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The Great Expansion. The Exceptional Spread of Bank Branches in Interwar France

Abstract

France during the 1920s was characterized by exceptional expansion of bank branches, with access to banks developing rapidly in rural areas due especially to establishment of temporary branches. However, it did not translate into increased bank assets and deposits as a share of national income. The banking crisis of the Great Depression ended the network expansion and reversed part of it, but the number of bank branches remained four times greater than before the war (though the French population was similar in 1910 and 1930). The distinction between indicators of credit or deposits on GDP and indicators of the density of the banking network challenges the thesis of the Great Reversal and improves understanding of the evolution of the banking system during the interwar period. We argue that inflation and increased competition explain the disconnect between the evolution of branches and the real volume of banking activity.

JEL Classification: G21, G34, N14, N24

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1. Introduction

After strong development of banking and financial markets before the First World War (hereafter, WWI), the interwar period is often regarded as characterized by the opposite trend, what Rajan and Zingales (2003) call the Great Reversal. The fluctuation varied according to observed variables and countries, but the general picture is that of partial catching up of banking and finance after WWI, which the Great Depression ended abruptly. France, then one of the most financially developed countries, is no exception. Using the best data available at the time, Rajan and Zingales (2003) found that the ratio of bank deposits to GDP stagnated between 1913 and 1929, from 0.42 to 0.44, and then declined inexorably.

The Great Reversal argument accords with an important part of French banking historiography, which has even dated the banking downturn to WWI. Focusing on analysis of a limited number of bank balance sheets, the argument highlights a retrenchment of French banks that offset expansion of the *Belle Époque* (Bouvier 1984; Gueslin 2016; Lescure 2016), and contributed to the disappearance of local banks and concentration of the sector around large groups (Baubeau 2016; Gueslin 2016). The banking sector thus never really recovered from WWI.

However, such literature contrasts with Hubert Bonin's research. Using a large mass of banking archives, he emphasizes that the 1920s was a period of tremendous expansion of the network of bank branches, and of commercial efforts by large national credit institutions, such as the *Crédit Lyonnais* or *Société Générale*, and both provincial and local banks (Bonin 2000). The 1920s marked a second banking revolution, during which access to banking services became the norm for the middle class and large banking groups consolidated. This exceptional expansion, halted by the Great Depression, later shaped the economic growth of the post-war period, the *Trente Glorieuses* (Bonin, 2000, vol. 1, p.542-544).¹

The current article clarifies this debate by using new micro-level data on balance sheets and locations of branches of the entire French banking system. Given the absence of banking regulation in France before 1941, there exist no official statistics on banks, and thus it is necessary to use private and non-centralized sources. Bonin (2000) uses only scattered quantitative sources, without providing a comprehensive picture of regional evolutions. Hoffman, Postel-Vinay, and Rosenthal (2015, 2018) collected and used bank branch data before

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¹ For more on banking, financial development, and economic growth in France during the *Trente Glorieuses*, see Monnet (2018).

1914, but they were unable to compare them to bank balance sheets. Baubeau et al. (2021) use new bank balance sheet data from the interwar period, but they do not assess the bank branch network. The current paper extends and combines these two previous studies, presenting balance sheet data from 1901 onward and bank branch data during the interwar period that can be compared to pre-1914 data.

A primary finding is exponential increase to the number of bank branches, beginning after WWI. The 1920s exacerbated the trend that began at the *Belle Epoque* and was an exceptional period of growth regarding the number of bank branches and thus geographic access to banks. However, the increase did not translate into increased bank assets and deposits as a share of national income. Our new data on bank balance sheets even suggest a decline to this ratio during the 1920s. The Great Depression halted the expansion but did not cause a decline in the density of the banking network; the number of bank branches during the 1930s remained four times greater than before the war, though the French population was similar in 1910 and 1930. The number of banks in small towns did not decline. Before the war, less than 10% of bank branches were located in towns with fewer than 2,000 inhabitants, in comparison to an average of 25% during the 1930s.²

Bancarization, defined as the access households or firms have to banking services, measured as bank branch density, might have been a phenomenon disjointed from growth of deposits and banking assets as a percentage of national income. From a viewpoint of bank branch density in France, the period between the two world wars was thus a Great Expansion rather than a Great Reversal. Beyond the French case, our conclusions warn against prevailing use of the ratio of bank credits (or deposits) to GDP as an indicator of banking development. Cross-country comparisons from Beck, Demirguc-Kunt, and Martinez Peria (2007) suggest a strong correlation between indicators of banking outreach (i.e., bank account or branch density) and development (i.e., ratio of credit or deposits to GDP), but the current paper suggests that these two types of indicators have not always progressed together.

Why did aggregate real volume of banking activity stagnate or decrease while the number of bank branches grew exceptionally fast—much faster than the population? We propose two explanations that accord with extant literature. The first is that existing banks opened new branches to limit entry of new competitors, rather than to significantly increase business volume

² Although the definition of a bank branch may have changed slightly after banking regulations during 1941, the number of bank branches reached in 1929 (around 12 000) was not reached again before the late 1960s, and the ratio of bank branches per inhabitant before the mid-1970s. See Feiertag (2011) and *Rapports annuels du Conseil National du Crédit*.

(Dick 2006; Jayaratne and Strahan 1996, 1998; Stiroh and Strahan 2003). Branch expansion did not prove to be too costly for banks because it was done partly through temporary branches, which were open in small municipalities for only a few days a week, especially market days. The second reason for the sharp increase in bank branches during the interwar period links to inflation, which was very high during the 1920s—more than 20% per year from 1918 to 1920, and again from 1924 to 1926. Jonker and Van Zanden (1995) argue that high inflation during the early 1920s led European banks to compete and innovate to ensure that the nominal value of their assets rose as quickly as prices did. To cope with pressures from inflation on the real value of assets, banks could either convert nominal assets into real assets (i.e., convert loans into shares) or expand the number of loans quicker than the rate of inflation. French banks primarily tried to follow this second option. The expansion of branches, especially temporary ones, might have played a prominent role in such strategies, and thus to maintain the same level of real activity, banks were obliged to expand their networks and reach new clients. Borrower proximity mitigates information asymmetry, which is particularly strong during troubled macroeconomic times. Better coverage of the territory by opening new branches allowed privileged and more direct access to private information on borrowers (Aupetit et al. 1912; Bazot 2011). The inflation-driven increase to the activity of some banks might also have reinforced the strategy of expanding bank branches as a barrier to entry. However, the inflationbased argument must be put into perspective; inflation appears to explain the unprecedented scope of bank branch growth during the interwar period, but it does not explain why the trend began in 1910.

We also examine how the expansion of the banking network was shaped by two forces. The rise of regional banks, defined as those operating with numerous branches in several departments but not throughout the country, was a major phenomenon during the 1920s. During this period, competition between national and regional banks developed. In 1920, the banking network was divided but nearly balanced among three categories of banks—national, regional, and single-branch (i.e., those with several branches within a single department, representing a smaller share and stable over the decade). By 1930, the first two types of banks controlled the majority of the network (33% held by national and 40% by regional banks), and single-branch banks represented only one-tenth of the total number of branches. Extension of the banking network was conducted at the intensive margin (i.e., existing banks opening new branches),

rather than by multiplication of new single-branch banks.³ The 1920s were characterized by conquest of new market shares in rural areas and small towns, and expansion was largely achieved using temporary branches that were open in marketplaces in small towns for a few days each week. Their share of the total number of branches rose from 11% to 32% between 1920 and the 1930s.

The second trend is consolidation of the banking network during the 1930s, after the violent crisis of 1930–1931.⁴ During this decade, the share of regional banks in the network declined to the benefit of large national banks; in 1938, the former represented only 31% of the branches, the latter nearly half. However, concentration was not accompanied by a significant decline in network size, and expansion during the 1920s was not offset. Strong penetration in rural areas remained, a phenomenon partly the consequence of a takeover by the large national banks of the banking networks of regional banks that experienced difficulties during the banking crises of 1930 and 1931 (Baubeau et al. 2021; Bonin 2000; Laufenburger 1940).

Our study of interwar France also contributes to the literature on bank branches and financial stability. Economists continue to question the influence of the expansion of branch networks on financial stability and the economy. Some studies, especially those conducted in the United States, suggest that the creation of bank branches contributes to better diversification of bank assets and thus of risks (Cherin and Melicher 1988; Wheelock 1995; White 1984), or to a beneficial increase to competition between banks (Carlson and Mitchener 2009). Other studies suggest contrarily that extension of networks over a large geographical area increases monitoring costs and therefore the probability of default (Carlson 2004; Colvin, De Jong, et Fliers 2014). In this respect, the interwar French case improves understanding in this debate. On one hand, the largest French banks did not suffer from the crisis and they maintained, and

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³ Lauffenburger (1940) and Bonin (2000) already emphasize fierce competition between national and regional banks. The current paper offers a comprehensive, quantitative perspective to this literature, especially highlighting the role played by temporary branches, whose quantitative importance had been overlooked.

⁴ The evolution of bank concentration in other countries also presents contrasting findings. In the United Kingdom, for example, a wave of mergers occurred between 1880 and 1918, with the disappearance of many small banks (Braggion, Dwarkasing, and Moore 2020a). After WWI, the British banking sector was led by an oligopoly of five large banks (Braggion, Dwarkasing, and Moore 2020; Capie and Billings 2004). In the United States, the concentration of the banking sector began later, during the mid-1920s (Fohlin and Jaremski 2020). The concentration of the Dutch banking sector remained more moderate (e.g., alongside large banks, smaller ones continued to operate), accompanied by a new phenomenon, the formation of large banking networks and the opening of new branches (Colvin, De Jong, and Fliers 2014). During the 1920s, Italy experienced a net increase to the number of branches, the number of banks, and competition among them. Concentrations observed elsewhere did not begin until the following decade (De Bonis, Marinelli, and Vercelli 2018). Recent research by Marco Molteni (2021) also finds that the Italian expansion of bank branches in the 1920s did not translate into a credit boom.

even expanded, their network of branches. As in the case of Canada during the Great Depression (Bordo et al., 2015), this finding supports the idea that large banks with many branches contribute more to financial stability than the multiplication of single-branch banks. On the other hand, at the macroeconomic level, the exceptional expansion of branches, and the strengthening of regional banks at the expense of single-branch banks, during the 1920s led to the greatest banking crisis in the country's history, during 1930 and 1931. This apparent paradox can be explained by the typology of banks and their relative experience at managing a rapidly growing network. Before WWI, national banks had already accumulated the organizational experience required to collect information and manage a large network, which explains the much lower risk of default. In contrast, regional banks appear to have had less experience and less efficient organization at performing these tasks, which in turn would have translated into much greater risk of default. The scale of analysis and, particularly, the type of bank can therefore significantly modify the conclusion drawn regarding the link between the multiplication of branches and financial stability. Interwar France thus calls for clear differentiation between banking typologies in the context of these analyses.

In the next section, we briefly discuss the economic and banking context of the interwar period. In section **Erreur! Source du renvoi introuvable.**, we describe our two original data sources, the *Favre* yearbook and the *Album*. Section 4 shows the evolution of the banking network during the interwar period. Section 5 refines the analysis of the branch network and discusses the strong geographical and rural dimension of its expansion. In section 6, we analyze the evolution of the balance sheets of these banks, and we conclude in section 7.

2. The French economy during the interwar period

The postwar decade was a period of recovery of economic activity (Sauvy 1984:1). During recovery, companies' financing needs grew significantly (Daviet 1995, Bonin 2000), and competition between banking institutions increased. Provincial and regional banks, and large commercial banks, intensified their competition (Bonin 2000, Ambigapathy 2004). At the same time, new players in the public or para-public banking sector (Baubeau 2016; Gueslin 2016), such as the *Crédit Agricole* or *Banques Populaires*, cooperative banks supported by the state to develop agricultural credit and loans to small businesses, also increased competitive pressure. Part of financing the reconstruction was entrusted to the *Crédit National*, a para-public institution that issued long-term loans (Lauffenburger, 1940).

At the macroeconomic level, the 1920s were characterized by widespread inflation and monetary instability. Until stabilization of the franc in 1926 and its adherence to the Gold Exchange Standard in 1928, inflation impacted the value of banking operations (Cassiers 1995; Sauvy 1984:1). To compensate for the inflationary expansion (*gonflement inflationniste*) of their deposits, banks granted increasingly more loans (Jonker and Van Zanden 1995; Lescure 2016).

The crisis of the 1930s hit the French economy hard, with all economic sectors suffering (Sauvy 1984:1, Baubeau et al. 2021). The monetary context contributed to this decline. Until 1936, France remained on the Gold Exchange Standard and formed the Gold Bloc, which aggravated the deflation that began at the beginning of the 1930s. After abandonment of the gold standard and the devaluation of the franc during1936, the depreciation of the currency and the economic crisis continued, and short economic recoveries (notably in 1932 and 1933, and 1935 and 1936) were followed by relapses until 1938 (Sauvy 1984:1).

The crisis particularly affected the banking sector. At the very beginning of the 1930s, many banks failed, including small banks, bankers, some old local and regional banks, and even a major bank, the *Banque Nationale de Crédit*, which the government eventually bailed out (Baubeau et al. 2021; Bonin 2000, Bouvier 1984; Daviet 1995). Banking panics encouraged transfers of deposits from commercial banks to safe institutions (Baubeau et al. 2021), savings institutions (*Caisses d'épargne*) and the central bank.⁵ The central bank did not play the role of lender of last resort to stop the banking panics. The four largest banks in the country, however, did not suffer from the crisis, even acquiring some branches of bankrupt banks. Bouvier (1984) suggests that this reorganization of the banking sector might represent a necessary cleansing. Monnet, Riva, and Ungaro (2021) question this argument, suggesting a negative effect that the decline in banking activity, caused by waves of bank runs, had on economic activity.

3. Data and sources

The macroeconomic history of the French banking system during the interwar period is incomplete because of a lack of quantitative data, a gap largely explained by the absence of banking regulation in France before 1941. Before that date, neither the French government nor the *Banque de France* produced comprehensive statistics on the banking system. To assess the

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⁵ This trend of decreasing deposits in commercial banks combined with a marked increase in deposits in savings banks is not specific to France but is a general feature of the 1930s in countries that experience banking crises (Degorce and Monnet 2021).

evolution of the French banking system during this period, it was customary among historians and economists to rely on the balance sheets of the four or six largest French banks, easily available due to the preservation of such archives, and to assume that these large banks represented the remainder of the banking system (Bouvier 1984; Saint Marc 1983). This assumption was, however, contradicted by more recent studies, which found high failure rates among small banks (Bonin 2000; Laufenburger 1940; Lescure 2016; Plessis 1996). After the discovery of new archival sources, Baubeau et al. (2021) constructed a database that contains the balance sheets of all commercial banks (i.e., joint stock companies that collected deposits and discounted commercial paper). They demonstrate quantitatively that the influence of the banking crisis of 1930 and 1931 was much stronger than previously found, and the evolution of the largest banks' balance sheets are not representative of the entire banking sector. We discuss new data on bank branches and the sources from which we retrieved them. We then briefly discuss bank balance sheet data from Baubeau et al. (2021) and identify how to crosscheck them with branch data.

3.1 Permanent and temporary bank branches: the Favre and the Bottinyearbooks

The primary source that we use is the *Annuaire des banques et banquiers*, also known as the *Favre* yearbook, named after the publication's editor. The yearbook lists annually the bank branches open in France. Appendix 1 (Figure 9) shows an example of a page from the Favre yearbook. The yearbook includes all branches opened in France, by French or foreign banks, and includes information about these branches, such as their location (e.g., city and department) and their exact address. The branches are classified according to whether they are located in Paris or in the province (i.e., everywhere except Paris), then by alphabetical order of departments of the province, and finally by alphabetical order of cities within each department.⁶ This source was published throughout the interwar period, between 1921 and 1939, for branches operating between 1920 and 1938. Thus, the 1921 edition lists banks' branches that operated in France during 1920.⁷

We were unable to find two editions of the Favre yearbook—the 1932 and 1934 editions (for 1931 and 1933 branches, respectively). To complete gaps in the data, we used a complementary source, the Bottin Yearbook (named after the person responsible for the publication, and

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⁶ Paris is usually immediately followed by the two departments of the Paris region at the time (i.e., Seine and Seine-et-Oise), and then provincial departments listed alphabetically.

⁷ In the remainder of the paper and unless otherwise noted, we consider *data* or *branch* years, not *edition* years.

otherwise known as the *Annuaire du commerce Didot-Bottin* or *Annuaire et almanach du commerce et de l'industrie*). The source is a professional directory that details the list of professions that and professionals who operated within each sector, including the banking sector. In the first part of the Bottin yearbook, companies are classified by profession, and in the second part, companies are classified by city and profession. We use data from the second part because they are more complete than the lists in the first part, and the information accords with Favre data.

We also use the Bottin yearbook for data prior to WWI. In the absence of Favre yearbooks, the Bottin is the only available source for this period. Hoffman et al. (2018) thus used the Bottin yearbooks to study 19th-century banks and notaries. We use their data for the period 1881 to 1910, but they do not include Paris data, and thus we collected data for Paris branches for 1910 from the same source.

We discovered that the Bottin reports on branches less exhaustively than the Favre does, with the former particularly underreporting single-branch banks. This difference in sources is essential to interpreting the lower number of branches during 1931, 1933, and years prior to 1920 (i.e., years during which information derives from the Bottin), explained in Section 4.3. The difference between the two sources allows consideration of another source, the *Album* (see section 3.2), which offers a more restricted but homogeneous definition of banks from 1901 to 1938.

When a bank had multiple branches in the same city, the information was reported in both sources. Rather than just listing the presence of a bank by city, we have a list of the branches operating in each city. These sources also specify when the branches were open only temporarily (e.g., one day a week, a few days a month, or only market days or fairs). Such temporary branches were frequent in smaller cities and rural areas. This information allowed us to distinguish *permanent* and *temporary* branches, which is crucial to analysis. The information captured from this source is listed in Appendix 1.A (Table 2).

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⁸ Their data are available online (the source for 1910 was from Bazot [2014]).

[[]URL: https://didomena.ehess.fr/collections/v118rd64z?locale=en&view=masonry]

⁹ Branches considered temporary in the remainder of the study are those for which the variables *temporary* and *fair days* appear in the database. Temporary branches correspond to branches associated with information such as fair days (*jours de foire*), open twice per week (*ouvert 2 jours par semaine*) or [open on] Tuesday and Friday (*mardi et vendredi*). For the purpose of analysis, we focus on metropolitan France and exclude the colonies and Algerian department. We also exclude branches of the *Banque de France* and the *Crédit Foncier de France* for their peculiar features. We link each municipality to a corresponding identifier of the Insitut National de la Statistique et des Etudes Economiques (INSEE), considering mergers or deletions of communes. The purpose is

3.2 Bank balance sheets; the Album

Standardized balance sheet data between 1901 and 1938 come from an original archival source—the *Album* (Baubeau et al., 2021), a ledger created by the *Crédit Lyonnais*, one of the most important banks in France. It contains annual balance sheets for all French joint-stock companies (*sociétés anonymes*) that collected deposits and discounted commercial paper. It was impossible for the *Crédit Lyonnais* to obtain information on banks under a juridical status other that *société anonyme* because it did not publish their balance sheets. The *Crédit Lyonnais*'s definition of bank—an institution that collects deposits and discounts commercial paper—corresponds to that of commercial or universal banks, which is very close to the one the French regulator used in 1941. Baubeau et al. (2021) offer more information on the history of this source, demonstrating that the total balance sheets collected corresponds to 98% of the bank balance sheets that the regulator subsequently recorded. The Album excludes the Haute Banque (e.g., Rothschild, Neuflize, Mallet, etc.). However, such merchant banks were not opening multiple branches to collect deposits and lend to small businesses, and thus their absence in this source is not a major issue for this study.

3.3 Categories of banks

To refine analyses, we classify banks into four categories—national, regional, departmental, and single-branch. To do this, we use the location of the branches. National banks are those present in more than 45 departments (i.e., half of the French territory, following an administrative approach). Over the entire period studied, four banks exceeded this threshold: Société Générale, Crédit Lyonnais, Comptoir National d'Escompte de Paris, and Banque Nationale pour le Commerce et l'Industrie (which succeeded to the Banque Nationale du Crédit in 1932). The four major banks are commonly considered national banks by historians of the French banking system (Bouvier 1984; Laufenburger 1940; Lescure and Plessis 2004). The Crédit industriel et commercial is usually deemed one of these large banks by historians, and by contemporaries, but it was a banking group, comprising banks that maintained their own legal existence. We therefore treat it as a special case, discussed later in this section.

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to match branch data with population censuses from 1921, 1926, 1931, and 1936. We thus distinguish rural (fewer than 2,000 inhabitants) and urban (more than 2,000 inhabitants) cities, considering changes between the censuses. ¹⁰ During the interwar, France was partitioned into 90 metropolitan *Départements*. This threshold was chosen to observe the divide between large banks, already documented as truly national institutions, and other banks of lesser scope, notably regional banks.

Regional banks correspond to those present in more than one department but in fewer than 45 departments. During the 1920s, the period during which regional banks flourished, the largest regional bank was present in 40 departments, and the smallest national bank in 72. Departmental banks were present in a single department, but with more than one branch. Single-branch banks had only one branch, and they typically included private bankers and financiers and thus would not be recorded by the *Album*.

Mutual and cooperative banks do not fall easily into the four categories. They had a pyramidal structure, with a central body on which regional entities, which nevertheless enjoyed much autonomy, depended, and then as a third layer, local banks. This structure makes it difficult to classify them into a category of bank that is defined by the number of branches. 11 These mutual and cooperative banks included the Crédit Agricole and Banques Populaires branches. Banks attached to the Crédit Industriel et Commercial (CIC) also belonged to this special case, though they were not cooperative banks but a banking group. 12 Since the individual banks enjoyed autonomy, we treat them as regional, departmental, etc. banks, depending on their individual branch structure. The various banks are thus considered banks, independent of each other. 13 However, these cases represent only a small portion of the number of banks and of the banking network (Appendix 2, Table 5). Additional analyses were conducted to ensure that results do not change depending on the treatment of mutual and cooperative banks. During these analyses, we alternatively considered that all networks that belonged to the Crédit Agricole, Banque Populaire, or Crédit Industriel et Commercial belonged to a single bank. This study does not take into account savings institutions (Caisses d'épargne) that collected deposits but did not lend to firms. By law, they had to invest assets in only government securities (Lauffenburger 1940, Baubeau et al. 2021, Monnet, Riva, and Ungaro 2021 for a description of these institutions and the role they played in the interwar French financial system). Some were private (Caisses d'épargne ordinaire) and some created by the French state (Caisse Nationale d'épargne). There were already well-established before the 1920s. Private institutions increased

¹¹ Funding and subsidies from the state also distinguished them from other private banks, which might explain different development strategies, especially in terms of branch openings.

¹² Like the Caisses de Crédit Agricole and de Banques Populaires, the Crédit Industriel et Commercial was a central entity on which several regional entities depended, such as the Société Lyonnaise de Dépôts et de Crédit Industriel, the Société Nancéienne de Crédit, the Crédit de l'Ouest, etc.. The Société Générale des Banques de Province was another large banking group with a structure similar to the CIC, but it entered bankruptcy in 1921.

¹³ For example, the Caisse Locale de Crédit Agricole Mutuel, Caisse Régionale de Crédit Agricole des Hautes-Alpes, Caisse Régionale de Crédit Agricole du Doubs, and Caisse Nationale de Crédit Agricole are considered four different banks.

their total branches from 2,396 to 2,729 between 1919 and 1938, and state-owned ones were

present in all post offices (about 15,000 during the interwar).

3.4 Comparing the Album and the Favre

The Album covers only a small number of banks (227 per year, on average, between 1920 and

1938), in comparison to the Favre yearbook (2,495 per year, on average, between 1920 and

1938). Nevertheless, the Album's coverage is much more significant in terms of number of

branches. Shown in Table 1, only 9% of the banks included in the Favre yearbook are also

present in the Album, but it covers 64% of all branches in the Favre. All national banks' and

75% of regional banks' branches appear in the Album. Unsurprisingly, the Album covers very

few single-branch banks (5% of those in the Favre). Such single-branch banks were usually

private bankers that operated as partnerships, and thus they were excluded from the Album.

Robustness analysis (Appendix 3) suggests that all main conclusions concerning the evolution

of the banking system remain unchanged if only bank branches in the *Album* are considered.

We now offer a complete picture of the French network of branches using the Favre, largely

using the *Album* for analysis of balance sheets.

[Table 1 about here]

4. The French interwar period: between competition and consolidation

Using a new dataset on bank branches, we can assess in detail the evolution of the French

banking network during the interwar period, through the lens of competition and consolidation.

The violent banking crisis of 1930 to 1931 encouraged us to distinguish the 1920s and 1930s.

[Fig. 1 about here]

[Fig. 2 about here]

[Fig. 3 about here]

[Fig. 4 about here]

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4.1 Banking expansion and competition between national and regional banks during the 1920s

The period following WWI was characterized by expansion of the French banking network. Figure 1 shows the net increase to the total number of branches over this period. The French banking network developed from about 6,000 branches in 1920 to nearly 12,000 in 1929, just before the crisis. New branches were largely opened by banks that were already operational at the time. There was only a slight increase to the number of banks operating in France (Figure 2), and thus the average number of bank branches increased sharply over the period (Figure 3).

A comparison between data from the Favre yearbook (available from 1920) and data on the number of branches before WWI from Hoffman, Postel-Vinay, and Rosenthal (from the Bottin yearbook) shows strong growth in the number of branches between 1910 and 1920, but the number of branches in the province (i.e., outside Paris) was largely stable before 1910. According to the Bottin yearbook, there were 2,444 branches in France in 1910, and nearly 6,000 in 1920 according to the Favre yearbook, a ten-year increase (+143%), and even greater than that observed during the following decade (+100% between 1920 and 1930). However, growth observed between 1910 and 1920 is explained partially by disparities between sources. Comparing the Bottin and the Favre during the early 1930s (section 4.3), we find that the Bottin lists a smaller number of banks and branches. Branches in the Bottin represent only about 80% of branches in the Favre during this period. If we apply this estimate to 1910 to 1920 to correct Bottin data, growth during this decade would be closer to 100%, as in the following decade.

Disparities between sources thus explain part of the observed difference between 1910 and 1920 branches. However, despite the war and a subsequent moratorium on bank deposits, there was strong growth in branches between these two dates. To explore this growth in greater depth, we use data on branches from the Album. For a sub-sample of 70 banks, the *Crédit Lyonnais* reported the number of its branches from 1910 to the early 1920s in the Album. The annual change to the number of branches for these 70 banks is shown in Figure 13 (Appendix 3). In the sub-sample, the increase to the number of branches begins in 1910 and is then very rapid, but ceases by the war. This observation accords with that from Kaufmann (1914), which is based on data from the three largest French banks from 1910 to 1912. As soon as 1918, expansion of bank branches resumed at the same pace as that observed during the 1920s. 14 To

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¹⁴ The *Crédit Lyonnais* reported 661 branches in 1910, and 888 in 1913. The number of branches decreased during WWI, down to 767 branches in 1916, and then started increasing again. During 1919, there were nearly as many branches (837) as in 1913.

sum up, evidence suggests that a strong increase in bank branches began during the few years that preceded WWI, in 1912 and 1913, but was stopped by the war and resumed when the war was over.

Branch expansion during the 1920s occurred at different speeds, depending on the type of bank, altering the network's structure. During 1920, distribution between three types of banks was balanced; 26% of branches were held by regional banks, 31% by national banks, and 35% by single-branch banks. Departmental banks held only 7% of branches, a share that remained stable throughout the decade.

According to data from the Favre yearbook, regional and national banks grew quickly and gained market share at the expense of smaller banks during the 1920s. During the early 1930s, regional banks represented approximately 40% of total branches, and national banks 32%. The share of branches of single-branch banks fell considerably, from 37% to about 20% (Figure 4). This movement was reflected in a sharp increase to the average number of branches in regional and national banks. Both multiplied by nearly two between 1920 and the early 1930s, from about 10 to 20 and 500 to 1000, respectively (Appendix 4, Figure 21).

The 1920s were characterized by competition between regional and national banks, and the share of single-branch banks collapsed. Since the Album contains a small number of single-branch banks, the decline to the share of single-branch banks is less pronounced when we examine the balance sheets; cumulative shares of assets in regional and national banks increased slightly, and the share of single-branch banks decreased from 25% to 20% (Appendix 3, Figure 16). In contrast, banks in the Album show the same evolution in terms of branches (Appendix 3, Figure 12, 14, and 15). Between 1920 and 1930, the average number of branches per bank increased from 19 to 27 in the Album, and from 2.4 to 4 in the Favre. Complementary analyses conducted on the *Crédit Agricole*, *Banques Populaires*, and *Crédit Industriel et Commercial* suggested a similar conclusion (Appendix 2, Figure 10 and Figure 11). Branches at these banks doubled during the 1920s.

These general dynamics correspond to those described from specific examples by historians of the French banking sector, especially regarding the history of major regional and national banks from Bonin (2000). For example, the *Crédit Lyonnais* tripled its branches, from 436 in 1920 to 1,451 in 1931 (Bonin 2000:1 p.299). The Société Générale created about 400 branches during the 1920s, from 1,097 to 1,514 (Bonin 2000:1 p.300), and the *Comptoir de Mulhouse*, a large regional bank in eastern France, underwent tremendous expansion, increasing its branches

eightfold, from 94 to 751, between 1913 and 1930, having begun a branch race, interrupted by the war, as early as 1911 to 1913 (Stoskopf 2016).

4.2 Concentration in the 1930s

The crisis of the early 1930s ceased this upward trend. After peaking in 1929, the total number of bank branches started declining gradually until 1938. The decline remained limited, not offsetting the boom observed during the previous decade. Although the total number of bank branches in 1938 was lower than at their peak in 1929 and 1930, it was still nearly four times higher than in 1910 (Figure 1). This increase meant a fourfold increase to the number of bank branches per inhabitant, since the French population was the same in 1930 as in 1910 (41.5 million). The average number of branches per bank remained stable during the 1930s (Figure 3). Although the total number of banks decreased (Figure 2), surviving banks did not close the many branches they opened before the crisis. Thus, after the expansion phase of the 1920s, the following decade was a phase of concentration; some banks disappeared because of the crisis, but the number of branches remained high. The concentration benefitted the largest banks that survived the crisis (Bonin 2000, Baubeau et al. 2021). The average number of their branches continued to grow, especially during the first half of the decade (Appendix 4, Figure 21). Their share in the banking network increased considerably. During the 1930s, their branches represented 40% of all branches operating in France (Figure 4). They also comprised 60% of total assets, in comparison to 40% before the crisis (Appendix 3, Figures 16 and 17; see also Baubeau et al., 2021). This increase to the weight of national banks in the banking network was at the expense of regional banks, whose shares dropped by 10 points (Figure 4).

A comparison between datasets from the Album and the Favre Yearbook suggests that the share of banks that failed in the Album was greater than those in the Favre. However, the decline to the number of branches of surviving banks recorded in the Album was limited (Appendix 3, Figure 12 and Figure 15). The Album's banks that survived the crisis thus increased their average number of branches to 36 per bank, in comparison to 19 in 1920 and 27 in 1930. Again, excluding or including *Crédit Agricole*, *Banques Populaires*, and *Crédit Industriel et Commercial* does not change these findings (Appendix 2, Figure 10 and 11).

4.3 1931 and 1933: two cases that illustrate the difference in sources

Since we were unable to find Favre yearbooks for 1931 and 1933, we collected data on branches from a complementary source, the Bottin. The Bottin's coverage of branches, however, is less systematic. The number of branches and banks in 1931 and 1933 collected from the Bottin is clearly lower than in other years (Appendix 1, Table 3). During 1932 and 1934, the number of branches and banks returned to their 1930 and 1932 levels. Data from the Bottin correspond to breaks in the series.

Concerning the number of banks, the Bottin reports fewer single-branch banks than the Favre yearbook does. The number of national banks was stable, and the decrease to the number of regional banks in the series was progressive from 1930 to 1934, so differences between the sources does not appear to be large regarding these types of banks. In contrast, the number of single-branch banks reduced by nearly 1.5 in 1931 and 1933, in comparison to 1932 and 1934 (Appendix 1, Tables 3 and 4).

Concerning branches, the Bottin reports fewer branches for all bank categories. Thus, during 1931 and 1933, regional banks had, according to the Bottin, 16% and 31% fewer branches than during the previous year, national banks 5% and 8% fewer branches, and departmental banks 2% and 6%. These differences between the two sources were not driven by underreporting the number of banks in the Bottin, but by underreporting the number of branches of a bank. The underreporting of branches for a bank in the Bottin is particularly noticeable in large cities (e.g., Paris, Marseille, Bordeaux, Lyon, Lille, etc.).

5. The geographical and rural dimension of the banking expansion

[Fig. 5 about here]

[Fig. 6 about here]

5.1 Geographical expansion of the 1920s

Expansion of the banking network was clearly driven by the opening of new branches in rural areas and small towns, evidenced by two indicators— (i) the number of temporary branches, typically opened in villages and small towns on fair or market days, or on predefined numbers of days during the week or month, and (ii) the share of bank branches in municipalities with fewer than 2,000 inhabitants. Opening temporary branches was a way to reach new clientele

without incurring high fixed costs for premises and staff associated with installation of a permanent branch. The number of temporary branches in proportion to the total number of branches thus increased throughout the interwar period, particularly during the 1920s (Figure 5). Only 11% of branches were temporary in 1920, but they represented 30.3% of the banking network in 1927. This proportion remained stable during the crisis, and even continued to increase during the second half of the 1930s, reaching 35% in 1938. The increase was driven particularly by national and regional banks (Appendix 4, Figure 25). The case of the national banks is striking; at the conclusion of the war, temporary branches represented only one-fifth of the network, but they represented nearly half of it during the banking crisis of 1930/1931.

This phenomenon is even more salient when we considered the banking network in small municipalities (i.e., those with fewer than 2,000 inhabitants) in rural areas. The number of rural branches in comparison to the total number of branches, excluding Paris, increased considerably during the 1920s (Figure 6), from one-tenth in 1910 to nearly one-quarter in 1930. The opening of temporary rural branches was more pronounced among regional banks (Appendix 4, Figure 26). During 1920, one-third of rural branches were regional banks', and more than half were owned by regional banks by 1930 (Appendix 4, Figure 24).

The banking boom of the 1920s was achieved through conquests of new markets, particularly by regional and national banks, through temporary branches. Rural areas and small towns, where savings were still contestable, were where regional and national banks competed.

5.2 The absence of the "Great Reversal" after the crisis

The 1930s crisis ceased the movement of geographical expansion but did not reverse it. Although the number of temporary branches in the network decreased slightly between 1930 and 1934, it stabilized from 1935 onward. During the 1930s, at least half of the network of national and regional banks comprised temporary branches (Figure 5 and Appendix 4, Figure 25). The share of rural branches in the network was stable during the 1930s (Figure 6), and national banks strengthened their positions significantly in these areas, accounting for more than 40% of rural branches opened (Appendix 4, Figure 24).

To sum up, expansion of the French banking network during the interwar occurred by opening new branches, especially temporary branches, in rural areas and small towns. These areas became new markets for competition between national and regional banks. The expansion was not just the result of a few banks taking market shares from others already established in rural

areas and small towns, but genuine expansion of banking in these underserved areas. Current systematic quantitative analyses are consistent with Bonin (2000), who describes banks' strategy to collect deposits from farmers in the countryside and the wider access of the middle class to banking services;¹⁵ it was no longer necessary to live in the city to open a bank account and access other banking services.

6. Expansion of the banking network and decrease to real bank assets

Due to extreme variations in both GDP and banking activity during WWI, the relationship between expansion of the banking network and the decrease to real bank assets was very volatile. Banking assets decreased more than GDP until 1916 because of the war crisis and moratoria on credits. Until 1919, banking assets stabilized and GDP kept decreasing. Ratios of banking assets and deposits to GDP thus reduced until 1916, and increased afterward (Figure 7 and Figure 8).

From 1920 onward, the number of bank branches increased considerably. Similarly, the size of the balance sheet of the banks in the Album increased in nominal terms, and also their loans and deposits (Appendix 3,

¹⁵ For example, Bonin (2000) highlights strategies of large banks, such *Crédit Lyonnais*, *Société Générale*, and *Comptoir d'Escompte*, that sought to open temporary branches (i.e., bureaux intermittents) and target rural customers. See Cardoni (2016) on the growing bancarisation of French households.

Figure 18). However, it did not increase as quickly as GDP, so the share of bank balance sheets in GDP reversed to pre-war levels. Thus, the unprecedented expansion of the network of bank branches was not accompanied by an increase to real banking activity, measured as the ratio of balance sheets to GDP. Examining the series of assets, deposits, and credits by volume (i.e., considering inflation of consumer prices), we similarly conclude stagnation in banking activity, as Michel Lescure (2016) points out while focusing on national banks.

Several explanations address this paradox. The first relates to the role played by branches as barriers to entry for new banks in a context of increased competition (Cassis 2008); the larger the network, the wider the customer base to which banks have access, and the more difficult it is for new competitors to enter the market (Dick 2006; Jayaratne and Strahan 1996, 1998; Stiroh and Strahan 2003). This hypothesis especially explains why large national banks continued to expand branches during the 1930s, after the banking crisis, and also acquired branches from failed banks, while France experienced deflation and its output never returned to pre-crisis levels during the 1930s.

The second relates to inflationary pressures on banks' balance sheets. Experiencing increases to deposits and decreases to the real value of loans, banks are encouraged to lend more, a credit race that exacerbates competition between banks. To maintain a constant real volume of credit in an inflationary situation, banks must compete to find customers. Jonker and Van Zanden (1995) (see also Lescure's (2016) discussion of the French case) use this argument to explain how rapid development of banking in Europe during the early 1920s led to increased fragility of the banking sector. They argue that inflation leads to risk-taking and deterioration of portfolio quality. We do not, however, observe clear increases to risk-taking concerning assets of French banks during the 1920s. Contrarily, we find an increase to the share of commercial portfolios (i.e., discounting) and liquid assets (i.e., central bank reserves or cash) on banks' balance sheets, at the expense of financial securities and advances on securities, even though some banks developed increasingly risky overdraft credit (Bonin 2000) (see Appendix 3, Figure 19 and Figure 20). Discounting commercial paper or treasury bills is safest because it is guaranteed by signatures and state and represents the most liquid type of credit. This breakdown of banks' balance sheets is too crude to suggest anything definitively regarding risk-taking, but we find that the riskiest loans did not take a larger share. French banks also did not respond to inflation by acquiring shares. On the liabilities side, inflation reduced, unsurprisingly, the share of equity, thus weakening banks.

However, the inflation argument is limited for several reasons. First, the increase to the number of bank branches was continuous during the 1920s, but inflation stabilized for the first time in 1922, and again from 1926 to 1928. Second, the dynamic of growth to the number of bank branches did not begin at the end of WWI, but for the first time after 1910, a period characterized by absence of inflation. Post-war inflation, however, might have triggered a competitive movement that was subsequently reinforced, even when inflation stabilized, thus pushing the number of bank branches up.

[Fig. 7 about here]

[Fig. 8 about here]

7. Conclusion

The interwar period was a time of unprecedented, long-lasting expansion of the French banking network, an observation that counters the Great Reversal. The increase to the number of branches during the 1920s was driven particularly by banks' expansion in rural areas and small towns. National and regional banks simultaneously competed more aggressively, and the latter significantly increased their market share in terms of branches during the decade. Although the banking crisis of 1930-1931 halted the expansion, there was no reversal to the size of the banking network. The primary change that the crisis brought was concentration of the network in national banks. Expansion of the banking network, and therefore bancarisation, occurred at a time when banks' real level of activity was stagnating or even decreasing. Geographic expansion of access to banking services thus constitutes a different historical process from what is usually called financial development, commonly measured in terms of the ratio of credit to GDP.

During the decade that preceded the most severe banking crisis in its history (1930/1931), France did not experience a boom of banking credit, and nor have we observed clear deterioration to the quality of banking assets at the aggregate level (i.e., discounting of commercial paper remained the primary activity), even though some banks developed increasingly risky overdraft credit (Bonin 2000). Paradoxically, the primary upheaval shown by banking statistics during the 1920s is branch expansion. Although we cannot dismiss the idea that such expansion was accompanied by excessive risk-taking, we can hypothesize that

its effect on the crisis came through another channel. Rapid recruitment of new clientele might have weakened banks by leaving them at the mercy of depositors' loss of confidence, and thus of the bank runs that France experienced during 19301931, a hypothesis that warrants more research.

References

Ambigapathy, Balaji. 2004. 'Le Capitalisme Bancaire En France: Banques de Dépôts Contre Banques Provinciales, 1918-1930'. in *Banques Locales et Banques Régionales en Europe au XXè siècle*, edited by M. Lescure and A. Plessis. Paris: Albin Michel.

Anon. 1901. Album. Crédit Lyonnais.

Anon. 1921. Annuaire Favre. Banques et Banquiers de Paris, Seine et Seine-et-Oise, Des Départements et Des Colonies. Paris: Bibliothèque Financière.

Anon. 1931. Annuaire Du Commerce Didot-Bottin. Paris: Firmin-Didot frères.

Aupetit, Albert, Lucien Brocard, Jacques Armagnac, G. Delamotte, and G. Aubert. 1912. Les Grands Marchés Financiers: France (Paris et Province), Londres, Berlin, New-York. Paris: Félix Alcan.

Baubeau, Patrice. 2016. 'Première Guerre Mondiale et Hiérarchisation Du Système Bancaire En "Jardin à La Française". in Les banques françaises et la Grande Guerre: journée d'études du 20 janvier 2015, Histoire économique et financière de la France. Série Animation de la recherche, edited by F. Cardoni. Paris: IGPDE-Comité pour l'histoire économique et financière de la France.

Baubeau, P., Monnet, E., Riva, A., & 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, Guillaume. 2011. 'Financement Relationnel et Développement Local: L'expérience Française de La Belle Epoque (1880-1914)'. EHESS, Paris.

Bazot, Guillaume. 2014. 'Local Liquidity Constraints: What Place for Central Bank Regional Policy? The French Experience during the Belle Époque (1880–1913)'. *Explorations in Economic History* 52:44–62. doi: 10.1016/j.eeh.2013.10.001.

Beck, Thorsten, Asli Demirguc-Kunt, and Maria Soledad Martinez Peria. 2007. 'Reaching out: Access to and Use of Banking Services across Countries'. *Journal of Financial Economics* 85(1):234–66. doi: 10.1016/j.jfineco.2006.07.002.

Bonin, Hubert. 2000. Les Banques Françaises de l'entre-Deux-Guerres (1919-1935). Paris: Plage.

Bordo, M. D., Redish, A., & Rockoff, H. (2015). Why didn't Canada have a banking crisis in 2008 (or in 1930, or 1907, or...)?. *The Economic History Review*, 68(1), 218-243

Bouvier, Jean. 1984. 'The French Banks, Inflation and the Economic Crisis, 1919-1939'. *Journal of European Economic History* 13(2):29–80.

Braggion, Fabio, Narly Dwarkasing, and Lyndon Moore. 2020a. 'Value Creating Mergers - British Bank Consolidation, 1885-1925'. CEPR Discussion Paper No. DP14663.

Braggion, Fabio, Narly Dwarkasing, and Lyndon Moore. 2020b. 'Value Creating Mergers - British Bank Consolidation, 1885-1925'. *CEPR Discussion Paper No. DP14663*.

Capie, Forrest, and Mark Billings. 2004. 'Evidence on Competition in English Commercial Banking, 1920–1970'. *Financial History Review* 11(1):69–103. doi: 10.1017/S0968565004000058.

Cardoni, Fabien. 2016. 'Introduction Générale'. in Les banques françaises et la Grande Guerre: journée d'études

du 20 janvier 2015, Histoire économique et financière de la France. Série Animation de la recherche, edited by F. Cardoni. Paris: IGPDE-Comité pour l'histoire économique et financière de la France.

Carlson, Mark. 2004. 'Are Branch Banks Better Survivors? Evidence from the Depression Era'. *Economic Inquiry* 42(1):111–26. doi: 10.1093/ei/cbh048.

Carlson, Mark, and Kris James Mitchener. 2009. 'Branch Banking as a Device for Discipline: Competition and Bank Survivorship during the Great Depression'. *Journal of Political Economy* 117(2):165–210. doi: 10.1086/599015.

Cassiers, Isabelle. 1995. 'Managing the Franc in Belgium and France: The Economic Consequences of Exchange-Rate Policies'. in *Banking, Currency, and Finance in Europe between the Wars*, edited by C. H. Feinstein. Oxford: Clarendon Press.

Cassis, Youssef. 2008. Les capitales du capital: histoire des places financières internationales, 1780-2005.

Cherin, Antony, and Ronald Melicher. 1988. 'Impact of Branch Banking on Bank Firm Risk via Geographic Market Diversification'. *Quarterly Journal of Business and Economics* 27(2):73–95.

Colvin, Christopher, Abe De Jong, and Philip Fliers. 2014. 'Predicting the Past: Understanding the Causes of Bank Distress in the Netherlands in the 1920s'. *QUCEH Working Paper Series, No. 14-04*.

Daviet, Jean-Pierre. 1995. 'Les Banques de Dépôt Françaises de 1920 à Nos Jours'. in *Les banques en Europe de l'Ouest de 1920 à nos jours: colloque tenu à Bercy les 7 et 8 octobre 1993*, *Collection 'Histoire économique et financière de la France'. Série Animation de la recherche*, edited by M. Lévy-Leboyer. Paris: Comité pour l'histoire économique et financière de la France.

De Bonis, Riccardo, Giuseppe Marinelli, and Francesco Vercelli. 2018. 'Playing Yo-Yo with Bank Competition: New Evidence from 1890 to 2014'. *Explorations in Economic History* 67:134–51. doi: 10.1016/j.eeh.2017.10.002.

Degorce, Victor, and Eric Monnet. 2021. 'The Great Depression as a Saving Glut'. CEPR Discussion Paper No. 15287.

Dick, Astrid. 2006. 'Nationwide Branching and Its Impact on Market Structure, Quality, and Bank Performance'. *The Journal of Business* 79(2):567–92. doi: 10.1086/499131.

Feiertag, Olivier. 2011. La bancarisation de la société française dans les années 1968' In : *Les Français et l'argent, XIXe-XXIe siècle : Entre fantasmes et réalités* [online]. Rennes : Presses universitaires de Rennes, 2011. ULR: http://books.openedition.org/pur/121053>.

Fohlin, Caroline, and Matthew Jaremski. 2020. 'Two Centuries of US Banking Concentration: 1820-2019'. *CEPR Discussion Paper No. DP14516*.

Gueslin, André. 2016. 'Le Nouveau Paysage Bancaire d'après-Guerre'. in Les banques françaises et la Grande Guerre: journée d'études du 20 janvier 2015, Histoire économique et financière de la France. Série Animation de la recherche, edited by F. Cardoni. Paris: IGPDE-Comité pour l'histoire économique et financière de la France.

Hoffman, Philip, Gilles Postel-Vinay, and Jean-Laurent Rosenthal. 2015. 'Entry, Information, and Financial Development: A Century of Competition between French Banks and Notaries'. *Explorations in Economic History* 55:39–57. doi: 10.1016/j.eeh.2014.04.002.

Hoffman, Philip, Gilles Postel-Vinay, and Jean-Laurent Rosenthal. 2018. *Dark Matter Credit: The Development of Peer-to Peer Lending and Banking in France*. Princeton, NJ: Princeton University Press.

Jayaratne, Jith, and Philip Strahan. 1996. 'The Finance-Growth Nexus: Evidence from Bank Branch Deregulation'. *The Quarterly Journal of Economics* 111(3):639–70. doi: 10.2307/2946668.

Jayaratne, Jith, and Philip Strahan. 1998. 'Entry Restrictions, Industry Rvolution, and Dynamic Efficiency: Evidence from Commercial Banking'. *The Journal of Law and Economics* 41(1):239–74. doi: 10.1086/467390.

Jonker, Joost, and Jan Luitten Van Zanden. 1995. 'Method in the Madness? Banking Crisis between the Wars, an International Comparison'. in *Banking, Currency, and Finance in Europe between the Wars*, edited by C. H.

Feinstein, Oxford: Clarendon Press.

Kaufmann, Eugen. 1914. *La Banque En France (Considérée Principalement Au Point de Vue Des Trois Grandes Banques de Dépôts)*. Paris: M. Glard & E. Brière.

Laufenburger, Henri. 1940. Les Banques Françaises. Paris: Librairie du recueil Sirey.

Lescure, Michel. 2016. '1914-1918, Les Débuts Du "Great Reversal" Des Banques Françaises'. in *Les banques françaises et la Grande Guerre: journée d'études du 20 janvier 2015, Histoire économique et financière de la France. Série Animation de la recherche*, edited by F. Cardoni. Paris: IGPDE-Comité pour l'histoire économique et financière de la France.

Lescure, Michel, and Alain Plessis, eds. 2004. *Banques Locales et Banques Régionales En Europe Au XXe Siècle*. Paris: Albin Michel.

Molteni, Marco. 2021. 'Bank Failures: What Failure? Distress, Development, and Supervision in Italian Banking, 1926-1936', PhD dissertation, Oxford University, Pembroke College.

Monnet, Eric, Angelo Riva, and Stefano Ungaro. 2021. 'The Real Effects of Bank Runs. Evidence from the French Great Depression (1930-1931)'. *CEPR Discussion Paper No. 16054*.

Monnet, Eric. 2018. Controlling Credit: Central Banking and the Planned Economy in Postwar France, 1948 1973. Cambridge University Press.

Piketty, Thomas. 2001. Les Hauts Revenus En France Au XXe Siècle: Inégalités et Redistributions, 1901-1998. Paris: B. Grasset.

Plessis, Alain. 1996. 'Les banques françaises dans les grandes crises du 20e siècle'. *Vingtième Siècle, revue d'histoire* 52(1):85–93. doi: 10.3406/xxs.1996.3564.

Rajan, Raghuram, and Luigi Zingales. 2003. 'The Great Reversals: The Politics of Financial Development in the Twentieth Century'. *Journal of Financial Economics* 69(1):5–50. doi: 10.1016/S0304-405X(03)00125-9.

Saint Marc, Michèle. 1983. *Histoire Monétaire de La France : 1800-1980*. 1re éd. Paris: Presses universitaires de France.

Sauvy, Alfred. 1984. Histoire Économique de La France Entre Les Deux Guerres. Paris: Economica.

Stiroh, Kevin, and Philip Strahan. 2003. 'Competitive Dynamics of Deregulation: Evidence from U.S. Banking'. *Journal of Money, Credit and Banking* 35(5):801–28. doi: 10.2139/ssrn.333621.

Stoskopf, Nicolas. 2016. 'Une Réussite Méconnue: Le Comptoir d'escompte de Mulhouse (1848-1930)'. *Annuaire Historique de Mulhouse* 27:191–216.

Wheelock, David. 1995. 'Regulation, Market Structure, and the Bank Failures of the Great Depression'. *Review* 77(2):27–38.

White, Eugene. 1984. 'A Reinterpretation of the Banking Crisis of 1930'. *The Journal of Economic History* 44(1):119–38. doi: 10.1017/S0022050700031405.

Figures

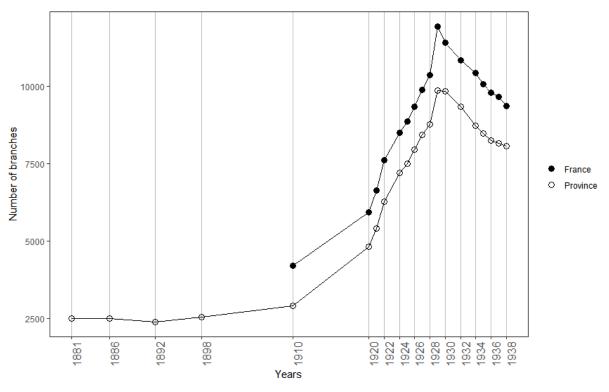


Figure 1: Number of branches

Notes: for the years prior to 1914, the source is the Bottin (data by Hoffman et al. (2018) et Bazot (2014); calculation from the authors of this study). For the years after 1914, the source is the Favre (data and calculation by the authors).

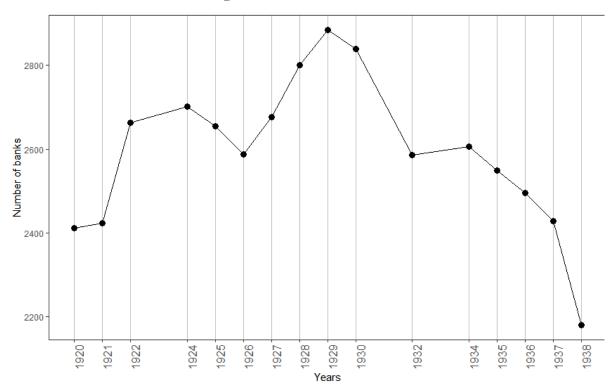


Figure 2: Number of banks

Source: Favre (data and calculation by the authors).

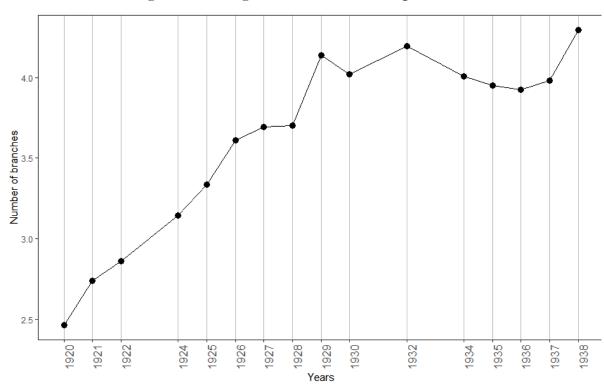


Figure 3: Average number of branches per bank

Source: Favre (data and calculation by the authors).

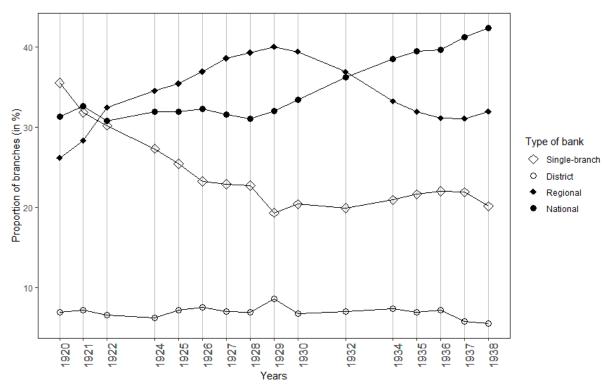


Figure 4: Proportion of each type of bank in the banking network

Source: Favre (data and calculation by the authors).

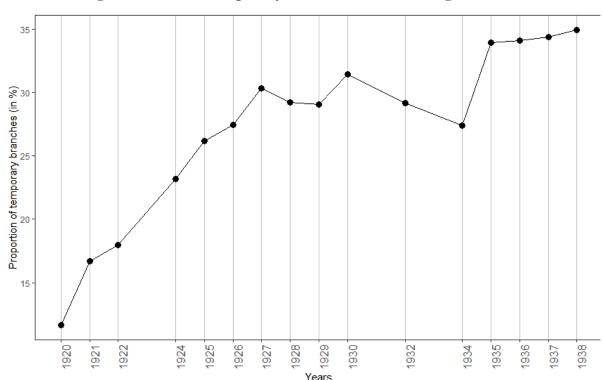
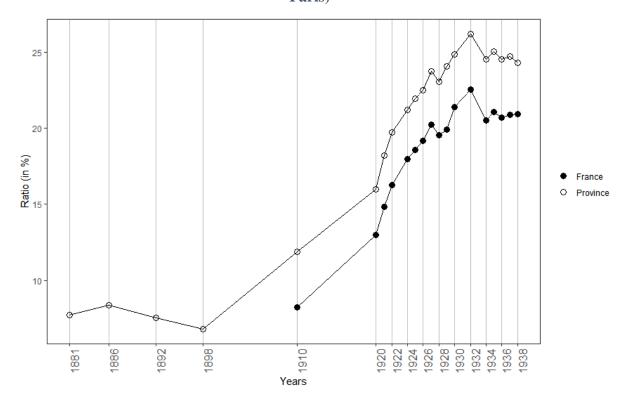


Figure 5: Share of temporary branches in the banking network

Source: FBottin (1931 and 1933) and Favre (other years).

Figure 6: Share of the branches in towns with fewer than 2,000 inhabitants (excluding Paris)



Source: for the years prior to the First World War, the Bottin (data by Hoffman et al. (2018) and Bazot (2014); calculations by the authors of this study); for the years after the war, Favre (data and calculations by the authors).

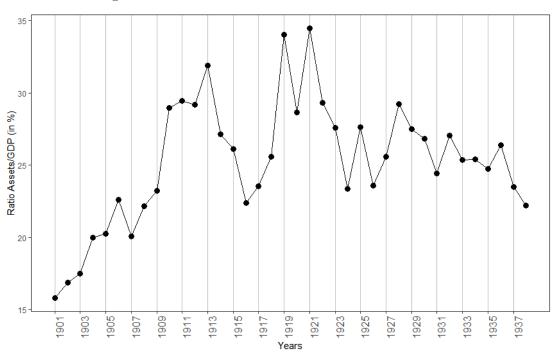


Figure 7: Size of balance sheet in % of GDP (Album)

Sources: calculations by the authors from the Album for the size of balance sheet (measured by the total of assets), and Piketty (2001) for the GDP.

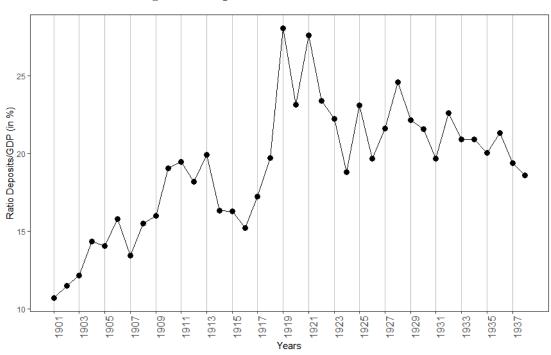


Figure 8: Deposits in % of GDP (Album)

Sources: calculations of the authors from the Album for the amount of deposits, and Piketty (2001) for the GDP.

Tables

Table 1: Comparison Album-Favre

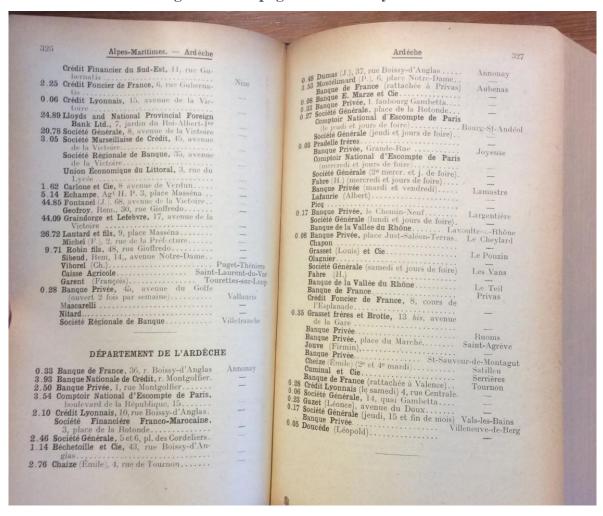
(in %)	Banks	Branches
All banks	9.08	64.07
National banks	100	100
Regional banks	35.22	74.48
Departmental banks	25.96	38.67
Single-branch banks	5.10	5.10

Note: This table details the share of banks (column "Banks") or of their branches (column "Branches") present in both the Favre yearbook and in the Album. All values are in percentage. Each value is an average calculated over the 1920-1938 period. For example, on average, 35.22% of regional banks and 74.48% of the branches of regional banks, present in the Favre yearbook, were also present in the Album.

Appendix 1: The Favre yearbook

A. Presentation

Figure 9: One page of the Favre yearbook



Note: Favre yearbook, 1923 (the branches as of 1922).

Table 2: Information collected for each branch

City	City of presence of the branch (cities existing between 1920 and 1938).
District	District of the city of presence (departments according to the division in force between 1920 and 1938).
Bank	Name of the bank that opened the branch.
Job	Filled if (i) the bank operated in a specific activity line ("job"), or (ii) the bank was in fact a banker operating in one of those activities ("job"). Jobs can be various: moneychangers ("changeurs"), discounters ("escompteur"), agent ("agent de change"), etc.
Temporary	Filled if the branch is open only on a limited number of days every week or month (for instance, "every Tuesday", "every first Sunday in the month", etc).
Fair days	Filled if the branch is open only during fair or market days.

B. Comparison with the Bottin

Table 3: Number of branches and banks (focus)

	1930	1931	1932	1933	1934
Number of branches	11,704	10,061	11,466	9,086	10,759
Number of banks	2,844	2,034	2,664	1,870	2,610

Sources: Favre yearbook for the years 1930, 1932, and 1934; Bottin yearbook for the years 1931 and 1933 (data and calculations by the authors).

Table 4: Number of branches and banks (focus) per bank category

		N	lumber of banks i	in	
	1930	1931	1932	1933	1934
Single-branch	2,331	1,540	2,262	1,460	2,186
Departmental	225	220	194	204	213
Regional	282	268	235	200	205
National	6	6	6	6	6

		Nu	mber of branche	s in	
	1930	1931	1932	1933	1934
Single-branch	2,331	1,540	2,262	1,460	2,186
Departmental	765	733	750	720	766
Regional	4,509	3,779	4,225	2,912	3,474
National	4,099	4,009	4,229	3,994	4,333

Sources: Favre yearbook for the years 1930, 1932, and 1934; Bottin yearbook for the years 1931 and 1933 (data and calculations by the authors).

Appendix 2: Mutual and cooperative banks

For ease of language, we include in the group of mutual and cooperative banks the banks attached to the networks of the *Crédit Agricole* (CA), *Banques Populaires* (BP), but also those belonging to the *Société Générale de Crédit Industriel et Commercial* (CIC).

Table 5: Share of mutual and cooperative banks

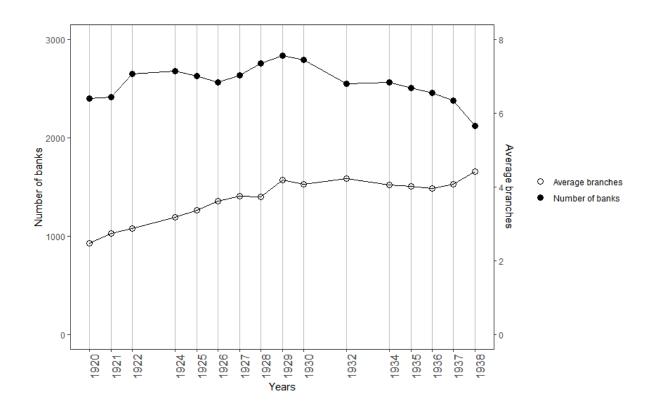
Year	Share (in %)	Weight (in %) in the network
1920	0.61	0.57
1921	0.65	0.57
1922	0.71	0.54
1924	1.03	0.61
1925	1.09	0.61
1926	1.23	0.57
1927	1.66	0.68
1928	1.80	0.52
1929	1.97	0.58
1930	1.99	0.70
1931	2.45	0.57
1934	1.97	0.69
1935	1.91	0.67
1936	1.99	0.73
1937	2.53	0.83
1938	3.26	0.98

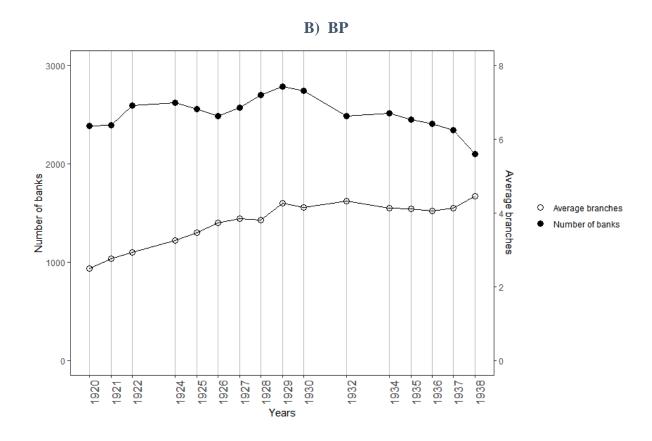
Note: This table presents the weight of mutual and cooperative banks, considered here as a fifth category, independent of national, regional, departmental, and single-branch banks. The "share (in %)" refers to the share of this category in the total number of banks; the "weight (in %) in the network" refers to the share of their branches in the total number of branches.

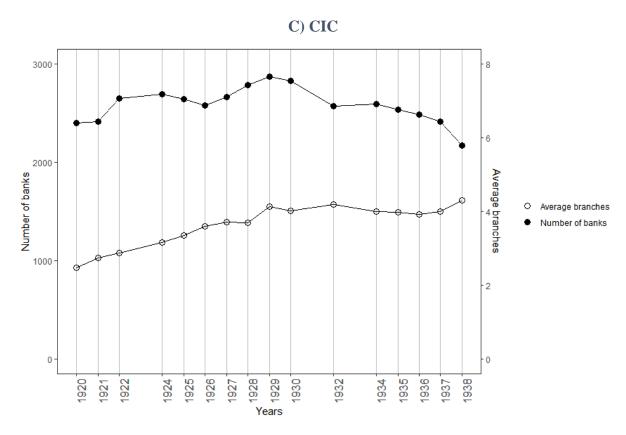
Table 6: Robustness analyses

Groups	Treatment
A	The same analyses are conducted, considering all the entities attached to the CA network as a single bank.
В	The same analyses are conducted, considering all the entities attached to the BP network as a single bank.
C	The same analyses are conducted, considering all the entities attached to the CIC network as a single bank.

Figure 10: Number of banks and average number of branches per bank $\label{eq:A} \textbf{A) CA}$

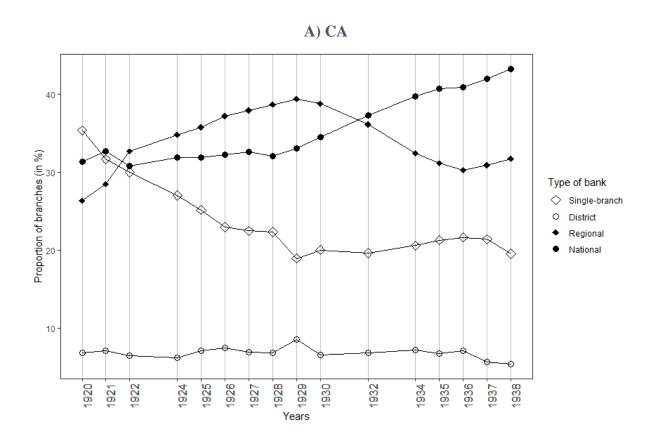


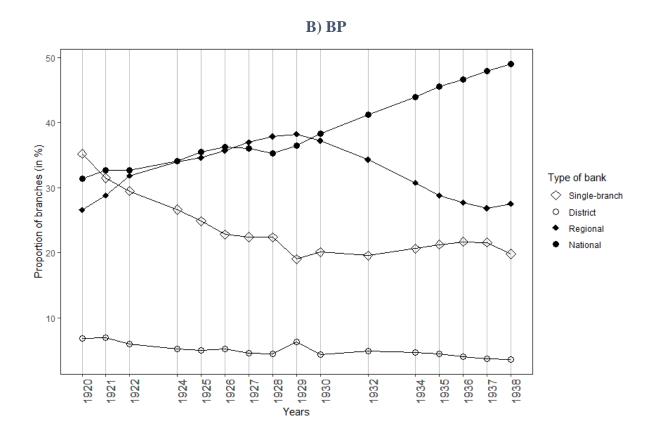


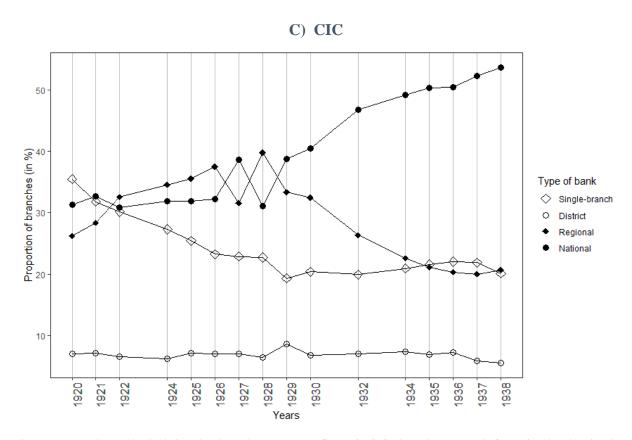


Note: These graphs show (i) the evolution of the total number of banks (left axis), and (ii) the evolution of the average number of branches per bank (right axis). Source: Favre (data and calculations of the authors).

Figure 11: Share of each type of banks in the banking network







Source: Favre (data and calculations by the authors). Note on figure C (CIC): in 1927, the trends for regional and national banks are reversed due to the momentary shift of CIC (considered in this specification as a single bank) into the "national banks" category. Indeed, this insitution is present in more than 45 departments (only) in 1927.

Appendix 3: The banks of the Album

Number of branches Years

Figure 12: Number of branches (Album)

Source: Favre (data and calculations by the authors). Note: this graph details the number of branches, as reported in the Favre yearbook, of banks also present in the Album.

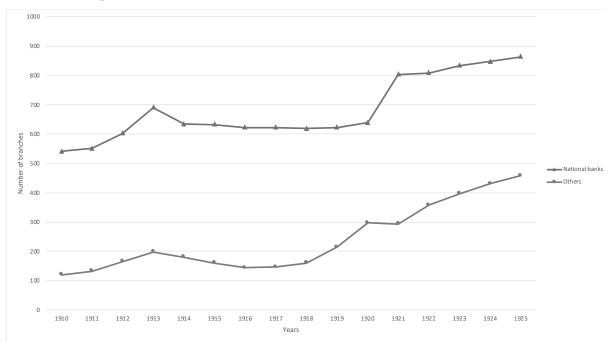


Figure 13: Number of branches (Album) between 1910 and 1925

Source: Album (data and calculations by the authors). This graph represents, on an annual basis, the number of branches of the 70 banks for which this source specifies information ("number of branches") continuously between 1910 and the early 1920s. The category "National banks" includes the *Société Générale* and the *Banque Nationale pour le Commerce et l'Industrie* (for the two other banks identified as national in this study, the *Crédit Lyonnais* and the *Comptoir National d'Escompte de Paris*, the number of branches is not reported between 1910 and the early 1920s in the source).

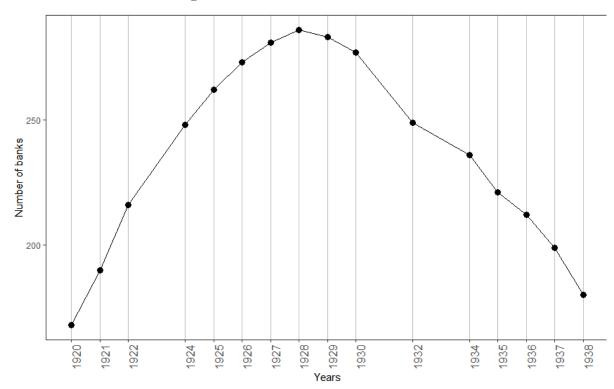


Figure 14: Number of banks (Album)

Source: Favre (data and calculations by the authors). Note: this graph shows the number of banks reported in the Favre yearbook that are also present in the Album.

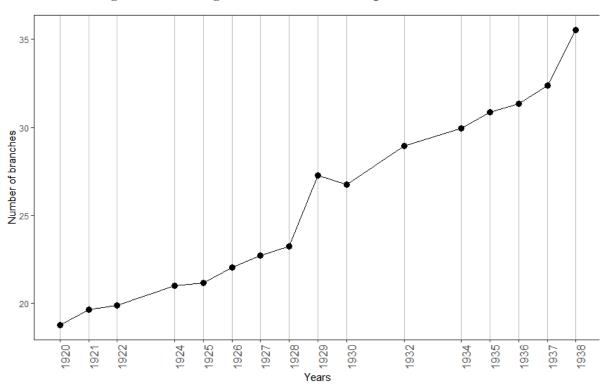


Figure 15: Average number of branches per bank (Album)

Source: Favre (data and calculations by the authors). Note: this graph shows the average number of branches per bank, for the banks reported in the Favre yearbook and that are also present in the Album.

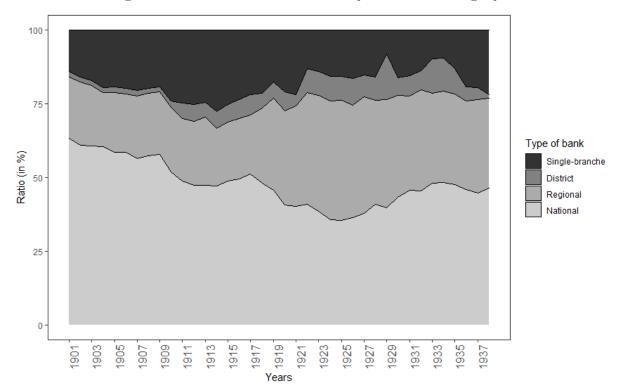


Figure 16: Share of the assets held by each bank category

Note: each area refers to the share of assets held by a certain type of bank (single-branch, departmental, regional or national banks) out of total assets. Source: Album (data and calculations by the authors).

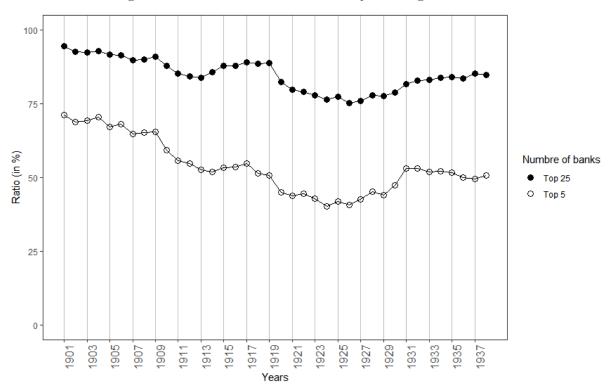


Figure 17: Share of the assets held by the largest banks

Note: "Top 25" (respectively "Top 5") refers to the share of assets of the 25 (5) largest banks (in terms of balance sheet) on total assets. Source: Album (entry and calculations by the authors).

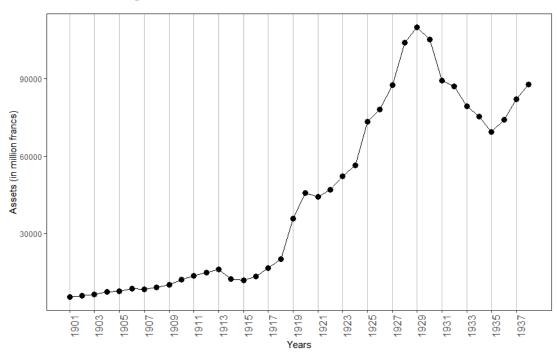


Figure 18: Size of bank balance sheets (Album)

Note: the size of bank balance sheet is measured by the total of assets (or liabilities). Source: Album (data and calculations by the authors).

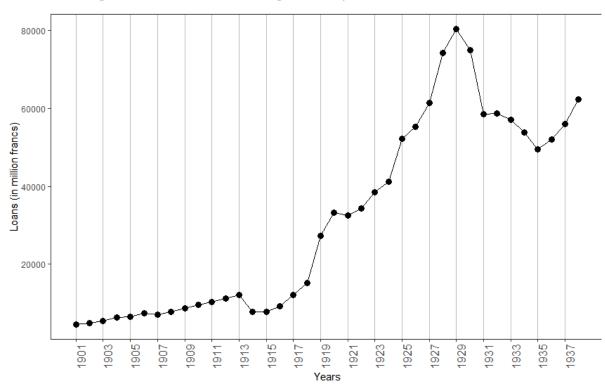
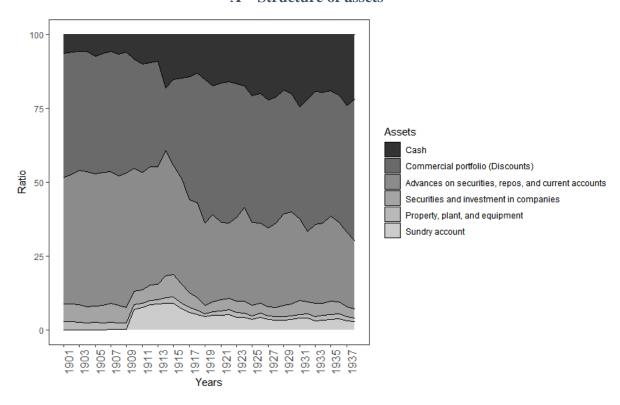


Figure 19: Amount of loans granted by the banks of the Album

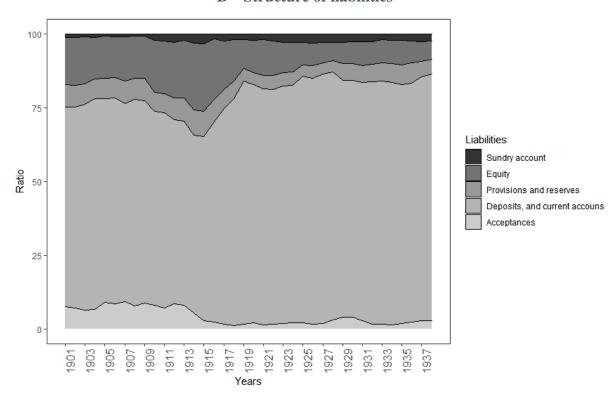
Source: Album (data and calculations by the authors).

Figure 20: Structure of the balance sheet of the banks of the Album

A – Structure of assets



B – Structure of liabilities



Source: Album (data and calculations by the authors).

Appendix 4: Bank categories and share in the banking network

District 4.2 3.9 3.6 3.3 3.0 Regional Number of branches 17.5 15.0 12.5 10.0 Type of bank O District Regional National National 1000 800 600 1922 1924 1925 1926 1927 1928 1929 1930 1932 Years

Figure 21: Average number of branches per bank category

Source: Favre (data and calculations by the authors).

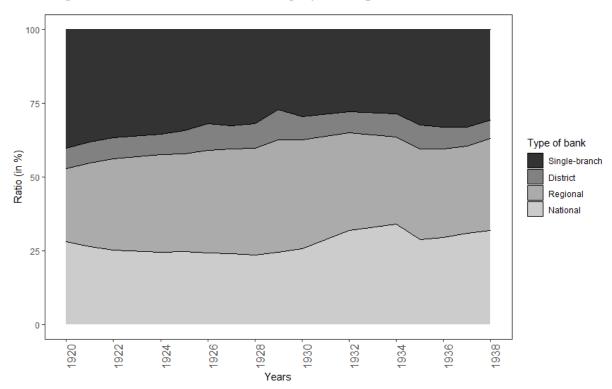


Figure 22: Share of each bank category in the permanent-branch network

Source: Favre (data and calculations by the authors). Note: this graph shows the evolution of the composition of the network of permanent branches. For example, in 1920, 28% of permanent branches are owned by national banks, 25% by regional banks, 7% by departmental banks, and 40% by single-branch banks.

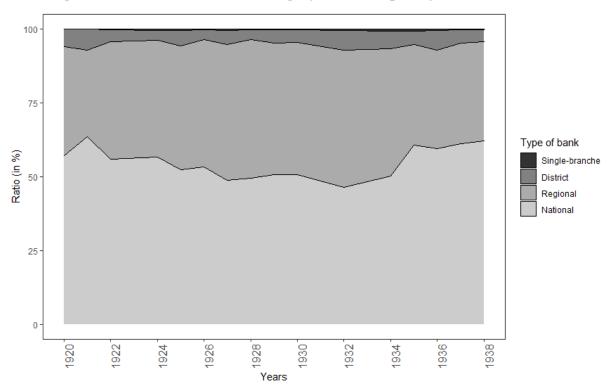


Figure 23: Share of each bank category in the temporary-branch network

Source: Favre (data and calculations by the authors). Note: this graph shows the evolution of the composition of the network of temporary branches. For example, in 1920, 57% of the temporary branches are owned by national banks, 37% by regional banks, 8% by departmental banks, and 0% (0.14% exactly) by single-branch banks. (The figures here are rounded to the nearest whole number).

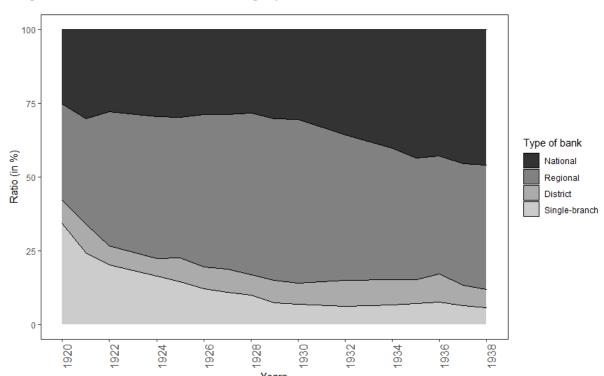


Figure 24: Share of each bank category in the cities with less than 2,000 inhabitants

Source: Favre (data and calculations by the authors). Note: this graph shows the evolution of the composition of the banking network in municipalities of less than 2,000 inhabitants. For example, in 1920, 25% of the branches opened in these municipalities are operated by national banks, 33% by regional banks, 8% by departmental banks, and 34% by single-branch banks.

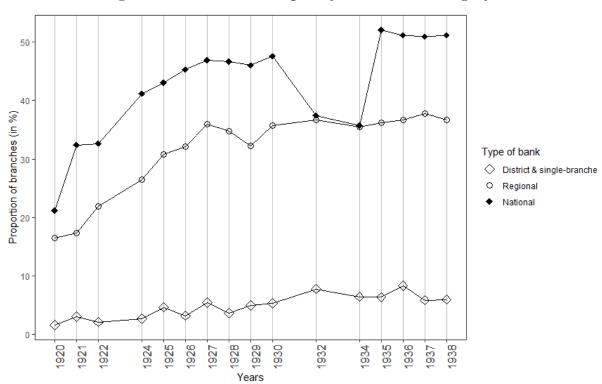
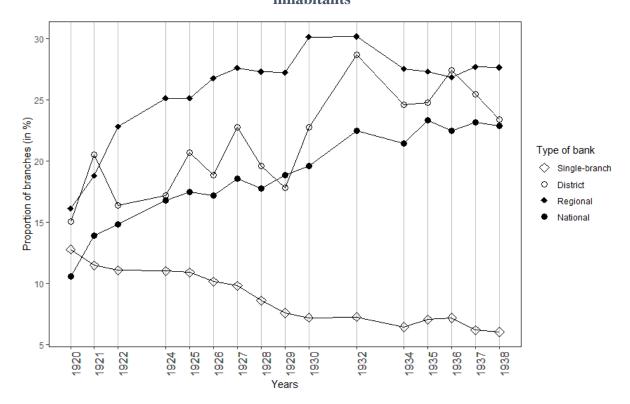


Figure 25: Share of the temporary of each bank category

Source: Favre (data and calculations by the authors). Note: this graph traces the evolution of the share of temporary branches (out of all their branches) opened by each type of bank. For example, in 1920, 21% of the branches of national banks, 17% of the branches of regional banks, and 2% of the branches of departmental banks and mono-branch are temporary.

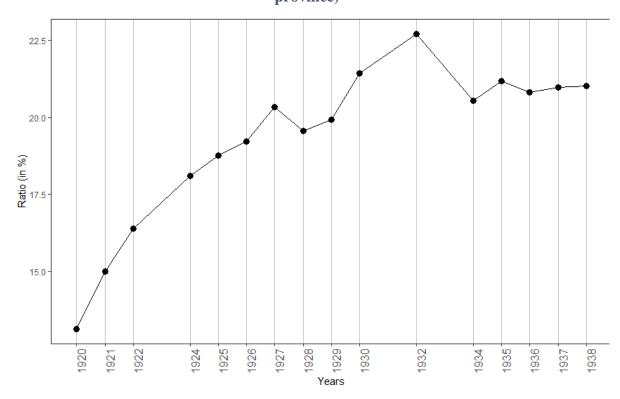
Figure 26: Share of the branches of each bank category in the cities with less than 2,000 inhabitants



Source: Favre (data and calculations by the authors). Note: this graph shows the evolution of the share of branches opened in municipalities of less than 2,000 inhabitants (out of all their branches) for each type of bank. For example, in 1920, 11% of the branches of national banks, 16% of the branches of regional banks, 15% of the branches of departmental banks, and 13% of the branches of single-branch banks are open in municipalities with fewer than 2,000 inhabitants.

Appendix 5: Cities of less than 2,000 inhabitants – Paris and province

Figure 27: Share of the branches in the cities with less than 2,000 inhabitants (Paris and province)



Source: Favre (data and calculations by the authors). Note: this graph shows the evolution of the ratio of bank branches opened in communes with less than 2,000 inhabitants to all bank branches opened in France. For example, in 1920, approximately 13% of the bank branches opened in France are located in municipalities with fewer than 2,000 inhabitants.