooperative banks, within a context of evolution, can be seen as an isomorphic transformation, as noted by Spear (2011). The adaptability of cooperative banks in a dynamic environment is evident through their strong cohesion. Therefore, taking into account the effects of institutional homogenization constraints, whether they are coercive in a formal (regulatory), or mimetic manner through the dominant form of institutions, will then enable us to explain the potential trajectory of cooperative banks in the battle for climate transition.

2.3. Cooperative bank's advantages

The issue of climate change is becoming increasingly important and requires immediate actions. The foundational characteristics of cooperative banks seem to provide the necessary resources and tools to chart a genuine path for environmental transition and combat climate change. Therefore, in this section we will explore “why” and “how” cooperative banks can be more effective in promoting environmental sustainability than private shareholder banks.

In the previous section, we demonstrated how cooperative banks responded to pressures by adapting to change through the isomorphic effect, as remarked also by Spear (2011). This adaptability has been a key factor in their success, as North (1994) notes that “*Successful political/economic systems have evolved flexible institutional structures that can survive the shocks and changes that are a part of successful evolution*”(p. 367). In this context, the inherent

flexibility of cooperative banks has positioned them as generally responsive to external constraints. In today's challenges, this adaptability equips them with an advantage when it comes to addressing coercive pressure within the context of climate change.

Although cooperative banks and shareholder banks have not fully embraced climate transition, due to the gradual nature of the mutation process, cooperative banks have been more actively moving in that direction. Initially, it is evident that there is a strong commitment to completely stop funding the expansion of new fossil fuel projects. As indicated in the Banking on Climate Chaos report, institutions like Crédit Mutuel, DZ Bank, and Rabobank have demonstrated their intent to gradually disengage from the environmentally detrimental sector. Furthermore, these banks have been reducing their financial support to fossil fuel companies by over 49 % between 2016-2022. This flexibility and adaptation present in these institutions shows the difference with the attitude of shareholder banks. Even though shareholder banks are committed to informal pressures like the Paris Agreement (2015), the Net Zero Banking Alliance (NZBA) and with the United Nations' strategies (SDGs) and integrating ESG issues, they're still investing in fossil fuels and the expansion of new projects. In 2021, there was a significant drop (65%) in these types of investments made by European shareholder banks, which was followed by a recovery in 2022. It's important to note that this decline and subsequent recovery is attributed to various factors: the pandemic, the war in Ukraine, the inflation, and not a change in bank policy (Banking on Climate Chaos, 2023). Furthermore, the European Union's legislation that only focuses on enhancing transparency within institutions, integrating climate risks into their operations, and conducting stress tests to assess banks' capacity to manage these risks may not be adequate for fostering strategies that align with the transition. In such cases, banks are more inclined to publish reports rather than taking substantial actions. The underlying issue here is that banks require transition plans to effectively integrate climate actions into their activities. Although the legal framework does not offer full support for the transition, cooperative banks have shown a remarkable commitment to aligning with it.

In the term of informal pressures, constraints are less legally binding because they are not mandatory such as principles of responsible banking (UNEP FI), the Net-Zero Banking Alliance (NZBA), Paris Agreement 2015, etc. These non-exhaustive recommendations provide guidance to banks to integrate climate issues into their activities and decision-making. They aim to encourage a transition to a sustainable economy and manage climate-related risks. Although banks are not legally required to follow the recommendations of informal pressures, unlike formal ones, they may be motivated to do so for various reasons. Banks can improve their reputation and brand image among customers, investors, and the general public, who are increasingly sensitive to environmental issues. The presence of banking institutions that implement actions in line with the transition trajectory and climate problems may stimulate (in an average-long term) mimicry by other banks in this direction.

At the same time, there are NGOs such as BankTrack, Greenpeace, Reclaim Finance, etc. They are involved in raising awareness, research, mobilization, and monitoring of banks' climate practices. In this category, pressure arises when banks undertake contradictory actions or fail

to take necessary measures to achieve set objectives. The BNP Paribas case is an example since three NGOs have opened the first trial of a financial climate chaos under the duty of vigilance law (2017) (Le Monde, 2023).

There is another factor for change related to cooperative banks at the internal level: cooperative character. The cooperative founding values and principles are consistent with the criteria of climate transition: financing temporality tends towards the medium to long term, participation and collaboration in local development, and collective interest. These cooperative tools will facilitate the implementation of the fight against climate change.

It is now urgent to take short-term action against climate change to achieve the desired ultimate outcome of medium-to-long-term carbon neutrality (Labussière and Nadaï, 2020) in the future. The actions that banks must take to fight climate change include mobilizing capital immediately for less carbon-intensive long-term projects, undertaking actions to reduce their GHG footprint, and gradually disengaging from financing polluting channels (Boissinot et al., 2016; Labussière and Nadaï, 2020). In this regard, cooperative banks hold a coherence advantage of temporality within their business model and with the criteria of transition. They give priority to financing useful projects in conjunction with the demand of members and their local community, thus prioritizing the general interest over the individual interest of conventional banks. Since they are not exclusively seeking short-term returns but also social utility (Caire et al., 2013; Ouyahia and Roux, 2017), these purposes lead them to commit to sustainability, which perfectly corresponds to the notion of climate transition. The latter refers to the change from the current economic model, dependent on fossil fuels, to an economy functioning with renewable energy (United Nations). However, our total independence from fossil fuels will not be achievable suddenly but through a long-term progressive process. Therefore, the absence of profit maximization constraint allows cooperative banks to engage in medium-to-long-term investments. In addition, capital accumulated from non-distributed dividends leads to concentration of productive capital which can allow local and regional institutions to invest in projects aligned with the transition goals.

The fact that cooperative banks should be more virtuous depends on internal and external factors. The latter are established based on the potential of this type of institution to adapt to legal, institutional, or cultural changes. The pressure exerted by formal and informal changes results in an aligned application within cooperative banks. For example, in 2023, Crédit Mutuel is supporting local farmers by financing renewable energy equipment projects. It also offers impact loans at discounted rates and advantageous financing solutions for these projects, thanks to the support of the European Investment Bank (EIB).

The legitimacy of cooperative banks in addressing climate change lies in their institutional adaptability, flexibility, and foundational principles. The benefits of such institutions pave the way for climate transition engagement. Immediate actions are necessary to change investment channels and disengage from polluting activities.

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