Evaluatıng the Credıt Guarantee Fund (Kgf) of Turkey as a Partıal Guarantee Program in the Lıght of Internatıonal Practıces

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Abstract

This study aims to evaluate the structure and performance of The Credit Guarantee Fund of Turkey (KGF) from different aspects of literature and international practices. Analysis shows that the value of Guarantee of KGF is low in Turkish banking regulations and banks are hesitant to use its guarantee. Its average guarantee amount is higher than European average, but default rate is higher and leverage ratio is lower compared to standards and international practices.

Key Words: KGF, Loan Guarantees, Partial Credit Guarantee Institutions, SMEs' Financing, Basel II, Turkey, Lending Costs

Introductıon

SMEs have always been the center of interest for academics and policy-makers because of their contribution to employment which is very important for the stability of economy and welfare of the society, their flexible organisation and production structures to capture new business opportunities and their position to support larger firms. However; SMEs in almost all over the world have difficulties in accession to financial resources they deserve.

As a result of asymmetric information problem, that arises at the time one can not have sufficient information about the other in an economic relation as stated in pioneering analysis of Akerlof (1970: 488-500) about the problem of market for lemons (second hand autos), adverse selection and moral hazard reduces the probability of benefiting of SMEs from banking credits. The understanding developed by Stiglitz and Weiss (1981: 393-410) that credit rationing is more reasonable rather than the decreasing of demand for credits to reduce the loss arising from credits in case of asymmetric information, expresses the negative manner of banks to the SMEs.

Banks are hesitant to lend to SMEs not only because of the asymmetric information problem arising from difficulties on gathering historical financial information; but also for high transaction costs, weakness on registration of the collateral, execution of the contract, laws of bankruptcy, judicial process, unaudited financial results and their structure based on limited liability. (Klapper, Beck and Mendoza, 2010: 10)

To overcome the credit rationing raising from structures of SMEs; governments, local administrations and occupational organisations intervene in the credit markets via the tools such as credit guarantee, interest subsidy, direct lending and regulative subsidies. (eg. less provisioning)

This study aims to evaluate the practices of credit guarantee institutions as the most common form of financing SMEs in credit markets and the performance of The Credit Guarantee Fund (KGF) of Turkey in the light of international practices.

1. Credıt Guarantee Programs

Credit guarantee programs dates backs to the 19th century and the first guarantee schemes were established in Belgium and France in 1840s. Guarantee programs supported by government had played important roles to rebuild the economy in Europe, especially in Germany and Holland, after the World War II. (Deelen and Molenaar, 2004: 13, ilo.org) At the present time; the number of the programs and the guarantee volume have increased considerably.

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Also the techniques to reduce the risk of credit default stated in Basel II Accord, contributed credit guarantee institutions to expand globally. (Cardone-Riportella, Ponce and Casasola, 2008) Ideal guarantee programs are the institutions that undertake the credit risk of a firm, which have feasible project or investment but can not meet the criteria of the lender because of lack of collateral and corporate credit rating, by offering guarantee on the amount agreed with exposed creditor. According to the conditions of the guarantee; debtor has to pay commission and other charges not only to the lender but also to the guarantor in the process of the guarantee. The guarantee program pays to the lender in case of default of debtor at the rate of risk undertaken during the crediting process.
There is not a healthy statistical information about the number of existing credit guarantee programs but it is found out that there were more than 2250 active guarantee funds in 100 countries by 2003. (Green, 2003) There are a number of studies in the literature to measure the effectiveness of credit guarantee programs on accesion of SMEs to finance. However it is not a surprise for one to see opposite views on the effectiveness of these programs.

According to Honohan (2008); credit markets need the guarantee institutions because of the following three reasons: First of all; the guarantor runs better to overcome the asymmetric information problem by having the advantage of more information compared to lender. This factor especially encourages the mutual guarantee programs created by ownership of businesses. The second factor; the status of guarantee programs having a diversified portfolio enable them to diversify and spread the risks compared to the lenders concentrated in a particular geographic area. As the last one; the guarantee programs facilitate the crediting process since they are not subject to same regulatory constraints the creditors face.

Furthermore those guarantee programs contribute to the relations between banking system and SMEs and also decrease the interest rate charged by the creditor. (Posey and Reichert, 2011: 91-102) The study of Beck, Demirgüç-Kunt and Martinez Peria (2008) -one of the most comprehensive study done in recent years including 91 banks in 45 countries- identified that 50 % of the banks in developed countries and 56 % of the banks in the developing countries see the guarantee programs as the most common method and the most effective tool compared to the others used by governments to support and to finance the SMEs.

The most important criterion used to measure the effects of the credit guarantee programs on economy and SMEs is “Additionality” referring to the “additional” loans made possible due to the guarantee against loss provided to the lender.“Financial Additionality” and “Economic Additionality” are two types of additionality which are very difficult to measure. Financial additionality, also known as incrementality, refers to the amount of loans made under guarantees that would not have been made otherwise. Boocock & Shariff (1996: 25-35) found out that 63 % of guaranteed loans provided to SMEs were additional in Malaysia. Studies by NERA (1990) and Pieda (1992) showed 48 % and 68 % additionality respectively in England. It is estimated that 90 % additionality was actualized in 1995 due to the guarantee of FUNDES Fund, a fund established in Switzerland and giving guarantees in Central and Southern America. (Levitsky, 1997a: 5-11) Berger, Frame and Miller (2005: 191-222) found out (in their study made for the US) that 75 % additionality was provided by guarantee programs. In another study by Zecchini and Ventura (2009: 191-206) done for Italy; it is found out that the rate of additional credit supply provided by Italian banks through guarantee programs is average 12,4 %.

From the aspect of economic additionality; the credit guarantee programs provide new employment opportunities, protect the existing employment, increase export of goods and services and tax revenues collected from businesses and employees.

In the study about the contribution of the credit guarantee programs to countries’ economies; Schmidt and van Elkan (2010, aecm.be) estimated that German credit guarantee institutions increased GDP by 3,2 billion Euros, created new 12.900 employment, decreased the number of unemployers by 9.100 and provided 670 million Euros financial revenue to the government annually.

According to another study prepared by the Korean Credit Guarantee Institution (Kodit) (accepted as the most important one of the existing credit guarantee institutions by its guarantee volume reaching 10 % of the credits lent to private sector, in other words, 15 % of the credits for SMEs or 9 % of the South Korean GDP); 86.795 new employments were created by means of the guarantee and the government collected 167 million USD tax revenue through the production increase in 2003. (Gwak, afdc.org.cn)

Riding and Haines (2001: 609) found out in their study on credit guarantees in Canada within the framework of the "Small Businesses Loans Act" that each guarantee amounting to average 2.000 dollars provides employment opportunity for one.

The credit guarantee programs have a significant function during the period of economic crisis when it is very difficult accessing to financial resources, especially for the SMEs. For instance; European Mutual Guarantee Association (AECM), having 34 member guarantee institutions from 18 countries including Turkey, created private crisis tools between the end of 2008 and the beginning of 2009 by amount of 11,2 billion Euros guarantee, one third of its total guarantee operations. Thus 120.000 SMEs accessed finance and 851.000 employees kept their jobs. (AECM, 2011)

On the other hand, it is asserted that probability of running out of funds in a short time especially in developing countries because of high default rates incompatible with principles of financial sustainability, high guarantee rates and low guarantee fees cause credit guarantee systems to fail as being an alternative credit tool. (Zecchini and Ventura, 2009: 191-206)

The existing credit guarantee programs operate in various types summarized in Table 1. A guarantee program runs by more than any of these types.

2. The Credıt Guarantee Programs in Turkey

To understand the importance of credit guarantee institutions in Turkey, one should analyse some figures about the place of SMEs in Turkey. The shares of the SMEs in Turkish economy are 99,8 % in enterprises, 77 % in employment and only 10 % in gross investments. (TUIK, 2008) Also in access to bank loans, Turkish SMEs face significant difficulties. The share of the credits provided to SMEs by banking system in total loans between 2007-2010 shown in Table 2 reveals the situation. As it is seen by the table; the share of credits for SMEs provided by banking system is about the rate of 0,3 %.

Tha data related to the economic activities carried out by SMEs indicates the importance of the practices of efficient credit guarantee programs in Turkey.

There are two credit guarantee programs established to provide guarantee support for SMEs in Turkey; The Central Unity of The Turkish Tradesman and Craftsmen Credit and Guarantee Cooperatives' Unions (TESKOMB) and The Credit Guarante Fund Inc. (KGF). The most important difference between these structures are that KGF is founded by public and occupational organisations while TESKOMB is the structure formed by businesses. Some of the capital of the KGF is provided by public while the capital structure of the TESKOMB is formed by the tradesmen and craftsmen. TESKOMB undertakes the entire risk of the loans since it is a mutual program operating with full guarantee while KGF is a non-mutual one operating as a partial guarantee program.
Only Credit Guarantee Fund (KGF) is analyzed in this study as the guarantee program in Turkey since credit risk is shared between banks and credit guarantee institutions in most of the worldwide practices and the rules of EU countries' aid allow guarantee institutions to undertake the risk at the rate of maximum 80 %.

2.1. The Credit Guarantee Fund (KGF)

Partial credit guarantee system in Turkey, unlike its foundation motives in other countries, was shaped by the guidance of German Federal Government that wanted to prevent immigration and make the immigrants return to their own country due to the effect of recession broke out in western European countries as a result of early 1970s' oil crisis. The first firm, founded with a symbolic amount of capital and based on the decisions of Ministers' Council in 1993, was supported by MEKSA (Foundation for the Promotion of Vocational Training and Small Industry), TOSYÖV (Foundation for Professionals and Executives of Turkish Medium Sized Businesses), TESK (Confederation of Turkish Tradesmen and Craftsmen) and lately KOSGEB (Small and Medium Enterprises Development Organization) and Türkiye Halk Bankası (Turkish Halk Bank Inc.) as the partners. It was founded as "Credit Guarantee Fund, Management and Research Inc." in 1994 and in the same year it began to grant guarantee. Later in 2007 it became "Credit Guarantee Fund Inc." by increasing its capital to 60 millions Turkish Lira (TL[3]) from 20 millions. (KGF, 2010)

[3] 1 USD equals to approximately 1,8 TL by March 2012 exchange rates.

A study has been done aiming The Credit Guarantee Fund (KGF), which was passive on guaranteeing for a long time, to reduce the effect of the global financial crisis of 2008 on SMEs and to encourage the development of credit insurance in Turkey. Thus; the government decided to support small sized businesses which can not reach finance because of lack of collateral by allocating a billion TL for KGF from Treasury. Throughout the process; it is targeted to increase the financial resources of the Fund and intended to achieve its functions to be more efficient. In addition, it was decided to restructure KGF and to increase its capital through banks' participation as partners. Furthermore new programs have been allowed when needed. Regulations have been made to obtain public support for the credit guarantee programs in the extraordinary period. First of all; banks and leasing firms were invited to become partners of ongoing institution by the leadership of Treasury. As a result; capital of KGF hit 240 million TL and the number of the partners has reached to 25.

KGF has protocol with 37 banks and financial institutions and owns 26 branches located in various cities by May 2011.

KGF, as of today, is a partial guarantee program generally guaranteeing directly by its equity, having the structure of non-mutual program, adopting the analysis procedure based on business, offering guarantee up to 80 % of the credit (except 100 % guarantees to Turkish Eximbank) in ex-post structure by models of funded and closed/targeted programs.

Following part studies the position of KGF's guarantee in the Turkish credit market.

2.1.1. The Guarantees of The Credit Guarantee Fund

Guarantee is defined as all kinds of assets, guarantees and securities as well as any other contractual rights which ensure total or partial guarantee of any bank receivables as a hedge against the risk of non-payment of credits and other receivables according to the Regulation "On Procedures and Principles for Determination of Qualifications of Loans and Other Receivables by Banks and Provisions to be Set Aside". (Resmi Gazete, 2006, No. 26333) The guarantee of KGF is classified at the "3rd Group" in the Regulation as "Sureties by natural persons and legal entities enjoying credibility higher than that of debtors".

There is a dual guarantee understanding for the value of KGF's guarantee in Turkish regulation. The credits given under KGF's guarantee by using Treasury Funds have been determined as "risk-free" in the context of transactions which are not subject to credit restrictions, by a change in the "Regulation on Credit Operations of Banks" in the year of 2010. (Resmi Gazete, 2010, No. 27657) However, the guarantee of KGF based on the sources provided by the European Investment Fund, EIF (2011) having the AAA rating grade, is not privileged than the guarantees by the legal entity and natural person in terms of collateral risk according to banking legislation. So it is important to regulate the guarantee transactions based on EIF credits similar to the guarantees from Treasury Funds by The Banking Regulation and Supervision Agency, BDDK of Turkey.

2.1.2. Facilities Provided by KGF

KGF has granted about 708 million USD guarantee from its equity and this amount of guarantee has created about 952 million USD loan volume during the 16-year period from 1994 to 2010. The amount of KGF guarantees has increased significantly especially in the period of global crisis; as it can be seen in Figure 1. (KGF, 2010) Distribution of terms for guarantees provided by KGF by the end of 2010 are as follows; short term: 22,47 %, medium term: 37,27 % and long term: 40,26 %. (KGF, 2010) If the difficulties of SMEs to access to the medium and long-term finance opportunities are taken into account, it seems that KGF enables them to have long-term loan.

Meanwhile; the share of SMEs in Turkey is to be mentioned both within the total number of enterprises and in KGF's guarantees. While the share of micro and small-sized enterprises in Turkey is 99,3 %, their share in the KGF's guarantees is 77 % and the share of medium-sized enterprises is 0,5 % whereas the share of medium-sized enterprises in the KGF's guarantees is 23 %. (KGF, 2010 and TUIK, 2008) Therefore, the distribution of the KGF guarantees by the sizes of enterprises can be concluded as unfair.

While 90,95 % of the KGF guarantees is given for the cash loan, working capital loan have the greatest share in the total loan by 71,55 %. (KGF, 2010)

Acceptance rates of the guarantee applications of KGF are shown in Table 3. As it is seen, actual acceptance rate of applications (as of the annual averages) to guarantee is 32,68 %. Low acceptance rate from KGF's resources proves its very conservative attitude in the process of guarantee.

By contrast; the meeting rates of guarantee applications is as high as 86 % in guarantees given from Treasury funds (KGF, 2010) since that risk sharing in this type of guarantee is in KGF's favor.

Table 4 is arranged in order to demonstrate the existence of KGF in the credit market. It indicates that KGF's performance is not sufficient regarding to its vision which is aiming to guarantee at least one SME from every bank's branches and to increase the share of the loans using KGF guarantees for SMEs loan to 1 % in all loans.

3. Evaluatıon of Kgf's Performance Compared to the other Countrıes' Practıces

In this chapter; the place of KGF in Turkish economy, its guarantee criteria, scope of its guarantee for Basel II, matters about participation of banks to KGF, default and leverage ratios which have great importance for the viability of KGF are evaluated in the context of literature and other countries' practises.

3.1. The Place of Credit Guarantee Programs and KGF in GDP

In the study on 76 credit guarantee funds in 46 countries by Klapper, Beck and Mendoza (2010: 13) it is calculated that median share of the guarantees in GDP is 0,30 % in developing countries and 0,21 % in developed ones.

To explain the place of KGF in Turkish economy, the share of the guarantees in GDP is analysed and compared with other countries. Table 5 indicates the place of guarantee programs in economies including Turkey and other selected countries by the year of 2009.

It can be seen by Table 5 that ratio of KGF is considerably low regarding both median calculated by Klapper, Beck & Mendoza and selected European and Asian countries' average (except India) although amounts of the KGF guarantees have been increased significantly since 2007.

3.2. Evaluation of KGF Guarantees from the Aspect of Basel II and Its Guarantee Criteria

Basel II implementations in Turkey are expected to begin by June 2012 after having been delayed for a long time. (2011, dunya.com) Thus, measurement of capital in banking system will be changed significantly and instruments accepted as collateral in Turkish banking sector such as person/company guarantees, customer's cheque and bills, KGF, pledge of commercial enterprises and securities, assignment of claims will keep their characteristic for the national banks but will not be accepted as "collateral to reduce the firm's credit risk weight" according to Agreement on Basel II Standard Approach. In other words; because of the changes on collateral, banks will demand firstly the collateral defined in Basel Documents from the firms applied for loans. If it is not possible; due to the lack of an effect to reduce capital liability of the other collateral, banks will reflect their cost to the loan interest rate so businesses will get the loan more expensively. (Bankacılar Dergisi, 2006)

Loans against sureties by natural persons and legal entities are partially involved in Basel II. In respect of the Accord; guarantees providing equivalent protection and credit derivative contracts can be accepted as collateral as long as they fulfill the certain conditions; such as being direct, clear, irrevocable, unconditional. Also guarantor and credit derivative contractor must have at least credit A(-) rating. Hence, guarantor's risk weight replaces with risk weight of real other side. (BIS, 2004 and BDDK, 2006) Thus; guarantees provided by the KGF do not have effect to reduce risk according to Basel II due to the absence of any rating grade given by rating agencies. So, it is important to be rated for KGF because of the facility to get counter guarantee by international funds like EIF having rating grade such as A(-) and better.

Besides there is another point to make KGF guarantees valid in Basel II since it blocks 20 % of its guarantee amount as deposit (Responsibility Fund Account) in the creditor bank. Then; one fifth of the KGF guarantees automatically can be evaluated in the status of "cash collateral in the same currency" in Basel II Simple Method and subjected to risk-free weight. (Karakaya, Marşap and Gökten, 2008)

The criteria of offering guarantee vary according to guarantee institutions both in developed and developing countries. The comparasion prepared to indicate the differences between criteria of KGF and other institutions is shown in Table 6.

One can see from the table that the firm scale limit of KGF is higher than the programs in Northern America and Far East. On the other hand; KGF's firm scale and guarantee limits are quite lower than the European programs due to the SME description of EU.

3.3. The Utilization of the KGF Guarantees by the Banks

An important problem of the guarantee programs established in developing countries is to convince the commercial banks to participate in the program's operations and equity since the main stakeholders of the credit guarantee programs are the banks. Because the banks do not trust on the fund and hesitate to participate because of the reasons such as bureaucratic delays in the payments of guarantees, cost increase and government's insistence including the punishment threat to make them participate especially in the public-supported funds. However; experiences from developing countries disprove this case. (Green, 2003: 25 and Levitsky, 1997a: 5)
Uesugi, Sakai and Yamashiro (2010: 463) in their study analyzing the Japanese credit market, one of the most important credit guarantee systems in the world, found out that the banks suffering lack of capital and having difficulties to fulfill capital requirement and so in need to reduce loans; tend to use more credit guarantees compared to the banks having strong capital by the aim of changing the non-guaranteed loans with guaranteed ones to decrease the exposure for risky assets.

Ownership structure of the banks also affect the participation to the fund and support. Beck, Demirgüç-Kunt and Martinez Peria (2008) found out in their mutual study that 83 % of the public banks and 52 % of the private local banks participated in the survey had positive approach to guarantee programs.

There are various implementations and suggestions to provide banks' participation to guarantee programs. For instance; existence of many participating banks in the situation of which each one has only a few number of guaranteed SMEs loans, complicates for guarantor to follow the fund and increases the cost. Instead; it will be wiser to include bigger banks which have more than 50 % share of the banking sector in respect of both assets and customers. (Levitsky, 2007b: 9) Also some regulatory decisions might increase the banks' contribution to the funds; Korean Credit Guarantee Fund (Kodit) obliged banks by law to contribute the fund by giving 0,2 % of particular types of credits' annually till year of 2000. Decreasing of capital allowances sometimes leads to positive results. For instance, when a guarantee institution in Spain guarantees a bank; the bank has to reserve 1,6 % capital allowance instead of 8 %. (Yüksel, 2011: 41) Besides, high guarantee ratio is used to attract the interest of banks to the funds in some countries.

The efficiency of the banks in the KGF have still been quite limited as it can be easily understood from Table 7; although the number of banks reached 20 by the impact of structural changes begun in 2007.

The problem of banks' hesitation analysed in the literature is valid also for KGF. The number of banks accepting KGF guarantees currently is just 52 % of the banks operating in Turkey. Besides; as it can be seen from Table 7, the share of guarantees given to the two state-owned banks shows that guarantees of KGF (having partnership with 20 banks) concentrate on few public banks. The total shares of Halk Bankası and Ziraat Bankası established to support SMEs and Agricultural businesses are 53 % in the number of guarantees and 41 % in the amount of guarantees. (KGF, 2010) Hence; it is understood that the banks adopting the mission of the Fund in economic, social and politic manners are mostly a few public banks. So it is possible to express that the analysis made about bank ownership by Beck, Demirgüç-Kunt, Martinez Peria is valid for Turkey.

Besides, the shares of the four banks (both two state-owned and two private ones) in the number of guarantees is 66 % and in the amount of guarantees is 56 %. Furthermore, 45 % of the participating banks, do not even publish any information about KGF over their web sites.[4] Although it is not expressed clearly; it is thought that some of the banks implement a limit for total guarantee amount given by KGF as a result of banks' approach to KGF. (2010, dunya.com) Thus; KGF needs to be in touch with more banks to convince them to get its guarantees.
The banks are also hesitant for the guarantees from Treasury Funds because of the fact that KGF does not seek any more collateral in those guarantees except those already taken or to be taken by lenders. Besides the KGF shares lender's collateral in pro rata basis in case of default. (Resmi Gazete, 2009, No. 27289) In addition; the risk share ratio from Treasury guarantees (being as 65-35 %; that is 65 % from KGF and 35 % from the banks) is quite low compared to the ratio by 80 % in guarantees offered from KGF equities.

[4] By the date of August 2010

As a result in 2010 only 24 % of the guarantee applications were Treasury based. (KGF, 2010) Although the number of KGF guarantees given to private banks is quite less than those to public banks, average guarantee amount used by private banks is 46 % higher than the public banks'. So, it can be said that in accordance with their missions the public banks use the KGF guarantees generally for smaller enterprises but the private ones do it for greater businesses. The average guarantee amounts per firm for selected EU countries and Turkey are shown in Table 8. As it can be seen from the table; the average guarantee amount per firm in Turkey is higher than the European average despite its very low firm's scale limit compared to EU institutions.

3.4. Default Rates in Credit Guarantee Funds and KGF

The rates of loss and profit accumulation are absolutely important for the programs to survive and they have considerable effect on the perception of banks although Klapper, Beck and Mendoza (2010: 13) in their study, including 46 countries, determined that 60 % of credit guarantee institutions are non-profit.

According to ILO (International Labour Organisation); supporting the implementations of guarantee programs in various countries, annual net default rate is less than 2 % of guarantees in effective guarantee programs. If the ratio is lower, the fund is considered as "very conservative" and if it is higher than 3 % then measures should be taken to improve since the situation would spread between the customer groups and cause the fund to run out quickly. (Deelen and Molenaar, 2004: 95) Saadani, Arvai and Rocha (2011) calculated that the default rates were under 3-4 % in selected countries' guarantee institutions.[5]

In their mutual study Klapper, Beck and Mendoza (2010, 17) found out that 5,37 % of guaranteed loans is in default while the same ratio is better as 4,22 % for those being in the portfolio form. According to the study; the default rate of guaranteed loans in portfolio form vary in different countries as 0 % in Argentina and Honduras but 36 % in the Bahamas.

Figure 2 illustrates the historical cumulative default rates for the Canadian, US and UK programs' seven-year maturity loans. It is clear that the default rates of three large economies from northern hemisphere are extremely higher than the standard ones. But, it be noted that the rates indicated in Figure 2 must be analysed attentively since guarantee institutions have different terms and portfolio forms.

The default rates of Kodit in Korea and Eurofidi in Italy are shown in Table 9. At this point it must be mentioned that Italy has 3.947.000 SMEs (the greatest number for SMEs within all businesses in EU), operating with 19 % of all SMEs from 27 member countries of EU, possessing approximately 70 % of credit guarantee systems' customers of EU (equal to 1.000.000 members). (Eurostat, 2011) And EuroFidi is the greatest guarantee institution of EU, located in Italy as the provider of 41 % of total guarantees in EU countries. (De Vincentiis, 2008: 39) Although the average default rates of Kodit (about 4,5) and Eurofidi (about 6) are higher than non-payment standard of ILO, these ratios must be concluded as a natural result of their great guarantee volume and the effect of global crisis.

Average default rate of KGF is 6,47 % for the period of 1994-2010. So, the default rate of KGF is quite higher than the ratios assumed as standard. But Klapper, Beck and Mendoza (2010) determined in their study that default rates of the programs which has been founded about 15 years ago, like KGF, are higher because the losses due to the guarantees began to accumulate in later periods of the funds.

Bank ownership distribution of KGF's default rates are shown in Table 10. Although five years' average of Turkish banking sector's non-payment receivables is 5,14 % (BDDK, 2011); that is quite lower than KGF's ratio. The default rate in KGF guarantees used by private banks is very close to banking sector's average but that to public banks is much more than the sector's as it can be distinguished from Table 10 easily. This result is coherent with the findings of Klapper, Beck and Mendoza (2010, 17) which claim the default rates are higher in previously established programs and "being attractive to the politicians" is assumed as the most important reason for high rate. Moreover; a strong relationship is identified between the default rates and politicians' increasing effectiveness in the funds. However; it is not because of government's acting in funding and managing but taking part in evaluating of credit risk and revitalization of uncollectible receivables.

[5] Palestine, Egypt, Tunisia, Lebanon, Morocco, Netherlands, Chile, Iraq, Taiwan, Saudi Arabia, Canada, Malaysia, France, Colombia, Korea and Hungary

Deelen and Molenaar (2004: 13) expressed in their mutual study made for ILO that "Net Loss Rate" must be less than 2 % to be accepted as sufficient. As it can be seen from Table 11; net loss rate of KGF (calculated as Amount of Defaulted Receivables After Revitalized Receivables / Amount of Guarantee) is much more than that score.

3.5. Leverage Ratio of Credit Guarantee Funds and KGF

One of the basic indicators to evaluate financial sustainability of guarantee programs is the leverage ratio calculated by dividing the amount of guarantee used into fund's capital. Because of partial structure of guarantees and impossibility of defaults of all the guarantee beneficiaries at the same time; funds are able to offer very high amounts of guarantee compared to their capital. For instance; a guarantee fund having leverage ratio as 10 and undertake 50 % risk, can provide 10 USD guarantee by its 1 USD equity, meaning to provide 20 USD amount of banking loans.

A healthy guarantee program has to keep its leverage ratio under a certain level in accordance with its portfolio's risk but also it must not decrease the ratio to a lower level that will suspend SMEs benefiting from guarantees. On the other hand, participating banks will increase their risk appetite for credits if the leverage ratio surpasses the targeted level. A guarantee institution having a very high level of leverage ratio has to decrase its costs and increase the revenues and also try to provide additional funds. Furthermore, some guarantee programs provide "counter guarantee" aiming to increase the funds. The sample above would be 40 USD banking loans by obtaining 50 % counter guarantee, then. There has not been any model built up for optimum level of leverage ratio so far. However, The Basel II Standard about capital's sufficiency and EU Directive No.486 (2004, http://ec.europa.eu) are accepted as new guides, moreover.

According to ILO; guarantee fund must reach 2:1 or 3:1 leverage rates in their first three years and 5:1 rate at the end of first 5 years. Generally well-functioning guarantee funds should run between 5:1 and 10:1 leverage. (Deelen and Molenaar, 2004: 95)

The experts who prepared the "Best Implementations Report" for The European Commission reached consensus on (Best Reports, 2006) that this rate must be 6 or 7 in a mature and well-diversified mutual guarantee plan. In addition; as of December 31st 2009, the average consolidated leverage rate of AECM members over their equities is approximately 10. (AECM, 2011) The leverage ratios of selected countries' guarantee funds are shown in Table 12. As it is seen by the table; the rates vary from 0,5 to 26. Similar to practices of many countries which leverage ratios are determined by regulation; KGF also keeps reserve that equals to 20 % of guaranteed amount in related banks named as "Liability Fund Account Against Credit Provision", so the leverage ratio can be maximum 5.

According to Levitsky (1997b); there must be some doubts about the fund's rationality if its leverage ratio still remains under 3 although five or more years have passed. As it can be noticed by Table 13; KGF, after 14 years of its foundation, providing indirect guarantees by EIF, having a leverage ratio up to "5" and remaining quite less than this rate except 2008, has preferred a very conservative crediting strategy.

Conclusıon

Credit guarantee programs are accepted as the most effective mechanism to support SMEs in the world. After 14 years of its foundation; the share of The Credit Guarantee Fund of Turkey (KGF) in total loans and GDP is low compared to its targets and selected European and Asian countries, because of the value of its guarantee in banking regulations and hesitations of the banks to use its guarantees. Although it has very low firm's scale limit comparing EU institutions, its average guarantee amount per firm is higher than European average. Default rate of KGF which is very important for the viability of the Fund is quite higher than the ratios assumed as standard. Furthermore the default rate of guarantees used by the public banks is quite higher than that to private banks. This rate in KGF guarantees used by private banks is very close to sector's average but that to public banks is much more than the sector's. The results on its leverage ratio which shows effectiveness of credit guarantee programs show that KGF has preferred a conservative crediting strategy.

As a result; KGF has increased its performance especially after its restructuring in 2007, but it should increase its effort to get more counter guarantee to reach higher leverage ratio to get in touch with more banks and encourage the banks to use its guarantees. The program needs also more independent decision making mechanism to overcome the problem of high default rates.

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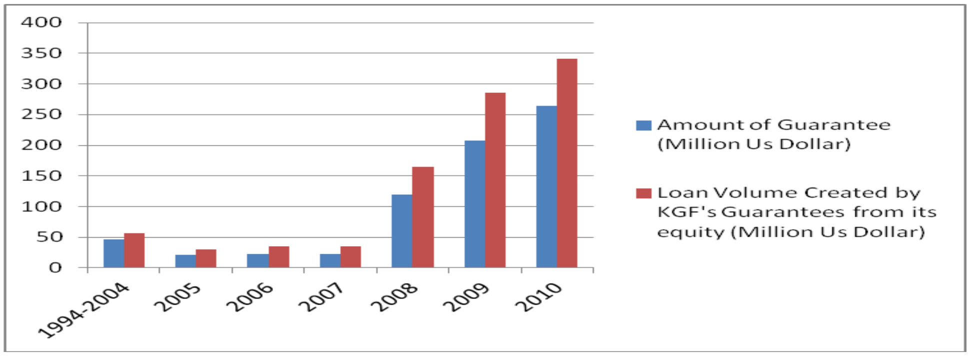
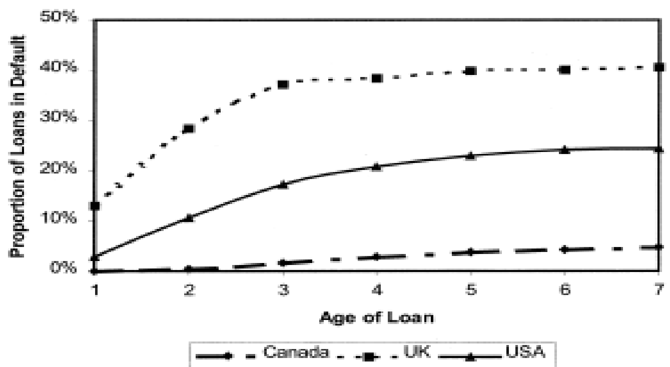
Annex

Figure 1: The Amount of Guarantees and The Loan Volume Created by KGF by Years



Source: KGF, 2010

Figure 2: The Default Rates of Loans From Canadian, English and American Credit Guarantee Programs



Source: Riding and Haines, 2001: 595-612

Table 1: Types of Credit Guarantee Programs

Ownership Structure	**Mutual Programs:** Programs created by entrepreneurs in order to guarantee each other.	**Non-Mutual Programs:** Programs created by enterpreneurs, banks and governments not only to guarantee each other but also the others.
Target Organizations	**Closed/Targeted Programs:** The programs created to support a specific target group for accession to credits.	**Open Programs:** The programs having certain and special conditions but not to support any target group.
The Scope of the Guarantee	**Partial Guarantee Program:** Guarantee program compromised to the creditor bank about sharing the risk up to an agreed percentage.	**Program with Full Guarantee:** Guarantee program providing full guarantee (100 %) for credit.
The Use of the Program's Capital	**Funded Programs:** The guarantee program keeping a certain amount of reserve in creditor bank's accounts in case of non payment.	**Unfunded Programs:** The program that government undertakes the credits' default partially or entirely without allocating fund.
Parties of the Guarantee	**Direct Guarantee Program:** The guarantee service only in the framework of the agreement between the creditor and guarantee institution.	**Indirect Guarantee Program:** The programs obtaining financial support in case of non payment, from a third party in addition to the bank and guarantee institution.
Methods of Guaranteeing	**Guarantee Based on Business:** Each credit demand is sent to guarantee institution by creditor bank to be analyzed and guarantee is provided for business by guarantor if it is appropriate.	**Guarantee Based on Portfolio:** Guarantee institution provides guarantee to all businesses that meet the pre-determined criteria according to its agreement with the creditor.
Time to Guarantee	**Ex-ante Programs:** The guarantee is allocated when the program accepts to give guarantee for the debtor's project and then debtor applies to creditor bank for assesment of the loan demand.	**Ex-post Programs:** Credit application is investigated initially by bank and delivered to guarantee institution soon after approval.

Table 2: The Share of the Credits for SMEs Provided by Banking System

Years (as of December)	The Share of Credits (cash and noncash) (%)	The Share of Cash Credits (%)
2007	0,36	0,27
2008	0,31	0,23
2009	0,29	0,21
2010	0,31	0,24

Source: Interactive Bulletin of BDDK

Table 3: Acceptance Rates of the Guarantee Demands From KGF's Equity

Years / Periods	Guarantee Amount / Guarantee Amount Demanded (%)
1994-2004	37,53
2005	41,64
2006	33,19
2007	27,27
2008	27,59
2009	34,04
2010	33,17
1994-2010	32,68

Source: Data gathered from KGF, 2010

Table 4: The Place of KGF's Guarantees in Banking Sector (2007 – 2010)

Years	The Loan Volume Created by the Guarantees Used for the Loan / Total Cash Loans of Banks for SMEs (%)	The Number of SMEs Demanded Guarantee from KGF's Equity / The Number of Customers for SMEs Loans in the Banking Sector* (%)	The Number of Firms Guaranteed from KGF's Equity	The Number of Firms Guaranteed from KGF's Equity / The Number of Customers for SMEs Loans in the Banking Sector* (%)
2007	0,06	0,04	305	0,02
2008	0,25	0,12	1.138	0,07
2009	0,39	0,24	2.605	0,15
2010	0,41	0,20	2.382	0,13
Total	0,27	0,15	6.430	0,10

Sources: Data gathered from Interactive Bulletin of BDDK and KGF, 2010

*The data for "The Number of Customers for SMEs Loans in the Banking Sector" is archived from December, 2006

Table 5: The Share of the Guarantees in GDP Provided by Guarantee Programs of Selected Countries by 2009

Country	The Share of the Guarantees in GDP (%)	Country	The Share of the Guarantees in GDP (%)
Canada	0,1	Italy	1,4*
USA	0,2	France	0,4
South Korea	5	Hungary	1,9
Malaysia	1	Netherlands	0,2
Taiwan	3,5	Romania	0,4
India	0,1	Turkey	0,1**

Sources: (Saadani, Arvai and Rocha, 2011), KGF, TUIK and Eurostat

*Italy's data is calculated from Eurostat Key Figures 2011 & Eurofidi, values are over 2009 current prices on GDP,

**Turkey's data is calculated by the amount of the guarantee provided by KGF and TUIK values over 2009 current prices on GDP

Table 6: The Criteria of Guarantee in Selected Countries including Turkey

Country	Guarantees for the New Founded Businesses	Firm's Scale Limit	Guarantee Limit (million $)	The Sector Guaranteed	Guarante for the Working Capital
USA	Yes	Sales: 7 million $	2	All	Yes
Canada	Yes	Sales: 5 million $	0.5	All (except agriculture)	No
Chile	Yes	Sales: 3 million $	0.45	All	Yes
Colombia	Yes	Assets: 7,3 million $	0.97	All (except agriculture)	Yes
France	Yes	Sales: 70 million $ Employees: 250	3.5	All (except many of agricultural businesses)	Yes
Hungary	Yes	Sales: 70 million $ Employees: 250	17.8	All	Yes
The Netherlands	Yes	Sales: 70 million $ Employees: 250	1.8	All	Yes
India	Yes	Assets: 1 million $	0.2	All	Yes
South Korea	Yes	All	3	All	Yes
Malaysia	Yes	Sales: 1,6 million $ Employees: 50 Manufacturing: 7 million $ Employees: 150	3	All	Yes
Taiwan	Yes	Services: 3 million $ and Employees: 100; Manufacturing: 200 Employees:	3	All	Yes
Egypt	Yes	Employees: 50	0,35	All	Yes
Turkey	Yes *	Sales: 14 million $	0,58**	All	Yes

Sources: (Saadani, Arvai and Rocha, 2011) and KGF, 2010

Firm values of EU countries and Turkey are converted to USD by August 2011 exchange rates.
* To obtain the Treasury guarantee, the firms have to be active for at least 2 years.
** The guarantee upper limit is 0, 87 million USD for the SMEs creating risk group directly or indirectly.

Table 7: The Utilization of the KGF Guarantees by the Banks (1994 –2010)

Creditor	Share in Total Number of Guarantees	Share in Total Amount of Guarantees	Average Amount of Guarantee (TL)
Public Banks	**0,58**	**0,49**	**147.200**
-Türkiye Halk Bankası	0,46	0,34	-
-Ziraat Bankası	0,07	0,07	-
Private Banks	**0,41**	**0,50**	**215.939**
-First Two Private Banks	0,13	0,15	-
Public and Private Banks	**0,98**	**0,99**	**175.623**
Others	0,02	0,01	104.655
All	100,00	100,00	174.428

Source: Data gathered from KGF, 2010

Table 8: The Average Guarantee Amount Per Firm for Selected EU Countries and Turkey*

Country	Average Guarantee Amount Per Firm (€)	Country	Average Guarantee Amount Per Firm (€)
Germany	21.000	Slovenia	53.000
Austria	337.000	Romania	50.000
Bulgaria	5.000	Poland	10.000
Italy	9.000	Turkey	42.500
Hungary	30.000	EU Average	31.700

Source: (KGF, 2010), (Final Report Go Network Project, 2006), (AECM, 2008)
* EU and Turkey averages are by the year of 2007 and the other countries' are by the year of 2006

Table 9: The Default Rates of Kodit of Korea and EuroFidi of Italy

Year	The Amount of Defaulted Loans / The Amount of Guarantee (%)	
	Kodit	Eurofidi
2005	-	5,3
2006	4,5	5,2
2007	3,9	5,7
2008	5,0	7,6
2009	4,4	-
2010	4,7	-

Sources: Kodit, 2010 and Eurofidi data gathered from ACSIC, 2009

Table 10: The Distribution of KGF's Default Rates According to Bank Ownerships

Bank Ownerships	Default Rate (1994-2010)
Public Banks	7,20 %
Private Banks	5,60 %
Average	6,47 %

Source: Data gathered from KGF, 2010

Table 11: Revitalized Defaulted Receivables of KGF

Period/ Year	Revitalized Receivables / Amount of Defaulted Receivables	Amount of Defaulted Receivables After Revitalized Receivables / Amount of Guarantee
01.01.1994 -31.12.2010	23 %	5, 25 %

Source: Data gathered from KGF, 2010

Table 12: Leverage Ratios from Selected Countries

Country – Guarantee Fund	Foundation Date	Leverage Ratio	The Year Leverage Ratio is Calculated
Germany - Bürgschaftsbanken	1954	26	1994
France - SOFARIS	1971	22	1995
Croatia - HGA	1995	20	2001
Japan - CIC & NFCGC	1937	15	1995
Korea - KCGF	1976	15	1995
Peru - FOGAPI	1979	13,8	2001
India - DICCG	1981	11	1995
Taiwan - SMBCGF	1974	10	1994
Malaysia - CGC Berhad	1972	8.0	1995
Mexico- Nacional Financiera	1997	5.0	2001
Brazil - SEBRAE	1995	1,9	2001
Romania - RLGF	1993	1,5	2000
Colombia - FNG	1982	1,4	1995
Argentina - FOGABA	1995	0.5	2001

Source: Green, 2003

Table 13: Capital and Leverage Ratios of KGF (2007 – 2010)

Year	Equity (Current Prices, TL)	Leverage Ratio: Amount of Guarantee Given / Equity
2007	20 millions	2,6
2008	60 millions	4,7
2009	240 millions	2,4
2010	240 millions	2,7

Source: KGF, 2010