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From technical to academic central banking: The scientization of the Banque de France

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Abstract

This article documents the historical evolution of economic expertise at the Banque de France (BdF), from the late-nineteenth to early-twenty-first centuries. Criticizing presentism and conceptual reductionism in the notion of scientization, I characterize the evolution of economic expertise at the BdF as being a result of ‘field effects’ emerging from the BdF’s attempts to build state capacity. The BdF’s development of economics expertise should be interpreted as a way of negotiating the boundaries between various fields (private banking, technocracy, academia, and international central banking). In particular, I highlight two distinct boundary arrangements: *technicalization* and *academization*. From the late-nineteenth century to the 1960s, the rise of technical functions results from a dual positioning at the boundary between, respectively, the state and the market, and national and international institutions. The BdF’s nationalization, in the mid-twentieth century, fostered its integration into the administrative and technocratic field, putting it in competition with other ‘technicalized’ institutions. From the 1970s to the 1990s, the BdF negotiated new arrangements with the academic field. Finally, as a member of the European System of Central Banks since 1999, the BdF has sought scientific legitimacy to have a say in European monetary policymaking.

Keywords: Central banking; field analysis; scientization; sociology; state power

Introduction

The transformations undergone by central banks in the last two or three decades have often been described as a movement from the ‘art’ of central banking (Hawtrey, 1970) to the ‘science’ of monetary policy (Clarida, Galí, and Gertler, 1999; Issing, 2005; 2017; Blanchard, 2006; Mishkin, 2007; Coeuré, 2019). In the social studies of central banking, this historical trend is often summarized by referring to Martin Marcussen’s (2006a; 2006b; 2009) concept of ‘scientization’. The ‘scientization of central banking’ is a puzzling concept, since it brings together two logics, scientific and political, that, from Max Weber to Pierre Bourdieu, are usually considered heterogeneous. If central banks are bureaucratic organizations aimed at producing economic policies to achieve certain economic objectives, why do they now produce research following an ‘academic’ standard, which seems unrelated to the goals pursued by a central bank? This article shows that the concept of ‘scientization’, by conflating these two heterogeneous logics, misses the essential point, namely that the *variety* of the *actual* modes of articulation between science and politics depends on social and historical contexts. By taking the Banque de France

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(BdF) as a case study, this article reconsiders the notion of scientization by characterizing the BdF as a 'boundary organization' (Guston, 1999; Coombs and Thiemann, 2022; Goutsmedt and Sergi, 2025). Taking a step further, I bridge the idea of 'boundary organization' with the Bourdieusian sociology of social fields and of the state. This allows me to show that the BdF is operating at the intersection of various social fields and seeking to build state capacity through boundary arrangements (Hoppe, 2005) and boundary objects (Star and Griesemer, 1989) working as coordination devices between actors with different norms, interests, and aims. The conceptual contribution of this article therefore lies with providing a more nuanced delineation of the boundaries within which central banks operate, and a more detailed characterization of the processes of 'scientization'. The article aims at filling the gap between the social studies of central banking and the history of central banks by adopting a long-term historical sociology perspective – running from the end of the nineteenth century to the beginning of the twentieth century – applied to the BdF. By doing so, my analysis points to an implicit presentism in the social studies of central banking literature, showing that features of 'scientized' central banking existed at the BdF well before the 1990s.

The historical path taken by the French central bank can therefore help refine the somewhat blurry and over-encompassing concept of scientization. This case study allows me to disentangle, not only analytically but also empirically, the various sub-processes happening at different periods in time. I distinguish between *technicalization* and *academization* processes, corresponding to two different arrangements and two different strategies to build state capacity. This temporal division permits a more fine-grained map of the boundaries on which central banks are operating: not only at the boundary between science and politics, but also state and market, national and international institutions, academia and administrations. The analysis shows how five different *field effects* shape the boundary between science and politics at different moments in time.

Scientization, field effects, and the building of state capacity

The arrangement between science and politics

The notion of the 'scientization' of central banking, though popular in the social studies of central banks, remains ambiguous (Goutsmedt and Sergi, 2025). According to Marcussen (2006a; 2006b), 'scientization' both refers to the fact central banks increasingly rely on scientific and rational information to set their policies and to the rise of techno-scientific rhetoric in central banks' communication. In this article, my central contention is that the lack of a distinction between two different logics, scientific and political, produces conceptual ambiguity. In certain critical usages, 'scientization' refers to an obfuscation of politics through techno-scientific discourse. Some other times, it designates the idea that public policy is genuinely undergoing a techno-scientific transformation. The notion of *scientization* assumes too univocal a relationship of replacement or obfuscation of politics by science. This article shows, on the contrary, that there are other types of arrangements between politics and science, which do not always inevitably result in the replacement or obfuscation of one in favor of the other.

Science and politics are traditionally thought, in social sciences, as heterogeneous and separate. Max Weber (1946 [1917]; 1946 [1919]), for instance, asserted a clear separation in principle between science and politics, the former dealing with judgments of facts and the latter dealing with value judgments. Later, Pierre Bourdieu (1984) emphasized the very high degree of autonomy of the academic field, especially *vis-à-vis* the political and bureaucratic fields: academia sets its own ends, according to an internal logic specific to the field; as a result, academia, politics, and bureaucracy operate according to different principles. The articulation between science and politics can therefore not be taken for granted, and it requires a 'social arrangement' (Goffman, 1977) that allows for negotiating

their boundary. By too easily conflating these logics, the concept of ‘scientization’ overlooks the varieties of ‘social arrangements’ leading to their articulation. The theoretical perspective taken by this article is to document how exactly actors negotiate ‘boundary arrangements’ (Hoppe, 2005), and to highlight the diversity of resulting arrangements, depending on various historical contexts. This approach allows for an analysis of how science and politics are co-constructed by actors who protect the autonomy of their respective fields (‘demarcation’), while also defining the ways in which they interact (‘coordination’).

Moreover, ‘scientization’ is problematic from a normative stance because it is a preconception derived from common-sense. Indeed, the idea that monetary policy could be a science is primarily an ideal drawn from the imagination of economists, or an argument used by policymakers for self-legitimization (see for instance Clarida et al., 1999; Blanchard, 2006; Mishkin, 2007; Coeuré, 2019). These authors argue that the implementation of monetary policy rules, as described by Taylor (1993), and the development of the New Keynesian paradigm entailed a scientization of monetary policy. By using this term, one takes the risk of being uncritical of the implicit values and social representations of central banks’ agents. Since the distinction between ‘art’ and ‘science’ implies an uneven value assigned to different types of knowledge, the latter can serve as a means of self-legitimation for monetary policy. Although Marcussen (2006a; 2006b) was aware of this self-legitimizing use of science, he used this concept to refer to a global historical process, occurring since the late 1990s, whereby central banks increasingly rely on scientific and rational information to set their policies. Abolafia (2012: 2) made a similar observation that ‘more than any other financial institution, the central bank stands for technical rationality, the application of scientific thought to the solution of administrative problems’. Both authors point out the risk of a-politicization of monetary policy. Mudge and Vauchez (2016) argue that the ECB is a ‘hyper-scientized’ institution that uses science as an instrument of bureaucratic authority. In other words, scientization would be an avatar of bureaucratic rationalization, a classic feature of technocratic institutions, as stressed by Max Weber. However, the confusion between ‘technical rationality’ and ‘scientific thought’ does not help clarify the meaning of the idea of ‘scientization’.

Rather, I argue that one should distinguish between the use of ‘science’ for the building of bureaucratic capacities, that is to achieve certain policy goals, and the use of ‘science’ for legitimization purposes. I refer to the first use as ‘technicalization’ and to the second as ‘academization’. This distinction reflects the one made by Weingart (1999: 155) between the ‘instrumental’ uses and the ‘legitimizing’ uses of scientific advice in policymaking. It also reflects the distinctive divide in the social space of central bankers, as studied by Lebaron (2008, 2010, 2012), between, on the one hand, academic capital and, on the other, political and bureaucratic capital.

Technicalization is an *internal* arrangement, typical of modern government, that seeks to enhance bureaucratic capacity and provide infrastructural power (Mann, 1984) by monopolizing information and forcing legibility on the economy through the imposition of quantification and commensuration between social phenomena (Desrosières, 2013b; Scott, 1998). A relevant illustration of this process is Fourcade’s (2010) history of the development of the economics in France. Fourcade shows that the development of economics as an academic discipline was significantly driven by the building of the French technocratic state: this was achieved, especially in the post-war era, throughout establishing economics as a relevant training subject for high-ranking civil servants (the ‘grands corps techniques’) within the elites’ higher education system (‘Grandes écoles’).¹

The *academization* process corresponds to an *external* arrangement between fractions of bureaucracy and academia. Academization aims at enhancing bureaucratic organizations’ symbolic power, through the building of a monopoly over the judgment of truth claims. Lebaron (2012) has used this term to designate the fact that the social profile of central

bankers is evolving from the politico-bureaucratic pole to the academic pole. Other authors have suggested that central banks are increasingly becoming ‘producers’ of science rather than mere consumers (Thiemann and Priester, 2024: 8), as illustrated by the exponential increase in publications in peer-reviewed journals authored by central bank staff (Claveau and Dion, 2018). These activities play a structuring role in (re)defining the boundaries of economics as a science, the scope of its jurisdiction, in its scientific orientations (through the type of questions asked and in the types of knowledge valued). By contributing to academic debates central banks can influence economic beliefs and perform the economy (see e.g. Lebaron, 1997; 2000a; 2000b; 2015; Guilbert and Lebaron, 2017). Moreover, scientific legitimacy functions as a substitute for political legitimacy in an era of central bank independence *vis-à-vis* national governments. Indeed, central banks’ ambivalent structural position between the state and the economy (Coombs and Thiemann, 2022) results in regular ‘legitimation trials’ (Jürgenmeyer, 2023). Central banks are suspected of being either captive or too interventionist; they therefore must reassert their position as an impartial, neutral institution, acting in the best interest of the public. For instance, Thiemann, Melches, and Ibrocevic (2020) showed how, following the 2007-2009 financial crisis, the development of measurements of systemic risk by new alliances between central bankers and academic economists legitimized and justified central banks’ macro-prudential interventions. Another example of academization is Mudge and Vauchez (2016), who argue that the European Central Bank’s investment in research enables its autonomy from other European political authorities, as well as from national central banks.

The distinction between *technicalization* and *academization* is, however, not merely analytical; it corresponds empirically to different historical developments happening at the BdF at different moments in time.

The varieties of boundary arrangements

As argued above, there is a variety of possible arrangements between science and politics that develop depending on the socio-historical context. This variety depends crucially on the socio-historical context, since boundary arrangements are the result of social negotiation processes between different actors. In order to show the different drivers and outcomes of such processes, this article adopts a case-study based approach, and it takes a long-term historical perspective on the BdF case.

The lack of historical depth represents one of the main limitations of the political and social science literature on central banking, especially when dealing with ‘scientization’. This literature often makes few references to (and does not engage with) economic historians’ work on central banks. As a result, social studies of central banking tend to focus on the period following the 1990s (the era of central bank independence) and, consequently, they do not provide satisfactory historical hindsight for the contemporary situation – or, put differently, they show various degrees of presentism bias. Indeed, economic historians taking a longer-term perspective have already shown, in the case of the BdF, but also for other central banks, that these institutions have been engaging with knowledge production activities since their inception (for the BdF case, see e.g. Andrieu, 1990; Feiertag 2005a, 2005b, 2005c; Plessis, 2005; Boulanger, 2016).

This article fills the gap between historical and social science research on the ‘scientization’ of central banks by bringing a comprehensive account of the evolution of the BdF’s arrangements between knowledge production and policymaking over more than a century. I distinguish between two main boundary arrangements, technicalization and academization. These are not strictly chronologically separated but they developed sequentially, technicalization preceding academization.

Table 1. Evolution of the Studies in the Banque de France's organizational chart. *Source:* Author's own.

1880-1903	Section des études économiques (within the Secrétariat Général until 1926)
	Section des archives et statistiques
1903-1906	Service des études économiques
1907-1919	Bureau des études économiques
1920-1926	Direction des études économiques
1927-1944	Direction des études économiques (independent from the Secrétariat Général)
1945-1946	Direction Générale des Études Économiques
1946-1954	Direction Générale des Études et Services Étrangers
1955-1967	Direction Générale des Études et du Crédit
1968-...	Direction Générale des Études

Notes: The name of this section changed several times. From 1880 to 1883 it was called 'travaux d'économie politique'. From 1884 to 1897 it was called 'statistiques des banques étrangères et travaux d'économie politique'. Finally, it was called 'section d'études économiques' in 1898. In addition, archives and statistics were split in 1900 and the section 'archives et statistiques' became 'section des statistiques'.

The first arrangement, *technicalization*, had been developing at the BdF from the end of the nineteenth century to the 1960s. It involved: the growth of quantification (that is, the conventionalizing of economic concepts and establishment of measurement procedures: Desrosières, 2013b), the development of statistical and time series analysis, and the harmonization of statistics with those of other central banks around the world. This arrangement also involved an internal evolution of the organizational structure of the BdF, increasing the size, missions, and autonomy of the 'technical' bodies – that is, those BdF services dedicated to the production of statistics and expertise – in such a manner that the balance between 'technical' and 'political' functions in the organization was redefined. More precisely, technicalization corresponded to an increase in the amount of information collected and produced, a growth in the staff of these services, as well as a shift within the organizational hierarchy – from a 'Section' to a 'General Directorate' (cf. infra, Table 1). Giving functional autonomy to these services with respect to the BdF leadership, technicalization was crucial for the structural integration of the BdF into the French technocratic field (Belhoste, 2003).

The second arrangement (*academization*) has been developing since the 1970s. It did not replace technicalization; it was rather superimposed to it. *Academization* corresponds to three major developments in the history of the BdF. First, a new understanding of the role of 'Studies' within the BdF emerged in the 1970s that is expressed by the distinction made by actors between 'études' ('studies') and 'recherche' ('research'), the first meaning policy-oriented technical support and the second meaning original research closer to an academic standard. This resulted, first, in a clear reorientation of the BdF's hiring and promotion policy, favoring new profiles, with stronger academic backgrounds; second, academization entailed the development of several initiatives (in particular, conferences and seminars), bringing together bank staff and academic economists. In turn, this further enhanced the internal re-balancing between knowledge-oriented and policy-oriented bodies, with the services dedicated to 'studies' growing more than proportionally to the total size of the BdF.

In a nutshell, our historical approach documents that scientization *à la* Marcussen and a-politicization through science is not the result of a sudden shift happening in the 1990s, but rather is deeply rooted in earlier developments leading to a progressive internal re-balancing between 'science' and 'politics'.

Field effects and the building of state capacities

The ultimate aim of this article is to *explain* the emergence of these two arrangements; that is, to account and document, along the history of the BdF, the motivations, arguments, and social rationales driving different actors negotiating demarcation and coordination of science and politics. The empirical analysis suggests that the driving mechanisms are ‘field effects’.

Building on Guston’s (1999) idea of ‘boundary organizations’, the introduction to this special section (Goutsmedt and Sergi, 2025), as well as Coombs and Thiemann’s (2022) recent work, the article locates central banks at the boundary between science and politics, and between the state and the economy (Mitchell, 1999). I argue that this placement can also be explained by the positioning of central banks as organizations at the boundary of various fields (Eyal, 2012). In this regard, we continue the work of Mudge and Vauchez (2016) on the ECB who interpreted the ‘hyper-scientization’ of the ECB as a ‘field effect’ (Bourdieu, 1993; Martin, 2003), rooted in the ECB’s cross-location in three fields (financial institutions, professional economics, and European politics).

A field is a relatively autonomous social microcosm, where actors follow specific rules and act upon specific interests (the ‘*nomos*’ of the field). Fields are structured by the internal struggles for domination, through struggles for the definition of the legitimate form of capital. The boundaries between fields are themselves a subject for struggles. Bourdieu (2011) theorized the state as a site where different forms of capital are subsumed under symbolic capital. In particular, he emphasized the role of places standing at the intersection of different fractions of the field of power, which he calls ‘neutral places’ (Bourdieu and Boltanski, 1976; Boltanski, 2008). According to Bourdieu, the field of power is the social space composed of agents occupying dominant positions in the various fields (scientific, religious, political, economic, etc.) and therefore a place where different principles of domination and forms of capital compete. The field of power is an ‘intersectional field’ in the sense that it is located at the intersection of several fields. As a result, he explains state formation by competitive struggles for the monopoly of symbolic violence.

We argue that the two arrangements distinguished above result from the BdF attempting to build state capacities by negotiating the boundaries between the fields at the intersection of which it stands and coordinating their interactions. *Technicalization* is typically an attempt at building bureaucratic capacities in the sense that it seeks efficient means to achieve policy goals. It corresponds to already well-documented strategies of information monopolization and legibility enforcement on the economy (Desrosières, 2013b; Scott, 1998). By imposing standards that simplify pre-existing social arrangements through the introduction of, for instance, censuses, units of measurement, money, or uniform languages, states can seek to control transactions and circulations taking place within a defined area, and thus gain infrastructural power (Mann, 1984). In the case at hand, this happens through the development of the BdF’s statistical capacities, the monopolization of statistics and time series about the French economy, and attempts to harmonize financial and monetary statistics across the world.

Academization is another attempt to build symbolic state capacity (Centeno and Ferraro, 2018) through the conquest of undisputed legitimacy in discussing monetary and economic matters. Investing in the production of research and hiring people with academic curricula aims at enhancing the central bank’s symbolic power through a monopoly over the judgment of truth claims. Indeed, economists are the main competitors – and thus a potential source of critique – of the central bank in the space of legitimate discourse about the economy. I argue that the formation of a French, then European, monetary state was made possible notably by the integration between a fraction of the bureaucratic field (central bankers) and the field of economists. In particular, I contend that scientific

legitimacy functioned as a substitute for political legitimacy in the process of building central bank independence *vis-à-vis* national governments.

More precisely, I highlight five different field effects corresponding to different historical episodes and transforming the science/politics arrangement. *Technicalization* results from the first three field effects. First, the *privileged* situation of the BdF *vis-à-vis* other private banks and its *de facto* nationalization in 1936 put it in an ambivalent position between the state and the market and led it to develop technical expertise as a ‘neutralizing’ tool. Second, the development of an international field of central banking, with the establishment of the Bank for International Settlements during the interwar period, led the BdF to develop its economic and statistical expertise to meet the needs for statistical harmonization across central banks, while also competing with other central banks in international discussions. Third, the *de jure* nationalization of the BdF in the aftermath of World War II put it in competition with very advanced technical bodies (the ‘*grands corps techniques*’) with which it had to keep up if it wanted to have a say on economic policy.

Academization at the BdF follows from two other field effects. From the perspective of the central bank, gaining scientific – i.e., academic – authority was a way to seek legitimacy within the field of power, and to relieve the tensions between the competing fields that converge at the central bank (economic, financial, political, national, and international). From the perspective of academic economists, academization of the BdF allows them to come closer to central positions within the general field of power, by exchanging specific symbolic capital (i.e., academic prestige) for extensive general power. In other words, the ‘Directorate-General of Studies’ (‘*Direction Générale des Etudes*’) transformed itself into a genuine ‘neutral place’ (Bourdieu and Boltanski, 1976).

Data and methods

This article combines existing historical accounts of knowledge production at the BdF with first-hand data collection from the BdF’s archives and interviews with key historical witnesses. First, I identified a key chronology of the most important historical shifts in the BdF institutional history: shifts in its missions, internal organization, etc. These shifts were identified through a survey of secondary literature. I then traced, based both on secondary and primary (archival) materials, the evolution of the organization of the BdF throughout different periods; within this organizational structure, I identified and listed all the organizational entities within the BdF whose activities and attributions pertained to the production of knowledge or to the production of statistics (in the broadest sense).²

Table 1 provides a simplified chronology of the different labels that were attributed to such organizational entities. Despite this evolving terminology, these entities have been consistently labeled as ‘Studies’ (‘*études*’), referring to their mission (‘to study’). This term (the ‘Studies’) is therefore the one that we will use hereafter to refer to these various entities and to their mission. The table also testifies to the increasing importance of the ‘Studies’ at the BdF: they evolved over the century from a simple ‘Department’ (‘*Section*’), that is, a lower-echelon administrative unit, reporting to a Direction, to an autonomous ‘Directorate’ (‘*Direction*’), and then a ‘General Directorate’ (‘*Direction Générale*’). Yet, this was a contingent and non-linear process.

Building on this identification of major trends and characters, a more detailed archival work in the *Archives de la Banque de France* (ABF hereafter) was subsequently conducted by focusing on the significant periods.³ The materials constituted more than 70 boxes, containing notes, letters, internal correspondence, and reports. Archives were mostly collected from the collections of the General Secretariat (‘*Secrétariat Général*’), the General-Directorate of Studies (‘*Direction Générale des Etudes*’), the Directorate-General of

Credit ('Direction Générale du Crédit'), and 'papers' of the Directors of Studies. Quantitative data about the staff of these services was gathered since 1872 based on the 'Etat Général du Personnel' that has surveyed all the employees of the bank. All the employees of the services identified were hand-coded in a database every two years and quantitative analyses of the data were computed.

This analysis of the archives was complemented with four in-depth interviews with former BdF staff active in the 'Studies'. Moreover, for the recent period (after 1994), since the archives were not accessible at the time of investigation, I primarily relied on interviews, online sources, and gray literature, as well as an analysis of the Scopus database of articles with at least one author affiliated with a central bank. Interviews, lasting between forty-five minutes and two and a half hours, were conducted with two former Directors of Studies at the BdF, a former economist at the Research Center ('Centre de Recherche') of the BdF and a former member of the ECB's Executive Board.

The technicalization of the Banque de France

On 5 January 1880, Governor Ernest Denormandie decided that 'the study of economic and financial questions that may be of interest for the Bank' was to be part of the remit of the General Secretariat ('Secrétariat Général'). As a result, a Political Economy Section ('Travaux d'économie politique') was created within the General Secretariat. This date is foundational, insofar as, for the first time, an office dedicated explicitly to 'studies' appeared in the organization chart of the BdF. However, 'studies' had existed decades before, although they were conducted mostly by external actors using BdF data produced by the already existing Archives and Statistics Section ('Section des archives et statistiques'). A notable example is Clement Juglar (2014 [1862])'s pioneering analysis of trade crises and business cycles, which relies on data from the BdF's balance sheets.

In this section, I argue that, up until the 1970s, the Studies have undergone several major changes, demonstrating what I call the *technicalization* of the BdF: that is, the building of a considerable statistical infrastructure, the development of an internal capacity to analyze the data produced, and an expansion of the Studies. I identify three field effects explaining this trend.

The Banque de France at the boundary between state and market, 1800-1945

During the second half of the nineteenth century, data and quantitative studies were produced both by the BdF and by other private banks. The BdF played no special role in this ecosystem. Even today, most historical studies about the interwar period use statistical series based on the data established at the time by the four major commercial banks: the Crédit Lyonnais, Société Générale, Comptoir d'escompte, and Crédit industriel et commercial (Saint-Marc, 1983; Bouvier, 1989; Patat and Lutfalla, 1986; Bernanke and James, 1991; Mitchell, 2003). Crédit Lyonnais in particular had developed an exceptionally important Financial Studies Service ('Service des Etudes Financières') since 1871, aimed at guiding the bank in recommending securities to its clients (Flandreau, 2003). Enjoying considerable prestige, especially abroad, this department functioned in a way that foreshadowed contemporary rating agencies. The documentation it produced was even used for the work of the Paris Peace Conference of 1919, which notably determined the economic 'reparations' owed by Germany following World War I. From 1901 to 1939, the Financial Studies Services at the Crédit Lyonnais collected and standardized annual bank balance sheets in a massive ledger called 'the Album' (Baubeau et al., 2021). In comparison, as there existed no banking regulation and supervision, the BdF gathered regular information on the balance sheet of only the four main commercial banks, and did not

construct a standardized accounting framework; nor did it have a systemic approach to financial and banking statistics before 1945.⁴ However, the Studies developed at the BdF from the end of nineteenth century to the interwar period differed qualitatively from those of its commercial competitors: the approach to Studies developed at the BdF focused less on financial analysis and more on ‘political economy’ studies, addressing topics such as cycles and variables that were not only financial but also economic ones.

In 1881, the Political Economy Section (‘Travaux d’économie politique’) and the Archives and Statistics Section (‘Section des archives et statistiques’) had only six employees in total. This number even fell to four, from 1891 onward, and it stagnated until the eve of World War I (Figure 1). Despite this weak dynamism, the arrival of Governor Georges Pallain in 1897 played a decisive role. He surrounded himself with economists and statisticians, such as Pierre Des Essars, as head of the Economic Studies Section in 1898, Albert Aupetit, a doctor in Law and later General Secretary of the BdF in 1902, André Liesse, professor of statistics and industrial economics at the Conservatoire National des Arts et Métiers, and George Roulleau, as Deputy Governor in 1922. Pierre Des Essars was a prominent member of the Société de Statistique de Paris, as well as Gaston Roulleau, who became its President in 1924. Both Des Essars and Roulleau used BdF data for several publications in the *Journal de la Société de Statistique de Paris*,⁵ carrying out the first statistical analysis about the issue and discounting of negotiable instruments (Baubeau, 2011), the seasonality of the various forms of currency, and the circulation of money (Plessis, 2005). This established close ties between the BdF and the Société de Statistique de Paris. In 1903, the two sections were merged into a ‘Service of Economic Studies’, which became a Directorate within the General Secretariat in 1920. Gradually, the Service of Economic Studies became a sort of observatory of the French economy, as the BdF changed from a private bank to a national central bank. These changes indicate an evolution from internal management tools to instruments for observing the outside world. The transformations of the BdF’s accounting during this period, moving from internal corporate accounting to lineaments of national public accounting and studies of the bank’s external world, reflect the transition from private corporate governance to public government (Desrosières, 2013a).

Becoming a Directorate (‘Direction’ hereafter) independent from the General Secretariat in 1926 with the appointment of Pierre Quesnay as its head, the Studies gradually gained a relative functional autonomy from the BdF leadership. Quesnay was called to join the BdF by Governor Moreau in 1926, following the recommendation of his former professor Charles Rist, who was appointed Deputy Governor that same year and was one of the most famous French economists of his generation. In addition to directing Studies, Quesnay served as secretary of the Committee of Experts that prepared the stabilization of the franc (Boulanger, 2014).

The Banque de France at the national-international boundary

The BdF, alongside the Bank of England and the Bundesbank, has the oldest department of studies among central banks. Yet, in the late-nineteenth and early-twentieth century, as observed also by Martín-Aceña and Tortella (2010), the BdF felt that it was lagging behind the Bank of England; BdF’s leadership concluded that the reason for this was the absence of a dedicated department for studies and statistics. From the very first statistical studies at the BdF, a particular emphasis was put on producing international comparisons, particularly with England,⁶ and on reporting information about international affairs, e.g. the activities of other central banks. From 1884 onwards, the Section of Economic Studies was renamed ‘Foreign Bank Statistics and Political Economy Studies’ (‘Statistiques des banques étrangères et travaux d’économie politique’). Starting in 1891, the BdF started to collect systematically the weekly balance sheets of all central banks worldwide (Bazot, Monnet, and Morys, 2022). The section employed skilled multilingual personnel to survey

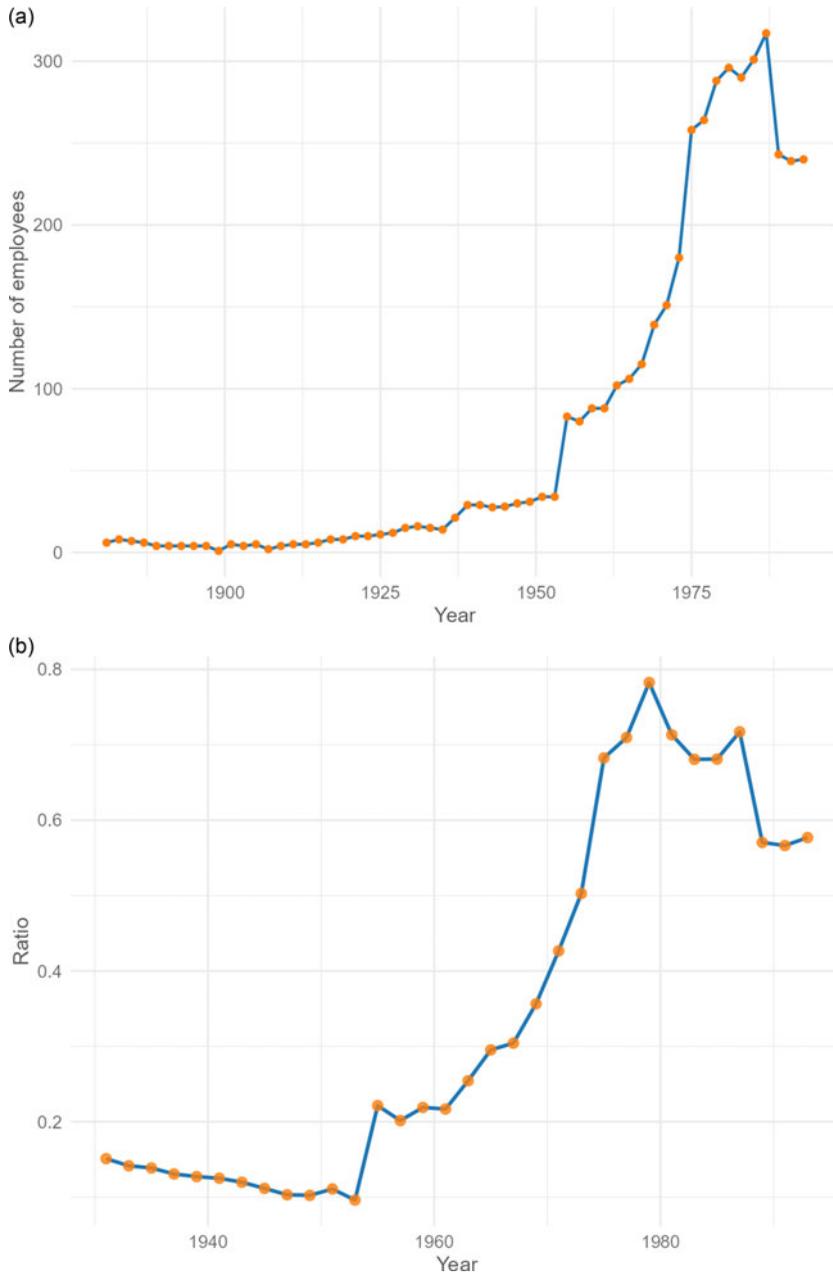


Figure 1. a. Evolution of the number of employees of the studies, 1881-1993. *Source:* États Généraux du Personnel, ABG (calculated by the author). b. Evolution of the ratio of studies employees to total staff, 1881-1993. *Source:* États Généraux du Personnel, ABG (calculated by the author). *Note:* Total staff is estimated based on the number of pages in the État Général du Personnel.

foreign financial newspapers, make regular press reviews, translate the various reports by foreign central banks, and gather and harmonize data on other central bank assets. One of the first significant publications resulted from the mission to the United States by George Hérissé (Senior Inspector at the BdF) in 1888, who reported to the BdF a very rich general picture of the North American banking system.⁷

This function of the Studies became central through the action of the League of Nations to promote the international harmonization of statistics and of monetary policies from the 1920s. During the interwar period, international cooperation between the banks of issue was strengthened, particularly around the stabilization of the main currencies and the establishment of an international monetary system based on the gold exchange standard by the Genoa Agreements in May 1922. This cooperation entailed an important work of statistical harmonization, in which the study function played a core role (see also Yee, 2024). One of the main architects of this emerging international field of central banking was Pierre Quesnay – who we have already encountered in an earlier section – as the head of the Direction of Studies (1926–1930). A fervent advocate of monetary internationalism, Quesnay had worked previously at the Secretariat of the League of Nations (1920–1926) (Boulanger, 2017).

The Conference of the Statisticians of the Banks of Issue constituted an important and symbolic moment of the international cooperation fostered by Quesnay at the BdF. The Conference, held between 11 and 16 April 1928 in the Golden Hall (*'Galerie Dorée'*) of the BdF, was organized under the aegis of the League of Nations and worked under the presidency of Quesnay. During the Conference, the representatives of twenty-four central banks presented the activities of their statistics departments.⁸

In 1930, the Bank for International Settlements (BIS) was created. Quesnay became its first Director General. The BdF Direction of Studies stood then at the interface of the growing international exchanges across central banks. For example, in a letter dated March 26, 1931, the head of the Reichsbank's statistical department urged his French counterpart to 'continue the exchange of statistical information as inaugurated by the Paris Conference in 1928'.⁹ A regular correspondence was then established, in which the two men kept each other informed of the organization, developments, and publications of their respective services. M. Lacour-Gayet, the head of the Direction of Studies from 1931 onwards, argued, in a note from 27 March 1931, addressed to the BdF Governor, that the role of the Direction should be mainly the 'liaison [...] with foreign issuing banks'. He insisted on the need to develop 'liaisons by personal contact' by increasing the number of 'courtesy trips' and by establishing internships in foreign issuing institutes to develop 'living documentation'. He emphasized that this was a prestige issue that 'enabled [the Bank of England] to stand up successfully to the American banks', especially in the context of the forthcoming elections to the BIS Board of Directors, where it would be necessary to influence the discussions on German reparations.¹⁰ In this note, he placed his Directorate at the heart of a battle for influence in which the main competitor was the Bank of England. Seeking to influence discussions on German reparations and promoting 'living documentation', he conferred a role to the BdF in international economic intelligence and in serving national interests.

During the interwar period, technicalization was thus a result of an international field effect due to the formation of an international field of central banks. Developing the Studies was both a way to develop instruments to govern and shape the 'French economy' (see also Angeletti, 2021; 2023) demarcated by other national economies, a question of 'prestige', i.e., of symbolic power, in the competition with other national central banks and a means for economic intelligence.

The Banque de France within the technocratic field, 1936–1965

In July 1936, the reform of the statutes of the BdF reduced the influence of shareholders in the deliberations, entailing a *de facto* nationalization of the BdF (Duchaussoy, 2017). The same year, the French government, led by a left-wing coalition (the 'Front Populaire') implemented a nationalization of credit (Monnet, 2018). This made the BdF endorse a new role, that of acting for the public interest. From 1936 to 1965, the development of the

Studies is linked to the growing idea of a public monetary service and the gradual entry of the BdF into the administrative and technocratic fields. Studies developed in correlation with – and as if to counterbalance – the loss of autonomy of the Bank in relation to the government.

As the Director General of the BIS and former Director of Studies at the BdF, Quesnay was one of the main architects of the 1936 reform. During the parliamentary debates of July 1936, he sent a note to the Chairman of the public finances commission at the Sénat and former Minister of Finance Joseph Caillaux – which Caillaux literally took up in his speech to the Senate. He made proposals to ‘modernize’ the BdF and advocated for an interest rate and credit policy. According to him, this evolution required a ‘double renunciation: ‘to political activity’, first; ‘to competition with private banks’, second’ (Margairaz, 2016: §17). In other words, it was about moving out of the ambivalent position at the boundary between the state and the market. Quesnay expressed in a clear way the difficult balance imposed by the new situation of the BdF between the assertion of its authority and governmentality on the one hand, and the need to gain the trust of markets on the other. The solution to this contradiction, for Quesnay, lay in the depoliticization of the institution, by refocusing on technical functions. In his opinion, the BdF had to become more technical in order to organize credit without being suspected of having political interests. This example shows, among other things, that depoliticization is not specific to central banking in the 1990s. It is an old strategy that can be activated depending on the institutional configuration. This is why the 1936 reform implied the upgrading of the Studies, in accordance with the vision that Quesnay had instilled during his time at the Direction. Similarly, Duchaussoy (2017: 64) explains that the creation of the Exchange Stabilization Fund (‘Fonds de Stabilisation des Changes’) – an emergency reserve fund tasked with regulating the exchange rate of the national currency by buying and selling francs, gold, and foreign currencies – went hand in hand with strengthening the Bank’s expertise. From 1936 on, the Direction of Studies became an ‘essential vector of information, serving a dual role as an interface both with the Bank’s government and with other central banks and commercial banks’ (Duchaussoy, 2017: 65).

Thus, in July 1936, the Director of Studies, Lacour-Gayet, sent exactly the same note on ‘living documentation’ as in 1931 to the newly appointed Governor, along with a draft reorganization of the Direction.¹¹ Following Quesnay’s plan, he asked for a ‘rational reorganization of the Directorate of Studies’ and emphasized the role of the Direction as a body providing information to the Bank’s authorities, and also to the public and to public administrations. He considered financial communication and dissemination of statistical information as a ‘public service’ and the ‘collaboration of the Service’s agents with certain financial information bodies’ as ‘not only admissible but also desirable’.

Moreover, since the law of 1941 organized the supervision of banks (Andrieu, 1990) and since the BdF was becoming the instrument of the national credit policy, new instruments were required to ensure the control and supervision of banks. The Directorate General of Credit (‘Direction Générale du Crédit’) thus included a ‘General Studies Section’ and the ‘Banks and Financial Institutions Department’; the latter monitored the situation of banks by centralizing information on outstanding loans and balance sheets. From 1945 onwards, the BdF thus developed a systematic approach to financial and banking statistics, which was absent in the previous period. In particular, the Banque started publishing financial and macroeconomic analyses and statistical tables about banks in the *Rapport Annuel du Conseil National du Crédit* and in the *Rapport de la Commission de Contrôle des Banques* (Table 2). World War II and the 1941 law put an end to the Crédit Lyonnais’s statistical activities, thus suppressing the main contender to the BdF’s supremacy over financial data. At the same time, since 1942 the Direction of Studies became a ‘General Directorate’ and was grouped with the Foreign Services from 1945 (‘Direction Générale’ hereafter) headed by Jean Bolgert. Jean Bolgert was Director General of Studies and Foreign Services from 1942 to 1955. He entered the BdF in 1917 after studying at

Table 2. Main publications of the Banque de France. Source: Author's own.

Date	Publication	Frequency	Description
1800-1945	Rapport pour l'Assemblée Générale des actionnaires	Yearly	BdF financial statements, balance sheet, operations
1945-1993	Compte rendu des opérations	Yearly	BdF financial statements, balance sheet, operations, macroeconomic assessment, policy and activity report
1994-today	Rapport de la Banque de France	Yearly	Macroeconomic and financial analyses, policy report, balance sheet assessment and forecasts
1946-1994	Rapport du Conseil national du crédit	Yearly	Macroeconomic and financial analyses, statistics about credit and policy, activity report
1949-1983	Rapport de la Commission de contrôle des banques	Yearly	Banks balance sheets, information and legal measures on bank capitalization, statistical tables
1984-1993	Rapport de la Commission bancaire	Yearly	Legal statements and cases, information about the activities of banks and financial companies, financial analyses, statistical tables about banks and financial companies.
1971-1993	Bulletin de la Banque de France	Quarterly	Information about the economic situation, economic studies, statistical tables
1990-today	Bulletin de la Banque de France	Monthly	Information about the economic situation, economic studies, statistical tables
1953-today	Rapport de la Zone franc (Rapport des coopérations monétaires Afrique-France from 2020)	Yearly	Macroeconomic and financial analyses about the situation in the Western and Central African and Pacific monetary zones, policy statements, more recently forecasts
1974-1995	Cahiers économiques et monétaires	Irregular	Applied economic and financial analyses, managed by the Service des Etudes Econométriques et de Recherche (SEER)
1994-today	Documents de travail	Irregular	Working paper series
2013-today	Rapport de l'Observatoire de l'inclusion bancaire	Yearly	Presentation of developments in financial inclusion, activity and policy report
2013-today	Rapport sur la stabilité financière	Bi-annual	Financial analyses and risk assessment of the financial system, current situation and future challenges
2016-today	Bloc-notes éco	Irregular	Educational articles presenting BdF studies for students, professionals and journalists

the Ecole libre des sciences politiques, became an inspector in 1927 and was strongly associated to the constitution of foreign services alongside Quesnay. From 1949 onwards, he was personal advisor to W. Baumgartner (Feiertag, 2013: §5) When it was decided in 1955 to group the two General Directorates (Credit and Studies), the number of staff member assigned to Studies increased from 34 agents in 1953 to 83 in 1955 (Figure 1).

Emerging from its position as 'first among equals', the BdF started taking part in the competition within the technocratic field. The *de jure* nationalization of the BdF by the laws

of 2 December 1945 and 17 May 1946 durably changed the balance of power between economic authorities, making the BdF responsible for credit policy jointly with the Ministry of Finance. Consequently, the BdF was put in competition with two other technocratic administrations that were much more advanced on the road to technicalization: first and foremost, the Bureau of Statistics and Financial Studies ('Bureau des Statistiques et des Etudes Financières') of the Treasury – which became the French Treasury's economic service ('Direction de la Prévision') in 1965 – and the National Institute for Statistics and Economic Studies (INSEE). If the BdF wanted to be able to assert its point of view within the French administration, it had to compete with the Ministry of the Economy, and thus upgrade its study function. During this period, new statistical tasks were undertaken by the BdF, such as Balance of Payment Statistics from 1945 onwards (Le Gallo, 2021) and credit statistics computed by the Central Risk Service ('Service central des risques'). The BdF later started to implement the rating of every French company ('cotation des entreprises'), which required developing statistics about private companies' accounts through the Central Balance Sheet Data Office ('Centrale des Bilans'), created in 1968. One interviewee explained how competition between the BdF and INSEE gradually developed, with studies sometimes overlapping, as in the case of the business cycle surveys carried out by the two institutions from the 1950s:

The BdF started to develop what would later be called business cycle surveys [and] statistics on credit, money, (...) interest rates and (...) balance of payments. The problem at that point is (...) the relationship between the BdF and INSEE, because INSEE does situation surveys, and the BdF does them too, is that normal? (...) So it's all a bit complicated. (...) The INSEE is not always very happy when the BdF publishes economic forecasts, even today. Of course, because they also make them. And it's a bit competitive, but after all, competition is sometimes good, it's stimulating and so on. (Interview with a former Director General of Studies, 01/21/2022)

However, this process was 'technical' in the sense that it only consisted in developing means of calculation and expertise directly linked with policy needs and in relation with the 'Grands Corps Techniques de l'Etat'. It did not, in any respect, engage with academic debates. In a note addressed to the Governor on 15 September 1954, Jean Bolgert outlined his vision of the role of the Direction Générale.¹² He emphasized the 'very particular and original character of the Direction' and concluded that 'the Direction ha[d] evolved into an *'état-major'* department'. He meant that the Studies did not work independently of the Bank's other functions, but rather that they now were intended to be available to the BdF leadership, to answer any request for technical expertise or advice. Indeed, he considered that 'maintaining an economic studies department similar to those that abound in the United States would be [...] an unnecessary and expensive luxury'. In the accompanying report, he insisted on the distinction between 'studies' conducted at the BdF and academic 'research' – 'the Department of Studies has always avoided purely academic debates [...]. Absolute independence of mind with regard to all theories' – and on the fact that the Direction Générale should not consult scholars, unlike other European banks.

The academization of the Banque de France

From the end of the 1960s onward, the Direction Générale took a completely different path: whereas in the 1950s Jean Bolgert stated that it was not to engage with academia, ten years later, the BdF was resolutely turning towards a policy of fostering collaborations with academia. This evolution is fueled by the parallel establishment of economics as an

autonomous discipline within French universities after 1968. Before then, economics was taught as a minor in departments of law and political sciences; economists, especially those with a research interest in mathematical and quantitative economics, belonged mostly to engineering schools, private companies, or public administrations (Fourcade, 2010; Vatin, 2008). The academization of the BdF is thus closely tied to the institutionalization of the economic discipline itself within French academia. As a result, academic economists progressively emerged as contenders – and as a source of potential critique – in the space of legitimate discourse about the economy, prompting the BdF to seek closer ties with them.

The formation of a neutral place, 1966–1994

While initially Studies lagged behind the rest of the Bank in terms of staffing, from the 1960s onwards it started to grow more than proportionally to the total size of the Bank.¹³ While the total staff of the BdF approximately quadrupled in volume between the 1930s and the late 1980s, Studies increased their staff by 12 times. Before 1960, the total staff quadrupled in volume, and the staff of Studies followed suit. After this date, it can be considered that there was a substantial increase in the proportion of staff assigned to the Studies. Therefore, it must be concluded that part of this growth was due to a strategic choice.

The newly appointed Deputy Governor André De Lattre, a former ‘inspecteur des finances’, technical adviser to the General Secretariat of the Presidency of the Republic and then head of Wilfrid Baumgartner’s cabinet, arrived in July 1966. He had a strong will to ‘modernize and open up the Banque de France’.¹⁴ To modernize the BdF meant, for De Lattre, introducing cutting-edge techniques. To ‘open up’ meant developing relations with the outside world, in particular with academia. These relations should be developed, according to him, mainly through joint symposiums between the BdF and academia. The BdF implemented several policies seeking to establish regular relationships with the academic field.

From September 1966, a first ‘information symposium’ inviting academics was planned in the Golden Hall, according to the wishes of Deputy Governor De Lattre. De Lattre had invited ‘old university friends’, such as Paul Coulbois, a full professor of political economy at Sorbonne University, Jean Mérigot, a full professor at the Institut d’études politiques in Bordeaux, and Jean-Louis Guglielmi, a full professor at Sorbonne University, via a written invitation.¹⁵ Most of the academics were very enthusiastic about this event – ‘such an initiative is too exciting for me as an academic to neglect’ one wrote¹⁶ – hoping that it would lift some of the secrecy on monetary issues and build bridges between practical and theoretical knowledge:

Your concern to renew the links between the Bank and the academic world seems to me to be justified in every respect. As a practitioner myself, I am aware of the danger of approaching financial problems from a purely bookish angle, although I do not think that the latter should be neglected.¹⁷

The Information Symposium on liquidity problems (‘Colloque d’information sur les problèmes de liquidité’) was held between 10–12 October 1966 in the presence of renowned economists such as the highly influential economist and statesman Raymond Barre,¹⁸ Emile James, a full professor at the Ecole des Hautes études Commerciales and elected member of the Académie des sciences morales et politiques, and Pierre Tabatoni, a university professor in economics at Paris-Dauphine University, as well as young economists such as the development economist Sylviane Guillaumont-Jeanneney and Jacques Le Bourva, a professor of economics at Rennes University. André De Lattre introduced the symposium immediately saying his wish to initiate a series of recurrent

meetings and proposed that another symposium be organized in 1968.¹⁹ A second symposium was organized in 1969 on ‘balance of payments problems’,²⁰ bringing together the same guests as in 1966, and a few other personalities such as Bernard Lassudrie-Duchêne, a professor at Sorbonne University and a well-known specialist in international economics, or Alain Barrere, a professor at Sorbonne University and one of the main introducers of Keynesianism in France. Seven employees of the Ministry of Finance, and Olivier Wormser, Governor of the BdF, also attended the symposium and were received in the Golden Gallery (‘Galerie Dorée’). The following year, a third symposium was held on ‘Quasi-Money’; then in 1975 on ‘The problem of financing investments’, where the same regulars were present. Also present was the eminent Jacques Rueff (very influential in French economic policies from the 1920s to the 1970s), members of financial and banking organizations, André De Lattre (President of the Crédit National),²¹ and Claude Gruson (member of the management board of the Compagnie Bancaire and former Director General at INSEE), employees of the Ministry of Finance, and members of the Commissariat Général au Plan, in addition to participants from the BdF, including two deputy governors. It is therefore clear that these symposiums were increasingly becoming ‘neutral places’ (Bourdieu and Boltanski, 1976), gathering actors belonging to the various fractions of the field of power (political field, administrative field, academic field, economic and financial field, etc.). ‘The dominant concerns of the last 20 or 25 years’ were discussed there, according to Deputy Governor De La Geniere.²² As early as 1974, staff members stated: ‘in the context of its relations with the university – which it has endeavoured to develop over the past few years – the Banque de France has organised regular symposiums with professors of economics. [. . .] In this way, a tradition was established, which is still fragile, and which should be consolidated’.²³ The aim of these conferences was not so much for the BdF to learn from academics as to disseminate information. Scholars were indeed only invited as audience, while the presentations were made by the staff of the Direction Générale.

During this period, the role of the Direction Générale evolved considerably. From 1968 onward, it regained its independence from the General Directorate of Credit, although the two continued to collaborate regularly. The centrality of the Studies was further reinforced by the law of 2 January 1973, which gave the BdF the mission of ‘carrying out all studies and analyses useful for its information or that of the public authorities’. The new Statutes of 1973 changed the composition of the BdF’s General Council, replacing ‘members by right’ representing economic sectors with experts appointed for their ‘economic competency’ (Monnet, 2018: 94). The Director of Studies, F. Moliexe, emphasized in May 1973, that while the *Direction* had in the past ‘the broadest possible vocation for research and information’ but had refrained from participating in academic discussions, ‘the increasing multiplicity and complexity of economic phenomena [. . .] as well as changes in the organization of the Bank of issue have imposed, over the last twenty years, profound changes in the role and character of the Studies Department’.²⁴ In 1973, the composition of the BdF’s General Council (‘Conseil Général de la BdF’) was modified in order to integrate ‘experts’ chosen for their economic skills: Raymond Barre and Edmond Malinvaud, a world renowned economist at INSEE and former director of the *Direction de la Prévision* at the Ministry of the Economy from 1972 to 1974. It is likely that Malinvaud contributed to bridging connections between the BdF, INSEE, and the *Direction de la Prévision*, and to establishing these two institutions as a model for the future of Studies at the BdF. In 1976, the Roquetteville project took note of this evolution by merging the General Directorate of Studies and the General Directorate of the Economic Conditions (‘Direction Générale de la Conjoncture’). New ‘strategic choices’ were made, ‘in response to the concerns expressed by the Joint Standing Committee’.²⁵ These choices were made in favor of a deepening and diversification of work, a ‘significant increase in studies intended to inform the Bank’s

authorities', but above all to give priority to 'fundamental research' and 'original research and synthesis work'.²⁶

This evolution can also be explained by the competition with other bodies of the administrative field both at the national and international levels. Indeed, the report of the joint standing committee's synthesis group on the activities of the *Direction Générale* in 1975 emphasized the inadequacy of the resources and training of economists to reach a level 'comparable to that of economists in other central banks' and called for the development of a Research Department 'in order to enable the Bank to maintain the important position it holds in this field in comparison with other administrations'.²⁷ Similarly, in an update on the role and operating conditions of the *Direction Générale* at a meeting of the Executive Committee, Pierre Berger, the new Director General of Studies, recalled that 'in certain cases, [...] the Bank finds itself in a position of competition with certain government departments such as the *Direction de la Prévision* or the INSEE'. Berger thus recommended to 'try to impose [them]selves through the quality and originality of the work [they] provide'.²⁸ For its part, the Joint Standing Committee recommended deepening relations with academics, criticized the overly 'immediate' aspect of the *Direction Générale*'s work and calls for the creation of a forecasting unit. It encouraged the broadening of the Bank's areas of study as well as the conduct of 'pure' research: 'Generally speaking, it is important for the Bank to give itself the means to assert itself in these areas through the scope and quality of its studies and thus be in a position to respond to its own needs and those of the public authorities, as well as to the requests it receives, particularly from the university and international organizations'.²⁹

As a result, forms of cooperation between the BdF and universities developed on both sides. On the BdF's side, academics were invited to give presentations in BdF symposiums. The practice of hosting student interns also became more widespread from 1977 onwards, especially during the Summer months.³⁰ From 1979 onwards, the Bank's government implemented a policy of financial support for researchers, university professors, and students.³¹ That same year, Christian De Boissieu, an economist at Sciences Po who occupied multiple positions in national and international economic institutions, was the first to receive a grant of 10,000 francs for a research project on the 'structure and formation of interest rates'.³² Progressively, the BdF entered the burgeoning landscape of macroeconomic forecasting units in France (Angeletti, 2021), an area that was previously reserved to the Treasury's *Direction de la Prévision* and the INSEE. From 1979 onwards, members of the *Direction Générale*'s staff participated in the G.A.M.A. project to set up an econometric model in collaboration with the CNRS and University Paris X-Nanterre. This conversion to fundamental research led, in 1990, to the creation, by the new Director of Studies, Yves Barroux, of a Research Center 'widely open to the outside world'. The twelfth BdF-University symposium organized that year brought together more prestigious personalities than ever before, such as Tommaso Padoa-Schioppa, Charles Goodhart, Jean Tirole, Philippe Aghion, Michel Aglietta, as well as Marc-Olivier Strauss Kahn and Dominique Plihon who were both employees of the *Direction Générale* and thus testified to the successful marriage between the BdF and academia. A *Centre d'Etudes Supérieures de la Banque* (Centre for Advanced Studies) was created to provide university training for the Bank's staff. On the other side, institutions such as University of Paris 1 solicited the Bank's agents to participate in their training.³³ Robert Raymond for instance, a future Director General of Studies from 1983 onward, began to give lectures at the Sorbonne³⁴ and André De Lattre taught economic policies at Science Po between 1959 and 1983. A member of the Business Conditions Division and then Director of Research from 1990 onwards, recalled a 'cross-fertilization' allowing universities to 'better understand, sometimes to come and work, to obtain statistical series that they didn't even know existed, and to improve their work'.³⁵

The *Direction Générale* became a neutral place in the sense that it became a meeting point between all fractions of the field of power and a place of production of the dominant

economic ideology. All the different field effects mentioned before thus played a role. One department in particular was to play a catalytic role in this dynamic: the Econometric Studies and Research Bureau ('Service d'Etudes Econométriques et de Recherche'), set up in 1969. Introducing econometric research at the BdF, the department elaborated on the BdF's own model of analysis of the French economy in 1975. Moreover, the BdF model constituted an original synthesis between monetarism and Keynesianism, based on the hypothesis of an 'overdraft economy' (Hicks, 1967), which was to become a school of thought in France during the 1980s (Feiertag, 2005a: 238; see also Renversez, 2008).

The *Direction Générale* was increasingly perceived as 'emissary of the Bank' or spokesperson, not only to the public but also to the BdF's international counterparts. In a note circulated on 22 October 1973,³⁶ P. Berger emphasized that the *Direction Générale* must play a very active role in disseminating information to different audiences, in particular the actors providing data (financial institutions, companies, and exporters), the universities, professors, and students, who must receive 'direct information on the evolution of the economic situation', but also '[the Bank's] own conceptions on the interpretation of the phenomena', and the press. The Econometric Studies and Research Bureau was thus supposed to play a role in disseminating econometric analyses and scientific communication through the publication of the *Cahiers économiques et monétaires*, starting in 1974 (Table 2). Berger also stressed that the work conducted by the BdF cannot be identical to academic research: BdF staff must above all maintain relations with the outside world, and actively bring a point of view, namely that of the Bank. In another note in 1970, Berger writes that 'like the previous symposiums, the latest one confirms that the positive contribution is greater on the part of the Banque de France than on the part of the professors, whose theoretical views are not always of a nature to provide useful elements for the conduct of monetary policy. This does not mean that such meetings are useless, on the contrary, but that they should be considered above all as a profitable contribution by the Banque de France to university teaching'.³⁷ As a former Director of Studies put it, the aim was to fill a 'lack of knowledge about the reality of monetary phenomena' and 'to ensure that academics no longer talk nonsense about monetary issues'.

If the BdF takes on important tasks of disseminating economic information, it is because it considers that this can increase the effectiveness of monetary policy, as the Governor explained to the Minister of the Economy: 'I am convinced that a better knowledge by experts and the general public of monetary and financial phenomena and of the consequences implied by the choice of policies can only lead to a better understanding and therefore to a more effective action of the monetary authorities'.³⁸ Therefore, it becomes clear that the new connections built with academia and the contribution of the BdF to academic debates aim at building symbolic state capacities through the monopoly of the judgment of truth claims.

The Banque de France within the European System of Central Banks

From the 1990s onward, following the acceleration of the European economic and monetary integration process, the BdF became both legally independent from the French government and integrated within the European System of Central Banks (ESCB). This entailed two changes. First, the new stakes for the BdF action consisted in making its voice heard in the decision-making process at the European level. Second, formal independence meant that the BdF, like all other ESCB central banks, could no longer base its legitimacy on that of a democratically elected government, and therefore had to find other sources of legitimacy and authority. Following the lead of the European Central Bank (ECB), the BdF sought political legitimacy by adopting the formal norms of academic legitimacy.

As Mudge and Vauchez (2016) showed, the ECB is an institution that has been seeking academic legitimacy since its inception, notably through a Directorate General specifically

devoted to research, whose main aim has been to publish articles in leading academic journals. As this former member of the ECB's Executive Board put it, in an interview I conducted in 2021, this strategy is 'a bit of a show-off' and aims at endowing the ECB with significant scientific prestige. This strategy also allowed the ECB to establish itself both in the face of European national central banks whose scientific legitimacy was still largely to be built and in the face of the American Federal Reserve. As a former staff member of the BdF's Research Centre put it, 'the aim of the ECB was to impose itself in a world where the other central banks all looked down on it. [...] It was an opportunity for the people who were there who said to themselves 'well, there's an opening to gain market shares, perhaps in the long term to make our work visible'".

The rise of this new dominant player in the field has led to a major rethinking at the BdF, which found itself in competition with the other national central banks in an area where it was rather behind. Indeed, long integrated into the French administrative field, it recruited its staff based on very different criteria from those of other national central banks and soon of the ECB – in particular, very few staff with a PhD – and therefore had great difficulty in seconding its staff to the ECB.

This new situation led the BdF to review its strategy, imitating the new forms of academic legitimacy set by the ECB. Three initiatives are most representative of this new endeavor. In 1990, the BdF created its own Research Center, overviewed by a prestigious scientific committee: Jacob Frenkel (then chief economist at the IMF), Edmond Malinvaud, Patrick Artus, and Christian de Boissieu among others.³⁹ In 1995, the 'Banque de France Foundation' was established, with the mission to fund economic research and to 'work for better synergy between the research community and the Banque de France'.⁴⁰ Since 1997, this foundation has awarded several research grants.

Furthermore, since 2001, the Foundation has also been sponsoring a PhD dissertation prize hosted by the French economics association ('Association Française de Sciences Economiques') as well as a 'Young Researcher's Prize' (since 2008). Finally, the BdF set up, in 2004, a visiting program allowing French and foreign academics to apply for one- to three-week stays at the BdF, with travel and accommodation expenses covered. More occasionally, the BdF also financed research projects or university conferences. According to a former staff member of the Research Center, all these initiatives were 'a way of making the BdF visible and giving the impression that the BdF was in the picture in international terms, so the idea was to invite (...) famous people to say, 'the Banque de France exists like other central banks.' Understanding the need for economists with PhD credentials, the Research Center was happy to send some of its employees do a PhD in the United States.⁴¹

Following these initiatives, which started in the 1990s and early 2000s, the BdF experienced, starting from the mid-2000s, a strong expansion of its research profile. As a former research executive reports, the strategic reorientation of the BdF in the 2000s led to an unprecedented massive hiring of researchers and PhDs: 'It's a strategic choice that was made. And the strategic choice was to make research more dynamic, to say that it was imperative to exist in the field of research. It's a huge choice, so there was a lot of hiring and the standard hiring flow was much more oriented towards research, research was much more valued internally, so here we changed gear. We've changed gear, it's a huge thing! Huge. Huge'.⁴² According to another witness at the time, this 'change of gear' was carried out according to the will of the newly appointed deputy governor in 2005, Jean-Pierre Landau, who alongside his career as a senior civil servant taught economics at Science Po Paris, Johns-Hopkins University, and Princeton University.

Regarding academic publications, the BdF has been catching up with other central banks since 2005. In the 2010s it reached the same quantitative level of publications in academic journals as the Bank of England or the Federal Reserve of Saint Louis.⁴³ As a former executive of research at the BdF explained, before the 2000s some of the staff had

been publishing books or articles, but most of the time they did it using an alias, and without claiming a direct affiliation with the BdF.

This new strategy by the BdF, which marks the final step of its academization, was motivated by the need to influence the European field of central banks and the bodies responsible for monetary decisions in a context where the new dominant player, the ECB, had imposed scientific prestige as a new criterion of legitimacy.

Conclusion

By applying a long-term perspective on the case of the BdF, this article escapes the presentism often associated with the notion of scientization. My analysis documents the fact that processes such as de-politicization through knowledge production have existed since the very beginning of the twentieth century. Moreover, this article's theoretical framework, focusing on field effects, highlights the variety of possible arrangements between 'science' and 'politics' and how they are built within different socio-historical contexts. Re-defining scientization as a field effect emerging from the BdF's attempts to build state capacity by negotiating its placement on the boundary of various fields (banks, technocratic field, academic and international field of central banks), this article distinguishes between two different boundary arrangements – namely, technicalization and academization.

The long transition of the BdF from a private bank to a public institution led to the emergence of economic studies and statistics that defined the limits of a territory and an economy to be governed. From then on, the BdF became part of an international system of central banks and competed with other regulatory institutions in neighboring economies. The field of international central banking, promoted by the League of Nations and the BIS, was the main driver of the development of Studies at the BdF, notably during the interwar period. From 1936 onwards, the gradual nationalization of the BdF strengthened this process. *Technicalization* made it possible to neutralize and depoliticize the BdF's actions by promoting its 'technical' functions and justifying its attributions by its special technical competence. From the time of its *de jure* nationalization in 1945, the BdF was put in competition with other technical bodies of the State, first and foremost the INSEE and the Treasury's department of economic studies. In the 1970s and 1980s, a second process of *academization* started under the watchword 'modernize and open up'. A university-oriented policy was set up involving regular BdF-University symposiums, the financing of university research projects, student internships, and soon, joint research projects bringing together prestigious players from the academic, banking, administrative, and political fields. From 1976 onwards, a strategic reorientation gave priority to so-called 'fundamental' research and to original, forward-looking studies. Gradually, a *neutral place* formed around the *SEER*, where actors from various fields (banking, administration, and academia) collaborated and gave birth to a new model of interpretation of the French economy. The Direction Générale was increasingly placed at the interface between the BdF and its various external audiences, responsible for conveying a point of view, that of the Bank, and for making its voice heard, notably in international meetings and at the BIS, but also with the academic and banking audiences for whom it develops an important communication and publication policy. This research turnaround was given a further boost by the European monetary integration and the newly gained independence of the BdF. Faced with this new dominant player and the new standard of political legitimacy that it imposed, the BdF sought academic legitimacy by founding its own Research Center and through the BdF Foundation. In the mid-2000s, there was a considerable increase in its research activities, both in terms of staff and publications in academic journals, motivated by the need to have a say in European-level deliberations.

As shown by the other articles in this special section, the forms in which the arrangements between science and politics are actualized are specific to each case, as they are determined by the history of bureaucracies and of academic fields in each country. Furthermore, the phenomena referred to as ‘scientization’, as well as the academization highlighted in this article, primarily characterize central banks in the Global North. It should, however, be noted that several central banks in the Global South have undergone comparable developments. For example, the Central Bank of West African States (BCEAO) established a banking training center as early as 1977 to support the Africanization of its management staff. Since 2019, this center has become a general directorate, and its responsibilities have been redefined to include research and prospective studies, suggesting that it is moving towards an ‘academization’ type of arrangement.

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Notes

1. The ‘Grands Corps Techniques de l’État’ is a branch of the French senior public service, alongside with the ‘Grands Corps Administratifs’, that consists of senior civil servant engineers such as the body of military engineers, mining engineers, water, bridges and forests engineers, or statistical engineers.
2. Archives de la BdF (ABF), 1500200301 AR 1 to 7 (Organization of the BdF); ABF, 1375200401 AR 1 (Organization of the Direction Générale des Études, 1931-1976).
3. In particular, the deposits 1375200401, 1370200401 and 1417200405 (Department of Studies and Statistics). All originals in French are translated by the author.
4. ABF, 1069201116 AR 48 to 71.
5. Congrès international pour l’étude de l’épargne, 1957, rapports nationaux, pp. 219-221 cited in Plessis (1982); ‘Les dépôts de titres à la Banque de France’, Journal de la Société de Statistique de Paris, October 1897, cited in Plessis (1982).
6. Comparison of the quarterly, monthly, and then weekly statements of the BdF and the Bank of England (1843-1873), comparative changes in discount rates in France and England (1800-1877), etc. (ABF, 1069200401 AR 93-95).
7. ABF, 1500 2003 01 AR 286.
8. ABF, 1370200401 AR 1.
9. ABF, 1370200401 AR 1: letters of March 26 and April 21, 1931.
10. ABF, 1370200401 AR 1: notes of March 27, 1931, from R. Lacour-Gayet.
11. ABF, 1370200401 AR 1.
12. ABF, 1375200401 AR 1.
13. As no archival documents provide a summary of the total workforce’s evolution and as the ‘Etats Généraux du personnel’ span hundreds of pages yearly thus making a manual count impractical, I constructed a proxy using the number of pages in the ‘Etat Général du personnel’ each year. Given the document’s consistent layout, the increase in pages likely reflects the bank’s total workforce growth.
14. See ‘Moderniser et ouvrir la Banque de France (1965-1970)’, testimony of André De Lattre in Feiertag (Feiertag, 2005b).
15. ABF, 1375200401 AR 120.
16. ABF, 1375200401 AR 120: Letter from André Chaîneau to Deputy Governor De Lattre, September 14, 1966.
17. ABF, 1375200401 AR 120: Letter from Pierre Dieterlen to Deputy Governor De Lattre, September 13, 1966.
18. Raymond Barre was a highly influential university professor, statesman and politician. Among other things, he was chief of cabinet for the minister of Industry and a member of the Rueff-Armand Committee. He later became European Commissioner and prepared the ‘Barre plan’ that served as the basis for European economic and monetary integration. He also later became Minister of the Economy and Prime Minister.
19. ABF, 1375200401 AR 120: speech by Mr De Lattre, October 10, 1966 (morning)(p.2).
20. ABF, 1375200401 AR 121.
21. The *Crédit National* was a banking establishment created by a special law on 10 October 1919, that stood at the border between the State and the private sector. It later became Natexis in 1997, and Natixis in 2006.
22. ABF, 1375200401 AR 121: Introduction by Renaud de La GENIERE to the symposium of April 1975.

23. ABF, 1375200401 AR 34: 'Projet de colloque avec les professeurs de sciences économiques', 1974, p. 2.
24. ABF, 1375200401 AR 1: document 'La direction des Etudes de la Banque de France', F. Molière, May 1973.
25. ABF, 1375200401 AR 19: 'Activités de la direction générale des études en 1976', February 25, 1977: 'The guidelines set by the Bank's government in October 1976, in response to the concerns expressed by the Joint Standing Committee (...) inspired the program of action adopted for 1977, but they already had a certain impact on the activity of the Directorate General for Research in 1976'.
26. ABF, 1375200401 AR 19: Note dated February 25, 1977, and activity report of DG Etudes in 1977 dated 23 February 1978.
27. ABF, 1375200401 AR 36: 'Rapport du groupe de synthèse de la Commission mixte permanente sur les activités, les moyens et les structures de la Bdf', pp. 43-44.
28. ABF, 1375200401 AR 36: 'Réflexion sur le rôle et les conditions de fonctionnement de la Direction Générale des Etudes : Réunion des Cadres', 22 October 1973.
29. ABF, 1375200401 AR 36: 'Rapport du groupe de synthèse' . . . , p.89.
30. ABF, 1375200401 AR 19: Note of March 26, 1980.
31. ABF, 1375200401 AR 19: Note from Robert Raymond the General Secretary, 9 October 1979.
32. ABF, 1375200401 AR 19: letter from P. Barre to Christian de Boissieu, 5 June 1979.
33. ABF, 1375200401 AR 19: letter from C. Fourgeaud to P. Berger, 14 January 1976.
34. ABF, 1375200401 AR 19: Note for the Directorate General for Personnel, 29 December 1980.
35. Interview of the author with a former Director of Studies.
36. ABF, 1375200401 AR 37: 'Réflexion sur le rôle et les conditions de fonctionnement de la Direction Générale des Etudes' (Réunion des Cadres, 22 October 1973).
37. ABF, 1375200401 AR 37: 'Réflexion à propos du colloque organisé avec les professeurs de sciences économiques' (Reflections on the colloquium organized with professors of economics).
38. ABF, 1375200401 AR 19: letter from the Governor of the Bdf to the French Minister of Economy, 16 May 1980.
39. ABF, 1370200401 AR 17: letter (3 August 1990) and letters of invitation to participate in the scientific committee.
40. See <https://fondation.banque-france.fr/presentation/presentation-de-la-fondation> updated on 04/28/2020 at 10:09, accessed on 08/14/2022 at 15:00.
41. Olivier De Bandt (PhD in economics at the University of Chicago, 1991-1994) was subsequently seconded as a Senior Economist to the European Monetary Institute in 1996 (See <https://www.banque-france.fr/economie/economistes-et-chercheurs/olivier-de-bandt>); Henri Pagès (PhD at MIT, 1984-1989) was seconded as a Senior economist at the BIS (1997-2000); Marc-Olivier Strauss Kahn was also sent to Chicago in 1981 to complete a PhD (ABF, 1375200401 AR 20: note, 8 October 1981); Pierre Sicsic is another economist who got a US PhD financed by the Banque.
42. Interview with a former research executive at the Bdf.
43. Source: Scopus data base, calculation by the author of the number of articles published each year with at least one author affiliated to a central bank between 1990 and 2021.

References

- Abolafia, M.Y. (2012) *Central Banking and the Triumph of Technical Rationality*. Oxford: Oxford University Press.
- Andrieu, C. (1990) *La banque sous l'Occupation: Paradoxes de l'histoire d'une profession: 1936-1946*. Paris: Les Presses de Sciences Po.
- Angeletti, T. (2021) How economics frames political debates: Macroeconomic forecasting in the French planning commissions. *Socio-Economic Review*, 19(2): 635-657.
- Angeletti, T. (2023) *L'invention de l'économie française*. Paris: Les Presses de Sciences Po.
- Baubeau, P. (2011) Gaston Roulleau et l'étude des effets de commerce ou la tension entre statistiques fiduciaires et conceptions métallistes. *Histoire & Mesure*, 26(1): 221-242.
- Baubeau, P., Monnet, E., Riva, A., and Ungaro, S. (2021) Flight-to-safety and the credit crunch: A new history of the banking crises in France during the Great Depression. *The Economic History Review*, 74(1): 223-250.
- Bazot, G., Monnet, E., and Morys, M. (2022) Taming the global financial cycle: Central banks as shock absorbers in the first era of globalization. *The Journal of Economic History*, 82(3): 801-839.
- Belhoste, B. (2003) *La formation d'une technocratie: l'école polytechnique et ses élèves de la révolution au Second Empire*. Paris: Belin.
- Bernanke, B. and James, H. (1991) The gold standard, deflation, and financial crisis in the great depression: An international comparison. In: Hubbard, R.G. (ed.) *Financial Markets and Financial Crises*. Chicago, IL: University of Chicago Press, 33-68.

- Blanchard, O. (2006) Monetary policy: Science or art? Paper presented at ECB colloquium held in honor of Otmar Issing. March, Frankfurt. <https://www.scribd.com/document/239714994/Blanchard-Monetary-Policy-Science-or-Art>. Accessed 24 March 2025.
- Boltanski, L. (2008) *Rendre la réalité inacceptable: à propos de 'la production de l'idéologie dominante'*. Paris: Demopolis.
- Boulanger, A.R. (2017) *Pierre Quesnay (1895-1937): Un expert financier, de la Normandie au monde*. PhD Thesis, Université Rouen Normandie.
- Boulanger, R. (2016) Pierre Quesnay (1895-1937): Un parcours transnational de la banque de France à la banque des règlements internationaux. In: Feiertag, O. and Margairaz, M. (eds.) *Les banques centrales et l'État-nation*. Paris: Presses de Sciences Po, 379–394.
- Boulanger, R. (2014) Histoire d'une 'zone grise', Jean Monnet et Pierre Quesnay (1920-1930). In: Bossuat, G. (ed.) *Jean Monnet, banquier, 1914-1945*. Paris: Institut de la gestion publique et du développement économique, Comité pour l'histoire économique et financière de la France, 5–18.
- Bourdieu, P. (1984) *Homo Academicus*. Paris: Editions de Minuit.
- Bourdieu, P. (1993) Some properties of fields. In: Bourdieu, P. (ed.) *Sociology in Question*. London: Sage, 72–77.
- Bourdieu, P. (2011) Champ du pouvoir et division du travail de domination. *Actes de la recherche en sciences sociales*, 190(5): 126–139.
- Bourdieu, P. and Boltanski, L. (1976) La production de l'idéologie dominante. *Actes de la recherche en sciences sociales*, 2(2): 3–73.
- Bouvier, J. (1989) La Banque de France et l'Etat des années 1850 à nos jours. In: *L'historien sur son métier: Études économiques XIXe-XXe siècles*. Paris: Éditions des Archives Contemporaines.
- Centeno, M. and Ferraro, A. (2018) *State and Nation Making in Latin America and Spain*. Cambridge: Cambridge University Centeno Press.
- Clarida, R., Galí, J., and Gertler, M. (1999) The science of monetary policy: A New Keynesian perspective. *Journal of Economic Literature*, 37(4): 1661–1707.
- Claveau, F. and Dion, J. (2018) Quantifying central banks scientization: Why and how to do a quantified organizational history of economics. *Journal of Economic Methodology*, 25(4): 349–366.
- Coeuré, B. (2019) Economics as a profession: From science to practice. European Central Bank Speech, 28 November. <https://www.ecb.europa.eu/press/key/date/2019/html/ecb.sp191128~9216194199.en.html>. Accessed 18 February 2025.
- Coombs, N. and Thiemann, M. (2022) Recentring central banks: Theorizing state-economy boundaries as central bank effects. *Economy and Society*, 51(4): 535–558.
- Desrosières, A. (2013a) *Gouverner par les nombres: L'argument statistique II*. Paris: Presses des Mines.
- Desrosières, A. (2013b) *Pour une sociologie historique de la quantification: L'Argument statistique I*. Paris: Presses des Mines.
- Duchaussoy, V. (2017) Une Banque publique? 1936 ou la mutation initiée de la Banque de France. *Revue historique*, 681(1): 55–72.
- Eyal, G. (2012) Spaces between fields. In: Gorski, P. (ed) *Bourdieu and Historical Analysis*. Durham, NC: Duke University Press, 158–182.
- Feiertag, O. (2005a) Greffe économétrique et genèse de l'école de la Banque de France (1969-1985). In: Feiertag, O. (ed.) *Mesurer la monnaie: Banques centrales et construction de l'autorité monétaire (XIXe-XXe siècle)*. Paris: Albin Michel, 213–245.
- Feiertag, O. (2005c) Pour une histoire de l'autorité monétaire des banques centrales. In: Feiertag, O. (ed.) *Mesurer la monnaie: Banques centrales et construction de l'autorité monétaire (XIXe-XXe siècle)*. Paris: Albin Michel, 13–26.
- Feiertag, O. (ed.) (2005b) *Mesurer la monnaie: Banques centrales et construction de l'autorité monétaire, XIXe-XXe siècle*. Paris: Albin Michel.
- Feiertag, O. (2013) La Banque de France, son gouverneur et le 'petit peuple' des banques centrales européennes au début des années 1950. In: Feiertag, O. (ed.) *Wilfrid Baumgartner: Un grand commis des finances à la croisée des pouvoirs (1902-1978)*. Vincennes: Institut de la gestion publique et du développement économique, 365–390.
- Flandreau, M. (2003) Le service des Etudes financières sous Henri Germain (1871-1905): Une macro-économie d'acteurs. In: Desjardins, B., Lescure, M., Nougaret, R., Plessis, A., and Straus, A. (eds.) *Le Crédit lyonnais (1863-1986)*. Genève: Librairie Droz, 271–301.
- Fourcade, M. (2010) *Economists and Societies: Discipline and Profession in the United States, Britain, and France, 1890s to 1990s*. Princeton, NJ: Princeton University Press.
- Goffman, E. (1977) The arrangement between the sexes. *Theory and Society*, 4(3): 301–331.
- Goutsmedt, A. and Sergi, F. (2025) Redefining scientization: Central banks between science and politics. *Finance and Society*. This issue.

- Guilbert, T. and Lebaron, F. (2017) L'économie des mots et les mots de l'économie: Analyse sociodiscursive des discours des dirigeants de la Banque centrale européenne. *Langage et société*, 160-161(2): 217–235.
- Guston, D.H. (1999) Stabilizing the boundary between US politics and science: The role of the Office of Technology Transfer as a boundary organization. *Social Studies of Science*, 29(1): 87–111.
- Hawtrey, R.G. (1970) *The Art of Central Banking*. New York: Routledge.
- Hicks, J.R. (1967) *Critical Essays in Monetary Theory*. Oxford: Clarendon Press.
- Hoppe, R. (2005) Rethinking the science-policy nexus: From knowledge utilization and science technology studies to types of boundary arrangements. *Poiesis & Praxis*, 3(3): 199–215.
- Issing, O. (2005) Communication, transparency, accountability: Monetary policy in the twenty-first century. *Federal Reserve Bank of St. Louis*, 87: 65–83.
- Issing, O. (2017) Central banks: Are their reputations and independence under threat from overburdening? *International Finance*, 20(1): 92–99.
- Juglar, C. (2014) *Des crises commerciales et de leur retour périodique: Des crises commerciales et de leur retour périodique*. Lyon: ENS Éditions.
- Jürgenmeyer, J. (2023) Legitimation trials: The limits of liberal government and the Federal Reserve's quest for embedded autonomy. PhD Thesis. Columbia University.
- Le Gallo, F. (2021) Etablir la balance des paiements, une mission statistique à la Banque de France depuis 1945. *Bulletin de la Banque de France*, 238(5). <https://www.banque-france.fr/fr/publications-et-statistiques/publications/etablir-la-balance-des-paiements-une-mission-statistique-la-banque-de-france-depuis-1945>. Accessed 24 March 2025.
- Lebaron, F. (1997) Les fondements sociaux de la neutralité économique. *Actes de la Recherche en Sciences Sociales*, 116(1): 69–90.
- Lebaron, F. (2000a) *La croyance économique: les économistes entre science et politique*. Paris: Seuil.
- Lebaron, F. (2000b) The space of economic neutrality: Types of legitimacy and trajectories of central bank managers. *International Journal of Contemporary Sociology*, 37(2): 208–229.
- Lebaron, F. (2008) Central bankers in the contemporary global field of power: A 'social space' approach. *The Sociological Review*, 56(1): 121–144.
- Lebaron, F. (2010) European Central Bank leaders in the global space of central bankers: A geometric data analysis approach. *French Politics*, 8(3): 294–320.
- Lebaron, F. (2012) A universal paradigm of central banker? *Social Glimpse: Journal of Social Sciences and Humanities*, 1(1): 40–59.
- Mann, M. (1984) The autonomous power of the state: Its origins, mechanisms and results. *European Journal of Sociology*, 25(2): 185–213.
- Marcussen, M. (2006a) Institutional transformation? The scientization of central banking as a case study. In: Christensen, T. and Lægred, P. (eds.) *Autonomy and Regulation: Coping with Agencies in the Modern State*. Cheltenham: Edward Elgar, 81–97.
- Marcussen, M. (2006b) *The Fifth Age of Central Banking in the Global Economy*. Roskilde: Center for Democratic Network Governance.
- Marcussen, M. (2009) Scientization of central banking: The politics of a-politicization. In: Dyson, K. and Marcussen, M. (eds.) *Central Banks in the Age of the Euro: Europeanization, Convergence, and Power*. Oxford: Oxford University Press, 373–390.
- Margairaz, M. (2016) La période singulière où la banque de France s'est nationalisée (1936-1966): De l'imbrication dans la politique nationale du crédit à la tentation de la politique monétaire. In: Feiertag, O. and Margairaz, M. (eds.) *Les banques centrales et l'État-nation*. Paris: Presses de Sciences Po, 395–450.
- Martin, J.L. (2003) What is field theory? *American Journal of Sociology*, 109(1): 1–49
- Martín-Aceña, P. and Tortella, T. (2010) Regulation and supervision: The rise of central banks' research departments. In: Battilossi, S. and Reis, J. (eds.) *State and Financial Systems in Europe and the USA*. New York: Routledge.
- Mishkin, F.S. (2007) Will monetary policy become more of a science? NBER Working Paper Series, 13566. https://www.nber.org/system/files/working_papers/w13566/w13566.pdf. Accessed 24 March 2025.
- Mitchell, B. (ed.) (2003) *International Historical Statistics: Europe 1750-1993*. London: Palgrave Macmillan.
- Mitchell, T. (1999) Society, economy, and the state effect. In: Steinmetz, G. (ed.) *State/Culture*. Ithaca, NY: Cornell University Press, 76–97.
- Monnet, E. (2018) *Controlling Credit: Central Banking and the Planned Economy in Postwar France, 1948-1973*. Cambridge: Cambridge University Press.
- Mudge, S. and Vauchez, A. (2016) Fielding supranationalism: the European Central Bank as a field effect. *The Sociological Review Monographs*, 64(2): 146–169.
- Patat, J.-P. and Lutfalla, M. (1986) *Histoire monétaire de la France au XXe siècle*. Paris: Economica.
- Plessis, A. (1982) *La Banque de France et ses deux cents actionnaires sous le second empire*. Paris: DROZ.

- Plessis, A. (2005) La Banque de France et la production de statistiques au XIXe siècle. In: Feiertag, O. (ed.) *Mesurer la monnaie: Banques centrales et construction de l'autorité monétaire (XIXe-XXe siècle)*. Paris: Albin Michel, 55–68.
- Renversez, F. (2008) De l'économie d'endettement à l'économie de marchés financiers. *Regards croisés sur l'économie*, 3(1): 54–64.
- Saint-Marc, M. (1983) *Histoire monétaire de la France (1800-1980)*. Paris: Presses universitaires de France.
- Scott, C.J. (1998) *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*. New Haven, CT: Yale University Press.
- Star, S.L. and Griesemer, J. R. (1989) Institutional ecology, 'translations' and boundary objects: Amateurs and professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39. *Social Studies of Science*, 19(3): 387–420.
- Taylor, J.B. (1993) Discretion versus policy rules in practice. *Carnegie-Rochester Conference Series on Public Policy*, 39(1): 195–214.
- Thiemann, M., Melches, C.R., and Ibrocevic, E. (2020) Measuring and mitigating systemic risks: How the forging of new alliances between central bank and academic economists legitimize the transnational macroprudential agenda. *Review of International Political Economy*, 28(6): 1433–1458.
- Thiemann, M. and Priester, S. (2024) Bridging the gaping hole: Central bank economists' role in the rise of macro-finance post-crisis. *European Journal of Sociology*, 65(1):103–145.
- Vatin, F. (2008) L'esprit d'ingénieur: pensée calculatoire et éthique économique. *Revue française de Socio-Economie*, 1(1): 131–152.
- Weber, M. (1946 [1917]) Science as a vocation. In: Gerth, H.H. and Wright Mills, C. (trans. and eds.) *From Max Weber: Essays in Sociology*. New York: Oxford University Press, 129–156.
- Weber, M. (1946 [1919]) Politics as a vocation. In: Gerth, H.H. and Wright Mills, C. (trans. and eds.) *From Max Weber: Essays in Sociology*. New York: Oxford University Press, 129–156.
- Weingart, P. (1999) Scientific expertise and political accountability: Paradoxes of science in politics. *Science and Public Policy*, 26(3): 151–161.
- Yee, R. (2024) Stability in numbers: Central banks, expertise and the use of statistics in interwar Europe. *Contemporary European History*, 33(3): 1038–1059.