

CORPORATE INSURANCE AND DEBT CAPACITY: EMPIRICAL EVIDENCE FROM ITALY

Fabrizio Santoboni*, Gianfranco A. Vento**, Pasqualina Porretta***

Abstract

In banks/enterprises relationships a key role is played by Basel II Framework, which accurately correlates banks' capital requirement to risks, by stimulating a more precise creditworthiness assessment. As known, the containment of risks inherent in bank financing can be carried out *ex ante*, through an adequate screening, which allows the proper assessment of enterprises' economic and financial situation and a sound composition of the total loan portfolio, and *ex post*, through guarantees, which allow benefiting from a loss reduction only after insolvency has occurred. From this perspective, Basel II Framework brings important changes, since life insurance and surety policy are "eligible" guarantees for Credit Risk Mitigation. Nevertheless, banks could offer a better pricing to borrowers not because they are less risky, but because the whole operation would need a lower capital requirement. Therefore, corporate risks reduction – which would allow, in the absence of credit rationing, a more profitable debt capacity – is necessarily achieved through an appropriate "umbrella insurance", able to cope with both direct and indirect loss.

This work aims at investigating the existence of a "virtuous" relationship among corporate insurance purchases, credit risk and debt capacity. Such aim has been pursued through different steps: review of literature, to identify the reasons of corporate demand for insurance; analysis of Italian enterprises' corporate insurance purchases; drafting of a questionnaire, to submit to a sample of the main insurance companies working in Italy, intended to identify what kind of role they play in the relation with enterprises and which insurance products they offer; drafting of a questionnaire, to submit to a sample of the main banks working in Italy, intended to investigate whether and how the possession of corporate insurance is taken into consideration in the determination of enterprises' creditworthiness****.

Key Words: Debt Capacity; Corporate Insurance; Credit Risk Mitigation; Risk Management; Creditworthiness

JEL classification: G22; G21

* Senior Lecturer of Banking and Finance, Faculty of Economics, "Sapienza" - University of Rome, Via del Castro Laurenziano 9, 00161 Rome

E-mail: fabrizio.santoboni@uniroma1.it

** Professor of Banking and Finance, Regent's College, London and G. Marconi University, Rome

E-mail: gianfranco.vento@uniroma1.it

*** Senior Lecturer of Banking and Finance, Faculty of Economics, "Sapienza" - University of Rome, Via del Castro Laurenziano 9, 00161 Rome

E-mail: pasqualina.porretta@uniroma1.it

**** This study is the result of a joint effort. However, sections 3.2 and 4 are attributable to Fabrizio Santoboni, sections 1 and 2 to Gianfranco A. Vento and sections 3 and 3.1 to Pasqualina Porretta.

1. Introduction

Although firms are currently experiencing widespread difficulty in obtaining access to credit, thanks to the use of more accurate and stringent methods of evaluating credit worthiness, Basel II is playing a fundamental role in defining the relationship between banks and firms by establishing a more efficient link between capital requirements and risks. This technique enables banks to improve the risk/yield correlation and promotes efficient

capital allocation. Moreover, it provides firms with easier access to credit at a cost that more closely reflects the risk involved.

However, banks can limit their economic and financial risks they are exposed to on the lending portfolio both *ex ante*, by appropriate screening to correctly evaluate the creditworthiness of their borrowers and shrewd structuring of the overall loan portfolio, and also *ex post*, by the use of instruments (i.e. guarantees) that enable them to reduce losses after insolvency has occurred.

In the event of this latter scenario, Basel II introduces significant innovations, for among the instruments that can be used for Credit Risk Mitigation (CRM), these same guarantees can play a key role – especially those known as “eligible” (or “compliant”). This kind of guarantee includes two types of insurance: life insurance policies and surety policies.

However, in this case, the bank might offer the borrower a better pricing not so much because it involves less risk, but because the entire operation would involve a lower capital requirement. Clearly then, the best way to limit the business risks firms are exposed to (especially the concrete ones) – enabling them, in the absence of credit rationing, to benefit from more advantageous conditions of credit access – inevitably involves protection provided by an adequate insurance “blanket”, made up of property, car and business interruption policies, that is able of withstanding both “direct” and “indirect” damages.

In cases where there is recognition of the “therapeutic” effect of this type of coverage, there is strong evidence that a “synallagmatic” relationship is set up between the extent of insurance coverage and a greater willingness on the part of credit intermediaries to provide company finance. This occurs because management of the risks to which firms are exposed reduces the overall risk and consequently improves credit worthiness (Mayers D., Smith C.W., 1982; Thakor A.V., 1982; Davidson W.N. *et al.*, 1992; Zou H., Adams M. B., 2008 e 2009; Ania, Irsa, 2010).

Given this premise, we must point out that traditional lines of research into the relationship between banks and firms have given little importance to the role insurance can play in enhancing company access to credit.

The aim of this paper is to ascertain whether there is a “virtuous” relationship in Italy between the extent of insurance coverage, credit risk and access to credit.

Therefore, after briefly reviewing the national and international literature, we will focus on an analysis of the results of a sample survey conducted on two selected groups of insurance companies and banks operating in Italy, in order to ascertain:

- on the one hand, if insurance companies, in their dealings with client firms, offer a *risk management insurance* service that aims at finding *ad hoc* solutions for an efficacious management of risks connected with their specific type of activity;
- on the other hand, what credit policy is adopted by banks towards companies that make use of insurance coverage.

2. Literature review

Only a highly limited number of theoretical studies and empirical surveys have been carried out on

company insurance policies and their possible uses. Moreover, these studies have been conducted principally by researchers and practitioners working outside the Italian context¹.

Even fewer studies have placed a specific focus on whether there is a connection between the purchase of insurance policies and access to credit.

The starting point for this type of survey was the early ‘80s, when a part of the literature on financial matters began expressing the idea, with regard to bank-company loans, that the purchase of *property* insurance coverage might be a valid tool for reducing the relative probability of insolvency and the cost (not merely economic) of a possible crisis. In other words, the use of *property* insurance could increase debt capacity, reduce the cost of capital and augment company value. It follows that the decision to make use of insurance services could also have a real effect on a company’s financial structure.

One of the first studies on this subject was carried out by Thakor A. V. (1982), who claimed that insurers act as intermediaries whose task is to “process” information passing between financial backers and borrowers and thereby to play a key role in reducing the costs connected with asymmetrical information. By taking on the risks related to the borrower’s *collateralised assets* given as warranty to the financial backer, insurance companies assist in the management of information uncertainty that the lender has to face both *ex ante*, during *screening* of the debtor’s credit worthiness, and *ex post* during the monitoring phase that follows the drawing up of a contract.

At this point it should be noted that the borrower can also be encouraged to take out insurance, as this would contribute to reducing creditor concern over a possible insolvency resulting from substantial and unexpected losses. In this case, the purchase of *property* insurance can help both to reduce the cost of credit and to increase debt capacity. Naturally, there is a greater incentive to take out insurance when annual savings in terms of interest payable exceed insurance premiums.

Some years later, when considering the reasons that induce individuals and firms to seek insurance coverage, Davidson W.N. *et al.* (1992) found that the main motive for corporate clients was to guarantee the punctual repayment of creditors: in exchange for taking out insurance policies, company creditors were willing to grant credit at more profitable conditions for shareholders, thus producing positive effects in terms of company value.

Following on from a previous study conducted in 2005, Zou H. e Adams M. B. (2008 e 2009) used a sample of publicly listed Chinese firms, for the period ranging from 1997 to 2003, to detect a possible relationship between extent of insurance coverage, corporate debt capacity and the cost of debt. The

¹ Studies outside the Italian context refer to firms located mainly in North America or Asia.

authors focused particularly on two closely-related questions: firstly, do company indebtedness and the cost of credit act as an incentive for insurance coverage? And secondly, does the presence of insurance coverage in turn influence corporate debt capacity and the cost of credit? The study findings indicated that the three factors were simultaneously related. Moreover, the study demonstrated that organizational structure, firm size and growth opportunities were vital factors in influencing insurance decisions in the companies investigated.

A study conducted on 2,295 companies by Ania (2010) and Irsa between 2008 and 2009 (the results of which have been fully classified in papers by Schivardi F. (2010) and Guiso L., Schivardi F. (2010), showed that firms cover mainly the risk of fire, theft and robbery, and civil responsibility for third parties and employees, whereas little attention is given to the risk of an interruption in business activity, particularly when it comes to taking out *ad hoc* insurance policies. Factors that promote the decision to draw up insurance contracts are: company size, the “age” of the company, the probability of sustaining or causing damages to third parties in the future, the owner’s aversion to risk taking and confidence in insurance companies. The study appeared to confirm the hypothesis of an association between company insurance and improved conditions of credit access.

Lastly, after analyzing the most significant theoretical assumptions in the literature together with evidence gathered from empirical surveys, Santoboni F., Arcadi V. (2011) demonstrated that one of the principal factors that influence companies in their insurance decisions is the possibility of benefiting from better conditions of credit access. However, in Italy, the percentage of companies covered by an adequate insurance “blanket” appears to be rather low. Among the reasons given for the lack of insurance coverage, the ones that undoubtedly stand out are the poor perception of exposure to risk and the high cost of insurance services.

3. Survey

As we have seen, attempts have also been made in Italy by the firms which require insurance covers and researchers to determine the role played by insurance sector in relations between banks and companies, although the spotlight has focused almost exclusively on the entrepreneurial scene. In order to fill this gap in information, we decided to conduct a survey entitled: “*Corporate insurance and debt capacity: the point of view of banks and insurance companies in Italy*” which would express the opinion of the other two categories capable of enhancing the “virtuous” relationship between extent of insurance coverage, credit risk and access to credit, that is to say the banks and insurance companies.

3.1 Data description and empirical methodology

Due to the lack of general information and a public database that would have been of assistance in reaching our research aim, this study was carried out in the first half of 2012 using a *judgmental sampling*²). It was conducted by creating and subsequently administering specific *Questionnaires* to two selected samples operating in Italy: on the one hand, a group of insurance companies (Insurance Questionnaire), and on the other, a group of banks (Bank Questionnaire). Despite the limited number of intermediaries taken into consideration, these samples provide a significant response as they represent a large segment of the markets analysed.

The intermediaries interviewed

As stated above, the method chosen for conducting this study entailed an “upstream” selection of the interlocutors so that responses would have a significant “pointer value” in indicating the practices usually followed in relations with the real sector of the economy.

In this connection, the main source of information for selecting potential interviewees from the insurance sector were the statistics contained in the Ania Report “Gross written premiums in Italy, 2011”³ which lists groups of companies according to their respective share of the insurance market, calculated on the basis of collected premiums (Table 1).

No similar assessment of the importance of each institution was possible in the bank sector, since the Glossary included in the Appendix of the 2011 Annual Report of the Bank of Italy merely provides a list of credit intermediaries operating in Italy, according to their category and size (Tables 2 and 3)⁴.

To overcome this apparent *impasse*, we consider data disseminated by the Bank of Italy and data published in credit intermediary balance sheet documents for the year 2011. By comparing the total assets of each credit intermediary with those of the entire bank industry, we were able to identify the major *players* operating in our country (the first 15 of which are listed in Table 4) and focus most of our

² Purposive sampling is a non-probability method of sampling, i.e. a method where the choice of the n units that make up the sample is not randomized. Units are selected because of the need to obtain specific knowledge or because of their particular characteristics. In fact, in purposive sampling, certain sectors or sample units are chosen because they represent the type of situation to be analyzed and because researchers believe they contain a high concentration of the phenomenon under investigation. The commonest form of purposive sampling is quota sampling which is obtained by selecting sample units that are thought to be like or similar to the sample parameters and those of the general population. For a thorough discussion of sampling methods, see Frosini B.V. *et al.* (1999).

³ Ania (2012), pp. 17-18.

⁴ Bank of Italy (2012), pp. 307-309.

attention⁵ on these intermediaries. Although few in number compared with the overall figure for this sector, they nevertheless represent over 88% in terms of market share. Moreover, we facilitated our research survey by referring mainly to “homogeneous bank” groups or to groups of “heterogeneous bank origin”⁶, since this enabled us to reasonably assume that responses from the leading bank or from one of the organizations included within the group confines, presented a faithful picture of the universally shared *modus operandi*.

Questionnaires

Questionnaires were the method chosen to obtain answers to the questions that prompted the present survey. The aim of the *Insurance Questionnaire* was to ascertain whether, in their relations with corporate clients, insurance companies adopt a distributive *push* strategy rather than merely satisfying specific requirements by offering a service of risk management insurance (i.e. a kind of “consultancy” that enables them to offer a better management of corporate risks). As regards the *Bank Questionnaire*, the aim was to investigate whether the drawing up of insurance contracts was a factor taken into consideration when determining company credit worthiness, and if so, what was the importance given to this.

Each of the Questionnaires used in the survey was divided into three parts: the first and second were designed to gather information respectively on the interviewee and the company/bank to which they belong; the third part contained the questions that were the subject of this analysis. When planning these instruments, prime importance was given to the following aspects:

1. a limited number of questions (without, however, impairing the informative value of the survey);
2. the almost sole use of objective questions, often with multiple choice answers;
3. adoption of an *à la de Leeuw* method based on a *sequential mixed-mode approach*⁷, capable of combining the temporally sequential use of different methods of survey (in our case, initial request of direct interview, followed by dispatch of questionnaires via e-mail, and final request of phone interview).

The reason underlying this choice of method was that the combined use of the aforementioned aspects in cross-sectional research guarantees a higher rate of response on the part of the persons interviewed.

⁵ As will be subsequently explained, the Survey included intermediaries other than those listed in Table 5.

⁶ On the subject of financial conglomeration, see Proto A. (2002); Proto A. (2006); Santoboni F. Vincioni A. (2007); Proto A. (2008).

⁷ de Leeuw E.D. (2005).

To add greater “reliability” to the responses obtained in both questionnaires, we built up an “identikit” of the ideal interviewee. In the bank sector, this profile corresponded to the person in charge of the credit sector; while for insurance companies, it was the person in charge of the commercial sector.

3.2 Results and discussion

Questionnaires were administered to a total of 120 financial intermediaries that included 60 insurance companies and the same number of banks, thus representing well over 90% of the sectors to which they belonged⁸. Of these, responses were obtained from 16 insurance groups and 27 credit intermediaries⁹, that is to say, approximately 61% and 40% of their respective sectors.

Insurance Questionnaire

Almost all of the companies interviewed declared that company clients seek to insure primarily against fire risk (94%) and thereafter against theft and third-party liability (88%) (Figure 1). Interestingly, in the category “Further types of risks for which companies seek insurance”, there is an almost unanimous demand to cover the risk of accident and illness.

As regards affiliations (Figure 2), firms that make use of insurance services belong mainly to the *retail* sector (94%) and to that of *micro, small and medium-sized industries* (81%), while only a limited number of insurance companies include *large corporates* (19%) among their clients.

With regard to the most widely-used type of contract (Figure 3), 69% of companies choose the single risk solution; although the global policy (56%) and the “all risk” policy (38%) are also frequently chosen.

As for the extent of insurance coverage, 60% of those interviewed reported that they possess a maximum of 3 insurance policies (Figure 4), while 87% of interviewees reported that their companies purchase up to 5 insurance policies. Only 7% of companies stated that they had taken out more than 10 insurance policies.

In most cases (88%), it is the company owner who interacts with the insurance company (Figure 5). Only in a limited number of cases do entrepreneurs transfer management of insurance expenditure to the administrative office (31%) or other staff (19%) -

⁸ For the insurance sector, we took into consideration all the 60 groups listed in Table 1; for the banking sector, besides the 15 intermediaries listed in Table 4, another 45 small-sized players were taken into consideration to ascertain whether different operational techniques had been adopted.

⁹ Among the 27 banks interviewed, there were:

- 14 Limited banks, 1 Branches of foreign banks, 5 cooperative banks and 7 mutual banks (Table 2);
- 2 Major banks, 1 Large bank, 3 Medium banks, 8 Small banks and 13 Minor banks (Table 3).

particularly the *risk manager*. This is entirely in keeping with the picture of the “typical” client company that emerges in Figure 2.

When choosing a channel for purchasing insurance policies, the “traditional” ones undoubtedly take pride of place (Figure 6): in fact insurance companies reported that firms resort principally to agencies (56%) and/or brokers/consultants (50%), while only restricted use is made of other channels. This is not surprising considering the need for the support of a consultant in managing company risks – a service that cannot easily be provided by “alternative” channels¹⁰.

Finally, as regards the use that firms make of *compliant policies*, 60% of insurance companies find a market for this type of contract in the company sector (Figure 7).

Bank Questionnaire

With reference to the bank sector, our aim was to ascertain whether, and to what extent, possession of insurance coverage is a factor in determining the credit worthiness of firms that are seeking a loan and in granting more favourable conditions of credit access. For this purpose, we decided to divide our survey into two main parts: the first was devoted to “eligible” policies; the second focused on corporate insurance.

First of all, bank interviewees were asked how much “weight” was given to “compliant” policies in the range of guarantees that companies are required to provide. Figure 8 shows that only a highly limited number of those interviewed made use of this type of insurance (11%), while data concerning property guarantees (required by all banks), personal guarantees (96%), personal mortgage guarantees (85%) and financial guarantees (involving more than half the credit intermediaries) were in sharp contrast with these findings.

In answer to the question: “What percentage of allocated credit is covered by guarantees?”, approximately three quarters of the respondents (80%) indicated a percentage in excess of 60% (Figure 9). This gives us the opportunity to make some considerations.

One of the prime objectives behind the planning and subsequent creation of the Basel II regulatory framework was to drastically reduce the importance previously given to guarantees: in fact, the availability of more efficient instruments for assessing the counterpart’s debt repayment capacity would have allowed banks, in theory, to dispense with the need for systematic guarantees, except under particular circumstances. However, in the light of accepted practice on the credit market – a procedure that was confirmed by the banks interviewed in our survey - it would appear that resorting to guarantees

is still current practice. In point of fact they offer a dual efficacy for mitigating risks in that they play:

- a “regulatory role”: Basel II enables capital absorption to be reduced provided the guarantees meet certain requisites;
- an “effective role”: they play a key role in CRM. Although the economic risk underlying specific exposure remains, guarantees allow the risk to be transferred (totally or partially) to other subjects or assets, so that, in case of *default* on the part of the company borrower, there is a diminished economic risk for the credit intermediary.

Since life insurance and surety policies are included in the *Basel compliant* guarantees¹¹, we decided to ask the banks whether companies:

- a) make actually use of insurance instruments used for CRM;
- b) are able to obtain more favourable conditions for access to credit.

As regards sub paragraph a) (Figure 10), over half of credit intermediaries (56%) reported that companies do not resort to this type of insurance; on the contrary, the remainder of those interviewed gave an affirmative reply, declaring that companies use both types of insurance (37%) or only life contracts (7%). With regard to sub paragraph b), less than half of those interviewed (47%) reported granting more advantageous conditions to company clients (Figure 11).

A reasonably reliable interpretation of the responses taken into consideration thus far appears to suggest that the limited use of “eligible” policies may be due to the fact that companies have little knowledge of the potential efficacy and that banks have a preference for traditional types of security.

As previously stated, the second part of the questionnaire focuses on instruments that offer coverage for business risks. First of all banks were asked whether possession of these instruments was included among the factors taken into consideration for evaluation of the credit worthiness of a client company and, secondly, what was the “weight” given to corporate insurance in this evaluation procedure. Almost 60% of those interviewed gave an affirmative response to the first question (Figure 12), while for the second point (Figure 13), most of the credit intermediaries (61%) declared that the incidence of company policies in determining the credit worthiness of an enterprise did not exceed 5%. 28% of banks claimed that this incidence ranged from 5 to 10%; while 11% placed incidence in the range of 15 to 20%.

In answer to the question: “Do banks offer more advantageous conditions of credit access to

¹⁰ Reference is to bank counters, financial advisor networks, internet and telephone contact.

¹¹ For further information on the general and specific requirements of “eligible” policies see Santoboni F., Arcadi V. (2011).

companies with adequate risk coverage?" (Figure 14), 64% of intermediaries gave an affirmative response.

Lastly, among the factors that chiefly affect the definition of credit costs (Figure 15), credit rating/worthiness played a key role (reaching a level of 92% among those interviewed), followed at some distance by maturity (54%), guarantees (31%), characteristics of the operations and overall bank/borrower relations (23%), costs/tax structure and capitalisation (15%) and repayment method and overall opportunities (12%).

Naturally consideration must be given to the fact that both the type and size of the bank intermediaries that responded to our questionnaire may have influenced the findings. For this reason, we decided to make a double subdivision of the aforementioned intermediaries – in accordance with classification methods adopted by the Bank of Italy (Tables 2 and 3) – so as to distinguish between:

- a) on the one hand, "Limited banks" and "Other banks" (branches of foreign banks, cooperative banks and mutual banks);
- b) on the other hand, "Major", "Large" and "Medium"-sized banks ("MLM banks") and "Small" and "Minor" banks ("SM banks").

For sub-division a), no substantial difference was found between the two groups of credit intermediaries as regards the type of guarantees requested and the percentage of allocated credit covered by guarantees. A similar consideration can be made for the use of "compliant" policies, as regards the granting of more favourable conditions of credit access in the presence of such guarantees. However, a different picture emerges when we focus on the use of company policies: in fact it is mainly corporate banks that take this coverage into consideration when determining credit worthiness (Figures 16 and 17) and offering improved conditions of credit access (Figures 18 and 19) – although, in terms of incidence, no substantial difference exists in determining credit worthiness.

As regards sub-division b), no significant differences emerged in the behaviour of the two groups of credit intermediaries with regard to the type of guarantees requested by client companies, the importance given to corporate policies in determining company credit worthiness, the attention to corporate policies when the banks assessing the creditworthiness of a client company and the possibility of obtaining more favourable credit conditions in the presence of such policies.

However, for all other aspects we observed disparities (significant in some cases) attributable, in our opinion, to diverging company set-ups and management methods adopted for the lending process.

Evidence of these discrepancies can be seen mainly in the fact that "SM" banks grant financial backing even when guarantees are lacking or limited,

while at least 61% of the credit granted by "MLM" banks is backed by guarantees (Figures 20 and 21).

The more conspicuous tendency of "MLM" banks to require guarantees is confirmed by the use made of "compliant" insurance policies (Figures 22 and 23) by their company clients who thereby obtain more favourable conditions of access to credit (Figures 24 and 25).

Corporate insurance and debt capacity

Only limited use is made of "eligible" policies as instruments of guarantee, although possession of this type of insurance seems to secure the possibility of better conditions of access to credit (Figure 26): in fact, 89% of banks declare that they offer more favourable conditions to company clients in possession of at least one "compliant" policy. At the same time, with regard to their lending operations with firms that lack this type of insurance coverage, 90% of the intermediaries interviewed stated that they do not offer them more advantageous conditions. Statistical evidence of this can be seen when an analysis of the causal relationship between use of "compliant" policies and more favourable conditions of credit access show a positive correlation of significant intensity: in this case, the value expressed by the *Squared Cramér's V Statistic* ($\phi_{rel;bil}^2$) is 0.41 (see Table 5).

If we focus our attention on the connection between possession of corporate insurance and access to credit (Figure 27), the possibility of obtaining more favourable credit conditions does not seem to depend on the extent of client company's insurance coverage: in fact Table 6 shows that the value of the *Squared Cramér's V Statistic* is substantially nil (0.04), indicating the absence of any kind of association between the two factors.

As regards the causal connection between "compliant" policies and accessing credit at more favourable conditions (Figures 28 and 29), it is possible to highlight a more significant role for "Limited" banks; for this kind of banks the survey revealed the greatest link compared to the entire sample analysed (Table 7). On the other hand, with regard to the connection between possession of corporate policies and credit access conditions (Figures 30 and 31), the data confirm the lack of an association between the two factors.

As regards the classification by size (Table 8), while the "SM" banks (Figures 33 and 35) confirm the findings universally expressed by the credit intermediaries interviewed, the findings expressed by "MLM" banks (Figures 32 and 34) are somewhat surprising. It would appear that both possession of "compliant" policies and the possession of corporate insurance policies has effect on obtaining more favourable conditions of credit access; in fact, the value expressed by the *Squared Cramér's V Statistic* is the highest possible ($\phi_{rel;bil}^2=1$). That case

indicates a certain coherence in credit policy among larger banks¹². Clearly, these considerations reflect the limited number of the study sample and should be seen as a descriptive analysis of the data at our disposal. For all, more sophisticated statistical methods could be used in order to make more complete and significant this analysis. This type of study should be the subject of future research and investigation.

4. Conclusion

Although companies still have limited insurance coverage, there is nevertheless evidence to suggest that a risk management “culture” is spreading in the entrepreneurial sector¹³. In companies that lack the specific financial – and more importantly – human resources needed for this kind of activity, insurance companies could become *partners* in firms that would like to pursue a policy of careful management of *corporate risk*, designed to create the value of their enterprise.

However, the decision to resort insurance services requires a thorough analysis of the costs and benefits associated with different types of risk management. In our opinion, if adequate insurance protection guaranteed more favourable terms of credit access, we would witness an increase in the number of companies taking out insurance policies.

On the other hand, even though possession of corporate insurance does not often lead to more favourable credit terms, nevertheless it seems that banks increasingly bear this factor in mind when assessing the credit worthiness of a client company.

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¹² Ultimately it is as if there was a “rule”: possession of company policies = more favorable terms of access to credit; lack of company policies = failure to obtain better credit access conditions

¹³ Clear evidence of this is that insurance companies claim to offer consultancy on risk prevention and the use of specific instruments in firms.

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Appendix

Table 1. Life and non life insurance market in Italy – 2011

n°	Company/corporate groups	Premiums (thousand €)	Var. % 2011-2010	Incidence % total	n°	Company/corporate groups	Premiums (thousand €)	Var. % 2011-2010	Incidence % total
1	GRUPPO GENERALI	20.104.663,00	-5,2%	18,24%	31	CRA VITA	208.195,00	-53,6%	0,19%
2	GRUPPO INTESA SAN PAOLO	11.230.699,00	-17,2%	10,19%	32	GRUPPO NAZIONALE SUISSE	175.346,00	4,1%	0,16%
3	GRUPPO ALLIANZ SE	9.816.399,00	-14,2%	8,91%	33	ALICO ITALIA	162.127,00	11,8%	0,15%
4	GRUPPO ASSICURATIVO POSTE VITA	9.556.746,00	0,4%	8,67%	34	COFACE ASSICURAZIONI	154.370,00	4,7%	0,14%
5	MEDIOLANUM VITA	9.143.555,00	3,4%	8,29%	35	GRUPPO BANCA POP. DELL'ETRURIA E DEL LAZIO	111.218,00	-50,8%	0,10%
6	GRUPPO FONDIARIA-SAI	8.883.720,00	-24,0%	8,06%	36	SACE BT	103.628,00	12,0%	0,09%
7	GRUPPO ASSICURATIVO UNIPOL	6.712.782,00	-4,0%	6,09%	37	GRUPPO NET INSURANCE	80.872,00	-17,7%	0,07%
8	GRUPPO AVIVA	4.255.450,00	-29,9%	3,86%	38	EILO DIRETTO	79.217,00	9,8%	0,07%
9	GRUPPO CATTOLICA ASSICURAZIONI	3.758.221,00	-19,7%	3,41%	39	ASSICURATRICE MILANESE	73.639,00	32,6%	0,07%
10	GRUPPO AXA	3.684.518,00	-40,3%	3,34%	40	GRUPPO LE ASSICURAZIONI DI ROMA	71.621,00	5,3%	0,06%
11	GRUPPO BNP PARIBAS	2.990.409,00	5,7%	2,71%	41	PRAMERICA LIFE	66.743,00	16,5%	0,06%
12	GRUPPO REALE MUTUA	2.687.270,00	1,7%	2,44%	42	RRM SALUTE	58.149,00	56,4%	0,05%
13	CNP UNICREDIT VITA	1.980.951,00	-28,9%	1,80%	43	SOC.SVIZZERA D'ASSICURAZIONE	50.067,00	15,8%	0,05%
14	GRUPPO CREDIT AGRICOLE	1.694.615,00	-5,3%	1,54%	44	ARISCOM	50.026,00	46,1%	0,05%
15	GROUPAMA ASSICURAZIONI	1.608.621,00	4,4%	1,46%	45	CREDEM ASSICURAZIONI	41.418,00	3,7%	0,04%
16	GRUPPO BANCA CARIGE	1.269.958,00	-15,2%	1,15%	46	ASSICURAZIONI RISCHI AGRICOLI VMG 1857	37.696,00	14,6%	0,03%
17	GRUPPO HELVETIA	1.005.962,00	3,0%	0,91%	47	ARAG	36.541,00	2,0%	0,03%
18	GRUPPO ZURICH	965.037,00	-5,2%	0,88%	48	GHARA ASSICURAZIONI	32.379,00	18,4%	0,03%
19	VITTORIA ASSICURAZIONI	937.177,00	14,6%	0,85%	49	MEDIOLANUM ASSICURAZIONI	25.331,00	6,4%	0,02%
20	SKANDIA VITA	780.859,00	-46,8%	0,71%	50	CE ASSICURAZIONI	22.664,00	2,5%	0,02%
21	GRUPPO SARA	760.551,00	-6,8%	0,69%	51	ELBA ASSICURAZIONI	21.413,00	47,4%	0,02%
22	CREDEM VITA	708.830,00	34,4%	0,64%	52	UCA - ASSICURAZIONE SPESE LEGALI	21.267,00	18,7%	0,02%
23	GRUPPO ITAS ASSICURAZIONI	592.981,00	-13,1%	0,54%	53	APULIA PREVIDENZA	10.722,00	-54,6%	0,01%
24	GRUPPO UNIQA	591.698,00	-6,9%	0,54%	54	NOBIS ASSICURAZIONI	9.623,00	43,1%	0,01%
25	GRUPPO HDI ASSICURAZIONI	534.593,00	-13,0%	0,48%	55	GLOBAL ASSISTANCE	7.335,00	31,4%	0,01%
26	GRUPPO COVÉA	534.314,00	-43,5%	0,48%	56	S2C	6.154,00	460,0%	0,01%
27	GRUPPO ASSIMOCO	507.433,00	-35,4%	0,46%	57	TUTELA LEGALE	2.582,00	84,2%	0,00%
28	DIRECT LINE INSURANCE	496.149,00	45,1%	0,45%	58	BENTOS ASSICURAZIONI	1.611,00	-65,1%	0,00%
29	GRUPPO MUNCHENER RUCK	494.852,00	-1,3%	0,45%	59	SLP	1.449,00	3,1%	0,00%
30	UBI ASSICURAZIONI	219.097,00	1,8%	0,20%	60	IMA - ITALIA ASSISTANCE	1.039,00	3,8%	0,00%
						TOTAL	110.232.552	-12,2%	100,00%

Source: ANIA, (2012), *Gross written premiums in Italy, 2011*, Rome, April, pp. 17-18.

Table 2. Banks resident in Italy: grouped according to category – 2011

Category	Number	%
Limited banks	234	30,75
Branches of foreign banks	75	9,86
Cooperative banks	37	4,86
Mutual banks	415	54,53
Total	761	100,00

Source: Bank of Italy, (2012), *Annual Report for 2011 - Appendix*, Rome, 31 may, p. 307.

Table 3. banks resident in Italy: grouped according to size – 2011

Size	Number	%
Major	5	0,66
Large	11	1,45
Medium	34	4,47
Small	142	18,66
Minor	569	74,77
Total	761	100,00

Source: Bank of Italy, (2012), *Annual Report for 2011 - Appendix*, Rome, 31 may, p. 307.

Table 4. Banks resident in Italy: market share – 2011

Table 4. Banks resident in Italy: market share - 2011			
n°	Credit intermediary	Total assets (thousand €)	Incidence % total
1	GRUPPO UNICREDIT	926.768.744,00	31,41
2	GRUPPO BANCARIO INTESA SANPAOLO	639.317.101,00	21,67
3	GRUPPO MONTE DEI PASCHI DI SIENA	240.757.724,00	8,16
4	GRUPPO BANCO POPOLARE	134.126.618,00	4,55
5	GRUPPO UNIONE DI BANCHE ITALIANE	129.803.694,00	4,40
6	GRUPPO BANCARIO BANCA NAZIONALE DEL LAVORO	97.943.321,00	3,32
7	GRUPPO BANCARIO MEDIOBANCA	76.904.217,00	2,61
8	GRUPPO BANCA POPOLARE DELL'EMILIA ROMAGNA	60.487.931,00	2,05
9	GRUPPO BIPIEMME - BANCA POPOLARE DI MILANO	51.935.786,00	1,76
10	GRUPPO BANCARIO CARIPARMA CREDIT AGRICOLE	49.290.653,00	1,67
11	GRUPPO BANCARIO DEXIA CREDIOP	48.831.774,00	1,66
12	GRUPPO CARIGE	44.860.061,00	1,52
13	GRUPPO BANCARIO BANCA POPOLARE DI VICENZA	41.878.711,00	1,42
14	GRUPPO BANCARIO VENETO BANCA	37.968.621,00	1,29
15	CREDITO EMILIANO - CREDEM	31.097.308,00	1,05
	Total	2.611.972.264,00	88,53

Source: Our data processed on basis of Bank of Italy data and data from intermediary balance sheets

Figure 1. Risks covered by client companies (per 100 insurance companies)

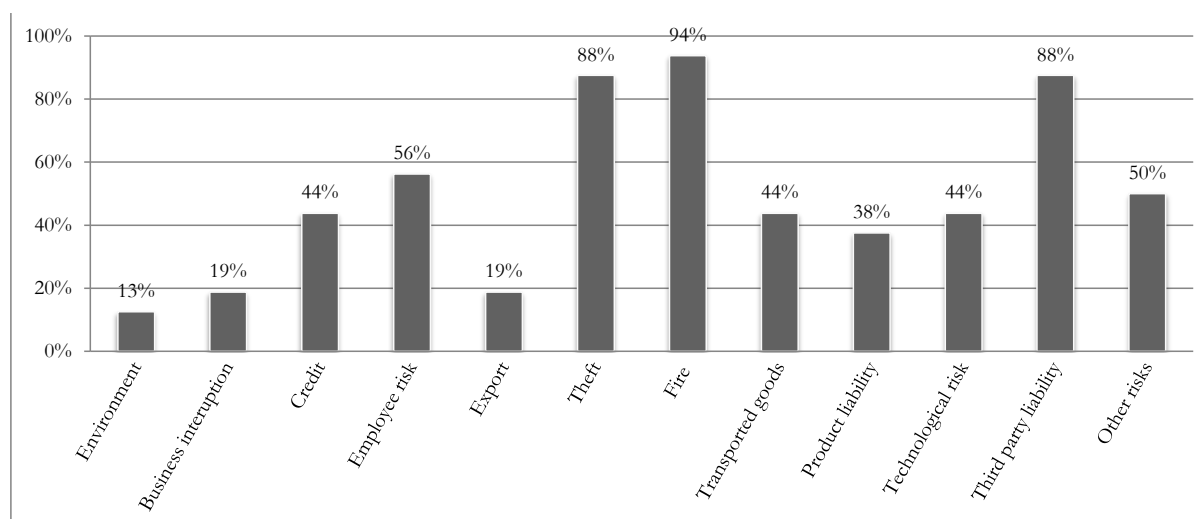


Figure2 . Type of client company (per 100 insurance companies)

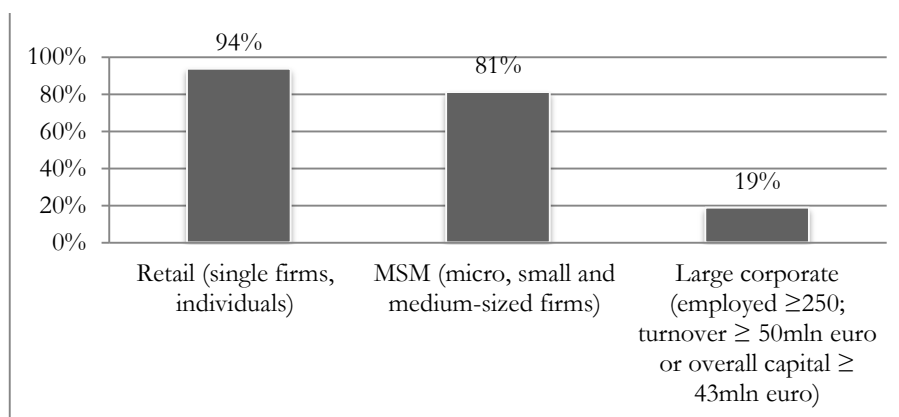


Figure 3. Type of policy used by client company (per 100 insurance companies)

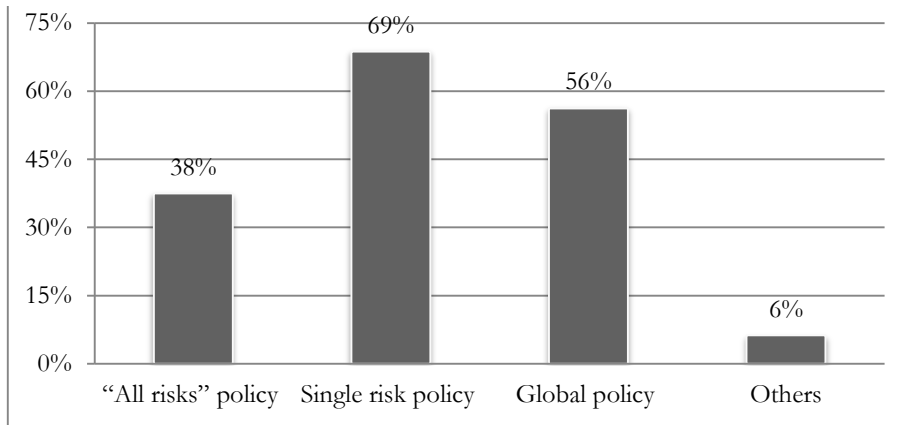


Figure 4. Mean number of policies held by client company (percentage share)

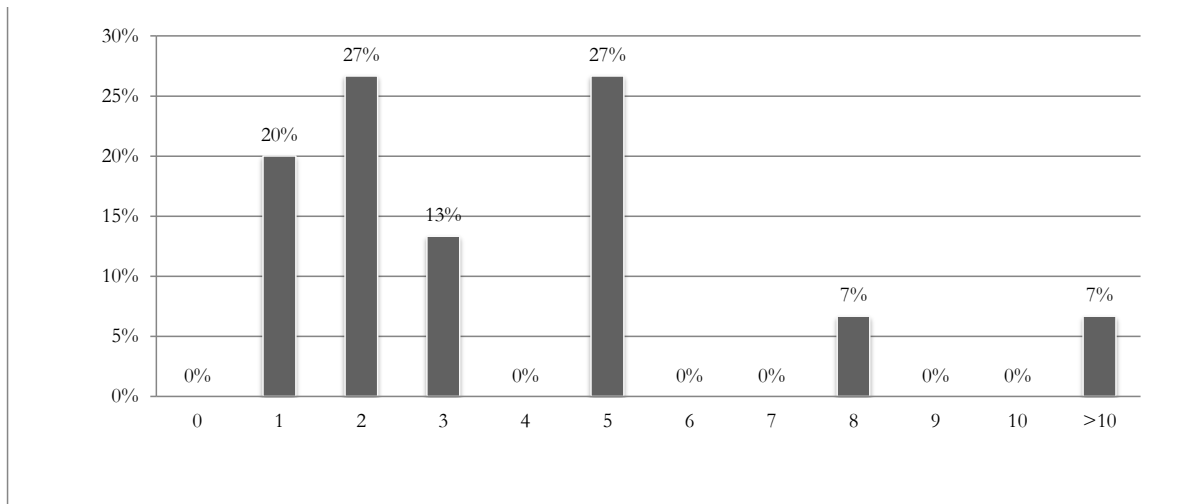


Figure 5. Who buy the policies? (per 100 insurance companies)

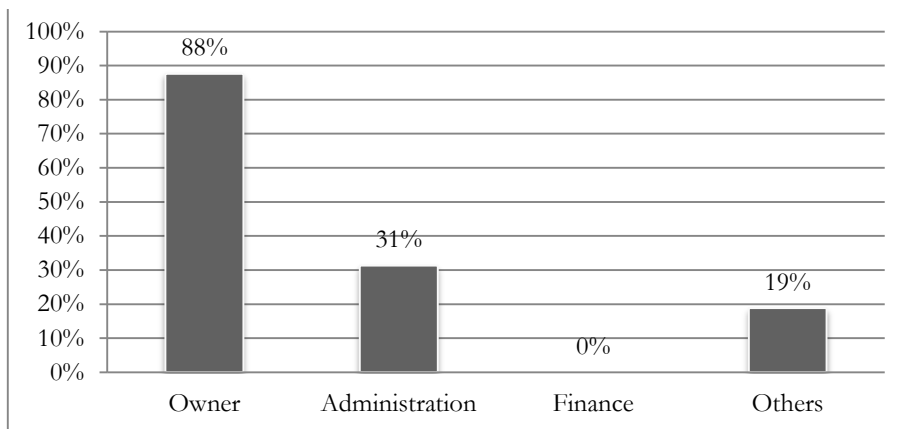


Figure 6. Channels used by client company purchase of policies (per 100 insurance companies)

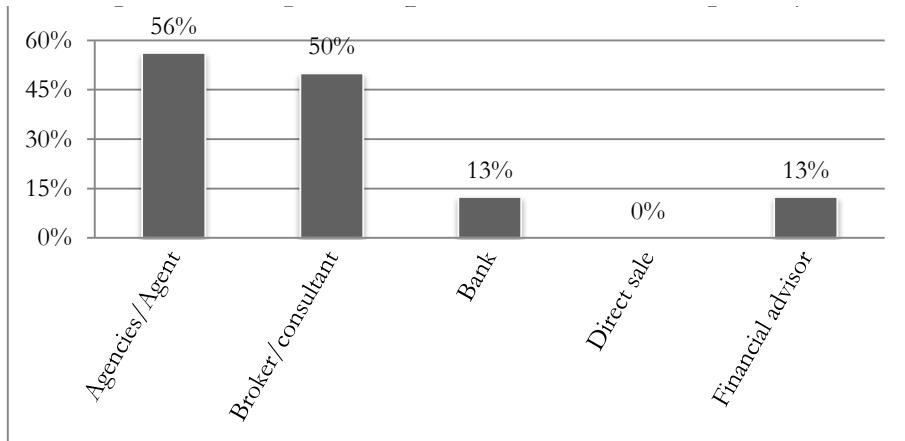


Figure 7. Do client companies use “compliant” policies? (percentage share)

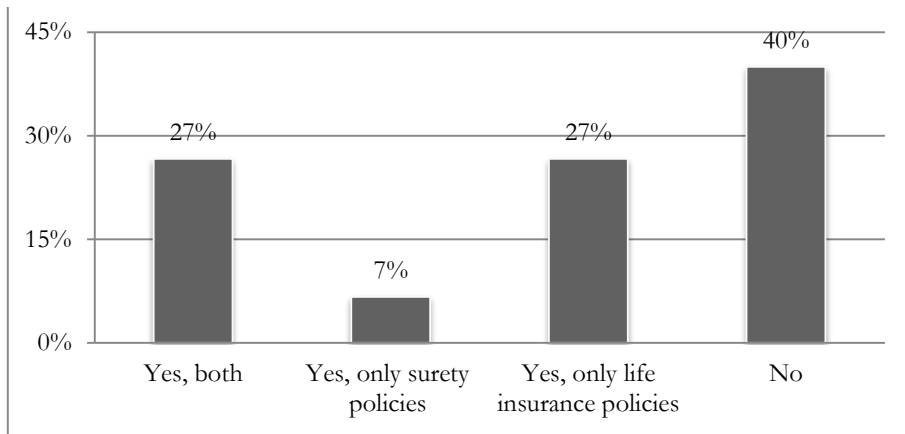


Figure 8. Guarantees required of client companies (per 100 banks)

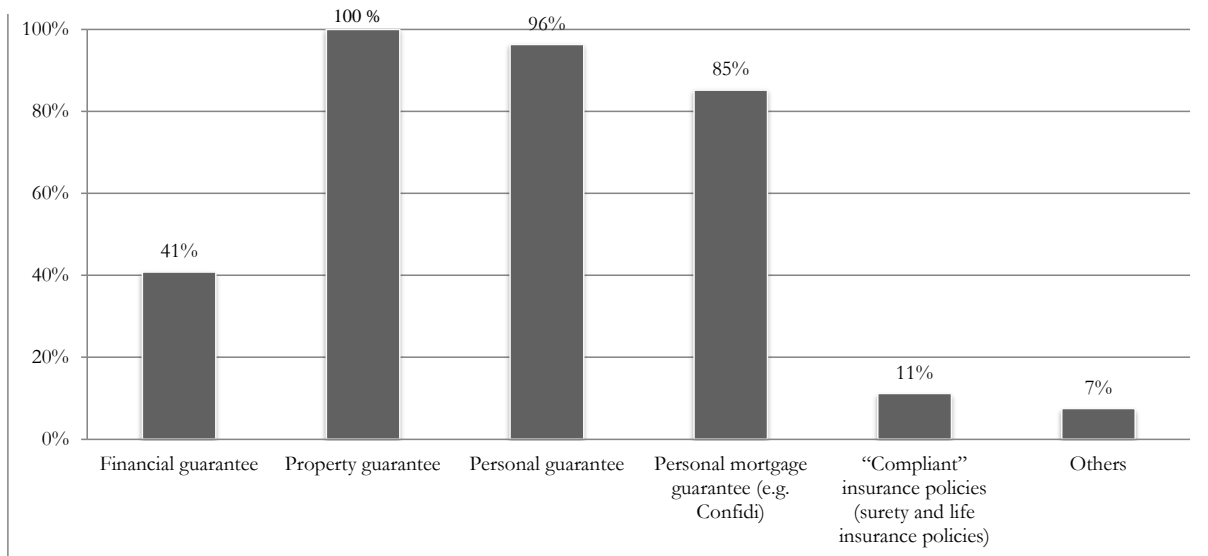


Figure 9. Percentage of allocated credit covered by guarantees (percentage share)

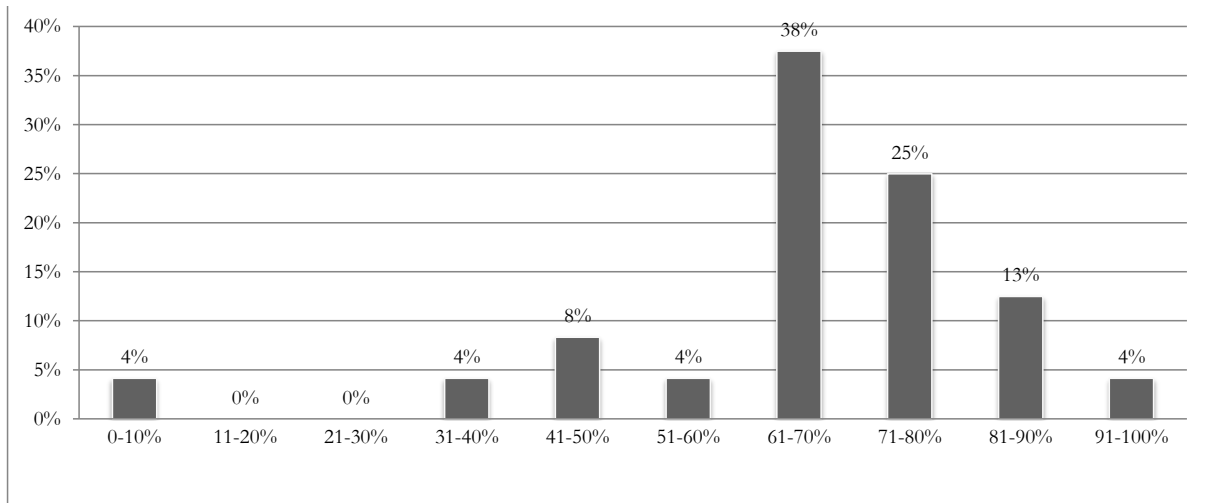


Figure 10. Do client companies use “compliant” policies (percentage share)

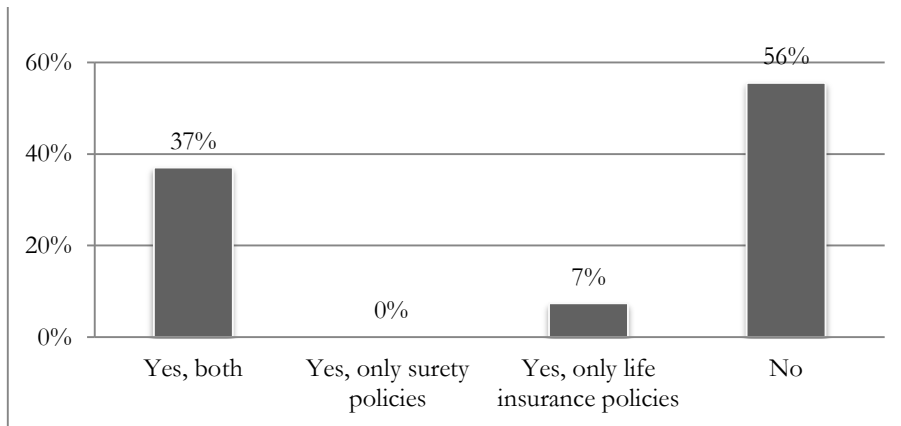


Figure 11. Would you give/are more favourable terms given to the companies that provide “compliant” policies as guarantees/security? (percentage share)

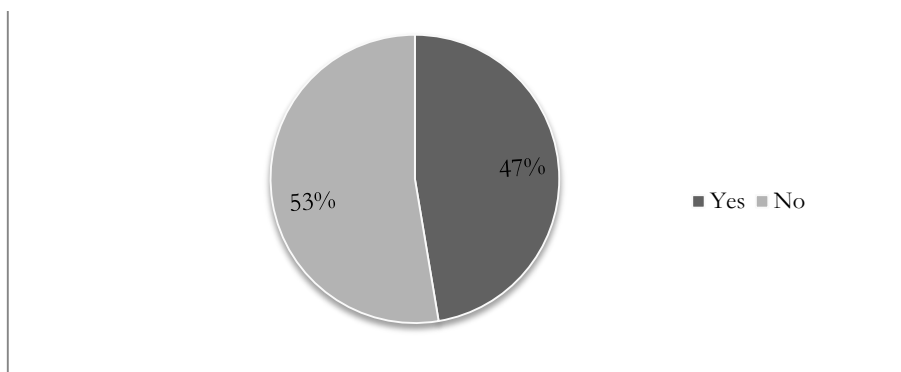


Figure 12. Are corporate policies taken into consideration in assessing client company credit worthiness? (percentage share)

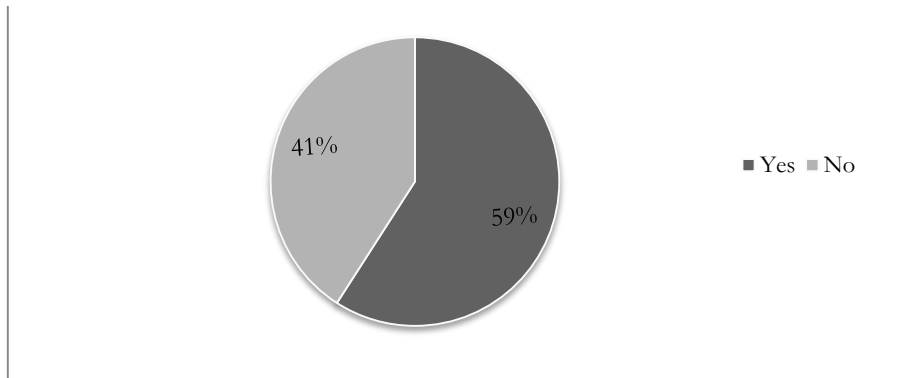


Figure 13. Incidence of corporate policies in determining credit worthiness of client company (percentage share)

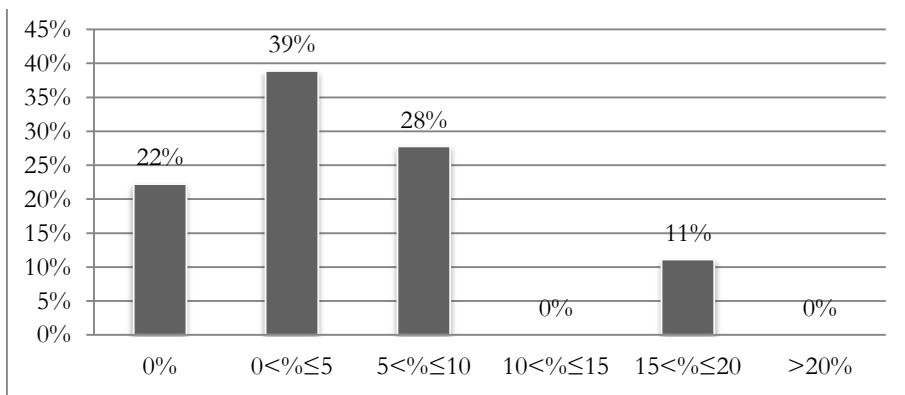


Figure 14. Do banks offer more favourable terms of credit access to companies adequately insured against business risks? (percentage share)

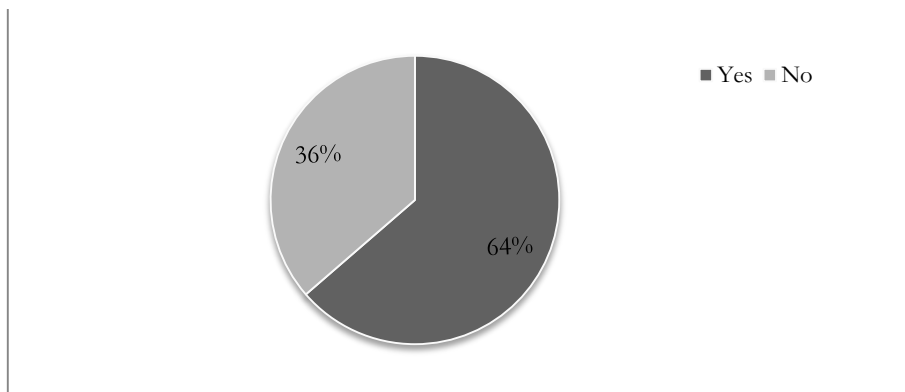


Figure 15. Factors affecting cost of loan operations (per 100 banks)

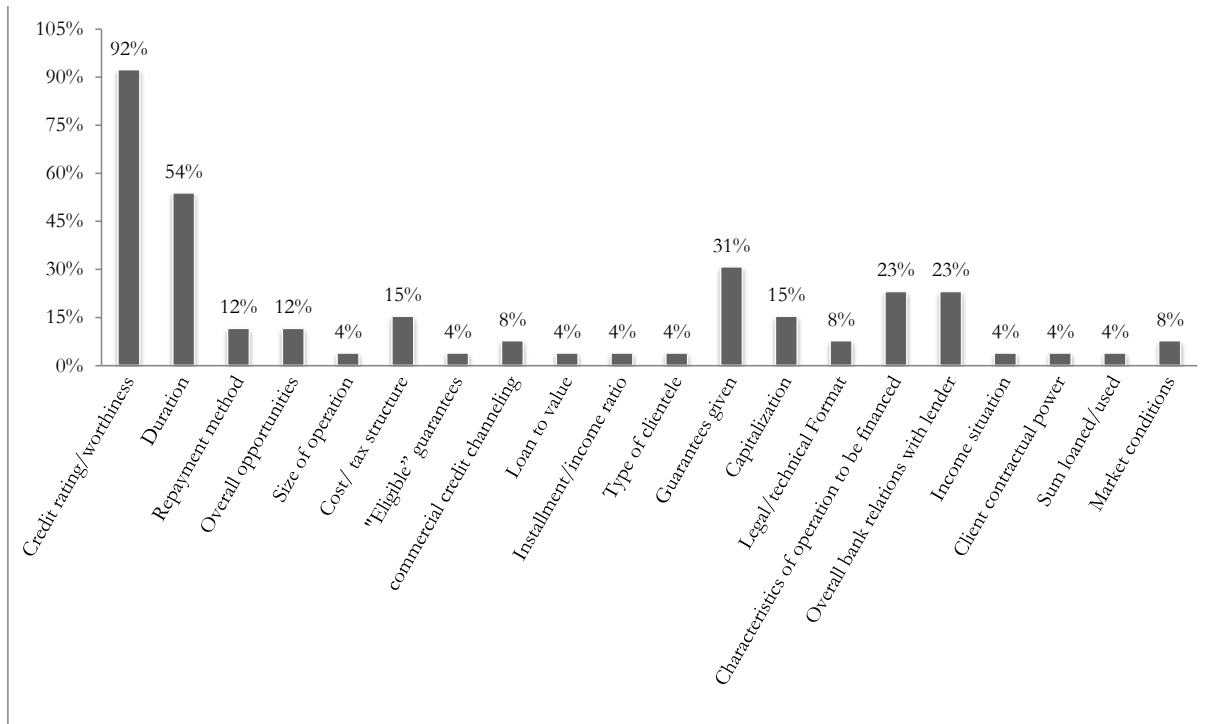


Figure 16. Do limited banks take corporate policies into consideration in assessing the credit worthiness of a client company? (percentage share)

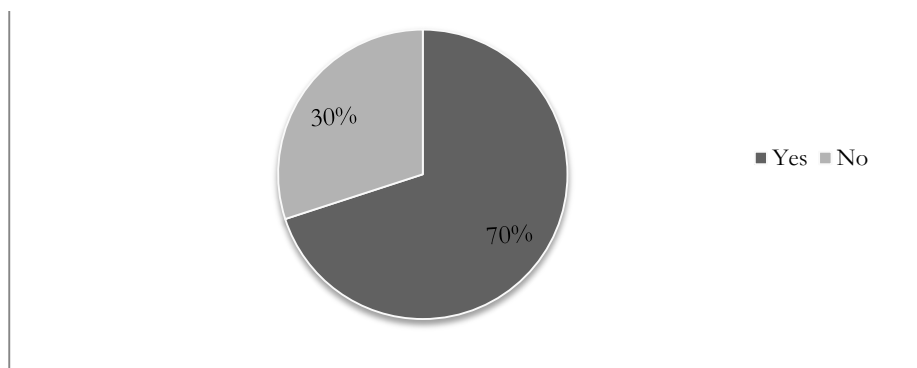


Figure 17. Do "other banks" take company policies into consideration in assessing the credit worthiness of a client company? (percentage share)

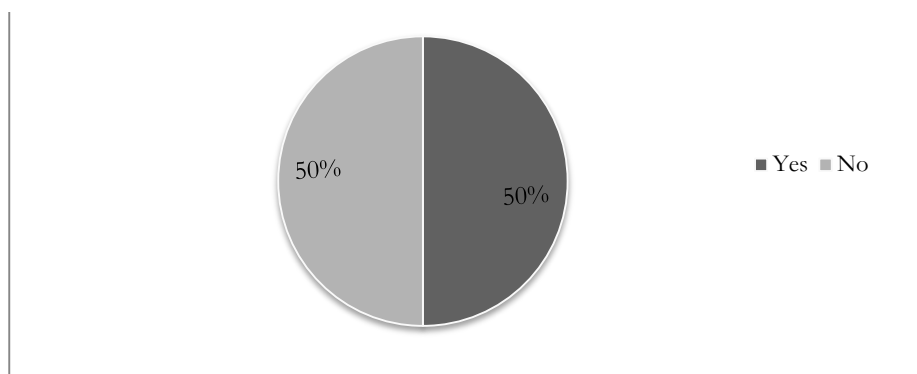


Figure 18. Do limited banks grant more favourable terms to assess to credit to companies adequately insured for business risks? (percentage share)

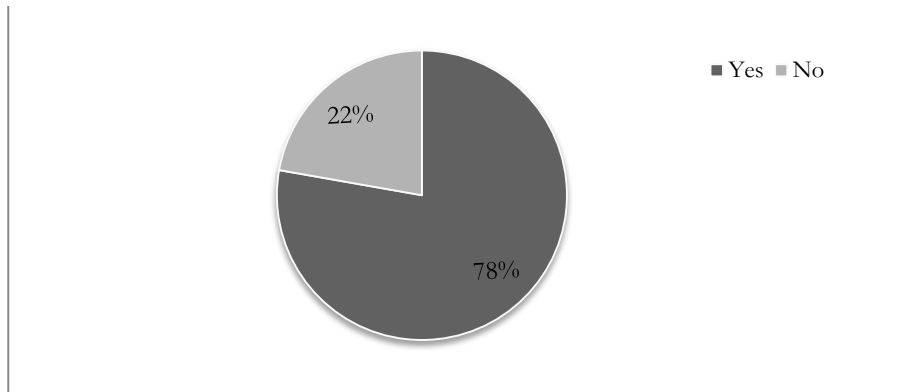


Figure 19. Do "other banks" grant more favourable terms of access to credit to companies adequately insured for business risks? (percentage share)

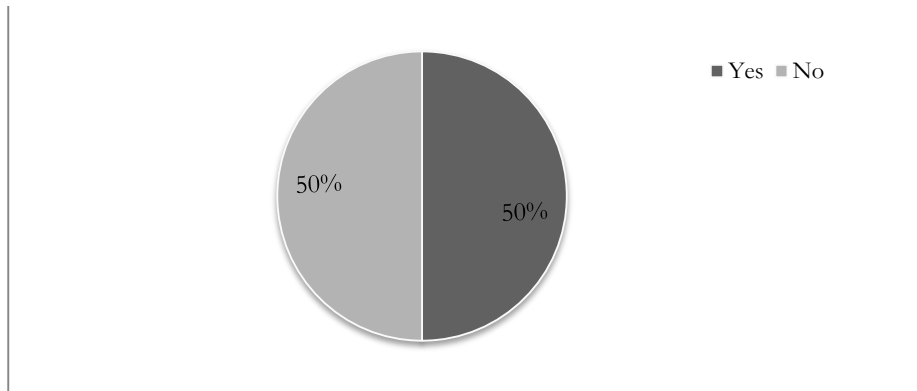


Figure 20. Percentage of credit allocated by "MLM" banks covered by guarantees (percentage share)

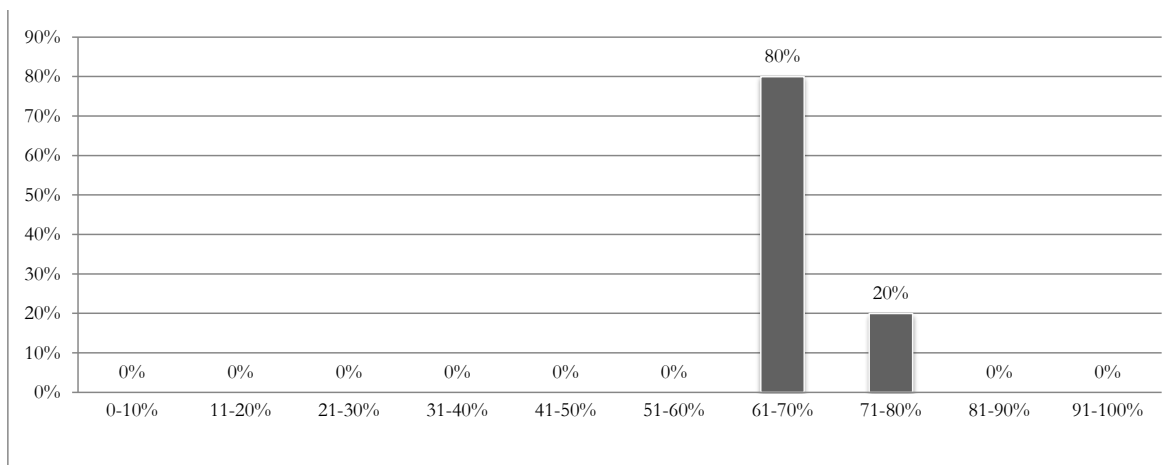


Figure 21. Percentage of credit allocated by "SM" banks covered by guarantees (percentage share)

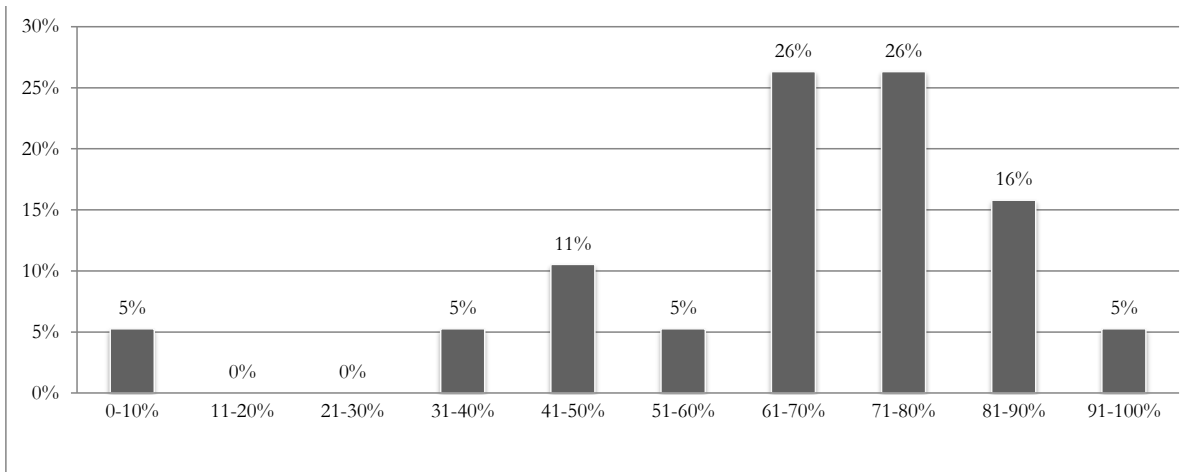


Figure 22. Do the client companies of "MLM" banks make use of "compliant" policies? (percentage share)

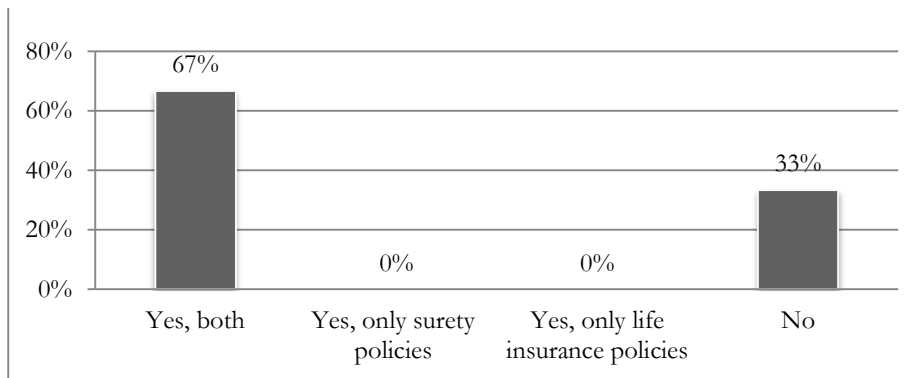


Figure 23. Do the client companies of "SM" banks make use of "compliant" policies? (percentage share)

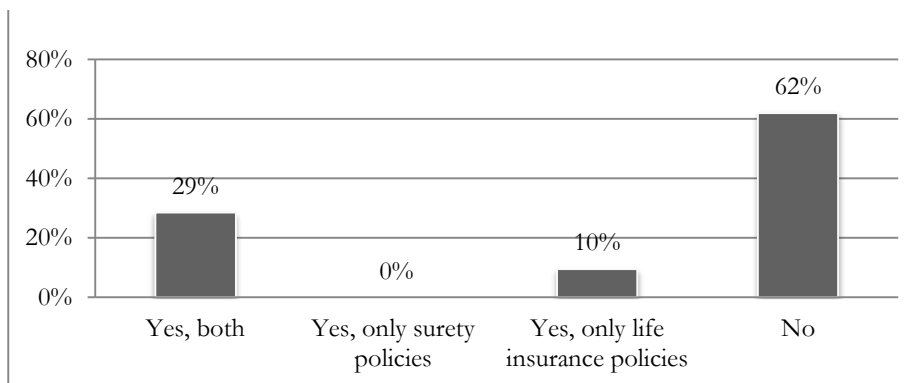


Figure 24. Are companies that provide "compliant" policies as guarantees granted/could they be granted more favorable terms by "MLM" banks? (percentage share)

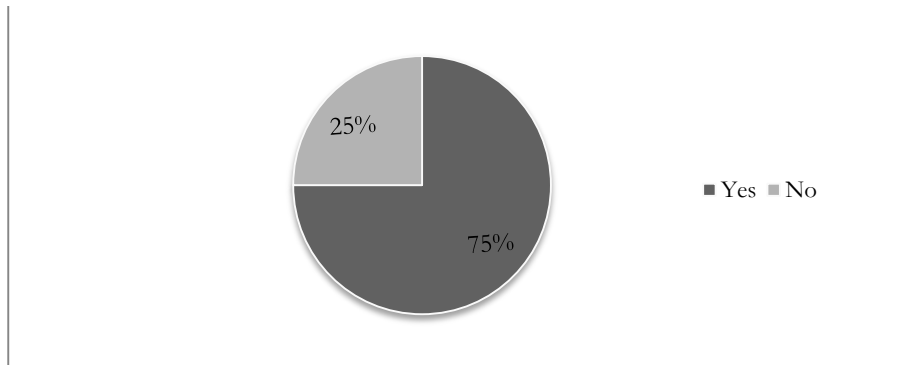


Figure 25. Are companies that provide "compliant" policies as guarantees granted/could they be granted more favorable terms by "SM" banks? (percentage share)

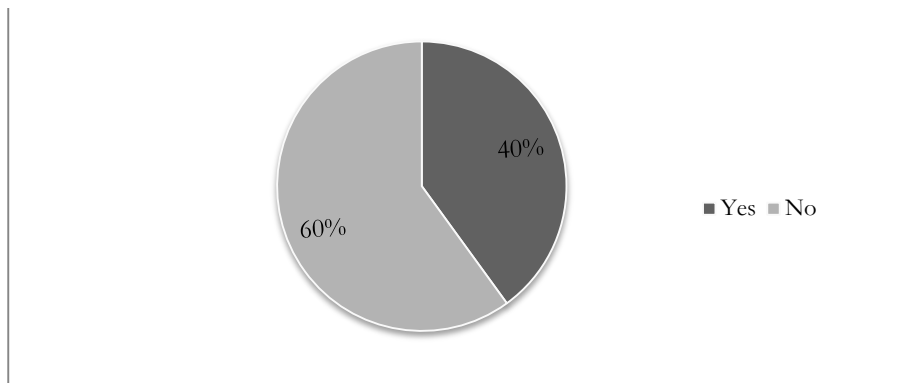


Figure 26. Sample distribution for use of "compliant" policies by companies and more favorable terms of access to credit

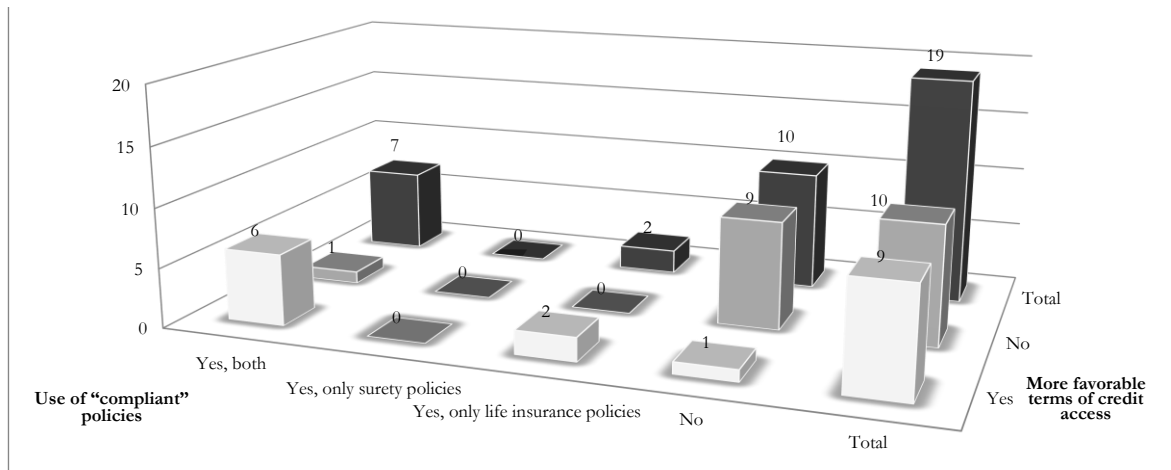


Table 5. Table of "compliance" policy contingency

Use of "compliance" policies	More favorable terms of credit access		
	Yes	No	Total
Yes, both	6	1	7
Yes, only surety policies	0	0	0
Yes, only life insurance policies	2	0	2
No	1	9	10
Total	9	10	19

Figure 27. Sample distribution for consideration given to corporate policies in assessing credit worthiness and more favorable terms of credit access

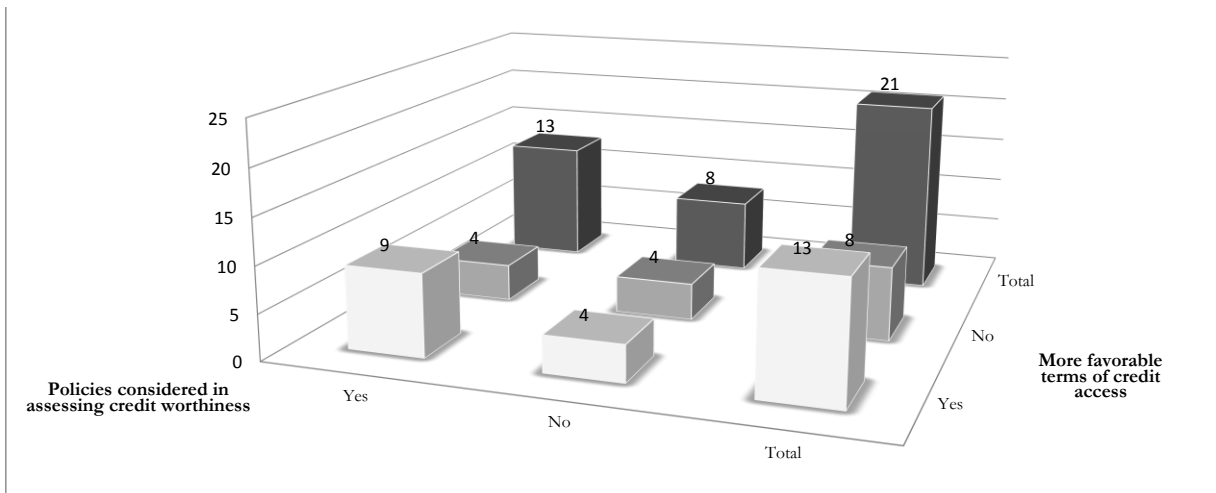


Table 6. Table of company policy contingency

Corporate policies considered in assessing credit worthiness	More favorable terms of credit access		
	Yes	No	Totale
Yes	9	4	13
No	4	4	8
Total	13	8	21

Figure 28. Sample distribution for use of "compliant" policies by companies and more favourable terms of credit access —Limited banks

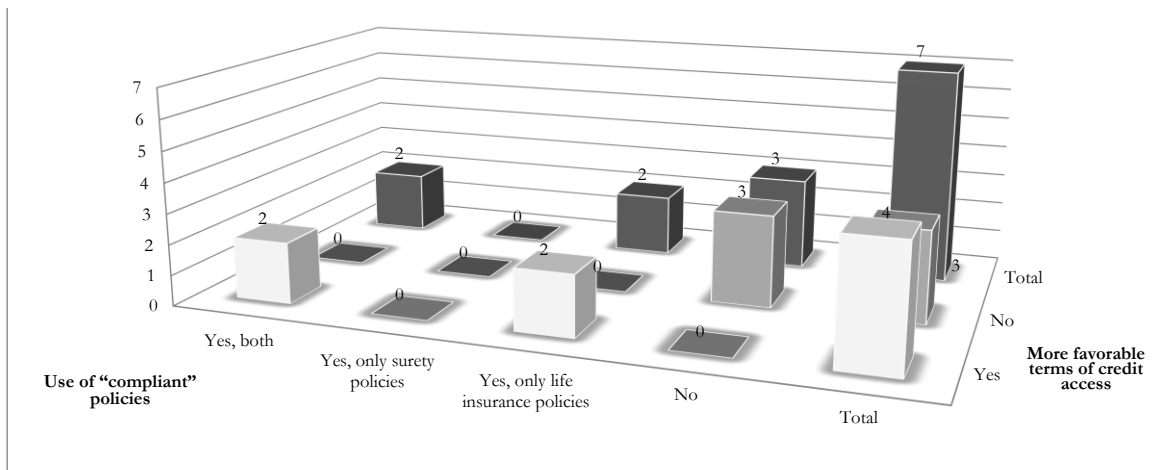


Figure 29. Sample distribution for use of "compliant" policies by companies and more favourable terms of credit access - Other banks

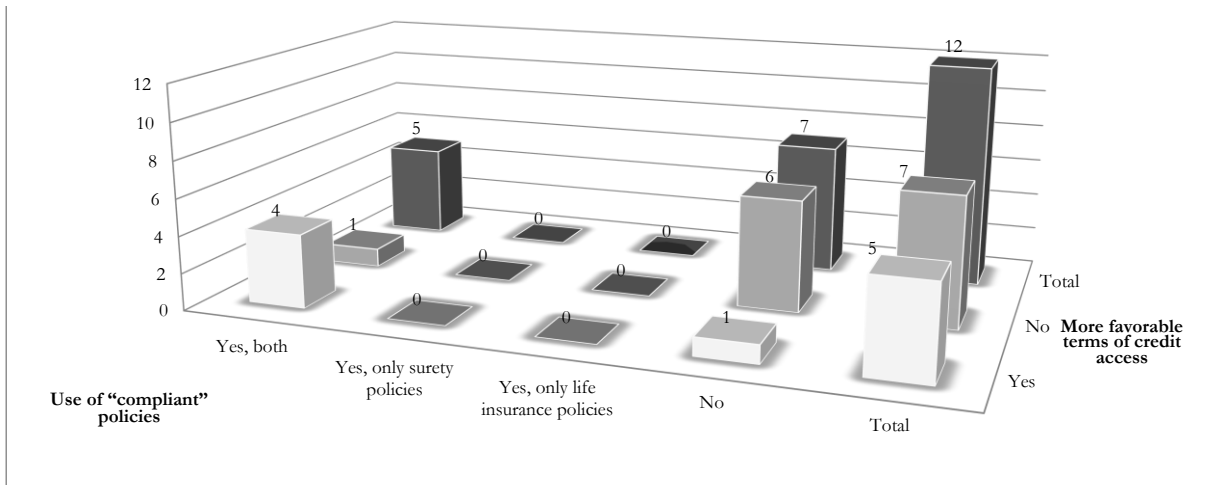


Figure 30. Sample distribution for consideration given to corporate policies in assessing credit worthiness and more favorable terms of credit access — Limited banks

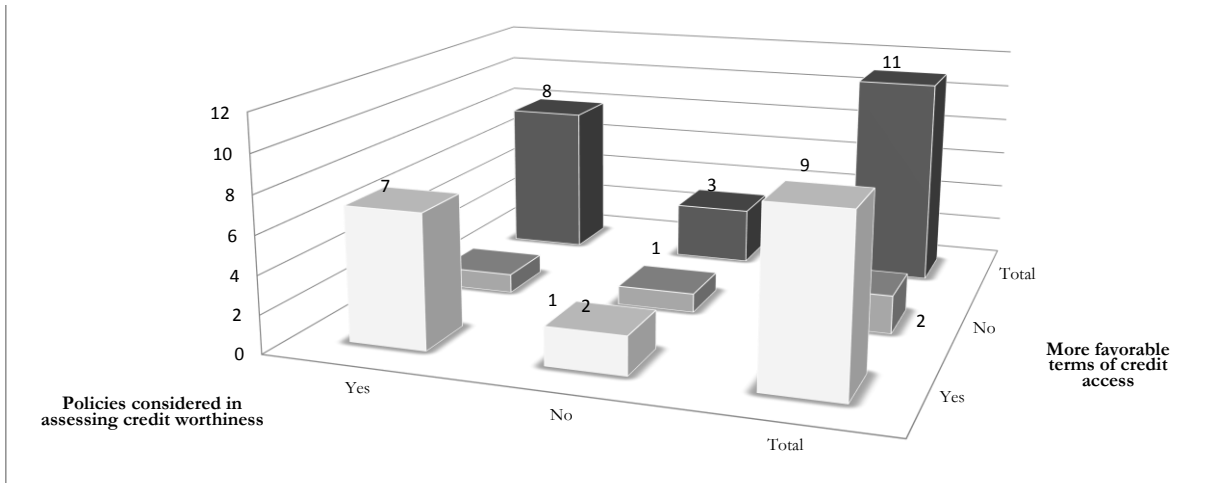


Figure 31. Sample distribution for consideration given to corporate policies in assessing credit worthiness and more favorable terms of credit access - Other banks

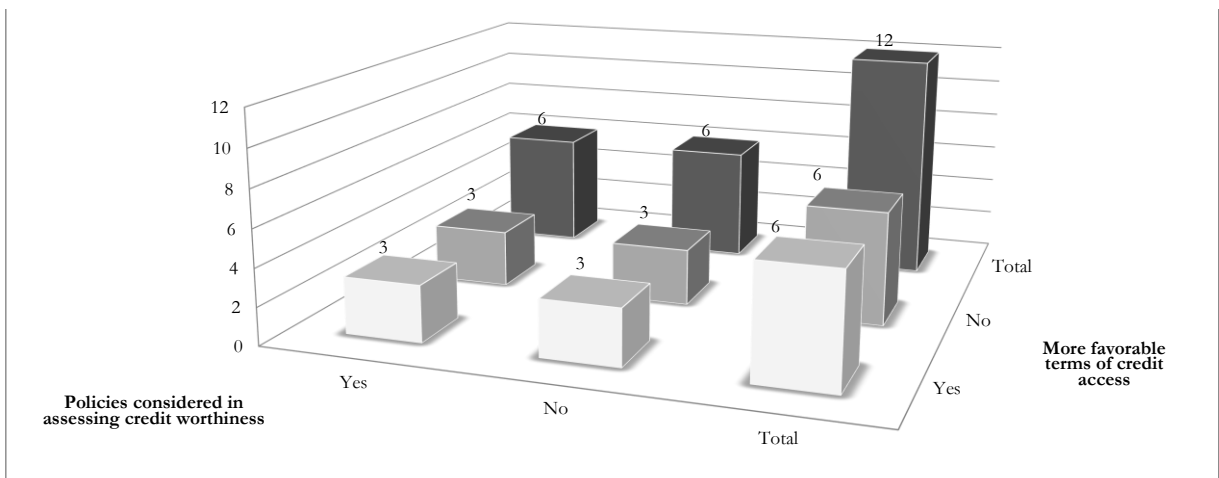


Figure 32. Sample distribution for use of "compliant" policies by companies and more favourable terms of credit access - "MLM" banks

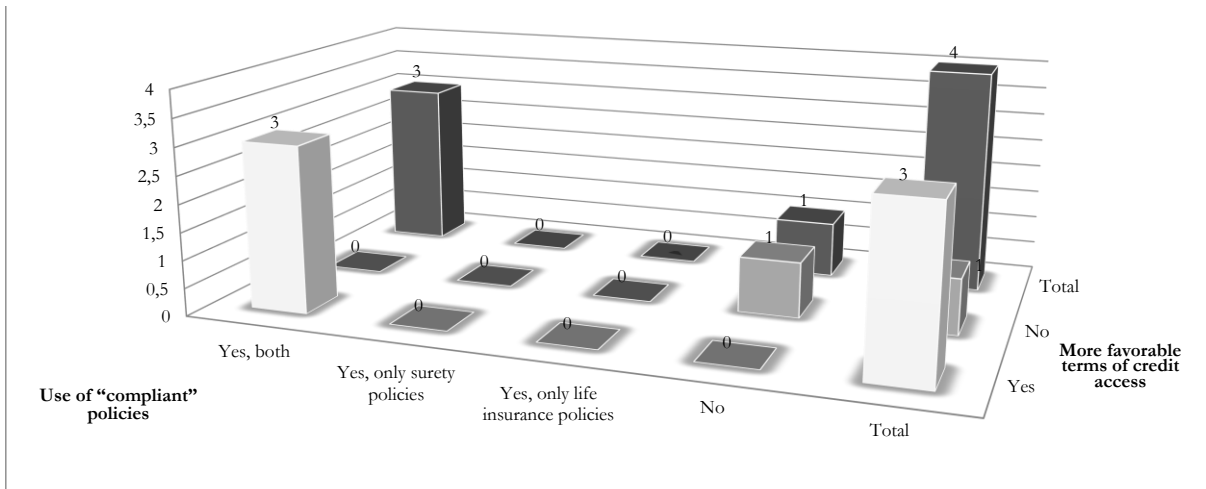


Figure 33. Sample distribution for use of "compliant" policies by companies and more favourable terms of credit access - "SM" banks

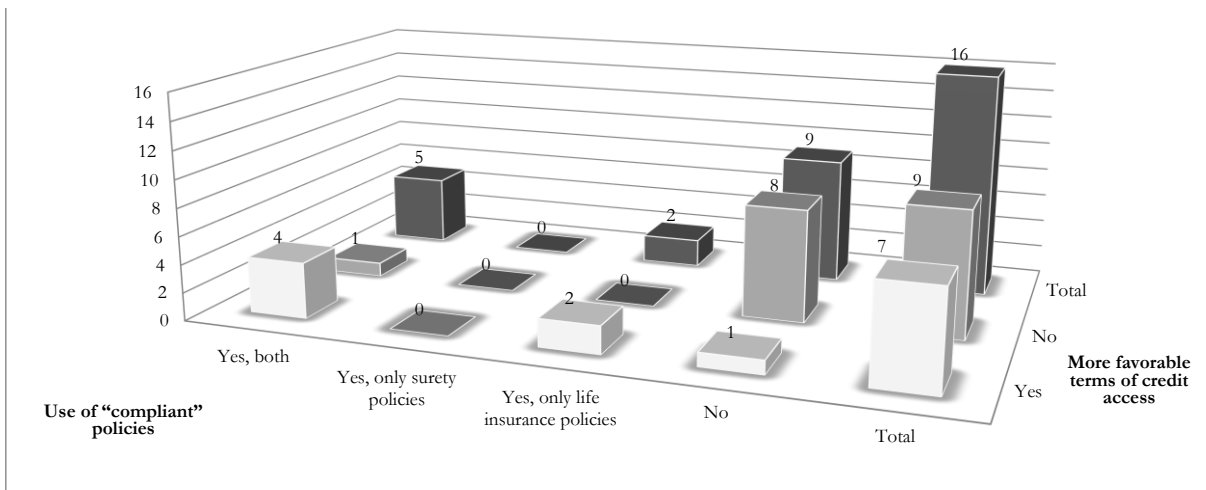


Figure 34. Sample distribution for consideration given to corporate policies in assessing credit worthiness and more favorable terms of credit access — "MLM" banks

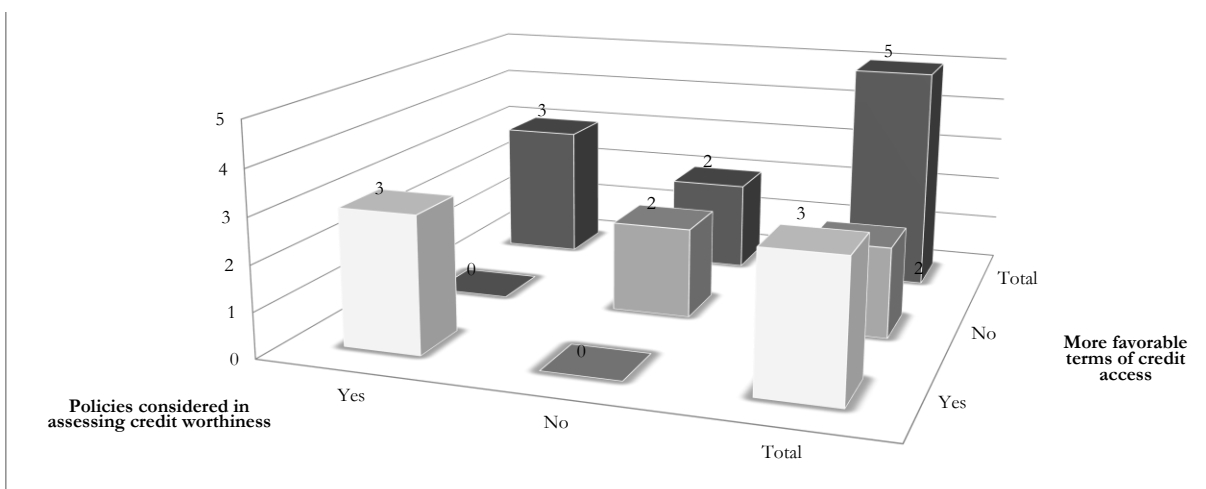


Figure 35. Sample distribution for consideration given to corporate policies in assessing credit worthiness and more favorable terms of credit access - "SM" banks

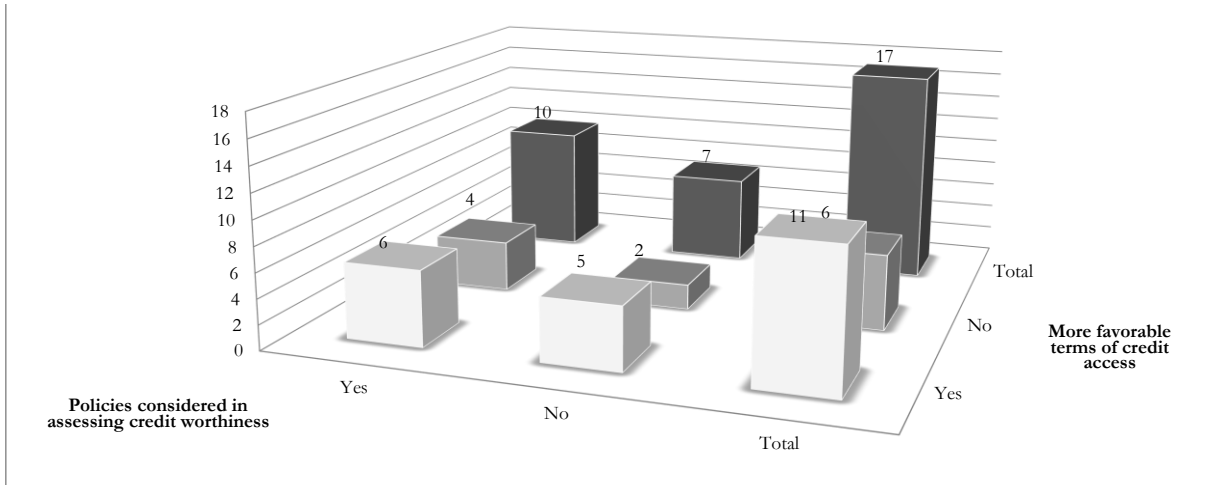


Table 7. Squared Cramer's V Statistic according to bank category

Category	Correlation between "compliant" policies and more favorable terms of credit access	Correlation between corporate policies and more favorable terms of credit access
Limited banks	0,5	0,06
Other banks	0,43	0

Table 8. Squared Cramer's V Statistic according to bank size

Size	Correlation between "compliant" policies and more favorable terms of credit access	Correlation between corporate policies and more favorable terms of credit access
"MLM" banks	1	1
"SM" banks	0,57	0,01