Branch Manager Turnover and Lending Efficiency: Local vs National Banks *

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"The important role of local banks stems [...] from their being expression of business and society in the areas where they operate; hence, local banks' support for social and economic development in such areas will necessarily differ from that provided by managers at local branches of banks from other regions [...]: in large banks, the better the performance of a branch manager, the faster will be his move from less to more important branches scattered all over the country [...]; and, thus, the fewer will be his opportunities to sink roots in local communities, to understand the needs of these communities in detail and effectively convey them to the bank's head offices" (Saraceno 1970, pp. 1023-24; my translation).

1. Introduction

Should we share the view put forth by Pasquale Saraceno, a public servant better known for his efforts to foster the development of Southern Italy and to advocate government ownership in the economy and the banks than as a supporter of local banks? Is this thesis justified in the light of the theory of intermediation? Does it stand the empirical test? And, if so, is there any implication or prescription warranted for the structure of the banking system?

This paper focuses on these questions by means of three different approaches. First (in Section 2) I argue that – while emphasizing

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the role of banks in providing a solution to incentive and asymmetric information problems – the mainstream theory raises a yet unnoticed research question. Can different allocations of lending decisions and responsibilities between bank head offices and branch managers have an impact on the quality of loans? This question is relevant if, as seems to be the case, branch managers are the ones who collect information on debtors. Accordingly, branch manager turnover could damage customer relationships and have a negative impact on banks' lending efficiency. Linked to this is the question of whether branch manager turnover is higher at big/national banks than at local banks. This could stem from two different causes. The first is the one suggested by Saraceno: branch managers could originate by themselves a "demand for turnover" since faster careers require higher turnover. The second looks at the turnover as an effective response by the bank to the moral hazard problem with the branch manager. The branch manager might use his/her informational advantage on local borrowers *vis-à-vis* the bank head offices to pursue personal objectives (empire building) in conflict with the best interest of the bank. Hence, if an increasing distance between head offices and the branch manager heightens the moral hazard between the two, turnover could well be higher at large banks. A final question, linked to the above, is whether bank size being equal, do different ownership arrangements lead to higher or lower branch manager turnover.

In Section 3, I empirically test the hypotheses described above on the basis of data on average branch manager turnover at Italian banks. The variability of branch manager turnover across banks is high, ranging from a minimum of 10 months to a maximum of 10 years. I show three main results. First, that – controlling for loan unit revenue and for other factors – the ratio of bad debts to total loans is larger for banks having a higher turnover of branch managers. Second, that branch manager turnover rises when either bank size or the length of recovery procedures increases. Third, that – other things being equal – branch manager turnover tends to be lower for savings banks and for cooperative banks.

Building on these findings, in Section 4 I draw some conclusions and general hypotheses. In particular, I argue that high branch manager turnover, even if necessary to solve the moral hazard problem between the branch managers and the bank head offices, can weaken customer relationships and lead to a situation of information under-investment by banks, with a possible adverse impact on their

ability to allocate loans. Three considerations are warranted. The first concerns the positive correlation between branch manager turnover and the length of recovery procedures. Because these are notoriously longer in the South, partly as a consequence of less efficient courts, this may cause information under-investment and worsen financial constraints for borrowers in that area of Italy, where financial constraints are more pervasive. Second, my findings can shed new light on an old question: namely for the theory of intermediation it is difficult to account for small banks coexisting with large banks in spite of the often hypothesized economies of scale. If the moral hazard problem between branch managers and bank head offices worsens as the distance of the head offices from the branch increases, this may yield an advantage for local banks *vis-à-vis* national banks in the form of a managerial diseconomy that could offset the hypothesized economies of scale. The third consideration hinges on the evidence that, other things being equal, branch manager turnover tends to be lower for savings banks and cooperative banks. It is well-known that in these banks directorships also tend to exhibit a lower turnover. Even though low board turnover may cause management problems for the bank, one can conjecture that this may have the beneficial side-effect of allowing better governance of the moral hazard between head offices and branches.

2. Goods and bads of branch manager turnover

Nowadays the theory of intermediation maintains that the fundamental reason for the existence of banks is their contribution to overcoming the asymmetric information problems of borrowers who would not otherwise qualify for funding from external lenders. In the absence of banks such debtors would be forced to abandon even profitable investment projects or start only those for which self-financing suffices.[1] By collecting private information on potential and actual customers, banks specialize to screen worthy borrowers. They therefore perform an important role *vis-à-vis* relatively unknown business borrowers – a role that would prove prohibitively expensive for non-specialists, considering also the adverse selection problems

[1] See Bhattacharya and Thakor (1993).

involved. Furthermore, observing over time borrowers' behavior, banks qualify as efficient agents to monitor that the latter put the funds to good use, thereby relieving their moral hazard. Thus, by gathering information on loan applicants before granting them loans and subsequently, banks perform their main task, namely to make external funds available to such creditworthy borrowers who would otherwise suffer financial constraints. It goes without saying that effective information gathering – preliminary to the efficient allocation of loans – requires long-term customer relationships being established between banks and debtors. An example, referred to data from the USA, is that proposed by Petersen and Rajan (1994 and 1995) and by Berger and Udell (1995). They show that borrowers benefit from closer and longer customer relationships in terms of both the availability and the cost of credit.[2]

An interesting issue, albeit one which still lacks the due attention from researchers, hinges on where and who starts customer relationships and takes care of them and, accordingly, where and who collects private information on debtors. In particular, considering that by and large information is collected and relationships are started at the branch level, the chief responsible for this role should be the branch manager.

A question then is whether the significant customer relationship is not the 'generic' one between the customer and the bank but rather the 'specific' one between the customer and the branch manager who initiates the relationship and/or takes care of it. The latter does indeed appear to be the significant one, considering that credit relationships almost invariably involve some personal, idiosyncratic features bound up with the specific relation between the borrower and the branch manager, features that cannot be handled profitably if at all by the head office. This hypothesis raises a further problem. The fact that the branch manager enjoys an informational advantage on his/her own borrowers *vis-à-vis* the bank head offices generates a moral hazard problem between the two parties. In other words, the branch manager could have an incentive to grant loans at his/her branch beyond the amount that would be optimal for the bank. For example, he/she could pursue his/her own power (empire building) or even personal interests by colluding with unworthy borrowers.

[2] For Italy, Angelini and Guiso (1994) and Angelini, Di Salvo and Ferri (1997), respectively on a sample of medium-sized and large firms and on a sample of small and minor firms, find that the probability of running into liquidity constraints decreases when credit relations are more concentrated.

All bankers are obviously aware of such risk. Banks usually fight it by deploying two different instruments: on-site internal auditing at branches and branch manager turnover. The former has no drawbacks for information gathering on borrowers and for the length of customer relationships. By contrast, branch manager turnover while helping to resolve the moral hazard problem between the head offices and the branch managers reduces and worsens information gathering on borrowers. This is obviously a trade-off between allowing the branch manager a long stay at the same branch, thereby ameliorating information gathering but at the risk that the branch manager will allocate loans to his/her own advantage, and increasing branch manager turnover, thereby solving the moral hazard problem between the head office and branch managers but at the risk of poorer information gathering on borrowers.

The mechanism described by Saraceno (1970) in the opening quotation does not really seem an alternative explanation to the one just proposed. According to Saraceno, high turnover would be 'demanded' by branch managers in order to speed up their own careers. It is not clear, though, what advantage the bank would stand to reap by fostering moves leading to a worsening in the collection of information on borrowers. It is therefore likely that, according to the principle *promoveatur ut amoveatur*, faster careers for branch managers willing to be transferred merely reflect the use of another instrument – an economic incentive rather than a command – in order to resolve the moral hazard problem between head offices and branch managers.

A related question is whether branch manager turnover is higher for large/national banks than for small/local banks. In other words, according to the framework above, does the moral hazard problem between the head office and branch managers worsen with bank size? And, accordingly, should we expect branch manager turnover to be higher for large/national banks than for small/local banks? The answer will likely be yes if we hypothesize that as the distance between the bank head offices and the branch grows either the moral hazard or the costs of curtailing it will increase. For example, according to Banerjee, Besley and Guinnane (1994), and Besley and Coate (1995), owing to *information spillovers*, the members of a local community enjoy an informational advantage *vis-à-vis* external agents in relation to other members of the same community. In our case, for a local bank this would lower the asymmetry in information between

the bank head offices and the branches: generally, the local bank chief executive officer (CEO) is a member of the community. This coexistence within the same local community enables the CEO to monitor branch managers' actions freely or at a negligible cost, thereby attenuating the moral hazard problem.

The last question, linked to the above, pertains to the possible impact of different ownership arrangements – given the bank size – on branch manager turnover. Some ownership structures are likely to deliver a lower rate of turnover than others among the members of a bank's directorship. If, other things being equal, the longer tenure of directors alleviates the governance of the moral hazard problem between the head offices and the branches, the bank may be able to afford lower branch manager turnover. Even though long-lasting directorships may overall be a bad *per se* for the efficient operation of the bank, one cannot rule out that this may be a factor of stability of tenure among branch managers.

Summing up, the above discussion leads us to the following three hypotheses to be empirically tested:

i) provided there is some variability across banks in branch manager turnover, is a longer stay associated with higher efficiency in the allocation of loans?

ii) Is there any foundation to the hypothesis that the bigger the bank the higher the branch manager turnover?

iii) Is it true that, *ceteris paribus*, ownership arrangements that generate greater stability of tenure (a longer stay) at the head office also tend to increase the length of assignment (stay) for the branch managers?

3. Empirical tests

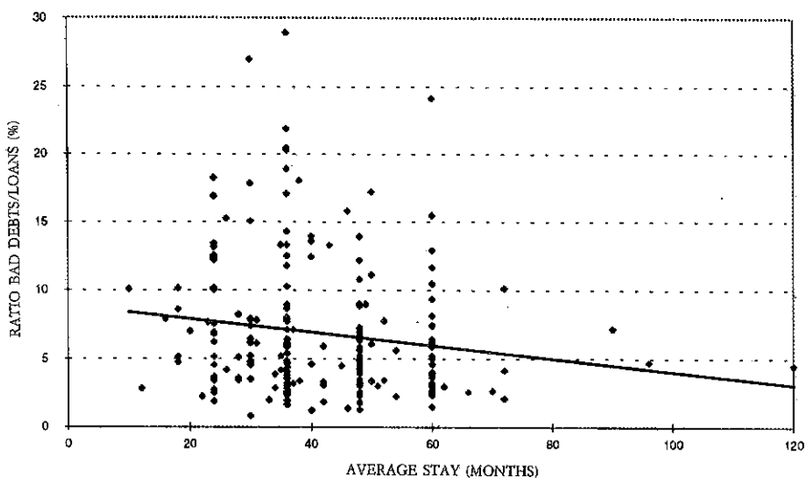
The empirical evidence is based on information on average branch manager stay (tenure) at all Italian banks, except the tiny mutual banks (*casse rurali ed artigiane*, now *banche di credito cooperativo*), collected by means of a questionnaire put to the banks

at the beginning of 1993.[3] I use the evidence in two ways. First I propose a discussion based on graphically presented correlations. Then I present further tests specifying two simple linear regressions aimed at identifying which determinants of efficiency in the allocation of loans and of branch manager stay prove statistically significant.

The preliminary step entails ascertaining that there is some variability across banks in branch manager turnover. The distribution of branch manager stay across banks has a mean close to 3 and a half years (41.6 months) while the mode and median coincide at 3 years; that the variability is sizable is shown by the large standard deviation (15.2 months) and by the large spread between the bank having the minimum stay (10 months) and that with the maximum stay (10 years).

GRAPH 1

AVERAGE STAY OF BRANCH MANAGERS AND RATIO BAD DEBTS/LOANS



Graph 1 provides a first answer to hypothesis *i)*, on the supposed link between branch manager stay and bank efficiency in the allocation of loans. For each bank, the Graph shows on the x-axis the average stay of branch managers against the ratio of bad debts to

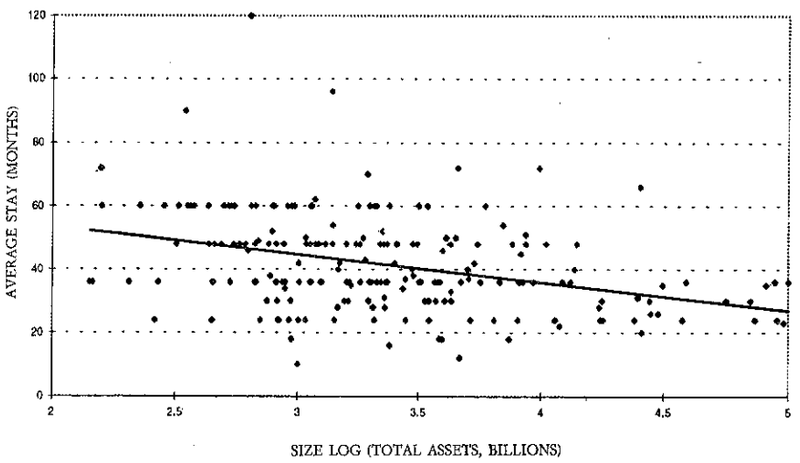
[3] The questionnaire, mainly designed to collect information on banks' involvement in the corporate governance of borrower firms, is reported in the Appendix to Capra *et al.* (1994). Valid answers were 239, but dropped to 208 in the following analysis because, for comparability, I eliminated the banks with fewer than 5 branches.

loans outstanding. Even though this ratio provides an imperfect and lagged measure of efficiency in allocation, its high variability across banks suggests that it is a reasonable proxy for loan quality. The Graph highlights a negative relation, as the negative slope of the interpolating line suggests. Thus, the preliminary evidence lends some support to the hypothesis that high branch manager turnover can cause an information under-investment by banks, resulting in a lower capability to screen and monitor borrowers.

Graph 2 provides preliminary support to the second hypothesis – that branch manager turnover increases with bank size. According to the slope of the interpolating line, branch manager stay decreases from 4 and a half years for the smallest size banks (with total assets of less than 500 billion lire) to a little more than 2 years for the largest banks (with total assets of close to 100,000 billion lire).

GRAPH 2

BANK SIZE AND AVERAGE STAY OF BRANCH MANAGERS

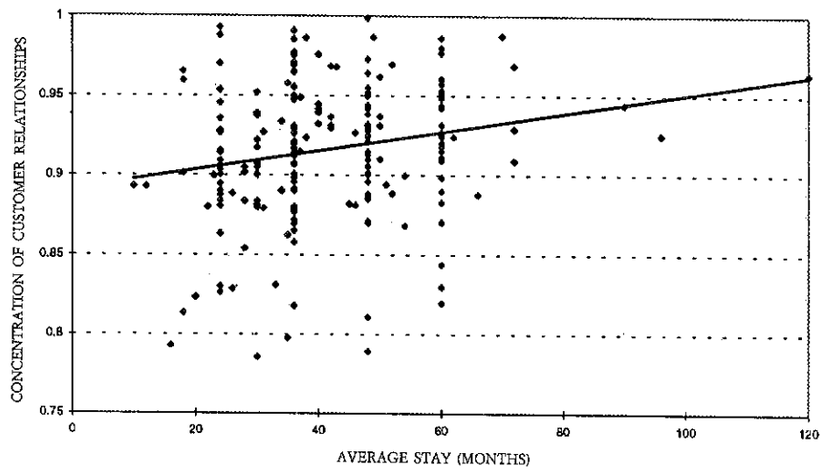


The possible links between branch manager stay and customer relationships warrant some preliminary observations. Customer relationships become closer – thereby helping overcome asymmetric information problems – when they grow more exclusive and/or last longer. On the one hand, for a given duration, the relationship is closer if it is concentrated at one or a small number of banks; on the other hand, given its concentration, it is closer when its duration

increases. These two dimensions of customer relationships can be quantitatively evaluated with a fair degree of approximation by analyzing micro data on bank-firm relations. For this paper, available data allowed me to compute a proxy for the concentration of customer relationships at a single bank. In particular, I used the proxy, suggested by Angeloni *et al.* (1995), computed for each bank as the weighted average, over that bank's borrowers, of the Herfindahl concentration index for individual borrowers across lending banks.[4] The hypothesis here is that longer stay of branch managers could be associated with higher concentration in bank-firm relationships. Graph 3 shows that, indeed, the proxy for concentration of customer relationships increases with branch manager stay.

GRAPH 3

AVERAGE STAY OF BRANCH MANAGERS AND CONCENTRATION OF CUSTOMER RELATIONSHIPS



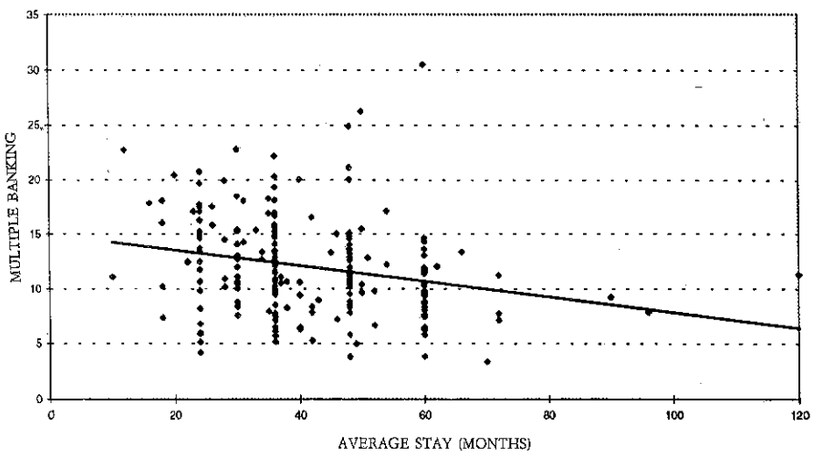
A further observation pertains to the possible link between branch manager turnover and multiple banking, a phenomenon that is likely to undermine individual banks' ability to acquire information

[4] Let L_{ij} be loans granted by bank i to firm j and let L_j be total loans granted by bank i to all firms. The proxy for loan concentration for firm j is the Herfindahl index: $h_j = \Sigma_{i=1}^{m} L_{ij} / (\Sigma_{i=1}^{m} L_{ij})]^2$ where i = 1,2, ..., m lending banks. The concentration index for bank i is then: $H_i = \Sigma_{j=1}^{n} q_{ij} h_j$ where j = 1, ..., n are all bank i borrowers and $q_{ij} = L_{ij} / L_i$ is the share of loans to customer j on total loans by bank i.

on borrowers. For example, according to Detragiache, Garella and Guiso (1996), multiple banking is a deliberate policy choice of firms which seek to borrow from a variety of banks in order to reduce the risk of being caught short of liquidity if any bank refuses to renew or increase its credit. Ruling out bank crises, branch manager turnover may be the single most important factor augmenting the firm's expectation that the bank could become less willing to grant it credit. Thus, if this hypothesis is warranted, we should observe multiple banking grow as branch manager turnover increases. And, indeed, Graph 4 displays a negative correlation between the two variables.[5] More specifically, going from banks with the highest branch manager turnover to those having the lowest, the average number of banks for any lira borrowed by the average customer falls by one half.

GRAPH 4

AVERAGE STAY OF BRANCH MANAGERS AND MULTIPLE BANKING



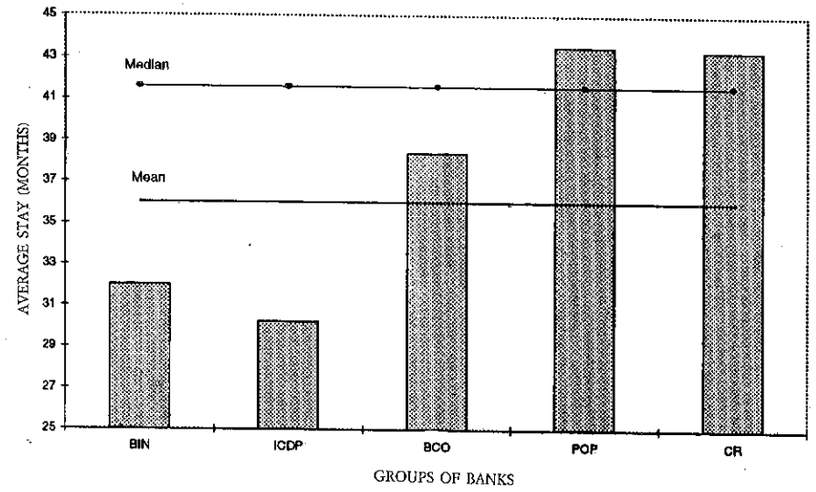
We come now to the third hypothesis: that, *ceteris paribus*, ownership arrangements that lower the bank directors' turnover are associated with a longer stay for the branch managers as well. In this

[5] Analogously to the previous index, let L_{ij} be loans granted by bank i to firm j and let L_i be total loans granted by bank i to all firms. If for firm j the number of lending banks is nb_j, the multiple banking index for bank i is given by: $NB_i = \Sigma_{j=1}^{n} q_{ij}\, nb_j$ where j = 1, ..., n are all bank i borrowers and $q_{ij} = L_{ij}/L_i$ is the share of loans to customer j on total loans by bank i.

respect, Graph 5 reports the mean branch manager stay for the various institutional groups of banks. Public law banks (ICDPs) and banks of national interest (BINs) show the minimum stay (respectively 30.2 and 32 months); ordinary banks (BCOs) exhibit an intermediate value (38.4 months); cooperative banks (POPs) and savings banks (CRs) show the longest (respectively 43.5 and 43.3 months). Thus, the stay for BINs and ICDPs lies below the average; that for BCOs lies between the mean and the median; that for POPs and CRs is above the median. One needs to stress that Graph 5 offers only preliminary evidence considering that, as Graph 2 shows, branch manager stay is inversely related to bank size and it is well known that BINs and ICDPs comprise the largest banks while POPs and CRs, alongside some large banks, include the smallest. Clearly, there is a need for a more refined statistical analysis by means of regressions.

GRAPH 5

AVERAGE STAY OF BRANCH MANAGERS BY GROUP OF BANKS



In the second part of the empirical analysis I present the estimates of two regression equations: the first is designed to identify the possible benefits from branch manager stay, the other the determinants of stay. Thus, the first regression wants to test whether or not the negative link between branch manager stay and the ratio of bad

debts to loans outstanding is robust controlling for other features of the bank. In particular, I specify the equation as follows:[6]

$$BADL = \alpha + \beta_1^*LSTAY + \beta_2^*RLOA + \beta_3^*LOAS + \beta_4^*LOABOR + \beta_5^*HERF + \beta_6^*LOLI + \beta_7^*DUMEZ + \varepsilon \quad (1)$$

where, for each bank, *BADL* is the ratio of bad debts to loans; *LSTAY* is the logarithm of the average stay of the branch managers; *RLOA* is the unit revenue on loans; *LOAS* is the ratio of loans to total assets; *LOABOR* is the average loan (ratio of total loans to the number of borrowers); *HERF* is the proxy for concentration of customer relations for the bank described above; *LOLI* is the ratio of loans to credit lines; *DUMEZ* is a dummy variable whose value is set at one for banks with head offices in the Mezzogiorno (Southern Italy and the two main islands).

The basic idea for this specification is that, assuming risk neutrality, each bank chooses its own risk-return parameter and we must control for this choice when evaluating the lending efficiency of the bank. Thus, if *BADL* is higher for bank A than for bank B, it would be wrong to jump to the conclusion that bank A is less efficient before controlling whether or not the larger *BADL* is entirely justified by higher unit revenue on loans: the expected sign for *RLOA* is therefore positive. Branch manager stay is included in the regression in logarithms *(LSTAY)* in order to control for non-linearity in its relation with *BADL*: its expected sign is negative. The inclusion of *LOAS* is designed to control for the likely impact on bank lending efficiency stemming from the bank's specialization; it is possible that efficiency is higher for banks which have a larger share of assets in the form of loans: the expected sign of *LOAS* is negative. *LOABOR* aims to consider another type of specialization in lending; a high *LOABOR* presumably identifies banks which tend to lend to large borrowers, who are generally characterized by lower risk of default: the expected sign is negative (Angeloni *et al.* 1995). For *HERF* too the expected sign is negative: other things being equal, closer customer relationships should allow a better allocation of loans. Instead it is not clear which sign we should expect for *LOLI*. On the one hand, a high *LOLI* could identify banks able to enforce a better correlation between credit lines and customers' actual demand for credit, hence

[6] All variables included in the two regressions are measured as of the end of 1992.

banks paying more attention to the management of liquidity and credit risks. On the other hand, though, a high *LOLI* could identify banks lending to riskier borrowers, whose drawings are regularly close to the ceiling. Finally, the expected sign for *DUMEZ* is positive since Southern banks lend to an economy that is more fragile and structurally characterized by higher bad debts and because lending efficiency is generally lower for these banks (Faini, Galli and Giannini 1992).

The second equation aims to test more formally the hypothesized negative relation between bank size and branch manager stay as well as checking whether, given the bank size, different ownership arrangements have an impact on branch manager stay. In particular, I specify the equation as follows:

$$STAY = \alpha + \beta_1^*LEMP + \beta_2^*BRA2 + \beta_3^*RECOV + \beta_4^*DUPOP + \beta_5^*DUCR + \eta \quad (2)$$

where, for each bank, *STAY* is the average stay of the branch managers; *LEMP* is the logarithm of the number of employees; BRA2 is the number of branches squared; *RECOV* is the average time for credit recoveries in the geographic area to which the bank belongs; *DUPOP* and *DUCR* are dummy variables, respectively for cooperative banks and for savings banks.

On the basis of Graph 2 we expect to find a negative relation between bank size and branch manager stay. Considering that such a relation might be non-linear, I include the logarithm of the number of employees and also the quadratic term referred to the number of branches.[7] As the time needed for credit recovery lengthens, this increases the cost for banks associated with a given instance of misconduct by the branch managers: therefore we should expect branch manager stay to be inversely related to *RECOV* which, as Generale and Gobbi (1996) show, differs widely across areas. *DUPOP* and *DUCR* test whether, for a given bank size, branch manager stay is longer for these banks. In fact, if it is true – according to hypothesis *iii)* – that lower turnover of a bank's directors may assist governance of the moral hazard between the head office and the branch managers, the expectation of a longer branch manager stay for cooperative

[7] For bank size I tried total assets, the number of branches and the number of employees; the last shows a stronger relation, but results do not qualitatively change when it is replaced by either of the other two variables.

banks is warranted. De Bonis, Manzone and Trento (1994) maintain that turnover of directors is quite low at cooperative banks. Even though I am not aware of published results, cursory evidence leads me to believe that such turnover is quite low at savings banks as well.[8]

Results for the two regressions are reported in Table 1. The expected signs of the variables included are confirmed for both regressions. In particular, the findings for the first equation show that branch manager stay is negatively related to loan quality when average loan revenue, location of the head office (North and Centre vs. South) and the other variables designed to control for bank specialization are equal. As expected, average loan revenue is higher when loan quality is worse. Loan quality improves as the bank assigns more assets to loans (high *LOAS*), as the bank specializes its lending to medium-large borrowers (high *LOABOR*), as the bank maintains closer customer relationships (high *HERF*).

The ratio of loans to credit lines exhibits a positive sign, even though its relation to *BADL* is only weakly significant. This indicates that high values of *LOLI* are associated with banks lending to riskier borrowers, who structurally borrow close to the limit of their credit lines. The results for the geographic area dummy also conform to expectations. Other variables being equal, the banks with their head offices quarters in the Mezzogiorno show a higher bad debts/loans ratio. It is impossible on the basis of the present analysis to tell to what extent this reflects the unfavourable geographic bias of their loan portfolios or instead is attributable to their lower lending efficiency. Finally, it is worth noting the high R^2 considering that this is a cross section estimate.

The results from the second estimated equation conform to expectations as well, even though the goodness of fit is much lower. The average stay of the branch managers falls as bank size increases, as the importance of *LEMP* highlights. The positive sign for the quadratic term confirms that the relation is non-linear. Also, the negative relation between branch manager stay and the time required to complete recovery procedures in the area in which the bank head offices are located is quite strong. Lastly, with reference to the hypothesis that, as a result of a lower turnover of board member *vis-à-vis* the other banks, cooperative banks and savings banks might exhibit lower turnover of the branch managers, the relation is weak: for both bank groups the sign is positive, as expected, but the relation is significant at the usual levels only for savings banks.

[8] Referring to the tiny *banche di credito cooperativo*, here excluded, Andreozzi *et al.* (1996) estimate the average stay of board members to be close to 10 years; the authors believe this stay to be high *vis-à-vis* the other banks.

TABLE 1

DETERMINANTS OF LENDING EFFICIENCY AND OF BRANCH MANAGER STAY[a]

Variable	Estimated coefficient	White's *t*-statistics
Lending efficiency		
α	0.155	2.3**
LSTAY	–0.015	–2.8***
RLOA	0.589	4.1***
LOAS	–0.102	–2.6***
LOABOR	–0.400	–4.7***
HERF	–0.118	–1.8**
LOLI	0.058	1.5*
DUMEZ	0.048	5.5***
No. of observations	208	
R^2	0.61	
adjusted R^2	0.59	
Branch manager stay		
α	109.50	8.6***
LEMP	–5.62	–6.1***
BRA2	2.0e-5	3.1***
RECOV	–59.48	–3.6***
DUPOP	2.96	1.2
DUCR	4.03	1.7**
No. of observations	208	
R^2	0.21	
adjusted R^2	0.19	

[a] Significance levels at which null hypothesis that the coefficient is zero can be rejected are respectively labeled with: * (10%), ** (5%), and *** (1%). Results of the regressions do not change when the 12 outliers of banks with manager stay shorter than 18 months or longer than 60 months are excluded.

4. Some conclusions

I now sum up the discussion and the evidence presented and venture some conclusions. First I have argued that the theory of bank intermediation – locating the *raison d'être* for banks in the use they make of private relationships with customers in order to overcome asymmetric information problems – requires analyses, still to be undertaken, on how the division of responsibilities between the head office and branch managers may have an impact on bank lending efficiency. In particular, since information on borrowers is collected by the branch managers, branch manager turnover could interfere with this function and impair lending efficiency. Indeed, the empirical results shown support this hypothesis. I have shown that, controlling for other factors, the ability of banks to allocate loans worsens as branch manager stay (tenure) decreases. Furthermore, as branch manager turnover increases customer relationships weaken.

The question then arises: why do banks frequently move managers among branches if this has a negative impact on their lending efficiency? The most plausible answer we found is that banks face a trade-off. The longer the manager stays in a branch the more he/she gains an informational advantage on his/her own borrowers *vis-à-vis* the head office. In turn, this raises a moral hazard problem: the branch manager could exploit this advantage to pursue his/her personal projects (empire building) in conflict with the bank. It is in order to curtail such risk that banks move the branch managers. There is a clear trade-off between allowing the branch manager a long stay at the same branch, thereby ameliorating information gathering but at the risk that the branch manager may allocate loans to his/her own advantage, and increasing branch manager turnover, thereby solving the moral hazard problem between the head office and branch manager but at the risk of worsening information gathering on debtors. This explanation is more convincing than the one suggested by Saraceno in the opening quotation, i.e. that branch managers "demand" their own turnover since faster careers imply higher turnover.

A second question pertains to the determinants of the sizable variability in branch manager stay across banks (from a minimum of 10 months to a maximum of 10 years) and to whether Saraceno is right in asserting that tenure is shorter for large/national banks than

for small/local banks. The answer is positive in light of the evidence reported. An additional factor, besides bank size, heightening branch manager turnover is the length of time needed to complete loan recovery procedures. These two factors deserve further attention.

In particular, the magnitude of the moral hazard between the branch manager and the bank could increase as the distance between the branch and the bank headquarters increases. This is likely to be the case if, as some authors argue, owing to information spillovers, the members of a local community enjoy an informational advantage *vis-à-vis* external agents in relation to other members of the same community. In our case, for a local bank this would reduce the asymmetry in information between the bank head offices and the branches, thereby attenuating the moral hazard problem. These findings can shed new light on an old question: namely the difficulty for the theory of intermediation to account for small banks coexisting with large ones in spite of the often hypothesized economies of scale. If the moral hazard problem between the branch managers and bank head offices worsens as the distance of the head offices from the branch increases, this may give rise to an advantage for local banks *vis-à-vis* national banks, a managerial diseconomy that might offset the hypothesized economies of scale.[9]

The evidence that branch manager turnover is positively related to the length of recovery procedures seems justified considering that the longer these procedures the higher the costs to the bank in the face of the same instance of misconduct by the branch manager. The time required for recovery procedures, however, is largely out of the bank's control and depends mainly on the exogenous efficiency of the courts. Since such efficiency is notoriously lower in the South, this element triggers high branch manager turnover in that region. In turn, this can cause information under-investment on borrowers precisely in the part of Italy where, given the fragile economy and the high risk of default, the most effective screening of good from bad projects would be needed. In this regard, the causal chain going from a low efficiency of the courts to high branch manager turnover to information under-investment can help explain the often observed fact that financial constraints are more pervasive in the Mezzogiorno than in the rest of Italy.

[9] Nakamura (1993) puts forward the hypothesis that large banks bear managerial diseconomies.

The last consideration hinges on the evidence that, other things being equal, branch manager turnover tends to be lower for savings banks and cooperative banks. It is indeed well-known that these banks also tend to exhibit lower turnover of directors. Even though low board turnover may cause management problems for the bank, it could have the positive side-effect of allowing better governance of the moral hazard between the headquarters and the branches. However, the empirical evidence is inconclusive: the hypothesized relation stands statistical scrutiny only for savings banks.

Two prescriptions emerge from the analysis. First, making courts more efficient in terms of the length of recovery procedures lessens the moral hazard between bank headquarters and the branch managers by reducing the excessive turnover and the information underinvestment. This could lower liquidity constraints particularly in the Mezzogiorno. Second, incentives could be given to banks to use other means than turnover to offset the moral hazard *vis-à-vis* branch managers. Probably the most effective alternative is periodical on-site internal auditing, which can greatly reduce the information asymmetry from which the moral hazard originates. This enables banks to refrain from excessive turnover, increase their information investments and improve their lending efficiency.

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