



**HAL**  
open science

## A model of adaptive relationship between the entrepreneur and the bank

Julien Cadot, Jean-Pierre Couderc, . Association Française de Finance

### ► To cite this version:

Julien Cadot, Jean-Pierre Couderc, . Association Française de Finance. A model of adaptive relationship between the entrepreneur and the bank. AFFI 2007. Congrès international: Ethique et Gouvernance, Jun 2007, Bordeaux, France. 15 p. hal-02814817

**HAL Id: hal-02814817**

**<https://hal.inrae.fr/hal-02814817>**

Submitted on 6 Jun 2020

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

## **A model of adaptive relationship between the entrepreneur and the bank**

French Finance Association (AFFI) Annual Meeting  
JUNE 27, 28 & 29, 2007, Bordeaux, France

Cadot Julien<sup>1</sup>, PhD Student, University of Montpellier (corresponding author)  
Couderc Jean-Pierre<sup>2</sup>, Assistant Professor, Sup'Agro Montpellier

**Abstract:** In this paper, we present the relationship between the bank and the entrepreneur as an adaptive relationship. We fit the Myers' model of underinvestment (Myers (1977)) to a multi-period model and introduce the concepts of bargaining power and reputation. In the model, the project value, for the entrepreneur, is directly linked to his bargaining power over the banker through both the managerial slack and the property rights that the banker will accept to leave. As reputation interacts with bargaining power and property rights, the entrepreneur can undertake a sub-optimal investment in the first period if he expects that this can increase his probability to benefit from a reputation effect in the second round of investment and thus optimize the investment process. This model of bank-entrepreneur relationship is relevant for small scale business with high capitalistic intensity and therefore highly leveraged. Results plead for a special place of the entrepreneurship finance in the commercial bank and the irrelevance of credit scoring approaches for this type of business.

**Résumé :** Dans cette contribution, nous proposons de modéliser la relation entre la banque et l'entrepreneur à partir du modèle de sous-investissement de Myers (1977). Nous y introduisons les concepts de pouvoir de négociation et de réputation, qui ont un impact direct sur la valeur du projet, du point de vue de l'entrepreneur, puisqu'ils conditionnent ses droits de propriété sur la rente et les actifs du projet. Cependant, comme la construction de la réputation est étroitement liée à son pouvoir de négociation, l'entrepreneur peut accepter de « gager » une part importante de ces droits de propriété sur le projet au moment d'initier le processus d'investissement. Dans ce cas, la perte de valeur initiale peut être compensée par une probabilité plus élevée de bénéficier d'un effet de réputation. La banque sera alors prête à accompagner l'entrepreneur sur des projets plus complexes et impliquant des investissements plus lourds. Elle a de cette façon un rôle direct dans le processus de création de valeur. Le modèle s'applique aux projets d'entreprises caractérisées par une intensité capitalistique et un endettement élevée. Il plaide pour que les banques accordent une place spéciale au financement de l'entrepreneuriat et qu'elles prennent en compte la non-pertinence d'une approche standardisée, de type credit-scoring, dans le contexte entrepreneurial.

---

<sup>1</sup> Doctorant UMR MOISA/CR2M, bât. 26, Sup'Agro, 2 place Pierre Viala 34060 Montpellier, [cadot@supagro.inra.fr](mailto:cadot@supagro.inra.fr), [33] 04 99 61 23 99

<sup>2</sup> UMR MOISA, bât. 26, Sup'Agro, 2 place Pierre Viala 34060 Montpellier, [couderjp@supagro.inra.fr](mailto:couderjp@supagro.inra.fr), [33] 04 99 61 28 67

## 1. Introduction

Does credit rationing exist? According to some recent theoretical and empirical works the answer is no (see De Meza (2002) and Parker (2002)), although Stiglitz and Weiss (1981) showed that information asymmetry between the entrepreneur and the banker should imply credit rationing. This occurs when the bank has no other choice than arbitrarily excluding some entrepreneurs from the bank financing. Contrary to this conflicting approach of the bank-entrepreneur relationship, here we argue for an adaptive investment and bank financing process. In our setting, project value, bargaining power and reputation act as incentives to reorient the investment process, and ultimately match the project complexity to the entrepreneur's competencies.

This research follows a field study we conducted for *Crédit Agricole* (the largest French bank involved in the agricultural sector) on the "vineyards entrepreneurs", i.e. those starting their own business. In the well-known context of wine crisis, the bank question was: who succeeds, who fails and why? The study relied on extensive information about 272 vineyards entrepreneurs spread in the main French wine production regions. In contradiction with common ideas, there are no simple criteria to predict success or failure of vineyards succession, acquisition or creation. For example, the proportion of failure (measured by repayment delay and negative annual mean current account) for acquisition and creation is not larger than for succession. In fact, the study is showing that there is an adjustment of the financial structure on return, leading to an almost perfect risk-return trade-off. As we observe that the investment process following the business starting-point seems rather long (in our sample, only 58% of the project investments are engaged the first year, on average), the hypothesis is that the bank will implement a financing contract which leads the entrepreneur to adapt the investment process to the "state of affair". Instead of a classical credit rationing, this adaptive relationship would stem from incentives specific to the banking relationship.

Some empirical evidences would support this view of the banking relationship in the whole agricultural sector. Indeed, for Barry and Robison (2001) some specificities of the agricultural firms - exposure to natural and food-specific market risks, high capital intensity, small-scale and family nature of the business, and therefore highly leveraged – make a close-ties relationship between the banker and the entrepreneur efficient. Hence, instead of a conflicting relationship, such as it is implied by the hypothesis of credit rationing, we observe an alignment of preferences.

In order to design the model, we start from the Myers' model of underinvestment (Myers (1977)) and add the concepts of bargaining power and reputation (Diamond (1991) (1) and Diamond (1991) (2)). In our view, the project value, for the entrepreneur, is directly linked to his bargaining power over the banker through both the managerial slack (Charreaux and Desbrières (1998), Myers and Majluf (1984) or Diamond (1991)) and the property rights that the banker will accept to leave him. The banker acts on the managerial slack through limiting long term debt and thus increasing liquidity risks. Moreover, he holds property rights on the project through guarantees. But because reputation interacts with bargaining power and property rights (liquidity risks and guarantees are information productive), the entrepreneur

can undertake a sub-optimal investment in the first period if he expects a positive effect of reputation in the second period, i.e. in the second stage of the investment process.

Note that this model of bank-entrepreneur relationship is particularly relevant for small scale business with high capitalistic intensity, high leverage and a certain level uncertainty, the agricultural firm typically consisting of these characteristics.

In the following section, we review the literature on the relation between bank finance and investment process. In the section 3, we present the model and then we conclude.

## 2. Literature review

For researchers in corporate finance, the bank relationship has been a topic of interest since the seminal paper of Jensen and Meckling (1976) who introduced the agency theory into the corporate finance field. In our view it provides a unique perspective to link firm value to agency and information asymmetry.

Focusing on the debt contract, Jensen and Meckling pointed out the risk of overinvestment coming from the bank financing. In this respect, the debt feature, i.e. a fixed repayment for every pay-off superior to this payment, acts as an incentive for the owner-manager to choose risky project with high pay-off and high volatility instead of financially healthier project with lower volatility. This is equivalent to a value transfer from the bank to the owner-manager. For Degryse and de Jong (2006) the main cause of overinvestment problems is *the managerial discretion*.

In the same vein, Myers (1977) pointed out the problem of underinvestment. For Myers, the difficulty to contract on ex post performance, which can't be assessed by a third stake, prevents renegotiation of the repayment after the investment is made. Therefore, the entrepreneur does not undertake some positive NPV projects because their pay-off are lower than the debt repayment. For Degryse and de Jong (2006) *the information asymmetry* explains why overinvestment problem arise.

In our view, the information asymmetry is more critical than managerial discretion in the entrepreneurship context. Indeed, for the same reasons that shareholders do not face a managerial discretion problem from growing firms, which need "to go regularly to the financial markets to obtain capital" (Jensen (1986)), the banker does not to have to protect himself against managerial discretion from the entrepreneur who initiates an investment process. Moreover, underinvestment is likely to be particularly stringent when capital intensity is high, i.e. when return on investment is low. This is why we build a model upon the Myers setting of underinvestment rather than the Jensen and Meckling overinvestment model.

In this respect, the corporate finance theory provides a frame to understand how the entrepreneur behaves when his first financing resource is the bank. However, both the credit rationing and the financial intermediation theories have gone further in the bank contract characteristics. For example, Stiglitz and Weiss (1981) focused on the effect of the rate of interest or the use of collaterals. In line with Diamond (1984) financial intermediation theory, Sharpe (1990) was the first to show how the bank can take advantage of its capacity to collect information. Rajan (1992) clarified how the bargaining power and the project quality can lead

the entrepreneur to prefer long term debt to short term debt. Hence he gave prominence to the role of debt maturity in solving information asymmetry problem.

In our view, Diamond (1991) linked up bank contract theory and corporate finance in giving value to reputation and “control rent”. The “control rent” is the rent over which the entrepreneur has full property rights. The control rent is directly linked to liquidity risks arising “from the borrower’s loss of control rents in the event that lenders are unwilling to refinance when bad news arrives” (Diamond (1991)). In our view, the control rent is quite similar to the managerial slack of Jensen (1986). Besides, Charreaux and Desbrières (1998) pointed out the role of the managerial slack in the entrepreneur’s bargaining power. Indeed, they defined it as “the surplus of managerial discretion the entrepreneur benefits from, when negotiating with various firm stakeholders<sup>3</sup>”. From now, we will use the term of managerial slack rather than “control rent” to define the entrepreneur’s bargaining power over the future rent. Note that high liquidity risks could imply a negative project value.

Diamond (1991) showed that there can exist a life-cycle effect when liquidity risks interact with reputation. Indeed, as Fama (1985) suggested, liquidity risks could imply information sharing through the need for the banker to assess the credit value of the firm when refinancing is needed. Therefore, the entrepreneur could ask for short term credit in order to build up reputation and adjust the debt level in the future, even in the presence of liquidity risks (see also Childs, Mauer and Ott (2005)). In a dynamic setting<sup>4</sup>, the entrepreneur who expects a positive credit rating, initially ignored by the bank, will have to arbitrate between an immediate project value decrease because of liquidity risks and future value of reputation. For Diamond (1991), the value of reputation indirectly equates “the value to [an entrepreneur] of making optimal project decisions over this date [when the entrepreneur values reputation]” (indeed, this value corresponds to the “reputation capital” loss in the event of default). In our model we will see that the reputation value is close to this definition.

Collateral, guarantees or covenants are other means for the banker to deal with information asymmetry. In our case we will only retain the use of guarantees. Indeed, the uncertainty which is specific to the entrepreneurship context would prevent the use of covenants, too expensive to write at a time when the relationship is starting. Moreover, we suppose the case of an entrepreneur who is limited in asset and capital. Therefore, he cannot offer collaterals to the bank.

We will suppose that guarantees will act as conditional property rights for the bank over the project assets. Therefore, from the entrepreneur point of view, this lowers the value of the project in a similar manner than liquidity risks: this arises from “a borrower’s loss of [firm assets] in the event that lenders are unwilling to refinance when bad news arrive”. In the

---

<sup>3</sup> « L’excédent représentant la latitude dont dispose le dirigeant dans ses négociations avec les différents stakeholders. »

<sup>4</sup> “Dynamic models that allow for interactions between flexible financing *and* investment decisions are rare, and dynamic models that allow for agency are even rarer (Childs et al. 2005).” In our view, if the corporate finance approach of the bank relationship is effectively static, this is not the case for approaches focusing on the bank contracts, such as credit rationing or financial intermediation theories, which provides, for most of them a clear schedule of actions.

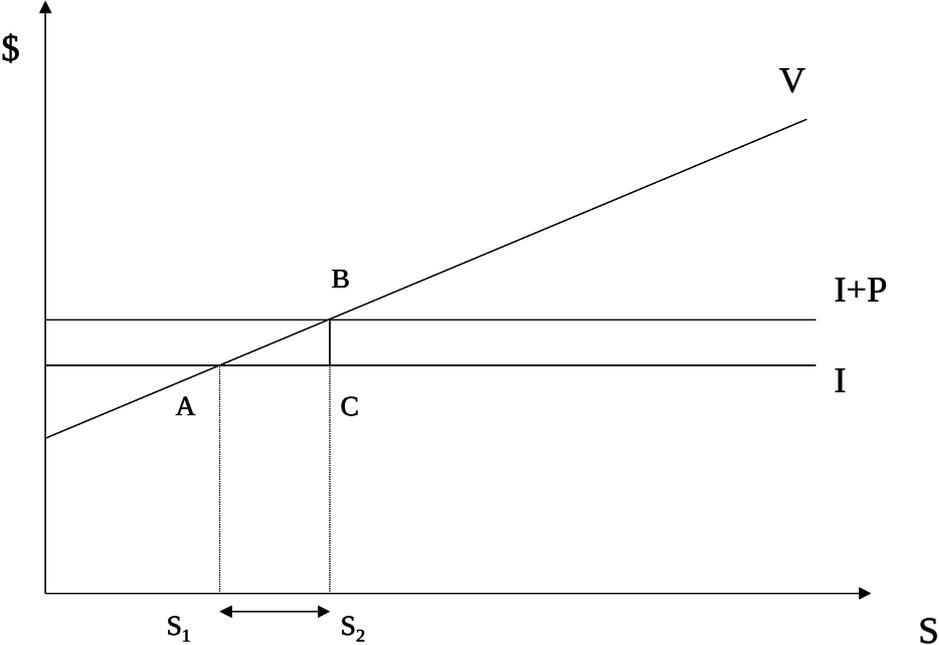
following we will consider liquidity risks and guarantees as two potential dimensions of the bank bargaining power over the entrepreneur’s project.

Our model is an attempt to allow for these properties of the bank contract in a dynamic framework. It is making the relation between the investment process (dependent on the project value in the entrepreneur’s point of view) and the bank relationship to become explicit.

**3. The model**

**3.1. Value, complexity and bargaining power**

Before drawing our model, we will refer to graph 1, illustrating the Myers’ underinvestment problem. S represents the “state of the world” and V represents the value of project according to S. I is the investment required to undertake projects. P is the payment due to the bank if the entrepreneur borrows I. If s is between S<sub>1</sub> and S<sub>2</sub> at the decision point, hence the entrepreneur will not undertake the project although it leads to a positive NPV. This is the Myers’ underinvestment problem. Note that if renegotiation was feasible, hence the entrepreneur would undertake investments even if s is between S<sub>1</sub> and S<sub>2</sub> and he would renegotiate the amount of payment.



**Figure 1 : the problem of underinvestment (Myers (1977))**

We depart from the model in the following respects.

(i) Instead of “state of the world”, we consider S as the whole projects’ set following their risk level. We will suppose that entrepreneurs are more or less able to undertake risky projects. This is dependent upon their competencies. In this respect, as the risk is conditioned on their competencies, we favour the term of complexity rather than the term of risk. Therefore S does not represent the “state of the world” anymore but rather the project

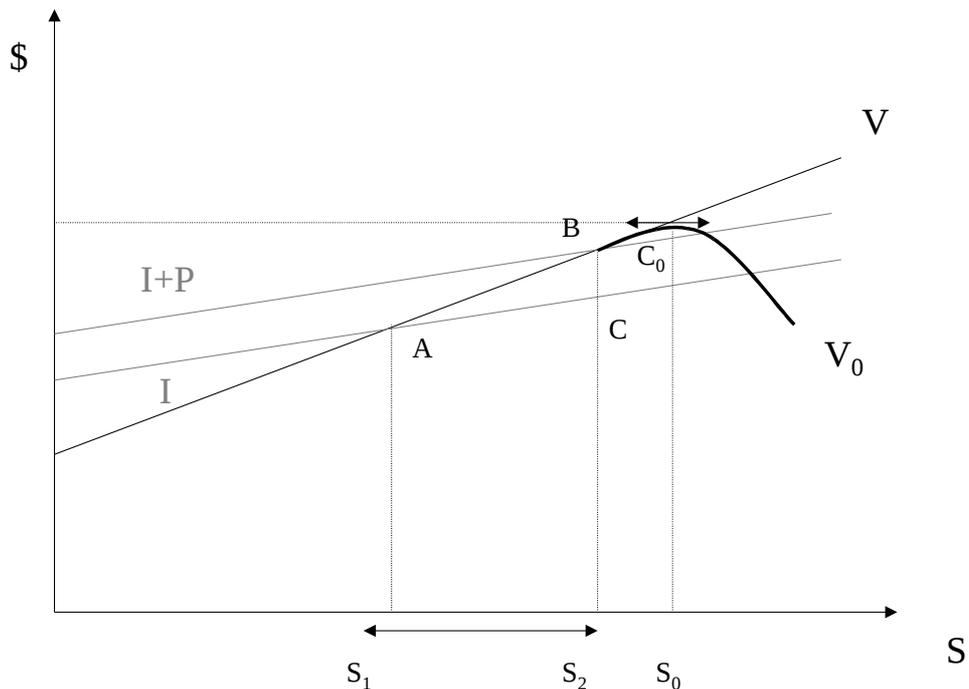
complexity.  $V$  is increasing in  $S$ . Indeed, if they had the choice between two projects with the same pay-off, all entrepreneurs would undertake the less complex project.

(ii) Moreover, we suppose that the investment which is required to undertake the more complex project is higher than for the less complex one. We suppose here that the number of activities that the entrepreneur will have to manage is directly linked to the level of investment. Another possible source of positive relationship between complexity and investment is the working capital, generally positively related to total income (take for example the amount of trade credit).

Note that a short distance between  $V$  and  $I$  is representative of a high capital-intensity project. One can see that capital intensity worsens the risk of underinvestment:  $(S_1 - S_2)$  is wider in Figure 2 than in Figure 1.

(iii) The project value  $V$  (when there is no agency problem) is monotonically increasing in complexity  $S$ . This is not the case when we take into account the risks perceived by the bank, correlated with its rating of the entrepreneur competencies (see the  $V_0$  curve representing the *real* project value, i.e. the project value from the entrepreneur's point of view). In our model we consider that bankruptcy cannot occur. The bank does not finance an entrepreneur whose projects are promised to failure (the effect of a prohibitive bargaining power will act as a disincentive to undertake investment). Therefore the decrease in value does not stem from bankruptcy costs as in Modigliani and Miller (1958) but because of the liquidity risks and the transfer of property rights, i.e. both the components of the bank bargaining power. In our model, an entrepreneur with a high credit rating should benefit from a favourable bargaining power and should be incited to implement value-creative, complex projects.

(iv) There exists an investment and complexity threshold beyond which the bank will exert its bargaining power. As implementing bargaining power is costly, the bank is willing to exert it only for relatively high value-creative business (on the bank relationship costs and profits in the agricultural sector, see Gloy, Gunderson and LaDue (2005)). Moreover, the growing bank bargaining power implies an optimal level of investment and complexity ( $S_0$ ) related to the entrepreneur's credit rating.

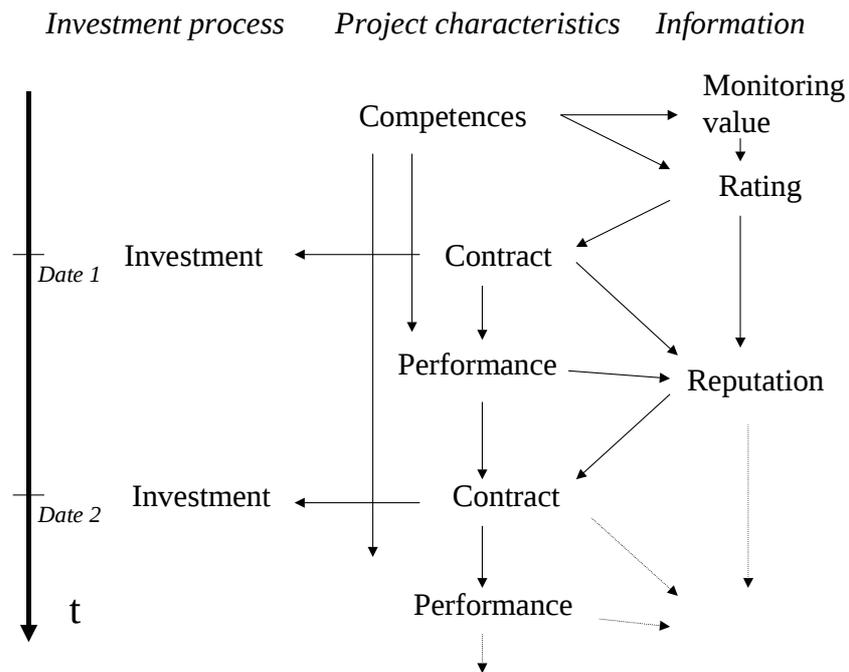


**Figure 2 : project value when the bank bargaining power increases with complexity**

In this model, the entrepreneur rationally undertakes the project  $S_0$  in a one-period contract. However, in a dynamic setting, there exists incentives to choose sub-optimal projects in the first period because of bargaining power and reputation interactions. There is a life-cycle effect affecting the bank relationship. But before drawing the possible trajectories of the project financing, we need to make explicit the schedule of the relationship.

### 3.2. The schedule

In Figure 3, we make explicit the connection between the investment process, the project evolution and information.



**Figure 3: Investment process, project characteristics and information**

To start with, the only differences within the set of entrepreneurs are their competencies. Obviously, these competencies have a direct impact on the future project performances, before and after the date 1. Before providing the financial resources needed for the first investment, the bank produces a first rating of the entrepreneur. It determines the level of bargaining power that the banks are leaving with him according to the selected project. If the performance confirms the rating, the entrepreneur will benefit from a reputation effect: the bank will be ready to finance more complex projects without increasing its bargaining power.

However, the contract also has an influence on reputation. Indeed, contracts for which the banks benefit from bargaining power (determined by short term credit renewing or guarantees) have informational properties. As a result, the contract has a direct influence on reputation building.

In turn, reputation and performance determine the level of bargaining power the bank is ready to leave at the date 1. According to this, the entrepreneur will select the value-maximizing project and undertake the second investment round. The second investment terminates the investment process and sets the long term value of the firm conducted by the entrepreneur.

Now, we link together the dynamic setting and the previous model of investment and value. As a result, we map the trajectory of the project financing and investment.

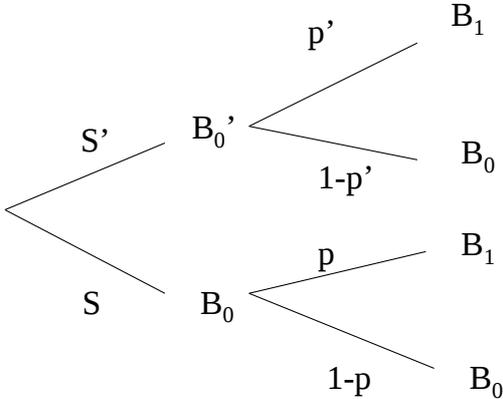
### **3.3. The financial trajectory**

Our dynamic setting relies on a potential change of the credit rating between the date 0 and the date 1. Therefore, the value curve of the project for the entrepreneur can change. In Figure 4,  $V_0$  and  $V_1$  illustrates the project value curve at the date 0 and at the date 1



Consider now that bargaining power and reputation interact positively. This means that an entrepreneur can undertake a project with a negative value at the date 1, for example  $\overline{B'_0=C'_0M'_0}$ , in order to benefit from the information conveyed by the contract providing bargaining power to the bank. Thus, this increases the likelihood to make the project value curve grow from  $V_0$  to  $V_1$  so that it becomes optimal for the entrepreneur to undertake the more value-creative  $S_1$  project at the end of the investment process. In fact, the entrepreneur needs to arbitrate between the risks of being trapped in the  $S_0$  project and the risks of project-control loss due to an exposure to a high bank bargaining power at the date 0. If the rating of the bank is not getting better at the date 1 than at the date 0, then the total costs of the aborted  $S_1$  project is  $B'_0-B_0$  (with  $B'_0$  negative and the opportunity cost of  $B_0$ ). This dilemma is illustrated in Figure 5.

$p$  is the probability to benefit from a positive reputation when the entrepreneur chooses to maximize the project value at the date 0. In our setting this is the *optimal* path.  $p'$  is the probability to benefit from a positive reputation when the entrepreneur chooses to commit in the  $S_1$  project in spite of a  $V_0$  project value curve (the initial entrepreneur's credit rating implies that  $S_0$  is the optimal project at the date 0). In this context, the banker protects himself with bargaining power at the date 0 and will relax it if the date 1 entrepreneur's rating becomes positive. This is what we name the *prudential* contract. Note that  $p' > p$ . Indeed, if  $p'$  was not higher than  $p$ , the entrepreneur would never take liquidity risks and would never accept to leave a significant part of his project property rights to the bank.



The entrepreneur has got the choice between  $S$ , maximizing the project value at the date 0, and  $S'$ , loosing  $B'_0$  at the date 0. The entrepreneur chooses  $S'$  if the reputation linked with short term credit and guarantees compensate the date 0 loss.

**Figure 5 : the entrepreneur's dilemma**

Now, consider the two possible decisions of the entrepreneur:

- $S$  when he maximizes the project value at the date 0;
- $S'$  when he undertakes  $S_1$  project in spite of a  $V_0$  value curve at the date 0.

Define  $B_T$  and  $B'_T$  as, respectively the NPV of the decisions  $S$  and  $S'$ , we obtain

$$B_T = B_0 + (1-p) \frac{B_0}{1+r} + p \frac{B_1}{1+r} \text{ and}$$

$$B'_T = B'_0 + (1-p') \frac{B_0}{1+r} + p' \frac{B_1}{1+r}$$

The entrepreneur will choose S' if  $B'_T > B_T$ , i.e. if

$$B'_T - B_T = (B'_0 - B_0) + (p' - p) \left( \frac{B_1}{1+r} - \frac{B_0}{1+r} \right) \geq 0 \quad (1)$$

- $B'_0 - B_0$  is the loss incurred in the first period;
- $P' - P$  is the added probability of growing from the  $V_0$  to the  $V_1$  value curve with the “prudential contract” against the “optimal contract”;
- $\frac{B_1}{1+r} - \frac{B_0}{1+r}$  is the expected present value of the project  $S_1$  relative to the project  $S_0$  when the entrepreneur benefits from the credit rating which leads him to undertake the  $S_1$  project in the second period.

We can write the equation (1) in the following manner:

$$\frac{(p' - p)(B_1 - B_0)}{1+r} \geq B_0 - B'_0$$

In this respect, we can say that the entrepreneur is ready to undertake a sub-optimal project at the date 0 if the second period gain is higher than the first period loss. In the following, we take the first period loss as given. Hence, we examine the terms left of the equation.

The term  $p' - p$  is a real measure of the contract's informative property. Moreover, if, at the date 1,  $B_1 - B_0$  represents the benefit that the entrepreneur could expect from a complex project in comparison with a less complex one, at the date 0,  $B_1 - B_0$  represents the value of the reputation for the entrepreneur who is willing and able to undertake the  $S_1$  project (in the same vein of Diamond (1991), see section 2).

In our model, the reputation value is positive if the bank underrates the entrepreneur competencies at the date 0. Therefore, the information collected between the date 0 and the date 1 through the information properties of the *prudential* contract should lead the bank to correct its rating and to provide the entrepreneur with a contract which maximizes the project value according to his competencies.

Moreover, the expected value of reputation can be overvalued by the entrepreneur if he is wrong about his evaluation of his own competencies. As entrepreneurs are rather optimistic (De Meza and Southey (1996)), we would expect that this is likely to occur. In this event, the entrepreneur would experience the first period loss and maximize the project value in the following period. Thus, he will undertake the project with the best trade-off between complexity and bargaining power i.e.  $S_0$  ( $M_0$  in the Figure 4). As a result this project is less investment demanding but is also less value creative than the expected one. Roughly one can say that the optimistic entrepreneur is more likely to experience the loss of the  $S_1$  abortion,  $B'_0 - B_0$ .

Note that in these two cases, the information provided by the contract during the first period leads to a preferences' alignment of the banker and the entrepreneur in the second period. In this respect, this adaptive bank-entrepreneur relationship provides an efficient way of dealing both with the risk of entrepreneur competencies' underrating when information is poor and when there exists a bias of optimism.

To conclude, we would come to the three components of the project value that the entrepreneur has to take into account before engaging the investment process. Once he has evaluated his own *competencies* (his capacity to undertake more or less complex project) and the *reputation value* (which is dependent upon his competencies and the initial bank rating), he has to select the contract which is the most likely to make him benefit from this value. If he believes that he is underrated, he can use the information property of contracts over which the bank benefits from a strong bargaining power, i.e. the *prudential* contract. Hence, if the project value is negative in the first period because of this weak bargaining power, the total net present value of this choice can be higher than an each-period maximizing behaviour. In this respect, we can measure an *information value of contracts* in the form of probability differential.

As this probability differential is positive when the "prudential" bank contract is implemented, the entrepreneur faces a trade-off between maximizing the value of his project at the first period or to take risks. He will take more risks if the product of the reputation value with the probability differential overcomes the first period loss.

This view of the bank-entrepreneur relationship slightly differs from the credit rationing hypothesis, according to which the bank has to exclude entrepreneurs. Here the bank finances him by the way of negotiating more or less bargaining power on the project value. Given that bargaining power is costly but is information productive, it appears to be in the bank interest to relax it if the entrepreneur rating shows that his competencies match the project complexity. If not, the bank will keep a strong bargaining power. In this event, the entrepreneur will have to choose a less complex project (less investment consuming) in order to benefit from a positive managerial slack and property rights when the firm is mature. In this respect, the model suggests an alignment of preferences in between the banker and the entrepreneur.

#### **4. Conclusion**

In our view, our model provides a framework to explain the influence of the bank relationship over the investment process. The underinvestment problem, which is specific to the debt contract and particularly stringent in an entrepreneurship context, can be solved if the bank is able to negotiate bargaining power over the entrepreneur project and if the entrepreneur can strategically use the bank contracts to build up reputation. The bank will adapt its bargaining power over the project to the entrepreneur's credit rating (given that reputation is included in the credit rating) and the entrepreneur will fit the investment to the

bargaining power the bank is ready to leave with him. This results on an adaptive bank-entrepreneur relationship which has a direct impact on the value-creation process.

This model is relevant for a capital limited entrepreneur, undertaking high capital intensity projects implying a rather long investment process (in order to make possible the strategic use of time for reputation building). This is typically the case in the agricultural sector. However, we think that this model provides insights on the entrepreneurship banking finance beyond the agricultural case, although some of our hypotheses stem from what can be observed for vineyards entrepreneurs. In contrast, this model appears as irrelevant for high-tech projects which will be better financed through venture capital...

In our view, this model can provide an integrative frame for different theoretical insights on the bank-entrepreneur relationship. For instance, it can be used to discuss some concepts of *the bank relationship theory* (for a review, see Berger, Klapper and Udell (2001), Boot (2000) or Ongena and Smith (1998)). The theory considers that the bank relationship is structured along two dimensions (Degryse and Van Cayseele (2000)): the depth, stemming from the “off-contract” entrepreneur-banker relationship, and the thickness, defined as the information conveyed to the bank through the multiple financial contracts and services. Our model gives particular prominence to the thickness of the relationship. In our view, this dimension is particularly important in the entrepreneurship context. Indeed, the depth of the relationship depends on duration, obviously limited when entrepreneurs are just starting to run their own business.

To conclude, our approach of the bank relationship would plead for commercial banks differentiating the entrepreneurship projects from mature firms ones when they have to report about the credit risk they are incurring (according to Basel II requirements, for example). Indeed, the model states that the bank is able to finance project for which the classical financial analysis is likely to be irrelevant. However, the disincentives to invest in “risky” project (according to credit scoring) should be ruled out by the advantages of being the *first* (or prime) entrepreneur’s stakeholder, from the time of the uncertain project to those of the stable and profitable firm.

## 5. Bibliography

- Barry, Peter J., and Lindon J. Robison, 2001, Agricultural Finance: Credit, Credit Constraints, and Consequences, in B. Gardner and G. Rausser, ed.: *Handbook of Agricultural Economics* (Elsevier Science B.V.).
- Berger, Allen N., Leora F. Klapper, and Gregory F. Udell, 2001, The ability of banks to lend to informationally opaque small businesses, *Journal of Banking & Finance* 25, 2127-2167.
- Boot, Arnoud W. A., 2000, Relationship Banking, What Do We Know?, *Journal of Financial Intermediation* 9, 7-25.
- Charreaux, Gérard, and Philippe Desbrières, 1998, Gouvernance des entreprises : valeur partenariale contre valeur actionnariale, *Finance Contrôle Stratégie* 1, 57-88.
- Childs, Paul D., David C. Mauer, and Steven H. Ott, 2005, Interactions of corporate financing and investment decisions: The effects of agency conflicts, *Journal of Financial Economics* 76, 667-690.
- De Meza, David, 2002, Overlending?, *The Economic Journal* 112, 17-31.
- De Meza, David, and Clive Southey, 1996, The Borrower's Curse: Optimism, Finance and Entrepreneurship, *The Economic Journal* 106, 375-386.
- Degryse, Hans, and Abe de Jong, 2006, Investment and internal finance: Asymmetric information or managerial discretion?, *International Journal of Industrial Organization* 24, 125-147.
- Degryse, Hans, and Patrick Van Cayseele, 2000, Relationship Lending within a Bank-Based System: Evidence from Small Business Data, *Journal of Financial Intermediation* 9, 90-109.
- Diamond, Douglas W., 1984, Financial Intermediation and delegated monitoring, *Review of Economic Studies* LI, 393-414.
- Diamond, Douglas W., 1991, Debt Maturity Structure and Liquidity Risk, *The Quarterly Journal of Economics* 106, 709-737.
- Diamond, Douglas W., 1991, Monitoring and Reputation: The Choice between Bank Loans and Directly Placed Debt, *The Journal of Political Economy* 99, 689-721.
- Fama, Eugene, 1985, What's different about banks?, *Journal of Monetary Economics* 15, 29-36.
- Gloy, Brent A., Michael A. Gunderson, and Eddy L. LaDue, 2005, The Costs and Returns of Agricultural Credit Delivery, *American Journal of Agricultural Economics* 87, 703-716.
- Jensen, Michael C., 1986, Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers, *The American Economic Review* 76, 323-329.
- Jensen, Michael C., and William H. Meckling, 1976, Theory of the firm: Managerial behavior, agency costs and ownership structure, *Journal of Financial Economics* 3, 306-360.
- Modigliani, Franco, and Merton H. Miller, 1958, The Cost of Capital, Corporation Finance and the Theory of Investment, *The American Economic Review* 48, 261-297.
- Myers, Stewart C., and Nicholas S. Majluf, 1984, Corporate Financing and Investment Decisions when Firms have Information that Investors do not have, *Journal of Financial Economics* 13, 187-221.
- Myers, Stewart C., 1977, Determinants of corporate borrowing, *Journal of Financial Economics* 5, 147-175.
- Ongena, Steven, and David C. Smith, 1998, Bank Relationships: A Review, *The Performance of Financial Institutions* Forthcoming.
- Parker, Simon C., 2002, Do banks ration credit to new enterprises? and should governments intervene?, *Scottish Journal of Political Economy* 49, 162-195.

- Rajan, Raghuram G, 1992, Insiders and Outsiders: The Choice between Informed and Arm's-Length Debt, *The Journal of Finance* 47, 1367-1400.
- Sharpe, Steven A., 1990, Asymmetric Information, Bank Lending and Implicit contracts: A stylised model of Customer Relationships, *The Journal of Finance* 45, 1069-1087.
- Stiglitz, Joseph E., and Andrew Weiss, 1981, Credit Rationing in Markets with Imperfect Information, *The American Economic Review* 71, 393-410.