Impact of the World Financial Crisis to SMEs: The determinants of bank loan rejection in Europe and USA

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Impact of the World Financial Crisis to SMEs: 
the determinants of bank loan rejection in Europe and USA

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Abstract:
This paper shows that SMEs with the world financial crisis suffer more and more and they face a high rate of rejection of bank loans. Indeed, the Center for Small and Medium Sized Enterprises notes that the term loan rejections increased 2.5 times since 2008 compared to 2004, from 6.1% to 16.3%. The world financial crisis began with the subprime characterized by a housing crisis and it turned into a crisis both financial and real economy. Consequently, SMEs are very affected. For it, we examine the main factors of loan rejection with an international sample (Europe and USA) by studying micro and macro economics determinants from 2009 to 2012. We find that small and young firms in Europe have more problems than the others. In the USA, when the ownership belongs to the family, it is more difficult for a firm to obtain a bank loan. For the general sample, when firms have financial problems, risk assets and important debt, bank loans have very difficult to obtain.

Key words:
SMEs, rejection of bank loans, Europe, USA, micro and macro economics determinants

JEL Classifications: G01-G20-G21
1. Introduction

Since the mid-2007 the world financial markets crisis started and had put all stock exchange in a serious economic turmoil in recent years putting financial markets and sovereign debt markets under almost unprecedented pressure. The banking sector played the crucial role in propagating the initial shock to macroeconomic activity. Indeed, the headwinds hitting banks in the Euro and American areas and beyond have lead to a sharp decline in bank profitability and eroded their capital cushions. However, the financial crisis led to disruptions in banks’access to wholesale funding, their ability to securitize assets and put severe pressure on their liquidity positions. Consequently, these developments imposed serious strains on bank’s balance sheet position, forced many banks to readjust their balance sheets and potentially impaired their ability to provide the non-financial private sector with funds for spending and investment. The main consequence of this observation is that banks have less ability to supply new loans.

The aim of this paper is to understand the main determinants of loan rejection by financial banks for SMEs. Towards this end, we examine micro and macro economic determinants that may affect the decision for a bank to reject a loan. This study deals with a precise examination of main European countries and with the USA. The different impacts of the countries and geographical areas can be explained by macroeconomics effects that we develop in this paper.

We begin by presenting a world definition of SMEs and their situation in worldwide, especially in countries of our study. Indeed, we remark that the financial health of SMEs provides from their own situation (their financial results...) but also from the external environment where they are. Growth of GDP, regulations from government and bank system, context of financial markets (a sense of optimism, pessimism, a sense of stress), opinions of institutional investors, are all factors that affect the degree of difficulties for SMEs to obtain a funding. For example, the Development Policy and Analysis Division from United Nations make some rate growth of GPD and we find that for a basic scenario, USA have 1.8% of GDP growth against 0.5% for Europe. For the pessimist scenario they obtain - 0.8% for the USA and – 1.8% for Europe. These results and these prospects will affect the policy of government and banks in each country. We also notice from a World Bank investigation that there is 38.5% of loan rejection for SMEs in Spain against 14.7% in the USA.

This paper examines the effect of financial crises on SME financing in main countries in Europe and in the USA. We focus on two factors: micro economic effects on the one hand and macro economic effects on the other hand. Towards this end, we use a panel econometric method with fixed effects.

We first establish the main determinants that affected the bank decision to grant a loan to SMEs. For this we have separated them into two categories: first determinants which provide directly from the SME’s results (micro determinants) and second determinants that affected directly SMEs from external environment (macro determinants). We noted that it is the first time that this distinction between determinants has been realized. What’s more, activity sector as variable is rarely studied; measures of anticipations from institutional investors in the financial markets and the level of stress in financial markets have been introduced for the first time. Another variable is also introduced in order to take into account the maturity of SME. Indeed a new firm will not have the same results as a firm that is part of a lifecycle type "mature".
Our second focus is to evaluate the impact of these financial constraints to SME in Europe (main countries have been chosen) and in the USA. We find that European SMEs are more affected than American SMEs. This can be explained by the fact that growth prospects in the USA are better and previous policy of SMEs in the U.S. favored more than those in Europe. At the end of results we are able to perform an analysis highlighting the key factors of SMEs that of loan rejection according to their origin (Europe or USA).

Our third focus is concentrated on the methodology to study data. We chose a more complex methodology that the others (Holton, Lawless, MacCann; 2012): a panel econometric approach with a fixed effects model. The originality of our study lies in the use of information in both individual and temporal dimensions (countries represent by the individual dimension and period from 2009 to 2012 represents the temporal dimension). With this methodology, we evaluate the impact in each European country and we determine if this impact is more important or not by year between 2007 and 2012.

And our last focus is to state the alternatives and measures proposed by the governments following the increase of the number of loan rejection.

These findings are consistent with the different observations that we notice. Indeed, since last quarter of 2008, a substantial decline in the real annual growth rate of loans granted to euro area non-financial corporations has been observed. The drop in the growth of loans has coincided with the sharp deterioration of economic activity and a supply reduction of lending has likewise contributed to amplifying the downturn of the wider economy. For example, the Center for Small and Medium Sized Enterprises notes that the term loan rejections increased 2, 5 times since 2008 compared to 2004, from 6, 1% to 16, 3%. A more recent observation is about the declaration of French Bank (August 2012) that France enters in recession and financial market crisis underline the limits of the construction of Europe and the Euro.

The paper is organized as follows. Section 2 describes the construction of database and the methodology using. Section 3 presents the main facts of a loan rejection by banks. For it two categories are presented: micro economics factors and macro economics factors. Section 4 presents the results of panel data econometrics. Section 5 analyses the different solutions adopted by government and section 6 concludes.

2. Data and methodology

2.1 Data

To conduct this study, we use several sources of database. Indeed since 2009, a survey is realized by the European Central Bank (ECB) each half-yearly: it is the survey on access to finance of small and medium enterprises (SAFE). It deals with information on the financing needs of SMEs, their experience in attempting to access finance, along with information on their perceptions of current economic and financial conditions. The survey provide different information: firms answer some questions about turnover, employment, ownership type, age, sector of activity... As the origin comes from the ECB, the sample concerns European countries (Belgium, Finland, France, Greece, Ireland, Italy, Netherlands, Portugal, Spain) only some countries have a more precise study: France, Germany, Italy, Spain. If we will realize a more precise study, we must have all information for the main
countries in Europe and for the main actors in crisis as Greece ... So we decide to search all the SMEs from 2009 to 2012 (the first half) in Europe and in the USA with as much precision as possible. For it, we use Capital IQ, Eurostat, European Central Bank, Federal Reserve System, Eurosystem’s Bank Lending Survey.

The dependant variable in the model is: the loan rejection which capture the main determinant for a SMEs to have a loan reject. We illustrate in table 1 the share of firms in each country that take a 1 for each dummy that will be used as a dependent variable in our analysis. For example, we observe that 38.5% of Spain firms were rejected for a loan, the main reason is given by the increase of interest rate on loans with roughly 75%. Indeed Spain would need around 115 milliards of euro for the end of the year. Its loan rate to 10 years reaches 7.6% in July 2012. We remark that Greece, Ireland, Italy are in the same situation as Spain. In addition, one remark can be mentioned that the percentage of loan rejection in relative to other studies has increased.

Table 1: Statistics of SME: Number of SMEs and Percentage of total answers per country with dependent variable equal to one for a loan rejection

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of SMEs (In thousands)</th>
<th>Loan Rejection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>426</td>
<td>11.7</td>
</tr>
<tr>
<td>Finland</td>
<td>200</td>
<td>7.9</td>
</tr>
<tr>
<td>France</td>
<td>3 450</td>
<td>15.8</td>
</tr>
<tr>
<td>Germany</td>
<td>1 880</td>
<td>17.5</td>
</tr>
<tr>
<td>Greece</td>
<td>820</td>
<td>33.1</td>
</tr>
<tr>
<td>Ireland</td>
<td>158</td>
<td>40.8</td>
</tr>
<tr>
<td>Italy</td>
<td>3 947</td>
<td>25.7</td>
</tr>
<tr>
<td>Netherlands</td>
<td>583</td>
<td>33.9</td>
</tr>
<tr>
<td>Portugal</td>
<td>778</td>
<td>26.4</td>
</tr>
<tr>
<td>Spain</td>
<td>2 653</td>
<td>38.5</td>
</tr>
<tr>
<td>USA</td>
<td>8 100</td>
<td>14.7</td>
</tr>
</tbody>
</table>
The sample is composed of European and American SMEs from the first half of 2012. There are 70,000 firms for the entire sample: 25,000 for European sample and 45,000 for USA sample.

Then we select some variables as characteristics of firms which represent the explanatory variables: we use variables in relation to the micro economics factors on the one hand and macro economics or external environment factors on the other hand.

2.1.1 Micro economics factors

- Firm size: the number of persons who are currently employ in full time or part time. We decline it in three categories:
  - From 1 to 9 employees
  - From 10 to 49 employees
  - From 50 to 249 employees

- Age of firm: the number of existence years of the firm
  - 10 or more years
  - Less or equal to 1

- Activity sector:
  - Manufacturing sector
  - Service sector

- Ownership: It represents the owner of the firm
  - Shareholders
  - Family
  - Venture capital

- Finance:
  - Net Profit margin: it is calculated as net profits divided by sales. It measures how much out of every dollar of sales a company actually keeps in earnings. A higher profit margin indicates a more profitable company that has better control over its costs compared to its competitors.

- Opinion of manager:
  - Pessimism:
    - ZEW index. It is the name of the german center in european economy research. It measures the anticipations of analysts and institutionals investors about german economy. This indicator reflects the confidence of European investors. It uses for European sample.
    - KCFSI (Kansas City Financial Stress Index): it is a monthly measure of stress in the US financial system based on 11 financial market variables (3-month LIBOR/3-month T-Bill spread). A positive value indicates that financial stress is above the long-run average, while a negative value signifies that financial stress is below the long-run average. Another useful way to assess the current level of financial stress is to compare the index to its value during past, widely recognized episodes of financial stress.

2.1.2 Macro economics factors

- Growth:
  - Private Debt to GDP: total stock of euro area private sector debt (loans and debt securities) from Monetary Financial Institutions (MFIs excluding ECB) balance sheets in each country, gross domestic product at market prices from ESA95 National Accounts, quarterly. It is to capture the effect of indebtedness levels.
individuals followed over time. Obtaining an estimate in section and in series is therefore possible. The temporal dimension depending on geographical areas (Europe and USA).

At the end we can make a synthesis in order to have the main determinants of loan rejection depending on geographical areas (Europe and USA).

The originality of our study lies in the use of information in both individual and temporal dimensions (countries represent by the individual dimension and period from 2009 to 2012 represents the temporal dimension). These data, more commonly known as panel data allow us to study a group of individuals followed over time. Obtaining an estimate in section and in series is therefore possible.

2.2 Methodology

As we noted previously, we have the dependant variable that is considered as dummy variable that takes 1 when a loan is rejected for a bank. We select a probit regression taking into account all independent variables (micro and macro economics variables).

The aim of this study is to search the determinants of loan rejection for a SME in different European countries and in the USA. In introducing each European country as dummy variables in the first study, we evaluate the impact of a loan rejection for each country. For this, we use a panel econometric data and specially the fixed effects model for this study. In a first step, we introduce for European sample all countries as dummy variables for each and we eliminate the constant. In a second step, the study deals with Europe in general (we don’t distinguish each country as the previous study) and the USA. We also use fixed effects model. Panel data analysis is the most efficient statistical method (Madalla. 2001). The panel data set consists of cross sectional and time series data. The panel data structure allows for taking into account the unobservable and consistent heterogeneity, which are specific features of each selected company. The OLS form of panel regression requires that ownership and other control variables are strictly orthogonal to the errors, and that the errors are independently and identically normally distributed with a mean of zero and variance equal to $\sigma^2$. The existence of at least one source of endogeneity (dynamic endogeneity, simultaneity and unobservable heterogeneity) in the data generating process will cause the estimates to be biased and inefficient.

At the end we can make a synthesis in order to have the main determinants of loan rejection depending on geographical areas (Europe and USA).

- **GDP Growth**: Gross domestic product, logarithm of the average real GDP growth rate in 2009-2012 (the first half) from World Development Indicators. It is to capture the effect of economic activity.

**Regulations:**
- Government Ownership of banks: proportion of assets of a country’s top ten banking institutions that were held by the public banks from La Porta and al. (2002).
- Banking concentration: three largest banks assets from Database on Financial Development and Structure, Caprio and al. (2001).
- International Accounting Standards: dummy variable is equal one if the firm uses International Accounting Standards from WBES.

**Risk:**
- LCVI Indicator (Liquidity, Credit and Volatility Index) from JP Morgan: this measure is for capture the extent to which stress in the financial sector affects firms’ access to finance.

**Debt**
- Debt to output: the percentage of outstanding loans in each sector relative to the total output of the sector. It is to capture variation in debt across sectors.
that allows us to study phenomena in their diversity as their dynamics and thus improve the accuracy of the estimated models.

The panel econometrics is now widely used for the validation of theoretical discussions because it has many advantages. Indeed, it provides more accurate estimators and more effective than studies in time series or cross section, because the panel samples are accessing their user a considerable amount of information, the data are extremely numerous mainly in the dimension individual, have a great variability, and have widely inter-individual differences. On the other hand, the econometrics of panel data allows, unlike cross-sectional studies, to study more precisely the dynamics of a given phenomenon in the long run. It also offers the ability to control individual heterogeneity or unobserved time can be correlated with the explanatory variables can bias and, therefore, the estimated coefficients.

We tested two models, an individual fixed effects model and an individual random effect model.

The difference between these two models concerns the assumptions about individual heterogeneity. For individual fixed effects model, individual heterogeneity is specified as a constant specific to each individual.

Its general form is written as follows: \( Y_{it} = \alpha + \beta x_{it} + \epsilon_i \)

As for the random effects model, it takes into account an individual specific effect at residu. This one is composed of two components: the random standard component \( \epsilon_{it} \) and the random component \( \mu_i \) which captures the individual heterogeneity.

The model is then written as follows: \( Y_{it} = \alpha + \beta x_{it} + \mu_i + \epsilon_{it} \)

Different statistical tests that we conducted, allowed us to accept the existence of individual heterogeneity in both models (Fisher's test to check the significance of fixed effects and Breush Pagan’s test to test the significance of effects random). The question is therefore to choose between two models for the interpretation of regression results. Indeed, the two fixed effects models and random effects can take into account the heterogeneity of data, but the assumptions on the nature of the specific effects differ from one model to another. In the first case, we assume that the specific effects can be correlated with the explanatory variables, and in the second case, we assume that the specific effects are orthogonal to the explanatory variables. The Hausman specification test is used to test which of these assumptions is appropriate to the data. It is to study the hypothesis of independence between the explanatory variables \( x_{it} \) and the residu and especially individual heterogeneity \( \mu_i \) in a random effects model. In this context, he compares it to a fixed effect model. In our study, the results of this test we can reject the hypothesis of independence between the unobserved individual heterogeneity and the explanatory variables. This is why we opted for an individual fixed effects model which has more robust results.

The interest of a panel is to analyze the dynamic behavior, while still managing to capture the heterogeneity of individuals (Sevestre, 2002).

What’s more, the independent variable takes 1 if the loan of the firm is rejected and 0 otherwise; and the dependent variables are almost all binary variables so we use a probit specification.
3. Definition and factors that affect SMEs financing

3.1 Introduction

The presence of Small and Medium Enterprises (SMEs) in an economy has an important and significant role in the economy development it is widely proved (Reynolds, 1991; Wright and al., 1998; Jackson and al., 1999; Lau and Busenitz, 2001). For example it has been particularly evident that SMEs have contributed significant to the economic growth of France: they represent nearly 90% of the economy. It is the same statement for the USA where they are 22 millions.

The research aims to investigate empirically the determinants of loan rejection from SMEs due to the degradation of economy since the world financial crisis. This study deals with a comparison with few geographical areas: the USA and Europe with some countries (Belgium, Finland, France, Greece, Ireland, Italy, Netherlands, Portugal, Spain).

3.2 SME: Definition

Before studying SMEs we have to define it. We make the observation that there is no single, uniformly definition of a small firm (Storey, 1994). The definition of the role of small firms in an economy is problematic and there are more than 30 different definitions to explain what is a small business (Beesley, 1984; Storey, 1987). We can quote the definition form Ganguly (1985) who defines SME as “a small firm has a relatively very small share of the market... The firm is managed in a personalized way by its owner or part of the owner... It is independent in that is does not form part of a larger enterprise and is free from outside control when making major decisions”. The Bolton Committee (1971) described the SME definition and gave some criteria that SME must have:

- It is owned by managed by the same individuals, rather than by professionals on behalf of shareholders;
- It has a small share of the marketplace or a larger share of a very small markets.
- It is legally independent ie it is not being owned by another business or not forming part of a larger enterprise.

What’s more, the SME Information Centre (2000) said of SMEs: “manufacturing enterprises are those with fewer than 100 employees and non-manufacturing enterprises are those with fewer than 50 employees”. Wong and Sit (1992) have reviewed the government statistics and suggested that “SME refers to owner-managers having their own business with genuine independence, not a division, subsidiary, or franchise of the big corporations”.

Indeed one of the challenge in studying a cross-country analysis of SME data is the absence of a universal definition of what is an SME. Some efforts aim to streamline and harmonize SME definitions (OECD, 2004). In summary, definition of SME take into account the number of employees, total net assets, sales and investment level. We can notice that the most common criteria refer to have a cut-off range of 0-250 employees. We check that the most common definitions used by regulators are based on the number of employees, sales and/or loan size. However, the most common among the three, is the number of employees criterion.
3.3 Research

In spite of the difficulties in defining small and medium firms, there is a general agreement that smallness and newness cause difficulties for businesses especially during a world finance crisis. This impact is particularly important that we observe that 99% of SMEs in France are represented by firms with less 50 employees. Consequently, the loan demands and all financing for SMEs will become more and more difficult. That’s the reason why we explain in this paper the main factors that affect SMEs for a financing demand from 2007 to 2011. To realize it, we split into two different factors: the micro environment as the size, the financial situation … and the macro environment (GDP, government laws, international norms …).

Indeed, the SME growth has several origins: on the one hand we have external environment and on the other hand internal environment. We can quote some examples for these two sides of origins growth. For the internal environment, three main reasons may be raised:

- The characteristics of owner manager such as gender, age, qualification, unemployment status, motivation …
- The nature of the firm such as firm size, firm age, legal status, method of acquisition …
- The company strategy such as business planning, marketing strategy, Research and Development, Employee Training …

For the external environment, two blocks may be explained this growth:

- External factors as economic environment, government supports …
- The Business Infrastructure

Based on these criteria, we select the main determinants influencing the decision for a bank to accept or not a loan to a SME. In the next paragraph we explain briefly some references of the theories about the supply and the demand of credit in order to explain and to describe variables which affect either supply of credit, demand for credit or both before testing hypotheses in the next section.

3.4 Related Literature

SMEs sector is often characterised by the fact that they represent the engine of growth and a large part of private sector in many developed and developing countries. However, they face to market imperfections and institutional weaknesses impede their growth. There is substantial evidence that small firms face larger growth constraints and have less access to formal sources of external finance, potentially explaining the lack of SMEs contribution to growth. We observe that the literature of credit system suggests that imperfect information and other frictions in credit markets and focuses on the effectiveness of the monetary policy transmission mechanism in providing finance to the real economy (Bernake, Gertler, 1995). Two other problematics about credit system are mentioned: the bank lending channel on the one hand and the balance sheet channel with deal with the impact of banks and borrowers balance sheets respectively on the supply of credit on the other hand. Peek and
Rosengren (1995) provide an overview of the bank lending channel and highlight the effect of banking structures on lending to firms.

One of the most difficulty of this literature deals with the problems in delineating between supply and demand effects in analysing movements in credit (Kashyap and Stein, 2000). One strand if literature has focused on the distinction between these supply and demand effects using firm level data (Kashyap, Stein and Wilcox, 1993), firm and bank data (Albertazzi and Marchetti, 2010), bank lending survey data (Hempell and Kok Sorensen, 2010; Ciccarelli, Maddaloni, Peydro, 2010; Del Giovane, Eramo, Nobili, 2010).

As Holton, Lawless, McCann (2012), this paper deals with the country level factors which impact on supply and demand. This paper adds different points of the literature. Indeed as said Beck and al (2002b), financing constraints represent a significant obstacle to growth, especially for small firms. Consequently, we determine few possible reasons for a SME to have a loan rejected. For this, we classify micro economics factors which depend on intern factors of the firm and macro economics factors which depend on external environment.

3.5 Micro economics Factors

In this subsection, we present the micro economics factors that influence the access of SMEs loans. We classify them in some categories:

- **Size:** this criteria is decisive to access a bank loan. Indeed more the size is small, more it is difficult to obtain a loan. This observation can be justified by the fact that in general, bank has less financial guaranties and resources when it lends for a small firm and it may be more “frivolle”. In order to be more precise, we decline size into three categories: firms with 1 to 9 employees, firms with 10 to 49 employees and firms with 50 to 250 employees.

H1: The larger the company is, more important the bank will lend with fewer constraints.

- **Maturity:** we make this hypothesis that the more the firm is “old” and more bank is confident to lend some money and to contract a loan if financial results are correct. For this we have selected two categories of firm: “new firm” which has less or equal one year of existence, and firm which has more 10 years of existence.

H2: More the age of the firm is important more the bank will lend with fewer constraints.

- **Activity sector:** in our study this variable is added contrary to other studies. Indeed we find that the origin of the company may have an influence of bank decision so we introduce two main sectors as manufacturing and services. This origin can affect more or less strong according to the country or geographical area.

H3: More the activity sector is exposed to financial markets more the bank will lend with many constraints.

- **Ownership:** we divided it into 3 parts; shareholders, family and venture capital. According to the property owned by the firm, it may affect the decision of the bank. We can make the hypothesis that venture capital can be more volatile than a firm that is owned by a family.
H4: More the ownership of the firm is exposed to a financial risk, more the bank will lend with fewer constraints.

- Finance: we select “net profit margin” as a financial variable. We inspect whether a decrease of net profit margin will affect the firm for a bank loan.

H5: More the net profit margin is good more the bank will lend with fewer constraints.

- Opinion of investors: we employ two variables in order to take into account confidence of investors: one for Europe and one for the USA.

H6: More the level of the indicator is important, more the bank will lend with many constraints.

3.6 Macro economics Factors

In this subsection, we describe the external environment that affects the decision for a bank that accept or not to lend. The external environment is characterised by the real economy, the link between finance and the real economy. Previous studies analyse the role of banking sector in propagating real economy crisis (Bernanke, 1983) and in contributing to real economy growth (Rajan, Zingales, 1998), for the effect of finance on growth, for the role of finance in efficiently allocating capital to growth sectors (Wurgler, 2000). To examine the real economy that affect supply and demand for loans and to capture all the changes that affect economic activity in each country we use several variables: GDP growth, private debt to GDP ... Indeed, changes in economic growth can affect the expected returns on investment which will alter their demand for credit (Lown, Morgan, 2002). GDP growth will also affect the supply of credit to firms. When a country has a negative GDP, the prospects of growth are reduced, income also, assets values decrease so firms present more risk. These factors are binding for a bank loan. These factors may impact the private sector balance sheet and affect their credit worthiness that’s the reason why we use “private debt to GDP”. Private debt to GDP can impact either the supply of demand for credit. Rogoff (2011) remarks that debt overhang can create a need to deleverage, thus decreasing the incentive to invest and reducing demand for credit.

- Growth:

H7: More the growth is important in a country, more the bank will lend with fewer constraints.

We have chosen another aspect that it has to be studied.

- Regulation:
Government ownership of banks: we supposed that a government in a country which owned banks financing constraints are likely to be higher. Such countries are more likely to have a public registry.

H8: More the bank system is owned by the government more the bank will lend with many constraints.

Banking concentration: we expect that in a country with a highly concentrated banking system access to finance would be more restricted.

H9: More the banking system is concentrated more the bank will lend with many constraints.

International accounting standards: we tested the fact that the use of international accounting standards or audited financial statements has an effect on self-reported financing constraints.

H10: More the bank is conformed to the international accounting system more the bank will lend with many constraints.

Risk:

LVCI indicator: it is a measure of stress on the financial markets

H11: More the level of this indicator is important, more the bank will lend with many constraints.

Debt:

Debt to Output: we take a variable to capture the variation in debt across sectors

H12: More the level is important more the bank will lend with many constraints.

4. Panel Data Econometrics

4.1 Determinants of loan rejection

4.1.1 Europe

Table 2 reports the results of our regression for the determinants of loan rejection for Europe. We use a probit model that takes one when a bank reject a loan. We realized 6 models due to the multicollinearity between variables. Each variable is classified by themes: size, maturity, activity sector, ownership, finance, opinion of investors, growth, regulation, risk and debt. Generally, we
observe that small and young firms are more likely to get a refusal to obtain a bank loan. Indeed, the difficulties in accessing financing stay one the most principal obstacle of creation, survival and growth of SME and in particularly for the most innovative as start-ups (it concerns our variable (less or equal to one year of existence)). Financial crisis only exacerbates the difficulties in this area while SME and entrepreneurs suffer a double blow: on the one hand an important decrease of demands of goods and services and on the other hand a tightening of credit conditions. We try in a next paragraph to describe the government solutions. Whether small or young firms, they don’t have important financial resources to give some guarantees to the bank. When we speak about small firms, we talk about firms from 1 to 9 employees. It is the same observation when we speak about “young firms” with less or equal to 1 year of existence. “Young firms” can be characterised by “start-ups” even if they are not all in this situation. Start-ups are in general small firm which invest in a new sector, in a new technology, they are innovative. These last one are nicknamed “micro enterprises”. We introduce in a next paragraph the solution provided by government in different countries.

Another characteristic that we notice about the determinants of loan rejection is that firms in the industrial sector are more affected than firms in services sector. This fact may be explained by the decrease of industries in many countries. We can take the French example where the automotive sector suffers as PSA Peugeot Citroën wants to delete 8000 jobs in France and stops the production in Aulnay-sous-Bois. Indeed the constructor suffered a net loss of 819 million euros in first half. It is four times higher than anticipated by analysts surveyed by Dow Jones Newswires. Consequently the rating agency Fitch has already downgraded the note of PSA from “BB+” to “BB”. According to INSEE (the French Statistical Institute), the composite indicator of business climate reaches the lowest level since early 2010. At the opposite and this is the only example of our sample, Germany is the only country where industrial sector records a growth (even if small) of its production: the German Ministry of Economy says 1.6% of growth in May 2012 after a decrease in April.

Concerning the ownership, we observe that firm which belongs mainly to a family composition is more likely to obtain a bank loan in relation to a firm with multiple shareholders or a majority part of venture capital. Indeed when multiple shareholders compose the ownership of a firm, the shareholding and the ownership are diluted and not stable. For a bank, it is not a good signal to trust in a firm. They are more sceptical. It is the same observation for firms which have an important ownership of venture capital. Venture capital is a new source of financing for some firms and especially for small and medium firms. However if a firm has only venture capital for its financing, bank can considered that it is a more risky financing (introduction of mezzanine debt). At the opposite, senior debt is more secure.

Concerning the financial variables “net profit margin” we observe that firm with law net profit margin are well susceptible to have more problems to obtain a bank loan. It is very understandable by the fact that weak profits and prospects are not assets for a bank.

And to finish our micro economics aspects, we select the opinion of investors with 2 variables: Zew Index for Europe. We introduce ZEW index to estimate the opinion of European investors. We see that investors are pessimist in their projection and financial prospects.
Next, we observe the macroeconomics effects for the determinants of loan rejection. We distinguish four aspects: first growth effects, then regulation, risk in a third step and finally the debt.

We employ two variables for the “growth effect”: private debt to GDP and GDP growth. We observe GDP growth in Euro sector is not very good. Indeed, Brussels declares that the Euro Zone is an recession during 2012 and the growth prospects for 2013 are being revised down from what was planned 1% against 1,3% expected. For Private Debt to GDP, we find that the percentage of Private Debt relative to GDP in Euro zone is very important, for example in February 2012, in Spain the rate reaches 130%, France 110%, Italy 82%, Germany 48%. These two indicators are significant and translate that more the debt of country is important more it is difficult for a firm to obtain loan. Indeed government is tougher with banks and towards SME. We will confirm it when for the next variables that we study.

In a second step, we study the regulations by government, banking system and international regulations. We use three variables that we have defined previously. We expected that in a country where the role and the place of government is very important in the bank system, the constraints will be higher. This fact is approved with the significant results of the variable “government ownership of banks”. We also assume that in a country where the banking sector is very concentrated, it will be more difficult to obtain a bank loan and the conditions are more important. For this, we chose “banking concentration” as variable. The results show that more the banking concentration is important, more it is difficult to obtain a bank loan (the constraints are more important). And finally we inspect whether the international standards may affect obtaining a credit from SMEs. We find that the coefficient of this variable is not significant at a 10% of level. However we find that this variable is still important to take into account. Perhaps a variable with the regulation of Bâle 3 could have been more significant.

Then we introduce a risk variable, LCVI indicator, to capture stress in financial markets and the banking sector. LCVI indicator comes from J.P. Morgan to identify various components of global risk including liquidity risk, credit risk and volatility risk (LCVI). Liquidity risk is measured by the premium factored into the spread between on-the-run and off-the-run government bonds, which otherwise have the same credit risk. Credit risk is given by the spread between long term investment grade corporate bonds and a risk-free rate, while volatility risk is based on the implied volatility of options markets. Associated with these sub-indices it is an index of global risk aversion which combines the three sub-components. This index is particularly interesting as it was developed to circumvent the problems associated with measuring risk within a single asset class and is often used as an approximation for risk aversion in global financial markets (International Monetary Fund, 2002, 2003a). In addition, the overall LCVI index is comprised of the weighted average of three risk subcomponents: credit risk, volatility risk and liquidity risk. The three components are assigned equal weights in the index. We investigate that the coefficient is significant and reflects that there is a sense of fear and anxiety in the markets that invade the system of bank financing.

To finish, we investigate the relationship between the debt to output to the constraints financing a bank loan. This variable allows us to capture the debt across sectors relative to the total output of the sector. We find that sector where debt is important, are less susceptible to reduce their demand. This observation may be explained by the fact that this sector needs some financing to growth.
Before beginning the USA results, we have to notice that for all precisions for the European study, appendix A1 to A3 deals with perceived deterioration in loan availability, the decrease in loan demand and the interest rate increase.

For the temporal dimension, we remark that our results are very significant for 2011 and the half of 2012. These results prove that economical conjuncture become more and more difficult. These results corroborate with those in macro economic determinants of our study. We find also that financial crisis has a more important impact today as the beginning (2007), it proves also with our results.

4.1.2 USA

[Insert Table 3]

For the USA probit regression, we use the same methodology as Europe study. In USA, we have in mind that there are only big firms and SMEs are not really important in the economic growth. This observation is absolutely wrong in the sense that Federal State pays great attention and resources for SMEs. Indeed in the land of competition glorified, the surprise comes from the law “Small Business Development Innovation Act” originally enacted in 1953 but significantly amplified in 1982. It provides SMEs with an obligatory part of all markets public, either directly or through the large companies. In total 100 billion worth of contracts are boosting the growth of SMEs. Another specification of the USA is that there is the “Bayh-Dole Act”, named after the two senators who proposed, was adopted in 1980. It gives the intellectual property of inventions resulting from research conducted with federal funds and preference is given to SMEs technology transfer. What’s more, exclusive licences are granted to SMEs, which can be very interesting for them. With all these particularities of SMEs in the USA, we observe that the impact of financial crisis in SMEs financing is less important than in Europe. This fact can be explained by the efforts of government to support growth and the existence of SMEs. We observe that the coefficients are lower than those in the European study. However we remark that small firms (1 to 9 employees) have more penalized than firms with 49 to 250 employees to obtain a bank loan. Nevertheless, these results are less important than those in Europe.

We find, as European results, that new firm have more difficult to obtain a bank loan. However as the previous result, the coefficient of this variable is less important as the same in the European study. Indeed we know that in the USA, start-ups have an important place in the economy, the famous example is the Silicon Valley where start-ups in new technology are very numerous.

Concerning activity sector, we remark that results are similar as those in Europe. Industrial sector is a little more affected as services sector. This impact is lower than in Europe. This observation can be explained by the fact that the USA knew this decrease in industry sector before Europe such as General Motors, Ford... and they responded immediately by making strategic alliance as General Motors and PSA.

In a next step we study the ownership effect of the determinants of loan rejection. Contrary to Europe where a constitution of family ownership is a real advantage compared to shareholder and venture capital, in the USA we observe that family ownership in SMEs is less present and don’t constitute the same importance as in Europe. Indeed, the shareholder structure in the USA has
always represented an important role. This observation is always proves true in the sense that we have significant coefficient for a shareholder ownership. The most relevant is that Venture Capital is very important in SMEs in the USA that is one of the reasons that they become world leaders. Indeed, the business press is often the echo of studies touting the dynamism of American SMEs that can in some years become world leaders. The founders of these companies have future full of often, at a crucial stage of their development project, returned to their shareholders capital professionals to support their growth strategy. Private Equity is the source of SMEs development. The results for Venture Capital in our study are obviously significant.

Concerning Finance, we use the same variable as Europe, “net profit margin”. We also observe that firms which have less net profit margin, have more constraints to obtain a bank loan. No difference between Europe can be noticed.

To finish the part of microeconomics variables, we study the opinion of industrial investors by using a specific index: KCFSI index. As we defined it before, we saw that if it is a positive value, it indicates that financial stress is above the long-run average. And it is exactly what we have in our study. Stress is the main feeling that we have in financial markets since few years. Consequently we assume that institutional investors are pessimist about financial prospects. It is the same observation in Europe.

Next, we introduce macroeconomics variables, the same as in Europe. We study also the four aspects: growth aspects, regulations aspects, risk and debt aspects.

In a first time, we study the growth aspects with two selected variables: private debt to GPD and GDP growth. Concerning the GDP growth we observe that American economic growth has slowed sharply in the first quarter 2012 but some of its essential foundations were reinforced according to the first official estimate of US GDP. Compared to the previous quarter, the GDP of the country rose 2.2% annualized rate from January to March 2012 after rising 3.0% during the three autumn months, declared the Commerce Department. The results of American economy growth are lower than the ministry to the median estimate of analysts who gave a growth rate of 2.5% in the first quarter. However, the US Central Bank (FED) said that the country’s economic slowdown should be passenger and announced that it foresaw a recovery of future growth. Indeed, two factors explained the future increase of GDP: the increase of intern demand of US goods and increase of exportations. If we use Private Debt to GDP in the USA, we notice that the level of private debt to GDP is equal to 75%. The first remark that we can said is that the level is lower than in countries in Europe. So we find that the economy in the USA is in better situation than in Europe. It is one of the reasons that the results for the USA are better and more significant.

Then, we study the regulations with government ownership banks, the banking concentration and the international accounting standards. We find as Love and Mylenko (2003) that government ownership and the international accounting standards are not significant. However, we find a positive and significant effect for the banking concentration. Indeed following the “subprime crisis”, the fragility of banks has encouraged a vast movement of concentration that worries more supervisors because the oligopolistic structure of the banking market is not without consequences for financial stability.
To capture stress in financial markets and banking sector, we use as for Europe study, the LCVI index. And the results show that there is a sense of fear and anxiety in the markets, we can confirm it when we see the evolution of VIX index. However the coefficients are less important as those in Europe because institutional investors have more confidence in the USA than in Europe where a crisis of Euro money is latent.

To finish the macroeconomic study, we study the debt with debt to output as variable. We remark that more the debt is important in a sector, more the demand of loan is important too. It is the same conclusion as Europe.

For the temporal dimension, we remark that our results are significant for 2011 and the half of 2012. The significativity is a little bit lower than in Europe. These results prove that economical conjuncture become more and more difficult. These results corroborate with those in Europe. However we observe that in 2007, the USA were more impacted than Europe (Lehman Brothers...).

4.2 Synthesis of main determinants of loan rejection

To be more concise, we presented the main determinants of loan rejection with a table which compares Europe and USA.

Table 4: Main determinants of loan rejection in Europe and in the USA

<table>
<thead>
<tr>
<th></th>
<th>Europe</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm Size</td>
<td>Significant for Small firm</td>
<td>No significant</td>
</tr>
<tr>
<td>Maturity</td>
<td>Significant for Young firm</td>
<td>No significant</td>
</tr>
<tr>
<td>Activity Sector</td>
<td>Significant for Industrial Sector</td>
<td>Significant for Industrial Sector but less affected than in Europe</td>
</tr>
<tr>
<td>Ownership</td>
<td>Significant for Shareholders and Venture Capital</td>
<td>More important coefficient for Family but no significant</td>
</tr>
<tr>
<td>Finance</td>
<td>Very significant</td>
<td>Very significant</td>
</tr>
<tr>
<td>Opinion of Investors</td>
<td>No significant</td>
<td>No significant</td>
</tr>
<tr>
<td>Growth</td>
<td>Very significant</td>
<td>Significant</td>
</tr>
<tr>
<td>Regulations</td>
<td>Significant</td>
<td>No significant</td>
</tr>
<tr>
<td>Risk</td>
<td>Very significant</td>
<td>Very significant</td>
</tr>
<tr>
<td>Debt</td>
<td>Very significant</td>
<td>Very significant</td>
</tr>
<tr>
<td>Dates</td>
<td>All significant but more in 2011 and 2012</td>
<td>All significant but more in 2011 and 2012</td>
</tr>
</tbody>
</table>
5. Answers in terms of government auctions

5.1 Europe

5.1.1 Introduction

In the current context, which is the worst financial and economic crisis in decades, it is recognized that various factors such as aversion to risk more pronounced, declining liquidity and the bleak prospects for economic growth or should have or should have very serious repercussions on SME access to finance for entrepreneurs for short and long term. Small businesses are particularly vulnerable because a) they can not reduce their size, they are already small, b) taken individually, they are less diversified in terms of their economic activities, c) their financial structure is less solid and capitalization is lower, d) in terms of credit risks, their rating is lower (when they are noted), e) they are heavily dependent on credit, and f) they have fewer options financing, particularly because of their limited access to financial markets. Given these considerations, the steps taken or will be planned by the majority of countries to counter the effects of the crisis and stimulate the economy must also aim to facilitate access for SMEs and entrepreneurs to finance.

Governments usually respond by three types of measures:

- Support sales and fight against the depletion of working capital for SMEs.
- Improving SMEs’ access to liquidity.
- Help SMEs maintain their level of investment.

The ability of countries to cope with the crisis depends largely on the flexibility available to them in terms of fiscal and monetary policy. Many of countries surveyed recently implemented plans of action to fight against the crisis involving three to varying degrees of action: demand stimulus (measures to promote consumption, infrastructure programs, tax measures), credit enhancement, including recapitalization of banks, in some cases, provisions or mechanisms explicitly designed to preserve or enhance the capacity of bank financing to SMEs and measures relating to the labor market (lower taxes or payroll taxes to create jobs and temporary extension of programs of unemployment compensation).

In many countries, the action plans implemented by governments to deal with the crisis and the measures that accompany them, also study the problem of financing SMEs. We can classify the measures implemented by the countries into three broad categories:

- Measures to support the sales and to fight against the depletion of working capital for SMEs including loans and insurance to export reductions and deferrals, and observation by the authorities of a stricter discipline on payment,
- Measures to improve SMEs' access to liquidity, primarily to credit, by bank recapitalization and expansion of existing loan guarantee and credit,
- Measures to help SMEs to maintain their level of investment and, more generally, their ability to cope in the short due to a possible rebound in demand, particularly through investment grants and investment credits, accelerated depreciation, and an R & D funding.

We find that credit conditions are more and more difficult. Indeed, credit terms refer to a multitude of aspects, the most important are the differences in costs and interest rates between banks and
other financial intermediaries, commissions; the difference between the amount lent and those requested by companies; the level of collateral requirements, loan maturities, and processing times.

According to a study by OECD, some observations can be noticed:

- SMEs (and business in general) have significantly scaled back their investment projects financed by borrowing,
- The needs of SMEs for working capital and short-term borrowings decreased in some countries, although to a lesser extent compared to loans under investment,
- Banks have tightened their lending policies, both for pledges for money lent (although this is not exclusive to the SME),
- In some countries, banks and other financial intermediaries have significantly increased the cost of credit (and margins) for all their customers, which may seem paradoxical in an overall decline interest rates. The European Central Bank indicates that differences in interest rates for loans for small amounts have increased dramatically in late 2008.

Concerning the strategy by the bank, we can explain it by three factors that caused the increased caution of banks and other financial intermediaries in lending to SMEs:

- The poor economic outlook for SMEs
- Stagnation interbank lending and the increased cost of capital
- Balance sheet constraints

5.1.2 Solutions by government auctions

First we can present some short-term measures to support the sales, cash-flow and working capital. Recovery plans implemented are intended to stimulate demand for consumption or investment spending. For example, France and Germany have allowed accelerated depreciation for all asset categories or certain assets, such as Germany, where damping thresholds were established for SMEs, who thus reducing their taxable income. Credits, discounts, and deferred tax rebates are also provided by some countries. To fight against the risk of depletion of working capital for SMEs, some countries have introduced specific measures which, without involving additional credit lines, are aimed at easing liquidity constraints of SMEs. Two main types of instruments are used: regulations to reduce payment delays and enforce payment discipline (France) or reducing delays in payment by the State as France, Italy … In addition, SMEs are among the exporters, either directly or indirectly through their participation in global value chains. To mitigate the drop in sales on export markets and increase liquidity in case of companies extended terms of payment internationally, many countries have implemented or reinforced existing funding or guarantee in for exports. We can cite some examples such as credit lines for export (Canada, Chile, Czech Republic, Denmark, Mexico, Slovenia), mechanisms of credit insurance (Germany, Luxembourg, New Zealand and the Netherlands), Credits equipment for SME exporters (Mexico) or a general support for internationalization and competitiveness of SMEs (Italy, Spain). These measures may come to support existing initiatives or be totally new.

Second government introduce some incentives to SME. While many action plans provided for the recapitalization of some of the largest banks with public funds, we believe that banks have significantly tightened their credit policies. To mitigate the impact on SMEs represented by the
double shock of falling sales and tighter access to credit, the government adopted two different approaches to improve the availability of loans to SMEs:

- Side incentives, create and expand mechanisms guarantee loans to SMEs or, if unsuccessful, direct government lending,
- Side discipline or sanctions, imposed on banks that were recapitalized with public funds specific objectives on credit to SMEs, placing them under administrative supervision or implement special procedures to resolve a case by case problems between SMEs and banks.

Third, some mechanisms for credit guarantee have been created. There are also a number of private security mechanisms. The European Mutual Guarantee Association (AECM), which consists of non-profit organizations providing credit guarantees to SMEs, provided 55 billion euros to 1.6 million SMEs (about 8% of total SMEs in the European Union). As members of the AECM familiar with the local context and the SME sector, they are able to assess more accurately the risk posed by each loan. They also provide additional information to banks and SME partners and link with them. From the perspective of AECM, the cons-guarantees of the European Union are extremely useful and effective, but the program "Competition and Innovation" suffers from delays in implementation and, to date, only some of AECM members were able to sign bilateral agreements with the European Investment Fund. During the crisis, governments should be more flexibility in the use of their against-guarantee mechanisms, broaden the scope of these mechanisms for working capital and ease their conditions so as to cover the guarantee commitments in the short term. The AECM also proposes that banks that accept guarantees private loans are excluded from the relevant requirements in terms of reserves. Some direct loans to SMEs by public institutions such as SME support agency have been organized by country. We can presented some institutions: OSEO, France, the Ministry in charge of SMEs in Belgium, the Instituto de Credito Oficial (ICO) in Spain, in which they are an additional way to provide liquidity to overcome the reluctance of private banks to lend to SMEs even in the presence of collateral. In Belgium, the Ministry in charge of SMEs provides these companies with pre-financing arrangements that they can present to banks to obtain loans. In addition, Belgium and France have called a "credit mediator" that may occur at regional and central level to level and help resolve differences between companies seeking to obtain bank loans and banks. This mediation can help SMEs to solve their liquidity problem keeping their loans or getting new ones. To initiate the process, the company must demonstrate a "mediation file" on the website of the credit mediator who was appointed at national level to coordinate mediation and act as "referent" of last resort. He is assisted by mediators departmental, regional directors of the Bank of France. Once the file is received, the banks are notified by mail, and have a period of 5 working days to respond to the company. After that, the mediator county has 5 working days to review the matter and report how it should be treated. When the mediator has identified solutions, the company will be informed by mail.

Fourth, some measures are created to strengthen measures to promote investment. Face medium-term prospects rather pessimistic and falling sales, many SMEs have reduced or suspended their investment projects. Consequently, their requests for long-term loans fell sharply, as noted above. To prevent SMEs from losing their competitive edge in the medium term and help them be ready for the upturn, some countries have implemented measures to strengthen their capital base and / or develop their productive capacities. These measures take the form of tax incentives or specific funding opportunities such as grants or credits.
Fifth, some measures are introduced to strengthen the capital base, private equity and venture capital. Many measures are implemented by the European Investment Fund (EIF), a member of the European Investment Bank Group. The EIF provides funding to long-term supply of equity, and guarantees on portfolios and securitizations of loans to SMEs to facilitate access to financing these companies. In late 2008, he undertook to provide EUR 3.5 billion of net equity (portfolio of venture capital and development capital), and EUR 12.3 billion in assets were securitized or guaranteed.

Sixth, other measures helping start-ups and innovative SMEs with high growth. Indeed, a consensus emerged around the need to ensure start-ups and innovative SMEs with high growth of access to adequate funding. Some governments have decided to encourage the provision of venture capital via private co-investment, in line with the principles of the OECD Action.

Another measures can be noticed as improve information and skills of SMEs and managers, facilitate dialog and consultation between government, SMEs and financial institutions and a better understanding the context of SME financing and entrepreneurial.

Other challenges for SMEs can be explored: sustainable development, corporate social responsibility... they represent a modification of consumption and production model or the development of green economy for the research of a social and economy development with both goals in environmental matters social. For example, ISO 26000 published in 2010 reconciles the different approaches and considers that social responsibility is the organizations contribution to sustainable development. This is a factor of economic competitiveness, efficient resource management and strategic positioning.

5.2 USA

5.2.1. The Small Business Act

An agency (Small Business Administration - SBA) is to implement the "Small Business Act". The minimum objectives of public procurement for SMEs (under 500 people) are currently 23% of direct contracts and 40% of the subcontract.

Programs to achieve these objectives:

- Are reserved for SMEs all contracts below 100 000 dollars or markets on which at least two SMEs can meet;

- Must necessarily give rise to plans for outsourcing all contracts above $ 1 million, with the commitment to entrust a fraction SMEs. In case of non-compliance, it is required to reimburse the SBA the difference between the target and actual.

Obviously, this assistance for SMEs is a major distortion of perfect competition. In the eyes of American government, several major reasons so warrant. The first is simply that it should help SMEs to become tomorrow's champions in order to avoid aging and win against larger companies to conquer the world. The second reason is the tremendous SMEs' ability to generate growth and especially jobs. It is well known that it is SMEs that create the most jobs, unlike large companies. To fight against unemployment, the public interest well understood is then to help them, because they carry many jobs.
Finally, the U.S. State perfectly perceived as radical innovations hatch especially in SMEs and the economist William Baumol has calculated that on average thirteen times more inventive per employee than larger firms. We now understand the importance of pampering SMEs because it is where much of the developing future products.

The history of the acceptance of the SBA deserves being told, as it illustrates the radically opposed conceptions of competition on both sides of the Atlantic. In 1996, was signed the Government Procurement Agreement (GPA) within the World Trade Organization (WTO), the Americans were then obtained a waiver that allowed them to maintain the SBA and Europe has agreed this exemption. Without having claimed for itself, Europe does not currently have the right to develop such a policy for SMEs.

Worse, the European Commission is opposed to the French government’s request to establish a similar policy, always on behalf of the need to copy a competition!

As we noticed before, the USA have some preferred relationship with university with the Bayh-Dole Act. In addition, we remark that there is public support to SMEs and innovative entrepreneurs. Indeed, The SBIR (Small Business Innovation Research) is being implemented since 1992, always under the SBA. This program over 2 billion dollars a year is reserved for SMEs, he invites them to create and develop, for government agencies, products that do not exist.

To this end, it encourages researchers to create start-ups and SMEs to extend their technological potential, while it encourages the commercialization of new products very innovative.

The selection process of the company will benefit from grants like a competition organized in two phases. In the first phase of six months, all competitors receive a subsidy of about 60 000 euros to implement the project and its feasibility study.

In a second phase of about two years, one or more companies have been selected, the agency grants a new grant of an average amount of 500,000 euros to develop a prototype, this grant of up to several million euros. Despite a government grant, the company retains full intellectual property the technology developed.

It is recognized that this program has a considerable economic impact. Annually, about 4,000 companies are involved and this program has helped thousands of academics and researchers to become entrepreneurs. Over 300 companies selected by the program are now publicly traded. A success like Amgen (14,000 employees) is exemplary, as established in 1980, it has largely benefited from the SBIR program and has become the world leader in using biotechnology drugs.

In general, participation in the SBIR program is a label for a company of quality and profitability, and it thus causes the interest of venture capitalists and business angels, which then accelerates its development.

5.2.2 The United States Small Business Administration (USSBA)

The United States Small Business Administration (USSBA) is an institution that works with 5 000 banks and credit unions, some 250 Community Development Corporations (CDCs), over 170 non-profit financial intermediaries and Community Development Financial Institutions (CDFIs) and nearly
300 small business investment companies (SBICs). The USSBA Capital Access Program has several major sub-programs that provide guarantees and co-funding for a wide range of products designed to meet the diverse financial needs of small firms throughout their life cycle, starting from small start-ups to established firms.

The largest of these, the Loan Program, provides guarantees for working capital loans up to USD 5.0 million to new and existing small businesses. The second largest sub-program, the Certified Development Corporation Loan Program provides guarantees and co-funding for loans up to USD 5.0 million used for the purchases of fixed assets.

The financial and economic crisis of 2008-09 had a pronounced impact on the USSAB’s Capital Access Programs. The volume of its two largest loan guarantee programs declining from a monthly average of USD 1.7 billion during the 2005-07 period to a low monthly level of USD 687 million, an 60% decline. The average dollar volume for these two programs rebounded to USD 1.4 billion after major interventions by the federal government.

To achieve this rebound volume, the USSBA first provided additional incentives to financial institutions, and second it assisted in the unfreezing of the secondary market for USSBA loans. The Agency employed additional funding received from Congress to temporarily increase its guarantees. The USSBA also temporarily reduced or eliminated the fees it charges financial institutions participating in its loan guarantee programs. The agency also increased its loan limits.

The second problem facing the USSBA was that, due to the sharp drop of interbank confidence, the volume in the secondary market for SBA backed loans dropped sharply just as it did in the commercial paper market. About 40% of guaranteed loans are sold in the secondary market.

This market experienced a sharp drop during the second half of 2008, moving from an average monthly level of about USD 328 million to approximately USD 100 million during the first month of 2009. In response, on March 16, 2009 the President announced that as part of the Financial Stability Plan (FSP), the Department of Treasury would purchase USD 15 billion of USSBA loans on the secondary market. Through this program the government promised to be a buyer of last resort for these recent loans.

5.2.3 Start-ups

A variety of approaches to alleviate these pressures are being publicly discussed and, in some cases, implemented. These include: federal R&D agencies financing very early-stage companies through add-ons to existing grants to support taking spin-offs to market; creation of a new federal program to provide competitive funding to support proof-of concept research at universities “crowd funding” under which entrepreneurs with ideas: seeking financing to use the Internet to advertise their ideas and to seek investments in small amounts from many small investors, as authorized in the Jumpstart Our Business Startups (JOBS) Act; and providing matching funds and various forms of non-financial assistance to entrepreneurs with good ideas that are worthy of financing but are at too early a stage, and therefore, too risky to attract private capital. Following careful analysis and evaluation, the federal government should implement the most promising of these approaches.
These proposals fall within the scope of the Startup America initiative launched by the Administration in 2011 to improve the environment for high-growth entrepreneurship.

They would usefully be complemented by the other main aspects of this initiative: creating mentorship and educational opportunities for entrepreneurs; reducing regulatory barriers; and driving a nationwide effort to engage potential new opportunities in industries like healthcare, clean energy, and learning technologies (US Department of Commerce, 2012).

The federal government also runs a number of programs to promote high-growth potential entrepreneurship at the regional level, including through the development of innovation clusters.

Entrepreneurial activity could be further enhanced by limiting clauses in employment contracts that expressly prohibit individuals from competing with their former employers.

Stricter enforcement of such contracts is associated with lower rates of entrepreneurial start-ups, innovation and employment growth (Samila and Sorenson, 2011; Marx et al., 2010).

Building a better social safety net would also encourage firm start-ups by reducing the potential costs of failure for entrepreneurs and their families. The Health Care Act of 2010 makes an important contribution to improving the safety net for entrepreneurs and making small firms more attractive to work for by reducing the costs of individual or small group policies. Similarly, the reforms proposed in the FY 2013 budget to encourage small firms to offer qualified employee retirement plans for the first time will help to make working for small firms more attractive.

6. Conclusion

Since 2008, the world financial crisis affected financial markets and all stock market (commodities, exchange rates, currency values...). Another segment of the economy is hit: SMEs and contractors. Indeed SMEs and contractors represent the most important segment in all economies. They are a considerable source of jobs and profits, growth and innovation. According to the OCDE, SMEs employ more than half of private sector workers. Financial crisis affected directly the financing of SMEs (weaker results, bank’s constraints more difficult ...).

We explain the main determinants of loan rejection from a bank to a SME in Europe and in the USA by combining micro economic and macro economic determinants. We notice that the impact of financial crisis on SMEs is not the same in all countries. For that, different variables studied (size, maturity of firms, activity sector ...). The most relevant observation is that small and young SMEs in Europe have more difficulties to obtain a bank loan than in the USA. It can be explained by the fact that USA gave a better importance of SMEs and more possibilities to find a financing compared to Europe. Another determinant that affects negatively SMEs to obtain a loan during this recession in Europe: the ownership by shareholders and Venture capital. Indeed, venture capital is related to financial markets that implies some financial risks. Europe banks don’t trust in it contrary to the political banks in the USA where venture capital is a main source of financing (mezzanine debt ...). What’s more, the temporal dimension gives us information: 2011 and 2012 are the two years where it is the most difficult for Europe, in the USA 2007 was important, 2011 and 2012 are also too but lower than in Europe.
Given the results, the policies employed by governments must be changed in order to favor SMEs credit during financial crisis. Some measures have been implemented with European Investment Fund, with some organizations as OSEO in France ... and a creation of a “mediator file”. Innovation as the USA will be more take into account (for start ups’s integration in the USA such as reducing regulatory barriers ...) and to give them news objectives such as the regulation of environment, corporate social responsibility.

This paper allows us to understand that determinants that affected SMEs to obtain a bank loan are, mainly intern factors (financial results, ownership, size...). However we find that other aspects have to be studied: external factors affect greatly the economic situation of SMEs (banking constraints, growth of the countries, risk in financial markets ...). These results allow us to reflect on the fact that governments must act and that all the constraints imposed on banks and other institutions do not produce an opposite effect on the growth of SMEs? More flexible constraints would not be better?
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