



Central Banks as a source of Knowledge for good Financial Crisis Management

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Abstract

The 2008 financial crisis substantially increased public and scholarly discussion on central banks' roles. In order to guarantee efficient financial crisis management, this article looks at the structure of knowledge transmission from central banks to the legislature. The relationship between central banks and policy makers is investigated, drawing from a qualitative research that includes expert interviews with representatives of European central banks. According to the research, central banks possess a high degree of competence; yet, there are obstacles in the way of information transmission to political entities. Expert knowledge management has the potential to mitigate these deficiencies. Since the 2008 financial crisis, the organisation has made advances, but there are still shortcomings, especially in the areas of communication and policy-making. By doing so, this paper closes a research gap in the area of knowledge transfer between central banks and the legislative branch and provides recommendations for enhancing these procedures.

Keywords: Central banks; Financial crises; Financial policy; Knowledge management; Policymaking

JEL classification: G21; G38; H3s

1. Introduction

The financial crisis of 2008 led to a drastic mind-change in both economics and politics. Unsurprisingly, central banks soon found themselves in the firing line. Turner (2017) even raised the question of whether central banks themselves had caused the financial crisis. This paper takes the view that financial crises – like crises in general – always represent a crisis of knowledge (Holland, 2010). However, previous studies showed that neither a knowledge culture nor a stringent knowledge system exist within the political system (Mittelstädt, 2022). The importance of the interaction between the government or legislator on the one hand and the central banks on the other has already been emphasized by Moser-Boehm (2006). I would therefore like to expand the aforesaid question to the extent whether central banks actually have the knowledge or the opportunity to pass it on to policymakers in order to be able to prevent financial crises in the first place.

The abilities to acquire new knowledge or access old knowledge, evaluate it and apply it to Despite an extensive – and often theory-heavy (source) – literature, there is a research gap regarding political institutions and central banks. Therefore, this work aims to contribute to two research fields. On the one hand, the literature on financial crisis management should be expanded to include the aspect of knowledge transfer between political decision-makers and central banks. On the other hand, the criticism of the knowledge management discipline should be countered with a decent practical study.

From August to October 2024 four representatives of European central banks were interviewed as part of a qualitative study. The interviewees all held responsible positions in the area of financial market stability and acted as direct contacts for national politics. The results, which were evaluated using qualitative content analysis according to Mayring (1994), show an overall positive picture. The results demonstrate a very high level of technical expertise and a very good level of organization. Despite proven ability to learn, there are also various challenges where a professional KM system can support. Following the experiences of the Great Financial Crisis, central banks have entered a new, fourth development epoch (C. A. E. Goodhart, 2010). Nevertheless, this research highlighted fractures between CB and (financial) policy. Knowledge management alone will by no means resolve these weaknesses, but proposals will be discussed later that, in combination with greater awareness, could provide suggestions and impulses to make the interaction of the multitude of actors on the international stage of financial market regulation even more resilient.

2. Literature

2.1 *Financial crises management*

Crises mean that the principles that have proven themselves in phases of economic boom are questioned. This also and especially applies to financial markets and their most important players. For a long time, central banks were only concerned with price and currency stability. But this changed at the latest with the financial crisis of 2008, when blatant weaknesses in the overall system became apparent. James (2010, p. 10) even goes so far as to say that central bankers' image has gone from hero to villain. The literature on the consequences of the 2008 financial crisis for central banking has reached two broad set of conclusions. First, it has been argued that a very narrow understanding of monetary policy in good economic times, with central bankers focused exclusively on inflation, could have allowed the development of bubbles and financial imbalances that were ultimately responsible for the crisis. The second point concerned the central banks' limited ability to respond, as stated by Blinder (2013, p. 384), "the Fed ran out of conventional monetary policy ammunition on December 16, 2008, the day it reduced the federal funds rate to approximately zero." The general conclusion is that financial regulation should be strengthened, and that central banks setting monetary policy should take into account not only price developments, but also the evolution of credit and the emergence of asset bubbles (Fernández-Albertos, 2015, p. 228).

Numerous tasks are carried out by central banks. All have the duty to manage the supply of credit and money and, as a result, determine market interest rates through their control over the monetary base (Fischer, 2004, p. 170). Goodhart (2010) summarizes the central three main objectives or functional roles of central banks as follows:

- To maintain price stability, subject to the monetary regime in current operation, for example the gold standard, a pegged exchange rate or an inflation target.
- To maintain financial stability, and to foster financial development more broadly.
- To support the state's financing needs at times of crisis, but in normal times to constrain misuse of the state's financial powers. In the past this meant preventing debasement and misuse of the inflation tax. Prospectively it may in future also involve preventing misuse of the bank tax.

Over the last 20 years there have been strong debates on how central banks should carry out their duties. This reassessment has led to significant changes in how central banks operate and to a long and successful period of low inflation (Mishkin, 2007, p. 1). In the literature there are seven basic principles for "successful outcomes in their conduct of monetary policy: 1. Price stability has significant advantages, 2. fiscal and monetary policies should be coordinated, 3. time inconsistency is a serious issue that needs to be avoided, 4. Monetary policy need to be prospective, 5. accountability is a fundamental tenet of democracy, 6. monetary policy should be concerned with both output and price fluctuations, and 7. the most severe economic downturns are linked to financial instability (Mishkin, 2007, p. 1). In this context, the institution of the "lender of last resort" (LOLR) should be briefly discussed, as this has recently been discussed again more intensively as an additional task for central banks due to the GFC. The idea dates back to the beginning of the 19th century when Walter Bagehot developed his LOLR theory, building on the previous work of Henry Thornton (Freixas, Giannini, Hoggarth, & Soussa, 1999). Generally speaking, a lender of last resort offers financial liquidity to counterparties who are solvent but need liquidity (Buiter & Rahbari, 2012). According to Humprey (1989) protecting the money supply is the first priority, followed by supporting the whole financial system rather than specific financial institutions, acting in accordance with the longer-term goal of steady money growth, and announcing its policies ahead of crises to reduce confusion.

Objectives and tasks are often laid down in legislation. For instance, Article 2 of the statutes of the European System of Central Banks states that maintaining price stability while maintaining the general objectives of the European Union is the primary objective (Siekmann, 2015). In the USA, Congress has specified three main goals for the Federal Reserve: maximum employment, price stabilisation, and long-term interest rates on a moderate level (Federal Reserve Board, 2017). Studies by Fischer (2004) show that this is the case with price stability in particular. Around two-thirds of all central banks have a statutory mandate to do this. However, this often overlaps with conflicting goals the maintenance of full employment. The extremely high political dimension of the work of central banks should now be clear at the latest. This brings us to the important point of central bank political independence. In general, it is today considered proven that a high degree of independence combined with a clear mandate are important prerequisites for fulfilling the above objectives. The background to this paper is the so-called inflation bias to which governments are subject, while central banker "are more averse to inflation [...] in the sense that s(he) places a greater weight on price stability [...]" (Berger, Haan, & Eijffinger, 2001, p. 2).

2.2. Knowledge Management in central banks

Central banks obviously represent an important source of knowledge for political decision-makers. Therefore, in the context of this work, the need for close interaction with those responsible for politics must be underlined, since the exchange of specialist knowledge, strategic plans, political projects, forecasts, etc. is essential for combating crises. Even the occupation of executive boards, supervisory bodies and so on can be seen as a political process (Berger, Nitsch, & Lybek, 2008). According to studies, many central banks have been postulating a high level of transparency and knowledge sharing for several decades (Berger et al., 2008; Mellina & Schmidt, 2018), but the implementation must be critically questioned in view of the obvious weaknesses.

The management of available knowledge has been an issue in both economics and business practice for more than thirty years by now (Nakash & Bouhnik, 2021). While the focus of research clearly leans towards the private sector, studies and theories relating to the public sector are increasing (Massaro, Dumay, & Garlatti, 2015). For reasons that can only be speculated about, parliaments have long been ignored as one of the central institutions of Western democracies. As Ahamed, Amarakoo and Senevirathne (2015, p. 4) point out, “knowledge in Parliaments tends to be tacit/informal and not recorded.” There is also a gap in research for central banks. Although there are several notable studies on decisionmaking, such as by Maier (2010), or on communication strategies (Ehrmann & Fratzscher, 2007), the author is currently aware of only one dedicated study on knowledge management in the central bank of Malaysia. Ali and Ahmad (2006) present what they call the Banking Knowledge Management Model (BKMM), which is based on the three components knowledge generation, conservation, and sharing. However, the paper does not address the special role that central banks play in the international financial markets, but rather limits itself solely to the technical aspects of knowledge work. Knowledge management also rarely seems to be the main focus of investigations. Rather, it often appears as a sub-area of other thematic focuses. For instance, due to the growing focus on enhancing crisis management, the body of literature on risk management has expanded significantly. In her study, La Torre (2020) showed a clear deficit with regard to the identification of knowledge crises. This is surprising, as greater sensitivity would have been expected, especially in the aftermath of the financial crisis after 2008. Another strand that indirectly touches on KM relates to investigations into the working methods of boards of directors. For example, Moser-Boehm (2006) analyzes procedures and procedures for exchanging information between central banks and governments.

Using an empirical analysis of 960 commercial banks in 24 countries (2012–2015), Campanelle et. al (2019) show that knowledge creation contributes positively to value creation. However, not all knowledge conversion factors have a positive effect on the economic value of banks. The model shows which factors are relevant. The research is innovative through a large sample size and the focus on knowledge and not just intellectual capital. A different study examines the knowledge management procedures of Kenyan commercial banks (Rono, 2011). The results show that while most banks recognize the value of knowledge management (KM), few have established KM departments, strategies, or leaders. KM techniques primarily include social contacts, on-the-job training, and resources like intranets, phones, and emails. Document management

systems, staff retention plans, and best practices are essential to knowledge retention. Mizintseva and Gerbina (2009) to a similar conclusion in their analysis of European banks. They investigate the use of knowledge management to manage massive data flows, enhance decision-making, and preserve competitiveness by using data of the International Data Corporation of 600 banks in Western Europe. CRM, corporate portals, content management systems, and idea mapping are important tools that support knowledge customization and teamwork. KM in banks, however, must contend with issues like ineffective knowledge sharing, an excessive reliance on technology, and troubles defining implicit knowledge. The critique focuses on how many banks limit the usefulness of KM by not integrating it fully into their fundamental strategy. There are also case studies on Islamic banks (Nurdin & Yusuf, 2020), but they come to an ambiguous conclusion. Although the authors identify 8 steps in the KM cycle, they point out the difficulties that classic KM theories and models cannot be directly transferred to Islamic values and norms.

Finally, Moser-Boehm (2006) emphasizes that the banking crisis of 2008 was partly caused by a lack of essential knowledge of banking risks and value drivers among boards and senior managers in failing banks. These knowledge gaps related to their understanding of organizational structure, intermediation, and risk management, especially in fast-changing markets. As a result, the banks struggled to adapt and failed to acquire the necessary knowledge to address the challenges posed by the financial crisis. A dedicated investigation into the transfer of knowledge to the political leadership elite therefore seems more than sensible.

3. Methods and Data

Research design is to be understood as the overall strategy utilized to answer the research question (Blair, 2023). This is: Do central banks have the knowledge or the opportunity to pass it on to politicians in order to prevent financial crises? This research work aims, on the one hand, to make a contribution to the debate about financial crisis management, but on the other hand to close the research gap regarding knowledge work and communication. Although economics research has a clear focus on quantitative methods and is at least partly skeptical or hostile towards qualitative methods (Lenger, 2019), this paper takes the position that the economics focus can also benefit from qualitative research. In many situations, a qualitative research design could be the best course of action, especially if the goal of the study is to obtain in-depth understanding of complicated, context-dependent phenomena (Mwita, 2022).

One of the most used methods within the qualitative toolbox are expert interviews. An "interview can be simply described as a form of consultation where the researcher seeks to know more of an issue as opined by the individual being asked" (Adhabi & Anozie, 2017, p. 88). Experts, in turn, are defined by Döringer (2021, p. 267) "as persons who are responsible for the development, implementation, or control of a solution, or persons who have privileged access to people or decision-making processes." In this case, central banks are the research object; The responsible specialist departments were identified as direct contact persons. These can, for example, "Macroprudential policy", "Financial Stability" or "Crisis Management". A written interview guide must be provided so that candidates may get ready for the interview (Kallio, Pietilä, Johnson, & Kangasniemi, 2016). The purpose

of the guide is to steer the discourse so that the interviewer is always assured that the topics that are pertinent to him are taken into consideration. The researcher has the option to ask questions during a semi-structured interview at any appropriate time, if needed. After a representative's office employee participated in a pre-test, a few minor adjustments were made.

Table 1

Interview partner	Region	Duration
A	Northern Europe	32 minutes
B	Western Europe	40 minutes
C	Eastern Europe	32 minutes
D	Western Euope	35 minutes

Source: Author.

A total of eight institutions were contacted via email via the central bank websites. The relevant department management was contacted directly. Three people agreed to be interviewed. Two further contacts were made through the University of Finance and Administration (see Table 1). In order to maintain anonymity, it was decided to only name the regions of Northern, Western, Southern and Eastern Europe instead of the nation states. The course of the interviews was as follows. First, the author and the research project were briefly introduced. The reference to the complete anonymity of the participation was assured again. Finally, the questions were read out according to the guidelines. Questions were reduced to an absolute minimum due to time constraints. No changes to the questionnaire itself were necessary. At the end of the conversation, open questions were clarified and the offer was made to provide information about the further course of the research project. In the context of the present work, qualitative content analysis was used as the evaluation method. It is one of the most common methods in qualitative social research alongside grounded theory and objective hermeneutics (Wilson & Hutchinson, 1991). In the first step, categories that have been developed inductively on the material or that have been postulated in advance, based on theory and deductively, are assigned to individual text passages. The second phase then examines if certain categories can be applied to various text passages. Qualitative content analysis is generally used to structure communication material and then reproduce the summarised text sections in a generalised form (Goold & Damschroder, 2007). Various authors cite different processes in the context of qualitative content analysis. For this paper, the content analysis according to Mayring (1994) was applied. It includes a total of six steps when determining the analysis unit is included as it is done here.

The interview transcripts are defined as the analysis. All relevant text passages in connection with the research question are marked and then paraphrased:

- Marked text passages are generalized.

- First phase of text reduction
- Second reduction to just one word
- Formation of summary categories

The program *MAXQDA*, which can be considered a leader in the field of qualitative data analysis, was used for the practical implementation of the data analysis. The interview texts were uploaded to *MAXQDA* as a Word document and then processed there according to the analysis steps described above. Subtasks were performed in Excel.

4. Results

4.1. Knowledge

This chapter starts with the main category knowledge, as it represents the core aspect of this work. This category includes all statements about the wealth of knowledge. This refers both to individuals or institutions and even to nation-states. Knowledge is understood here as general knowledge, factual knowledge, cultural and social knowledge as well as private knowledge. Political opinions, norms and values are expressly not included. Interviewee C summed it up simply: “We [the central bank] have the knowledge and we can influence the [political] processes” (C, Pos. 11). In fact, all respondents can be attested to have a high level of specialist expertise. All interviewees had an academic background with an economic focus and could look back on a long career in central banking, financial policy, banking, etc. (A, Pos. 24).

Even if knowledge management in the scientific sense was not explicitly mentioned in any conversation, the transfer of knowledge is definitely an important task for all central banks surveyed. The most important recipients are governments and in particular the national finance ministries (B, Pos. 4), but international institutions, parliaments, the media and civil society are also identified as target groups. What should be emphasized positively is the positive knowledge culture that prevails in the institutions, which is expressed in a clear commitment to knowledge parts: “Then we do also have like-- it's called the memorandum of understanding where we do share any kind of relevant information regarding any hints of a different kind of crisis kind of situation threatening the financial stability of the financial system with the other members (A, Pos. 29).

The Eastern European representative explained the transformation process like this: “In a couple of areas in the bank, or in the central bank, we have regularly updated strategies. In some areas, we have external reviews. This is the organized way how to transform knowledge into future acting” (B, Pos. 6). The colleague from Western Europe added in more detail that there are essentially two elements, on the one hand the technical rule design, which is often the responsibility of the central banks themselves, and on the other hand an advisory function to the executive or legislative branches (C, Pos. 5-6). The sources of knowledge therefore primarily come from our own analyses (A, Pos. 18). The question of whether central banks can learn was answered in the affirmative by all those interviewed, albeit with varying degrees. “You learn from the past crisis and you try to fix what went wrong with developing the regulation. That's good. I think that that has actually had a great impact on the current situation, because in 2007, 2008, the banks were part of the problem” (A, Pos. 41), while the colleague noted that loss of knowledge,

e.g. through staff departures, can make these processes significantly more difficult (B, Pos. 12).

4.2. Working processes

The processes category addresses all work processes in the central banks. This includes in particular the processes of the departments examined, but also the bank boards and other associated sub-units. A process here refers to all processes that serve to generate, assess, apply and pass on knowledge in the context of financial crisis management. The Northern European representative summarizes: “We do have procedures, and that's because you have those exercises you always pick up what were the things that functioned, what were the things that we noticed that we didn't function, what were the things that we didn't even think about, and what do we need to fix? It's all about learning how to improve the procedures, but also, for example, sharing the information, getting the really up-to-date picture, and what would be the most important thing that we have learned so far” (A, Pos. 35).

The work processes of the central banks in the four countries examined with regard to knowledge management and knowledge transfer are characterized by a combination of structured protocols, informal networks and the use of international cooperation. The interviews reveal differences in strategies and processes, but also common challenges and approaches. Every nation has well-established protocols for exchanging knowledge that are predicated on frequent updates and gatherings. There are established arrangements that allow the central bank to communicate knowledge with the Ministry of Finance, the insurance regulator and other relevant entities. This includes providing the government and other stakeholders with quarterly study of the financial system, real estate markets, and macroeconomy (B, Pos. 5). The underlying strategies are also regularly updated (B, Pos. 6). It became apparent at various points in the discussions that the 2008 financial crisis was a key element. At various points in the discussions it became apparent that the 2008 financial crisis was a key element “because in 2007, 2008, the banks were part of the problem (A, Pos. 41). This position was shared by Person B (Pos. 7), who used the word panic to describe the time

Central banks appear to be heavily dependent on the expertise of their employees. Interviewee B (Pos. 12) also complained that there was no solution for the departure of high professionals. It was also emphasized that CB's institutional independence and comparatively good resources are important for forward-looking and sustainable financial market supervision (B, Pos. 12). The aspect of communication took up a lot of space in the conversation. This was primarily addressed to the government, administration and parliament (B, Pos. 20). Several interviewees emphasized that it was important to remain coherent in one's statements, but to adapt the level of detail and complexity to the target group (B, Pos. 20 and A, Pos. 44). Interviewees from Northern Europe summed it up that the financial system is always a trust business (A, Pos. 37).

4.3. Policymaking

The category policymaking will be discussed in the next section. This is defined as all processes by which political decision-makers (such as governments, parliaments or administrative authorities) develop and implement laws, rules, policies and measures.

The focus here is on the policy area of the financial markets. It includes functionality, composition, communication and cooperation between central banks and political actors, such as governments, parties, parliaments, and ministries. The Eastern European representative describes the interaction between policymaking and central banks as follows: “By policymakers, we can understand the government. In the financial sector, it is the central bank, the supervisory authority, the macro-prudential authority, the resolution authority, or something like that [...]. My view is that it's the way how the knowledge obtained by analysis research or previous policymaking is being transformed into current policymaking in a way that is very much dependent on the organizational structure” (B, Pos. 4).

The main instruments are in-house analyzes and models, which are communicated in the form of reports and participation in political committee meetings (A, Pos. 29). The most important contacts are therefore the government, especially the Ministry of Finance, Parliament and European institutions (B, Pos. 4). The specialist departments in particular were said to have great expertise, and the loss, something due to the retirement of individual civil servants, was seen as a major problem, as politicians often think in rather short terms, which is a major challenge (B, Pos. 16). Public awareness in particular can create pressure to act. A frequently cited example is the increase in capital requirements for banks, which was implemented relatively easily. Even the banking industry has accepted this and simply demanded that all nation states participate for competitive reasons (D, Pos. 29).

While three of the central bankers defined themselves as advisors, a Western European representative also had operational responsibility. His country does not have the necessary ministerial resources, which is why the central bank is actively involved in legislation, etc: “The formal rulemaking in Belgium is mainly done at the technical level by the central bank. For example, the transposition of directives. That's technically done here and then sent to the government, but that is more because we have a certain knowledge of writing laws in financial law” (C, Pos. 5). A procedure that was seen both positively and negatively by the interviewee (C, Pos. 11). Particular emphasis was also placed on special working groups led by the ECB, which dealt with the analysis of risks and the design of instruments. These meet four times a year and all national institutions are invited (D, Pos. 31). There was also agreement when assessing political crisis resilience. Overall, significant improvements were certified, particularly as a result of the 2008 crisis (C, Pos. 3). Nevertheless, there was also isolated criticism, which was primarily aimed at inefficient decision-making by those responsible for politics. Changing coalitions, party ideologies, etc. were also discussed (B, Pos. 26).

4.4. Globalisation

Finally, all statements regarding globalization should be evaluated. This category describes the process from a primarily national to an international or global banking and financial system. This includes financial transactions, supranational institutions and political coordination measures. “In many areas, you have quite strong cross-border institutions and inter-institutions with very good authority and reputation. In many cases, it is the source of sharing knowledge and information. I think that the central banks are

quite specific because we have the Bank for International Settlements, which is quite impartial” (B, Pos. 28).

The internationalization of banking regulation received a strong boost, particularly in the aftermath of the 2008 financial crisis. Existing institutions were strengthened and new ones were created (C, Pos. 3). The role of the European Union was particularly emphasized in all discussions. The Eastern European representative said: “The advantage of central banks and supervisory authorities is that we have powerful external international organizations that after any significant crisis, they analyze it, describe it, and provide plenty of recommendations [..]They do analytical research and then provide us with recommendations. They do store the knowledge and they do educate the future generations” (B, Pos. 11). But regional associations, some of which have a more informal character and have grown historically, have also been mentioned several times as important exchange platforms, for example for the Scandinavian countries (A, Pos. 29). Globalization also seems to increase awareness of crises and potential turmoil. Today, local banking crises are being analyzed in depth, which no one would have noticed 20 years ago (B, Pos. 18).

5. Discussion

This paper was started with the intention of obtaining an overview of how central banks contribute their knowledge to policy in order to ensure stability in financial markets. A better understanding of these processes, which have so far been little researched and difficult to understand from the outside, should help to identify breaks in communication, knowledge silos, or other challenges. This work is based on the thesis that there are deficits in knowledge and how to deal with it among political decision-makers and that scientific knowledge management could provide support here. The impression that knowledge management is a panacea should be avoided as much as possible. The peculiarities of the political system and the lack of a necessary knowledge culture make successful knowledge management difficult. Boltmann and Bankole’s (2017) (2017) assumption is that knowledge is recognised as a strategic asset in parliament, but it is mostly disseminated in an unstructured, informal way that is unrelated to parliament’s strategic aims. Nevertheless, facing the ever-growing need for information and fast decision-making as a result of globalisation, demographic change and crises (Cong & Pandya, 2003) the need of parliaments and its members for proper knowledge management is obvious.

It goes without saying that such a consideration as presented here is neither conclusive nor error-free. Unfortunately, no interview partner from southern Europe could be found. Although it is assumed that the technical processes are comparable due to internationalization alone, these impressions would have created a better overall picture. When reading, it must also be taken into account that the findings described here always represent the subjective view of individual central bank employees. For a systematic overview, a) a holistic investigation would have to be carried out and b) quantitative data would have to be included. It must also be viewed critically that various aspects were not covered or insufficiently covered by the interview guide, such as artificial intelligence. Nevertheless, there is confidence that the knowledge gained from this will provide valuable insights.

Overall, a very high level of technical expertise and a very good level of organization can be attested. The experience of the 2008 financial crisis generated intensive learning processes that resulted in a strengthening of macroprudential regulation. Internet analysis units, intra-bank working groups, constant consultations with the responsible ministries and integration into parliamentary processes ensure a constant flow of information. It should also be positively emphasized that there are protocols and strategies for crisis situations. Contrary to widespread clichés, at least the political leadership and working levels were given the authority to discuss on an equal level.

Nevertheless, various challenges also became clear. All representatives were aware of the systemic circumstances already described in Mittelstädt (2024), such as (frequently) changing governments, conflict-ridden coalitions, party ideologies and a lack of knowledge among individual MPs. These aspects cannot and should not be changed in democratic systems, but they form a special framework that central banks must address. Central banks should provide ongoing educational programs for MPs to increase understanding of financial stability and banking supervision. In addition, permanent communication channels can be set up between the central bank and parliament in order to institutionalize the exchange and ensure that it is independent of political changes. Precisely because of the high importance of conflict, which is repeatedly discussed, everything should be done to ensure neutral, evidence-based advice in order to minimize ideological conflicts and objectify the political discourse. In order to avoid loss of knowledge, past analyzes and recommendations should be documented and made accessible in a knowledge archive. These strategies allow central banks to maintain their independent role and work effectively within the democratic system.

It remained unclear to what extent central banks have dedicated knowledge strategies. Further research is needed on this. What was astonishing was that the aspect of artificial intelligence was not mentioned in any interviews - neither in relation to financial market analyzes nor to knowledge management. In some cases, the responsibilities for supervision, macroprudence and financial stability are anchored in different institutions; the extent to which greater centralization would be helpful here cannot be conclusively assessed. An important aspect of central bank knowledge management is cooperation with international organizations such as the Bank for International Settlements (BIS) and in particular the European Central Bank. These institutions provide valuable external analysis and help leverage key insights for the central bank's future strategy. Peer review systems and knowledge sharing platforms, like the Basel Committee platforms or the BIS Data Hub, provide a means of standardising international trade and conducting peer reviews, therefore preventing this. This can guarantee that national regulatory plans are routinely evaluated and modified and act as a quality control measure. Innovative solutions to emerging dangers might be developed by including a larger network of specialists in the exchange through the use of crowdsourcing platforms.

6. Conclusion

Both financial policy and central banks are remnants of turbulent times. They have had to deal with the COVID epidemic of 2020, the global financial crisis of 2007–2009, and a spike in inflation in 2022–2023 throughout the past 20 years (Kiley & Mishkin, 2024, p. 2). A number of models and metrics that central banks relied on stopped working as

expected after the 2008 global financial crisis, sparking fierce internal and external disputes. These controversial errors revealed not only gaps in knowledge, but also deficits in political communication (Best, 2024). But even if monetary policymakers apparently successfully manage a financial crisis, a certain link can be drawn from today's crisis management to tomorrow's risks, for even the best crisis management strategy can carry the virus for the next big slump if the strategists mistimed the exit (Wagner, 2010).

This paper therefore asked the question of how knowledge transfer from central banks to policy-making institutions works. Although the concept of knowledge management is generally recognized by commercial banks, the actual state of knowledge management often seems to be in its infancy, as there is often a lack of a dedicated strategy (Rono, 2011). In addition, there is an identified research gap regarding central banks. Due to the lack of statistical data and the fact that some informal information channels are involved, a qualitative approach was followed. Four representatives of European central banks were interviewed about this. The results showed that central banks have a detailed analysis system and address potential risk scenarios with a high level of expertise. There are also intensive information and discussion formats in the area of politics on both national and international level. Despite the comparatively good starting position, challenges were also identified that were primarily rooted in the political system itself. A lack of skills, changes in government and factors such as ideologies make objective knowledge work difficult.

Without wanting to claim a panacea, knowledge management can help to create both technical tools and a culture to break the centuries-long 'this-time-is-different syndrome' (Reinhart & Rogoff, 2009). Further research is needed, but the findings obtained give reason to be optimistic that the complex interaction of the actors examined would benefit significantly by strengthening the knowledge resource.

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