

Could Southern Italians Cooperate?

Banche Popolari in the Mezzogiorno

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I. Brief History of a Successful Institutional Transplant

In 1863, Luigi Luzzatti published *La Diffusione del Credito e le Banche Popolari*, beginning a lifelong effort to promote credit cooperatives on the German Schulze-Delitzsch model in Italy. Schulze-Delitzsche had argued for a new approach to the economic and moral improvement of the lower classes through the provision of credit. An explicitly philanthropic approach, providing a direct subsidy to the borrower with little expectation of repayment and imposing few sanctions in the event, inevitably undermined the viability of the institution, he argued. Just as importantly, it failed to morally educate the borrower as to the virtues of temperance, frugality and saving, of the undertaking and fulfilment of obligations. Credit unions should instead be like banks, with access limited to members whose share purchases provided the bank's capital. He stressed the importance of unlimited liability as a way of promoting solidarity and monitoring among the membership and as a way of signalling credibility to other lenders. By the time Luzzatti's book was published, almost 500 cooperatives had been founded on the Schulze-Delitzsche model in Germany.¹

Luzzatti introduced at least one substantial change to the German model: limited liability. The relatively backward social and economic conditions prevailing in Italy, he argued, meant that the capital and expertise of the bourgeoisie were indispensable to the rapid development of cooperative banks which could help artisans, small entrepreneurs, and other borrowers and savers from the lower classes. These wealthier individuals might be scared off by unlimited liability for an institution over which democratic norms would limit their control. Pisci has shown how, in the absence of a substantial artisan class or alternative local commercial banks, both the potential shareholders and potential customers of the *banche popolari* were found among a variety of groups including property owners, substantial entrepreneurs, local nobility, and even private bankers. The motives of these groups in founding cooperative banks were varied, but ideological, philanthropic motivations were not absent.

Lacking much competition from other deposit taking institutions, and accepting deposits from non-members, early *banche popolari* in some cases found themselves inundated with funds, all of which could not be employed in loans to members and short term discounts of commercial paper. At the same time, they were approached with demands for credit of every sort, including longer term

loans to industry and agriculture. Meanwhile, the lack of any clear legislation on cooperatives, which were ordinary joint stock companies in the eyes of the law, left them relatively free to evolve along whatever path they chose. What emerged was a sort of hybrid bank, which retained elements of the German cooperative model, such as limits on maximum shareholdings and a one man- one vote rule in the general assembly of shareholders, but also embraced operations more typical of a commercial bank, for example offering credit to non-members, making advances against the security of government bonds, or providing medium-term credit explicitly or through renewing loans.

This proved to be a winning formula, and the *banche popolari* grew in numbers and resources throughout the 1870s. Again circumstance aided them. Early on they received a temporary boost (1866-74) from the suspension of the gold standard together with legislation prohibiting the banks of issue from printing small denomination currency. Ordinary and cooperative banks met the transactions demand for small denominations by issuing currency substitutes (e.g. small denomination, transferable checks, bonds, or certificates of deposit which usually paid interest and were sometimes made out to the bearer), a practice tolerated by the government until 1874, which provided a new source of income. As confidence in the new institutions grew, however, deposits flowed in to such an extent that recourse to issuing quasi money was no longer necessary. The relatively prudent operational standards embodied in the movement's ideology and the charters of the individual banks was reinforced by "great decision-making viscosity in the general assemblies of the *banche popolari*, constrained by the norm of one vote per member," in Poldi's words. This conservatism kept the cooperative banks from participating too enthusiastically in the speculative boom of the early 1870s, and enabled them to weather the subsequent financial crisis of 1873 with little difficulty, only 3 *banche popolari* closing.² This only enhanced their reputation for stability, attracting more deposits and more capital, as cooperative bank shares were both an attractive investment and the ticket to preferential access to credit facilities.

The transplant had taken. By 1870 there were 50 *banche popolari*, with combined assets equal to 2.3% of the entire banking sector. A decade later these figures had almost tripled to 140 banks with 6.8% of all bank assets. Growth accelerated subsequently, numbers of banks reaching 608

¹ This section relies heavily on Poldi, *Alle Origini...*, Chapter 3.

by 1887, with an asset share of 9.3%. Thus ended the heroic phase, as Luzzatti termed it, and began the critical.³ The following years of stagnation and eventually crisis for the entire economy led to a loss of momentum, with declining deposits and little growth of equity. But even the financial cataclysm of 1893-94, which caused the traumatic collapse of numerous important joint stock banks, threatened to immobilize the banks of issue, and brought about the creation of the bank of Italy, failed to undermine the stability of the *banche popolari*. They had not, on the whole, been involved in the wave of speculative investment in urban real estate in conjunction with urban renewal that swept the country in the 1880s. As in the crisis of 1873, their relatively conservative asset portfolios and the confidence of their depositors saw the cooperative banks through the crisis with very few closures or loss of equity relative to the joint stock banks. There was a net loss of 10 banks and roughly 3% of equity from year end 93 to year end 94.⁴ Writing in the immediate aftermath of the crisis, Luzzatti was unfazed, arguing that the few failed banks had paid the price for their own errors in departing from orthodox operating rules, terming the crisis “an appropriate moment for them to disappear from the scene” and praising the “educational value of misfortune.”⁵

Steady growth resumed after the crisis. In 1900, Luzzatti presented a statistical comparison with the German documenting the achievement of rough parity in terms of bank size, assets, profits, and shareholdings.⁶ Though lamenting the failure to establish a central cooperative bank on the German model, he went on to show with some satisfaction that interest rates charged were actually lower than in Germany. Several of the *banche popolari* were among the nation’s largest banks and the group as a whole have been seen as particularly open to the needs of the local economy and amenable to supporting new business initiatives.⁷ By 1911, the share of the *banche popolari* in total bank assets peaked at 11.6%. This is an unusually high share by international standards; indeed, the German cooperatives which inspired the *banche popolari* had only about 3% of total banking

² A competing popular credit organization, the Banca del Popolo, based in Florence but with quasi-independent branches all over the country collapsed when it became clear it would never be granted the privilege of issue. Polsi, *Alle Origini*, p. 235.

³ *Banche Popolari*, 1895, p. 10.

⁴ The data for 1893 refer to only 655 of 730 banks. However, it was about the same as the 1892 figure, which was based on all of 718 banks, so it should be close to correct.

⁵ *Banche Popolari*, 1895, loc. cit.

⁶ *Banche Popolari*, 1898, p. xxii.

⁷ Zamagni, *Economic History*, p. 141, citing Confalonieri.

liabilities.⁸ Fortuitous timing, favorable circumstances, and adaptation to local conditions had made this transplant a resounding success.

⁸ Deutsches Geld- und Bankwesen in Zahlen 1875-1975'. Ed. by Deutsche Bundesbank, Frankfurt: Knapp 1976. p. Thanks to Mark Spoerer for this.

II. Another Institutional Transplant?

But there is a story within a story here. For in the 1880s a second transplant was undertaken, this time within Italy, from north to south. Over the course of the decade the number of southern *banche popolari* increased from 27 in 1880, about one fifth of the national total of 140, to an astonishing 377, over half of all 694 in 1890.⁹ The new southern banks' share of total equity was smaller, approximately 32% in 1893, but this can only be characterized as a very auspicious beginning.¹⁰

The story of the southern cooperative banks is particularly interesting, for they appear to be a dramatic exception to the general pattern of development in the Italian south, or *Mezzogiorno*. The economic backwardness of the Italian south relative to the rest of the country, with its attendant social and political consequences, is perhaps the single most written-about topic in Italian history, and even the briefest review of the dimensions of the question and the literature on it cannot be sketched out here. It is useful, however, to start with a rough quantitative view of the problem. Estimates of per capita output for 1911 indicate that the South had only three quarters the national average, and barely more than half the income of the industrializing northwest.¹¹ Alternative indicators of welfare, such as literacy, infant mortality, and height also reflect this divide. The gap, which may already have been widening up to 1911, only got worse in subsequent years, and remains a major problem to this day. Current newspaper reports about separatism in the north attest to the continuing relevance of the topic. Explanations of the *questione meridionale* have ranged from resource endowment through colonial exploitation (by the north) to the distribution of wealth to external effects of location.¹²

Of particular interest to us here, however, are explanations based on culture, of which there is no shortage. The issues were brought to the attention of the English speaking academic world by Banfield's controversial *The Moral Basis of a Backward Society*, published in the 1957. Banfield argued on the basis of field work that southern Italians accepted no goals or constraints beyond the

⁹ Banche Popolari 1898.

¹⁰ Banche Popolari 1895, tavola xx.

¹¹ Zamagni, *Economic History*, p. 39.

¹² One issue is whether a north-south divide is really useful, or whether we should think of a number of regional economies. For the purposes of this paper, the traditional definition of south is adopted: the former Kingdom of the Two Sicilies (the mainland south of Rome, more or less, and Sicily) plus Sardinia. This definition will not stop us from considering within-region differences in economic

narrowest, most short-term self interest of their immediate, nuclear families. He called this mindset amoral familism. Recently, Putnam has made a related argument in his widely read book *Making Democracy Work*. Putnam explores the mutual causality between the cultural attitudes described by Banfield and various social, political, and economic institutions, which he calls networks of civic engagement. In a local business association, for example, entrepreneurs work together to provide or obtain collective goods, the while developing personal relationships which facilitate the exchange of information, mutual monitoring, and the imposition of group social or economic sanctions. This “social capital” can then be deployed in support of other economic transactions which are not self-enforcing and cannot easily be contractually specified or enforced through the courts - the majority of economic transactions, that is. Social capital does not diminish with use. Where such networks, which need not be confined to the narrowly economic sphere, are absent, congruent cultural attitudes will not evolve. Where attitudes are unfavorable, it will be difficult to build up such institutions. When cooperation is absent and when the distribution of wealth and political power is highly unequal, as it was in the south, economic and political action, if undertaken at all, is organized vertically, through networks of dependent clients, each group of whom have nothing in common but their patron. Again, this merely reinforces the existing, equilibrium of unfavorable attitudes and missing institutions.

The *banche popolari* would seem to contradict Putnam’s argument. A cooperative bank is precisely the sort of cooperation he argues that southerners were incapable of. It is unclear whether or not cooperative bank shareholders are included in the figures for membership in cooperatives Putnam uses in constructing a five component index of civic traditions, but the *banche popolari* definitely do not enter the analysis in an explicit way.¹³

There are potential objections to this claim. It might be argued that the *banche popolari* were cooperatives in name only, and can tell us very little about southerners’ ability to sustain cooperation. This is wrong for two reasons. First and most importantly, even the establishment of an ordinary joint stock bank is precisely the kind of broader, less personal, non self-enforcing economic cooperation in which we are interested. So even if the *banche popolari* were not genuine cooperatives, their story would provide insights into cooperation. Secondly, the new commercial code of 1882 finally defined

activity, and is as useful as any other in defining culturally or institutionally similar areas, short of allowing residual or cultural effects for every province.

¹³ Putnam, *Democracy*, p. 149.

cooperatives for legal purposes. Banks with cooperative status were confined to a local sphere of operations, allowed a variable capital, limited to share prices of 100 Lire or less, required to have a one man - one vote rule in the general assembly of shareholders and a maximum shareholding of 5000 Lire per member, were allowed to make loans on the security of their own shares, and were allowed to conduct operations with non-members.¹⁴ It is true that these criteria were not very stringent. They did not force cooperative banks to be non-profit organizations, to do business only with members, or limit their operations; they acknowledged the reality of the hybrid system that evolved. But they did force cooperative banks to have many small shareholders, each of whom had an equal voice in the general assembly. This limited the ability of local families or factions to maintain control over an institution or to hijack it for their own purposes. In this way the *banche popolari* differed from local offices of the banks of issue, which some contemporaries wrote were often promoted and dominated by a few prominent locals, who subsequently extended credit only to themselves and their clients. Often, it was alleged, they borrowed from the bank, perhaps arranging for discount and subsequent renewals of fictitious commercial paper, then turned around and retailing this credit at higher rates to small local borrowers.¹⁵ To be sure, only a small investment was required in a *banca popolare* (at most 5000 Lire), so if control of the bank were lost to another faction or to the mass of shareholders, losses would be minimal. One might then ask, why not promote such an institution even if it were a bit risky? But if the bank prospered and attracted local resources, these would no longer be available to the faction in question, entailing a real loss. In sum, it seems clear that cooperative banks really did require southerners to cooperate.

Another potential objection is that the *banche popolari* emerged in the south only to exploit certain peculiarities of the regulatory setting. Understanding this point requires a brief background on Italian monetary institutions, which were rather complex and underwent frequent changes in this period. What matters for this discussion is that the system had several banks of issue, that they were in competition with one another and could only bring their notes into circulation in providing ordinary commercial and even industrial credit, and that the government controlled discount rates in an inflexible way, so that they bore little relation to economic conditions.

¹⁴ Polsi, *Alle Origini*, p. 256.

¹⁵ De Rosa, *Credito*, citing Franchetti, p. 104.

Government policy in the early years had disproportionately favored the *Banca Nazionale* (BN). It had been permitted to issue much more currency than the other banks so as to monetize government deficits, and its notes enjoyed superior legal status - they could be held as reserves by other banks but not vice versa, other banks notes were convertible into BN notes but not vice versa, etc. The result was that the BN far larger than the other banks of issue, and the only one whose notes circulated in all areas of the country. Economic and political considerations motivated the government to redress these disparities and level the playing field in 1874 banking legislation. Territorial expansion of the smaller banks would increase their size and influence, permitting them to reach their legal issue limits, and would increase competition in local financial markets. Disappointment with the results of this policy, along with an explicit desire to promote cooperatives, resulted in new legislation in 1885. Since the end of 1881, the *Banco di Napoli* had been experimenting with a policy of charging a lower discount rate (*tasso di favore*) to cooperative banks which established correspondent relations with it. The correspondent made a deposit with the bank as security.¹⁶ The 1885 law authorized all banks of issue to adopt this practice. Through this channel, the *banche popolari* gained access to vast resources otherwise unavailable to them, earning a sort of retail mark-up on funds borrowed through rediscounting. Evidently, this also relaxed a binding constraint for the banks of issue, which could simply match an increased demand for credit at lower prices with increased circulation, so long as legislative ceilings had not been reached or illegal circulation above them was not effectively monitored and punished. (A movement along a demand curve for credit.) As part of a long term strategy it may also have made sense to accept a low immediate return so as to bring notes into circulation in new markets and make them familiar there, increasing demand for them as a means of payment there - though officially they already had legal tender status. (A shift of the liquidity demand curve for a particular bank's currency.)

The phenomenal growth of the period did begin contemporaneously with the *Banco di Napoli's* experimental policy; there were only 46 southern *banche popolari* at the end of 1881, but already by 1888 there were 365, over half the national total. The response to this objection is similar to that regarding whether the banks were "really" cooperative or not. Certainly southern cooperative banks benefited from the particular institutional setting of the moment, perhaps more so than those in

¹⁶ *ibid*, p. 105.

the north. Yet, a number of specific counter-points can be raised. For example, in other respects timing was less fortuitous for the southern boom, for it came after the establishment of a national branch networks by both the banks of issue and, more importantly, the postal savings banks which were present even in small towns. Competition for deposits was more fierce than it had been for the early northern banks. Similarly, in a poorer region where income was less equally distributed it was always going to be more difficult to attract the same volume of capital and deposits. But the real point is that unifying local forces and taking the initiative to effectively attract outside resources is precisely the sort of cooperation Putnam is concerned with and is certainly of interest to us.

If it be accepted that the cooperative banks really can tell us something about cooperation in the south, we can focus our attention on an evaluation of their performance. Did they engage in the same sort of operations as their northern counterparts? Did they achieve the same growth and stability? Were they a success or failure?

The rapid growth of the 80s was not continued. The difficult period beginning around 1887, culminating in the crisis of 1893-94, had a more profound impact on the recently established *banche popolari* in the south than on those in the north. In the north, as described earlier, the crisis was a brief detour from a long term growth path, one that Luzzatti was even able to view as having a salutary purgative effect. The south, by contrast, was stopped dead in its tracks and never regained momentum. By 1908, the south had fewer banks than in 1890, 319 as against 377. This could of course have reflected consolidation, but the south's share of equity declined even more precipitously, from approximately 32% in 1893 to a mere 18% in 1908.¹⁷ Total equity in the system had increased over the period (from roughly 120 to 155 million Lire), but the decline of the southern banks was absolute, not merely relative.

Existing assessments of the southern experience with *banche popolari* are varied. De Rosa acknowledges the importance of the *tasso di favore* regulation, but emphasizes that in the 1880s the new banks exploiting this credit did not hesitate to make their presence felt in a positive way. Above all, they supported the process of transformation of southern agriculture along the lines of comparative advantage: towards the production of specialized exports such as citrus fruit, olive oil, and wine. These changes were a response to the collapse of grain prices due to American exports, and

¹⁷ *Banche Popolari, 1908.*

an increase in demand from more developed economies, especially France, where vineyards had been devastated by phyloxera. It has long been argued that the tariff of 1887 and the resulting trade war with France then ruined precisely the most dynamic elements of the southern economy and society. They brought the cooperative banks down with them, says de Rosa, even if other factors were also at work.

Di Biasio also takes a generally positive view of the experience, at least as it unfolded in the province of Caserta. He describes how in 1877 the promoters of the *Banca Mutua Popolare* of Caiazzo literally went from door to door among the city's shops in search of share subscriptions, collecting 7.65 Lire the first day. Mobilizing local capital in support of development initiatives such as this is a prime example of the sort of cooperation needed to support economic growth. In addition to its normal banking business, the Caiazzo bank went on to undertake a number of initiatives aimed at improving the standard of living of the lower classes, for example building and selling housing for low income families. Di Biasio emphasizes the difficult conditions in which southern *banche popolari* operated. In particular, they encountered fierce competition from the postal savings banks, which had been authorized in 1875 legislation. These banks had offices in even small towns, were open all week (unlike the cooperatives), offered a relatively high rate of interest of from 3.5 to 4%, and were backed by the authority of the state. Small wonder that where they faced this sort of competition, the cooperative banks of Caserta province had difficulty attracting a large volume of deposits. The fact that they nevertheless found enough shareholders and depositors to make a go of it he views as a triumph.¹⁸ Finally, Di Biasio repeatedly rebuts the contention of some writers that the *banche popolari* were tools of the bourgeoisie, who duped the lower classes into investing and depositing in them, then lent the funds to themselves. There were cases of banks which made only large loans and of banks which seem to have been entirely profit-and dividend-oriented, he acknowledges. But the fact cited by critics that the *grandi operatori* got more than their "fair share" of loans (i.e. a greater proportion than their equity holdings) doesn't really say anything about whether the lower classes benefited from the establishment of cooperatives, he says. For the *piccoli operatori* would have gotten nothing at all from the banks of issue, for which the transactions costs of retailing miniscule credit in

¹⁸ Competition from postal savings banks has also been emphasized by Guinnane in his account of the unspectacular performance of cooperative banks in Ireland. Guinnane, *Failed Transplant*.

local markets were prohibitive. And bourgeois participation in these ventures was indispensable to establish their credibility, thus ensuring working class participation.

Luzzatti himself seems to have been of two minds on the issue of the southern banks. Writing in 1895 he cited the same factors as de Rosa, noting that “without the commercial blockade, without the agrarian crisis, the technical errors I have mentioned would not have sufficed to overturn their good fortune.” (p. 6) The main “technical error” to which he referred was excessive investment of relatively short term liabilities in long term agricultural operations and in credit secured by agricultural land. He also mentions offering excessively high returns to attract deposits, making excessively large loans to an insufficient number of privileged borrowers, failing to promptly write off bad debts and properly value assets, and failing to reinvest a large enough share of profits. Some of these practices could be interpreted as deliberate deviations from cooperative ideals or even deception, and Luzzatti does allude to possible problems of factional or personal bias in lending as well as lack of sufficient concern with the moral goals of the movement. By and large, however, he seems to indict the competence and prudence of southern bank leaders, who were carried away by “confidence, optimism,” and “inexperience with the laws of credit.”¹⁹ And while he admonishes against excessive reliance on rediscounts from the banks of issue, he is more critical of their failure to offer equally good terms for rescheduling debt as they had granted the ordinary joint stock banks in the crisis.

Polsi offers a more negative assessment. Writing of the years before 1882, he claims the cooperative banks had “extraordinary difficulty” in establishing themselves in the south, so much so that “one could almost imagine a cultural problem in assimilating the idea of cooperation.”²⁰ The southern cooperatives, he argues, never achieved growth based on deposit collection, relying instead “almost exclusively on rediscounting at the *tasso di favore*.”

Finally, Moricola takes a particularly negative view, one that is consonant with Putnam’s argument. He emphasizes the bourgeois domination of the movement as a whole, and the particular importance for the south of the *tasso di favore* legislation. He cites the contemporary Giustino Fortunato to the effect that the latter permitted too great a flow of resources into impoverished areas, credit which was short term and volatile, likely to be cut back suddenly in a crisis. He argues that the growth of the banche popolari in the south has “a non-economic root... and a strict relation to the

¹⁹ *Banche Popolari, 1895*, pp. 6-7 and *1898*, p. v.

power strategies of the dominant local classes.”²¹ The *banche popolari* were formed as the response of local elites to two developments: threatened loss of monopoly power in local financial markets to outside competition in deposit collection and lending; and financial straits imposed by falling grain prices, the subsequent collapse of the French wine market, rising wages due to emigration, and a rapidly increasing tax burden. The banks were intended to divert local and outside resources to local elites, not for investment purposes but to pay tax bills and stave off painful adjustments until the crisis had passed. When the difficulties did not pass, the banks were left with portfolios of uncollectable loans backed by real estate. When the financial crisis of 1893-94 hit and rediscounting was curtailed, they became completely illiquid and collapsed. The veneer of cooperation was merely to gull local depositors and take advantage of the *tasso di favore*. The formality of democratic decision making procedures masked complete control by a few members of the local elite through the familial and client networks. It must be pointed out that the bank whose history Moricola takes as exemplary of this experience, the *Banca Popolare di Avellino*, was not in fact a cooperative bank under the 1882 definition, and does not appear in statistical publications about the *banche popolari* despite its name. And many of the faults criticized most acerbically by Moricola in this particular case could instead be seen as virtues: the cohesion of the local elite as an example of cooperation, the willingness of the lower classes to deposit as an example of trust, the investment in an electric power plant as visionary, the insider loans as parallels to Lamoreaux’s New England banks, and so on.²²

While the accounts described above are not mutually exclusive, there seems to be uncertainty on a number of points. Did the southern *banche popolari* invest too much or too little in transforming the economy? Were they incompetent and enthusiastic, or were they corrupt? Was their regulatory and competitive environment on net easier, or more difficult than in the north?

III. A statistical comparison of north and south in 1893-94

The next sections use data from a comprehensive survey of the *banche popolari* covering the crisis years 1893-94 to attempt a quantitative approach to answering these questions. I begin with a statistical comparison of north and south in 1893-94 based on aggregate measures for the two regions.

²⁰ Polsi, *Alle Origini*, p. 206.

²¹ Moricola, *Dal Mutuo alla Banca*, p. 112.

In numbers, as we have seen, the two regions were equal. The crisis of 93-94 led to a net loss of 10 banks in the south, while the north registered no change. For several southern regions the roots of the crisis appear lie further back. Numbers peaked in 1889 for Abruzzi-Molise, Puglia, and Basilicata and showed a net loss of 44 by 1894. This timing would fit with the trade war explanation. However, of the gross flow of new bank openings in 1894, half (13/26) were in the south. Note also that the south actually had **more** *banche popolari* on a per capita basis: 34,000 inhabitants per bank, compared with 52,000 elsewhere.

Where the south and north were quite different was in average bank size. In the December 1893 sample of 697 banks, average paid-in capital per bank was 171k Lire in the north vs. only 88k in the south. Much of this difference was due to Lombardy, where the average was 478k, but even excluding it from the northern figure leaves a northern average of 107k. The difference was even bigger for equity: 236k (147k without Lombardy) vs. 106k. Of course since equity includes reinvested profits, this could reflect simply the greater average age of northern cooperatives.

Measure on a per capita, rather than a per bank basis, paid in capital was 3.24 Lire per head in the north, 2.54 in the south, a difference of 28%. Excluding Lombardy from the northern figure, we actually find a **greater** figure for the south: 2.15 vs. 2.54. Given the per capita income gap between north and south, these figures are impressive and suggest that southern investors were every bit as willing to participate in this sort of cooperation as those in the north, and to put their money where their collective mouth was.

Turning to membership, in an 1893 sub-sample of 662 *banche popolari*, the northern banks had twice the members per bank: 816 vs. 408. The north also had 36% more shareholder-members per capita (1500 per 100k population, vs. 1100 in the south). A rough estimate of the average investment can be obtained by dividing paid in capital (from 697 banks) by membership (from a subset of 662 banks). This yields an estimated average investment of 217 Lire per member in the north, 231 in the south. Since 23 of the 35 missing banks were from the south, the true number was probably closer to regional equality. Similar results obtain when aggregating up properly calculate regional figures in the report using plausible weights. The north was ahead on total equity (capital + reserves) per shareholder (299 Lire vs. 276, an 8% advantage).

²² Lamoreaux, *Insider Lending*.

The social composition of the membership was also similar for a subsample of 639 banks for which this information is available. In both areas, *piccoli industriali e commercianti* are the largest group, about one quarter of members. In both areas *piccoli agricoltori* are the next largest group, with about 20-25%. The south has a slightly smaller share but makes this up with a few more representatives from both ends of the spectrum in the agricultural sector, *grandi agricoltori* and *contadini* (peasants). The south has a few more workers, the north a few more white collar employees and professionals. In terms of shares owned, the distribution is slightly different. The northern banks are more in the hands of *piccoli industriali* (23 vs. 18%), the south more in the hands of *grandi agricoltori* (21 vs 16%). Given the very different economic structures of the two regions, these differences are quite small.

To sum up the information on size and membership, the south seems to have raised a similar amount of capital from similar social groups, individual members of which invested similar amounts. The difference was that the southern capital was spread over a greater number of smaller banks, each with fewer members and thus less capital. This might be attributable to lower average population density in the south. Southerners cooperated in setting up *banche popolari* in the same way as northerners.

The data also allow comparison of balance sheets. The difference that cannot escape notice is the huge difference in total assets (or liabilities) per bank: 1,736k as against 354k! The gap is again much smaller if Lombardy, home of the immense *Banca Popolare di Milano*, is excluded, but remains a more than two to one ratio (890k vs. 354k). This exceeds the ratio for capital invested, and points to different success in attracting other sorts of liabilities. This is clear when we consider the liability side of the balance sheet, as presented in Table 1. Two categories of liability have been deducted from the total in calculating the figures in Table 1. These are free deposits for custody and deposits for security, both of which were items such as government bonds which were given as security for loans and kept at the bank. The exact same figures show up on the asset and the liability side of the balance sheet, confirming that these do not represent resources put at the disposition of and invested by the bank.

Table 1: Liabilities as shares of total, North and South, Dec. 31, 1893.

	North	South
Paid-in capital	.134	.278
Reserve fund	.050	.055
Deposits in current accounts	.175	.127

“ in savings accts.	.441	.219
Bonds in circulation	.073	.144
For. Ex. acceptances	.013	.005
Debts to correspondent Banche Pop.	.064	.085
“ to shareholders, undistrib. divid.	.002	.006
“ diverse	.036	.048
Notes/checks received for cashing	.002	.013
Insurance fund for bank employees	.003	.001
Rediscounts	.007	.019
Sum	1	1
Net Profits	.012	.013
Net Profits / Equity	.063	.038

What is striking in Table 1 is the difference in “inside” versus “outside resources. The north was clearly dramatically more successful in attracting other resources, above all savings deposits, which account for twice as great a share of total resources. There is also an advantage as regards current account deposits. The south relied more on capital and reserves, and turned to alternatives such as bond issues and rediscounting to raise outside funds. The year-end rediscount figures may give a false impression of the volume of funds obtained in this way during the year. For a subsample of 655 banks, the ratio of total rediscounts during 1893 to total loans and discounts made during the year was 25.3% in the north and 38.5% in the south. While the south was clearly more dependent on such credit than the north, the figures are quite high in both regions. Also striking is the fact that the south earned equally high net profits on the total resources at its disposal. The quite substantial difference in average profit on equity is clearly driven by the greater leverage of northern banks.

Table 2. Assets by share of total, Dec. 31, 1893.

	North	South
Cash on hand	.034	.032
Loans	.185	.340
Discounts of commercial paper	.208	.212
Advances	.018	.036
Riporti	.043	.005
Mortgage loans	.023	.042
Non-performing assets (sofferenze)	.015	.079
Agricultural loans	.000	.000
Current account overdrafts	.056	.029
Credits: banche pop. & correspond.	.041	.025
“ diverse	.043	.081
Government securities	.264	.067
Industrial securities	.030	.013
Furnishings and set-up expenses	.003	.009
Real estate	.024	.009
Notes/checks to be cashed	.012	.020
Rediscount of (own?) bonds	.001	.002

Total	1	1
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Table 2 presents asset shares for year-end 1893, again deducting the custody and security deposits. Two major differences stand out. The first is the much greater northern share in government securities - at over one quarter of total assets it is almost four times the southern proportion. One interpretation is that this reflects greater conservatism on the part of northern banks, which could be seen in either a positive or a negative light. But it is well to remember that some northern *banche popolari* had a volume of deposits that may have exceeded the demand for loans and discounts by credible borrowers. Even if conservatism is seen negatively, the large share of government bonds may be simply a measure of the northern banks' success. The other major difference is in the share of non-performing loans, or *sofferenze*, which is 1.5% in the north, fully 8% in the south. On this measure of success, the south clearly comes out worse. Assuming these assets are earning a 0 return, it is all the more surprising that Table 1 indicates equal net profits per Lira of resources collected.

The higher share of mortgage loans in the south could reflect any number of things: greater support for agriculture, a greater share of debts having gone bad and been converted into mortgage loans, or greater speculation in the 80s urban real estate boom. Greater northern shares for *riporti* (a form of credit whereby the borrower sells securities to the bank and contracts to buy them back at an agreed price in the future), current account overdrafts, and industrial securities may reflect greater support for local industry there. Such differences may have been demand or supply driven. There is also a notable difference in diverse credits. This category is indeed diverse, as notes for individual banks make clear. In some cases it includes items which clearly belong in other categories. A few typical assets for this category are: debts associated with *esattoria* service, or tax collection, performed for local or provincial government - debts owed either by individuals for their taxes or by the government for advances made; interest maturing on government securities; deposits given as security to other banks, usually banks of issue; legal expenses; and occasionally seized assets of debtors, such as the equipment of a sawmill. There is one case where the value of a number of items recently burgled from the bank is recorded here. According to the authors of the report, the distinction between loans and discounts was not clear to the banks which provided the data, with many recording their entire portfolio in one or the other category, so not much can be made of differences here.

Information is also available on the average size of transactions and accounts. Northern *banche popolari* had four times as many current accounts, on average, each with an average balance 45% larger, and each registering about twice as many transactions, compared with the south.²³ (Excluding Lombardy, all figures are much closer, but the gap remains substantial.) The amount of each transaction, however, was almost identical. If current accounts were used primarily by businesses, and this is supported by anecdotal evidence and the fact that the average transaction was over 1,000 Lire, then the northern banks had many more business customers, each of whom used their accounts more often. The similarity of account and transaction size, together with the evidence on the social origin of shareholders suggests the current accounts were being used by the same type of customers in north and south. There were more businesses to demand such services in the north and/or the average entrepreneur conducted more business by check. Current account overdrafts, another service provided to business, are also more frequent and with larger loan amounts in the north.

Northern cooperatives had four times as many saving accounts, on average, each roughly twice as big. The number of transactions per account was about the same. The size of the average transaction was about 50% greater in the north. So the northern banks found more depositors, each of whom deposited more, but they seem to have used their accounts in a roughly similar way. Again, this may indicate they came from the same economic groups. Regarding ordinary loans, northern banks made more of them on average, and they were 50% larger on average. For discounts, the differences in number and size are similar: about three times as many discounts each about one third larger. Southern banks, then, did not make a few giant loans to wealthy individuals who controlled them. (They may, however, have made many small ones to these individuals.)

Summing up this statistical comparison of north and south, it reveals a pattern of differences that is sensible in light of differences in income, the structure of economic activity, population density, average age of the cooperatives, and the degree of competition for deposits. The major similarity is that the south raised a similar amount of capital per head (interpreted as per population or per shareholder), and found both shareholders and customers among the same groups. The same sort of southerners cooperated in the same way, making similar investments, to found *banche popolari* as in

²³ I used *rimborso*, or repayments, for transactions, but the results with *versamenti* are the same.

the north. The major differences are: that northern banks were fewer (per capita) and larger; that they were much more successful in attracting deposits; and that southern banks had substantially more non-performing loans. The last of these is clearly important and requires explanation.

IV. Determinants of Profitability at Individual Banks.

This section reports the results of an estimate of the determinants of profits at 694 individual *banche popolari*.²⁴ Profits, it might be argued, are no indication of the success of a cooperative. Luzzatti, in fact, sometimes pointed with pride to declining profit rates, and constantly decried risk-taking, profit-maximizing, dividend-paying policies. Stability or growth rates might indeed be better measures of success, and future work may address these issues with data from subsequent surveys. For the moment, however, it seems sufficient justification to note that losing money is certainly a measure of failure, and that at least in these crisis years there is a wide gap in profitability to the advantage of the north, which is regarded to have been the more successful of the regions by any criterion. This exercise can potentially establish whether southern banks were less profitable because of the environment in which they operated or because of their own strategy, and, if the latter, whether it was a question of incompetence and enthusiasm, or corruption and hijacking.

A simple regression of the return on equity on a constant and a dummy for the south yields a highly significant estimated south effect of -.016. This is smaller than the difference reported above (-.025) because the regression weights all banks equally, while the average reported above is dominated by bigger banks, which, in the north, were highly profitable.

Specification I in Table 3 is a regression of profitability on a number of characteristics of the province in which a bank was located. Exact definitions are given in Appendix A, but it should be noted here that the data are not well measured, and constitute at best rough indicators. Asterisks indicate the usual levels of significance, and column to the right of the estimates reports partial correlations as an index of relative explanatory power. Specification II adds two bank-specific variables which can be taken as somewhat exogenous to the bank's current strategy and success: age and total assets. Size is of course a reflection of past strategy and success, but the differences due to

²⁴ Four banks were dropped from the sample which could be identified as having an abnormally large impact on coefficient estimates and were anomalous cases.

current policy were trivial compared with overall variation in bank size, particularly given the propensity of troubled banks to carry non-performing loans on the books instead of writing them off, reducing assets. The point is that we can get a relatively “clean read” on these variables without worrying that they are as much caused by current performance as a determinant of it. The third model adds several variables which clearly reflect strategic choices by the bank, and are clearly not caused by current performance.

Since the magnitude, sign, and precision of the estimates differ little among the three specifications, I will discuss only model III here. Several hypothesized relationships appear to be present in the data. Provincial agricultural specialization, at least in the production of olive oil, is significantly negatively related to profits (less so when the bank-specific characteristics are included), offering support for the impact of trade policy. Urban and metropolitan locations are both significantly, negatively related to profits. This may reflect bank participation in the tremendous boom and crash in urban real estate in the 1880s and early ‘90s. Size is the most important explanatory variable, as measured by partial correlation, and its effect is powerful; doubling assets raises the return on equity by 1.4%. The strategy variable “secure” has a significant negative impact on profits. It is defined as the ratio of deposits held in custody or as security to total loans, discounts, and advances. It may reflect either the type of loans made, riskier loans presumably requiring a greater deposit, or bank policy for a given loan.

However, the fraction of total variation explained by the regression is quite small, and several effects are not intuitive. One would have expected age to positively affect profits as banks benefit from experience, but the negative significant finding is a robust one. One might expect the density of postal savings banks to significantly lower profits, particularly once age is controlled for, as this is correlated with whether the bank was founded before or after the postal savings banks (legislation of 1875); yet it has almost no effect. One would have expected population density to have a positive sign, and illiteracy to have a negative sign. Population density appears to be negative so as to explain poor performance in Naples province, far and away the most densely populated province even using the logarithm, while illiteracy may reflect good performance in the poorly educated northeast (the worse situation in the south in this regard being captured by the dummy?). The strategy variables other than secure also disappoint. Esattoria, the performance of tax collection services, often in conjunction with

credit to either taxpayers or the government, the number of correspondent banks, and the number of members, intended as a proxy for democratic rules, all fail to have a significant impact on profits.

Finally, the south dummy is statistically significant and entirely large enough to explain the north south gap in profitability in all specifications. Though we have uncovered some statistically significant relationships, we are not able to explain the north south difference in terms of exogenous provincial and bank specific characteristics. Note also that the stability of the coefficients and their standard errors across the three specifications implies there is little problem of multicollinearity among the variables, which might have been expected. With the possible exception of olive cultivation, it is not the case that the provincial variables impacted profits primarily indirectly, through their influence on the bank specific and strategy variables.

Table 3. Determinants of bank profitability.

	I. partial cor.		II. partial cor.		III. partial cor.	
Constant	.064 *		-.084 **		-.078 **	
Citrus	-.015	-.001	.016	.001	-.325	-.016
Olives	-.137 ***	-.128	-.114 ***	-.112	-.077 **	-.082
Vineyards	-.018	-.025	-.014	-.021	-.021	-.034
Urban	-.009	-.060	-.015 ***	-.102	-.016 ***	-.110
Metropolitan	-.056 ***	-.247	-.056 ***	-.262	-.054 ***	-.261
Industrial workers	-.0001	.034	.00003	.008	-2E-06	-.001
Postal savings banks	-.035	-.024	-.031	-.022	-.029	-.022
Illiteracy	.0004 *	.072	.0005 **	.088	.0004 *	.066
Ln(pop.density)	-.003	-.020	-.004	-.023	-.002	-.014
Age			-.002 ***	-.172	-.002 ***	-.184
Ln(assets)			.014 ***	.336	.014 ***	.335
Secure					-.030 **	-.094
Esattoria					.002	.014
Correspondents					.00004	.032
Members					-3E-07	-.005
South dummy	-.019 *	-.074	-.021 **	-.086	-.018 **	-.081
R Square	.111		.212		.225	
N	693		692		658	

We turn next to data on asset and liability shares from the balance sheets of individual banks. In part, these data reflect conscious bank strategy, for example deliberately taking on risk in the form of urban real estate loans or *riporti*. In part, they reflect a response to exogenous conditions, for example choosing to raise funds through bond issue when savings deposits are difficult to attract. There can thus be mutual causality among the various balance sheet variables, and between the balance sheet and environmental variables. Worse still, some variables are more a measure of success than its cause, as in the case of non-performing assets or losses written off. These assets must be included in the regression, however, in order to properly measure the return on other assets in which we are interested. It may be wisest to think of this as a sort of accounting exercise, where profits can be decomposed into the sum of returns on various assets and costs of liabilities. The results are presented in Table 4.

Many of the coefficient estimates in Table 4 are fairly precise, despite the potential multicollinearity problems discussed above. Further ad hoc diagnostic testing confirms that this is not an important problem. Omitting the suspect asset shares for non-performing loans, losses written off, and real estate leaves the other coefficient estimates and their standard errors little affected (fn: except the constant, which is to be expected since it now reflects primarily the effects of those variables). A

regression of non-performing loan share on all other asset shares yields a high R-squared (.77) and many significant coefficient estimates. But the coefficients are almost all identical, no individual coefficient being statistically significantly different from, say -0.80. This means that they are “explaining” non-performing loan share simply because all the shares together sum to unity, so non-performing loans are a residual. (The identity is not perfect because several unimportant shares have been omitted, effectively showing up in the constant term.) Finally, regressions of profit rates on the shares of each of the suspect variables alone still yield coefficient estimates similar to those reported above. I feel confident in dismissing multicollinearity as a practical problem. The issue of simultaneity is dealt with below.

Table 4. Regression of profit rates on asset and liability shares.

variable	coefficient estimate	partial correlation
Constant	.086 ***	
Loans and discounts	-.058 *	-.074
Advances on govt securities	-.095	-.028
“ on indust.sec. & merchds.	-.079 *	-.066
Riporti	-.036	-.013
Mortgage loans	-.097 **	-.080
Non-performing assets	-.158 ***	-.179
Current acct. overdrafts	-.100 ***	-.107
Credits: banche pop. & corrisp.	-.040	-.041
“ : diverse	-.170 ***	-.185
Government securities	-.059	-.061
Industrial securities	-.070	-.052
Furnishings & set-up costs	-.457 ***	-.288
Real estate	-.162 ***	-.121
Checks/notes to be cashed	-.055	-.039
Rediscount of (own?) bonds	.291	.021
Deposits: current accts.	.050 ***	.141
“ : “ w/out interest	-.053 *	-.072
“ : savings	.081 ***	.272
“ : savings * South dum.	-.059 ***	-.145
Bonds	.060 ***	.150
Checks/notes to pay	-.008	-.008
Debts: corrisp. banche pop.	.011	.024
“ : shareholders, divids.	.206	.042
“ : diverse	.021	.036
Checks/notes to be cashed	.025	.020
Rediscounts	.088 ***	.111
Losses written off	-1.263 ***	-.250
South dummy	.022 ***	.140
R-square	.430	

N	693	
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A preliminary regression was run in which all parameters were allowed to vary between north and south. Only a single southern effect was statistically significant: that for the share of liabilities in the form of savings deposits. An F-test of the restriction that all other southern effects were 0 could not be rejected at the 5 or 10% significance levels (borderline in the latter case). This is an important result. It tells us that, to the extent that there are any systematic patterns in the data, they do not differ between the two regions. It was **not** the case that, say, mortgage loans or current account overdrafts were highly profitable in the north, those in the south loss-making. This simplifies the task of isolating the source of differences in profitability, which instead of lying in a completely different structure of returns and costs, are instead to be sought primarily in different choices about asset and liability shares. The southern effect for savings deposits, since it was statistically significant and makes sense in light the previous discussion, has been kept in the specification reported in Table 4. The south dummy has also been included.

Asset and liability shares account for a substantial fraction of total variation in profitability, and many of the effects are statistically significant and in the expected direction. The fact that asset shares appear with a negative sign here must be interpreted together with the large positive constant. What matters are the relative positions of the asset shares. Many of the coefficient estimates are statistically significant, and there are some sensible patterns among the cost and return estimates. On the liability side, for example, savings deposits appear to cost less (raise profits more) than current account deposits or bond issues. Among the assets, the results that non-performing loan share substantially reduces profits is again intuitive. Similarly, losses written off affect profits in the way one would expect: if a bank were to write off all its assets, setting the share equal to one, we would expect a return on equity of -1. Other patterns are more interesting. Mortgage loans appear to have generated lower returns than loans and discounts, and real estate holdings were associated with particularly low profits. This could be connected with either the boom and crash in urban real estate, or agricultural loans gone bad. The diverse credits, discussed above, also significantly lower profits. Government securities seem to generate returns just as high as loans, discounts, and other more risky assets, according to these estimates. On the liability side it is interesting that rediscounts were

associated with particularly high profits, as much so as savings deposits. Another surprise is that non interest bearing current accounts seem to have a much higher cost than interest bearing deposits.

It should be observed however, that most of these differences are not statistically significant. Two differences which are significant and of particular interest here are those concerning the south. While savings deposits are, with rediscounts, the liability with lowest costs in the north, in the south the positive impact on profits is almost completely nullified. This would fit very well with evidence that they found it very difficult to compete with the postal savings banks and were forced to offer high interest rates. The partial correlation coefficients show that differences in the ability to attract savings deposits explain a fair bit of total variation in profitability, further underlying the importance of this factor. Secondly, the South dummy is positive and statistically significant. Given the estimated returns (costs) on assets (liabilities), and given the south's shares, it should have been doing worse than it did. One interpretation is that all returns were higher in the south, and/or all costs lower. This could be consistent with more profit-oriented management of southern cooperatives, and would not be inconsistent with corruption, but does not support of incompetence.

A note of caution in interpreting these results is in order. Judging by the partial correlations, a fair bit of the explanation is being done by non-performing assets, diverse credits, furnishings and set-up costs, real estate, and losses written off. With the possible exception of real estate, none of these is very easy to interpret, and all are potentially indicators of success more than strategy. Furnishings and set-up costs, the variable with the highest partial correlation, are not easy to explain, and the finding that they are highly negatively correlated with profits is robust to both specification and sample changes. One interpretation is that these represent fixed costs of starting a bank. Successful, profitable banks grow large, so these fixed costs dwindle to a tiny share of total assets, while the opposite is true of poorly run banks. In a sense, we are accounting for differences in profits much more than explaining them.

Subject to these caveats, we can say that differences in asset and liability shares, rather than either systematic or random differences in rates of return or costs of particular assets and liabilities explain the north-south difference. One exception is savings deposits, which were not nearly so positive an influence on profits in the south. Given the actual structure of assets and liabilities, the south seems actually to have done systematically better than the model would predict. We are not

accounting for quite half of the total variation in profits, idiosyncratic, bank-specific elements remaining more important, but we are accounting for the north-south difference.

Table 5.

	coeff.	part'l cor.	avg. South	avg. North	diff.	predicted profit gap
Constant	.041		1	1	0	0
Loans and discounts	-.064 **	-.083	0.631	0.651	-0.020	0.001
Advances on govt securities	-.064	-.019	0.004	0.004	0.001	0.000
“ on indst.secs. & merchds.	-.048	-.040	0.024	0.005	0.019	-0.001
Riporti	.020	.006	0.001	0.004	-0.003	0.000
Mortgage loans	-.137 ***	-.115	0.022	0.014	0.008	-0.001
Non-performing assets	-.164 ***	-.185	0.078	0.023	0.055	-0.009
Current acct. overdrafts	-.109 ***	-.118	0.014	0.038	-0.025	0.003
Credits: b.p.s & corresps.	-.052	-.055	0.015	0.043	-0.028	0.001
“ : diverse	-.168 ***	-.185	0.073	0.036	0.036	-0.006
Government securities	-.091 **	-.089	0.034	0.070	-0.036	0.003
Industrial securities	-.073	-.054	0.008	0.017	-0.009	0.001
Furnishings & set-up costs	-.372 ***	-.236	0.027	0.014	0.013	-0.005
Real estate	-.160 ***	-.118	0.006	0.017	-0.011	0.002
Checks/notes to be cashed	-.086	-.063	0.016	0.017	-0.001	0.000
Rediscount of (own?) bonds	.341	.023	0.002	0.001	0.001	0.000
assets						-0.010
Deposits: current accts.	.021	.055	0.060	0.119	-0.059	-0.001
“ : “ w/out interest	-.057 **	-.078	0.018	0.007	0.011	-0.001
“ : savings	.051 ***	.155	0.182	0.383	-0.201	-0.010
“ : savings * South	-.059 ***	-.146	0.182	0	0.182	-0.011
Bonds	.031 *	.070	0.105	0.060	0.045	0.001
Checks/notes to pay	-.027	-.029	0.011	0.014	-0.003	0.000
Debts: corresp. banche pop.	-.020	-.042	0.036	0.072	-0.037	0.001
“ : shareholders, divids.	.181	.037	0.006	0.004	0.002	0.000
“ : diverse	.006	.010	0.039	0.024	0.014	0.000
Checks/notes to be cashed	.026	.022	0.011	0.005	0.006	0.000
Rediscounts	.057 *	.074	0.018	0.011	0.008	0.000
liabilities						-0.020
Losses written off	-1.22 ***	-.249	0.003	0.003	-0.001	0.001
liabs. & losses						-0.019
Citrus	.225	.013	0.002	0.000	0.002	0.000
Olives	-.089 ***	-.101	0.089	0.017	0.071	-0.006
Vineyards	-.014	-.025	0.147	0.220	-0.073	0.001
Urban	-.005	-.040	0.131	0.179	-0.048	0.000
Metropolitan	-.035 ***	-.187	0.085	0.094	-0.008	0.000
Industrial employment	8E-06	.002	24.848	39.824	-14.977	0.000
Postal savings banks	-.043	-.036	0.138	0.155	-0.017	0.001
Illiteracy	.0002	.034	69.292	40.504	28.789	0.006
Log(pop. density)	-.003	-.020	4.945	4.774	0.171	-0.001
province						0.002
Age	-.001 **	-.099	8.531	11.800	-3.270	0.003
Log(assets)	.008 ***	.163	11.744	12.461	-0.717	-0.006
“exogenous”						-0.002
Secure	-.024 **	-.080	0.079	0.102	-0.023	0.001
Esattoria	.004	.023	0.082	0.124	-0.042	0.000
Correspondents	2E-05	.014	3.936	21.255	-17.319	0.000
“strategy”						0.000
South dummy	.014	.056	1	0	1	0.014
sum						-0.023

R-square	.472					
N	692					

The model in Table 5 combines both sets of explanatory variables. As noted above there are potential problems of multicollinearity and simultaneity in this specification. Multicollinearity within each group separately has already been dismissed. Multicollinearity between the between the two groups does not seem to have been a serious problem either. One might expect the provincial and bank specific characteristics to have impacted profits primarily through their impact on, say, non-performing assets. In a combined regression, then, their effect might be much less precisely estimated and they might lose statistical significance. It is clear that this did not generally happen. While there are minor differences (e.g. urban and illiteracy), both the magnitude and precision of estimates in the combined regression are quite similar to the separate regressions. Coefficient estimates for the balance sheet variables are even less affected. Ad hoc, informal diagnostic checks suggest that simultaneity does not influence the results substantially either. A standard approach to simultaneity involves the use of instrumental variables. A regression of the profit rate on non-performing asset share alone, using all other available variables as instruments, yields roughly the same coefficient as in a simple bivariate regression, which in turn is the same as the estimates in Tables 4 and 5. This is also true of the share of liabilities raised via savings deposits, and of mortgage loans.²⁵ As a practical matter, neither multicollinearity nor simultaneity seem to have had a major impact on our estimates, so the specification in Table 5 can perhaps be accepted with caution.

Since there is little change in the coefficient estimates from the separate regressions, there is no need to repeat the discussion of them here; the combined regression turns out to be, in a sense, merely the sum of the separate regressions. It remains the case that only half of overall variation in profits can be explained by observable bank and province characteristics. However, the systematic north-south difference is explained, as the south dummy is insignificant and positive. Columns four and five of Table 5 give average values of the explanatory variables for north and south. (These differ slightly from those reported in Tables 1 and 2 because here we are averaging across banks, each weighted equally.) The difference is shown in column six, and multiplied by the coefficient estimate

to yield the predicted north south difference in profits on account of each variable in the final column. The net predicted effect of the entire structure of assets in the south is about $-.01$, relative to the north. The observable choices of the banks actually make a small positive contribution, as the south has less current account overdrafts (which may represent loans rolled over grudgingly), government securities, and real estate, all of which offered lower returns than loans and discounts. The negative effect of asset structure is entirely accounted for by greater shares of non-performing assets, diverse credits, and furnishings and set-up costs. These can all be interpreted as indicators of success as much as causes of it. (Recall that diverse credits often include, among other things, overdue debts and legal expenses.) Again, assets account for profits more than they explain them.

The net effect of the structure of liabilities is powerful: $-.02$. This is almost entirely accounted for by differences in the share of savings deposits and the higher cost of southern savings deposits, which finding is both robust and straightforward to interpret. Southern banks raised a much smaller share of liabilities from savings deposits: 0.182 vs, 0.383 . This difference is sufficient to predict a $-.01$ gap in profits. Southern savings deposits also did not contribute in the same way to profits, their return (cost) being measured as dramatically lower (higher): $+.051$ vs $-.008$. While savings deposits were, along with rediscounts, the best way to raise resources in the north, this was not so in the south, where bond issue, current accounts, and rediscounts were all better. This implies that attracting more savings deposits would not really have benefited the southern *banche popolari* all that much; it would have been too expensive relative to other sources of funds. Another important finding is that the number of postal savings offices per capita has virtually no role to play, even controlling for age, which identifies whether a bank was established before the postal savings banks. This is true even in a regression of the liability share of savings deposits on provincial, “exogenous,” and “strategy” variables. The implication is that the high costs of attracting savings deposits were not due to competition, but to greater distrust among savers, who had to be offered a higher differential to leave the perceived security of the postal savings bank. This would seem to offer powerful support to a particular version of the non-cooperation hypothesis.

²⁵ For real estate, it is true, the IV estimate is smaller than the bivariate estimate or the estimates in Tables 4 and 5, but this is a variable for which the hypothesis of a common determinant with profits is quite speculative. In some cases this variable clearly reflects only the value of the bank building itself.

Provincial characteristics have a negligible and, surprisingly, positive impact of +.002. Yet, it would be premature to jump to the conclusion that we can dismiss agricultural specialization and trade policy as a cause of poor southern performance. For the negligible net contribution results from a large negative effect of specialization in olive culture (-.006) and a large positive effect of illiteracy. The latter cannot be considered a terribly sensible result. We can perhaps say that agricultural specialization is unlikely to have explained most of the north south difference, however. Similar considerations apply to the “exogenous” bank characteristics of age and size. The net contribution is small, but comprised of a large effect of size alone (-.006), mostly offset by a counter-intuitive, positive age effect. On the face of it, provincial and bank characteristics explain almost nothing, then. But the combined effects of agricultural specialization and smaller size together would predict a gap of -.012, which is most of the .016 gap identified at the beginning of the section.

The “strategy” variables as a group provide little almost no explanatory power.²⁶ Finally, the south dummy is positive and large, but insignificant. If there is any systematic difference in returns (costs) it would seem to favor the south. This might imply that if the southern cooperatives were mismanaged, the failure was not in day to day management of particular assets and liabilities, but in strategic decisions about what shares to hold. But recall that the explanatory power of asset structure derived largely from variables such as non-performing assets, which management cannot really be said to have deliberately chosen. They may well have mismanaged single assets such as the portfolio of loans and discounts, this failing to show up only because the bad debts have been moved to other asset categories. A major weakness of the balance sheet data is that they reflect only the point arrived at, not how it was reached. Still, one might have expected sheer incompetence to result in both the wrong portfolio and systematically worse returns on that portfolio - both more non-performing assets and lower returns on loans and discounts.

V. Conclusions

Cooperative banks were a remarkably successful institutional transplant across the Alps. Important modifications took the *banche popolari* in the direction of being more like ordinary commercial banks, but they retained a cooperative, democratic, philanthropic element. With these adaptations, the institution flourished in a new environment, attaining an unusual importance in the

financial sector. Within Italy transplantation from north to south proved more difficult. A variety of explanations have been proposed for this difference. Some have stressed factors beyond the south's control: a trade war with France that ruined its agriculture and those who had invested in it; excessive competition for savings from the government via the postal savings banks; lower incomes; inexperience. Others have stressed the social and cultural environment and the tendency of local forces to subvert an apparently democratic institution and put it to their own uses.

The evidence in section III weighs on the side of the first group. It shows that with due allowance for differences in economic structure, income levels, and population density, southern banks in 1893 did not look radically different from their northern counterparts in terms of their shareholders, customers, and operations. Southern entrepreneurs, artisans, property owners, and politicians could together mobilize capital to found cooperative institutions, and their aims were similar to those of northern promoters. Where they differed was in their success.

Section IV's analysis of the determinants of profitability at individual cooperative banks offers mixed evidence. Most of the variation in returns to equity was idiosyncratic and cannot be explained, but the north-south gap can be accounted for. Factors such as specialization in olive culture and bank size do contribute substantially to explaining the profit gap, but they are offset by counter-intuitive results for other variables, such as illiteracy and age. Nor is help forthcoming from expected sources such as population density or postal savings bank density. Model mis-specification and poor data may explain this. Still, it would be quite difficult to argue on the basis of this evidence that exogenous factors explain most of the north-south difference.

Asset structure predicts a substantial gap, but primarily due to variables such as non-performing asset share that measure success more than they cause it. Thus, we cannot claim to be really explaining the profit gap. These variables may reflect incompetence, subversion, or unobserved or poorly measured characteristics of the environment. The structure of liabilities predicts a large profit gap on the basis of southern failure to cheaply attract enough savings deposits. The results suggest that this was due neither to fierce competition for deposits, nor to incompetence by the banks themselves, but rather to diffidence on the part of depositors, who required a greater interest rate differential than in the north to accept the perceived risk of depositing at cooperative banks.

²⁶ Membership is excluded here because it is invariably unimportant and reduces the sample size.

The cooperative boom of the 1880s really was the sort of cooperation that Putnam says does not happen in the south. The empirical analysis developed here, however, cannot prove one way or the other whether it was corruption and subversion of the institution or exogenous factors and inexperience that caused low profits and stagnation. It does point strongly to one particular form of cooperation failure: diffidence toward a cooperative institution on the part of depositors. Could southerners cooperate? Yes and no.

Appendix A. Variable definitions.

Olives and Vineyards are the area planted with olive trees or vineyards divided by the total productive land area of each province. The former are from the *Annuario Statistico Italiano* (ASI) 1895, the latter from ASI 1911. These data do not distinguish between intensive and extensive cultivation, a very significant difference in terms of output. The ASI 1895 reported only the number of trees and the number of fruits. I converted fruits to quintals using a coefficient from the ASI 1905-07, then quintals to (intensive) land area using a ratio estimated by regression from regional data in the ASI 1911. Obviously these data are very rough, but the differences in olive and citrus production from one province to the next are big enough to overwhelm this. For wine production, however, this may matter.

Metropolitan was 1 if the bank was located in a city with population greater than 100k in the 1901 census (there was no 1891 census), 0 otherwise. There were nine such cities. Urban was 1 if city population was 30k to 100k in 1901, 0 otherwise. Population data taken from ASI 1911.

Industrial workers per capita are taken from *Statistica Industriale...* of 1903. These data are unreliable, as they are compiled from individual industry studies made at various times, some a number of years before the data to which the report ostensibly refers. They can be considered only indicative of general tendencies.

Postal savings banks are expressed per capita and are taken from ASI 1895. Illiteracy refers to the population above six years of age in the 1901 census, and is taken from ASI 1911. Population density is taken from ASI 1911. The natural log is used to reduce the impact of Naples province, which has more than twice the density of the next most thickly settled province.

Age is years since the bank was founded, taken from the 1895 report. Log of total assets is taken from the same source. The natural log was used on the basis of poor initial results with the level.

Secure is the ratio of deposits held in custody or as security to the total of loans, discounts, and advances. Esattoria is one if the bank performed tax collecting services, 0 otherwise. Correspondents is the number of banks with which the cooperative had correspondent status. Members is the number of shareholders in the bank.

The asset and liability shares are taken from the categories used in the balance sheets of the 1895 report. The only modifications were to combine assets and liabilities, which the report itself says many banks failed to distinguish, and to put agrarian loans, insurance funds for employees, reserves, and extraordinary reserves in the constant. The two asset shares were both zero for over 90% of banks, and had virtually no explanatory power. The two liability shares are conceptually and econometrically difficult to distinguish from capital.

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