SUPPORT OF LOCAL ENTREPRENEURSHIP:
AN EMPIRICAL INVESTIGATION FOR SERRES-GREECE

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This paper is divided into two parts, one theoretical and one empirical. The research deals with entrepreneurs that received loans from National Fund for Entrepreneurship and Development (ETEAN in Greek language). ETEAN provided enterprises with non interest or low interest loans based on state guarantees. The main objective of this research is to examine the project's effectiveness and its contribution into local development on Regional Unity of Serres, Central Macedonia, Greece.

The first part is divided into two sections. A comparative analysis of guarantees to small and medium enterprises (SME's) is presented in the first part referring to the European Union and in the second part to Greece. Particularly, in the first section of our paper presented data concerning guarantees provided in the EU. At the second section presented data which indicate the role of ETEAN's programs into the contribution of local development in Greece and the moral hazards due to state provided guarantees. Furthermore, obstacles that entrepreneurs face when they applied for guarantee loans are analysed in this part. Our data were extracted during the last three years by the extensive use of web links on the internet. Most data were taken from the websites of above mentioned ETEAN, the Pan-European Gateway to Business and Innovation Financing, the Gateway to European Research and Development and B.I.S.

At the second part presented the results of our research based on 200 entrepreneurs in Serres who receive loans from ETEAN. The results analysed with the use of descriptive statistical methods and correlations.

It is noticeable that businessmen’s answers are similar to those deduced from the results of the researches that have been referred to in bibliography.

In the final part of this paper the main conclusion is pointed out and that is that those programs which provide enterprises low interest or non interest loans support local development.

Key words: loan providing funds, state guarantees, local entrepreneurship, regional development, Regional Unity of Serres.

INTRODUCTION

It is common ground that Small and Medium Enterprises (SME's) constitute the main employment provider sector in the Greek economy and have a major contribution to the formation of the development potential of the Greek economy. The development of the enterprises depends heavily on the existence of loan able funds. Taking under consideration to the fact that the survival and the development of almost every enterprise is critically determined by the fund availability, this research deals with entrepreneurs that received loans from Greek Guarantee Fund for Small and Very Small Enterprises (TEMPME in Greek language). TEMPME provided to enterprises non interest or low interest loans based on state guarantees.

This paper is divided into two parts, one theoretical and one empirical and attempts to examine the project's effectiveness and its contribution into local development on Regional Unity of Serres, Central Macedonia, Greece.

At the theoretical first part of our paper which is divided into two sections, we will present a comparative analysis of guarantees to small and medium enterprises (SME's) to the European Union and to Greece. Particularly, in the first section of our paper presented data concerning guarantees provided in the E.U. and at the second section presented data which indicate the role of TEMPME's programs into the contribution of regional development in Greece. European Union supports SME's through various programs aiming simultaneously at the increase of total employment and competitiveness of European economy. In Greece during the time passage the existing developmental back up laws did not succeed in the creation and

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maintenance of a balance between country growth and development, and the substantial fostering of major innovation projects.

Our data were extracted during the last three years with the extensive use of web links on the internet. Most data were taken from the websites of above mentioned TEMPME, the Pan-European Gateway to Business and Innovation Financing, the Gateway to European Research and Development and B.I.S. Furthermore, obstacles that entrepreneurs face when they applied for guarantee loans are analysed in this part. According to Piperopoulos (2007:118-121) "The main obstacle for the 13% of SME’s is access to funds".

At the empirical second part are presented the results of the questionnaire-based research from 186 local entrepreneurs at Serres. We focused only on these enterprises which received loans from Greek Guarantee Fund for Small and Very Small Enterprises (TEMPME). We will analyse the results using statistical methods and calculate the average, the standard deviation, the coefficient of variation and the coefficient of correlation. We will also refer to crisis in poor regions.

It is worth referring to the fact that entrepreneurs’ answers are similar to researches that have been referred to in bibliography.

Finally, the main conclusion is pointed out and that is that programs which provide enterprises with non-interest or low interest loans support regional development.

GUARANTEES FOR SME’S

Guarantees for SME’s on EU

European Union recognizes the significant role of Small and Medium Enterprises. Furthermore, EU takes under consideration the fact that access to funds is vital not only for a new entrance but also for a mature business’s expansion. Thus EU provides financing to SME’s either using direct subsidises, either providing low or non-interesting loans or even providing state guarantees. EU also finances specific projects. The financing of the EU can be divided into two categories:

1) The Direct financing through subsidies is implemented primarily by through European Structural Funds. The European Regional Development Fund (ERDF) supports the development and structural adjustment of regional economies by helping small businesses and promoting the entrepreneurial spirit. The initiative called JEREMIE (Joint European Resources for Micro-to-Medium Enterprises) aims to improve access to finance for SMEs in less developed regions contributing to the creation of new businesses, especially in innovative sectors of activity. JEREMIE proposes guarantee loans together with own resourcing funding and venture capitals. The funds are provided through financial intermediaries, banks and investment funds, in particular through the European Investment Fund and the European Investment Bank (EIB). Furthermore, another special support instrument is the so-called programme JESSICA (Joint European Support for Sustainable Investment in City Areas), that is an initiative of the European Commission developed in co-operation with the European Investment Bank (EIB) and the Council of Europe Development Bank (CEB). It supports sustainable urban development and regeneration through financial engineering mechanisms. EU countries can choose to invest some of their EU structural fund allocations in revolving funds to help recycle financial resources to accelerate investment in Europe’s urban areas.

2) The Indirect financing provides enterprises better access to funds through financial intermediaries. The European Investment Fund (EIF) ensures the proper management of the resources on behalf of the Commission and EIF interventions through financial intermediaries, banks and investment funds, thereby reassures the proximity of funding. The main function of the EIF is to facilitate SME’s access to finance through borrowing, i.e. through loans and leasing. Among others, IEF guarantees loans for developments which are considered to have an increased risk, (for onstallce loans for information and communication technologies - ICTs). Finally, IEF also offers guarantees for micro loans (less than EUR 25,000), overcoming the fact that such loans present a high risk and low profitability.

It is worth referring on this point to the venture capitals which provide funds to companies which are either in the early stage of development or develops in innovative sectors of activity. The great majority of the enterprises were excluded from the benefit of the non-interest funds. The condition at the second Cycle that every enterprise should succeed in achieving a positive profit mean of its last three financial years in succession (especially the years 2005, 2006, 2007), in their profit and loss accounts. As a result of the previous strict condition, micro and new enterprises were excluded from the benefit of the non-interest funds. The condition at the second Cycle that every enterprise should succeed in achieving a positive profit mean of its last three financial years in succession (especially the years 2005, 2006, 2007), in their profit and loss accounts, finally allowed more business to benefit from the low-interest loans. In any case new enterprises have been excluded from this programme. Furthermore, according to Porter (1988:223) "As a result of newness, the high level of uncertainty, customer confusion, and erratic quality, the emerging industry’s image and credibility with the financial community may be poor". In addition, according to Piperopoulos (2007:118-121) "new entrepreneurs are more likely to suffer from insufficient fund availability".

The role of National Fund for Entrepreneurship and Development

During last years (1-1-2009 up to 7-4-2010) enterprises in Greece have been supported by the Greek Guarantee Fund for Small and Very Small Enterprises (TEMPME in Greek language) which provided enterprises with non interest loans (at the first Cycle of the program) or low-interest loans (at the second Cycle of the program) loans. Since February 2011, TEMPME has been substituted by the National Fund for Entrepreneurship and Development (ETEAN SA in Greek language). TEMPME was an a form of anonym society. The share capital rose up to €1.712.885,700. According to the law 3066/2002 TEMPME’s basic aim was to support Small and Micro enterprises when they struggle for loans. TEMPME provided to enterprises state guarantees up to 80% of the amount of credit. Thus, banks could undertake loans which could be characterized as high risk ones. Furthermore, TEMPME supported innovated activities. The great majority of the enterprises which have been benefited from TEMPME are located at Athens (Attica) or Thessaloniki (Central Macedonia).

As we presented in Table 1, the great majority of the enterprises (92.55%) have been benefited from the TEMPME programmes (or ETEAN). Therefore, our research focused on those enterprises which took loans from TEMPME.

In Table 2 we present the total amount of credit, the total amount of guarantees, the number of loans, the loan average and the number of employees who occupied by the two phases of the TEMPME programmes.

The main condition at the first Cycle is that every enterprise should have achieved 3 profitable financial years in succession during last three years at their profit and loss accounts. As a result of the previous strict condition, micro and new enterprises were excluded from the benefit of the non-interest funds. The condition at the second Cycle that every enterprise should succeed in achieving a positive profit mean of its last three financial years in succession (especially the years 2005, 2006, 2007), in their profit and loss accounts, finally allowed more business to benefit from the low-interest loans. In any case new enterprises have been excluded from this programme. Furthermore, according to Porter (1988:223) "As a result of newness, the high level of uncertainty, customer confusion, and erratic quality, the emerging industry’s image and credibility with the financial community may be poor". In addition, according to Piperopoulos (2007:118-121) "new entrepreneurs are more likely to suffer from insufficient fund availability".

In Table 4 we present the number of TEMPME
loans/ number of employees in the enterprise. We came to the conclusion that the number of the micro enterprises which were benefit from the programme raised from 69.61% at the first cycle to 74.5% at the second cycle of the programme.

In Table 3 we present the number of TEMPME loans per number of employees in the enterprise. At the first cycle of the programme 69.61% of the enterprises occupy less than 5 employees while at the second cycle of the programme 74.5% of the enterprises occupy less than 5 employees.

In Table 4 we present the amount of credit / number of employees in the enterprise. It is obvious that at the first cycle of the programme only 43% of the total amount of credit supported micro enterprises while at the second cycle of the programme the total amount of credit which supported micro enterprises rose up to 61%.

To come to the conclusion that the programs' accession conditions become flexible, microenterprises would be assisted more than the larger ones.

Taking the positive role of state guarantees for a granted, state should not disregard the moral hazard both by businesses and banks. According to the law, banks use the same criteria in order to provide funds for enterprises whether there are guarantees or not. Unfortunately, Greek banks provided state guarantee funds not only to those enterprises which had the ability to repay their debt, (the credible ones) but to almost every enterprise, even those enterprises which were likely to go bankrupt. For example, three years ago (September 2010), Greek government provided state guarantees to tomato industries in order to repay the tomato-producer farmers for the year 2009 (that is to say tomato-industries owed money to tomato-producer farmers for a period up to a year). In Serres alone, the guarantees raised to 5 million Euros as it was published in local newspapers. In addition, on one hand, businessmen do not meet its obligations as guarantees are existed and on the other hand, as banks having the liquidation of guaranteed loans they do not force enough their clients.

RESEARCH ON LOCAL ENTREPRENEURS

Methodology implementation—Descriptive statistics and correlations

We will analyze the results using either variables 1 and 2 at the questions with 2 choices or the variables 1 - 6 at the questions with more choices. Thus we will calculate the

<table>
<thead>
<tr>
<th>Programmes</th>
<th>Loan</th>
<th>%</th>
<th>Guarantee</th>
<th>%</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>L01</td>
<td>107,685,436.77</td>
<td>1.87%</td>
<td>72,829,196.78</td>
<td>1.60%</td>
<td>1234</td>
<td>1.92%</td>
</tr>
<tr>
<td>L02(1)</td>
<td>175,096,872.88</td>
<td>3.04%</td>
<td>117,756,646.02</td>
<td>2.58%</td>
<td>1651</td>
<td>2.57%</td>
</tr>
<tr>
<td>L03(1)</td>
<td>49,138,979.59</td>
<td>0.85%</td>
<td>31,903,255.96</td>
<td>0.70%</td>
<td>281</td>
<td>0.44%</td>
</tr>
<tr>
<td>L04(1)</td>
<td>29,004,262.83</td>
<td>0.50%</td>
<td>18,370,185.35</td>
<td>0.40%</td>
<td>1627</td>
<td>2.54%</td>
</tr>
<tr>
<td>L05(1)</td>
<td>455,000.00</td>
<td>0.01%</td>
<td>230,000.00</td>
<td>0.01%</td>
<td>3</td>
<td>0.00%</td>
</tr>
<tr>
<td>L07(2)</td>
<td>3,234,967,158.48</td>
<td>56.12%</td>
<td>2,587,000,438.48</td>
<td>56.72%</td>
<td>27069</td>
<td>42.18%</td>
</tr>
<tr>
<td>L08(2)</td>
<td>2,043,512,795.03</td>
<td>35.45%</td>
<td>1,634,810,236.02</td>
<td>35.83%</td>
<td>30308</td>
<td>47.22%</td>
</tr>
<tr>
<td>L09(2)</td>
<td>6,889,182.72</td>
<td>0.12%</td>
<td>5,511,346.18</td>
<td>0.12%</td>
<td>262</td>
<td>0.41%</td>
</tr>
<tr>
<td>L10(5)</td>
<td>103,867,166.73</td>
<td>1.80%</td>
<td>83,093,733.38</td>
<td>1.82%</td>
<td>1601</td>
<td>2.49%</td>
</tr>
<tr>
<td>M06 (leasing)(6)</td>
<td>14,232,128.95</td>
<td>0.25%</td>
<td>9,962,490.27</td>
<td>0.22%</td>
<td>145</td>
<td>0.23%</td>
</tr>
<tr>
<td>total</td>
<td>5,764,852,000.98</td>
<td>4,562,445,830.34</td>
<td>62181</td>
<td>64181</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1) The L01, L02, L03, L04, L05 and M06 are programs for the years 2004-2008 concerning guarantees for long term loans.
(2) The L07 is the TEMPE program – A Cycle which started on 1-1-2009 and ended on 9-4-2009
(3) The L08 is the TEMPE program – B Cycle which started on 9-4-2009 and ended on 31-12-2010
(4) The L09 is a program which started on 01-09-2010 and ended on 31-12-2010 concerning guarantees which de used for repaying taxes.
(5) The L10 is a program which started on 01-09-2010 and ended on 31-12-2010 concerning guarantees which de used for buying commerce.
(6) The M06 is a program for the years 2004-2008 concerning guarantees for leasing.
main descriptive statistical measures, the average, the standard deviation and the coefficient of variation. We will also calculate the statistical moment of distribution, the coefficient correlation.

**Data**

We addressed only to those enterprises which were benefited from the TEMPME programmes. The participants in the following research were 200 entrepreneurs, but only one hundred eighty six (186) entrepreneurs could give answers to all questions. The research took place from 1-6-2012 to 30-6-2012. Companies administration buildings were situated either in the city of Serres (population 76,000 according to the last census), or in towns seats of the Municipalities, or in small villages (population less than 1,000) or in the national road, or in the Industrial Area. Finally we choose in purpose some entrepreneurs who took loans from bank branches sited at Serres but their administration building is located in another Regional Unity (Local entrepreneurs who invest in a different regional unity like the neighbouring core region Thessaloniki).

**Results**

The 50% of those companies which participated on this research is located at the city of Serres. In Figure 1 there is depicted the situation of the company’s administration buildings.

We have mentioned above to the 2 Cycles of the TEMPME programmes. In Figure 2, we classify the enterprises to the 1st or the 2nd Cycle.

In Figure 3 there is depicted the amount of credit.

Analyzing the results using the variables 1 for amount of credit 5,000-2,0000 €, 2 for amount of credit 20,000-50,000 €, 3 for amount of credit 50,000-100,000 €, 4 for amount of credit 100,000-150,000 €, 5 for amount of credit 150,000-250,000 € and 6 for amount of credit 250,000-250,000 €, at the city of Serres the average is 2.40, standard deviation is 12.25, coefficient of variation is 5.09 and coefficient correlation is 0.99, at towns the average is 2.31, standard deviation is 2.36, coefficient of variation is 1.02 and coefficient correlation is 0.62, at villages the average is 2.02, standard deviation is 5.50, coefficient of variation is 2.71 and coefficient correlation is 0.83, at National Road or Industrial area the average is 3.87, standard deviation is 1.77, coefficient of variation is 0.46 and coefficient correlation is 0.09 and finally at Other Regional Unity the average is 2.80, standard deviation is 1.84, coefficient of variation is 0.56 and coefficient correlation is - 0.41. Enterprises sited at villages have the smallest average (2.20) while ones sited at National Road or Industrial area have the smallest average (3.87). There is no correlation between the answers given from entrepreneurs. Taking as a granted that the providing funds are analogue to enterprise’s size, we come to conclusion that in villages operate only micro enterprises.

We pose the question if the loan is performing (PL), no performing (NPL) or bad dept, because our intention was to examine the consequences of the crisis to local entrepreneurs. Taking as a granted that beneficiaries of the TEMPME programme were only profitable enterprises, we consume that crisis is the main reason for the existence of the bad loans. In Figure 4 we present whether the loan is performing, no performing or bad dept.

Analyzing the results using the variables 1 for performing loan (PL), 2 for no performing loan (NPL) and 3 for bad dept (BAD), at city of Serres the average is 1.97, standard deviation is 17.44, coefficient of variation is 8.86 and coefficient correlation is 0.99, at towns the average is 2.44, standard deviation is 3.08, coefficient of variation is 1.27 and coefficient correlation is - 0.41.
correlation is 0.63, at villages the average is 1.86, standard deviation is 7.93, coefficient of variation is 4.27 and coefficient correlation is 0.97, at National Road or Industrial area the average is 1.96, standard deviation is 4.71, coefficient of variation is 2.40 and coefficient correlation is 0.87 and finally at Other Regional Unity the average is 1.60, standard deviation is 0.98, coefficient of variation is 0.61 and coefficient correlation is -0.26. It is worth referring to enterprises at towns—seats of the municipalities—which have been more affected from the crisis than other enterprises. To the same conclusion we came with in one of our previous researches in which we wrote 3 years ago: "It is mentionable that crisis affected more the enterprises situated at towns" (Balomenou & Maliari, 2011:108). It is also mentionable that enterprises sited at core regions (as Thessaloniki) have been affected from the crisis less than all. Furthermore, regarding our case study, we observe that crisis is deeper at the poor regions of our Country. Something with that is in reliance to the relevant literature (Konsolas, N. 1997) and (Balomenou. C 2003), (in recession periods, at the great dilemma of regional science "efficiency versus equity" policy makers prefer the criterion of efficiency). Moreover, as it is well known in Regional Science, in periods of recession, the crisis policy responses, focus on more resources in core regions (Konsolas, 1997) and (Coniglio and Prota, 2011) in order, according to Myrdal theory (Balomenou, 2003:132), initially during recession periods, via the procedure of back wash effects (submission of economic resources and mobility of human resources from the periphery to the central / core regions) to straiten the said regions and finally via spread effects (from core/rich central regions to the lagging / poor periphery regions in periods of economical growth to reinforce the lagging areas that are finding it increasingly difficult to cope during economic constructions).

Finally, In Figures 5 and 6 there are presented the starting year of the business and the sectoral activity.

Analyzing the results using the variables 1 for performing loan (PL), 2 for no performing loan (NPL) and 3 for bad dept (BAD), at enterprises which the starting year is up to 1982 (the old ones) the average is 1.67, standard deviation is 2.50, coefficient of variation is 1.48 and coefficient correlation is 0.696, at enterprises which the starting year is between 1983 up to 1992 the average is 1.90, standard deviation is 7.07, coefficient of variation is 3.71 and coefficient correlation is 0.988, at enterprises which the starting year is between 1992 up to 2002 the average is 1.96, standard deviation is 19.13, coefficient of variation is 9.72 and coefficient correlation is 0.976, at enterprises which the starting year is after 2003 (the new ones) the average is 2.12, standard deviation is 5.47, coefficient of variation is 2.47 and coefficient correlation 0.800. In one of our researches 2 years ago which we wrote: "new enterprises not only face difficulties in accessing to funds but in addition they have been more affected by the crisis than the older ones" (Balomenou & Maliari, 2011). Thus both our researches conclude that crisis affected more new enterprises.
Analyzing the results using the variables 1 for performing loan (PL), 2 for non-performing loan (NPL) and 3 for bad debt (BAD), at scientists (doctors, lower-and-middle, etc.) the average is 1.608, standard deviation is 4.26, coefficient of variation is 2.65, and coefficient of correlation 0.734. Among professionals (plumbers, electricians, etc.) the average is 1.96, standard deviation is 4.71, coefficient of variation is 2.41, and coefficient of correlation 0.870, at commerce the average is 2.14, standard deviation is 11.15, coefficient of variation is 5.20, and coefficient of correlation is 0.993. At constructions the average is 3, standard deviation is 1.21, coefficient of variation is 0.40, and coefficient of correlation −0.68. It is worth referring to constructions, although there are only two in this sample – because all these enterprises are bankrupted. Taking under consideration that sub primes is the cause of crisis in USA, it is obvious that the sector of constructions has been affected from the crisis most of all. Regarding enterprises which are managing from scientists, we easily came to the conclusion that scientists repay their debts.

**CONCLUSIONS**

It is common sense that European Union supports SMEs with several programmes. In Greece, the backbone of Greek economy is mainly made up of micro and small enterprises. Greek state supports SMEs with the application of programmes through guarantees. Although Greek Guarantee Fund for Small and Very Small Enterprises (TEMPME) set so strict conditions, that the great majority of micro and new enterprises were deterred from the access to non-interest loans or low interest loans and the use of these guarantee funds by businessmen who could not receive other kinds of loans to support the survival of those enterprises.

The great majority of the enterprises which benefit from the TEMPME programmes are the larger Greek Enterprises and not the micro ones. While the dramatic recession, state and banks do not foster enough micro enterprises despite their major contribution to the survival and development to the larger ones. As the beneficiaries enterprises in villages and in small towns are smaller and less than those in Serres, we conclude that enterprises in small villages and towns should have more motives to develop. Profitable businesses can not manage to repay their debt. Therefore we conclude that financial turmoil has severely affected SMEs, especially on low-income regions as Serres.

The majority of new enterprises were excluded from TEMPME programmes. Furthermore the new entrants have severely attacked by the depression. In addition, taking under consideration the sector analysis, the consequences of the crisis are enormous at sectors as constructions.

Coming to an end it is to be deducted that for the last years TEMPME’s contribution to the fostering of SMEs was significant. But still the question remains: Is the support of such programs sufficient enough for a balanced development or not?

**References**


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