



**CREDIT GUARANTEES:
An assessment of the state of knowledge
and new avenues of research**

by
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PREFACE

The problem of collateral is a daily issue for lenders and causes much debate in the development finance community. Given the difficulties experienced in arranging traditional forms of loan security, such as land or chattel mortgages, various collateral substitutes have been proposed.

Among the substitutes for traditional collateral is the loan guarantee. Guarantee systems for loans have been proposed, planned and implemented in various countries. The assumption made by proponents of such a service is that the guarantee organization is either better informed about the risk of the loan than the lender or it is better structured financially to be able to manage the risk. Despite the apparent attractiveness of a loan guarantee, the empirical evidence available gives little encouragement. Nevertheless, interest in guarantees continues.

This book, the production of which was initiated in this Division, attempts to address the main issues with guarantee funds and the advantages and disadvantages of traditional guarantee systems. It comes to the broad conclusion that there are few instances in which a traditional loan guarantee service adds value in a sustainable way. The book then considers some examples from a highly developed economy, i.e., the United States, where guarantees are structured in such a way as to make them economically attractive to all concerned, and draws more general lessons from these examples. Finally, new approaches to the guarantee concept are aired and proposals made as to how these innovative mechanisms could be implemented in various situations.

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Although primarily the work of Michael Gudger, this book develops ideas which have been put forward by many others, especially subscribers to the Development Finance Network, run by the Ohio State University. To all those who have contributed on the subject of credit guarantees our thanks and appreciation. We hope that their views have been faithfully reflected and adequately included in the debate.

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CHAPTER ONE

CREDIT GUARANTEES: THE ON-GOING DEBATE

THE RATIONALE FOR CREDIT GUARANTEES

The introduction of credit guarantees has been widely advocated by development finance professionals to address difficulties facing individuals, households, farms and other small firms, which wish to borrow from banks. Small and Medium Enterprises (SMEs) and microenterprises that face credit rationing by formal sector lenders. SME and micro borrowers together with other credit rationed groups such as farmers, rural industries, and women have particular difficulty in developing countries around the world in obtaining formal sector credit. When they do obtain such credit, it is often on comparatively disadvantageous terms. Credit guarantees supported by donor and/or government subsidies have been recommended as a means of addressing these difficulties.¹

Advocates advance six arguments *in favour* of public sector investment or donor involvement in developing and operating credit guarantees. These are as follows: guarantees can overcome collateral constraints, offset the risks of lending to SMEs and micro borrowers, address information constraints, compensate for low profit margins, modify intrinsic characteristics of small business, induce learning, and produce additionality. Each of these arguments for guarantees is summarized below:

Overcoming Collateral Constraints

Proponents of guarantee funds argue that lenders have difficulty in originating and collecting loans due to a lack of collateral, and that guarantees in effect become a “substitute collateral.” This substitute collateral is viewed as being superior to physical collateral that SMEs and micro borrowers cannot offer or offer in sufficient quantities to secure a loan. The guarantee offered by a third party is both **secure** and **liquid**. Should the loan default, the guarantee is easily and quickly called by the lender under the terms of a legal contract that specifies how the lender can recover his money. The third party guarantee is not subject to the problems presented by physical collateral, such as its maintenance in good condition, verification of its value and safekeeping.

¹ Many of the arguments for and against guarantee funds can be found in Juan Jose Llisterri and Jacob Levitsky, editors, *Sistemas de Garantias de Credito: Experiencias Internacionales y Lecciones para America Latina y el Caribe*, Banco Interamericano de Desarrollo, Washington, 1996. An English version is found in *The Financier*, Vol.4, No. 1& 2, February/May 1997. Several of the articles also appear in *Small Enterprise Development* Vol. 8 No. 2, July 1997.

Proponents argue that guarantees compensate for:

- Inadequate registries for collateral and the high costs for registering collateral ;
- Absence of secure land titles ;
- Slow, costly and corrupt legal systems that impede the realization of collateral by a lender;
- Destruction or deterioration of the collateral whether accidental or intentional and borrowers' disposal or hiding of collateral; and
- Social and political pressure to not vigorously collect loans.

Furthermore, the guarantee fund is a financial entity that publishes its audited financial data, making it easy for a lender to determine the guarantor's solvency, liquidity, and claims paying capacity. Thus, from most points of view, a third party guarantee by a solvent and liquid guarantor is superior to physical collateral and should enable a lender to make a loan with the confidence that the loan will be recovered in case of default.

Off-setting Risks of Lending to SMEs and Micro Borrowers

Lenders are said to have a perception that SMEs and micro-borrowers are inherently higher risk clients. Bankers point to the high failure rates of small businesses, which are almost by definition more vulnerable to market and economic changes. In addition, the small and microenterprise operators are relatively inexperienced and seldom have the resources to survive a sustained economic downturn. Guarantees can share these risks with banks and thus reduce lender's perception of risk and their exposure to loss in case of default.

Addressing Information Constraints

Credit-rationed groups are unable to obtain loans because of lenders' lack of information and because of the high cost of collecting such information by lenders. Lenders without adequate information have difficulty in assessing the riskiness and profitability of the loans. Guarantees, particularly those issued by grass roots level organizations, can work closely with the target group of prospective borrowers and develop a sufficient amount of information about them, which enable banks to lend.

Compensating for Low Profit Margins

Lenders are reluctant to deal with credit constrained groups due to reduced profit margins. Most banks are not prepared to cope with a large volume of small loans and generally lack the ability to evaluate applications of many small borrowers whose financial characteristics do not fit easily into the credit evaluation and scoring techniques that they use for larger borrowers. Few lenders are prepared to make the investment in loan technology to gear up for a SME and micro lending programme and fewer still are prepared in loan technology and additional staff required to process many small loan applications. As a result, these additional costs make loans to SMEs and micro borrowers less profitable and less attractive to lenders. Guarantors can address this difficulty by providing data for the loan work up, and presenting these data to banks in the format that they are accustomed to, reducing the bank's administrative costs of loan work ups.

Modifying Intrinsic Characteristics of Small Businesses

Credit guarantees can compensate for some of the inherent difficulties faced by small borrowers, proponents argue. Small businesses are often characterized by erratic and seasonal cash flow. They may be subject to sudden and unpredictable price swings of the products they use or produce. Farmers are a classical case of this market price and cash flow risk. Furthermore, as many small businesses are operated by a sole owner or are family businesses, the accounting system is elementary or even absent. Small businesses in many countries have little incentive to develop accounting systems as this would risk being taxed, a risk that is largely avoided in the informal sector. Without a guarantee, banks would be reluctant to lend where accounts are not kept or are dubious; with a guarantee these issues do not influence the credit allocation decisions. As we will see in the case of FUNDES, some guarantee agencies also perform an advisory role for their clients, helping them manage their businesses to overcome these difficulties that precluded their access to credit.

Inducing Learning

Once banks are induced to lend with their risks reduced by guarantees, they will discover that some portion of the clients who borrow with guarantees are in fact not as risky nor as unprofitable as originally thought. These clients will "graduate" from the guaranteed loan group and borrow without guarantees. Subsidizing guarantee funds is justified on the grounds that especially first time borrowers are most often excluded from lending. Substantial

additionality can be achieved by introducing them to lenders that after a period of satisfactory performance on the part of a new client will be prepared to provide further loans without guarantees.

“Producing Additionality”

Guarantees are cited as a policy instrument that produces additionality. A small investment in a guarantee institution’s capital and/or on-going administrative support to guarantee institutions, it is argued, can produce a significantly larger volume of lending to a credit constrained sector than would have been achieved without such guarantees. Guarantees can modify the terms of the loan by allowing banks to extend more credit for longer periods.

ARGUMENTS AGAINST GUARANTEE FUNDS

The arguments for guarantee funds given above have generated counter arguments. Numerous scholars and development professionals are opposed to guarantees. They have argued with equal force that credit guarantees in general and in particular for SMEs and micro borrowers are a waste of precious development resources and a policy unlikely to produce the results held out by proponents. The critics of guarantees argue that promoters of guarantees overlook several very important theoretical and practical points: banks do not lend to farms and SMEs and micro for reasons that have little to do with the issues cited above.

Characteristics of Third World Banking

Banks in many developing countries are quite dissimilar to banks in more developed countries. Large industrial and commercial groups often own the banks. These groups are the principle clients of “their” house bank, and most lending is in effect **inter-firm lending**. Some house banks act primarily as the deposit and asset-gathering arm of large commercial and industrial groups of which they are a part. These banks have little interest in retail lending, and especially to small clients, because they can place all their loanable funds with large clients that are tied to the bank via cross shareholding and interlocking boards. Other, more broadly-based banks, are traditionally geared to the finance of trade and wholesale/retail business conducted by larger, well-established firms.

Closed Financial Markets and Lack of Competition

In many countries the demand for loans is much larger than the supply of loanable capital, providing little incentive to seek out small retail clients. Furthermore, many banking industries have long been protected from foreign competition. Foreign banks, if allowed to enter the local market, would compete by taking away some of their larger clients. The foreign banks would offer superior service and perhaps lower prices, thus forcing local banks to seek out newer and smaller clients. Some observers have remarked that many third world banking industries have yet to make the transition from “Gemeinschaft” to “Gessellschaft” and are unlikely to make such a transition until confronted with a more competitive capital market.

Capital Constraints

Lending requires capital. Most countries require a risk-adjusted capital adequacy ratio of 8%. Often the demand for loans is such that banks are fully loaned out. They cannot make additional loans without additional capital. In this situation, guarantees would not produce additional lending.

Costs of Guarantees

Issuing guarantees, critics point out, is costly. Administrative overheads are very high and consume the capital of the guarantee fund if it does not quickly establish a large enough revenue stream to spread these costs over a very large number of operations. Guarantee companies have generally failed to generate a large volume of low unit cost operations.

Pricing of Guarantees

Issuing a guarantee requires the guarantor to accurately assess the riskiness of the loan and to develop a price that reflects that risk. If it cannot do so effectively, the guarantee company's losses will exceed its income, reducing its capital. To date, no SME and micro-borrower guarantee company has consistently priced its guarantees at levels that permit it to maintain its capital, let alone increase its capital through retained profits. In fact, the management of a guarantee company is caught in a dilemma. It can charge a premium systematically related to the cost of guarantees, which the guarantee unattractive because of the price. Alternatively, management can price the guarantee at a low enough price to sell it but at the cost of losing

capital because the price does not cover costs and losses. These losses often are offset either by donor funds or continuing subsidies.

Guarantee Funds have no Comparative Advantage in Credit Assessment

Bankers, critics of guarantees argue, are better at evaluating risk than are guarantee funds. Bankers both have more experience and know their clients better than guarantee funds.

“Like a bank, the fund must base its decision on the quality of the proposals presented to it, and on the history, management style and other qualifications of the concerned entrepreneurs. The fund, in other words, must use the same methods of credit analysis as banks in determining whether or not to issue a guarantee. Moreover, the fund in all likelihood will not have better or more experienced credit analysts than banks. As a result the fund is likely to guarantee projects with about the same reluctance or willingness as a bank is to loan to a given undertaking.

If banks often reject loans because the applicant lacks collateral, and the guarantee fund is supposed to provide this collateral, then the fund must base its credit decisions on fewer criteria than those used by the bank. In short, the fund’s range of credit analysis is narrower than that of the banks.”²

Banks Will Engage in Opportunistic Behavior with Guarantees

If lenders are offered third party credit guarantees, they will select against the guarantor and guarantee only the loans that are at high risk of going bad or have already gone bad. This anti-selection process will give the guarantee fund a lower quality credit portfolio that will in turn be very, and probably destructively, costly. This point is made convincingly by Prof. Claudio Gonzalez Vega in numerous postings on the Development Finance Network. My paper on the *Caja Social* in Colombia presented at an Inter-American Bank Symposium sets out in some detail the dynamics of this interaction between lender and guarantee fund.³

² Krzysztof Herbst, “Local Guarantee Funds in Poland” in Antony Levitas and Grazyna Gesicka, editors, Local Guarantee Funds, Friedrich Ebert Stiftung, Warsaw, 1995, pp. 59-60.

³ See M. Gudger, “Sustentabilidad de los Sistemas de Garantia de Credito” in Sistemas, 1996.

Banks Prepared to Lend to SME and Micro Borrowers Can establish Their Own Guarantees

There is no *a priori* reason that a bank would want a third party guarantee. A bank could simply increase the interest rate instead of buying a guarantee and set up a loan loss reserve which is retained instead of being paid to a guarantee fund. In fact, this is exactly what some successful SME and micro lenders do. They know better than do guarantee funds the likely default rate, and they establish provisions to meet these losses without any additional administrative overheads. Again, the *Caja Social* in Colombia provides an example. The *Caja* was established in 1901 and now has 134 offices in 42 cities. In 1995 it had assets of \$580 million of which \$423 million were loans. The average loan size is around \$2,000. Since the late 1980s, the *Caja* has operated profitably by meeting its three types of financial intermediation costs: the cost of funds, the costs of administration, and the cost of loan losses. The loan losses in the 1985-95 period were about 2% per year, considerably lower than the fees charged by guarantee funds operating in Colombia in the same period.

SME and Micro Lending Requires an “Appropriate” Technology, not Guarantees

SME and Micro-lenders do not require guarantee but instead a different loan appraisal and loan supervision technology that is substantially different from the norms of commercial banking. From several studies of the *Cajas Municipales* in Peru the elements of this successful strategy can be identified.

- A target market clearly defined by terms of socio-economic and geographical characteristics.
- Products suited to the situation of the target market instead of standard loan products that do not meet the needs of the targeted market segment.
- An appropriate lending technology for a sector characterized by small loan sizes and high administrative costs, which generates a sufficient volume of good loans to keep expenses at manageable levels and not impair profitability.
- A cost-effective strategy of acquiring small and micro clients through a community outreach programme and organization of groups under the guidance of community-based loan officers.
- An inexpensive loan delivery system.

- An effective loan monitoring system to gather information continuously and permit intervention before a loan becomes non-performing.
- An enforceable system for classifying and identifying borrowers who are able and willing to honour repayment commitments and procedures that channel loans preferentially to those that do so over time.
- A strategy and a reputation for vigorously pursuing defaulters, as a lender thought to be “soft” on loan collections will face increased defaults.
- A realistic loan pricing policy so that interest rates are adequate to cover costs of funds, operating costs and loan defaults.

From this perspective, SME and micro-lending is less a matter of collateral and third party guarantees than it is the development of a coherent strategy and technology for reaching these groups and an operational methodology that will permit the lender to survive and grow. Guarantees would be of little value to a lender who had such a strategy. Guarantees would do little to induce a lender without such a strategy to lend to SME and micro-borrowers, and would do nothing to insure the survival, let alone growth, of a lender without such a strategy.

Guarantees Do Not Produce Additionality

Proponents of guarantees cite additionality as the major justification for the creation of the guarantee funds with public or donor funds. More credit on more favourable terms flows to the target groups with guarantees than without guarantees. Prof. Dale Adams has directly challenged this argument. He argues that there is no evidence of additionality. None of the proponents, in his view, have produced evidence that guarantees result in additionality. He further argues that as guarantee funds are part of a larger credit-targeting programme, the usual result is that subsidized credit flows to politically important groups largely irrespective of their creditworthiness.

CHAPTER TWO

CONTEMPORARY CREDIT GUARANTEE PRACTICE

The arguments set out in the previous chapter are theoretical and make only passing reference to operating credit guarantee systems. Of these there are a large number both in Europe and the U.S. with many examples also in developing countries⁴. This chapter reviews some of the experience in Europe, Asia and the non-Asian developing countries in addition to multilateral guarantee programmes sponsored by donors and NGOs. Chapter Three is devoted to the U.S. financial guarantee industry, which has been neglected as a source of information as to how to operate guarantees profitably and produce massive additionality.

EUROPEAN GUARANTEE SYSTEMS: WESTERN EUROPEAN COUNTRIES:

Advocates of guarantees generally hold up European programmes as models of successful guarantee programmes and argue that the long history of these programmes serves as a guide for other countries. Much of the discourse assumes the benefits for SME borrowers and focuses intensely upon the various administrative structures.⁵ Almost all West European countries have guarantee systems. In some countries, these are quite large and sophisticated systems based on multi-level mutual models (France and Italy) and other countries, they have developed into guarantee banks (Germany and Austria). Despite the size, sophistication and long history of these guarantee schemes there is surprising little analysis of them. Published materials tend largely to be self-serving and/or descriptive, but seldom delve into the issues of costs, subsidy-dependence, additionality and sustainability. This material usually argues benefits but seldom engages in a rigorous analysis of what precisely these are or how they are generated, or perhaps most important of all. Whether the benefits could have been produced, for less cost, in another way.

⁴ An excellent discussion of the various structures of guarantee schemes with particular reference to developing countries can be found in Richard L. Meyer and Geetha Nagarajan, Credit Guarantee Schemes for Developing Countries: Theory, Design and Evaluation. USAID, Africa Bureau, Washington, 1996. A companion publication is the Annotated Bibliography on Agricultural Credit and Rural Savings. Volume XVII, A special Issue on Credit Guarantee Schemes for Agriculture and Small, Medium and Micro Enterprises, Rural Finance Program, The Ohio State University, 1996. This is an excellent source of additional bibliographical information.

⁵ See Juan Luis Llorens, "Los Sistemas de Garantias de Credito para las PYMES en Europa" in Sistemas, 1996 for a description of the European models.

The first analytic work to appear on European guarantee funds does not provide a very positive appraisal.⁶ It suggests that the volumes of guarantees are very low and that the cost per guarantee is quite high. In the 12 European countries studied, the total number of guarantees issued in 1993 (the last year for which data are available) was about 43,000 with an average loan size of \$98,000. Nearly half of the total number of loans (18,000) were originated in Greece where the average loan size was about \$23,000. The largest country in the study, Germany, originated only 6,400 guaranteed loans with an average guarantee commitment of \$270,000. Spain originated about 6,500 with the average guarantee commitment of \$48,000; France reported 2,700 loans whose average guaranteed amount was about \$262,000. In Italy only 956 new guaranteed loans were issued with an average guarantee commitment of \$287,000. The U.K. issued about 3,900 guaranteed loans with an average value of \$47,000. In the 12 countries, the volume of new guaranteed loans was estimated at about 2-3% of total annual bank lending.

The German scheme requires budget support of about US\$27 million per year or about \$4,200 per loan guaranteed. The cost to the government budget per loan is about 1.5% of the loan value guaranteed. Italy has a budget outlay estimated at US\$38 million or about US\$40,000 per loan guaranteed. The relationship between the cost to the budget per loan and the loan size is 14%. In the U.K., the budget outlay was at least US\$24 million or just over \$6,000 per loan. This cost to the budget is about 13% of the loan size. In France, the cost data is not available as France provides recapitalizations of the guarantee system instead of an administrative subsidy.

It is hardly surprising in the light of the low volume of operations and the high cost per operation that the German Bundesbank's official view is unsupportive. It sees the German and European schemes as an interest rate subsidy to small and medium size enterprises for political purposes and, thus, not a "natural component of a market economy."⁷

⁶ Securitization of Guaranteed SME Loans in Europe and Finance for Innovation. Graham Bannock & Partners study for the European Innovation Monitoring System (DGXIII-D), Brussels, 1995.

⁷ Bannock, 1995.

Austria

A recent study of the Austrian guarantee scheme seems to support these findings. A total of 5,242 guarantees were issued in 1994 for a total amount of 2.4 billion Austrian Schillings. At a current exchange rate of 13.065 to the dollar, the total value of guarantees issued was about US\$ 184 million for an average of about US\$ \$35,000 per guarantee. Total subsidies in 1994 were AS 377 million or about US \$28.9 million. This implies a cost of about US\$5,500 per new guarantees issued, or roughly 15% of the average value of a guarantee issued in that year.⁸

Spain

Some older data from the very large Spanish scheme sheds some additional light on the issues of costs and the relationship of these costs the value of guarantees issued. These data suggest that the administrative costs of issuing guarantees average about 6% of the value of the loans guaranteed, of which only about 50% are derived from the fees charged. The rest derives from the investment income on the capital, which apparently came principally from the budget.⁹ The charge of 6% to issue the guarantees does not include the costs of calls on the guarantees.¹⁰ Thus, the Spanish scheme, in terms of cost, falls between the very efficient German programme and the more costly schemes in the U.K. and Italy. The data provided are silent on subsidy support for the Spanish programme.

TABLE ONE
FINANCIAL DATA FROM SPANISH "GARANTIA RECIPROCAS"
MILLION Spanish Pesetas

YEAR	FEE INCOME (A)	INVESTMENT INCOME (B)	TOTAL INCOME (A+B) (C)	PERSON. COSTS (C)	OTHER COSTS (D)	TOTAL EXPEN. (C+D) (C+D)	NET RESULT (66) (37) (50)	RISKS WRITTEN	EXPENSES AS % RISKS	FEE INCOME AS % RISKS
1985	276	389	665	353	378	731	(66)	N/A		
1986	477	559	1,036	482	591	1,073	(37)	14,767	7.27%	3.23%
1987	510	644	1,154	558	646	1,204	(50)	19,929	6.04%	2.56%
1988	631	735	1,366	658	611	1,269	97	24,638	5.15%	2.56%
1989	861	858	1,719	732	649	1,381	338	30,295	4.56%	2.84%
1990	895	1007	1,902	816	930	1,746	156	29,373	5.94%	3.05%
1991	1070	1120	2,190	906	998	1,904	286	32,082	5.93%	3.34%
TOTAL	4720	5312	10,032	4,505	4,803	9,308	724	151,084	6.16%	3.12%

⁸ Kurt Leutgeb, "The Experience of Burges Forderungsbank Regarding Loan Guarantee Institutions in Central and Eastern Europe," Burges Forderungsbank, Vienna, 1995.

⁹ Data supplied to the author by the Sistema Espanol de Garantias Reciprocas.

¹⁰ The charge actually may be higher as the loan amounts appear to be the total value, not the portion guaranteed. Typically 50%-75% of a loan is guaranteed.

EASTERN EUROPEAN COUNTRIES

Poland

Several Eastern European countries have experimented with or have established guarantee funds. Poland has the greatest number of guarantee schemes, both in the public sector and in the private sector. Several state-owned banks (including the Bank for Food Economy and the National Economy Bank) issue bank guarantees for various purposes as traditional bank guarantees. No information can be gathered as to the volume and the results of these bank guarantees except that the Bank for Food Economy as of 1996 carried an item on its balance sheet showing a loss of about U.S. \$600 million for export guarantees.¹¹

Specialized state agencies grant credit guarantees. These agencies are the Agricultural Marketing Agency which issues credit guarantees for purchase and storage of food products, the State Treasury Agricultural Property Agency guarantees up to 70% of the price paid by private parties to purchase agricultural land from the state, and the Agricultural Restructuring and Modernization Agency issues guarantees to help finance investment in the agricultural sector. These agencies either do not release data or do not disaggregate it from their overall budget. Interviews however suggest that the total volumes of these guarantees are quite small.

Poland has numerous very small-scale private guarantee funds, many of which are contained within a development foundation and thus are very difficult to evaluate in any systematic manner. These regional funds include the Nida Enterprise Fund, the Loan-Investment Fund (Olysztyń), the Lublin Enterprise Fund, The Białystok Enterprise Fund, and the Bilgorajska Regional Development Fund. As of late 1996, additional funds were in various stages of formation.

Additionally, USAID and the Polish-American Bank have some operations covered by the Loan Portfolio Guarantee Programme. The British Know How Fund has contributed to the capital of the Polish British Enterprise foundations in Lublin and Białystok about \$20 million. The STRUDER Programme, with EU support, is in the process of setting up an additional guarantee fund with capital of about ECU 5 million.

¹¹ This loss however is probably due more to the general financial crisis of the banking industry than to the

The Government of Poland owns KUKI, a new export insurance company that issues guarantees to Polish exporters. While not yet profitable, KUKI does have a declining loss ratio and a solid balance sheet characterized by steadily growing capital. Insurance operations continue to produce net negative results for the present while investment activities make the company profitable. Almost all of the operations are with large industrial and commercial companies. No exports from the SME sector have been covered by guarantees.

In late 1996, the guarantee funds met in Nidzica and formed the National Association of Guarantee Funds both to share experiences and to serve as an apex organization and the lobbying arm of the movement. In fact, lobbying was defined as their most important activity for 1997.

General conclusions about the Polish guarantee fund movement are difficult given the structure of most of the funds within regional development foundations. Several important aspects that should be noted:

- The volume of operations is very small, with usually only a dozen or so guarantees being issued by each of the funds.
- The leverage (or capital multiplier) of the guarantee fund ranges from 0.3 to 1 up to 2 to 1. Some have yet to issue guarantees for more than about 1/3 of their capital while others have issued guarantees outstanding that are twice as large as their capital. Most of the foundations have to make a term deposit in the lending bank for the amount of the loan guaranteed. In the best cases, they have to deposit 50% of the amount guaranteed.
- Guarantee fees charged are very low and do not appear systematically related to the expected rates of default or the rate of default that characterizes SME lending in general.
- Operating expenses are quite high. They generally far exceed guarantee fee income.
- Losses to date are very low as most of the loans were recently guaranteed and many are still disbursing.

Hungary

The Hungarian guarantee programme arose from the PHARE aid programme of the European Union, which was designed to help the country restructure as a market driven economy. In 1990, PHARE supplied ECU 10 million to establish a rural credit guarantee fund. Later an additional ECU 10 million was granted by the EU, and with local contributions reached approximately ECU 22 million.

Between 1991 and 1996, the Rural Credit Guarantee Fund (RCGF) issued a total of 1,985 guarantees, an average of about 330 guarantees per year. The total value of these loans was reported to be 17,871 million Hungarian Forints (HUF). Inflation was quite high, making this figure is difficult to interpret. However, at 1991 prices, the value of the loans were 8,610 million HUF, or about 4.3 million HUF per loan. This is approximately U.S.\$ 25,000 per guaranteed loan. The RCGF issued guarantees for about 87% of the amount of these loans. Operating expenses were about HUF 73.2 million at 1991 prices and the guarantees paid (net of recoveries) were HUF 283.2 million for combined expenses of HUF 356.4 million.

The operating expense ratio of the RCGF was a surprisingly low 0.85% of the amount of guarantees issued. Defaults however were about 4.1%. Thus, for the period 1991-1996, the RCGF required about 5% of the loans guaranteed and about 5.7% of the amount guaranteed (5%/87%) to meet the operating and loss costs of the guarantees.

This are surprisingly low numbers in an economy in transition. They should be taken with some caution for two reasons. First, during a period of high inflation, loans are often paid off as their real value has shrunk to a fraction of the initial value. This often enables the borrower to obtain another loan. Second, there is a clear trend toward higher operating costs and increasing defaults as the portfolio of guarantees matures. Operating costs rose from HUF 4 million to HUF 17.4 million between 1991 and 1994 and then stabilized at about HUF 16.5 million. In 1996, administrative costs were about 1.5% of the loans guaranteed and about 1.7% of the loans guaranteed. The defaults had risen to about 5.9% of the loans guaranteed and about 6.8% of the amount guaranteed, thus producing a combined operating cost of about 8.5% of the amount of guarantees issued. The balance sheets of the RCGF do not show fee income separately but it was reported to range from 2-4%. If this were the case, fee income would offset between a quarter and a half of these costs. The rest would have to be met by investment income on the donated capital.

Romania

Romania, apparently following the Hungarian example, set up two funds with PHARE support in 1994. One fund guarantees loans to SMEs while the other focuses on agriculture. As of mid-1997, these funds had issued 118 guarantees for about US\$27 million. No losses have yet been taken although in the agriculture fund, it is reported that 21 of 67 loans are rated as “sub-standard to bad.” Both funds depend heavily upon earnings on investments. When the Subsidy Dependence Index (SDI) is applied to 1995 balance sheet data, the SDI is 35% for the SME fund and 95% for the agriculture fund. However, SDI numbers at such an early stage should be seen only as a very early indication that income does not meet expenses.

More telling is a calculation of the cost of administration plus the provisions in the SME fund as a percentage of loans, which is about 9.4%. Stated differently, it costs \$9.40 to guarantee \$100, which can support a loan size of \$140-150. If total costs (variable and fixed) are included the cost rises to about 16%. Premium incomes cover about 21% of the \$9.40 or \$1.97. The rest comes from investments of capital supplied at no opportunity cost. In the agriculture fund, it costs about \$19.84 in administration and loss provisions to issue a guarantee for \$100 supporting a loan size of \$166. Of this amount, premiums and fees cover only 15.7% (\$2.11); the rest derives from investment income. Thus, if the Romanian funds were to fully meet costs by transferring them to the users of guarantees, they would have to charge about 7.4% of the value of the guarantees for the SME fund and excess of 17% for the agriculture fund.¹²

¹² Data supplied by Geetha Nagarajan.

SUMMARY OF THE EUROPEAN EXPERIENCE:

In Western Europe, there are no data as to the losses suffered by the guarantee funds and the amount of these losses offset by guarantee income. This important missing information would provide us with a clearer picture of these schemes. Without this information, we can only focus upon the administrative cost of issuing guarantees. With the exception of the relatively efficient German operation where guarantee fund operating costs are only about 1.5% of the amount of the guaranteed loan, the rest of the countries for which data are available, Britain, Italy and Austria, have administrative costs of 13%, 14% and 15% of the amounts guaranteed respectively. The large Spanish system's data, although not complete, suggests a charge of about 6% is necessary to cover administration. Available data suggests that, Germany excepted, it is unlikely that borrowers would tolerate the increased cost of borrowing if they were charged a fee that covered the administrative costs alone. To this would have to be added the default costs, which are not readily available to the public.

Administrative costs appear lower in Eastern Europe, but default costs bring total costs to levels that would discourage many reasonable borrowers. In Poland, administrative costs exceed guarantee incomes in most, if not all, the small programmes. In Hungary, the administrative charges appear to be around 5.7% and the losses amount to about 6.8% in the last year for which data is available, for a total cost of 12.5%. In Romania the cost of administration and provisions for bad debt net of guarantee fees appear to be around 7.4% for the SME fund and about 17% for the agriculture fund.

The West European guarantee schemes are the oldest and among the largest in the world. It seems doubtful that they could operate without subsidy if they were required to charge the full cost of their operations. Heavily dependent on subsidies, they have low volumes of operations and high operating costs that make them unlikely models for developing countries considering using guarantee funds to promote lending to SMEs and micro borrowers. However, none of this data bears upon the arguments concerning additionality, but, if there is additionality, it is very costly to achieve.

CANADA'S SMALL BUSINESS LOANS ADMINISTRATION

Canada's Small Business Loans Acts was designed to assist SMEs gain access to term financing by providing government backed guarantees issued by the Small Business Loans Administration (SBLA). Its Business Improvement Loan (BIL) programme covers businesses having gross revenues of up C\$5.0 million. A bank, a credit union, a trust company, a caisse populaire, or an insurance company may issue guaranteed loans.¹³

Banks are allowed to charge prime +3% for floating rate loans and for fixed rate loans, 3% over the residential mortgage rate for the applicable term. The maximum term of a guaranteed loan is 10 years. Currently, lenders pay to the government a one-time fee of 2% of the value of the loan (which may be financed by the lender). The lenders pay an annual administration fee of 1.25% of the yearly average end of month balance outstanding on the BIL's, which can be passed on to the borrower only through the interest rate.

The guarantee, called the Crown's Contingent Liability to Lenders, after January 1996 is 90% of the losses sustained on of the first C\$250,000 of BIL's registered loan amount, 50% of the second C\$125,000 and 10% of any amount over C\$375,000. The guaranteed loans may be used for purchase of land, premises, equipment and payment of the programme fees. Only farming, covered under a separate programme, is excluded.

The financial performances of the BILs are disclosed in the annual reports of the SBLA.¹⁴ The total value of loans made from programme's beginning in January 1961 through March 1996 was \$18.2 billion. However, \$17.7 billion was made during the 1977-1996 period. Since 1961, the government has paid indemnities net of recoveries C\$503 million. The fee income during the period was C\$225.2 million, producing a net loss of C\$278 million. Net losses have been 2.76% of the total amount of BIL loans. Of this, about 1.24% was collected in fees, implying that government absorbed the difference of about 1.52-%.

Interestingly, the SBLA calculates its loss reimbursements differently, which produces a larger percentage loss. Of C \$17.7 billion of BILs registered between 1977 and 1996, borrowers repaid C\$10.8 billion and the losses reimbursed by the Crown were C\$515 million, indicating total BIL recovery by banks of C\$11,3 billion. Guarantee payments are thus about 4.5% on the total reflows to banks, with an outstanding balance of C \$ 6.3 billion still carried

¹³ All currency amounts in the section are cited in Canadian dollars. The exchange rate at the time of writing this section was C\$ 1.41 = U.S.\$ 1.

¹⁴ The Annual Reports can be found at <http://strategis.ic.gc.ca/SSG/la01036r.html>.

on lenders' books. The 1996 Annual Report notes that the government's contingent liability on this amount is about C\$1.4 billion which will produce about C\$500 million of additional claims losses, thus increasing the cumulative loss rate as calculated by the SBLA to around 5.75%.

From 1994-1996, the Government has moved the loan guarantees toward a fully self-funding basis. In this period, claims paid were about C\$117.6 million while fees collected were C\$179 million. Up front loan registration fees were doubled from 1% to 2% while loan volume increased markedly from C\$1.3 billion to C\$9.2 billion in the 1994-1996 period. A considerable increase in claims is expected during the third and fifth years following this upsurge in coverage, justifying the increase in fees. The SBLA's objective is to ensure that claims costs will be fully offset by revenues.

There are no data available as to the cost of operations and the consequent charge to the budget. This information would provide a more complete picture of the programme and allow a balanced consideration of the sustainability without ongoing subsidies

It is not possible from these statistics to know whether or how many of these loans would have been made in the absence of guarantees. However, the case for additionality at relatively moderate cost is certainly stronger in Canada than in any other country surveyed, possibly excepting Germany. Almost 40% of the borrowers are startups, an additional 10% are in the first year of operations, and about 63% are in the second or third years of operations. The average borrower provides about 4.8 jobs and according to SBLA, adds additional 2.4 jobs per loan. Thus, the vast majority of guarantees support start-up and young businesses employing fewer than 5 people, which can add an average of another 2.4 jobs per loan guarantee, issued. If additionality is found in any guarantee system, it will be found in Canada. Including administrative costs and the guarantee payments that should result from the enormous increase in the volume of lending, it will be possible to measure both the additionality and sustainability by applying cost benefit analysis for job creation and the subsidy dependence index to measure sustainability.

ASIAN GUARANTEE SYSTEMS

Credit guarantee programmes for SME and micro borrowers operate in many Asian countries. However, the information available is even less comprehensive than in the case of European programmes. Only a single analytical article¹⁵ has yet to appear. This account draws heavily upon the data in that article, although the conclusions drawn are rather different.

Japan

Japan is estimated to have about 3.4 million SMEs. Loans outstanding in 1994 to these SMEs are estimated at US\$3,560 billion of which only US\$269 billion, about 7.5%, are guaranteed. 52 separate guarantee companies staffed by approximately 100 people each, issue these guarantees. These guarantee companies have a retro-guarantee from a government owned company for 70% of any losses that incur due to the total or partial failure of a borrower to repay the loan. This appears to be the principle conduit for continuing administrative subsidies. The guarantee industry reports 1994 income of about US\$7.8 billion. However, only about 2.2 billion, 28% comes from guarantee fees. The rest is from investments and other income. It appears that the initial capital came from government and that much of the retained earnings are derived from the financial income on that capital. No financial data on the reguarantee account is available. Annually about 1.4% of the guarantees are called and of this percentage about 54% is recovered, producing a net loss of about 0.7% of the guarantees issued. The 1-% fees charged should therefore cover this cost and make a contribution to capital. The budget support for these programmes is US\$68 million. This is about 2.5% of the amount of the loans guaranteed.

A calculation by Hatakeyama of the administrative cost in Japan per US\$1,000 of loans guaranteed is US\$28 or 2.8% and only marginally higher than the above calculation. The losses would appear to be offset by the fees charged. Thus, if the Hatakeyama calculation of the cost of operations were fully charged to buyers of guarantees, the cost would be about 3.5% (2.8% administration + 0.7% losses net of recoveries).

¹⁵ Michiko S. Hatakeyama and others, "Credit Guarantee Systems for Small and Medium Enterprises in Some Asian Countries" in *The Financier*, 1997. The Spanish version appears in *Sistemas*, 1996. The article contains what appears to be some confusion as to the total value of guarantees issued and the outstanding value of current guarantees.

Korea

In Korea, US\$72.6 billion of loans are made to SMEs but only about US\$9.5 billion or 13% is guaranteed. Guarantees are called at the rate 6.8% and only about 23% of called guarantees are recovered, producing a net loss of about 5% of the amount of the guarantees and about 4% after the 1% guarantee fee charged is deducted.

Hatakeyama reports that it costs about \$70 per \$1,000, or 7%, of the amount of guarantees issued to meet operational costs. Despite these high costs, the scheme is expanding vigorously, apparently financing the difference between the cost of operations and guarantee payments and the fee income from earnings on their capital. As a consequence of rapid expansion, the guarantee payments have increased by nearly 400% between 1988 and 1992. "If this trend continues, subsidizing the credit guarantee scheme may eventually become too costly for the government."¹⁶ Government budget support is \$3 million or about .032% of the US\$9.5 billion of guarantees issued.

The combined administrative and loss costs of the Korean guarantee programme appear to be about 11% of the annual value of guarantees issued. While this is considerably higher than the cost in Japan, it is somewhat less than the costs found in Western European countries, excluding Germany.

Indonesia

Indonesia has a smaller programme. About US\$15.8 billion of credit flows to SMEs but only about r \$12.6 million, 0.08%, of this amount is guaranteed. A full 50% of the guarantees are called, of which 71% are recovered, for a loss of 14.5% and a net loss of almost 14% of the value of the guarantees after the 0.6% fee is collected. Indonesia supplies about \$20 million per year from the government budget to support guarantees of only \$12.6 million.

¹⁶ Hatakeyama, 1996.

Malaysia

Malaysia has a government backed SME loan guarantee programme, the Credit Guarantee Corporation (CGC). The CGC was established in 1972 and services three sectors, small merchants, traders, and small construction. Bank Negara, the Central Bank, operates a quota system assigning loan amounts to each bank for each of these sectors. These loans have an artificially low interest rate ceiling. The various schemes that operate within CGC begin with a large number of loans and have declined in each subsequent year.

The General Guarantee Scheme (GGS) was introduced in 1980 to replace the defunct CGC. It made over 6,000 guarantees that year; but in 1985 it issued less than 100 and was suspended in 1989 when it issued only 5 guarantees. The Special Loan Scheme (SLS) introduced in 1981 and made over 17,000 guarantees; by 1989, the annual volume had fallen to just over 1,000 guarantees. Finally, the Principal Guarantee Scheme (PGS) was introduced in 1989 and issued 5,641 guarantees in 1991 but only 352 in the first 2 months of 1994, when yet another version of the PGS was introduced.

These guarantees were generally issued without the knowledge of the borrowers. A survey found that most borrowers (26 out of 32) were unaware of their existence. The CGC apparently does not give a very high priority to paying its claims and this probably accounts for the declining volume of guarantees in all three programmes. From 1986 to 1993, the CGC processed 3,563 claims for Ringgits millions (RM) 36.4 but paid only 1,505 claims totaling only RM 9.3. The remaining was rejected on technical grounds or withdrawn by banks. In 1993, the latest year for which data is available, non-performing guaranteed loans were put at about RM 185 or about 34% of total loans guaranteed. However, the CGC had processed only RM 5.3 of claims and had paid only RM 2.4 of claims. This is actually a sharp improvement from earlier years - both in terms of defaulted loans and amounts paid to banks!

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¹⁷ Grahame Boocock and Mohammed Noor Mohammed Shariff, "Loan Guarantee Schemes for SMEs—The Experience in Malaysia," Small Enterprise Development, Vol. 7, No. 2, June 1996.

Philippines

A recent count in the Philippines identified 10 different guarantee agencies, each with large administrative overheads and a very small volume of operations. Most of these programmes were so small that the guarantee income was not sufficient even to cover the administrative charges incurred by the Manila-based office staff.

The largest and most interesting Philippine guarantee institution is the Quedan Corporation (Quedancorp). It was set up to provide guarantees on rice warehouse receipts, thus making them negotiable. A miller, or farmer, can take his paddy to a Quedancorp supervised warehouse, deposit it, and use the receipt as collateral for a loan or take the receipt to the bank and discount it for cash. Quedancorp guarantees that the rice backing the receipt is warehoused and in an acceptable condition.

Between 1979 and 1993, Quedancorp income from guarantees was about 89.4 million Philippine Pesos (PHP) from guarantee issued on about 50,000 total transactions worth about PHP 15,166 million. The guarantee fee averaged across the period about 0.6% of the amount guaranteed. Over this period, the administrative costs of issuing the guarantees and supervising the warehouses was about 1.8% of the amount guaranteed. While guarantee fees were about PHP 90 million, the operating expenses were over PHP 270 million.

A large reserve created by the Philippine budget enabled Quedancorp to survive. Quedancorp investment income and loan interest exceeded 630 million Pesos, although inflation severely eroded the real value of its reserves. Beginning in 1990, the guarantee fees declined from about PHP 15 million per year to only about PHP 6 million per year in 1993 while the administrative charges rose from about PHP 35 million to well over PHP50 million. In the last year for which data is available it cost over PHP 50 million to issue guarantees that generated income just under PHP 6 million. In 1994, Quedancorp was reorganized and recapitalized, planning to discontinue the guarantee business to become an agricultural lender

The pattern is much the same at the Guarantee Fund for Small and Medium Enterprise (GFSME). Between 1984 and 1993, the GFSME generated origination fees of PHP 17 million and incurred expenses of PHP 211 million issuing about 1,360 guarantees (about 136 per year) on PHP 2.1 billion. The investment income from the reserve funded by the

Philippine budget offset the differences. Charges in excess of 10% of the amount guaranteed would have been required to cover GFSME's operating costs.

The situation was much the same at the GFSMEs competitor, the Small Business Guarantee and Finance Corporation (SBGFC) which only began operations in 1992. Between 1992 and 1994 when the study was completed SBGFC had generated guarantee fees of under PHP 3 million and expenses of nearly PHP 26 million on 525 guarantee operations totaling PHP 470 million.¹⁸

One of the few other empirical studies of the Philippine experience with guarantee funds investigated several other guarantee programmes: the CALF guarantee programme to promote agricultural lending, the Industrial Guarantee and Loan fund (IGLF), and PhilGuarantee to guarantee coverage to Philippine exporters on their local and foreign borrowings. The PhilGuarantee suffered 95% calls on their guarantees and the company was wound up. The study concluded that:

"The Philippine case shows that guarantee schemes of social banking are a type of support and are institutionally unviable. In actual fact they restrict, rather than encourage, lending and offer no solution to the problem of small and microenterprise finance. As they do more harm than good, only two options can be recommended: to leave risk management either to banks or to small and microentrepreneurs and their own grassroots solidarity arrangements." ¹⁹

¹⁸ Consulting report prepared by the author for the World Bank, 1994.

¹⁹ Hans Dieter Seibel, "Credit Guarantee Schemes in Small and Microenterprise Finance: Do they really do more good than harm? The case of the Philippines." *Quarterly Journal of International Agriculture*, Vol. 32 No.2, April-June 1995.

SUMMARY OF THE ASIAN EXPERIENCE

There is still much research to be done on the Asian schemes, especially their financial arrangements and the total cost of the guarantees. However, it is reasonably clear that the pattern found in Europe is evident in Asia. The market for guarantees is relatively small. Only a small portion of borrowers obtain guarantees. The administrative cost of issuing the guarantees is quite high. It is doubtful that borrowers would accept these costs if they were required to pay them to obtain guarantees.

An increase of 3.5% in Japan or 7% in Korea would be acceptable only to the most hard-pressed borrowers. In Japan, the guarantee costs would exceed the interest rate currently charged on loans and in Korea would double the interest rate. In the Philippines, there is no doubt that most borrowers would not use guarantees if they were charged the full cost. The Malaysian practice seems little other than a thinly veiled asset transfer. Banks are assigned SME lending quotas at below-market rates on loans guaranteed by a government corporation which denies payment on 35-50% of the loans that default. In these circumstances the continuing state subsidy, as in Europe, is a key element. It allows the guarantee funds to market their product in low volumes at below cost, while simultaneously incurring very high administrative costs. The difference is funded either by a direct subsidy or by interest income on a capital reserve derived from the state budget.

AFRICA

Africa has dozens of guarantee schemes, most established relatively recently with donor funds and operating on a very small-scale. Meyer and Nagarajan_ provide an inventory of 20 schemes in 16 countries. However, the schemes are fairly new and data are either absent or so scanty that very few conclusions can be drawn. Meyer and Nagarajan conclude that several programs issued few guarantees and were terminated. Terminations occurred primarily because of poor performance and poor implementation, which led to high costs and defaults. Further, they note that where guarantee schemes have been relatively active, they make little impact. There was little additionality in terms of loans made, and almost no borrowers "graduated" to non-guaranteed lending.

Agricultural Credit Guarantees of Nigeria

Nigeria offers the single African case where data are sufficient to permit some conclusions. The Agricultural Credit Guarantee Scheme (ACGS) was launched in 1977. This author reviewed its annual reports up to 1988 when it ceased publishing detailed data. Additional data were subsequently obtained at a conference attended by Nigerian officials. From this information we can construct a reasonable picture of its operations.

ACGS was intended to facilitate small farmer access to bank loans as a means of stimulating agricultural production. A capital fund of Naira 100 million was authorized and placed in the Central Bank. ACGS guarantees up to 75% of losses of principle and interest on loans of up to N 50, 000 for individuals and N 1 million for loans to cooperatives. Banks using the guarantees were required to lend at highly concessional nominal interest rates of 4 - 6 %.

The financial results are dismal. Between 1978 and 1994, ACGS wrote 183,875 loan guarantees against loans of N 1,035.3 million (approximately US\$ 46 million at N 23 = US\$ 1 in 1994 when the data was collected). Through June 1994, ACGS had settled 653 claims for N 0.4 million, amounting to less than 0.4% of the value of the loans guaranteed. However, the ACGS had claims due for settlement of N 127 million, or about 12.3% of the total volume of guarantees issued. When asked about the volume of pending claims, an official of ACGS noted that paying them would more than exhaust the scheme's net worth!

A rough estimate of the claims cost is 12.3% of the loans guaranteed: ACGS guaranteed 75% of the loan amount, so the claims cost was about 9.2% of the amount guaranteed. The administrative costs of ACGS were N 20 million from 1978 to 1988, roughly 5 times the amount of claims paid and about 16% of the amount of claims pending. With expenses at these levels, total operational costs are likely to be between 13% and 15% of the amount guaranteed. The data do not permit a precise calculation of administrative costs on the overall costs of operations. But, what is the rationale for a guarantee scheme that costs N 20 million to pay only N 0.4 million in claims, and that would be insolvent if it paid all claims due?

The result of not paying claims in order to preserve the capital of the scheme was that banks made fewer guaranteed loans. The number of operations declined from a peak of 34,000 in 1989 to only 2,895 in 1994. The available information suggests that the scheme was almost totally moribund by 1996. In many ways the Nigerian scheme resembles the Malaysian programs. In both cases, the Central Bank directed concessional credit to target groups and in both cases, guarantee funds issued guarantees to protect banks against default risks only to

deny claims when they arose. The result in both cases was that the volume of guarantees contracted to an insignificant volume and the fund could survive only by defaulting on its claims.

LATIN AMERICA

USAID Supported Guarantees

Latin America is rich in guarantee fund experiences but quite poor in carefully conducted analysis, although occasionally a program is reported by its manager to have produced successes. Guarantee funds, as an instrument to promote development in Latin America seem to have had its origins in USAID initiatives in the mid-1980s. The only systematic attempt to review these programs was conducted by FUNDES, a Swiss NGO. FUNDES reports that of the 12 programs that they identified in 11 countries, only two remain in existence "after having been bailed out repeatedly by shareholders." The reasons cited for the failure of all but two funds are: a) politically motivated payments, b) lack of confidence on the part of banks in the willingness of the funds to pay, and c) ill-advised investments and/or inflation.

USAID also operates a central portfolio of guarantee funds to provide portfolio guarantees for certain classes of loans made by banks. To date, no information is available in the public sector on the volumes of guarantees, the results and the expenses of this central facility.

FUNDES

FUNDES was founded in 1984. It is a Swiss-based NGO which created programs to guarantee 50% of SME loan amounts in Costa Rica and Panama. The organization later expanded to Bolivia, Guatemala and Colombia. Guarantee programs scheduled for Argentina, Venezuela and Mexico were not undertaken due to adverse economic developments in the region.

In 1995, after 10 years of experience, FUNDES undertook a fundamental review of its operations and the concept of using guarantees to bring SMEs and banks together to fund viable enterprises. The findings of that review are quite revealing:

FUNDES had guaranteed 2,400 loans totaling US\$ 54 million for more than 1,400 customers.

Average annual losses were only 0.7% through 1994, but rose to 4.1% as the result of claims in Guatemala and Colombia. However successful overall FUNDES was in keeping losses to acceptable levels, the organization was unable to break even because of very heavy administrative costs. Most of these costs were in the small business advisory and monitoring services, not in the guarantee operations. From 1991 onward, it became clear that the gap between income and expenses was widening. As the result of this review, FUNDES concluded that as an institution operating with private donor funds, it would sift its emphasis to nonfinancial services, including training and management consulting. Existing guarantee programs in Bolivia, Colombia, Panama and Costa Rica were to be restructured accordingly.

While the FUNDES guarantee operations did not cover costs, according to FUNDES officials they were instrumental in producing several positive impacts on the SMEs. These include: a) longer loan terms and less collateral, b) internal changes at the companies in quality and administration, and c) increased employment and growth at the companies receiving loans and guarantees.

However, even given that these changes did occur, it is difficult to determine whether they arose from the guarantees or instead from the intensive consulting, advising and monitoring services that FUNDES provided its clients. As we will see below, FUNDES itself determined that these services were more valuable than the guarantees.

The expectation of FUNDES was that banks' interest in the SME market would increase significantly with guarantees. Instead, the decade-long experience led FUNDES to conclude that:

- Banks remained uninterested because of the high cost of information and transactions.
- Banks were uninterested in SME lending even when their risk was limited to 50%.
- Banks did not want to work with "small, often simple and informal, customers."
- Banks were not driven by competition to seek out new markets among SME borrowers. The "healthy competition required for banks to become more interested-and competitive-in an increasingly attractive small business segment can be found only in open economies and financial markets."

These findings based on field experience confirm the criticism of guarantee funds in Chapter One.

ACCION International

ACCION International created a Bridge Fund in 1984 to enable its affiliates to obtain loans from local banks by offering credit guarantees as partial collateral. The Bridge Fund was capitalized with loans from USAID for US\$ 1.0 million in addition to donations from individuals and institutions. These funds were deposited in a bank and invested in bonds, which were used as collateral for guarantees made under standby letters of credit issued by Citibank in favor of local banks. These letters of credit currently support guarantees of 20 to 90% of the loans extended by local banks. Local banks use the letters of credit as security for loans to ACCION affiliates which in turn on-lend the funds to micro borrowers at market rates of interest.

This mechanism achieves substantial leverage. Each dollar in the Bridge Fund supports a letter of credit by Citibank to a local bank for \$1.30. Based on a letter of credit for \$1.30, the local bank issues a line of credit for \$2.25 to \$2.90. As the loans are short term, averaging four months' maturity, leverage can reach \$8.80 per year.

At the end of 1994 the Bridge Fund had issued US\$ 6.25 million in guarantees in nine Latin American countries: Argentina, Bolivia, Chile, Colombia, Costa Rica, Ecuador, Mexico, Paraguay and Peru. ACCION affiliates had issued a total of 400,000 loans totaling US\$ 209.5 million. The assets of the Bridge Fund had grown significantly to almost US\$ 6 million. Repayment rates were reported to be about 98% and no claims had been made on the guarantees. There is no information on the operating costs at the central level or of the national affiliates.

Colombia's Fondo Nacional de Garantia:

The largest guarantee programme in Latin America is the FONDO NACIONAL DE GARANTIAS (FNG) in Colombia. The FNG was established in 1982 with about US \$21million of capital from government entities, principally the export promotion programme PROEXPO and an industrial development bank, the Instituto de Fomento Industrial (IFI) along with several other small government shareholders. The FNG was designed to support the export sector as well as SMEs, mining, and commerce with guarantees to facilitate credit. Between 1982 and 1995 when this writer finished the data analysis of the FNG, the volume of guarantees rose from 47 per year in 1982 to almost 900 in 1992 and declined sharply to about 400 guarantees in 1996. In total, about 5,900 guarantees were issued. On average across the 15-year period, about 395 guarantees per year were issued.

The guarantee income generated was about 1,161 million 1990 Colombian Pesos on total guarantees issued of 30,930 million Pesos. The operating expenses were 1,845 million 1990 Pesos or 5.97% of the value of guarantees issued. The guarantee payments net of recoveries were 1,095 million 1990 Pesos, or 3.54% of the value of guarantees issued. The FNG across the 15 year period suffered losses and costs of 2,940 million 1990 Pesos, or 9.51% of the value of guarantee issued. Guarantee income was 1,161 million pesos or 3.75% of the value of guarantees issued. Guarantee income covered just under 40% of the cost of operations and losses. Thus, FNG paid out 2.5 Pesos in losses and administrative costs for each Peso of income. The cost of operating the FNG was met by the investment income on the capital it obtained from government. These totaled almost 8,000 Million 1990 Pesos.

As seen above, the rates that the FNG charged were far too low to meet losses and operating costs. On average FNG charged guarantee fees of about 3.75% but required fees of 9.5% to meet losses and operating expenses. Despite the large implicit subsidy, the market for guarantees averaged fewer than 400 per year.

The cost per loan guaranteed was quite high. In fact, administrative costs were considerably larger than the fees generated by the guarantees. Furthermore FNG achieved a very low volume of guarantee and consequently very low leverage of their capital. On average, the capital was leveraged at about 2-to-1 over the 15 year period. In 1995, the capital was about 9 billion current Pesos or some US \$9 million. Total guarantees outstanding were about 12.8 billion current Pesos and thus the leverage was about 1.4 to-1. In 1995, 386 guarantees were issued at a cost of 1.3 billion constant Pesos or about US \$1.3 million. Thus, it cost the FNG about \$3,370 to issue a guarantee whose average value was about US\$ 25, 000. The low volume of high cost guarantees and the low leverage of the reserves however protected the FNG from a rapid decapitalization. “The loss ratios of the FNG clearly are worrisome but with incentives so perverse ... it is surprising that losses are not greater. The reality is that the low level of activity by the FNG was its major protection and prevented a more serious loss of capital.”²⁰

²⁰ Beatriz Marulanda de Garcia, “Fondo Nacional de Garantias de Colombia” in *Sistemas*. These data are partially derived from this writer’s research and supplemented by additional information.

SUMMARY OF THE LATIN AMERICAN EXPERIENCE

Latin America has had a broad range of experiences with guarantee funds. On balance, the largest of these, the FNG, clearly is not a model to be duplicated in other countries. The FNG was characterized by low volumes of guarantees, very high operating costs, inadequate guarantee fees to meet costs and utilization of the income derived from earnings on capital to sustain the operation. The FUNDES experiment is in many ways the most interesting in that the organization at the end of 10 years of operations in Latin America came to the conclusion that they would not be able to meet the costs of operating guarantees. Even with guarantees, FUNDES concluded that banks had limited interest in working with the SME and micro market. As a result, FUNDES is restructuring operations to emphasize non-financial services for these sectors.

By far the single example that holds out hope of being duplicated in other regions is that of ACCION International. The Bridge Fund has achieved a substantial leverage of the capital, a significant volume of micro loans and apparently a low default ratio. The wholesale guarantee approach would appear to also have the added advantage of very low costs, although no cost data are available to permit a definitive judgement. Retail level guarantees clearly have not been successful. The ACCION bank guarantee approach seems to hold promise and should be carefully studied, as it develops, with a view to replication in other regions.

CHAPTER THREE

U.S. COMMERCIAL GUARANTEE COMPANIES: A MODEL FOR DEVELOPMENT FINANCE?

INTRODUCTION TO THE GUARANTEE INDUSTRY IN THE U.S.A.

The commercial guarantee industry in the USA is quite different from the state-supported schemes in Europe, Latin America, Canada, and Asia. It is first and most importantly a completely private sector industry comprised of stock companies selling financial guarantees for profit. Second, the volume of operations is very large and the industry's range of products is expanding rapidly as it seeks new markets domestically and abroad.

Do these commercial guarantee insurance companies offer a useful model for providing guarantees to SMEs and micro borrowers in developing countries and as a model for development finance practitioners promoting lending to SME and micro enterprises? Are there products, useful lessons or best practices that can be derived from the highly developed U.S. markets and applied in developing countries?

This chapter explores these issues. The U.S. industry operates within the largest, deepest and most liquid capital market in the world. It is a very large financial service industry (about US\$ 2 billion per year in premium income), is profitable, and is expanding the range of products that it markets in the USA and abroad, principally in Europe and Asia. If we can understand the conditions under which guarantees are successful as commercial ventures, we may make substantial progress in describing the sufficient as well as the necessary conditions for guarantees to work in developing countries.

The choice of the USA. as a research laboratory is guided by several considerations. Guarantees operated by insurance companies are not an exclusively U.S. phenomena. They exist in over 30 countries, but few are "monoliners" with guarantees as their principal or the only business. Outside the U.S., most guarantees are issued by general insurance companies. The U.S. almost alone offers pure examples of companies that offer only financial guarantees. Thus, the structure, administration and finance of the companies are not affected by other classes of operations. The U.S. is one of the few countries where the complete data for the analysis is freely available to researchers in published and audited financial statements.

The guarantee industry in the USA is divided into two basic components: Mortgage Guarantee Companies, which issue financial guarantees on individual mortgages, usually for those with less than 20% equity for a down payment. Bond Guarantee Companies initially provided protection to holders of mutual bonds to insure timely payment of principle and interest, but now cover a broad spectrum of non-municipal securitizations and structured corporate debt. These are the second component of this industry.

In the USA home mortgage lenders act principally as loan originators for secondary markets, Federal National Mortgage Association (Freddie Mac) and Federal Home Loan Mortgage Association (Fannie Mae). Banks make home mortgage loans and sell them in the secondary market, which set the criteria for "conforming" loans that lenders can easily sell. Mortgagees who cannot meet the 20% down payment required for a conforming 80% Loan to Value (LTV) mortgage, buy Private Mortgage Insurance (PMI) sold by a mortgage guarantee company. The guarantee thus effectively substitutes for the 20% cash collateral required for conforming loans.

The 80% LTV market became saturated fairly quickly and most mortgage guarantee companies began to issue 90% LTV guarantees. In recent years this market has also become saturated and some or even most companies now issue guarantees for LTV of 95% and 97%, thus fostering the purchase of "affordable" housing by low income families with the cash flow to service debt but without the assets to make much of a down payment.

In addition to facilitating home ownership, the mortgage guarantee market is a source of capital for many business start ups and for enlarging an existing business. Many people borrow against their equity in their homes by refinancing with mortgage insurance to "take out cash" for a variety of purposes. This source of finance is particularly important for SMEs organized as sole proprietorships, partnerships and family owned businesses, which often have difficulty obtaining institutional credit.

In the bond guarantee market, municipalities with weak credit ratings and agencies and project authorities with no credit history can buy a guarantee, which enables them to market their bonds as investment grade debt. Back by this guarantee, the interest rate at which they borrow is lower than they would have had based on their own credit rating alone. As investment grade obligations, their bonds are fully and easily placed in debt markets. Without the guarantee, they would have to sell in the "junk" debt market, pay a much higher interest rate and perhaps not fully place the bonds.

Many guaranteed issues are general obligation and tax backed bonds. Others are revenue bonds (backed by project cash flows) issued to fund hospitals, housing, transportation, roads, schools, parks and recreation facilities, sewer and water facilities, investor-owned utilities and recently for environmental remediation. Bond guarantees enable poorer municipalities to access credit markets on better terms and have created a ready market for unseasoned agency debt.

Beginning about 1993, there was a slow down in the rate of municipal bond issuance. In response, bond guarantee companies have moved increasingly into structured corporate finance and asset-backed securitizations to sustain growth in premium volume. This business now constitutes about 15% of the total amount of guarantees issued by the larger guarantee companies, and is growing rapidly. Recently, many of these companies have begun to establish subsidiaries in Europe. Several have set up subsidiaries in Japan to write guarantees throughout the Pacific Basin. The structured corporate finance and asset backed deals are likely to continue to grow rapidly while the municipal business remains more or less static. At the present rate, the transformation from municipal bond insurers into corporate finance insurers will be completed within a decade, with the corporate portion of the portfolio being much larger and more profitable than the municipal guarantee business.

Bond insurers have also moved to guarantee pools of small (even micro) loans by guaranteeing credit card receipts, consumer loans, auto loans and even pawn shop loans. Increasingly, new products come to financial markets with a guarantee so that the market will not require a high risk premium. These third party credit enhancements have played a major role in introducing new classes of business to debt markets. Their volume has grown enormously. It appears that the types of guaranteed derivative products that can be placed is more a function of the imagination of those creating the structured financings than any inherent limit in the guarantee industry, which by most measures has excess capital.

U.S. mortgage and bond guarantee companies are growing. The return on equity averages around 15% per year and most companies are profitable in most years. These companies appear to have overcome the difficulties that plague almost all (if not all) the guarantee funds that serve SME and micro-borrower markets in many countries. They have several characteristics that recommend them for study, as follows:

a) These companies require no subsidy. Most pay shareholders a return on capital invested in the form of dividends and /or additional stock.

- b) They obtain their capital almost entirely from the private sector. Over the last decade their shares have appreciated substantially in the stock market, rewarding their investors with capital gains.
- c) They have established a mass market for products that are voluntarily bought by borrowers as credit enhancements which can modify the amount and/or the terms and conditions of the loan.
- d) The mass market enables them to issue guarantees with minimal, if not trivial, overhead costs per operation.
- e) They have developed credit-underwriting standards to measure and to price their risks.
- f) Guarantee companies have developed cost-effective credit surveillance standards that permit them to detect credit quality deterioration and take action to control losses.
- g) They have automated the credit evaluation process by applying sophisticated credit scoring models.
- h) They have "commoditized" the guarantee products by developing a range of standard guarantee products, thus allowing borrowers seeking guarantees to compare pricing offered by different companies.
- i) They have developed knowledge about the risks they guarantee that enables them to determine and charge premiums adequate to pay claims and cover administrative overhead.
- j) The guarantee market is very competitive, requiring issuers to control their costs and keep them competitive.
- k) Guarantee companies continually innovate, developing new products in efforts to expand their market shares and develop new sources of revenue.
- l) They arguably produce massive additionality by enabling borrowers to deal with lenders and credit markets that they would not have access to without a guarantee or to obtain access on more favorable terms and conditions than would be possible without a guarantee. Guarantees address the collateral constraint directly in the home mortgage market, while in the bond and structured corporate finance market they reduce the risk premium.

The growth of the U.S. guarantee industry is particularly remarkable in introducing a third party into the traditional relationship between lender and borrower. Lenders traditionally carefully studied the financial situation of a loan applicant, analyzing collateral and credit history before approving a loan. To an increasing extent, lenders are passing that function to guarantee companies for certain classes of credit, principally those with which they have little expertise, such as municipal finance, and where the collateral is very weak, such as 80-97% LTV home loans.

The following tables show the size of the home mortgage guarantee industry and the magnitude of the transfer of credit risks to guarantee companies for home mortgages which lenders do not retain and for municipal bonds seeking higher credit ratings.

The mortgage guarantee portion of the U.S. financial guarantee industry is composed of 13 companies, insurers and reinsurers. The table summarizes financial data for the 11 largest companies. The companies in Table Two have make up over 95% of the total market for mortgage guarantees. Mortgage guarantees in the USA generates about \$1.4 billion dollars of premiums per year from a portfolio of risk in force of just over \$84 billion. Mortgage guarantee companies total revenues are about \$1.7billion and net incomes are around \$640 million per year. The total assets of the 11 mortgage guarantee companies are about \$6.8 billion and their total capital is about \$4.5 billion.

There are ten specialized bond insurers and reinsurers. Additional bond guarantee business is conducted by general insurance companies and by foreign insurers. However, the data in Table Two include well over 90% of the total bond guarantee business. Financial guarantees issued on municipal bonds and securitizations and structured corporate debt generate about \$690 million in premium income on originations having a net par value of \$105 billion. The total assets of the bond insurers equal about \$11.5 billion while their total statutory capital is about \$6.6 billion.

The two industries' total capital is about \$11 billion. The insurance in force and the net par exposure of the two industries approaches \$1 trillion.

TABLE TWO

MORTGAGE INSURERS AND REINSURERS

COMPANY	GEMICO	TRIAD	AMERIN	COMMON WEALTH	MORTGAGE GUARANTY	REPUBLIC GUARANTY	UNITED GUARANTY	FOREST VIEW	VEREX	KRE REINSUR.	CAPITAL REINSUR	TOTAL
INSURANCE IN FORCE	119,988	5,935	6,581	47,990	107,955	45,625	53,309	12,400	7,002	N/A	N/A	406,785
RISK IN FORCE	25,561	1,360	1,740	7,792	22,300	10,177	12,400	1,001	1,892	N/A	N/A	84,223
TOTAL REVENUES	556	22	21	216	8	49	274	254	281	14	27	1,722
NET INCOME	201	9	7	76	127	112	86	-8	6	4	20	640
ASSETS	2,110	103	113	594	1,667	694	786	174	240	139	224	6,844
CAPITAL	1,333	88	96	424	1,028	521	530	53	155	86	181	4,495
NET PREMIUM WRITTEN	421	19	21	184	214	212	228	10	14	16	29	1,368

BOND INSURERS AND REINSURERS

	MBIA	AMBAC	ASSET GUARANTY	CAPITAL MARKETS	CONNIE LEE	FINANCIAL SECURITY	FINANCIAL GUARANTY	CAP. GUAR.	CAP.RE	ENHANCE RE	TOTAL
NET PAR EXPOSURE	186,636	110,997	7,923	12,690	4,108	25,632	98,660	6,695	24,775	24,519	502,635
NET P&I EXPOSURE	344,037	199,078	12,016	15,138	7,735	41,319	182,384	12,538	47,287	44,348	905,880
NET PREMIUM WRITTEN	303	167	4	39	16	31	55	26	22	50	713
NET PAR WRITTEN	38,807	24,028	3,971	13,803	779	1,547	12,165	318	2,774	5,935	104,127
NET INCOME	278	143	21	9	214	140	250	5	18,084	39	19,183
TOTAL ASSETS	3,814	2,440	198	284	250	760	2,282	288	586	582	11,484
STATUTORY CAPITAL	2,017	1,359	93	240	122	470	1,388	196	373	322	6,580

DATA 12/31/96 MIL \$

The following sections present several case studies of both types of guarantee companies, which are studied to determine their applicability to developing countries. The cases include companies that are remarkably different. One is one of the smallest and most profitable companies that has found a niche market despite a very low volume of operations and consequently very high overheads. The other company is the giant of the industry, backed by a very strong parent company. It has seen its traditional market eroded and has created whole new classes of business to sustain growth.

HOME MORTGAGE GUARANTEE INSURERS: TWO CASE STUDIES

Triad Guaranty Insurance Corporation:

Triad Guaranty Insurance Corporation is a start up, is quite successful, but has yet to be challenged by adverse conditions produced by a recession. It is thus both interesting as a success and as a laboratory to see what happens during a future recession. Triad issues private mortgage insurance to residential mortgage lenders. It is the smallest of the 8 active mortgage insurers with only 1.7-% of the new business written. As noted, private mortgage insurance is a requirement imposed by secondary debt markets for most home purchases and refinancings when the conventional residential first mortgage loans is made to a borrower with equity of less than 20% of the value of the mortgage (LTV). The guarantee protects lenders from default losses and enables home ownership when the mortgagee has acceptable credit and adequate income to service the mortgage, but lacks the cash required by the borrower to meet the 20% cash collateral requirement. Alternatively, it allows homeowners to lower their equity to below 20% by taking some of the value of the home in cash for other purposes.²¹

The salient features of Triad that are of interest to the development community seeking models that may have some applicability in developing countries are:

- Triad is now 7 years old and as shown below is quite profitable, although it is yet to go through a recession when mortgage defaults typically rise.

²¹ There is no effective limit on the purpose for which the funds may be used. As noted, some goes for business purposes, but in other cases, the funds are used for consumption, education, investment and even speculation. The lender is generally unconcerned and most often unaware of how the funds will be used. This is one of the reasons that “cash out” refinancing is popular. In other classes of lending, banks generally want to know to use of the loan funds and in most cases exercise some control over their use, often disbursing them in tranches against receipts (construction loans for example).

- Triad has a statutory ratio of less than 60. This means that its losses and expenses are less than 60% of the premium income.
- The company has both grown its capital and has paid shareholders a dividend in cash and stock. In 1996, its return on assets was about 12% and its return on capital was nearly 15%. Both of these ratios have nearly doubled over the last 4 years.
- As a private company, it receives no subsidy.
- By almost any set of measures the company is *viable* as an ongoing business that has attracted private investors and shareholders to supply the capital needed to engage in the guarantee business.
- The guaranteed lenders would not have made the mortgage without the guarantee. The borrower, who could not present *adequate collateral* in the form of a 20% down payment, would not have been able to buy the house without the guarantee.²² Clearly these borrowers are collateral constrained and the insurance guarantee obviated that collateral constraint.
- This is clear cut case of *additionality*. In the absence of adequate collateral required by the lender these mortgages would not have been made without the insurance company's guarantee of payment.

The counter argument would be that the borrower in the absence of the insurance guarantee simply would have found a less expensive house to buy so that the insurance was not necessary. Alternatively, he would have sought out a lender prepared to extend him a loan to value (LTV) mortgage requiring only a 5-10% down payment and charged him a higher rate.²³ Both almost certainly occur, but a large and growing number of less than prime borrowers opt for the larger house, the lower mortgage payment and the PMI premium. In part this is so because the mortgagee can in effect cancel the insurance when his equity reaches 20% by refinancing and using a mortgage product for which he now has adequate collateral to satisfy the lender - or more accurately can be sold to a secondary mortgage market.²⁴

²² To be more precise, most borrowers would not have been able to buy the house for which he cannot produce a 20 % loan to value (LTV) down payment without the guarantee. Some borrowers would have been able to find a lender prepared to make a “non-conforming” loan that would be retained on the lender's books. Relatively few lenders still make “non-conforming” loans that cannot be sold into the secondary market.

²³ In this case, the lender would still have required the guarantee. This company does not write a significant 90-97%LTV guarantees but there are other companies that do.

²⁴ This “right” has been more theoretical than real until recently. Mortgagees are seldom told and seldom know that that they have a right to suspend the PMI when the equity reaches 20% and the LTV of the mortgage declines to 80%. There are currently several bills before the U.S. Congress that will require annual statements from the PMI company advising borrowers of this right.

As Triad only has less than 2% of the market, how are they able to compete?

The company does this through a series of measures to manage risk and keep down costs:

- **Experience Rating.** The company manages risk in a variety of ways. Triad has segmented the market and underwrites to a higher credit standard than the industry. In return, their customers get a lower rate. Triad increases or decreases the premiums paid by borrowers according to the loss ratios of the lending banks. If a bank is successful in producing loans with very few defaults, Triad gives that bank's customers a lower rate, and thus provides the bank with a competitive advantage vis-a-vis other banks.
- **Limited Delegation.** Second, and probably more importantly Triad uses very little "delegated"²⁵ underwriting. Only very high quality banks are allowed to underwrite for the company. All other underwriting is done in house.
- **Credit Management.** Triad uses frequent lender audits, strict surveillance of losses on delegated underwriting, and sophisticated credit-scoring techniques to prevent opportunistic behavior on the part of lenders.

The financial condition of the Triad Guaranty Company is shown in the following table, which covers the last 5 years for which consolidated financial and statistical data are available. Instead of presenting the traditional balance sheets and income statements, the following table extracts the relevant elements from both.

From the table, we can see that the net volume of premium has grown about four fold while total revenues and stockholder equity increased by about 5 fold in 5 years. The statutory and GAAP (Generally Accepted Accounting Principles) ratios indicate that the company pays away about 16% of its premium income for losses and spends around 40-50% (depending on how the accounts are done) on meeting the running costs of the company. These including the underwriting of risks, credit surveillance, and the other corporate expenses. This is a very high overhead is largely a function of the small size of the company. A risk to capital ratio of about 25 to 1 generally is considered acceptable. This company has produced very good results without over leveraging their capital. In fact, for the five years it has remained under 15 to 1, considerably below the permitted 25 to 1. If one subtracts the insurance in force in

²⁵ "Delegated underwriting" is the delivery of the underwriting pen by a guarantee company to a lender. The guarantee company and the lender agree upon the characteristics and credit scoring of loans that the bank can guarantee on behalf of the guarantee company. The lender can then provide both the loan and the guarantee. The Guarantee Company has a contractual right to review the guarantees issued on its account by the lender. The opposite of this transaction is "contract underwriting" where the guarantee company in effect prepares the loan for the bank. A client will have both the loan and the guarantee applications approved by the Guarantee Company. The bank then funds a client it often has never met and subsequently sells the "conforming" loan into the secondary market.

1995 from the insurance in force in 1996 to determine the additional amount of risk written and then divides this into the direct premium written in 1996, the approximate premium cost of 1.77% is derived. Thus, with this charge, the company meets its losses, expenses, and reserve requirements.

TABLE THREE
TRIAD GUARANTY INCORPORATED
 SELECTED CONSOLIDATED FINANCIAL AND STATISTICAL DATA
 (DOLLARS IN THOUSANDS ON DEC. 31)

INCOME STATEMENT DATA	1996	1995	1994	1993	1992
DIRECT PREMIUM WRITTEN	26152	18890	16172	13522	9198
ASSUMED	26	34	38	222	215
CEDED	-2217	-3924	-4034	-3926	-2599
NET	23961	15000	12176	9818	6814
EARNED PREMIUMS	24727	15478	10999	7911	5058
NET INVESTMENT INCOME	5447	4836	4181	1897	1205
REALIZED GAIN/LOSS	-162	173	-163	-16	0.5
OTHER INCOME	0	1	5	14	53
TOTAL REVENUES	30012	20488	15022	9806	6316.5
NET LOSSES AND ADJUSTMENT EXPENSES	33279	2217	1262	1284	847
AMORTIZATION OF DEFERRED POLICY ACQUISITION COSTS	3235	2289	1726	1533	852
OTHER EXPENSES	7259	4753	3658	2371	2083
INCOME BEFORE TAXES	16239	11229	8376	4618	2539
INCOME TAXES	5042	3470	2594	1251	816
NET INCOME	11197	7759	5782	3367	1723
BALANCE SHEET DATA					
TOTAL ASSETS	112403	99017	86664	78634	30754
TOTAL INVESTED ASSETS	98027	85978	75364	70800	25538
LOSSES AND LOSS ADJUSTMENT EXPENSES	6305	4589	3164	2255	1239
UNEARNED PREMIUM	8216	9086	9893	8774	6067
STOCKHOLDER EQUITY	97680	80441	70108	64726	21410
STATUTORY RATIOS (PERCENT)					
LOSS RATIO	16	14.3	11.5	16.2	16.8
EXPENSE RATIO	49.6	59.1	61.8	49.1	55.2
COMBINED RATIO	65.6	73.4	73.3	65.3	72
GAAP RATIOS (PERCENT)					
LOSS RATIO	13.3	14.3	11.5	16.2	16.8
EXPENSE RATIO	43.8	46.9	44.2	39.8	43.1
	57.1	61.2	55.7	56	59.9
OTHER STATUTORY DATA (MILLION DOLLARS)					
DIRECT INSURANCE IN FORCE	6556.3	5080	4111.4	2967.8	1966.6
DIRECT RISK IN FORCE	1515.4	1090.6	814.1	569.8	378.5
RISK TO CAPITAL RATIO	15.8:1	11.1:1	8.9:1	6.5:1	14.0:1

General Electric Mortgage Insurance Company

General Electric Mortgage Insurance Corporation (GEMICO), a part of the General Electric Financial Services group, is the giant of the industry. It has a market share of 19.8% of the total new business written. The data presentation above is not available for GEMICO but several important comparisons can be drawn.

While Triad's net premium has increased over the last five years from \$6.8million to almost \$24 million, GEMICO has seen its net premium increase from about \$430 million to \$466 million. Triad has stockholder equity of just under \$100 million while GEMICO has capital of over \$1.3 billion and assets of well over \$2 billion. The much smaller Triad expended about 40-50% of annual premium income on overhead while GEMICO's expense ratio was in the range of 22-23% of premium income. Triad paid away only 16% of income in losses while GEMICO's losses have ranged from 60 to 87% of premium income over the last five years. While Triad has managed a combined ratio ²⁶ under 60%, GEMICO has been over 80% in four of five years between 1992 and 1996 and in one year producing a significant loss of 108%. Triad has managed to keep the risk to capital ratio under 16 while GEMICO has been over 20 for four of the last five years.

The two companies are strikingly different both in size and in results. GEMICO is an older company with a more mature book of business. More loans have gone sour than is the case with the relatively young portfolio of Triad. More importantly, GEMICO confronts competitive discounting, risk based pricing (by Triad, among others) which removes some of the subsidy by stronger borrowers of weaker borrowers, and a growing use of "off shore captives"²⁷ for a lenders' best mortgage insurance business. While Triad delegates little underwriting to lenders GEMICO produces 43% of its new business by way of delegated underwriting. To offset this delivery of the corporate pen to a lender, the parent company, General Electric, has developed a sophisticated programme for mortgage credit scoring which, through its electronic interface, reduces paper documentation significantly. GEMICO

²⁶ "Combined ratio" is the method used by insurers to measure their underwriting profit and loss. It is the losses and the operating expenses divided by the premium income. A number of less than 1.0 means that the insurer is underwriting profitably while a combined ratio excess of 1.0 means the company pays away more than it take receives in premiums. This ratio does not include investment income which is usually the principle source of profit for most U.S. insurers, as the market is so competitive that underwriting profits are elusive at best.

²⁷ "Offshore captives" are insurance or reinsurance companies set up in jurisdictions such as Bermuda. These companies are owned by a large buyer of insurance products and in effect allow large buyers to form their own "captive" insurer and recapture the profit margin that would have been enjoyed by a commercial insurer for the captive owners.

in the face of a largely saturated market is also moving to expand its market share in the 95-97% LTV mortgage guarantee market. .

There are several “best practice” lessons to be learned from GEMICO.

- General Electric at the corporate level has a **commitment to a significant market share** in all its businesses. The corporation is prepared to commit the capital necessary to support insurance activities at a level compatible with reduced overheads and economies of scale. In fact, GEMICO has the lowest overhead in the industry at about 19% (compared to nearly 50% for Triad). We will see later in the review of the bond insurers that economies of scale in financial services are quite large indeed, but not all guarantee insurers have a rich parent to supply capital.
- GEMICO has maintained a **consistent focus on customer service, product innovation and process efficiencies**. Despite the high quality of customer service, increasing competition has eroded its market share from about 27% in 1994 to 20% in 1996.
- **Innovation and new products**, not all of which are successful or profitable, has been a characteristic of GEMICO management’s response to growing competition. Backed by the financial strength of the largest non-bank bank in the world, GEMICO can experiment with new products such as guarantees of 3-5% down payments. GEMICO is currently trying to recapture market share by increasing its high LTV (loan-to-value) guarantees portfolio. In 1995, high LTV’s were 21% of the portfolio; last year, they were 43% of the portfolio. GEMICO also has sharply increased its “delegated book” from 21% of new insurance in 1995 to 43% in 1996. This delegation in effect turns the lenders into franchisees of GEMICO.

Home mortgage guarantees and financial market development

The home mortgage guarantee industry relevant to many of the issues confronted by development finance community because the experience of this industry speaks directly to the issues of *viability of the guarantee fund, collateral constraints, sources of SME finance, and additionality*. With the creation of very low down payment programmes, the guarantee product has facilitated affordable home ownership by low-income groups.

- **Viability** The home mortgage guarantee industry is “viable” in the commercial sense. It can acquire the capital it requires from shareholders in the capital markets and produce an acceptable return on that capital. It requires no external support and continues to expand by creating new markets for its products.
- **Collateral Constraints** The home mortgage guarantee industry’s private mortgage insurance (PMI) obviates the need for at least 20% down payment in order to buy a house. Clearly collateral constrained borrowers are able to buy a house that they could not buy without the guarantee.
- **Source Of SME Finance** Equity built up in a home can be mobilized for business purposes (or any other purpose) through the use of the PMI product that allow the mortgagee to take cash out of his home equity.
- **Savings Development** While not an intentional purpose of the home mortgage guarantee, its creation promoted savings. The home is the American family’s single largest asset. Putting cash into a private home is an attractive option for most families especially as this cash can be utilized via the mortgage to access the some of the home equity for other purposes.
- **Additionality** It is clearly the case that borrowers who were formerly excluded from mortgage markets gain entry through the PMI guarantee. These companies entered the 95-97% LTV market with a profit motivation and to sustain their own premium growth. In the process, they have opened home ownership to a large number of lower income families. While the terms of the mortgage and PMI may not be as favourable as a non-collateral constrained borrower, they are superior to exclusion from the mortgage market, at least in the view of millions of American families.
- **Financial Market Development** The development of home mortgage guarantees and the creation of a secondary market for the mortgage products was a major element in creating a vast new market in which lenders could originate loans and then sell them into the market. Investors could buy these products to meet their specific needs either for a steady cash yield or in a discounted zero form to provide a specific amount of cash on a given date. In either case, the products were often more attractive than deposit accounts and the interest rates were usually considerably higher. With the guarantee, the default risk was removed at a relatively small cost to the ultimate holder of the paper.

BOND INSURERS: THREE CASE STUDIES

In the following section, three case studies of bond insurers are presented both to illustrate the diversity of the industry and to point to several features that make them germane as models for development finance. These companies have both enabled many projects financed with public money, principally tax receipts, to access debt markets on better terms than available without the guarantee. More interestingly for development professionals, these companies have shown a behavior similar to the mortgage guarantee companies. When faced with a saturated market, they have moved “down market” and developed products that meet the guarantee needs of other sectors that formerly could not access credit markets or could do so only on disadvantageous terms. Most recently, the bond insurance industry is beginning to reach into the ranks of the small and medium enterprises for business as its traditional markets saturate and the possibility of sustaining growth diminishes. Like the mortgage insurers, some (although not all) of the bond insurers have shown considerable skill at developing new guarantee products for “low end” markets traditionally neglected. Finally, like the mortgage guarantee companies, they have begun to expand abroad. This expansion has taken some most interesting turns for the development finance community.

Capital Guaranty Insurance Company

Capital Guaranty Insurance Company (CGIC) is the second smallest bond insurer in the U.S. market, after Connie Lee, a government sponsored enterprise (GSE), now privatized, which initially insured only college dormitory construction bonds. It has only a 1.9-% market share. In its 8th year of operations, CGIC has an insured portfolio of \$12.5 billion. The company’s net premiums were about \$26 million for the last year for which data are available, 1993. The company has managed to retain a very tight financial discipline issuing guarantees only to the low risk sectors of the municipal market and has a comprehensive credit surveillance policy in place to detect deterioration and take corrective actions. As a consequence, the company has no payment defaults in its portfolio. However the bonds which it insures have traded at a yield slightly higher than those insured by the larger competitors.

CGIC faces a severe competitive challenge in a market with declining premium rates. For example, between 1992 and 1995, premium rates for tax backed municipal bonds fell 22%. Its existing business has relatively high imbedded premium rates. However, acquiring additional business is challenging given that the trading value of its insured bonds are somewhat lower (with slightly higher yields) than those insured by its competition. This makes its continuation as a niche bond insurer more difficult and reduces its pricing

flexibility. The company is compelled to reduce the charges for the guarantees, given that its bonds trading values are lower. The bond issuer wants lower premium rates to compensate for the higher yields demanded by the market place.

With a very small niche market and its bonds trading at slightly higher yields, it is likely that over time the profitability of the company will continue to be pressured. In fact, the company's return on average equity is only about 8%, roughly half that of the other companies in the industry. Given the relatively low annual premium income of just over \$20 million and the high overhead and especially surveillance costs, it is difficult to see how the company can be very profitable. As a stockholder company with low returns on equity, it may find it difficult to attract additional capital. By way of comparison, Triad had a premium volume of under \$20 million and was compelled to spend over half that on overhead, but remained quite profitable producing a return on assets of almost 13% and on capital of 15%. In general, Triad had a market that was neither saturated nor in which premium volumes were declining. The management of Capital Guaranty found itself severely constrained by these factors plus the fact that it could not raise additional capital to expand into more profitable areas.

MBIA Insurance Corporation

MBIA, like GEMICO, is the giant of its industry. MBIA has 42% market share on its \$188 Billion net par portfolio which produces nearly \$185 million per year of premium income generated by guarantees issued on public finance, asset backed securities, and international debt. In addition, the company raised \$130 million in new capital to take advantage of the economies of scale that characterize its operations. In the face of declining premium rates in the municipal bond market that cripple a small player like Capital Guaranty, MBIA had the ability to raise additional capital and pursue other opportunities. With the increased commoditization of financial guarantees and lower margins, MBIA implemented four strategies to sustain growth and profitability.

- The company diversified into structured corporate debt and asset backed securities.
- MBIA began writing guarantees on international debt issues.
- It formed a strategic alliance with its largest competitor to cooperate in the European market.

MBIA also set up investment management services both for municipalities and to issue the guaranteed investment contracts of other insurance companies in order to generate additional revenues.

These first three were designed to produce additional premium while the fourth generated substantial new fee income. To lower expenses, MBIA brought the risk assessment department on line to provide additional surveillance and risk assessment for the guarantees it issued. MBIA no longer needed visit the companies or municipalities but instead could assess the financial condition on a regular basis via an on-line link. As a result, even in a declining premium rate market, MBIA was able to keep its return on a rapidly growing equity in the 15% range.

What “best practice” lessons may be drawn from the experience of these two companies for development finances professionals interested in providing guarantees in developing countries?

- **Economies of scale** are very large in the financial services business, especially in competitive markets. MBIA was able to increase capitalization and reach out to new businesses to sustain growth and return; Capital Guaranty was not, as it was too small and suffered from a rate of return that was not attractive. It stagnated, producing inadequate returns on capital while MBIA was able to grow, expand and enter new related businesses.
- **Diversification into related markets** was able to sustain growth at MBIA while being locked into a niche market cut Capital Guaranty’s return to ½ of the industry average. MBIA built an international business and a service business for municipalities and other insurers
- **Innovation** both helped sustain margins and reach formerly unserved markets. MBIA entered two new markets, home equity loan and first mortgage pools (where MBIA issued a guarantee on the securitized products). Capital Guaranty remained a niche player, confined by an inability to raise capital to grow and innovate. As with the mortgage guarantee companies, competitive markets drive diversification and innovation. This time, the bond insurers and the mortgage guarantee insurers began to converge on the margins as MBIA began to enter markets traditionally served by mortgage guarantee companies.
- **Mechanization, computerization and on-line surveillance** are essential to manage a large and diverse portfolio and as a cost savings measure when margins are pressured by competition.

Asian Securitization & Infrastructure Assurance (pte) Ltd.

A new company, Asian Securitization and Infrastructure Assurance, Ltd. (ASIA) has recently been established in Singapore. Its shareholders are CapMAX Asia, Ltd., an affiliate of Capital Markets Assurance Corporation; Apcac Investment Pte. Ltd., a subsidiary of the Government of Singapore Investment Corporation; Asian Development Bank; Employees Provident Fund of Malaysia; American International Assurance Company; Korea Long Term Credit Bank; Deutsche Investitions-und-Entwicklungsgesellschaft; and the Netherlands Development Finance Co. ASIA will be capitalized with \$100 million in policyholders surplus with an additional \$50 million of callable capital and an additional \$50 million in soft capital from an excess of loss reinsurance from the Aachener Reinsurance Company of Germany.

The company's principle business will be financial guarantees on asset-backed securities and infrastructure debt to be placed in primary and secondary Asian fixed-income capital markets. OECD estimates that Asian countries are already spending about 5% of GNP on infrastructure. The infrastructure project finance market in Asia is estimated to grow from about \$78 billion in 1996 to excess of \$90 billion in 1999 while the asset backed securities market will grow from \$5.5 billion to almost \$11 billion over the same period. ASIA Ltd. estimates that it can achieve a low single digit penetration of both of these markets.

The management of ASIA Ltd. has announced that they will underwrite to a zero default standard. This will be difficult in present circumstances. The condition on which Asian Development Bank, with its focus on the development of financial markets, agreed to participate in the capital structure of ASIA Ltd. is that not more than 20% of the guarantees be issued in "strong" countries such as Singapore, Korea, Hong Kong and Taiwan. The remaining 80% of the guarantees will have to be placed in the Philippines (BB), India (BB+), Indonesia (BBB) and China (BBB) as well as unrated countries which have substantial political and currency risks. ASIA Ltd. will not accept the risk of impairment of collateral or cash flow arising from fluctuations of the guaranteed security's currency and that of the collateral. As a result, it will be necessary to use currency swaps, hedges, reserve funds, indexing and even over-collateralizations to control this risk. The fact that the guarantees go to relatively high-risk projects implies a substantial cash flow from premiums as well as a much greater volatility and risk of losses.

The chief technical partner, Cap MAC, a subsidiary of U.S. based bond insurer, Capital Markets, has an 8 year track record in Asia and has had only one bond default. On larger risks where the commitment of ASIA would exceed 30% of its capital,²⁸ Cap MAC will co-underwrite the guarantee as well as provide the technical expertise to the new company as it tries to find a profitable Asian market for its guarantees.

The Singapore regulatory authorities have adopted prudential regulation modeled on New York State. The minimum capital requirement is U.S. \$75 million and the net par exposure for guarantees cannot exceed total qualified capital (paid up capital, capital on call and reserves).

The initial business written in 1996 was a mix of asset types spread across several countries. Infrastructure is one of the more promising areas for selling credit enhancements. A total of 5 transactions were approved or closed in China and Indonesia during 1996. Additional deals are likely to develop in 1997 as some international banks seek to reduce Asian infrastructure exposures. Over the next 5 years or so, Asia Ltd. expects to develop a risk to capital ratio of about 40-to-1 for the infrastructure component of the portfolio and between 75 to 100-to-1 for the bond component of the portfolio.

²⁸ 30% is the usual U.S. regulatory limit on the amount of capital that may be exposed to a single risk. ASIA will be regulated by the authorities of Singapore who permit up to a 75% exposure to a single risk. However, ASIA has adopted the 30% exposure on a voluntary basis as part of a deal with Standard and Poor's to obtain an "A" (Good) financial rating. Without at least an "A" rating, its guarantees would be of little use to buyers and its market would contract significantly.

CHAPTER FOUR PRIVATE MORTGAGE AND BOND GUARANTEE INSURERS AND DEVELOPMENT FINANCE

LENDERS, BORROWERS AND GUARANTEES

Essential to the development of third party credit guarantees is a fundamental change in the behavior of lenders. Only when lenders are prepared to originate a loan (or let someone originate it for them) is the entire chain of events set in motion. Why then would lenders prefer a third party guarantee to simply charging a higher rate and in effect keeping the risk premium for themselves? There appear to be several reasons:

- First, foreclosure or realization of collateral is very time consuming and costly in case of a default. Lenders also do not like to foreclose or take collateral due the bad publicity; the guarantee companies are both more adept at it and are less concerned with the consequences. In the U.S., there is an additional constraint. U.S. law does not permit mortgages to be called by the lender if the mortgagee is not delinquent. This is a legacy of the Great Depression when cash strapped banks called loans even when the mortgagee was current.
- Second, banks can generate a large volume of these loans but cannot sell relatively poorly collateralized home mortgages without the guarantee. Few banks would want to keep all of this class of loans that they can originate. The capital used to back these weakly collateralized loans would be quite large due to the adjustments applied to the risk weighted assets. The return to capital would be commensurately lower. The debt market can take more risks than can prudently managed banks. Furthermore, most of the participants in debt markets are not banks and do not have to meet capital adequacy ratios. However, the debt market demands the guarantee to insure that the lender is not acting opportunistically.²⁹
- Finally, and most importantly, most mortgages and other securities do not stay intact with both the principle and the interest stream owned by the same investor. In secondary markets, mortgages and corporate debt (and less frequently municipal bonds) securitized and broken into various components. For example, one may purchase the income stream on a pool of mortgages and not the underlying debt. Or one may buy a discounted “zero”

²⁹ Prof. Gonzalez Vega has stressed the problem of “opportunism” on the part of lenders. He noted that guarantors know less about borrowers than do lenders, thus offering lenders an opportunity to act opportunistically by guaranteeing the poorest loans. In the U.S. context, it is precisely this behavior that causes credit markets to demand a third party guarantee that the loan is of acceptable quality. In other words, without this vetting and backing the vetting with a guarantee based on the guarantors’ capital and credit rating, the credit markets would not likely buy the loans for fear of opportunistic behavior. From this point of view, what the

income pool that will return a specified amount on a given date. Thus, there is no on-going relationship between the borrower and the lender. In fact, they are often in different parts of the country and the holder of the mortgage may not even know the names and addresses of the underlying loans on the mortgage and structured corporate debt based products that he holds. Furthermore, he may hold only a portion of the debt or interest income stream.

Thus guarantees change the relationship between a banker and a borrower in some fundamental ways. Bankers have a larger credit market for the loans that they originate. They cannot prudently keep all the loans that they can originate, and would not want to, given the lower credit quality. In the larger credit markets there are willing buyers. Thus, banks in effect become the marketing agents for the credit markets

DO GUARANTEES PRODUCE ADDITIONALITY?

One school of thought led by Prof. Dale Adams holds that guarantees are largely irrelevant to development finance unless and until they are shown to produce additionality. An exact definition of additionality is quite complex, as the term is understood in various ways. For present purposes, additionality will be defined as additional volumes of credit and/or credit on more favourable terms to a target group which has confronted difficulties in accessing credit markets or has been charged a high “risk premium” for access to credit markets.

The U.S. experience clearly demonstrates that guarantees, if they have not produced additionality in and of themselves, certainly were part of the process of extending additional credit on significantly better terms to “low end” borrowers, a process which has resulted in additionality. There is also in the case studies a fairly consistent pattern of guarantee companies creating new guarantee products to support innovative forms of structured corporate finance and securitization of large pools of small individual transactions.

This latter development of securitizing small transactions is particularly important and interesting to those working in the field of development finance. Banks would not usually be prepared to lend amounts as small as most credit card transactions or most individual receivables nor would guarantee companies be interested in issuing a guarantee for a transaction this small. When they can be bundled (securitized), they can be guaranteed and placed in credit markets.

In the home mortgage arena, the development of the PMI (Private Mortgage Insurance) industry enabled people with less than a 20% down payment to buy a home. In time, the threshold was pushed down to 10% and most recently to 3-5%. This process has made home ownership, and consequently access to an important tax reduction strategy and a source of capital appreciation, accessible to millions of families that previously could not aspire to home ownership because of the collateral constraint.³⁰ Most recently, some bond insurers (treading in the area of the mortgage insurers for the first time) have guarantee securitized secondary mortgage pools and even issued guarantees on home equity loans when the LTV reached 100%.³¹

Home equity is the American family's single largest asset class. As such, it is far more often accessed for cash to start or grow a SME than any other source, almost certainly more often government guaranteed small business loans. The PMI industry has enabled many borrowers to utilize the equity in their homes as a source of funds.

Why is this so? The principle reason is that it is far easier. Secondly, there are no requirements to meet any other ethnic, age, income, or gender criteria. It is purely a financial transaction not affected by external factors. "Taking cash out of the home" is a decision made by the borrower and not subject to underwriting criteria and feasibility analysis. To qualify for a traditional guarantee, a borrower would be required to submit volumes of documentation and a detailed business plan that set out the projected finances of the business. Many of these applications are rejected after a long wait. Many people prefer to refinance their homes with a "cash out" mortgage and use the money to start or expand their business or for other purposes.

In the municipal and agency bond arena, lower rated municipalities and agencies with no credit histories were able to access credit markets on more favourable terms via the purchase of guarantees. The upgrading of the credit ratings on these lower rated bonds via guarantees and the sheer volume of these insured instruments seems abundant evidence that the terms and conditions on which poorer municipalities are able to sell debt has been significantly

³⁰ Home ownership is a politically popular policy in the U.S. The tax code provides for the deduction of mortgage interest and in some cases for an untaxed capital gain on the sale of the principle residence after a specified age. There are no such incentives for renters and therefore most families actively seek ownership both for its tax advantages and for what historically have been substantial capital gains from home ownership. Thus, in this sense the PMI buys both the tax deduction which partially or perhaps even fully offsets the cost of the insurance, and gives the mortgagee the opportunity to enjoy the capital appreciation typical of single family housing over the last half century in the U.S.

³¹ Several guarantee companies are considering or experimenting with 105-110% home mortgage guarantee products by which they will guarantee a loan for more than the appraised value of the home.

modified by the existence of guarantees. Additionally, the purchase of a guarantee has enabled issuers of bonds to secure complete placement of the bond, which might not have been fully placed had it been lower rated.

Structured corporate debt and asset backed securities are the newest area for guarantees. Already there is evidence that many securitizations have found better market conditions and better placement with a guarantee than without a guarantee. It is also clear that guarantees have supported the access to credit markets of non-traditional forms of corporate debt and asset backed securities.

One could certainly view this as more a function of the securitizations arising from a deep and very liquid debt market and very active debt markets for municipals and corporate debt rather than the effects of guarantees. It is almost impossible empirically to separate the effects of a large, deep, and very liquid mortgage, municipal and corporate debt market able to absorb large volumes of securitized mortgages, municipal bonds and corporate debt from the effect of guarantees. In fact, even if possible, it would not be a useful exercise. The guarantee industry must have the debt markets just as the debt markets use the guarantees of the insurers to price and market securities that either would not have been sold or would have been sold on less advantageous terms to the borrowers. It is an interdependent and symbiotic relationship that has pushed financial markets to reach groups formerly excluded or included on far less favourable terms.

Perhaps the most striking testament to the additionality of guarantees in the U.S. context that the market for guarantees is open and highly competitive. The guarantees are sold on a completely voluntary basis. Under these conditions the premium income of these guarantee companies has grown quite rapidly. One may reasonably infer that the purchasers of the guarantees have found that the guarantees are providing a valuable credit enhancement and are prepared to pay time and again the price for better access and more favourable terms and conditions in credit and debt markets.

IS THE U.S. EXPERIENCE RELEVANT TO DEVELOPING COUNTRIES?

At first glance, the U.S. mortgage and bond guarantee market would appear to be of little relevance to the issues of financing SME and micro lending in the developing world. More careful consideration should modify that judgement. First, and most importantly, many American families would not be able to buy a home without the PMI (Private Mortgage Insurance). This is particularly true in the “affordable” housing sector where with the PMI; families can purchase housing with 3-5% down payments. There are few, if any remaining banks and Savings and Loans (financial institutions very like British building societies) in the U.S. prepared to make a mortgage for their own net account with only 3-5% collateral. However, the guarantee companies are willing to assume that risk for a price. In fact, some are beginning to issue guarantees on uncollateralized LTV in excess of 100%. And, it is in this sector which the guarantee companies through their controlled risk taking and innovation have produced the strongest argument can be made for massive additionality.

Does this exploration of how guarantees work in the American home mortgage market have any relevance to the developing world? I would like to suggest that for SME it does; doubtfully and perhaps sadly it does not appear to be relevant for most micro enterprise borrowers, who are too few, too scattered and too poorly collateralized.³²

However, even its application to the SME market is probably severely restricted by the potential market size in most developing countries and weak credit markets. This in turn focuses our attention on the vital importance of credit markets in the development of the largest guarantee industry in the world. From this point of view, the development of large scale guarantee programmes need to be seen as a part of an overall capital markets development strategy. U.S. banks got into the business of making large numbers of loans that they previously would have rejected only when two conditions were met:

³² Prof. Claudio Gonzalez Vega in a posting on the Development Finance Network observed that the obstacles to reaching the micro borrower market with guarantees “where credit markets are thin and largely localized (which introduces huge risks from covariances), where the distribution of the probability of repayment across individual borrowers is highly dispersed, and where the guarantor knows little about the very few lenders that it is serving and their microborrower clients” is difficult in the extreme. Additionally, in character based lending, mortgages are not available as the “first line of defense.” While the first observations are on target, mortgage guarantee companies depend not on lenders but on detailed credit information on borrowers. In fact, much of the high LTV business is character-based. These borrowers have a history of repayment. In this business segment, collateral is unimportant and disappears completely in some 100%-110% LTV products.

- First, the government sponsored secondary market places, which were later privatized³³, and
- Second, credit markets were able to absorb the product of these local level home mortgage originations and municipal debt, then later corporate debt.

No developing country currently has a market size comparable to the U.S. market for home mortgages and home equity loans. We have seen that the economies of scale are very large indeed in the financial services sector. Most countries could not support even a single guarantee company, let alone a competitive industry. It is therefore likely that the development of national guarantee industries will be slow and hesitant and will parallel the development of debt markets. On the other hand, a multinational approach may have more potential both of expanding the debt markets' depth and liquidity and in providing economies of scale for credit guarantee companies, although it must overcome some severe obstacles such as currency and political risk.

CREDIT GUARANTEE COMPANIES IN DEVELOPING MARKETS

Some countries have already begun to place securitizations in their debt markets, although not of home mortgages. They have a workable, if far from perfected, legal basis for such transactions. Several developing countries have developed specialized private sector guarantee insurers to provide credit enhancements. However the volume of credit guarantees remains quite small.

One example of such a company is Mexico's Fianzas Monterrey Aetna, S.A., a joint venture between Seguros Monterrey and Aetna Insurance of the U.S. It is one of many companies doing a class of business called "fianzas" in Spanish and "bonding" more generally in English. Most of the business of this company (which under Mexican law must be a separate entity from its insurer parent) is issuing fidelity bonds for employees who handle cash and construction bonds to protect against a builder's default, contract non-compliance or malfeasance. The company however does issue a small and growing volume of financial guarantees. The numbers are difficult to obtain and no information is available on the

³³ Eric Nelson in numerous communications with the author has stressed the importance of the policy environment and the role of government in establishing a market for the U.S. guarantee industry. He argues that without the intervention of the government to set up two secondary mortgage markets, the mortgage guarantee industry could not have developed. While this may be true for mortgage guarantees, government intervention did not characterize the development of the bond guarantee industry. Nelson again observes that this is largely a function of the large and deep credit market and implies that it would be difficult to replicate without first developing the credit markets.

structure of the deals, but it is obvious that the collapse of the Mexican Peso in 1995 had a severely negative impact on the credit guarantee business. Recently the company has refocused its credit insurance business on selected clients on a collateralized basis.

Several other countries (Argentina, Brazil, Poland, the Philippines, and Thailand among others) have insurers who do what appears to be a small but growing volume of credit guarantee business. Unfortunately without access to detailed accounts, this business cannot be studied apart from the overall insurance business. To date, none of the companies involved have chosen to provide detailed breakdowns of their credit insurance business.

All of these countries however are characterized both by the fact that credit guarantees are an adjunct to the bonding insurance business and that the deals tend to be one off. They are negotiated on an individual deal-by -deal basis. The lending banks do not usually have an organized credit market into which to sell the deals and thus retain the risk for their own account. Although there are some cases when the deals were securitized and sold in secondary markets, this continues to be the exception rather than the norm.

A MULTILATERAL APPROACH TO CREDIT GUARANTEES

Building on the U.S.A. Model

The small markets and the slow hesitant growth of the private guarantee industry in developing countries may in turn be a strong argument for a designed intervention by a multilateral finance agency, perhaps similar to Asian Development Bank's capital participation in ASIA, Ltd. If private capital cannot make a profit at the outset because of the size constraint, perhaps the U.S. experience can be tapped again for a model. In the U.S., the major markets for home mortgages, student loans, some farm loans, and even college dormitory construction bonds were initiated as Government Sponsored Enterprises (GSEs) which were later privatized and are now for-profit share holder owned and stock exchange listed companies. The mortgage guarantee companies grew up spontaneously around these secondary markets. While few developing economies are of sufficient size and have a sufficient number of transactions to support a guarantee company, a regional or even hemispheric GSE guarantee company may provide the critical mass. Likewise regional debt markets may provide sufficient depth to place the securitizations and to support one or more credit guarantee companies.

More importantly, the U.S. case is instructive in that while active debt markets and a legal basis for securitization are necessary to establish third party credit guarantees; the relationship between the market and the third party guarantee companies is not static. There is a dynamic exchange between the guarantee companies and the debt markets as the guarantee companies push the frontier of what can be financed, continually bringing new types of securities to debt markets and inventing new financial products in their constant drive for additional sources of revenues.

Implementing a strategy similar to the U.S. model would entail the governments of a region establishing a guarantee company with government capital. The company once it had proved that it could make a profit would then be sold in to stock markets of the region to buyers who would become shareholders in a for profit company.

Would such a system find an adequate market in developing countries? Would the insurance company be profitable? Would banks accept the guarantees? Could the underlying property be securitized and would these instruments find acceptance in debt markets? These are questions to which there are no general answers and which will likely vary according to the development of the financial system of a given country. To a substantial degree, the answer depends upon the capital adequacy of the guarantee company and the confidence of the buyers of the guaranteed debt in the adequacy of prudential supervision of the company.

Building on the ASIA Ltd. Model

In the case of Asia Ltd., the model used a combination of development agencies, international insurers and reinsurers and specialized credit insurers to capitalize the company and to supply the technical expertise. This model is well suited to operating across national boundaries and can engage in both bond and structured financial guarantee businesses. The prudential regulation and the level of capital is such that the company has a Standard and Poor's rating of "A" which enables it to provide credit enhancements that will make the debt and securities that it guarantees attractive to the primary and secondary debt markets of Asia. The company has the somewhat unusual requirement to do 80% of its business in the "weaker" financial countries and thus foster the development of those capital markets.

As noted above and in the study of Asia Ltd. the capital requirements are of a size that a single credit insurer would not have sufficient market within the boundaries of a single country. However, one could easily imagine that a company similar to Asia Ltd. could operate across the Latin American and Caribbean countries and perhaps another in Africa. The combined economies of the Central European countries, the Newly Independent States and the Russian Federation would provide a third region of sufficient size to sustain a company similar to Asia, Ltd. On this basis, the capital requirements of about U.S. \$100 million could be easily met and the market would likely be of sufficient size to make the company viable.

The position of Asian Development Bank in the capital structure is of crucial importance for two reasons. First, as a condition of bank participation, Asia Ltd. agreed to place at least 80% of its guarantees in weaker countries. Second, the probability of default when the Asian Development Bank is involved is far less likely, as this would have far reaching implications for the country. Similarly, if the model were to be applied in other areas, the involvement of international financial institutions and regional banks would be of considerable importance, both as a source of capital and to help meliorate the default risk.

For organizations prepared to supply capital in return for a certain percentage of guarantees being issued in a given sector, a multilateral guarantee company could be a viable approach to developing guarantees. While it has yet to be done, an organization interested in guarantees on pools of SME loans could supply capital in return for a promise by the company to issue a specified volume of guarantees on securitized SME loans. Similarly, other types of loans (agricultural production, for example) could be securitized and guaranteed in return for supplying capital to the guarantee companies.

A variation on this model would be to establish a central facility where deals could be brokered. Borrowers seeking credit enhancements and guarantors from both the banking and insurance industries could come together and work out guarantee deals. This approach would be both low cost and require almost no capital commitment, but would have the disadvantage of having no source of revenue to support its operations.

Building on the Canadian Model

The Canadian model seems to be particularly interesting as it is both a government run system and is characterized by costs that are quite modest by comparison to guarantees extended by government in Europe and in Asia. Furthermore, the clients are both SME and start-up and young companies, which, as a result of the guaranteed loan increase their employment substantially. While it is not clear how this is achieved at such reasonable costs and whether the loans would have been made in the absence of the guarantee, clearly the Canadian experience is one of the more promising avenues for research.

CHAPTER FIVE

NEW APPROACHES TO GUARANTEES: A MODEST PROPOSAL FOR A FIELD TRIAL OF FINANCIAL GUARANTEES FOR SME AND MICRO LENDERS

In the preceding sections, a number of approaches, both unsuccessful as well as those that offer some prospects of being able to foster SME and micro lending have been discussed. In this section, elements successful in several countries are combined into a proposal to test in a modest field trial the utility of financial guarantees for SMEs and micro lenders.

LEVERAGING DEVELOPMENT CAPITAL

Financial guarantees would be written by a special purpose organization that would be funded by international banks, commercial banks, donors, insurers and other interested parties. The purpose of the organization would be to offer financial guarantees to qualified NGO and other micro lenders to enable them to leverage the guarantee and obtain capital in their domestic markets as well as to market syndicated paper in the debt markets. The guarantee company would operate world wide in order to achieve a significant volume of guarantees and thus to lower the transaction costs. While the SME and micro sector would constitute the primary focus of activities, the company could also engage in other financial guarantee transactions when those transactions are determined by the board of directors to foster development.

The initial capital could consist both of some “hard” capital and soft capital in the form of callable capital and/or reinsurance and/or re-guarantees from banks. The initial capital to create an operation that could enjoy an economy of scale is still relatively modest by international standards. It would likely not exceed \$100 million.

Both the amounts of capital and the shareholders in the guarantee organization would be important to provide the necessary confidence in the guarantees. The buyers would have to be confident that the guarantor is financially capable of meeting its obligation. Those who use the guarantees as security for lending (as below) would have to accept the guarantees and account for them on their balance sheets and in their risk weighted capital adequacy calculations as being high quality assets.

A SME or micro lender that wanted to use the guarantees would submit an application. The guarantee organization would first conduct an audit and then ensure that the applicant had an acceptable accounting and reporting system in place and could supply the guarantor with

regular financial reports. It would further verify that the applicant had established prudent rules for both lending and provisioning of potential losses.

With these safeguards in place the guarantee organization would issue an unconditional endorsable guarantee for which it would make a charge based upon the risk of default on the guarantee. The unconditional guarantee would then be used to borrow from a commercial lender and/or money markets in the country of the applicant. This guarantee would have the full faith and credit backing of the guarantor to the funding bank and would thus represent a very high quality guarantee that could be called should the borrower not pay either principle or interest as stipulated in the loan agreement.

Through an agreement with the regulatory authorities of the country in which the lender is located, it could be agreed that the guarantee would be counted as capital for regulatory purposes. In effect, the lender would be renting capital that could serve to remove the capital constraint on lending and would also overcome the difficulty of a mismatch between deposits and loans.

As an example, let us take a case where a micro lender could lend an additional \$3 million. The lender would first comply with the applicable rules of the guarantor as to accounting and internal management and then obtain a guarantee for \$2 million. This guarantee would then be used to borrow \$3 million in the home country from banks or money markets or other sources.

This guarantee has several advantages over direct lending:

- First and most important the guarantee organization could leverage its capital significantly. If the initial capital were \$100 million, it could with a conservative strategy write \$300 million of guarantees. With a somewhat more risky strategy, the volume of guarantees could increase to \$500 million. These guarantees would further be leveraged in the home country of the buyer of the guarantee.
- The credit surveillance conducted by the guarantor will in many cases be superior to the existing prudential supervision of regulatory authorities. As the guarantor has a financial interest in the operation of the buyer of the guarantee, the guarantor will be motivated to negotiate the conditions of the guarantee both to minimize the likelihood of default and ensure that it can maintain adequate credit surveillance. Unlike regulators, guarantors are strongly motivated to take actions at the first sign of financial troubles rather than waiting until the guarantee has to be paid.

- The guarantee mechanism enables SME and micro lenders to intermediate funds from capital markets and sustain lending to the sector. This further integrates them into the national financial system.
- The capital structure of the guarantee organization would militate against under pricing of guarantees or issuing guarantees to high-risk lenders. Involving commercial banks, insurers and reinsurers as well as multilateral banks and other development finance organizations would provide a structure that maximized the market driven orientation for the guarantee organization. Commercial entities would have a strong interest in protecting and growing their capital.
- In cases where the borrowing and the guarantee are in hard currency, the source of the loan could be in any of the international capital markets.

Accessing Debt Markets

The SME or micro lending entity who has obtained capital based on the guarantee would lend this to its clients. The product of this lending could be sold into debt markets with an additional guarantee issued by the guarantee organization. Let us assume that the \$3 million were lent in two tranches of \$1.5 million with one tranche for 6 months and the other for 1 year at a profitable spread over the cost of funds and the charge for the guarantee. These loans could then be securitized into 6 month and 12 month paper. The guarantee organization could issue an additional full faith and credit guarantee so that these loans could be sold in debt markets. Given the guarantee, these loans should have a higher credit status than most commercial paper and would be attractive to many investors including pension funds looking for short term paper of good quality paying more than the deposit rate.

The lender could use the proceeds either to relend or to reduce the balance with the source of the initial loan. The lender would likely retain the service on the business and make a charge for this service that would be included in the price at which the loans were sold. This would provide a steady service based fee income.

Promoting Savings And Protecting Savers

The guarantee organization would also enable SME and micro finance intermediaries to engage in safe and sound deposit taking by issuing a guarantee to cover the depositors' funds held by the intermediary. The same application process as above would enable the guarantee organization to issue a financial guarantee that is in effect deposit insurance. The reporting requirements would likely be more stringent and the credit surveillance more intense.

With this full faith and credit guarantee, the buyer could take deposits from the public with the assurance that should for some reason there be a run on the funds or a collapse; all depositors could be paid. If in fact the guarantor were required to pay due to a collapse, the financial records generated by the periodic reporting requirement and the credit surveillance would enable the guarantor to use a local entity such as a bank or accounting firm to pay off the depositors.

The leverage from this type of guarantee would be enormous. The same \$100 million in capital could support guarantees of probably well in excess of \$1 billion in savings. The leverage could be increased as experience is gained and the probability of a guarantee payment can be calculated with more precision. The fees charged would be capitalized and used to increase the amount of deposit insurance, which the guarantor issued.

This approach takes advantage of the most promising feature found in successful guarantee systems without imposing a substantial burden on the limited regulatory resources of developing countries:

- It most importantly would enable SME and micro lenders to significantly increase their volume of operations and do so in a safe and sound manner. The volume of lending could increase significantly without the necessity of increasing capital, as the lender would have a callable capital in the form of a guarantee.
- Banks and others who wholesale funds to the guaranteed SME could do so with no risk of default on the principal and interest. This would in effect give SMEs access to all capital markets.
- The volume of deposits captured by SMEs could greatly increase with what is, in effect, private deposit insurance. As SMEs generally lend at substantially higher rates, they could offer favourable deposit rates, thereby attracting savings from the public

- Placing the securitized debt in local and in some cases in international markets would be a significant step in developing more active and deeper capital markets as well as integrating NGO's and micro finance intermediaries into the financial sector.
- A multilateral, multinational guarantee organization would have a market large enough to develop an economy of scale and to lower the administrative cost per operation. With this large market, it can invest in developing the necessary credit surveillance technology.
- A capital structure that combines development finance capital with private sector capital experienced in guarantees is more likely to produce a market driven organization that will negotiate guarantee terms which will reduce default. The organization will have a commercial interest in conducting adequate credit surveillance, and in guarantee pricing that reflects the riskiness of the guarantee.

NON-INSTITUTIONAL MODELS FOR GUARANTEES

The guarantee institutions operating outside of the USA that were reviewed above have all been variations on a model in which the guarantee is provided by a separate organization to an individual borrower, who can then use the guarantee to obtain a loan. In the U.S. case, we saw that various types of securities sold in secondary markets were the object of guarantees. In the case of home mortgages, the securitizations grew out of the same “retail” approach to guarantees that characterizes the programmes in developing countries. All of these guarantees were characterized by the creation of a financial intermediary whose costs of operations added to the overall cost of credit. In the U.S. case, the economies of scale are so large that these costs were trivial while in the developing countries, the volumes were and are so small that the administrative costs would greatly increase the cost of credit unless they were borne by a subsidy.

In the proposal above, the “wholesale” approach to issuing credit guarantees is outlined as a means of eliminating many of the difficulties of individual SME and micro guarantees. It too is an “institutional” approach as were all the previous ones. While this is one approach, many of the goals of guarantees can be realized without the creation of a special purpose institution.

Several of these non-institutional approaches may be able to accomplish the same goals that guarantee funds seek without the cost of a separate financial intermediary. The research on non-institutional models for guarantees is in the initial stages. The two models set out below are the first efforts to conceptualize the problem of supporting credit to disadvantaged groups

without the necessity of creating both an institution and an on-going call upon external resources from budgets and/or donor. There will surely be many other variations on this theme. The following models are presented primarily to refocus thought and research toward more sustainable models that can accomplish the same goals without the severe financial problems that have characterized guarantees in the developing countries to date.

Capital Enhancement Guarantees

A new model for credit guarantees developed from an FAO project carried out for the Ministry of Agriculture of the Republic of Poland was developed by J.D. Von Pischke. After studying the experience of guarantee funds in Europe and in the developing world, it became apparent that they did not present a viable model for Poland. The costs were clearly too high and the volume of operations was clearly too low for the guarantee fund to not be heavily dependent upon on-going donor and/or government support. Furthermore, it appeared little if any additionality arose from the schemes operating in other countries and most were unattractive to banks and bankers, who consequently guaranteed only a small portion of the total loans. Moreover, the loans guaranteed were usually the poorest quality loans, those most likely to default, further raising the cost of guarantees through the process of adverse selection.

In these circumstances, a new model was needed to accomplish three goals simultaneously:

- move lending to a targeted broad sector, in this case, the agricultural sector
- function with reduced operating costs at sustainable levels and
- encourage sound banking practices

To achieve these goals, the Capital Enhancement Guarantee (CEG) model was developed as a model to utilize development resources supplied by donors and/or national governments. The description that follows is a slightly edited and modified version of the original Von Pischke proposal.

Credit guarantees as currently practised are not effective because they do not address the principal problems of banks. Instead they focus upon the supposed collateral constraint. It is not this constraint that is the major obstacle to a bank making a loan. CEGs on the other hand attack **the real problem** of rejected loans. Banks reject loans because they are:

- too risky
- inconsistent with a bank's business strategy and credit policy
- unlikely to meet the standards of banking regulators

The traditional approach to guarantees is to create a third party guarantor or provide credit enhancements. The Capital Enhancement Guarantee has numerous advantages over traditional approaches:

- CEGs transfer the decision-making responsibility to banks that have superior information.
- The CEGs require almost no staff
- Overhead costs are trivial when compared to the amount of guarantees issued.
- CEGs avoid moral hazard, a process by which the riskiest loans are presented for guarantees.
- CEGs provide superior and permanent leverage of donated or budgetary resources channeled to guarantee funds by transferring to banks the capital required supporting loans on a permanent basis.
- CEGs provide the strongest possible incentive to banks to make additional loans to the targeted sector but to make loans that are consistent with prudent banking practice.
- CEGs can be implemented very quickly without the necessity of creating a large and expensive organization.
- CEGs require no on-going budget subsidy for either losses or administration over and above the initial amount required to create the fund.

Implementing Capital Enhancement Guarantees

Capital enhancement guarantees (CEGs) provide a mechanism that avoids the disadvantages of traditional guarantees while offering a basis for lenders to explore and assume risk on an incremental basis. CEGs operate entirely through commercial and cooperative banking systems and the bank regulation framework at negligible administrative costs.

Capital CEGs are based on the principle that banks require capital to bear risk. The international standard among the industrial countries is that a bank should have at least 8 units of capital for every 100 units of loans outstanding. CEGs provide that capital and to the extent that international standards are adhered to, for each unit of capital provided, banks MAY be able to provide up to 12.5 units of loans, although prudence may dictate a less leveraged ratio.

Maturities Banks are often required by the Central Bank to match the maturities of their loans to those of their deposits. Most deposits in developing countries are still relatively short term and thus are useful to banks only for supporting short-term loans. CEGs provide banks with term capital that enables them to extend the maturities of the loans that they originate.

Loan Quality Loan quality is a critical to a bank. Banks often require what appears to be excessive collateral because they are concerned that the bank auditors or the Central Bank may not view the security supporting a loan as adequate and may require the bank to create a provision. These provisions are very expensive to banks as they reduce loanable capital and create entries on the liability side of the balance sheet. CEGs avoid this problem as the capital that banks acquire in effect goes to the asset side of the balance sheet and is very much like any other capital that the bank has on its balance sheet in its ability to support additional lending.

Establishment Of The Guarantee Fund

Donor and national funds provided for auction as capital enhancement guarantees can be placed in a special account and can disbursed very quickly under the rules described below. No permanent guarantee organization is created, which means that future losses are contained and that taxpayers are not burdened, given that virtually all such guarantee organizations fail or require continued taxpayer support.

Guarantee funds must be obtained from a donor or from the government. Their ownership must be established. The owner acts as the guarantor. Possible owners include the donor, the government, a trust, or an official agency such as the Central Bank.

If a trust were created it could be administered by three trustees: one appointed by the funder(s), one by the government and one by the domestic banking community. The trustees would require no payment for their services. The trust agreement should contain a "sunset clause" indicating that the trust will be dissolved not later than one year after the last guaranteed loan has been repaid.

- A fiduciary intermediary such as a bank, national or abroad, would hold the funds and execute transactions requested by the owner or the owner's designee.
- The owner would establish an accounting system and design reports that would indicate the activities of the fund to the satisfaction of provider(s) of funds, official agencies and banks participating in or interested in participating in CEG auctions.

- The owner would be responsible for periodic audits of the guarantee fund by independent auditors.

Capital Auctions To Create CEGS To Support SME Lending

Traditional guarantees are a slow and complex process. CEGs would avoid that process entirely through the capital auction. The guarantor provides capital through a bidding mechanism managed by an existing financial agency. No additional, permanent institution is required to administer CEG operations, thus minimizing costs. The sealed bids from the participating banks would indicate the amount of additional capital needed to support a given amount of additional lending that conforms to the requirements of the guarantor. The guarantor's requirements would define eligible loans based on types of loan recipients, amounts, maturities and purposes that the guarantee is intended to support.

A bank's bid "price" is the ratio of additional capital to additional loans. If a bank wanted to make an additional loan of 100 and believed that capital of 20 would be required to support the risk involved, the bank would bid 5 (or 100/20). If the bid were successful, the bank would receive 20 from the guarantee fund in the form of subordinated debt.

Successful bidders would be those submitting the highest bids, offering the most leverage for guarantee capital. A bank would have to have at least an 8% capital-to-assets ratio to be eligible to bid and its bid could not exceed the reciprocal of its actual capital-to assets ratio. Thus a bank with a 10% capital- to- assets ratio could not submit a bid larger than 10 while a bank with an 8% capital-to-assets ratio could submit a bid of 12.5 to 1 ratio.

Those banks submitting the highest bids would receive a transfer of subordinated debt (Tier 3 regulatory capital) to support the new lending that the bank committed to undertake in its bid document. The subordinated debt obtained through the CEG auctions would convert into permanent (tier 1) capital at the end of three to five years or on a pro rata basis as installments on the guaranteed loan or loans fell due. The amount of a Tier three capital cannot exceed 50% of its Tier 1 or permanent capital under most banking laws, which serves to keep guarantee operations within prudent limits. Guaranteed lending would have to have maturities of at least three years, or the bank would have to agree with respect to revolving short term loans for activities such as cropping for cycles of at least three years.

The transfer of capital to a successful bidder would be permanent unless the bank failed to make the specified loans or irregularities were discovered. Bank supervisors in their periodic examinations would check to ensure that banks made loans as specified in their bids.

A variation on this strategy would be to permit banks to bid both a multiplier, as above, as well as an interest rate to the final borrower. The bid ratio would be multiplied by the interest rate to determine the final score and the subordinated debt would be allocated to the banks with the highest scores. The spread that the bank earned on these loans would be divided into two components. The first would be the normal spread that the bank earned on its loan portfolio. The second component would be the income over and above the average interest earned, or the risk premium for the more risky loans. These funds either would be placed in a segregated account to support further lending to the sector or would be used to capitalize a fund that would be held by the trustees and periodically auctioned. This would allow the CEGs to be allocated to the banks that could use them most profitably and would create a source of earnings to recapitalize the fund, while still allowing banks a reasonable profit margin equal to that earned on the rest of the portfolio.

The Multiple Roles Of CEGS In The Banking System

The subordinated debt provided to banks through the capital auction would serve multiple roles. The new subordinated debt obtained by the bank would be:

- “Shadow” or pseudo collateral provided by the loan applicant.
- Shadow or pseudo equity on the loan applicant's balance sheet. A bank's increased capacity to bear risk would exactly offset an equal amount of a loan applicant's deficiency in risk bearing capacity as determined by bankers in the application of their credit policies or as defined by regulators.
- Shadow or pseudo equity on the loan applicants balance sheet.
- Leveragable capital on the bank’s balance sheet

Targeting The Ultimate Borrower

The auction process makes it impossible (except through collusion) for those responsible for operating auctions and setting conditions for guarantees to direct guarantees to specific borrowers. Administrative direction of guarantees would corrupt the system and usurp lenders' role and responsibilities in credit allocation and risk management. While the guarantees could support lending to a specific sector or industry, the CEGs would not be

subject to political influence to guarantee specified persons or loans but instead would depend upon an independent banker's evaluation of the viability and profitability of the loan.

The purpose of the CEG is to use market based, risk sensitive measures to direct subsidies to lenders and their clients (the ultimate borrowers) that qualify for guarantees. Accordingly, criteria must be provided for the types of borrowers who are supposed to benefit. Relevant variables may include location, size of assets or sales or workforce, the type of economic activity or function performed by the borrower, loan purpose and other features favoured by the owner of the guarantee fund. The selected targeted characteristics defining eligible borrowers should be specified in the funding agreement(s) between the provider(s) of funds and the owner.

Selecting Auction Rules

A bank would have to have an 8% risk weighted capital-to-assets ratio to be eligible to bid.

What is an "eligible bidder"? The first requirement would be specification of criteria for banks' participation in the auction. The guarantee is designed to help banks make more risky loans, yet the funding provided by the guarantee is only a fraction of the additional risk that a bank would incur in a loan supported by a CEG. Hence, banks should meet minimum regulatory requirements regarding their capital adequacy. To offer CEGs to undercapitalized banks could place them at greater risk if their guaranteed lending performs less well than implied by their bid.

A procedure for ascertaining a bank's capital ratio would be required. Ascertaining the capital ratio could be done most easily by certification by the bank examination arm of the Central Bank. Lacking this, the report of a qualified independent auditor could be used. Subordinated debt (Tier 3 regulatory capital) obtained through CEG auctions would be convertible into permanent (Tier 1 and 2) capital at the end of three years or on a pro rata basis as installments on the guaranteed loan or loans fell due, whichever occurs later. The amount of a bank's Tier 3 capital cannot exceed 50% of its Tier 1 and 2 or permanent capital under most countries' banking law, which would keep guarantee operations within feasible limits. Guaranteed lending would have to have maturities of at least three years, or banks would have to agree, with respect to short-term loans, to continue cycles of such lending for at least three years.

The procedure adopted to ascertain a bank's capital ratio would have to be applied throughout the period in which auctions are conducted. Annual updates would be required, supported by banks' undertaking with the submission of each bid that their capital position is not materially weaker than at the last certification. Banks that had exhausted their capacity to issue subordinated debt would have to report this condition and be disqualified from further bidding until they obtain more Tier 1 and 2 capital.

The process is entirely transparent, diminishing possibilities for corruption and perpetuation of bad practices and making it possible to identify additionality, which is the difference between what would happen with a guarantee and what would occur in the absence of a guarantee. Transparency and additionality are benefits that increase welfare for the economy and society as a whole.

CEGs can also assist banks with adequate capital ratios, but which lack a sufficient quantity of additional capital, or sufficient liquidity, or both to make loans eligible for CEGs. By providing capital to such banks, their capacity to increase their lending and to attract more deposits or other sources of funds would expand. However, loans supported by CEGs made by such banks would still have to be otherwise nonconforming.

Bids should not be accepted for loans that are unlikely to be made within a reasonable period of time, such as six months after the award. This would curb pre-emptive behavior by bidders and would also simplify CEG administration. Allowing a reasonable time limit would also permit unsuccessful bidders to resubmit their rejected proposals, possibly modified, to subsequent auctions prior to the time the funds are required to fund their client or prospective client with a CEG-supported loan.

These enhancement measures offset the loan applicant's collateral deficiencies, long viewed as the basic problem for which guarantees are required. This feature would enable banks to make loans that they would otherwise like to make but which, without the guarantee, would not conform to their credit standards or to regulatory guidelines. Clearly, this would influence banks' bids as they endeavor to obtain sufficient shadow or pseudo enhancement for applicants. (This compensating feature could require changes in Polish banking regulations.)

Awarding capital on the basis of bids approaching the reciprocal of banks' own capital ratios means that banks would be led to explore risks incrementally, dealing first with loan applications that would otherwise be rejected by narrow margins. This is consistent with

good risk management, which makes risk a source of profit for lenders; failure at risk management creates losses for lenders.

The CEG simply provides additional capital to bankers willing to make more risky loans in return. A bank does not have to pay for the guarantee but does have to perform as it contracts to do under the guarantee. Whether or not a bank suffers a loss on guaranteed loans, the amount of the guarantee obtained is transferred to the bank to compensate the bank for bearing an otherwise unacceptable risk.

Performance Monitoring

Bidders' eligibility would have to be monitored, as noted above. Likewise, their performance in making guaranteed loans would have to be reviewed. Performance monitoring requirements and sanctions against unacceptable behavior by bidders should be specified in participation agreements between banks and the owners of the guarantee fund.

The transfer of capital to a successful bidder would be permanent unless the bank failed to make the specified loan or irregularities were discovered. The bank concerned should report such failure or irregularities. Bank supervisors in their periodic examinations would check to ensure that banks made loans as specified in their bids.

Regulators would routinely check ex post that the bank did not make similar nonconforming loans at the same time without a guarantee, or adjust credit policy opportunistically in order to obtain a CEG.

Banks using CEGs would be required to maintain records to show that their performance conformed to the regulations of the guarantee scheme. They would also be required to make these records available to the guarantee fund's owners or designees.

Penalties would be required as an incentive to promote competitive bidding and responsible reporting. Penalties for collusion, misuse of funds and deceptive reporting should range from loss of eligibility to participate in further auctions for less serious infractions, to return of the funds obtained from the guarantee fund for serious violations. Civil suits could also be instituted by the guarantee fund if it assumes a legal personality.

It would be expected that banks would charge higher effective interest rates on guaranteed loans than on similar loans, because the risks remain higher. Also, guaranteed loans might have longer maturities than other loans because these borrowers' cash flows may be insufficient to repay quickly. Otherwise, guaranteed loans should not differ, after shadow or regulatory adjustments, from non-guaranteed but similar, conforming loans in a bank's portfolio.

Greater skill in managing risk, not merely transferring it, is accumulated through experience in making more risky loans, creating a permanent enhancement in the risk management skills of participating banks that would be reflected in improved credit policies and lending strategies. Better risk management techniques developed from experience with guaranteed lending are likely to be applied to lending in general and to be adopted and adapted across the banking community, creating social benefits as experience is gained.

CEGs leverage financial capital: better risk management should increase bank's bid ratios enabling guarantee funds to underwrite even more lending.

Being market-based through the auction process, CEGs will fail to satisfy promoters of certain projects and activities, which they feel, should be supported by banks or by taxpayers at all costs. This is in fact one of the strengths of capital enhancement guarantees. For credit allocation to be efficient and developmental, lenders have to be skilled at identifying bad, unremunerative projects as well as good projects and activities that are rewarding.

Banks' losses from guaranteed loans would provide extremely important information in judging the performance of CEGs. In other words, the impact on a bank's capital resulting from its lending supported by CEG would have to be calculated by the bank and reported periodically over the period for which CEG-supported loans were outstanding. This information should be reported to the owner of the guarantee fund and made public.

The CEG Compared To Traditional Guarantee Programmes

- Capital enhancement guarantees are significantly different both in structure and operation from traditional approaches to guarantees.
- They focus analysis on the real problem, which is risk, and its precise cost
- The guarantee is given to the key party in the decision who requires capital to support the loan.

- Greater skill in managing risk, not merely transferring it, is accumulated through experience in making more risky loans, creating a **permanent** enhancement in the risk management skills of participating banks that would be reflected in improved credit policies and lending strategies.
- Better risk management techniques developed from experience with guaranteed lending are likely to be applied to lending in general and to be adopted and adapted across the banking community, creating social benefits as experience is gained.
- CEGs leverage financial capital: better risk management should increase banks' bid ratios enabling guarantee funds to underwrite even more lending.
- Moral hazard is greatly reduced or eliminated - banks would have undiminished incentives for good credit decisions and loan administration because their capital remains at stake.
- The process is entirely transparent, diminishing possibilities for corruption and perpetuation of bad practices and making it possible to identify additionality, which is the difference between what would happen with a guarantee and what would occur in the absence of a guarantee.
- Transparency and additionality are benefits that increase welfare for the economy and society as a whole.
- The auction process makes it impossible (except through collusion) for those responsible for operating auctions and setting conditions for guarantees to direct guarantees to specific borrowers. Administrative direction of guarantees would corrupt the system and usurp lenders' role and responsibilities in credit allocation and risk management.
- Donor funds for action as capital enhancement guarantees can be disbursed very quickly.
- Administrative costs are trivial.
- No permanent guarantee organization is created, which means that future losses are contained and taxpayers are not burdened, as virtually all such organizations fail or require continued taxpayer support.
- When guarantee funds are exhausted through auctions, they remain at work in the banking system as capital or as experience with losses or both.
- There is no social loss, discontinuity or painful transition requirement created by the termination of the guarantee programme.
- Finally CEGs can be implemented very quickly compared to the years required to build a traditional guarantee mechanism.

POLICY REFORM APPROACH TO DEVELOP CREDIT GUARANTEES

If guarantees are viewed simply a means to an end and not an end in themselves,¹ the targeting of credit to specific groups and the terms on which they can borrow can be facilitated through public policy. This can be done without the creation of any new special purpose organizations and without the injection of either public or donor funds, although not without some direct and indirect costs. The effects of guarantees can be replicated largely by modifying the policy environment in which banks operate so that the incentives to lend to specified groups are altered.

Changing the Banking Rules

Banks are generally held to two sets of criteria that arguably constrain lending to SME and micro borrowers as well as to other credit constrained groups. Banks are required to maintain an 8% capital adequacy ratio. That is, the bank must have \$8 of capital for every \$100 of loans. This ratio was established as part of the Baise Accord, in 1988, updated I 1997. With the backing of the bank for International Settlements, Baise, .it is widely recognized and used, though many argue that while 8% may be a reasonable number for developed countries, lending in developing countries is inherently riskier due to political and economic factors and should be supported by higher levels of capital. If it is clear public policy to channel credit to specific groups in the society, the ratio can be changed so those banks require less capital to make certain classes of loans. Undoubtedly, the result of such a policy of requiring less capital for more risky loans is that the “credit quality” will decline as a result. However, these loans are only one part of an overall loan portfolio. The credit deterioration on this small piece may be an acceptable economic price for the broader society to pay (more risky loans and weaker, more exposed banks) as the cost of bringing additional groups into the credit system.

Its “risk weighted assets” determine the capital of a bank. The value assigned to an asset is variable. Cash, government securities, and loans are given different weighting in the formula to determine the bank’s capital. As with the 8% rule, there is general agreement as to how the weighting is applied. However, if it is public policy to move credit to a specific sector, the weighting could be changed to in effect provide banks with additional capital by assigning

¹ Certainly many guarantee supporters and promoters with an intellectual commitment to mutual and self-help organizations would not agree that guarantees are simply a means to an end. They see these organizations as having social and political functions of building group solidarity and often political allegiances that extend beyond the economic realm of simply making more credit available to a specific group.

different weights to loans to SME or micro borrowers. Bankers would have a fairly strong incentive to seek out these loans if they were given favoured treatment for the simple reason that they could make more of them with the same capital. The societal costs would be the same as with a weakening of the capital adequacy ratio—riskier banks less able to withstand a financial shock. Again, that may be an acceptable social price as these loans are likely to be a relatively small part of the overall bank loan portfolio and the aggregate credit quality deterioration may be on balance slight.

Changing The Collateral Requirements

If we accept guarantee fund advocates' argument that collateral is a severe constraint to lending to SME and micro enterprises, and if there is agreement that public policy should favour lending to specified groups, then the collateral constraint can be modified quite simply by requiring less collateral for specific types of loans. Bankers often report that they do not make loans to SMEs because bank regulators during loan reviews inspect the collateral. The collateral offered by SMEs may be of dubious quality in that banks cannot easily realize it and may not have a ready market in which it can be sold. The legal system may make realizing collateral a difficult, costly and lengthy process. And, often banks confront social organizations that help debtors resist bank collection efforts. The result of this situation is that the collateral is severely "discounted." Banks and most probably bank regulators have an implicit discount factor in mind for certain types of loans. It is not uncommon to find that loans to SME and micro borrowers are supported by 200-300% collateral. However, when the implicit "discount" factor is applied, the collateral is likely closer to the actual size of the loan. If banks cannot obtain this level of collateral they are reluctant to lend because they fear that the regulatory authorities may "classify" the loans and force the bank to provision them. Setting up provisions (reserves against loan losses) is costly to banks, as they cannot lend the money that is put into provisions. Lending can be promoted at the same social cost noted above by modifying this constraint. The level of collateral for certain classes of loans can be set lower than the present hurdle. The social cost is the same: a somewhat weaker banking system with lower quality credits.

These measures all weaken the quality of a bank's loan portfolio. Bankers would normally be unwilling to voluntarily participate in such a programme without some offsetting financial advantage to them. These incentives can be provided through some modifications to banking regulatory policies.

Extending The Term Of Lending

Banks often are unwilling to lend or to extend the term of lending because regulatory authorities require them to run a “matched book” where the maturity of their deposits parallel the maturity of their loans. This, for example, is the case in Poland where bankers report that central bank policy severely constrains term lending as the bulk of their deposits are for 30 and 60 days and they can only originate a one year loan when they have an offsetting one year deposit. It is typically the case in developing countries that most deposits are relatively short term; therefore most lending is short term. While the deposits may be short term, the total volume of deposits may be relatively stable over time. There is usually some quantity of deposits that can be classed as “core” deposits that will remain with the banks, although individual depositors may come and go. Regulatory policy that would permit banks to run a “long book” (borrow short and lend long) for certain classes of borrowers could change the terms of lending. Banks could for example be authorized make some (probably relatively small) volume of 2-3 year term loans to SMEs against 3 month and 6 “core” month deposits instead of having to “match” the deposit terms with those of the loans. Assuming a positive interest rate curve where longer-term loans pay higher rates of interest than shorter-term loans, bankers would have an incentive to seek out these more profitable loans. Banks would presumably want to make such loans on a floating basis in volatile interest rate environments so that an increase in rates would not leave them with below market rate term loans. They would likely want to index the loans to some inflation index or perhaps to some spread over the average cost of funds. Again, such a policy is not without costs, although the costs are difficult to quantify and are contingent in that they only become apparent during a financial crisis or an extended recession. Credit quality is lowered somewhat and banks are somewhat riskier as a consequence of running a long book.

Removing the “Hidden Tax”

Banks are often required to make non-interest-bearing deposits with the central bank. In one interesting case in Venezuela, the legal deposit (*encaje legal* in Spanish) was used to finance agricultural production. Banks have been traditionally very reticent to lend to agriculture both because of its inherent risk (due both to climatological factors and government price and import policy). Initially banks were required to lend 10% of their total volume of loans to agriculture but this policy was severely resisted and evasion levels were very high (as they were in Nigeria). Instead, the government gave banks the choice of deposits at the central bank at no interest or lending to agriculture at a slightly below market preferential rate. All banks chose to have some interest income versus having none. To protect themselves, they organized together with the universities and one large foundation with close ties to a large

agroindustrial group, the technical assistance and arranged for insurance to cover most of the climatological risks. On balance, the programme worked reasonably well with low levels of loan losses due to careful selection and extensive extension work, although the programme has been criticized for its below market rates and its targeting to some politically influential groups of farmers who are not very efficient producers. The cost of such a policy is that the central bank is deprived of one (but only one relatively unimportant) tool of controlling the total volume of loans in the financial system.

Using Tax Policy To Promote Lending

Finally, the functional results of guarantees can also be promoted by tax policy. Banks could be allowed accelerated write-offs of losses on certain types of loans. Thus, banks when they suffered losses or even when they created provisions could write these losses off against profits in the year in which they occurred. Banks thus would be able to deduct provisions from taxes. If the loan were subsequently recovered either totally or partially, the write off would be reversed. There are clearly identifiable costs to this approach. Some tax revenues will be forgone as a result of accelerated write-offs.

Policy Reform: Costs And Benefits

This functional approach to guarantees may achieve the same results as establishing a fund. It is not suggested here that any one single policy will achieve the desired goals; in practice, it is likely that some mix of policies will be needed. Furthermore, it is likely that in a given country, once the paradigm is refocused on public policy instead of institutional creation, a broad range of other policies will suggest themselves as means to the same end of a more inclusive credit system. All of these approaches derived from a paradigm shift have several common elements:

- They require an agreement at the political level that some social and economic costs to the society are an acceptable price for a more inclusive credit system. This agreement is not intrinsically different than many of the other agreements and compromises incorporated into any banking system.
- In some cases, law change may be required; in almost all some rewriting of the regulatory norms is necessary. More difficult still will be to bring bankers and regulators alike to understand and apply the new policies.
- No special function organization is created. As noted above, once created these organizations are both expensive to maintain and become a political constituency that works to acquire and maintain a subsidy from either the state and/or donors.

- If the volume of loans to target groups is low for whatever reason, the policies supporting the lending are cost free and simply disappear into the background of unused law and regulations.
- The administrative costs are trivial. There is no staff to process guarantee applications and to pay claims. With a reduction to zero of bureaucracy the borrower deals only with the bank and does not have the duplicate documents and delays that characterize most guarantee operations.
- The enforcement mechanism to minimize fraud, abuse, and corruption already exists. While almost certainly there will be some creative accounting and a significant number of existing loans will be transferred to the new categories created by these policies, both bank regulators and tax authorities could sanction such behavior as a regular part of their work. Banks found to engage in abuse could be fined or ordered to establish large provision. Tax cheating could be punished the same way as other forms of tax evasion. Moving credit to target groups through these policy mechanisms is likely to be characterized by the same levels of regulatory and fiscal evasion as characterizes the general environment in which they are set. The regulatory process for these policies is likely to roughly as efficient and corruption free as it is in the rest of the financial system.

The policy reform approach to broadening credit availability trades off some contingent costs against the sure and certain cost of funding a guarantee organization's (probably depleting) reserve and the costs of staff and administrative overheads to run what is typically a small volume of high unit cost guarantees. The costs of the policy reform approach are contingent. They are not actually incurred until a financial crisis that imperils the stability of banks arises. Even then they may be slight, as the loans promoted under this policy reform approach are in almost all cases likely to be a small part of the overall loan portfolio.

The policy reform approach is not without its disadvantages. First, banks still must keep on their books the lower quality credits that this approach would generate. There is no secondary debt market in most developing countries to sell them into. Prudent bankers thus would be reluctant to make large volumes of loans if they must be kept for their net account. However, this is not substantially different than the situation where bankers accept an untried and untested guarantee organization's guarantee of payment. In the first case, bankers know and understand the capital that supports the loan as it is their own; in the latter, they have to determine the credibility of the guarantee and monitor to guarantee organization for a deterioration in its credit quality.

CHAPTER SIX

CONCLUSIONS

Until this study, most of the dialogue concerning guarantees has been set in black and white. Proponents have argued their point of view that guarantees are required to lend to specific sectors. Opponents have argued that guarantees produce no demonstrable additionality or even if they did produce additionality under some circumstances, that they are too expensive, subsidy dependent, and too subject to political manipulation to be useful as policy tools. Based on this study of the European, Asian, Canadian, African, Latin American and U.S. experience, the debate can be refocused and rephrased.

This study speaks to both arguments. The guarantee companies operating in Europe, Asia and Latin America, with perhaps the exception of the ACCION Bridge Loan Fund, do not offer models that can be used in developing countries. With the possible exception of Germany, they are clearly too expensive administratively. While the Canadian experience is certainly worthy of further study to understand more of how guarantee payments are kept to a low level, government run funds have not been successful and would not appear to be models for developing countries. These two and possibly three (if Germany is included, despite its very low volume of guarantees) cases seem to offer the best examples of how costs can be kept to acceptable levels and where additionality, if is to be found, is most likely to occur in the retail level institutions.

The guarantee industry in the U.S. does produce additionality at a cost that the users of the guarantees find acceptable and is quite low by any measure. It produces additionality in fostering and supporting the introduction of new forms of structured corporate finance and asset backed securities. Recently, it has moved into other classes of debt where there are no assets backing the securitization, such as credit card receivables. It does support and foster additionality by reaching ever further into the low income and small individual transactions sectors to find new additional clients with mortgages and other assets and debt pools that can be securitized and guaranteed with an increasing range of guarantee products. These guarantee companies are operated without any subsidy and are in fact for-profit stock companies. The expenses are kept low by both large-scale operations and constant attention to process mechanization and innovation. In the U.S. case, the individual guarantees are done on a retail individual basis but are almost always repackaged to be sold in wholesale debt markets.

The multinational guarantee company model can serve as one approach that has a substantial potential to reach SME and micro lenders and deposit takers in developing countries. The potential benefits of such an approach are significant.

Guarantees are not “magic bullets.” They do not automatically produce additionality. Neither do they automatically achieve subsidy independence and sustainability. Least of all, they do not automatically attract private capital to sustain their growth into new areas of business. These all happen under a specific set of circumstances and a policy environment largely dictated by governments.

The development of guarantees that both produce additionality and acceptable cost structures appear to march almost lockstep with the development of large and deep credit markets. The U.S. offers no example of guarantees “leading” credit markets. Government first created the preconditions by establishing GSEs to make secondary markets in home mortgages (and later student loans and farm mortgages) and by giving tax-exempt status to certain forms of municipal obligations. Without large markets, guarantee companies could not have been successful as commercial ventures.

Only from this base market did the guarantee industry begin its relentless expansion into other areas of finance and its steady move toward “low end” transactions that characterize SMEs and micro lending. From this process emerged a symbiotic and mutually supportive relationship between credit markets and guarantee companies. In some cases, the initiative seems to come from one side and in others from the other. Irrespective of who deserves the credit for creating new financial instruments, both credit markets and guarantee companies are interested in having new and expanding supply of financial products to move through the secondary markets and both cooperate to produce it.

Thus, the issue of guarantees can be refocused from are guarantees useful to development finance to a more complex question of **under what conditions are guarantees useful instruments for financial development?**

The answer would appear multifaceted and the policy implications significant for policy makers and their advisors engaged in guiding the development of financial markets in developing countries. It appears from the U.S. case that guarantees can be developed on a self-sustaining, even profitable basis, but certain basic conditions should be met. These are now summarized:

- **Guarantees require both an economies of scale and deep and large and liquid credit markets.** The creation of the large credit market in the U.S. case preceded the development of a guarantee industry. In the developing countries, almost no single country is large enough to provide an adequate market and no single debt market is likely sufficiently large; collectively across a region these conditions may be met.
- **Guarantees successfully establish a symbiotic and supportive relationship with credit markets and support the expansion of these into new areas of finance.** This growth in turn creates new markets for guarantees. The easiest transactions to guarantee in the U.S. were home mortgages and municipal debt. These however were the springboard for expansion into a wide variety of guarantee activities.
- **The capital requirements to establish efficiently sized guarantee companies are so large that they are unlikely to be met in a single developing country.** The amounts of capital required to build the infrastructure for large scale operations that can achieve low per unit administrative costs and to build the sophisticated credit analysis and surveillance systems required so that the guarantee companies can risk their capital is very large. One of the smallest players in the mortgage guarantee market, Triad with less than a 2% share, began with over \$20 million of stockholder equity and grew to nearly \$100 million in 5 years. Its largest competitor has assets of over \$2 billion. Capital of the same magnitude characterizes the bond insurance industry with the smallest just under \$100 million of capital and the largest over \$2 billion. These amounts of capital argue strongly for multilateral, regional, hemispheric or even global approaches to developing guarantees to support debt markets.
- **Guarantee markets can saturate quite readily as they concentrate in the substandard credit risks.** In the U.S., guarantees are issued on the small percentage of mortgages that have high LTVs. In the bond insurance market, the initial market was for tax advantaged municipal bonds. When these markets were saturated, the guarantee companies had to create additional sources of revenue by expanding their range of products, the extent of their guarantees, as well as by geographical expansion into Europe and Asia. This in turn requires a policy environment supportive of structured corporate debt, securitization and financial innovation in general. Especially, it argues for structuring guarantee companies that can operate across international boundaries.

- **Guarantees require the intervention** of government and in the case of developing countries perhaps also the intervention of international development organizations to help create the conditions under which guarantees can work both to increase SME and micro lending, and to develop the debt markets in which the securitized products can be placed.
- **Guarantee products can be offered entirely by the private industry without reliance on ongoing subsidy; they can be both self sustaining and profitable under the above circumstances.** The capital is raised principally from shareholders. This in turn implies that the capital markets are the chief source of this capital and should they be weak or non-existent, it is difficult to see how the amounts of capital required can be raised in a single country. A larger base of shareholders can be found in the international arena both in the international development finance organizations and in specialized financial organizations with experience in guarantees.
- **Sustaining growth and profitability requires both expansions of markets and products as well as continuing process innovation.** So clear is the U.S. case of market driven growth and innovation that the role for government intervention in the supply of guarantees must be severely questioned, if not discarded. The role of government is the creation of the financial market structure within which guarantees can operate successfully.

Guarantees have a role in financial development. However, they require a supportive policy environment to grow and flourish as an important part of the financial sector. From the U.S. case, pushing guarantees as a solution to constricted credit markets, before promoting policies for attacking that constricted market would appear to be unproductive public policy and counter productive as public investments. Creation of national guarantee industries set within the boundaries of often quite small economies are unlikely to produce success. Regional, hemispheric or international approaches can provide the economy of scale required of modern financial service industries.

Finally, there are strong arguments in the guarantee programmes reviewed here against imposing the restrictions of public sector finance and the inevitable politically motivated targeting. The goal of developing a viable and sustainable financial guarantee industry that

can support SME and micro intermediaries in accessing financial markets and in mobilizing savings is most likely to be realized by a combination of a multilateral guarantor as outlined above combined with some of the non-institutional approaches. This mix of institutions and policies would both support and be supported by credit markets which could reach further and deeper into the economy to extend credit to smaller borrowers on more favourable terms than can be achieved without the third party guarantees. These goals can best be realized by developing guarantees as a private company, which can operate across international boundaries and access the credit markets of both the developing and developed countries.