Economic Impact of Credit Guarantee System– Hungarian Case Study

DANG THAI BINH
PHD STUDENT

Email: vgttbinh@uni-miskolc.hu

SUMMARY

This paper is a in-depth analysis and impact assessment of the credit guarantee system of Hungary. This study focuses mainly on the practice of Garantiqa Creditguarantee Closed Co. Ltd and evaluates and analyzes the impact of the credit guarantee on Hungarian economy in providing benefits tosmall and medium sized enterprises (SMEs), which contributes to the economic development of Hungarythrough providing benefits to the banks. Based on a comparative analysis this study shows a positive impact on the Hungarian economy.

Key words: credit guarantee, bank, SMEs, Garantiqa

Journal of Economic Literature (JEL) codes: D21, G20, O20

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INTRODUCTION

Credit guarantees are widely used in many countries around the world and are regarded as a policy instrument to promote economy, especially boost SMEs, create more jobs, stabilize the market etc.Governments of most countries seek to encourage Small and Medium Sized Enterprise (SME) growth and the job creation that many believe is fostered by such growth. Each country would liketo choose a suitable model guarantee. The Hungarian system of credit guarantee has a model including three major credit guarantee institutions: Garantiqa Creditguarantee Closed Co. Ltd, Rural Credit Guarantee Foundation and Venture Finance Hungary Private Limited Company; of these Garantiqa Creditguarantee Closed Co. Ltd (Garantiqa) plays the most important role. The credit guarantee system helps the SMEs' access to bank financing by providing credit default guarantees and therefor enhances their development and competitiveness. By creating more jobs and economic value, it played an especially important role in dealing with the financialcrisisin 2008.

This paper attempts to evaluate the impact of the credit guarantee systemon the economy through the case of Garantiqa Creditguarantee Closed Co. Ltd. (Garantiqa Hitelgarancia Zrt) of Hungary. It was founded by the Hungarian State and financial institutes in 1992. In 2013, it is 46.84% majority-owned by the Hungarian Development Bank Group (MFB), which is 100% owned by the Hungarian State.

LITERATURE REVIEW

Although the impact of the banking relationship on SME credit rationing has been widely analyzed in the literature, guarantee rationing has perhaps received the least attention of all (Mendizab et al. 2014). There have been several studies analyzing the economic impact of credit guarantee around the world. Credit guarantees for SMEs and the impact of credit guarantees have been widely studies in the past. Levitsky and Prasad (1989) provided information on credit guarantee schemes in 27 developed and developing countries. Their paper helps the readers to understand the operation of credit guarantee system (main elements, scope, problem). At the same time it also presents an evaluation of the guarantee schemes that the authors examined about the scope and their impact, in term of lending, creating confidence, loss rateindifferentregionsin the world.

Credit guarantees have an important role and impact on SMEs, lenders and the economy. According Levitsky(1997) and to Beck et al. (2010), credit guarantee has an effect by increasing lending to SMEs, thus increasing access to finance of SMEs. Credit guarantees help SMEs to reduce the costs of borrowing (Beck et al., 2010). Also, credit guarantee ensures new business formation, development and expansion (Levitsky, 1997; Nitani & Riding, 2005; Roodman & Qureshi, 2006).

In addition, credit guarantee also encourages lenders by providing collateral as compensation in case the loan is not repaid (Bookwork&Sharif, 2005), while to diversify risk through the loan guarantee means that credit institute will cooperate with many lenders to underwrite loans (Beck etal, 2010), allowing lenders to transfer risk of recovery of loan to the guarantor (Levitsky, 1997). Credit guarantees incentives to the lenders to help them overcome the problem of information asymmetry (Beck et al., 2010). The guarantors will participate in the application and monitoring process.

Credit guarantee is used as a policy tool to implement the national policies. According to Kang & Heshmati (2008), credit guarantee promotes the welfare and stability of society, accelerates economic growth and decrease unemployment. Additional credit guarantee creates more jobs (Riding & Hannes, 2001) and reduces poverty generally (Roodman & Qureshi, 2006).

Shim (2006) investigated the economic impact of the credit guarantee in Asian countries, using the ratio of credit guarantees outstanding to GDP to evaluate the effects of credit guarantees for economic welfare. According to this, the ratios of Japan and Korea are over 5% in the time period from 2001-2005. The study conducted by the OECD (2013) indicated that credit guarantees amount to a significant rate of GDP. In Europe the highest rate of outstanding guarantee to GDP were in Italy (2.2%), Portugal (1.9%) and Hungary (1.4%); by contrast in Asia, the highest rate were in Japan (7.3%), Korea (6.2%) and Chinese Taipei (3.6%).Also in the statistics of ACEM (European Association of mutual guarantee societies) (AECM, 2013) thera tio of credit guarantees outstanding to GDP was used to assess the impact of credit guarantees on the economy of all members of ACEM. A study of the Korean Credit Guarantee Fund (2012) also indicated that credit guarantees have an important role in helping the national economy, especially SMEs, to overcome the financial crisisin 2008. In addition, other studies also indicate credit guarantees help create more jobs (Riding & Haines, 2001), reduce the information asymmetry between borrowers and lenders (Beck et al., 2010), increase exports (Janda et al., 2012) etc.

METHODOLOGY

In this paper the author focuses on evaluating the impact of the credit guarantee company on the Hungarian economy through the practice of Garantiqa. As the research is focused just on one organization, Garantiqa, it is important to stress that the results must be handled carefully and not be generalized.

The author selected Garantiqa as the case study because its scope of operation covers the entire territory of Hungary and it is the largest credit guarantee organization in the nation, as well as because of its well-structured, long tradition. Beside, Garantiqa was analysed share an entrepreneurial fabric with a wide-spread SMEs. Because one of the most important factors in the growth process of credit guarantee institutions is provided by the presence of SMEs, which have always found accessing credit difficult. Therefore, Garantiqa was appropriate to analyze and compare with other credit guarantee systems in the region.By using the methods of analysis and comparison, this article can provide lessons and experiences useful for managers, policy makers and other interested parties.

The author has studied the operational model, results of operation of Garantiqa during the period from 2005 to 2013 and incorporates the analysis, evaluation, comparison of some indicators of Garantiqa with other credit guarantee institutions. In addition, the performance of the guarantee system of Hungary is compared with other countries in the region and in the world. The author used detailed data from Garantiqa and collected data relating to credit guarantees, SMEs, GDP and other data from other sources such as European Association of Mutual Guarantee Societies (AECM), Central Bank of Hungary, etc. Especially helpful was the opportunity to directly interview Zoltán Urbán, CEO of Garantiqa. This interview helped the author to have a deeper understanding of the actual operation of Garantiqa as well as the impact of the credit guarantee companyon the Hungarian economy. By in-depth research on the model of Garantiqa, this paper points out the positive impact of the credit guarantee company on the Hungarian economy in regard to SMEs, economic growth and the banks.

SMES IN HUNGARY

The SMEs have a very important role in the economy of each country. SMEs have the ability to adapt quickly to market, innovate, and be flexible to changes in customers and markets. At the same time, SMEs support large enterprises in the process of production and business. Success factors of SMEs are management capacity, the ability to rapidly innovate,creativity, quality of goods and services, strategic development and an indispensable element, which is capital. Just as SMEsof other countries, SMEs in Hungary have also faced difficulties in the business environment, in accessing finance from banks and credit institutions. In recent years, due to their efforts and support from the government of Hungary,SMEs continue to exist and develop further, and contribute more to the economy.

Table 1
Basic Figures - 2013

	Number of enterprises			**Number of employees**			**Value added**		
	Hungary		**EU27**	**Hungary**		**EU27**	**Hungary**		**EU27**
	Number	Share	Share	Number	Share	Share	Billion €	Share	Share
Micro	521,981	94,6%	92.10%	885,167	35.50%	28.70%	9	18.70%	21.10%
Small	24,883	4,5%	6.60%	472,316	18.90%	20.40%	8	15.80%	18.30%
Medium-sized	4,212	0,8%	1.10%	420,215	16.80%	17.30%	9	18.60%	18.30%
SMEs	**551,076**	**99.90%**	**99.80%**	**1,777,698**	**71.20%**	**66.50%**	**26**	**53.20%**	**57.60%**
Large	800	0.10%	0.20%	718,304	28.80%	33.50%	23	46.80%	42.40%
Total	551,876	100%	100%	2,496,001	100%	100%	49	100%	100%

Source:http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/performance review/index_en.htm

Table 1 clearly shows that SMEs in Hungary play an important role in the economy. According to statistics of European commission (2013), at the end of 2013, the number of SMEs was 551,076 and accounted for 99.9% of total enterprisesin Hungary; whilethe number of their employees was 1,777,698 andaccounted for 71.2% of total employment. Besides, SMEs contributed about €26 billion, over 50% of the total economic added value.

CREDIT GUARANTEE SYSTEM IN HUNGARY

The Credit guarantee system in Hungary is operated by three organisations: Garantiqa Creditguarantee Closed Co. Ltd, Rural Credit Guarantee Foundation, andVenture Finance Hungary PLC. The government ensures that the business areas of each credit guarantee institutions do not overlap and thus avoid wasting financial resources. Each credit guarantee organizationaim is to provide credit guarantee service for a specific business sector. The Rural Credit Guarantee Foundation aims to provide credit guarantees for rural and agricultural SMEs, while Garantiqa aims to provide credit guarantee services for SMEs, local governmental enterprises, local government, and Venture Finance Hungary PLC provides credit guarantee services, working capital loan venture capital, investment loanfor micro enterprises.

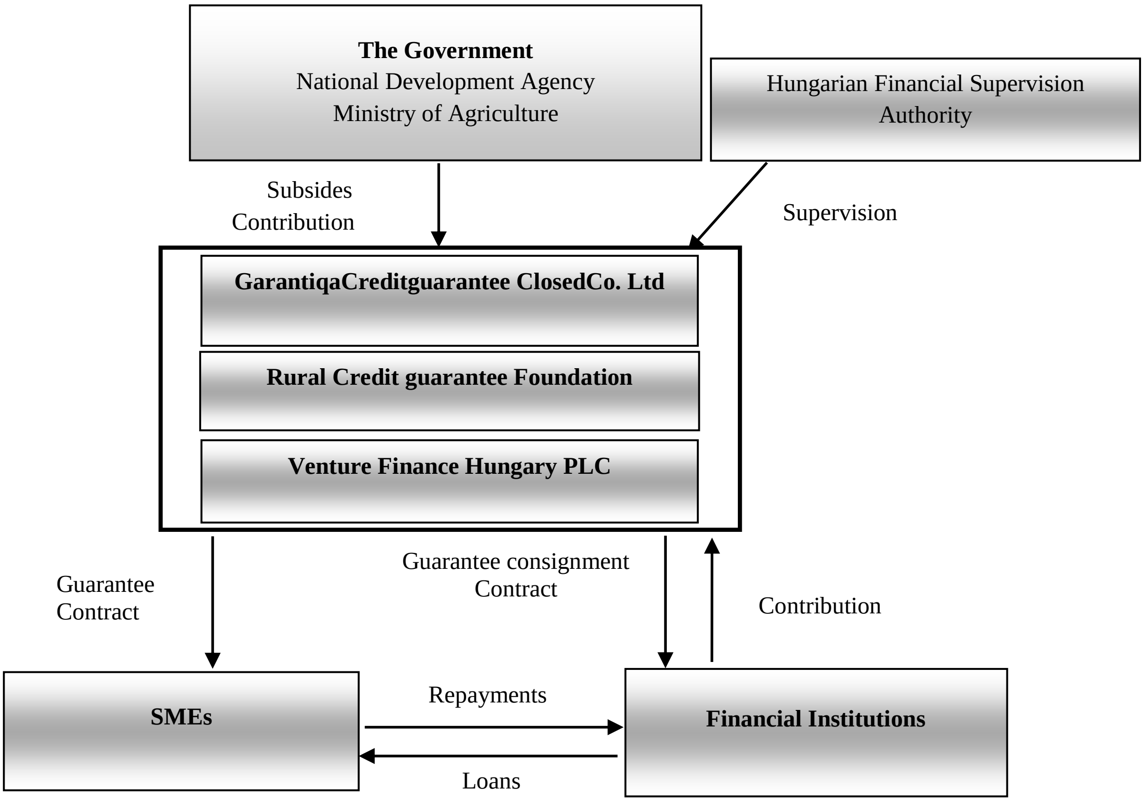


Figure 1. Credit Guarantee System in Hungary
Source: Own elaboration

The government directly supports the credit institutions via agencies and financial institutions indifferent ways, such as providing capital, sharing risk with the credit institution by implementing a counter-guarantee, support through low-interest loans, tax reduction etc. In addition, the government usually indirectly supports the credit institution by making regulations for lenders when collaborating with the credit institution, supporting fees for the borrower when collaborating with the credit institution etc.

Table 2
Characteristics of credit guarantee institutions in Hungary

Classification	GarantiqaCreditguaranteeClosed Co. Ltd	Rural Credit guarantee Foundation	Venture Finance Hungary Private Limited Company
Establishment	1992	1991	2007
Target Enterprise	Trade, service and construction enterprises	Rural and agricultural SMEs	Micro enterprises
Major Businesses	. Credit Guarantees . Guarantee to loans . Bank guarantees . Financial asset leasing . Factoring contracts . Tender guarantees . Bond guarantees . Other	. Bank guarantees . Factoring . Leasing . Guarantees **for rural development loans**	. Working capital loan . Micro loan . Investment loan . Credit guarantee . Venture capital
Source of funds	The Government of the Republic of Hungary, financial institutions	EU (PHARE), Hungarian Ministry of Agriculture, commercial banks	Hungarian Development Bank

Source: http://www.hitelgarancia.hu, http://www.avhga.hu/, http://www.mvzrt.hu

PERFORMANCE OF GARANTIQUA CREDITGUARANTEE CLOSED CO. LTD

Garantiqa helps SMEs gain easier access to loans and financial resources in the implementation of the service guarantee to promote SMEs in developing and enhancing competition, supporting SMEs to comply with the requirements of the European Union.

Products

The operation of Garantiqa targets three main types of customers: enterprises, local governments, and local governmental enterprises, with a special focus on promoting SMEs. Guarantee service is the core business of Garantiqa, in addition, it also provides additional services such as leasing, factoring etc.

Table 3
Products of GarantiqaCreditguaranteeClosedCo.Ltd

Types of customers	**Products**
Enterprises	Loan and Bank guarantees Factoring Leasing Tender guarantees
Local government	Loan and Bank guarantees Guarantees for European Union subsidies Bond guarantees
Local governmental enterprises	Loan and Bank guarantees Bond guarantees

Source: http://www.hitelgarancia.huand own elaboration

Credit guarantee procedure

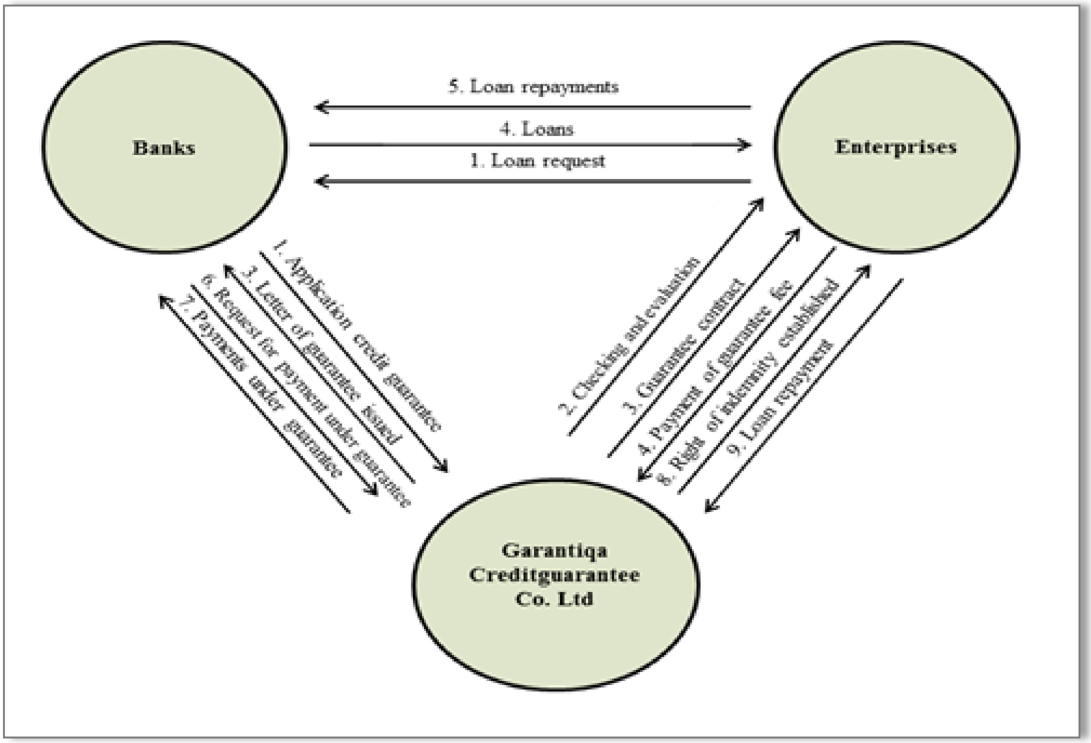


Figure 2. The Process of Undertaking a Guarantee
Source: http://www.hitelgarancia.hu and own elaboration

1. An enterprise indirectly applies to Garantiqa for credit guarantees through banks.

2. Upon receipt of an application guarantee, Garantiqa checks and assesses the credit worthiness as well as credit risk of the enterprise.
3. If the application is approved based on checking and assessment of credit worthiness, Garantiqa issued a letter of credit guarantee to the financial institution and requests the financial institution to extend loans to the enterprise. At the same time, Garantiqa performs guarantee contract with the enterprise.
4. The financial institution extends a loan to the enterprise. The enterprise pays a guarantee fee to Garantiqa.
5. Enterprise repayments are made to the financial institution under the terms and conditions of loan.
6. In the case of the enterprise does not repay all or part of loan in accordance with the term, the financial institution requires Garantiqafor payment under guarantee.
7. Garantiqa repays the loan to the financial institution on behalf of the enterprise.
8. Because payment has been subrogated, Garantiqa obtains a right of indemnity against the enterprise Garantiqa has right of indemnity against the enterprise.
9. Garantiqa recovers the right of indemnity from enterprise when enterprise rebounds.

Eligible enterprise

All enterprises operating for profit are eligible for credit guarantee unless they fall under the categories shown in Table 4:

Table 4
Examples of restriction on using of guarantee products

Classification	Contents
Prohibition or Restrict by Law	- Enterprisethathaveincreaseddebt from credit, bank guarantee,factoring or financial lease agreement which is guaranteed by other financial institutions. - Enterprises that have previously used Garantiqa's guarantee service, and made an untrue representation, or are currently in the process of exercising a surety guarantee in connection with its existing transaction, - Enterprise lacking creditworthiness. - Enterprise that have submittedbankruptcy, liquidation, or final settlement.
Restricted Industries	- Related to manufacturing of arms, ammunition and military combat vehicles - Related togambling - Whose transactions are the financing of household, personal consumption, sales and lease-back transactions or foreign investments.

Source: http://www.hitelgarancia.huandown elaboration

Coverage ratio

With the surety guarantee Garantiqa commits to delivering the payment obligations instead of the debtor (or subsidized party) towards the financial institution (or the disbursing party), if the debtor (or subsidized party) fails to comply with its payment obligation. The maximum rate of the surety guarantee 80% and the financial institution will be responsible with the 20% remaining.

The formula of the state counter guarantee regulates the yearly Budget Act. An amendment to the Budget Act that took effect on 20 June 2011 led to a considerable improvement in the conditions under which Garantiqa performs the guarantee assumption activity that largely defines its operations, as the extent of the counter guarantee rose from 70% to 85% in the case of SME products. The higher extent of the counter guarantee also applies in the case of new investment loan contracts.

RESULTS OF OPERATIONS AND ITS IMPACT ON THE ECONOMY

Results of operations

Results of operations of Garantiqa are evaluated firstly related to two indicators: outstanding guarantees and guarantees approved. From 2005 to 2013, Garantiqa had achieved Outstanding guarantees 292,000 cases with a total value of 3,347 billion HUF and guarantees were approved in 251,303 cases with a total value of 2,835 billion HUF. Both indicators are increasing in value and number; they tended to increase especially rapidly during the financial crisis years of 2008-2010. In that period, the ratio of outstanding guarantees averaged over 468 billion HUF/year (nearly 35,000 cases/year), and the ratio of guarantees approved averaged over 406 billion HUF/year (30,100 cases/year) (Figures 3 and 4).That proves Garantiqa has an important role in helping enterprises to access capital from banks that helps enterprises stabilize and develop, especially SMEs. At the same time, it demonstrates that the operation of Garantiqa from the time of its establishment to present is becoming more and more efficient and contributing more to the development of enterprises and the economy.

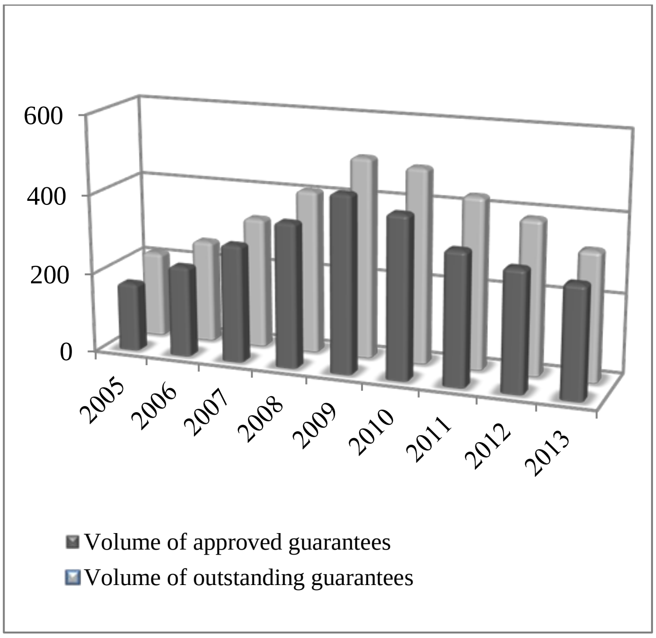


Figure 3. Volume of approved guarantees and outstanding guarantees (Billion HUF)

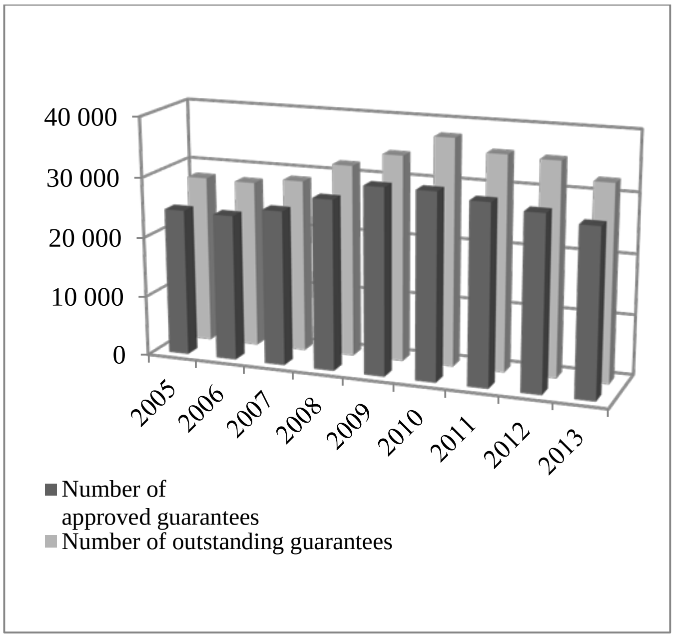


Figure 4. Number of approved guarantees and outstanding guarantees

Source: http://www.hitelgarancia.hu/en/introduction/annual-reports and author own calculations

Garantiqa was held by AECM rating(Garantiqa is a member of this organization). To evaluate the effectiveness and growth of its members, AECM has developed the ratio "Proportion of new activity in volumes and number''. This ratio is calculated by dividing guarantees granted per year (new activity) by the outstanding guarantees in portfolio for both volumes and number. AECM implemented statistics from 2010-2012 and statistical results were as follows: averaged for the members of AECM, the new activity has been decreasing in volume since 2010, from 39.97% to 36.68% (2011), and the proportion of new activity accounts only for 33.21%in 2012. The proportion of new activity in numbers has also experienced a downturn trend for three years in a row, from 37.76% new activity in number of guarantees in 2010 to 32.45% in 2011 and to 30.68% in 2012. Garantiqa is one offive members for which the ratio "Proportion of new activity in volumes and number" is highest in statistics from 2010-2012 and is higher than the average of all the members of AECM. The new activity in volume of Garantiqa from 2010–2012 was 88.15%, 84.69% and 84.50% and the new activity in number was 82.18%, 85.94% and 81.93%, respectively. These figures for AECM members can be compared in Table 5.

Table 5

New activity in volumes and number of guarantees for each AECM member for the years 2010 to 2012

Credit guarantee institutions	Country	New activity in volumes			New activity in number		
		2010	2011	2012	2010	2011	2012
Aws	Austria	24.70%	17.61%	19.71%	14.60%	10.35%	12.73%
SCM/MOB	Belgium	33.98%	37.80%	0.00%	47.92%	57.08%	0.00%
Sowalfin	Belgium	31.24%	36.82%	32.74%	20.75%	26.78%	19.91%
NGF	Bulgaria	94.86%	60.91%	19.49%	97.37%	52.27%	17.61%
CMZRB	Czech Rp	35.32%	7.58%	8.77%	32.11%	10.38%	18.02%
KredEx	Estonia	68.50%	50.58%	51.63%	48.69%	43.62%	42.74%
Socama	France	35.42%	34.26%	34.49%	12.27%	32.99%	31.78%
Siagi	France	89.79%	85.14%	71.41%	14.19%	13.80%	10.78%
VDB	Germany	25.69%	19.46%	18.69%	18.15%	15.03%	14.54%
ETEAN S.A.	Greece	7.91%	2.33%	0.84%	7.24%	1.10%	0.32%
Garantiqa	Hungary	88.15%	84.69%	84.50%	82.18%	85.94%	81.93%
AVHGA	Hungary	44.55%	54.54%	81.53%	43.62%	51.76%	45.61%
AssoConfidi	Italy	41.68%	45.02%	38.42%	54.08%	34.03%	29.99%
LGA	Latvia	54.91%	47.83%	26.50%	34.20%	23.88%	20.77%
Invega	Lithuania	38.71%	46.10%	39.08%	28.03%	35.03%	32.27%
MCAC	Luxembourg	na.	33.83%	8.06%	na.	23.88%	11.48%
Agentschap NL - BMKB	Netherlands	33.29%	35.39%	19.83%	19.69%	20.90%	12.78%
BGK	Poland	46.37%	51.54%	60.59%	4.97%	24.52%	n.a.
SPGM/SCM	Portugal	47.69%	22.48%	29.20%	42.97%	14.53%	25.96%
FGCR – Rural	Romania	78.85%	66.07%	45.22%	192.13%	97.05%	1321.57%
FRGC - RLGF SMEs	Romania	96.59%	96.80%	96.60%	79.89%	79.78%	78.98%
SGR/CESGAR	Spain	27.02%	20.69%	17.49%	39.44%	29.04%	20.18%
SZRB	Slovakia	38.49%	43.61%	na.	45.07%	49.62%	n.a.
RRA-GIZ	Slovenia	28.19%	22.08%	22.08%	16.07%	16.52%	16.52%
KrediGarantiFonu	Turkey	132.24%	93.57%	73.57%	103.28%	71.36%	90.55%

Source: http://www.aecm.be/en/aecm-statistics-2013.html?IDC=32&IDD=2777

To evaluate the performance of a credit guarantee institution, we can use the ratio of profit to outstanding guarantees; this ratio is a measure of profit per HUF of outstanding guarantee. As can be seen from Figure 5, from 2005 to 2007, the profit of Garantiqa increased steadily over the years and the ratio of profit to outstanding guarantees of Garantiqa was quite high in 2005 (0.69%), 2006 (0.6%) and 2007 (0.48%). This shows that Garantiqa is not only a policy tool to support economic development but also that it can survive and develop without support of the State.

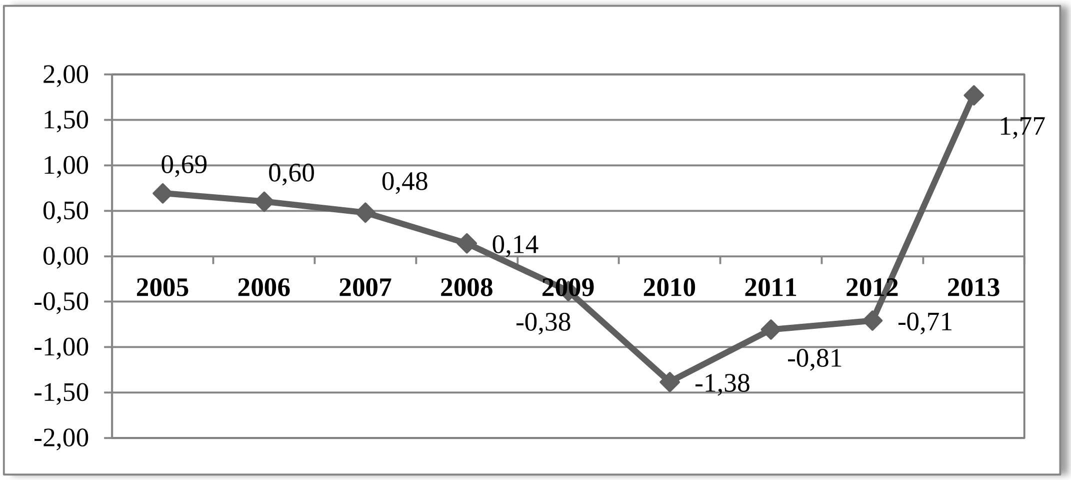


Figure5. The ratio of profit/outstanding guarantees (%)
Source: http://www.hitelgarancia.hu/en/introduction/annual-reports and author own calculations

However, during the period of financial crisis, the results of Garantiqa continuously loss in the period from 2009 to 2012. The losses of Garantiqa in this period are due to the several reasons.The first is the impact of financial crisis on enterprises, especially SMEs, leading to defaults. Therefor, the proportion of guarantee and redemptions of Garantiqa rose (from anaverage of 3% to over 6%). The second cause is the increase in the rate of coverage of counter guarantees undertaken by the state to 85% in 2011, which may have contributed to an increase in Garantiqa's risk-assumption activity. The third reason is Garantiqa performed reduction of guarantee fee paid by SMEs from 1.7 to 2.2% pa to 0.5-1% pa(from 2012), which decreased the income of Garantiqa. In addition, in 2010 a number of unplanned expenditures appeared(e.g. the special bank tax), which increased the total costs and led to Garantiqa's losses. However, with a change in management,a policy of cutting unnecessary costs, the guarantee portfolio was carried out and a new debtor-rating system developed, among other changes. These activities made aprofit for Garantiqa and the ratio of % profit to outstanding guarantees is the highest so far at5.73 billion HUF and 1.77% in 2013.

In addition, in its the operation and development, Garantiqaalways innovates, efforts and results of operations of Garantiqa are rated by its market share in the market of credit guarantee of Hungary. Garantiqa's market share was 74.5% in 2013, with the Rural Credit Guarantee Foundation holding 20%, Venture Finance Hungary Co.Ltd 5.1% and just 0.4% for Start Guarantee Co.Ltd.Thus, Garantiqa is the credit guarantee institution with the largest market share in Hungary and the dominant business activity of credit guarantee as well as the majority of client are attracted to Garantiqa.

Impact of Garantiqa on the Hungarian economy

From its establishment until now, Garantiqa strives to serve enterprises, especially SMEs, in the best way. Through its innovation efforts andGarantiqa's aimto gain the trust of businesses, banks, credit institutions, and other partners, it increasingly contribute more to the development of the Hungarian economy. The impact of Garantiqa on the Hungarian economy is demonstrated in a number of key points:

(1) Providebenefits tosmall and mediumenterprises

Difficulties of SMEsin accessing finance can be overcome when there is a guarantee of Garantiqa. It promotes and encourages the development of SMEs by providing a guarantee to help SMEsto borrow loans with simple procedures and quickly. During the period from the year 2005-2013, Garantiqamade guarantees to 256,689 SMEs.

The importance of Garantiqa's guarante eactivity with SMEs is illustrated by the fact that in recent years 10-12% of the volume of bank loans granted to SMEs have been secured with payment guarantees from Garantiqa. In the period from 2005 to 2013 more than 14% of the number of loans extended to SMEs in the whole banking system loans to SMES were guaranteed byGarantiqa (Table 6).

At the same time, through guarantee activities, Garantiqa helpsSMEs to gain easy access to access to medium and long-term loans, which helps SMEs become more active in financial matters and their business plans. Garantiqa can provide guarantees only as regards commitments with a duration of no more than 25 years.Besides, Garantiqua uses low-fee guarantees, which reduces the borrowing costs of SMEs, thereby reducing product costs and increasing the competitiveness of SMEs.

Table 6
The proportion of Loan guarantees extended to SMEs by Garantiqa/ Loans extended to SMEs by bank sector

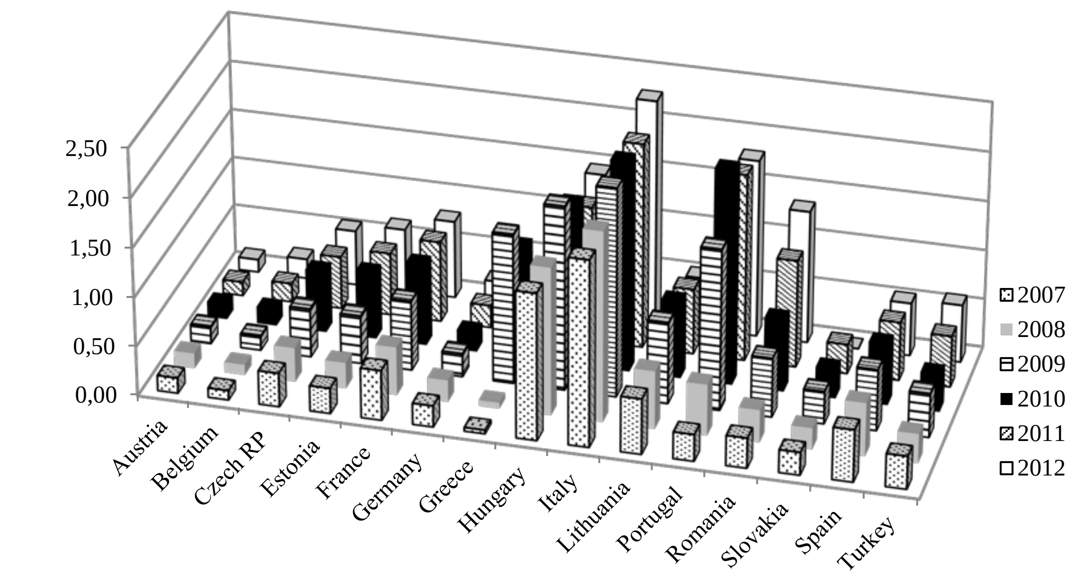
Year	Loans extended to SMEs by Bank sector (cases)	Loans extended to SMEs by Garantiqa (cases)	Loans extended to SMEs by Garantiqa/ Loans extended to SMEs by bank sector
2005	82,206	23,668	28.8 %
2006	134,668	23,478	17.4 %
2007	143,673	25,669	17.9 %
2008	179,117	28,329	15.8 %
2009	292,476	33,880	11.6 %
2010	472,530	32,227	6.8 %
2011	442,957	30,635	6.9 %
2012	382,862	30,604	8.0 %
2013	618,671	28,208	4.6 %
Total	**2,749,160**	**256,698**	14.1 %

Source: http://felugyelet.mnb.hu, http://www.hitelgarancia.hu and own elaboration.

(2) Contribute to the growth of the economy

Garantiqa plays a significant role in supporting SMEs to achieve financial growth and prosperity; in addition, it also plays a major role in the stability and economic growth. The importance of a credit guarantee institution in the economy can be measured by the ratio of outstanding guarantees to GDP. If this ratio is high, it means the contribution and the role of a credit guarantee institution is important in the national economy. Figure 6 shows the ratio of outstanding guarantees to GDP for Hungary increased steadily from 2007 to 2012 and in particular this ratio increased during the financial crisis from 2008 to 2010. This indicates that the guarantee system of Hungary played a major role in helping to stabilize the economy during the financial crisis. To explain the position of Garantiqa as well as the credit guarantee system in the Hungarian economy, we can compare the ratio of credit guarantee system of Hungary with other countries in the European region. This ratio of Hungary is very high in comparison with other countries in the region and ranks only second behind Italy. The contributing to this ratio is largely from Garantiqa.

Figure 6 shows that while for all AECM members the ratio of outstanding guarantees to GDP is tending to increase, Hungary, Italy, and Portugal are the only three countries whose ratio has increased steadily over the years, is stable and with a ratio of more than 1% GDP. The remaining countries have very low indexes and stand at less than 1% of GDP. Compared from 2007 to 2012, Italy (1.89%, 1.92%, 2.11%, 2.13%, 2.08%, 2.28%, 2.11%) has increased its proportion towards the value of economic activity while Hungary remained more or less stable (1.49%, 1.50%, 1.87%, 1.64%, 1.37%, 1.46%) and Portugal increased rapidly from 0.27% in 2007 to 1.63% in 2009 and maintain this ratio, with a high point in 2010 (2.18%), falling back somewhat in 2011 (1.89%), and 2012 (1.8%).



	2007	2008	2009	2010	2011	2012
Hungary	1.49%	1.50%	1.87%	1.64%	1.37%	1.46%
Garantiqa	1.29%	1.29%	1.62%	1.41%	1.15%	1.18%
Average of ACEM	0.62%	0.62%	0.78%	0.67%	0.58%	0.56%

Figure 6. Outstanding guarantees to GDP in Europe in the period 2007-2012 (%)
Source: http://www.aecm.eu, http://ec.europa.eu/eurostat and ownelaboration

All countries of ACEM used credit guaranteeas a tool to avoid and overcome the financial crisis. In the year 2009, almost all numbers increased. The most significant increases were record in Italy (2.11%), Hungary (1.87%), Portugal (1.63%), Greece (1.51%). We can confirm that the credit guarantee system of Hungary– in which Garantiqua plays a major role – has an important impactonthestability and development of the Hungarian economy, especially to help Hungarian economy overcome the financial crisis**.** The statistics above indicate that Garantiqa is one of the creditguarantee companies with effective operation. The ratio of outstanding guarantees/GDP of Garantiqa from 2007 to 2012 was always high: in 2007 it was 1.29%; 1.29% in 2008; 1.62% in 2009, 1.41% in 2010; 1.15% in 2011; and 1.18% in 2012. This ratio of Garantiqa is higher than 1% (of GDP) and higher than the average of the member countries of AECM.

To deal with the financial crisis of 2008, the Hungarian government used the Rural Credit Guarantee Foundation and Garantiqa Creditguarantee Co. Ltd as a policy tool to deal with the crisis**.** Since the beginning of the financial crisis, Garantiqa has made efforts to stabilize loan provision to enterprises**.** Garantiqa doubled the volume of the portfolio covered by counter-guarantees from 450 billion to 900 billion HUF in 2009.

Simultaneously, Garantiqa has simplified the risk management process, shortening the term of decision-making process, thus giving SMEs faster access to the capital. Further more, Garantiqa used the opportunities offered by the European Commission. Based on the approval of the European Commission, Garantiqa implemented a temporary state aid program. This program allowed Hungarian authorities to grant subsidies in the form of guarantees for investment loans, operating finance and financial leases concluded by 31 December 2010. During implementation of this program, market interest ratescould be reduced up to 25% (as calculated by the European Commission). The guarantee cover up to 90% of amount of mortgage loanor leasing and the guarantees may be granted to per SME up to € 2.5 million.

Another program was adopted by Garantiqaduring the crisis,the New Hungary Current Assets Loan Program. This program provied grantee mortgage loanswith interest rates lower than market rates. In addition, a program was implemented by the government to deal with the crisis, which was Széchenyi Card program. This program provided a special credit card for loans at a discounted interest rate for micro-enterprise and SMEs. The program aimed to supportsmall enterprise during the periods of financial crisis.

Thus, the government together with Garantiqa and otherguarantee organizations has implementedsupport for

SMEs by providing credit guarantees, credit facilities, loans with discounted interest rate.All these policies protect enterprises against the impact of the financial crisis on enterprises and the economy, also providing them with favorable conditions for their development. This confirm that the credit guarantee system is an important policy tool of the government to deal with the financial crisis, to ensure economic stability and promote economic development.

In addition, the financial stability report of the National Bank of Hungary showed the role of credit guarantee activities on the budget 2009-2011. National Bank of Hungary analyzed the "entrepreneurial financing" and concluded that the impact of Garantiqa on the GDP was around 1% on acumulative basic. The analytical approach is on a "What if basic": what the GDP level could have been without the credit guarantee support to SMEs.

Table 7

The impact of credit guarantee activity on the budget

Year	GDP (Million HUF)	Potential GDP decrease p.a. with no GHG-credit guarantee	Potential GDP decrease (MillionHUF)	Drawdown of state counter guarantee in HUF million	Counter guarantee drawdown/est.GDP decrease, %	Counter guarantee drawdown /annual GDP,%
2009	25,626,480	-0.40%	102,506	16,894	16%	0.07%
2010	26,607,339	-0.40%	106,429	20,084	19%	0.08
2011	27,886,401	-0.30%	83,659	13,675	16%	0.05
Total	**80,120,220**	**-**	**292,254**	**50,654**	**17%**	**0.06**

Source: http://www.aecm.be/servlet/Repository/?ID=2141&saveFile=true

The results of the analysis confirmed the following:

- The Hungarian State Budget between 2009-2011 was approximately 26,000billion HUF.
- The GDP decrease in 3 consecutive years could have reached 293 billion HUF–stated the National Bank.
- The direct public cost of credit guarantee is drawdown of state counter-guarantee: an average of 0.06 of the yearly GDP.

(3) Provide benefits to the banks and financial institutions

The significance of the credit guarantee system as well as Garantiqa has been shown to help ensure the stability of financial markets. For banks and financial institutions, when loan have the guarantee of Garantiqa, it means that the risk of such loans will be reduced.In fact, in recent years some 10-12% of the volume of bank loans granted to SMEs has been secured with payment guarantees from Garantiqa. And for banks and financial institutions when loaning under a credit guarantee, under Basel II, it will reduce the burden on capital requirements of financial institutions. Basel II defines the qualification requirements which the mitigation tool must comply with to reduce the capital appropriation of the funding bank intermediaries, against the credit risk.So it enhances the operability of credit guarantee institutions; and the banks and credit institutions can reduce credit risk, the following capital appropriation and therefor the bank and credit institutions can expand the scope of loan to SMEs. It means that the credit guarantee system as well as Garantiqa contributes to the expansion of lending by banks and financial institutions to SMEs.

According to research by the European Commission (Best Reports, 2006), Garantiqawas evaluated as a highly successful practice. Garantiqaimplemented a procedure of guarantee issued under special commitment with the banks. Garantiqa had been looking for a method to undertake guarantees in bulk, yet in a prudent, risk-sensitive way. With this way, cost saving are produced for the banks and Garantiqa. Also, the conditions of creditworthiness are defined for each specific product initiated by the partner bank.Garantiqahas applied software in decision-making in credit and the guarantee assessment, helping to save time for the partner banks and Garantiqa.

Another successful strategy of Garantiqais toencouraged banks and other financial institutions engaged in guarantee activities as the shareholders of Garantiqa. In 2013, the ownership structure of Garantiqawas follows:30.7% share of Government of Hungary; 46.84% share of Hungarian Development Bank and 22.46%share of commercial banks and other organizations. When the commercial banks and financial institutions are shareholders of Garantiqa, they will trust the guarantee activities of Garantiqa, simultaneously supporting and creating favorable conditions for Garantiqa in guarantee activities for SMEs.

In addition,Garantiqa also provides to banks other benefits such as up to date information about the risks of SMEs. Information specific credit of the borrowers in the process of working withGarantiqa will be collected and that information will be provided to a credit bureau and banks. This will create a large database of SMEs, and banks may use this information to assess the risk of SMEs, while minimizing the risk of lending toSMEs.

Garantiqa is a policy instrument of the government to support SMEsand thegovernment indirect support Garantiqa through support interest for SMEs.This means that SMEs and banks engaged in lending to SMEs will be entitled to the benefits and minimize the risks due to having the guarantee of Garantiqa. Garantiqahas affected the participation of banks in the market segment of SMEswith its policies and mechanisms. Garantiqaalso effects its banking partners by continuing to implement the policy guarantees and help banks understand and be more awaremore about benefits of the market for lending to SMEs. When banks become aware of the benefits of this market segment, they will participate in targeted SME sectors and participate in this market segment. Thus, it will create competition among banks in this market segment. The banks will create better products and services atmore attractive interest rates for SMEs. Since the competition will help financial market, the lending market will become stronger and increasingly more stable.

CONCLUSION

The main contribution of this paper is to show the impact of a major credit guarantee company on SMEs, the economy and the banking sector. Through the above analysis, this paper shows that Garantiqa Creditguarantee Closed Co. Ltd has a significant impact in bringing many benefits to SMEs, such as help SMEs gain easier access to capital and low interest rates and increasingperiod of the loan, while also there are many programs for support to SMEs, especially in financial crisis. For the economy, a significant effect is to stabilize the economy. In particular, Garantiqa was found to be an effective policy instrument to help the government to deal with and overcome the financial crisis. Besides, through promoting and supporting development of SMEs, Garantiqa has a furtherimpact on the growth and development of the economy. This study also points out the impact of Garantiqaon financial institutions. Garantiqa shares the risk with the banks through credit guarantees, and also helps the banks to expand lending, reduce costs in the lending process and reduce their capital requirements.

This paper is focused on researching the effects of Garantiqa but has not extensively studied the entire credit guarantee system in Hungary. Furtherstudies should expand the study of the entire credit guarantee system of Hungary. Due to time and data limitations, this study only analyzes the impact of the credit guarantee company on SMEs, the economy, the banking sector, but has not extensively studied the effects of credit guarantee company on other issues such as investment, employment, exports etc.

This study will be useful in helping managers, policy makers, banks, and even the government understand the importance of credit guarantee companies in the economy and their particular important in the promoting development of SMEs.

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