## 7 Conclusion

This thesis depicts the importance of the credit officers in loan mechanisms, a concern poorly studied in the literature. Results are based on a microcredit database but conclusions refer to credit market more generally. In the first part, thanks to a structural model, we uncover a substantial heterogeneity among credit officers in loan performance especially on the selection process. Experience gained at Vivacred is positively related with the estimated ability, while the previous experience is not. Even though the institution developed its own methodology, the credit officer benefits from a sizable autonomy. This first result underlines the pertinence of an adapted human resources policy.

Client-officer relationship may have a geographical dimention. If officers live close to their clients, they can have private knowledge of loan applicants. Thus, they can better assess the viability of a given project, and oversee a successful implementation when funding is granted. However, the officer may also be tempted to give an easier access to loans to his neighbors or friends. This would be a typical agency problem (Jensen & Meckling (1976)). Geographical proximity does indeed constitute one aspect of the affinities between individuals (Hogg & Terry (2000); Garcia & Ybarra (2007)) that could interestingly complete the first part of this thesis.

The downside of credit officers' autonomy is a disparate treatment towards women. Even if women benefit from a fair access to credit (approval), they receive smaller amounts than male applicants. This gender-gap is only partially attributable to the fact that female applicant tend to ask for smaller loans. The remaining loan size differential is mainly due to the credit officers' recommendation made to the committee. Moreover, this gender-gap is not justified economically as female clients repay better than their male counterparts even controlling for their extra income and the size of the loans they receive. This result is not tampered by relationship length nor when considering the gender of other people committed to the loan (guarantor, spouse). Thus, we conclude that the usual argument that women receive less because they are

poorer is actually hiding a more complex reality.

Women suffer from loan downsizing, especially when they apply for financing for larger projects. This finding is rationalized by a theoretical model à la Becker where the lender behavior depends on the scale of its dislike. Additionally, evidence does not support a "gender affinity" hypothesis between female client and credit officer in general. Compared to male credit officers, female ones tend to reduce the client gender-gap for small projects only. Considering larger loans, female officers penalize more female borrowers than their male counterparts. Financial psychology (Borghans et al. (2009)) provides a convincing explanation showing that women are more risk adverse both in their personal and professional life.

Although data are collected from 1997 to 2007, the dynamic aspects are not examined in this thesis. The period of study covers the institution's creation, and its first decade of maturation. Thus, it would be reasonable to imagine that credit officers' autonomy was diminished over time as the methodology became more refined. Some elements of change over time are scattered out this thesis. First, loan size regressions by period uncover a reduction in gender-gap magnitude between 1997-2004 and 2005-2007. Second, over the years, descriptive statistics reveal a rise in the proportion of women among applicants. Female proportion is both increasingly larger in the oldest branches and larger (since the begining) among newest branches. Third, credit officers' ability is positively related to specific experience acquired in Vivacred. This can be explained either by a learning-by-doing process, or simply because the more efficient credit officers stay longer in the institution. All theses dimensions of a dynamic process should be studied in more details.

Difference of behavior between genders remains an open topic. First, why do women ask for smaller loans, even controlling for business size and sector (this difference of requirement increasing with the renewal)? Risk aversion and anticipation of downsizing (choosing smaller project) are both plausible explanations. Second, why are women better at repaying loans of comparable size? Some hypotheses are as follows: the fear from threats made by credit officers; a greater valorisation of the relationship with the institution; a potentially higher profitability of their businesses. All those questions could be addressed by complementary qualitative research.