

Female Managers in Hybrid Organizations: Evidence from Financial Cooperatives in Senegal

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Financial cooperatives are hybrid organizations combining banking activities with democratic governance.¹ The tension between social and financial objectives makes financial cooperatives fertile ground for examining the behavior of women in leadership positions.

Female leaders are known to differ from men in their management style. They adopt a more participative and less directive style than their male counterparts (Eagley and Johnson, 1990). However, precisely how female top managers influence profits or social performance remains poorly elucidated, let alone situations where the two bottom lines

clash. We bridge this gap by exploiting a detailed database compiled from a large network of financial cooperatives in Senegal.

The situation of women in Senegal compares favorably to the rest of the developing world (Deaton, 1997). Senegalese women typically control their own incomes (Howson, 2013) while remaining subordinated to men. They increasingly engage in economic activities,² mainly small businesses. Despite these favorable developments, women in Senegal still face customary patriarchal norms, which exclude them from access to both property and formal financial services (Guérin, 2006). To overcome this issue, the Senegalese government introduced in 1983 a specific legal status for cooperatives to democratize their structure and empower female members. As a result, a new generation of financial cooperatives has come into being. The cooperatives studied in this paper belong to the new generation.

¹ See Jones and Kalmi (2009) for a worldwide survey on the cooperative sector.

² The situation varies across ethnic groups. Women from originally nomadic groups, such as Peulh and Hall Peular, tend to have fewer responsibilities than those from Wolof and Serere groups (Creevey, 1991).

I. Data and Descriptive Statistics

Senegal's Union des Mutuelles du Partenariat pour la Mobilisation de l'Épargne et du Crédit au Sénégal (UM-PAMECAS) is a network of 36 local cooperatives (LCs) grouped under the authority of a central union (CU). In May 2010, the network was serving a total of 406,667 members, of whom 53% were women. UM-PAMECAS exhibits a strong concern for female participation (Tall Ba and Cissé, 2009).

The governance structure of the network rests upon a subtle mix of centralization and decentralization. Each LC has an elected board composed of nine directors. LC boards set local strategic policies. However, human resources are managed at CU level for the whole network. The entire LC staff is hired and dispatched by the CU, which, in particular, sends a top manager to each LC. This paper examines whether—and if so how—the managers' attitudes in loan granting depends on their gender.

The loan-granting methodology adopted by UM-PAMECAS is in line with that of the bulk of the microfinance industry, which typically supplies standardized short-to-medium-term loans with fixed interest rates and rigid repayment schedules (Armendariz and Morduch, 2010). The loan-granting decisions

are made jointly by the LC board and the manager. The LC board logically prioritizes the satisfaction of its membership while the CU is more concerned with the profitability of the network. Since the charged interest rate is fixed, small loans are less profitable than large ones, all other things equal. Hence, profitability dictates granting larger loans while the LC board's interests may vary according to its membership.

Our dataset is made up of an unbalanced panel of 1,158 monthly observations (36 LCs over 42 months) over the period stretching from December 2006 to May 2010.³ For each loan, we observe the gender of the borrower and the loan size. On average, the loans granted to female borrowers are nearly half the size of those granted to their male counterparts. The gender-blind average loan size is EUR 692,⁴ while the gender-sensitive averages are EUR 515 and EUR 1,025 for women and men, respectively.

The descriptive statistics disaggregated by the manager's gender (Table 1, Panel A) deliver a picture that seems to contradict the literature consensus that female managers are

³ Altogether, the 36 LCs have granted 210,922 loans over the period under study. We have taken out the few group loans and those for which the sex of the borrower is unclear, leaving us with a total of 199,334 loans.

⁴ The average loan size represents 0.5% of the PPP Senegalese GNI per capita in 2010 (WBI, 2011). For readability, we express all monetary figures in euros (EUR). The local currency is the CFA franc (CFAF), the common currency of all member states of the West-African Economic and Monetary Union. CFAF has a fixed exchange rate against the euro (EUR 1 = CFAF 655.957).

more socially oriented than their male counterparts. Compared with males, female managers are associated with fewer loans to women and higher loan sizes.

Loan allocation also depends on the board composition. Panel B in Table 1 shows that LCs with female-dominated boards, i.e. with at least 50% female members, serve more women. But the average loan size is only slightly affected by the make-up of the board. Logically, female-dominated boards are more likely to be found in LCs with more female members.

[Insert Table 1 Here]

The figures from Table 1 reveal that the relationship between the managers' gender and the percentage of female board members is not random. A Pearson independence test confirms that female managers are significantly more frequently associated with male-dominated boards, and vice versa ($p < 0.01$). This result suggests that the CU makes strategic staff allocations and preferably sends male managers to LCs with female-dominated boards. While the CU hardly influences the board composition, it fully controls the allocation of managers. Hence, we interpret the outcome of the independence test as evidence that the CU management aims to

curb social biases, which might hinder the consolidated financial situation of the network. Further econometric analysis is needed to disentangle the actions of the manager and the LC board.

II. Gender and Social Performances

In the regressions reported in Table 2, we explain two social performances. First, we consider the share of loans allocated to women, which may capture some kind of "gender affinity" rather than pure social orientation. Second, we concentrate on average loan size, which is the typical proxy for depth of outreach and is directly linked to poverty alleviation. The two performances are intertwined since women are poorer than men on average.

For each explained variable, we estimate two specifications. In the first, the explanatory variables include two gender dummies: one for the manager, the other for board dominance. In the second specification, we add the interaction between the two dummies. In all equations, the control variables include the percentage of female members and the LC size proxied by total asset.

[Insert Table 2 Here]

We use random-effect panel estimation.⁵ Regression (1) in Table 2 shows that the share of loans granted to women is not significantly affected by the manager's gender. In line with Agier and Szafarz (2013), we rule out the "gender affinity" hypothesis for the manager. In contrast, female-dominated boards significantly increase the share of loans granted to women. Regression (2) shows that the average loan size to female borrowers is hardly affected by gender-specific variables. Together, the results from regressions (1) and (2) suggest that the differences found in Table 1 are mainly attributable to external shocks captured through year dummies.

Regressions (3) and (4) include an interaction term to account for the dependency between the manager's gender and gender dominance in the board. Regression (3) simply confirms the findings from regression (1). More interestingly, the significant and highly negative loading of the interaction term in regression (4) resolves the apparent puzzle detected from the descriptive statistics. Apparently, female managers favor larger loans only when associated with male-

dominated boards. In contrast, when the board is female-dominated, the effect is reversed; female managers associated with female-dominated boards grant significantly smaller loans than do their male colleagues under the same circumstances.⁶

The results underline that female managers follow the preferences of the majority of board members they work with. Instead of exclusively pursuing the financial objective of the CU that appoints them, female managers follow the policy rules of their local boards. An alternative explanation could be that female managers are powerless when associated with a male-dominated board. But this scenario is inconsistent with the facts. Indeed, female managers associated with male-dominated boards grant significantly larger loan sizes than male managers associated with male-dominated boards. Female managers are thus efficient in their work but they align their objectives on those of their local boards. In contrast, the figures corresponding to male managers are insensitive to FC board composition.

⁵ The random-effect method moderates the number of parameters to be estimated and makes it possible to identify time invariant variables. We run two-way random-effects estimation, which account for regressor variations over time within each LC and over LCs within each period. We use robust estimation to account for potential cross-sectional heteroskedasticity and serial correlation. In addition, we run Hausman (1978) tests to assess the random-effect specification.

⁶ Additional results (not reported here) show that 33% of female board members is an insufficient proportion to produce a significant impact. This confirms that majorities matter for corporate control (Chapelle and Szafarz, 2005).

III. Conclusion

Taking advantage of the double bottom-line of financial cooperatives makes it possible to identify the line of action followed by female top managers. The main finding of this paper is that female managers behave in accordance with local authorities even though their hierarchy is located at the central level. This, in turn, could explain why the central authority is tempted to send female managers to LCs with male-dominated boards, which are more rigid on financial discipline. Hence, sending female managers to places where men are in the majority on the board is a way to push these managers to serve the CU's best interests.

The literature provides several rationales for the behavioral evidence detected in this paper. Sturges (1999) observes that female managers are less inclined than men to define career success in terms of promotion. Female managers adopt a participative style and use their relational skills (Buttner, 2001). When they depart from this gender role model and opt for a more confrontational leadership style, they are judged more severely than their male colleagues (Korabik *et al.*, 1993; Eagly and Karau, 2002). All these arguments could explain why female managers refrain from hurting the feelings of local board members

even though the latter have barely any impact on their careers.

Our findings partly contradict the common wisdom according to which women are systematically more socially oriented than men under similar circumstances. While female-dominated boards enhance social loan allocation policies, female managers associated with male-dominated boards do not mitigate the financial discipline imposed by the board. In fact, they reinforce it.

Worldwide non-profit and hybrid organizations are typically less reluctant than for-profits to hire female top managers (Lyon, and Humbert, 2012). The sector is also known for producing higher job satisfaction than for-profit firms (Benz, 2005). So far, these two features have been observed independently. Possibly, they are linked. The female managers' tendency to behave consensually can indeed contribute to enhancing overall satisfaction not only among co-workers but also among members of governing bodies.

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TABLE 1— DESCRIPTIVE STATISTICS: MANAGER’S GENDER AND GENDER DOMINANCE IN THE BOARD

	Panel A: Manager’s gender		Panel B: Gender dominance in the board	
	Female (N = 428)	Male (N = 730)	Female (N = 241)	Male (N = 917)
Percent of Female borrowers	64	65**	68	64***
Average loan size	754	655***	671	697*
Percent of Female managers			27	39***
Percent of Female members	50	54***	56	51***
Total asset (in EUR 1,000)	1570	1542	1898	1462***

Notes: The stars report the results of t-tests for equal means between female and male managers/boards.

*** Significant at the 1 percent level.

** Significant at the 5 percent level.

* Significant at the 10 percent level.

TABLE 2 — SOCIAL PERFORMANCES: ROBUST RANDOM-EFFECT ESTIMATION

	(1)	(2)	(3)	(4)
	Percent of Female borrowers	Average loan size	Percent of Female borrowers	Average loan size
Female manager	-0.0130 (0.0116)	8.088 (27.81)	-0.0242 (0.0154)	70.77** (32.77)
Female manager * Female-dominated board			0.0260 (0.0184)	-148.7*** (34.73)
Female-dominated board	0.0220*** (0.00613)	-24.26 (25.38)	0.0197*** (0.00604)	-9.683 (21.65)
Percent of Female members	0.0643 (0.0928)	-277.9* (156.8)	0.0622 (0.0921)	-246.8 (156.2)
Total asset	0.000007 (0.00001)	0.0578 (0.0412)	0.000004 (0.00001)	0.0721** (0.0359)
Year	Yes	Yes	Yes	Yes
Constant	0.633*** (0.0514)	732.1*** (105.4)	0.642*** (0.0519)	672.0*** (104.7)
Statistics				
N	1,158	1,158	1,158	1,158
Wald χ^2	177.82***	34.36***	161.85***	124.28***
R ² -Within	0.107	0.0153	0.110	0.0199
R ² -Between	0.186	0.282	0.137	0.288
Hausman Test				
χ^2	3.48	8.93	5.58	11.19
P value	0.75	0.18	0.59	0.13

Notes: Results are from Random-effect panel data regressions. Robust standard errors reported in parentheses. *Female Manager* is a dummy variable taking value 1 if the manager is female, and 0 otherwise. *Female Board* is a dummy variable taking value 1 if the board includes at least 50% of women, and 0 otherwise.

*** Significant at the 1 percent level.

** Significant at the 5 percent level.

* Significant at the 10 percent level.