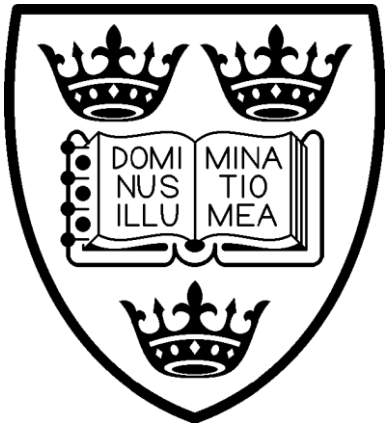


UNIVERSITY OF OXFORD

Oxford Economic and Social History Working Papers

Number 194, August 2021

The distress of Italian commercial banks in 1926-1936: a new dataset from banking supervision archives

MARCO MOLTENI

The distress of Italian commercial banks in 1926-1936: a new dataset from banking supervision archives

Marco Molteni[1]

Pembroke College, University of Oxford

Marco.molteni@history.ox.ac.uk

Abstract

This paper documents a new dataset on the distress of Italian joint-stock banks in 1926-1936. It employs classified information from the archives of Italian banking supervision to identify both outright and hidden bank failures. Providing the first all-embracing account of the crisis of small and medium banks in Italy during the Great Depression, it shows that once hidden distress is considered, their crisis was more severe than previously thought. Measured by total assets of banks involved, the distress of joint-stock banks would be considered a 'systemic crisis' by today standards. While previous research has mainly focused on the distress of large universal banks, this research opens new questions on our interpretation of the impact of bank distress in interwar Italy. Important regional patterns emerge, and these should receive more attention in future research.

[1] I am especially grateful to my DPhil supervisor Brian A'Hearn, for invaluable comments on this work. This research would have never been possible without the outstanding support in the archival research by Elisabetta Loche and all the archivists working at the *Archivio Storico della Banca d'Italia*. I am particularly indebted to Alberto Baffigi, Federico Barbiellini Amidei, Angelo Battilocchi, Isabella Cerioni, Elio Cerrito, Angelina Cheche, Eleonora Costantino, Paolo Croce, Elena Genito, Valeria Giaquinto, Alfredo Gigliobianco, Matteo Gomellini, Anna Rita Gresta, Giuseppe Luci, Renata Martano, Marco Melini, Dario Pellegrino, Paolo Piselli, Anna Rita Rigano, and Francesco Vercelli, for their exquisite hospitality and research support during my visiting period at the *Divisione Storia Economica e Archivio Storico* of the Bank of Italy. At various stages of this research I have received invaluable feedback from many colleagues and mentors, I would like to thank Sebastian Alvarez, Marianna Astore, Mattia Bertazzini, Steve Broadberry, Chris Colvin, Pierluigi Ciocca, Amaury de Viq, Rui Esteves, Beatrice Faleri, Philip Fliers, Giuliana Freschi, Giacomo Gabbuti, Roberto Ganau, Dante Luigi Gaviano, Oscar Gelderblom, Andrea Incerpi, Joost Jonker, Matthias Kemmerer, Wilfried Kisling, Nikita Lychakov, Kevin O'Rourke, Giovanni Pala, Ruben Peeters, Alba Rosa Piacenti Andrea Ramazzotti, Cristiano Ristuccia, Alessandro Roselli, Jacopo Sartori, Catherine Schenk, Gianni Toniolo, and all the participants to the 2nd LSE workshop on the Interwar period (2016), the University of Oxford Graduate Seminar in Economic and Social History (2016), the QUB Doctoral Colloquium (2017), the Utrecht University Seminar in Financial History (2018), the 1st ASE workshop at the Bocconi University (2018), and the Workshop «The Italian Economy under Fascism» at Pembroke College (2019). All errors are mine. I acknowledge generous funding from the Economic History Society, History Faculty (University of Oxford), Pembroke College (Oxford), and Fondazione Luigi Einaudi Onlus.

1 Introduction

In interwar banking history, the case of Italy is well-known for the distress and secret rescue by the fascist regime of the 'big four' large universal banks[2] (Toniolo, 1995; Battilossi, 2009, Feinstein et al., 2010; Barbiellini-Amidei and Giordano, 2015). Much less is known regarding the rest of the banking system – this being especially true for the international scholarship available in English. However, as Figure A 1 and Figure A 2 show, the importance of other bank categories in Italian banking system was anything but negligible. This work aims to fill this gap and to provide the first all-embracing account of the distress of Italian small and medium commercial banks in the interwar period[3]. Specifically, this paper aims at answering the following research questions:

Besides that of universal banks, did Italy experience a banking crisis in the 1930s? Once hidden but resolved distress is taken into account, does the picture change?

To answer this question, this paper constructs a new dataset [distress dataset] on the distress of Italian joint-stock banks between 1926 and 1936. It includes both cooperative (BP) and ordinary (SOC) joint-stock banks[4]. In Molteni (2020), I reconstructed a dataset of all Italian commercial banks filing for bankruptcy between July 1925 and March 1936 [bankruptcy dataset][5]. This work extends and complements that research: it identifies not only bankrupt banks but also hidden failures and non-distressed closures[6]. To do so, it makes extensive use of classified documents from two distinct banking supervision archives. ASBI_supervision and ACS_supervision[7].

The time span covered by this reconstruction is 1926/27 – 1936. The rationale behind this choice is both practical and theoretical. From a practical point of view, the available sources that guarantee

[2] The big four largest universal banks are Banca Commerciale Italiana, Credito Italiano, Banco di Roma, and Banca Nazionale di Credito.

[3] Commercial banks are defined as follows: credit institutions which are profit oriented, privately owned, fully integrated in the national payment system, and that collect deposits from the public in order to fund their lending activity, i.e. what today would be generally considered ordinary banks. In the context of interwar Italian banking, these are joint-stock banks (*Società Ordinarie di Credito,* SOC), cooperative joint-stock banks (*Banche Popolari*, BP), and private bankers and partnerships (*Ditte Bancarie*, DB).

[4] These are the acronyms used in the *Archivio Storico del Credito in Italia* (ASCI, Natoli et al. 2016), which follows the official classification that the Bank of Italy used until the 1990s.

[5] It is crucial to understand that, unlike in the Anglo-Saxton institutional context, in Italian legislation there was no distinction between bankruptcy and insolvency. Here, the term bankruptcy is used for 'procedura concorsuale' which applies to both companies' insolvency and personal bankruptcy.

[6] One important difference between the bankruptcy dataset and the distress dataset is that the former included private bankers and partnerships, while the latter does not. These cannot be included because we do not have a comprehensive list of existing banks belonging to this group prior to 1936.

[7] By banking supervision archives I refer to the Historical Archives of the Bank of Italy (ASBI_supervision: *Archivio Storico della Banca d'Italia, Banca d'Italia, Vigilanza sulle Aziende di Credito*, various folders) and the Archives of the Banking Supervision Office at the Ministry of the Finance, currently held at the Italian National Archives (ACS_supervision: *Archivio Centrale dello Stato, Ministero del Tesoro, Direzione generale tesoro, Ispettorato generale per i servizi monetari, di vigilanza e controllo, Ufficio tutela del credito e del risparmio*, various folders). See Appendix C.

a complete account only start with the introduction of banking supervision in 1926/27[8]. The reconstruction stops in 1936 because the new institutional setting introduced by the new banking law in 1936 provided a different set of rules to deal with banks in distress (Di Martino, 2004). From a theoretical point of view, the focus on the late 1920s and early 1930s is justified because this period coincides with the deflationary measures introduced in 1926 to restore the Gold Standard, and with the onset of the Great Depression (James and O'Rourke, 2013). These are the years in which *ex-ante* one should expect to observe a higher degree of banking distress.

Besides this introduction, this paper is made up of three more sections. Section 2 describes the methodological approach to reconstruct the dataset. Section 3 presents a first descriptive analysis of the dataset. The final section summarises the paper and its main results, paving the way for future research.

2 Building the dataset

2.1 Defining bank distress

First and foremost, it must be clear that the definition of distress adopted in this paper is operational and not theoretical, as distress is always defined *ex-post* – i.e. it is the outcome that allows me to identify historical distress. For banks in the impossibility to avert defaulting and stopping payments with their own forces, there are two outcomes: ceasing of payments happens (bankruptcy) or is avoided thanks to third party intervention (resolution). In this framework, the phenomena of bankruptcy procedure or resolution intervention are what define distress. Distress is defined as follows:

A condition in which a bank is not being able to pay back what is due to creditors and investors without a resolution intervention by a third party.

Had a different approach been used, one that considers distressed all banks experiencing problems according to a more subjective reading of archival documents regardless of the outcome, the sample would be larger. This implies that if banks in trouble managed to navigate through the crisis without external support, these are not considered distressed in the dataset[9]. The exclusion

[8] The first Italian law on regulation and supervision of commercial banks was enacted with R.d.l. 7 settembre 1926, n.1511 and R.d.l. 6 novembre 1926, n.1830. Supervision archives provide a unique and confidential source to study banking distress, as banking supervision archives should record and documents the life (and death) of all Italian banks. For an overview of the 1926 law see Molteni and Pellegrino (2021).

[9] For example, *Credito Romagnolo* of Bologna: the on-site inspection in August 1933 found it in a difficult position, but the bank then managed to survive without external help. With a capital of 35 mln Lire, it had hidden losses for 14.9 mln plus 20.8 mln of non-performing loans and 185 mln of frozen assets out of total balance sheet of 446 mln. Furthermore, between 1927 and 1932, the bank had already amortized 8.3 mln lire of losses. ASBI, Banca d'Italia, Vigilanza, prat.1434, fasc.1.

of these banks can be seen as a Type I error - Type II error trade-off. Here, I prefer to have fewer banks that are confidently distressed and accept to exclude some troubled banks, rather than have a larger sample – not only with false positives but also based on a less consistent and more subjective definition of distress. The rationale behind defining distress in this way is to keep a 'conservative' approach aimed at not overestimating banking distress and to minimise subjective judgements in interpreting qualitative archival sources.

As the rest of this paper shows, to understand the Italian banking crisis of the Depression, we need to understand 'distress' rather than just bank closures. Studying distress and not just closures is important in the case of interwar Italy because Italian Public Authorities had an active policy of resolving banking distress, and thus preventing distressed banks from ceasing being in trade with a loss for their creditors (i.e. filing for bankruptcy). Furthermore, following the 1926 banking law, the Italian banking system went through an important process of consolidation; therefore, one cannot simply assume that all bank closures are due to distress.

Other definitions of 'distress' are certainly possible and the one adopted here does not pretend to be unique or superior. 'Classic' research on the US banking crisis focused on 'bank failures', i.e. suspensions, which are often (but not always) associated with terminal closures[10]. After the seminal archival research by Richardson (2007b), it has been possible to distinguish between failures (i.e. terminal closures) and temporary suspensions (i.e. banks that suspended their operations but reopened). In fact, similarly to this study, Richardson used previously unexplored supervision archival material to distinguish between the two for the period that goes from January 1929 until the bank holidays of March 1933. In the European context, this issue is complicated by the fact that most European countries did not have banking regulations, and thus supervision archives do not exist for that time period. Colvin et al. (2015) stress the importance of focusing the analysis on distress, as severe financial troubles do not necessarily end up in outright failures. However, to broaden their concept of distress, they have to rely on public sources. Baubeau et al. (2021) broaden the definition of distress, including banks that did not experience an outright failure but suffered severe deposit withdrawals.

One important novelty of this work is to provide a better connotation of bank distress in Italy based on classified supervision documents. This approach is feasible because Italy did have banking supervision at the time, while this kind of information is not available for other European countries – e.g. the French and the Dutch cases studied by Baubeau et al. (2021) and Colvin et al.

[10] For a thorough discussion on the definition of failure and distress in the USA context see Richardson (2007b, 2007a) and the data appendix in Calomiris and Mason (2003).

(2015). In this respect, one notable exception is Sweden, which established banking supervision as early as 1868 (Hotori and Wendschlag, 2019). In fact, to classify which banks experienced distress during the 1907 crisis, Grodecka-Messi et al. (2021) adopt a narrative approach based on coeval newspapers, historical research, and primary sources from supervision archives[11].

Banking supervision documents allow us to identify banks whose distress did not result in bankruptcy and to separate those closures and mergers that were not prompted by a distress situation. This paper adopts an operational definition of distress which includes: (a) bankruptcies; (b) liquidations where most of paid-up capital is lost[12]; (c) mergers taking place to avoid (a) or (b); and (d) resolutions requiring money injections from third parties[13]. Liquidations where most paid-up capital is reimbursed and mergers reflecting healthy market consolidation are not considered distressed, even though these bank closures are nonetheless included in the dataset.

2.2 Archival strategy

The process of reconstructing this dataset is very closely related to that employed for the bankruptcy dataset in Molteni (2020), and some repetitions are inevitable. A multitude of sources, both primary and secondary, are used at each stage to construct the dataset presented here. A short description of these sources is available in Appendix C[14]. The process of reconstructing the dataset involves three steps:

(1) Identifying the names of all the banks of interest.
(2) Matching these banks with one or more files in banking supervision archives.
(3) Extracting relevant information from archival files and additional sources.

I assemble a list of all banks that could be in trade between 1926 and 1936. I try to match all these banks with their individual files in supervision archives. I revise this initial list in light of the subsequent archival research. I construct a set of variables for the final list of banks. The challenge presented by this process is the sheer number of banks relevant for this study: in total, the number of files consulted for this research goes beyond a thousand. Plus, all banks are manually matched by unique ids with existing Italian banking databases, such as ASCI (Natoli et al. 2016) and IMITA (Vasta, 2006), making the link with these datasets immediate.

[11] The "advantage" of Sweden, however, is that less than 90 banks existed in 1907, while in Italy there were more than 1,000 commercial banks active in the interwar period.
[12] The cut-off is arbitrarily put at 50%, but the dataset has two additional variables using a threshold of 30% and 100%.
[13] I.e. by the government, another bank, or new investors.
[14] For a detailed description of the sources employed this work refer to Molteni (2020)

2.2.1 Identifying all names of distressed joint-stock banks

The starting point is Cerrito's (1996) reconstruction of the Italian banking population in 1890 – 1936. Cerrito (1996) represents the best available reconstruction of the population of Italian banks for this period of interest and includes basic information on individual Italian banks[15]. I consider all BP and SOC that are recorded to be present for at least one year between 1923 and 1936[16]. This gives a list of 1371 banks, of which 547 are recorded to be alive in 1936, whereas 824 disappeared. In addition to the 824 banks that stopped being in trade, I include in the list of banks to match with archival files also those banks recorded as alive in 1936 for which other sources suggest distress. Three additional archival series at the Historical Archives of the Bank of Italy are consulted for this purpose. Firstly, the *sottofondo* 'Direttorio – Introna'[17] has several folders concerning banking resolution interventions supervised by Niccolò Introna, head of banking supervision. Secondly, all files concerning special rediscount to individual banks performed by the Bank of Italy in the period of interest have been checked – *Sottoserie 'Operazioni di Sconti Speciali'*[18]. Thirdly, all seven *copialettere riservatissimi del Governatore*[19] (ultra-secret letter books of the Governor – a series of books that preserve a copy of all the classified correspondence sent by the Board of Governors of the Bank of Italy) have been consulted from cover to back end for the period 1926-1936. Last but not least, a thorough review of the existing literature on the period has been done[20]. Therefore, even though it is impossible to know with absolute certainty that all distressed banks have been included, the probability that a bank experienced distress without being mentioned in any of the sources consulted is extremely low, albeit not zero.

2.2.2 Matching bank names with archival files

For 505 banks alive in 1936 of the 1371 banks in the initial list, additional sources do not provide evidence of banking distress, so they are excluded. I try to match all other banks with one individual bank folder in ASBI_Supervision and/or ACS_Supervision. In fact, of the 824 banks disappearing between 1923 and 1926 according to Cerrito (1996), 264 banks could not be matched with any folder. This latter group of banks, mostly disappearing before 1926 in Cerrito (1996), is excluded from the list based on the fair assumption that these had already stopped being in trade before the

[15] Name, establishment year, HQ, years of activity. Although this latter variable is not meant to be 100% accurate.
[16] See Appendix C.
[17] ASBI, Banca d'Italia, Direttorio – Introna, prat. 28, f.1 sf. 1-8; prat. 29, f. 1, sf.1-3; prat. 30 f.1 sf.1-8; prat. 31, f.1, sf.1; prat. 34, f.1, sf. 1-3; prat. 35, f.1, sf.1-4; prat. 36, f.1, sf.1-4; prat.37, f.1, sf.1-3: prat.38, f.1, sf.1-3; prat.39, f.1, sf.1-2; prat.43, f.1. sf.5; prat. 45, f.1, sf.8; prat. 56, f.1, sf.1; prat. 64, f.1, sf.1-2; prat. 65, f.1, sf.3; prat. 67, f.1, sf.1-20.
[18] ASBI, Banca d'Italia, Sconti, prat.16-290, various *fascicoli*.
[19] ASBI, Banca d'Italia, Direttorio – Stringher, prat.17, doc.2-4; Direttorio – Introna, prat.8, doc.1-2; Direttorio – Azzolini, prat.43, doc.1-2;
[20] See the bibliography in Molteni (2021).

establishment of banking supervision in early 1927. The remaining 602 are all matched with one file in at least one of the two supervision archives.

2.2.3 Extract relevant information

2.2.3.1 Headquarters and geocoding

Information on the headquarters is taken directly from Cerrito (1996) and double-checked with archival sources. In case of conflicts, archival sources are privileged.

2.2.3.2 Balance sheets data

Balance sheet data are collected to have an estimation of bank size. For most banks, *Archivio Storico del Credito in Italia* (ASCI, Natoli et al. 2016) has at least one annual balance sheet. If this is the case, balance sheet data come from ASCI. For banks not present in ASCI, data are taken from other primary sources, such as archival documentation or coeval publications. In few cases, data are taken from *IMITA.db.* Since the data entry process has to be done manually, the data are collected only for one benchmark year: December 1927. When data for December 1927 are not available, the closest month/year is recorded. When multiple sources are available, the following hierarchy is followed[21]:

1) ASCI December 1927
2) ASCI closest date (1924-1928)
3) ASBI_Supervision December 1927
4) ASBI_Supervision closest date (Dec1926-Dec1928)
5) Annuario CGBF December 1927
6) Annuario CGBF (Dec1925 or Dec1928)
7) IMITA.db 1927 or closest date

2.2.3.3 Distress

All banks filing for bankruptcy are considered distressed. All banks receiving a public subsidy to write-off losses are considered distressed. All mergers receiving a public subsidy are considered distressed. All mergers requested by banks to third parties to avert a bankruptcy procedure are considered distressed. All voluntary liquidations in which bankruptcy was only averted thanks to subsidies from third parties are considered distressed. All banks receiving grants and/or capital injections from third parties prompted by Italian public authorities are considered distressed.

Not all voluntary liquidations should be considered distress: certain liquidations ended up with a substantial reimbursement of paid-up capital. In these cases, a subjective judgement has to be made in drawing the red line between distress and no distress: I consider banks being distressed if they

[21] See Appendix C.

paid less than 50% of initial paid-up capital[22]. If the bank received a subsidy during or before the liquidation to avoid a bankruptcy procedure, the bank is considered distressed.

2.2.3.4 Timing

Defining a variable 'timing of distress' is intrinsically difficult: the very definition of distress is not clear cut, and pinning down any exact date would always be partial. Nonetheless, even just for operational use, such as ordering the events chronologically or providing a graphic representation, it is important to make the best choice possible given the sources available. As all subjective archival research, a number of caveats apply to this reconstruction: see Appendix D for a thorough discussion.

If a bank files for bankruptcy, 'timing of distress' is taken from the bankruptcy dataset. If a bank is put into voluntary liquidation, 'timing of distress' is the day the liquidation starts. If a bank ceases to collect deposits, but banking supervision documents show that this was just a way to deal with distress without banking supervision interference, 'timing of distress' is the day the bank announces the stop of deposit-taking activity and the reimbursement of existing depositors.

Defining 'timing of distress' for banks that are rescued by a third party is more challenging. It is very difficult to find a consistent estimate for the timing of interventions, given that rescues were organised *ad hoc* and could take place through different legal devices. Therefore, 'timing of distress' is the day the solution became 'official': (i) for distressed mergers, the day the merger was authorised by Ministerial decree; (ii) for capital injections, the day the capital raise was probated by the Tribunal; (iii) for government grant subsidies, the day the agreement between the bank and Italian public authorities was signed, or the day of issue of the secret decree authorising the money transfer taking place[23].

2.3 Final dataset

The archival research allows to further cut down the list of banks[24]. Out of 602 banks identified, 85 more banks are excluded because archival documents revealed one of the following cases: (i) the bank actually stopped being in trade before December 1926; (ii) the bank never collected

[22] I.e. after paying off all debts, less than 50% of capital could be reimbursed to shareholders. The dataset also has two variables that use a different threshold: all liquidations considered distressed regardless of the final percentages, and all liquidation paying at least 70% of total capital. Using these definitions does not change meaningfully the results.

[23] For Banca Commerciale Italiana, Credito Italiano and Banco di Roma, timing is the day the agreement with the government was signed. For Banca Nazionale di Credito, Banco S. Alessandro, Credito Toscano, Banca Cattolica Vicentina, Banca S. Spirito, the date they were mrged with other distressed banks. For Credito Adriatico, the day of the agreement with Banca Nazionale del Lavoro. For Credito Fondiario Sardo, the day IRI is authorised to buy its shares. For Banca Nazionale dell'Agricoltura, Banca di Frattamaggiore and Banca del Sud the day the capital was written-off and replenished.

[24] In fact, at all stages the whole archival research was characterised by a continuous feedback loop.

deposits from the public; (iii) the bank is recorded as a cooperative or ordinary joint-stock bank in Cerrito (1996) but, in fact, it belonged to a different legal category; (iv) the bank was never actively in trade; (v) the bank was never officially registered. Table A 1 presents the final classification of the initial sample of 1371 banks taken from Cerrito (1996): the final dataset has 517 observations, while 854 banks are excluded[25].

The dataset on distressed joint-stock banks includes 517 observations, of which 270 are ordinary joint-stock banks and 247 are cooperative joint-stock banks. The first distress recorded is on 15th January 1927 and the last on 31st December 1936. In fact, the dataset includes 105 banks that stopped being in trade during this period even though archival documents do not present evidence of distress. The dataset also includes 3 banks that could be classified neither as distressed nor non-distressed. Banks classified as distressed are thus 409. Table 1 shows all variables available in the dataset. For each bank, the dataset contains three sets of information. (a) Standard information on the name, legal category, establishment year, municipality and province of the headquarters; (b) balance sheet information on total assets, deposits, correspondent accounts, capital, reserves, and the date the data refer to; (c) distress information on the timing, outcome, distress category, and brief explanatory notes. Table 2 presents a tabulation of 'Outcome' and 'Distress Category'. The string variable 'Distress notes' briefly summarises why the bank was considered distressed. The framework used to classify 'Outcome' and 'Distress Category' is in Figure A 3.

Table 1: variables of distress dataset

Variable	Missing values	Variable	Missing values
Standard information			
Bank name	0/517	Municipality of HQ	0/517
Bank category	0/517	Province of HQ	0/517
Establishment year	19/517		
Balance sheet information			
Assets	14/517	Capital	15/517
Deposits	15/517	Reserves	22/307
Correspondents	21/517	Balance sheet date	14/517
Distress information			
Outcome	0/517	Distress notes	0/517
Distress category	3/517	Timing of distress	0/517

[25] The archival references associated with each bank name are available in the section after the bibliography.

Table 2: Tabulation of 'Outcome' and 'Distress Category' in distress dataset

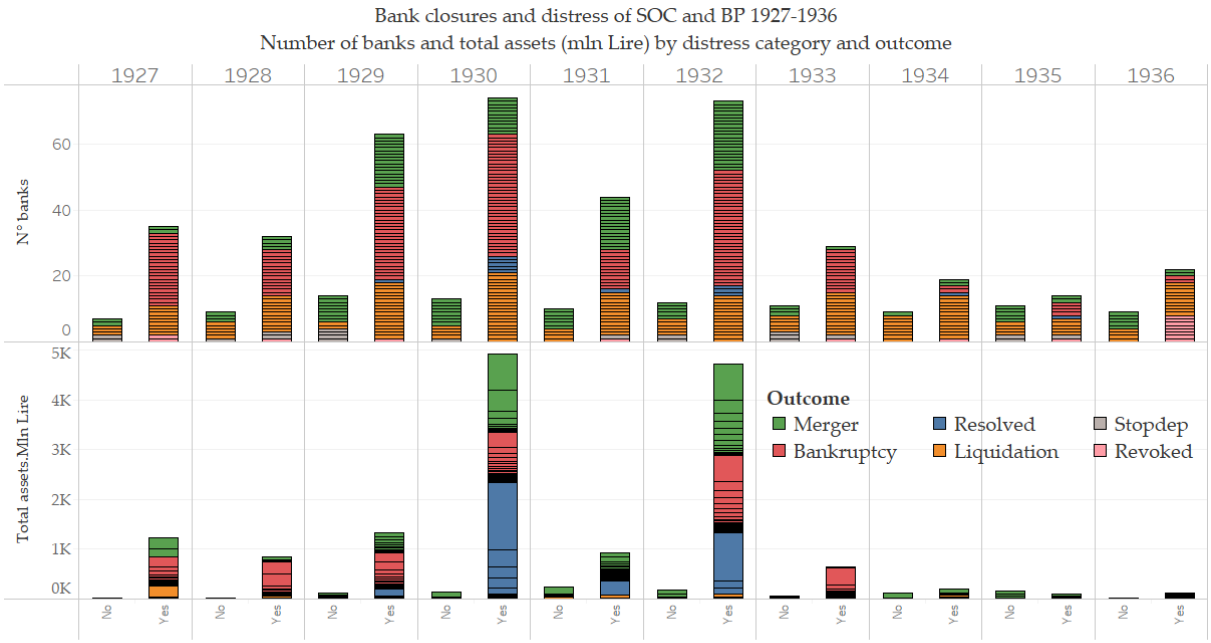
Outcome	Count	Percent	Distress Category		
			No	Yes	n. a.
Liquidation	170	32.9%	44	126	0
Bankruptcy	169	32.7%	0	169	0
Merger	127	24.6%	46	80	1
Ceasing collection of deposits	20	3.9%	15	5	0
Charter revoked	16	3.1%	0	16	0
Resolved [Restructuring plan]	13	2.5%	0	13	0
Foreign branch closed	2	0.4%	0	0	2
Total:	517	100%	105	409	3

3 Descriptive analysis

Discussing the timing of distress is necessarily tentative given the shortcomings discussed in Appendix D. However, as Figure 1 shows, the trend of bank closures and distress matches quite nicely that of bankruptcies, suggesting that the bias should not be huge. The trend presents a bimodal distribution, and the two spikes are more evident when looking at assets rather than the number of banks. Distressed banks in the late 1920s are – on average – smaller than distressed banks in 1930-1932, while distressed banks in 1933-36 are even smaller than those in the late 1920s. The bulk of mergers and resolution interventions took place in 1930 and 1932[26]. Therefore, the absence of bankruptcies after 1933 found in Molteni (2020) should not be imputed to a systemic resolution of distressed banks, but to an effective decrease of bank distress. Looking at the size of non-distressed banks, it emerges that the process of healthy consolidation involved only smaller banks, with no major healthy banks being absorbed. Furthermore, the number of non-distressed closures is quite stable over time, while that of distressed banks is more volatile.

[26] The bulk of the rescue interventions in 1930 happened in December, artificially reducing the number of bankruptcies in the following year. This helps explain the bimodal distribution with a lack of failures in 1931, known as the worst year for banking in interwar Europe. For a further discussion of this bimodal distribution see Molteni (2020).

Figure 1: bank closures and distress of SOC and BP 1927-36



Notes: all SOC and BP in dataset displayed - both distressed and non distressed closures: yes (Distress) no (No distress).

The magnitude of banking distress measured by total assets, deposits plus correspondents, and capital plus reserves is presented in Table 3 and Figure 2. Table 3 compares the total assets of distressed banks with the respective bank category and the total banking system. Figure 2 presents the classification of banks by distress and legal category as well as their total assets. Note that only the 517 banks included in the final list discussed in section 2.3 are displayed. Thus, the category 'Non-distressed closures' excludes non-distressed banks still active in 1936.

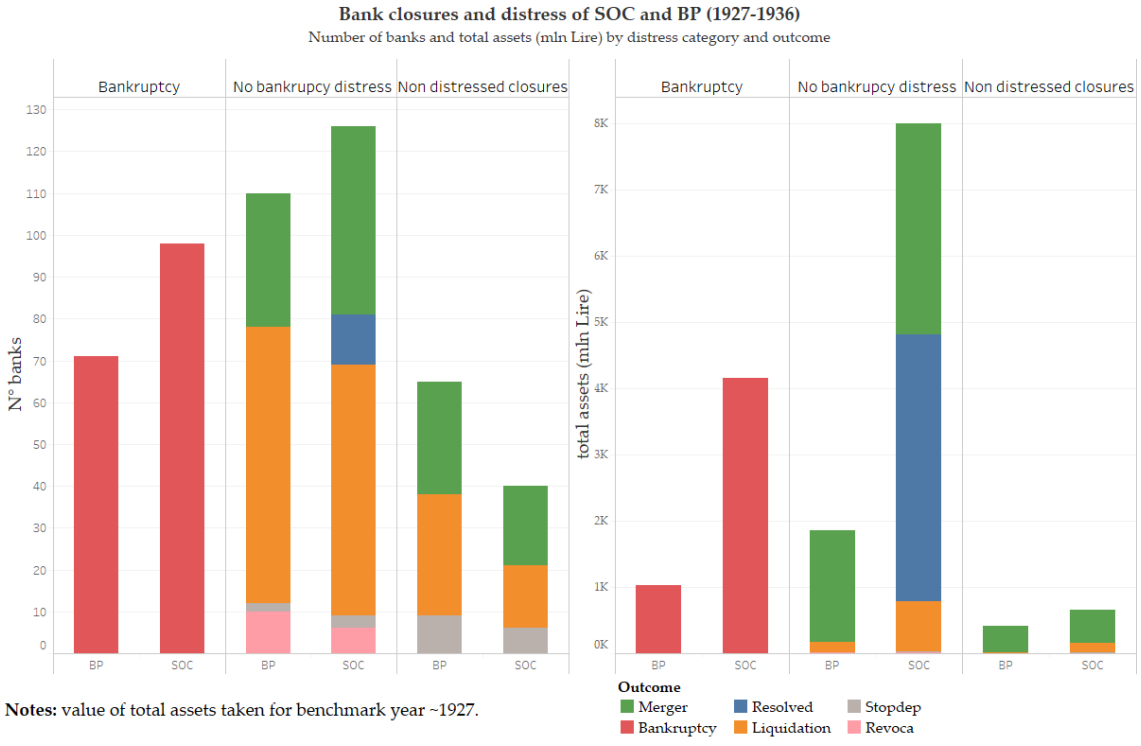
Once distressed but not bankrupt banks are taken into account, the crisis that Italian joint-stock banks experienced is revealed to be much larger than a narrow focus on bankruptcies would suggest. Even excluding the big four from the numerator while leaving them in the denominator, the total assets of distressed banks is 20% of the whole banking system. According to the classic taxonomy of 'systemic banking crises' proposed by Laeven and Valencia (2018), 20% is considered a threshold that would qualify a banking crisis as 'systemic'. In the case of interwar Italy, this threshold is confidently exceeded because the distress of private bankers and partnerships (DB) and other bank categories is not included in the figures. Excluding the big four from the SOC shows that 60% of assets owned by other ordinary joint-stock banks belonged to banks in distress. The figure is lower, but still high, for BP, this being 31.1%. Of course, once the total assets of the big four are considered, the magnitude of the crisis is impressive, almost reaching 50% of the total banking system.

Table 3: Share of balance sheets of distressed SOC and BP in 1927-36 on 1927 totals

Category	Total Assets		Deposits and correspondents		Capital and reserves	
a) Distressed BP	2,877.18		2,450.35		195.25	
b) Distressed SOC	12,146.85		9,170.85		1,228.32	
c) Total	15,024.03		11,621.20		1,423.57	
	Total 1927	%Share	Total 1927	%Share	Total 1927	%Share
d) All BP	9,249.10	31.1%	8,211.40	29.8%	683.20	28.6%
e) All SOC	41,556.20	29.2%	31,271.50	29.3%	4,538.80	27.1%
f) SOC (no big four)	19,655.96	61.8%	15,125.24	60.6%	2,168.80	56.6%
g) All credit institutions	75,143.30	20.0%	57,757.00	20.1%	8,033.50	17.7%
h) BP + SOC (no big four)	28,905.06	52.0%	23,336.64	49.8%	2,852.00	49.9%
Shares as above but including big four						
i) Distressed Big4	21,900.24		16,146.26		2,370.00	
j) Distressed SOC and BP	15,024.03		11,621.20		1,423.57	
k) Total	36,924.27		27,767.46		3,793.57	
	Total 1927	%Share	Total 1927	%Share	Total 1927	%Share
l) All SOC and BP	50,805.30	72.7%	39,482.90	70.3%	5,222.00	72.6%
m) All credit institutions	75,143.30	49.1%	57,757.00	48.1%	8,033.50	47.2%

Note: all figures are in mln Lire
Sources: see text; Cotula et al. (1996); Natoli et al. (2016)

Figure 2: Bank closures and distress of SOC and BP (1927-36)



Notes: value of total assets taken for benchmark year ~1927.

Disentangling the figures of bankrupt banks from the rest of the banking distress shows that, measured by total assets, the magnitude of distressed but not-bankrupt banks is twice as high as that of bankrupt banks only. Therefore, focusing on bankrupt banks captures only 1/3 of actual banking distress. The same proportion is not true looking at the number of banks, and this result

is driven chiefly by distressed mergers and resolved banks (Table 4): merged and resolved distressed banks were, on average, larger than bankrupt ones. By contrast, banks filing for voluntary liquidations were smaller than mergers, this being true for both distressed and non-distressed categories. Bank in the last two categories, 'Charter revoked' and 'Stop collection of deposits', were few and almost negligible in size, and thus not displayed in Table 4.

Most banks ceasing their activity between 1927 and 1936 were, in fact, distressed, the total of non-distressed closures being only 105, roughly a fifth of the banks considered. In terms of assets, the largest part of these healthy closures took the form of mergers. Remarkably, the number of BP is higher than SOC, whereas, for the other two categories, the number of SOC is higher. This finding suggests that BP were more resilient than SOC during the crisis – but delving further into this interesting hypothesis is left to future research.

Table 4: descriptive statistics of distressed SOC and BP by type of distress

Outcome	Bank cat.	Distress	Obs.	Total assets			Deposits and correspondents			Capital and reserves		
				Sum	Mean	Median	Sum	Mean	Median	Sum	Mean	Median
Bankruptcy	BP	Bankrupt	71	1,024.98	14.64	4.50	864.23	13.50	3.83	59.71	0.92	0.36
Bankruptcy	SOC	Bankrupt	98	4,151.56	42.80	14.87	3,366.72	35.07	8.21	334.91	3.56	1.90
Liquidation	BP	Distress	66	159.75	2.46	0.54	107.17	1.65	0.39	13.98	0.22	0.08
Liquidation	BP	No dist.	29	28.19	0.97	0.21	22.66	0.78	0.11	2.38	0.08	0.04
Liquidation	SOC	Distress	60	739.59	12.75	3.69	451.75	7.79	1.75	157.31	2.71	0.82
Liquidation	SOC	No dist.	15	141.82	10.13	4.69	90.74	6.48	2.89	25.82	1.84	1.04
Merger	BP	Distress	32	1,664.01	52.00	12.36	1,442.64	45.08	8.05	119.95	3.75	0.98
Merger	BP	No dist.	27	386.07	15.44	4.63	341.14	13.65	3.63	15.78	0.63	0.24
Merger	SOC	Distress	45	3,174.54	70.55	24.75	2,391.51	53.14	20.68	344.61	7.66	1.81
Merger	SOC	No dist.	19	495.43	27.52	13.76	404.45	22.47	6.76	49.89	2.77	1.86
Resolved	SOC	Distress	12	4,034.28	336.19	177.41	2,930.33	244.19	155.27	384.04	32.00	11.80

Note: all figures in mln Lire
Sources: see text

To put these figures in perspective, Table 5 compares the magnitude of the banking crisis in Italy with that of the USA – the most studied and possibly iconic episode of widespread banking distress in the interwar period. International comparisons are often difficult because there are different accounting standards and different institutional settings to deal with bank distress. The objective of this comparison is not to present a perfect comparison, but rather to construct a benchmark for the Italian banking crisis and compare it to the most studied banking crisis of the XX century: could Italian banking crisis be as severe as that in the USA if hidden distress were not resolved? Thus, the crucial issue is to avoid inflating upwardly the distress of Italian banks. Therefore, in

Table 5, I only include Italian banks for which we have precise annual data of their deposits. This restricts the sample to ordinary joint-stock banks present in ASCI. The exclusion of other SOC not present in ASCI as well as of BP and DB makes sure that I am largely underestimating Italian banking distress. Thus the bias goes against my claim.

Even excluding the notorious big four banks, total deposits of failed (i.e. suspended) US banks were roughly the same as the total deposits of Italian distressed ordinary joint-stock banks. However, only a third of the latter went through bankruptcy[27]. It follows that the hidden banking crisis that Italian small and medium commercial banks experienced was (at least) as severe as that experienced by commercial banks in the USA in the early 1930s.

[27] It is important to notice that whereas bank suspensions in the USA are concentrated in 1930-33, Italian problems started earlier. Without underplaying the macroeconomic shock of the Depression, these figures suggest that Italy had its own idiosyncratic problems already in the late 1920s.

Table 5: A quantitative comparison of US and Italian banking crisis

A quantitative look at banking crises in the U.S.A and Italy (1927-1936).

Year	U.S.A.			Italy						
	Total bank deposits. (National, State, and Mutual Savings Banks)	Failed (suspended) commercial bank deposits. (National banks and State banks).		Total bank deposits. (All categories of banks)	Bankrupt ordinary joint-stock bank deposits in ASCI.		Distressed ordinary joint-stock bank deposits in ASCI. (excluding bailed-out universal banks)		Distressed joint-stock bank deposits in ASCI. (including bailed-out universal banks)	
	[a] Million $	[b] Million $	[a] / [b]	[c] Million Lire	[d] Million Lire	[d] / [c]	[e] Million Lire	[e] / [c]	[f] Million Lire	[f] / [c]
1927	57,622	199.3	0.35%	59,883.5	291.9	0.49%	497.4	0.83%	497.4182	0.83%
1928	61,480	142.4	0.23%	63,273.7	495.7	0.78%	713.4	1.13%	713.443	1.13%
1929	59,832	230.6	0.39%	62,994.4	488.2	0.78%	964.0	1.53%	964.0169	1.53%
1930	58,092	837.1	1.44%	63,067.3	606.7	0.96%	3,262.5	5.17%	5578.486	8.85%
1931	49,509	1,690.2	3.41%	59,295.2	59.7	0.10%	683.2	1.15%	15738.56	26.54%
1932	45,886	706.2	1.54%	56,980.6	1,212.0	2.13%	2,958.2	5.19%	2958.205	5.19%
1933	42,125	3,596.7	8.54%	58,280.7	83.0	0.14%	105.3	0.18%	2000.996	3.43%
1934	49,708	37.3	0.08%	56,126.0	0.8	0.00%	78.8	0.14%	78.79008	0.14%
1935	55,239	13.9	0.03%	52,340.4	7.9	0.02%	76.0	0.15%	75.97569	0.15%
1936	60,619	28.1	0.05%	59,708.7	0.0	0.00%	20.2	0.03%	20.24189	0.03%
Total		7,481.8	**16.04%**		3,245.9	**5.39%**	9,359.1	**15.51%**	28,626.1	**47.82%**

Sources: calculations based on Board of Governors of the FED (1959; 1976) for the USA; Cotula et al. (1996), ASCI - Natoli et al. (2016), and Archivio Storico della Banca d'Italia (various folders) for Italy.

A full discussion of the geographic dimension of banking distress is necessarily tentative because the dataset does not contain information on the branch network of banks. Furthermore, in assessing the relative impact of bank distress in each region, one should bear in mind that Italian regions had a very different level of financial development: the distress of a bank with 50 mln Lire deposits in Piedmont is very different from the same happening in Calabria – see Table A 2. However, with these caveats in mind, it is still useful to show the evidence available.

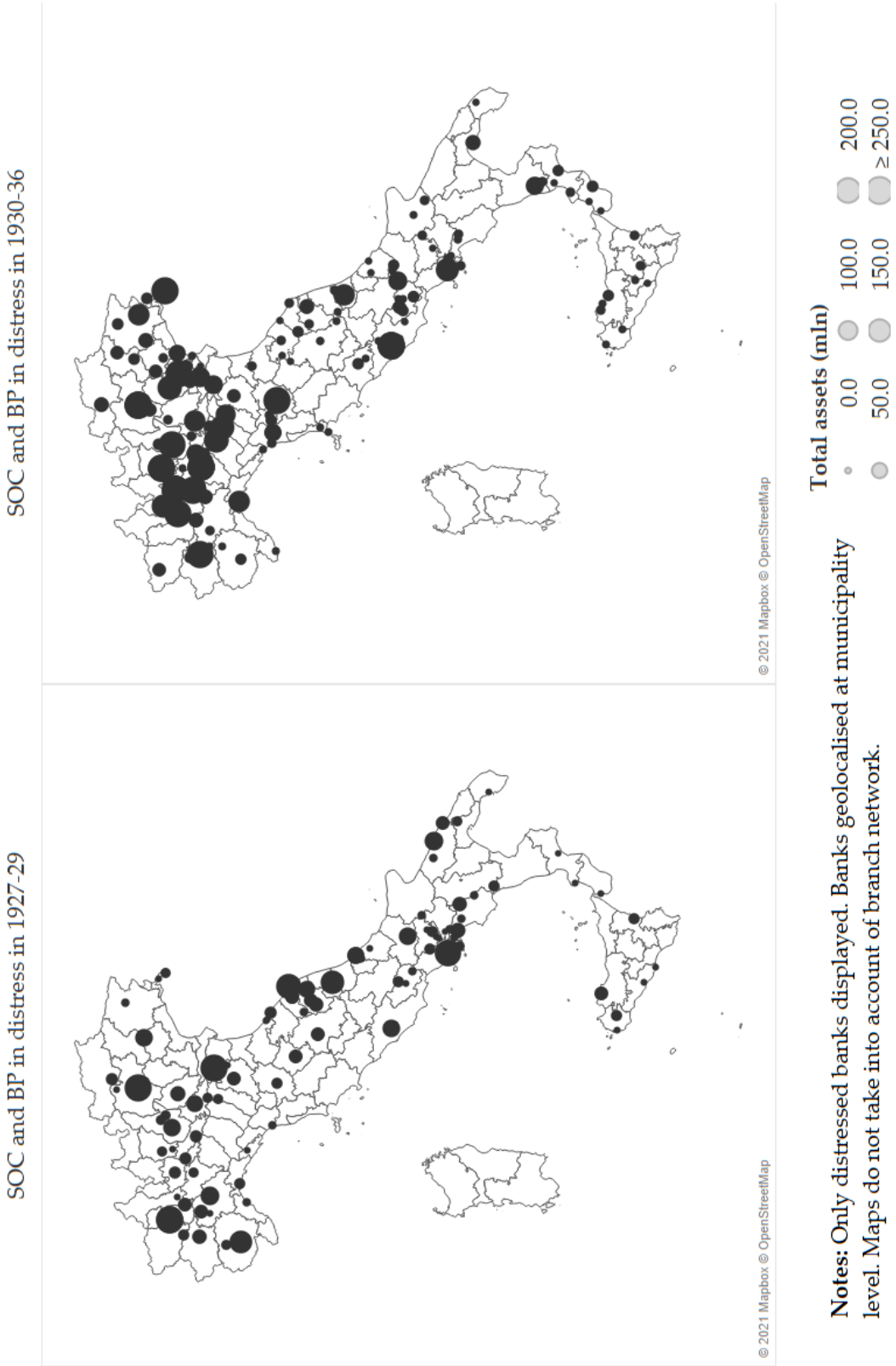
It is important to analyse geographical distress in its temporal dimension, and Figure 3 makes it clear[28]. Given the shortcomings of the timing for distress, I limit the analysis to comparing the late 1920s with the early 1930s. Piedmont, Marche, Campania, Molise, and Apulia experienced distress even before this could be imputed to the Great Depression, whereas the contrary is true for the North-East, Liguria, Lombardy, the Western part of Emilia Romagna, Tuscany, Latium, Abruzzi, and Calabria. Sicily and Umbria were the regions least affected by distress. Basilicata and Sardinia deserve a special discussion: these regions were very poor at the time, and banking was not very much developed, which helps explaining not much distress. Nonetheless, the main regional bank of Sardinia did experience distress and was resolved thanks to the intervention of IRI in 1935, but this is not reflected in the maps because the bank was formally headquartered in Rome[29]. Overall, distress was relatively more frequent in the South in the late 1920s and more widespread in the industrialised areas of Northern Italy in the 1930s.

Another important geographical pattern emerges comparing distressed closures and resolutions with healthy closures (Figure 4). Holding for different outcomes, banking distress was quite well spread around the Italian peninsula, while healthy closures are primarily concentrated in the Po Valley in the North and secondarily in the Central regions. It is quite striking that almost all bank closures in the South can be attributed to distressed situations. Figure 5 and Figure 6, presenting a geographical display of distress by outcomes, make it easier to understand this North-South pattern. Holding for different levels of banking activities due to a more backward and agricultural economy in the South, liquidations and bankruptcies are homogeneously spread along the peninsula. What makes the difference is the trend in mergers and 'resolved' banks. These maps suggest that the distress produced a marked consolidation of the local banking systems in the North, whereas it mostly led to a terminal closure of local and regional banks in the South. This confirms and gives a better qualification of the results found in Molteni (2020), showing that outright failures – i.e. bankrupt banks – were relatively more severe in the South. Remarkably, the

[28] Figure A 4 presents the same kind of map but comparing non distressed closures.
[29] The *Sezione di Credito Ordinario* of the *Credito Fondiario Sardo*. See ASBI, Banca d'Italia, Vigilanza, prat.7706, f.1.

area between Lombardy and Piedmont, the most industrialised at the time, had the highest degree of consolidation of all Italy.

Figure 3: Map of headquarters of distressed SOC and BP



Notes: Only distressed banks displayed. Banks geolocalised at municipality level. Maps do not take into account of branch network.

Figure 4: Map of headquarters of distressed SOC and BP and non-distressed closures

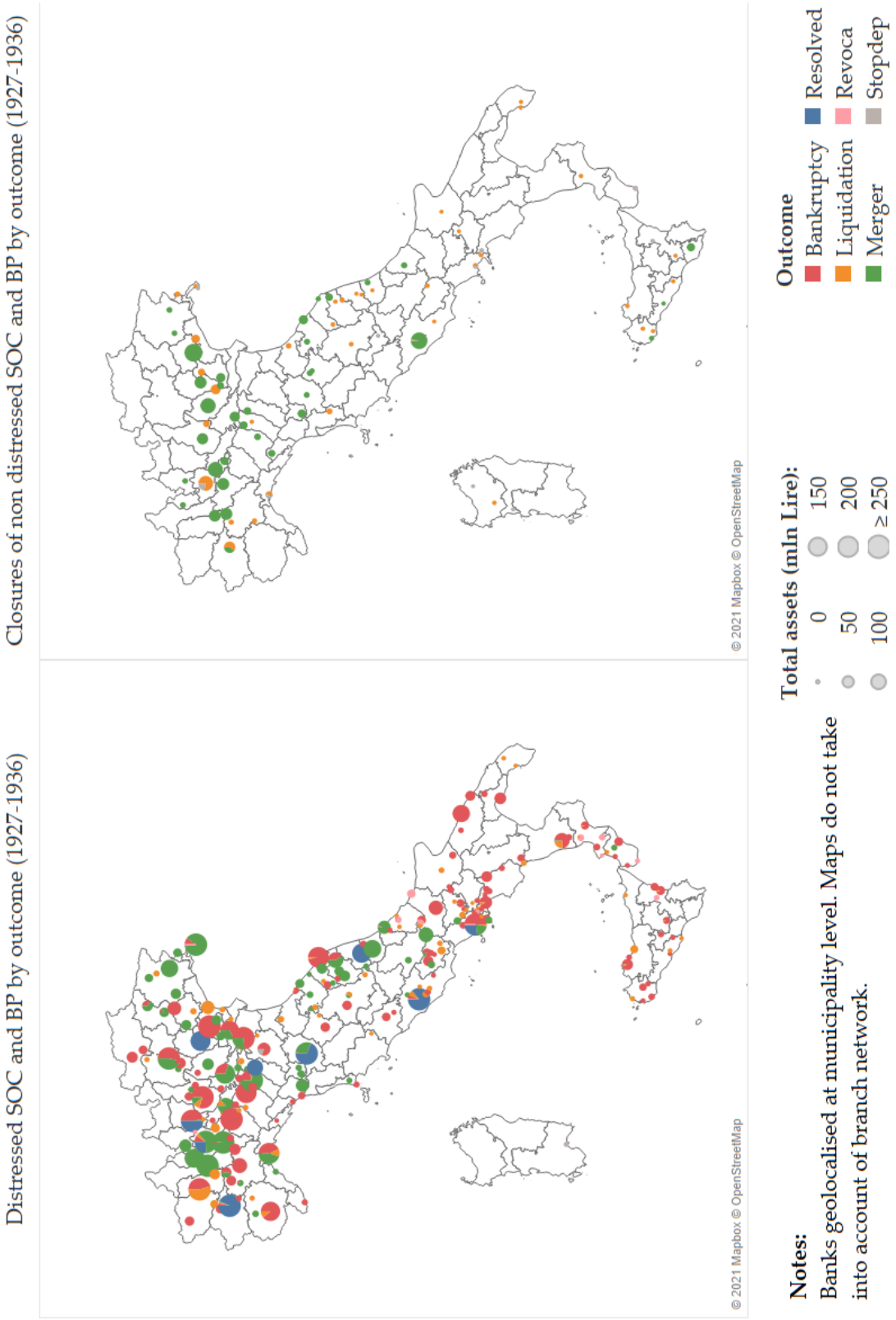
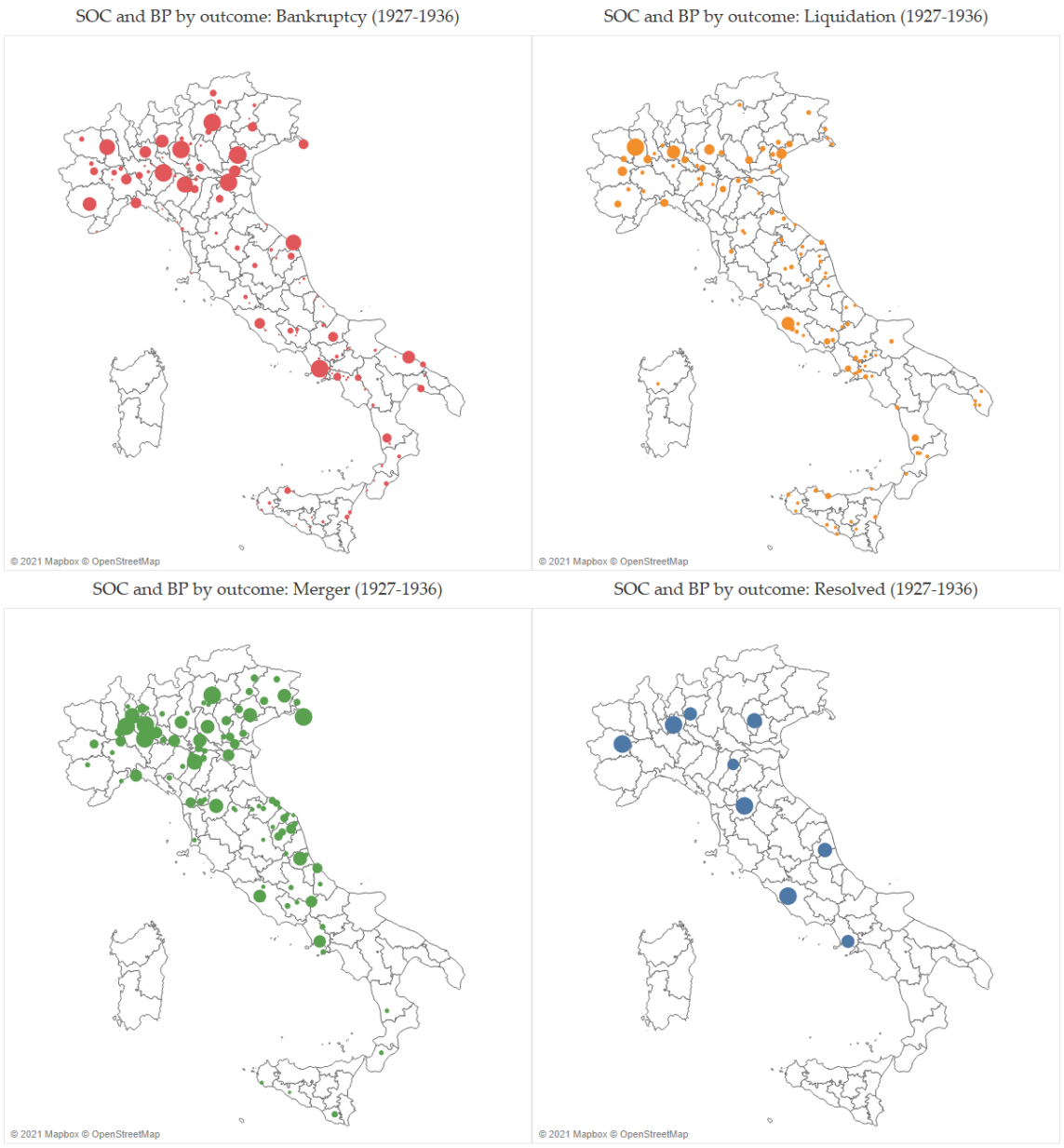
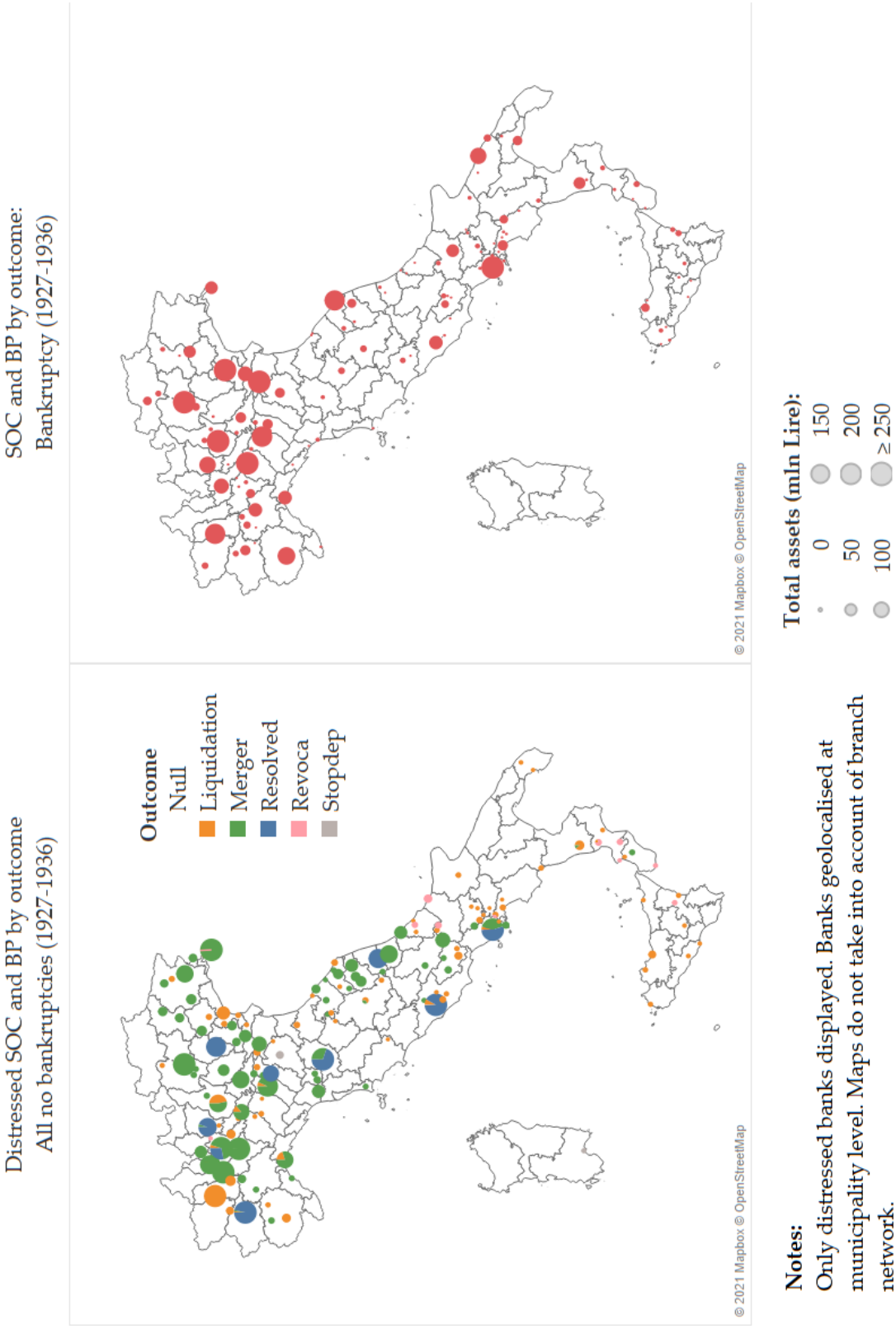


Figure 5: Map of distressed SOC and BP by outcome



Notes:
All distressed banks displayed. Banks geolocalised at municipality level. Maps do not take into account of branch network.

Figure 6: Comparative maps of distress vs bankruptcy (SOC and BP)



4 Discussion and conclusions

This paper documents the reconstruction of a new dataset on 517 individual Italian joint-stock banks in 1926-1936. Building on the work of Cerrito (1996), for each bank, the dataset has standard information (name, location, age, type of bank), balance sheet information for a benchmark year (total assets, deposits, correspondent accounts, capital, and reserves), and information on distress (distress, timing, outcome, and a brief note). The data provide the first all-embracing account of the distress of small and medium banks before and during the Great Depression. This fills an important historical gap since previous research has chiefly focused on the crisis of large universal banks. One important innovation of this work is that it relies on classified documents from coeval banking supervisors to distinguish outright failures (i.e. bankruptcies) from resolved distress. It also identifies which bank closures should not be considered due to distress but reflected a process of healthy consolidation.

In terms of magnitude (i.e. size of the balance sheet of banks) bankruptcies were not negligible, but at the same time, the crisis was not as severe as in the USA, possibly the most iconic and widespread banking crisis of the interwar period. However, once a broader and more accurate definition of banking distress is considered, the magnitude of the balance sheets of Italian commercial banks would qualify it as a systemic banking crisis even by today standards (Laeven and Valencia, 2018). In terms of deposits, it would be comparable to the crisis of commercial banks in the USA. Outright distressed closures, i.e. bankruptcy, only explains 1/3 of total distress, showing that there was an active banking resolution policy taking place in these years. Future research should address what were the drivers of the resolution process: was the resolution politically motivated? What was, if any, the resulting political economy among various regions?

Previous research showed that the South was relatively more affected by bank bankruptcies than the North[30] and that in certain regions like Apulia and Campania almost half of the existing bank offices (both headquarters and branches) went through a bankruptcy procedure (Molteni, 2020). By contrast, the new dataset reveals that actual distress was widespread in the Centre and the North as much as in the South. That was not the outcome of more severe banking distress in the South, but rather of more banking resolution actions taking place in the Centre and the North. In the South, the reduction in the banking population of SOC and BP was mainly due to terminal closures such as bankruptcies and distressed liquidations, whereas in the North, we observe an important movement of banking consolidation, not exclusively driven by distress.

[30] Even though in absolute terms (measured by total assets) the banks failing in the North were indeed larger.

Future research should study whether this had repercussions on local economies, or whether this was rather the output of idiosyncratic characteristics of different regions. We know that the North – South gap widened during the interwar period, as the South grew less than the North (Felice, 2019) : were bank distressed closures just a consequence of this? Or did they play an active part in shaping this outcome?

References

Barbiellini-Amidei, F., & Giordano, C. (2015). 'The redesign of the bank-industry- financial market ties in the US Glass-Steagall and the 1936 Italian banking acts'. Clement P., James H., & van der Wee H. (eds) *Financial Innovation, Regulation and Crises in History*, pp. 65–83. Pickering & Chatto: London. DOI: 10.4324/9781315653969-6

Battilossi, S. (2009). 'Did governance fail universal banks? Moral hazard, risk taking, and banking crises in interwar Italy', *Economic History Review*, 62/SUPPL. 1: 101–34. DOI: 10.1111/j.1468-0289.2008.00442.x

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†', *Economic History Review*, 74/1: 223–50. DOI: 10.1111/ehr.12972

Board of Governors of the Federal Reserve System. (1959). *All-bank Statistics, United States, 1896-1955*. Washington, D.C.: Board of Governors of the Federal Reserve System.

Board of Governors of the Federal Reserve System. (1976). *Banking and monetary statistics 1914-1941.*, 2nd ed. Washington, D.C.: Board of Governors of the Federal Reserve System.

Calomiris, C. W., & Mason, J. R. (2003). 'Fundamentals, panics, and bank distress during the depression', *American Economic Review*, 93/5: 1615–47. DOI: 10.1257/000282803322655473

Cerrito, E. (1996). 'La ricostruzione della popolazione bancaria'. Cotula F., Raganelli T., Sannucci V., Alieri S., & Cerrito E. (eds) *I bilanci delle aziende di credito 1890-1936*. Laterza: Roma-Bari.

Colvin, C. L., de Jong, A., & Fliers, P. T. (2015). 'Predicting the past: Understanding the causes of bank distress in the Netherlands in the 1920s', *Explorations in Economic History*, 55/1: 97–121. DOI: 10.1016/j.eeh.2014.09.001

Cotula, F., Raganelli, T., Sannucci, V., Alieri, S., & Cerrito, E. (1996). *I bilanci delle aziende di credito 1890- 1936*. Roma: Laterza.

Di Martino, P. (2004). 'Bankruptcy law and banking crises in Italy (1890-1938)', *Rivista di storia economica*, 20/1: 65–85.

Feinstein, C. H., Temin, P., & Toniolo, G. (2010). *The world economy between the world wars*. Oxford: Oxford University Press. DOI: 10.1093/acprof:oso/9780195307559.001.0001

Felice, E. (2019). 'The roots of a dual equilibrium: GDP, productivity, and structural change in the Italian regions in the long run (1871–2011)', *European Review of Economic History*, 23/4: 499–528. DOI: 10.1093/ereh/hey018

Friedman, M., & Schwartz, A. J. (1963). *A Monetary history of the US 1867-1960*. Princeton: Princeton University Press.

Grodecka-Messi, A., Kenny, S., & Ögren, A. (2021). 'Predictors of bank distress: The 1907 crisis in Sweden', *Explorations in Economic History*, 80: 101380. DOI: https://doi.org/10.1016/j.eeh.2020.101380

Hotori, E., & Wendschlag, M. (2019). 'The Formalization of Banking Supervision in Japan and Sweden', *Social Science Japan Journal*, 22/2: 211–28. DOI: 10.1093/ssjj/jyz011

James, H., & O'Rourke, K. H. (2013). 'Italy and the First Age of Globalization, 1861-1940'. Toniolo G. (ed.) *The Oxford handbook of the Italian Economy since unification*, pp. 37–69. Oxford University Press (OUP): Oxford.

Laeven, L., & Valencia, F. (2018). 'Systemic Banking Crises Revisited', *IMF Working Papers*, 18/206.

Molteni, M. (2020). 'Measuring Bank Failures in Interwar Italy: Sources and Methods for a Comparative Account', *Rivista di storia economica*, 37/3: 345–98.

Molteni, M. (2021). *Bank Failures: What Failure? Distress, Development, and Supervision in Italian Banking, 1926-1936,* DPhil thesis, History Faculty, University of Oxford.

Molteni, M., & Pellegrino, D. (2021). 'Lessons from the early Establishment of Banking Supervision in Italy (1926-1936)', *Quaderni di Storia Economica - Banca d'Italia*, forthcoming.

Natoli, S., Piselli, P., Triglia, I., & Vercelli, F. (2016). 'L'archivio storico del credito in Italia', *Quaderni di Storia Economica - Banca d'Italia*, 36. Roma.

Richardson, G. (2007a). 'Categories and causes of bank distress during the great depression, 1929-1933: The illiquidity versus insolvency debate revisited', *Explorations in Economic History*, 44/4: 588–607. article, Elsevier Inc. DOI: 10.1016/j.eeh.2007.01.001

Richardson, G. (2007b). 'Quarterly data on the categories and causes of bank distress during the Great Depression, 1929-1933', *Research in Economic History*, 25: 69–147. Cambridge. DOI: 10.1016/S0363-3268(07)25002-5

Toniolo, G. (1995). 'Italian Banking, 1919–1936'. Feinstein C. (ed.) *Banking, Currency, and Finance in Europe Between the Wars*, pp. 296–314. Oxford University Press: Oxford. DOI: 10.1093/0198288034.003.0011

Vasta, M. (2006). 'Appendix: the source and the Imita.db dataset'. Vasta M. & Giannetti R. (eds) *Evolution of Italian Enterprises in the 20th Century*. Springer Verlag: Heidelberg-New York.

Appendix A: Tables

Table A 1: Classification of 1371 banks in the initial sample from Cerrito (1996)

	Outcome	Count	Percent	Rationale for exclusion	Count	Percent	
Dataset: 517	Liquidation	170	12.4	Before Dec 1926	42	3.06	Excluded: 854
	Bankruptcy	169	12.33	Never collected deposits	24	1.75	
	Merger	127	9.26	Not a BP/SOC	14	1.02	
	Ceasing collection of deposits	20	1.46	Inactive	3	0.22	
	Charter revoked	16	1.17	Not registered in Albo	2	0.15	
	Distress resolution	13	0.95	Alive and healthy in Dec 1936	505	36.83	
	Foreign branch closed	2	0.15	No archival info (closed before Jan 27?)	264	19.26	
	Sub total	517	37.71	Sub total	854	62.29	
	Total	**1,371**	**100**				

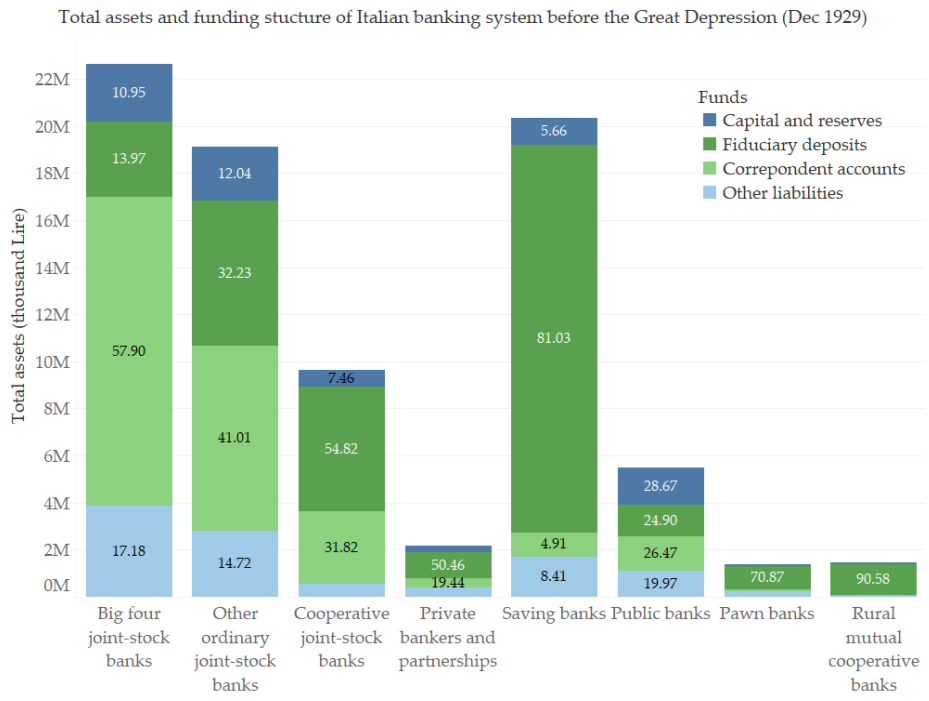
Table A 2: Bank and postal deposits of Italian regions in 1929

Region	Total deposits 1929 (mln)	Postal deposits 1929 (mln)	Bank deposits 1929 (mln)	Population 1931 (mln)	Total deposits per capita	Bank deposits per capita
Lombardy	10,538.00	805	9,733.00	5.54	1,900.99	1,755.77
Piedmont and Aosta	7,355.70	1,868.00	5,487.70	3.45	2,131.69	1,590.34
Veneto, Friuli and Giulia	4,601.50	447	4,154.50	4.12	1,115.98	1,007.57
Emilia Romagna	4,051.30	273	3,778.30	3.22	1,258.77	1,173.95
Tuscany	3,700.10	398	3,302.10	2.89	1,279.26	1,141.66
Latium	2,855.70	705	2,150.70	2.41	1,185.95	893.17
Sicily	2,777.60	836	1,941.60	3.9	712.78	498.25
Campania	2,504.80	1,008.00	1,496.80	3.51	713.67	426.47
Liguria	2,382.30	747	1,635.30	1.44	1,657.88	1,138.03
Calabria	1,115.20	443	672.2	1.67	668.2	402.77
Apulia	1,047.40	333	714.4	2.49	421.22	287.3
Abruzzi and Molise	1,008.80	456	552.8	1.5	673.18	368.89
Trentino Alto Adige	996.4	26	970.4	0.66	1,509.38	1,470.00
Marche	949.7	99	850.7	1.22	779.88	698.59
Umbria	437.6	77	360.6	0.69	630.48	519.54
Sardinia	350.7	175	175.7	0.97	360.39	180.55
Basilicata	340.8	215	125.8	0.51	671.2	247.76

Sources: Molteni (2020)

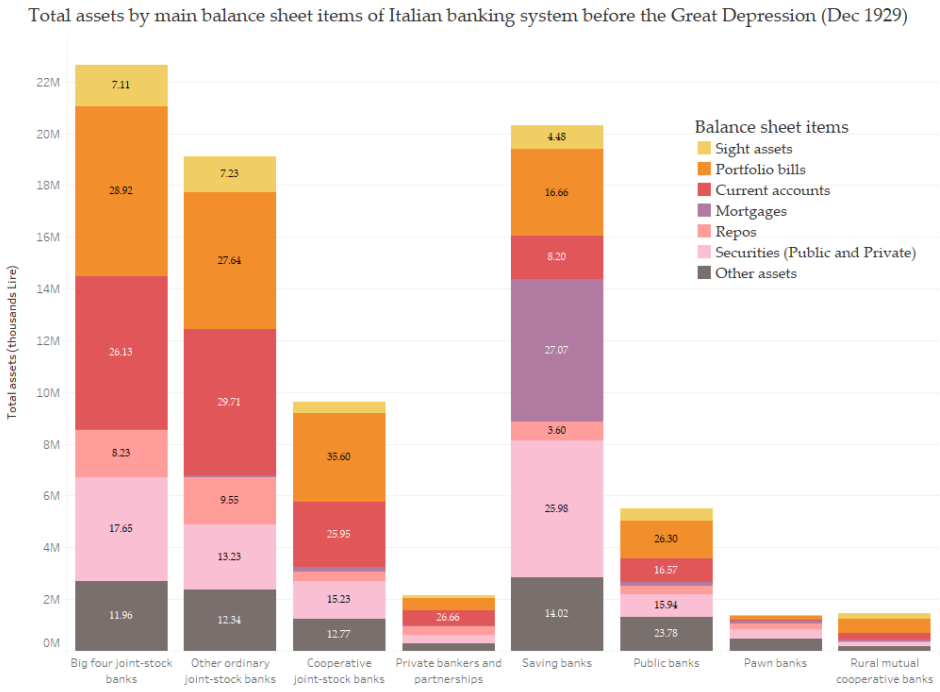
Appendix B: Figures

Figure A 1: Italian banking system by main categories: total liabilities



Sources: Cotula et al. (1996) and Natoli et al. (2016)

Figure A 2: Italian banking system by main categories: total assets



Sources: Cotula et al. (1996) and Natoli et al. (2016)

Figure A 3: Framework used in the archival work to classify distressed SOC and BP

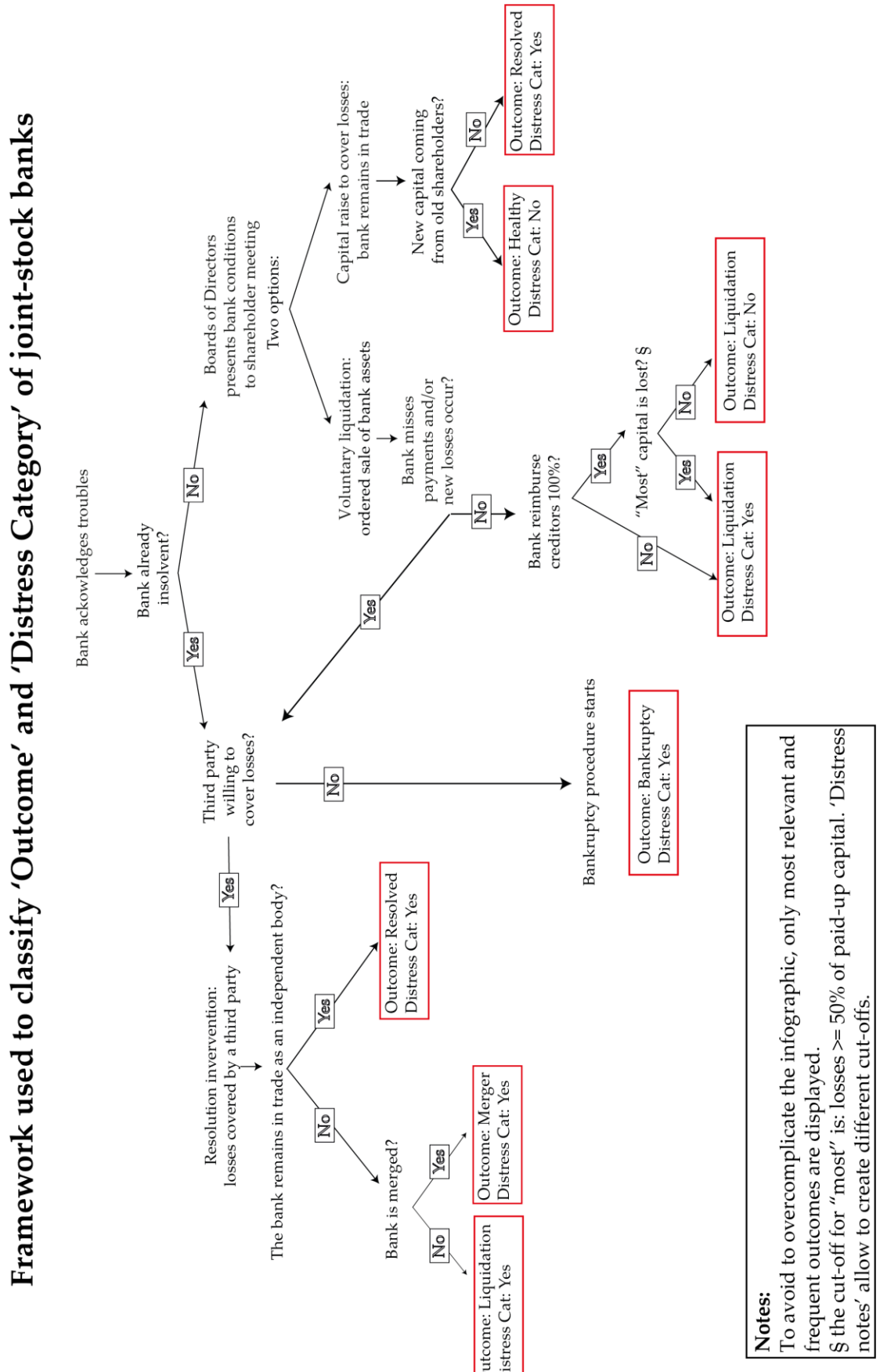
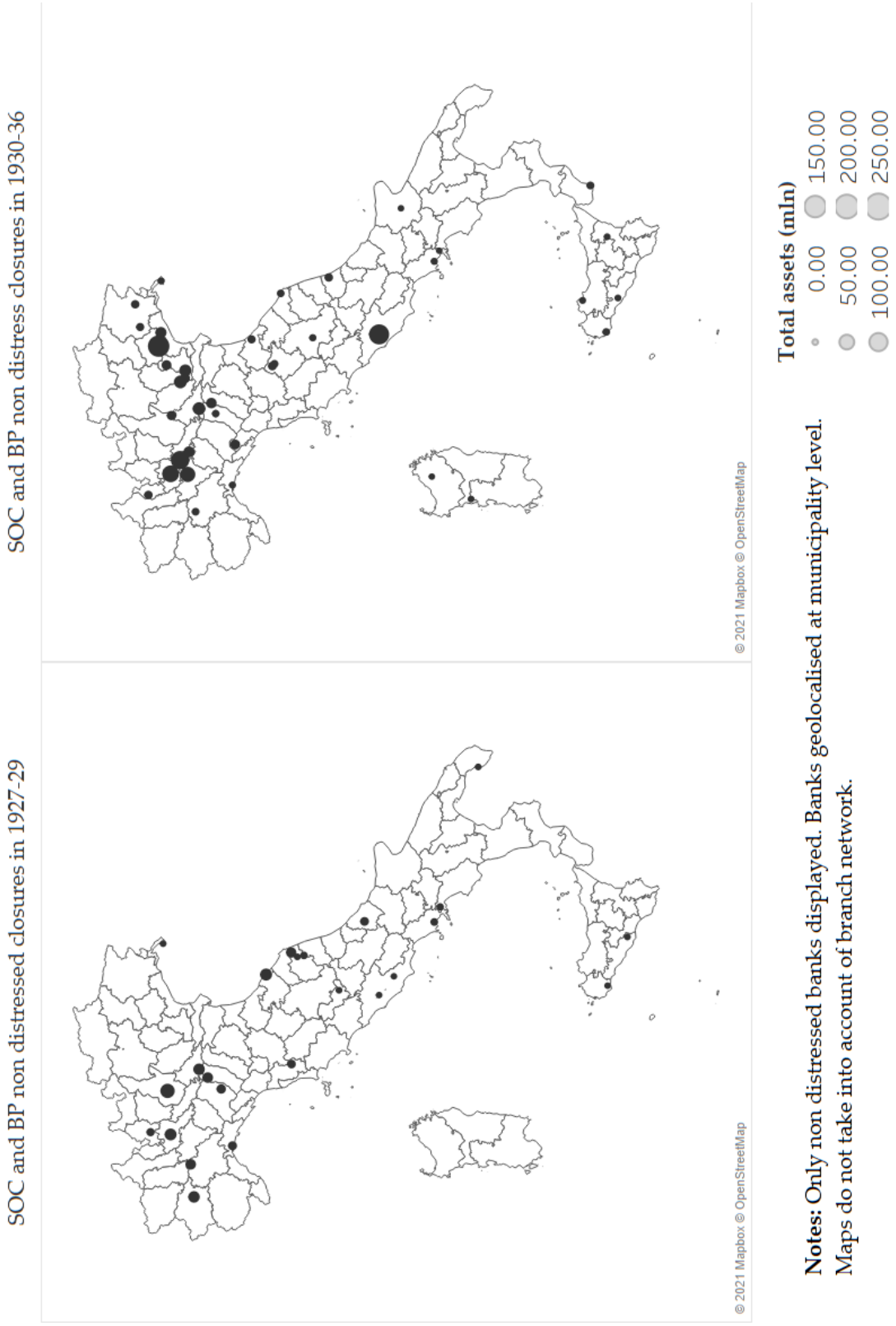


Figure A 4: Map of headquarters of non-distressed but closed SOC and BP



Notes: Only non distressed banks displayed. Banks geolocalised at municipality level. Maps do not take into account of branch network.

Appendix C: Data

This appendix presents a summary of the sources employed for assembling the dataset. A full description of these sources is available in Molteni (2020).

Archival sources

There were two distinct banking supervision offices, one at the Bank of Italy and one at the Ministry of Finance, which produced two parallel but distinct sets of documents that are held at two archives. Both offices (and thus archives) had a similar organisation, with all banks having one or more individual files. The existence of two distinct offices guarantees that it is very unlikely that we have lost track of any single bank: if the documentation of one bank went lost in any of the two archives we have records of it in the other. This also guarantees that all information can be double-checked in each of the two sets of documentation.

ASBI_supervision[31]: ASBI stands for *Archivio Storico della Banca d'Italia* (Historical Archives of the Bank of Italy). In 1926, the Bank of Italy was entrusted with the enforcement of the new banking law and put in charge of banking supervision. ASBI_supervision refers to the documents of the division in charge of conducting inspections and dealing with off-site supervision. It contains individual folders for each bank under its supervision. The kind of information available in these archives is of more technical nature, such as inspection reports and accounting reports.

ACS_supervision[32]: ACS stands for *Archivio Centrale dello Stato* (Italian National Archives). The Bank of Italy was in charge of day-to-day supervision, but it performed its duties on behalf of the Ministry of Finance, which took all final decisions on authorisations, sanctions, and interventions. Thus, the Ministry of Finance had a parallel office that received and dealt with all the communications from/to the Bank of Italy. The kind of information available in this archive is of more 'decisional' nature, such as correspondence with other ministries and memoranda on decisions.

In addition to banking supervision archives, additional archival series were consulted at ASBI.

Direttorio – Introna[33]: The personal correspondence of the head of banking supervision and vice-Director General of the Bank of Italy, Niccolò Introna. It had a series of folders concerning the crisis management of distressed banks.

[31] The full archival reference is: Archivio Storico della Banca d'Italia, Banca d'Italia, Vigilanza sulle Aziende di Credito, various folders. Short reference: ASBI, Vigilanza, prat. ? f. ?

[32] The archival reference is *Archivio Centrale dello Stato, Ministero del Tesoro, Direzione generale tesoro, Ispettorato generale per i servizi monetari, di vigilanza e controllo, Ufficio tutela del credito e del risparmio*, various subseries, various folders. Short reference: ACS, Ufficio tutela del credito e del risparmio, 'series', bb. ? f. ?

[33] ASBI, Banca d'Italia, Fondo Direttorio – Introna, prat. 28-85 various *fascicoli*.

Copialettere riservatissimi del Governatore[34]: seven 'ultra-secret' letter books with all the classified correspondence from the Governor and vice-Director Generals of the Bank of Italy. Banking distress was widely discussed.

Sottofondo Sconti[35]: there are 271 folders concerning special discounts (*Sconti*) provided to banks in distress in 1920/30s.

Ispettorato del Credito[36]: *Ispettorato del Credito* (Inspectorate of Credit) was established with the 1936 banking law. It took over the office previously held at the Ministry of Finance. It is a very useful source of information on banks that were still being winded down after 1936.

Verbali del Consiglio Superiore della Banca d'Italia[37]: the minutes of the Bank of Italy's Board. When banks experienced distress these were usually mentioned in the summaries of the meetings.

Other sources:

Annuario CGBF[38]: this banking almanac was published by the Italian Banking Association of the time. It provides information on bank details, board composition, balance sheet data, and branch network.

ASCI: Archivio Storico del Credito in Italia (Natoli et al., 2016) is a database on individual bank balance sheets from 1890 until 1973. Balance sheet data for cooperative joint-stock banks are not available for 1927-1935.

Bollettino del Credito (1937): in January 1937 the very first public list of all banks officially registered was published. It refers to December 1936.

Cerrito (1996): it is a dataset containing basic information on individual banks for 1890 – 1936. It is the microdata underlying the banking population published in Cotula et al. (1996). Unfortunately, it lacks information on cooperative joint-stock in the period 1927-1935. The years of entry and exit of banks in the 1920s are not 100% accurate due to issues with the underlying sources employed. In fact, the reconstruction of the population of SOC and BP for 1923-1935 has many shortcomings due to problems in the source available. Therefore, in these years, a bank exiting from the Anagrafe in year X does not necessarily guarantee that the bank stops its operation

[34] ASBI, Direttorio – Stringher, prat.17, doc.2-4; Direttorio – Introna, prat.8, doc.1-2; Direttorio – Azzolini, prat.43, doc.1-2
[35] ASBI, Banca d'Italia, Fondo Sconti, prat. 16-290 various *fascicoli.*
[36] ASBI, Ispettorato del Credito, Fondo Ispettorato del Credito, prat.864-1188 various *fascisoli* and prat.639-681, various *fascicoli.*
[37] ASBI, Banca d'Italia, Verbali del consiglio superiore, 1926-36
[38] Confederazione Generale Bancaria Fascista, Annuario delle Banche e dei Banchieri d'Italia, Milano, various years.

in year X. This is the rationale behind taking all banks from 1923 and not from 1926. 1923 is the last year for which a comprehensive list of all cooperative joint-stock banks is available.

IMITA: IMITA.db is a database on Italian joint-stock companies reconstructed by the University of Siena (Vasta, 2006). It includes information on boards composition and main balance sheet items for some large banks.

Appendix D: Caveats for 'timing of distress'

An important caveat should be kept in mind regarding the nature of the variable 'timing of distress'. Two elements contribute to shaping this variable: (1) is the bank distressed? (2) if yes, when does the distress start? And a trade-off exists between the accuracy of (1) and (2). If one wants a certain official acknowledgement of (1), this always takes place with a lag after (2). Banking distress is not just a switched on / switched off status and is very difficult to determine if and when a bank starts being distressed using indirect sources.

The goal of this reconstruction is not necessarily conclusive, but it is rather to put the basis for future works. Therefore, I prefer a consistent, more certain, and rule-based definition of distress to a potentially more precise (but discretionary) definition of the timing. A subsequent revision of the timing variable to refine it would certainly be more than welcome in the future. Indeed, the current version of the dataset is not without shortcomings, but all in all, I consider it the best way to lay the cornerstone of the database.

For banks filing for bankruptcy, the choice of the timing variable is quite straightforward, the day the Tribunal adjudicates bankruptcy is a fairly reliable and consistent proxy. Regarding the distress of banks not filing for bankruptcy, the issue of a lag between the actual distress and the publicity of resolution initiatives, hereby used as a proxy of distress, is a serious one. In certain cases, we know that from the first contact with Italian public authorities and the publicity of the resolution there could be a large time span. In theory, one could try to use a different proxy, i.e. the date of the first contact between the bank and the third-party intervening, but this would be more aleatory and not certain. It is impossible to know what was discussed in the meetings, and impossible to know with certainty that the date of the first contact according to the survived archival material is the actual 'true' date of the first contact. Furthermore, if this latter method were adopted instead, it would imply that for consistency it should be adopted for all distresses, including bankrupt banks that asked for help and did not receive it. We cannot be guaranteed that the 'true' date of the first contact is recorded homogeneously for all banks in available archival documents; thus, this would create a bias of which we would not know the direction nor the magnitude. By contrast, if the official publicity is taken, it is possible to determine the direction of the bias (the proxy is always later than the 'true' distress) and to speculate on the magnitude because the starting point is fixed and certain. If publicity and officiality are abandoned, it would be very difficult to categorise those cases in which a bank asked for help, but then no resolution action was eventually taken officially. Should a bank that asked for help, did not receive it, and then solved its problems alone be considered distressed? The trade-off here is between a better quality of the timing variables and

the certainty of the distress variable. For this research, a less precise but consistent and certain variable is preferred to a potentially more precise but aleatory and heterogeneous one.

Oxford Economic and Social History Working Papers
are edited by
Mattia Bertazzini (Nuffield College, Oxford, OX1 1NF)
Marco Molteni (Pembroke College, Oxford, OX1 1DW)