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### RESEARCH ARTICLE

#### SOLVENCY REGULATION ANALYSIS OF INSURANCE COMPANIES IN MOROCCO.

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#### Abstract

This research paper aims at analyzing the standards imposed by the insurance authority and social security in order to ensure solvency of insurance companies in Morocco, from laws in force. The following lines will tackle, at first, the causes of insolvency of insurance companies at an international level. Then, it will point out the normative mechanism and regulatory framework governing the solvency of Moroccan insurance companies.

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#### Introduction:-

The insurance market is characterized by its reverse production cycle, and hence, a consolidated regulation is needed purposefully to ensure solvency of the market and to strengthen the protection of insured parties. Indeed, the insurance market has a high risk. The purpose of the study and the risk management would be the implementation of necessary mechanisms to regulate the process management. And therefore, it would be wise to analyse the causes that may jeopardize the continuity of insurance companies. In this respect, the control of coverage provided is regarded as a crucial foundation for the proper functioning of the insurance market, nowadays. It is also a key issue to ensure the stability of the financial system from the outset. Besides, the recent development of Moroccans and his/her high level of technological knowledge support the implementation of an effective and strong system. Indeed, the control mechanisms are adaptable and processes improve. Moreover, legislative and regulatory innovations enrich the insurance market, nationally.

#### Recent context of the insurance Market in Morocco:-

In Morocco, The Supervisory Authority for Insurance and Social Welfare known as « ACAPS », was set up by law n°64-12 has legal personality under public law and financial autonomy. It replaces the insurance regulatory authority (DAPS) which had formerly been part of the Ministry of Economy and Finance. ACAPS exercises its control over persons that are subject to public or private law, with the exception of the government which exercises or manages insurance or reinsurance operations governed by the Insurance Code, as well as pension operations, pay-as-you-go or funded operations, compulsory health insurance and mutuals.

With the establishment of an independent regulatory authority for the insurance market and the social welfare sector, Morocco is developing its institutional framework to achieve a greater convergence with international standards in regulation and supervision. The objective is to enhance the effectiveness of regulatory activities at a national level and increase the attractiveness of the Moroccan market at the international level.

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The authority has control, in accordance with the Insurance Code, on insurance and reinsurance companies (including SMAEX) and insurance intermediaries. It is responsible for the granting and withdrawal of approval of these entities, for the control of the solvency of insurance and reinsurance companies, purposefully to protect the rights of insured persons and beneficiaries of insurance contracts, and to ensure macro-prudential supervision in coordination with other authorities in the financial sector (Bank Al-Maghrib and the Moroccan Capital Market Authority). Therefore, the Authority sets prudential rules and control rules through the preparation of circulars which are approved by decree of the Minister of Finance.

**Problematic:-**

In this regard of institutional instruments regulation reform or even regulation of the activities of insurance companies,

1. How can the system improve security in the Moroccan insurance environment?
2. To what extent can the creation of regulation Authority in this sector (ACAPS) promote transparency, monitor, control companies' activities and protect them against future risks or hazards?
3. How can this governmental authority align the system with security and risk management requirements on the rules of law and the normative international system of solvency?

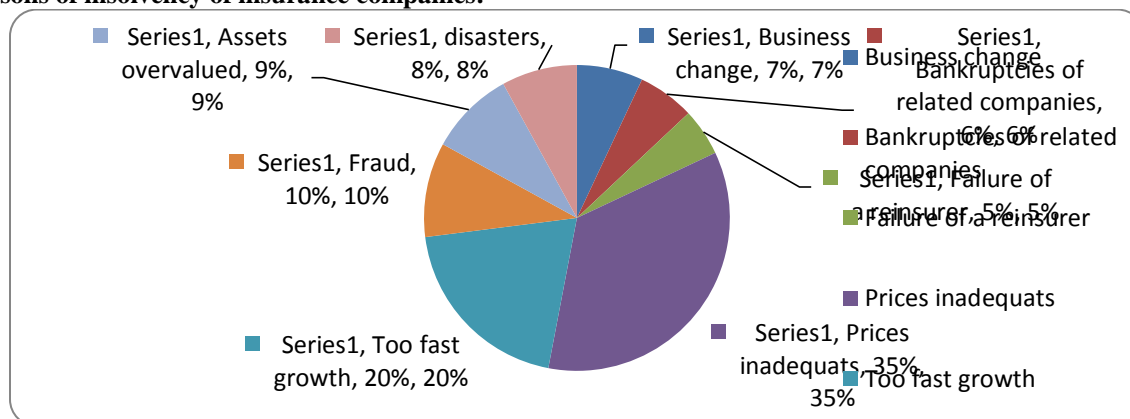
**Issue:-**

The issue of the regulating of the insurance market in Morocco is not a matter of chance. Actually, the Moroccan market is aware of the changes that are happening in Europe and in the region in terms of regulation of the insurance market. Questions arise and tackle the new research avenues in the market for which the Moroccan regulator of the insurance market should fall back and get framed by an effective regulation in accordance with market requirements and all its technical and management concerns. This governmental authority that is set up in Morocco is at the heart of the regulation of insurance and a guarantor of the solvency of the latter. The question that arise is about exploring the contributions that this regulatory system will have on the Moroccan market when strengthened and how it will affect the safety and risk management of insurance companies and reduce the risk of bankruptcies for insurance companies.

**Hypothesis and methodology:-**

The general hypothesis of the paper is about the implementation of a new solvency system in Morocco and the strengthening of the institutional regulatory mechanism and it will have an impact on bankruptcy risks of insurance companies. To answer this assumption, it is important to study the sources of bankruptcy of Moroccan insurance companies and to evaluate the national regulation of solvency of insurance companies. Our approach is; therefore, analytical and legal, and even regulation and governance of the insurance market.

The economic and social functions of insurance are well known and recognized at the level of international institutions such as CNUCED, which in the 1964 report stated that "a strong insurance market is a fundamental aspect of an efficient economic system. It contributes to economic growth and promotes employment ". In addition, insurance companies allow individuals or investors to eliminate risk. Customers transfer their insurable risks to an insurance company which, on the other hand, manage them effectively in order to avoid catastrophic scenarios that could jeopardize the financial situation of the company and thereby maintain its profitability. As part of its operations, one of the most important tasks of an insurance company is to effectively manage the risks to which it is exposed by ensuring its clients against risks. These can be actuarial, systematic, credit, liquidity, operational or legal. However, insurance companies are not immune to bankruptcy risks. They may suffer the effects of crises in the financial system, at lower levels compared to banks, yet they have reasons that obscure their profitability and jeopardize the balance of their financial system.

**Reasons of insolvency of insurance companies:-**

Source:-AM best; / Report « insolvency will historic return? » 1999

A study conducted by CNUCED in 1996 in an international level has identified the major reasons of insolvency, namely :

- 1. Liberalisation of the insurance market :** Insolvencies are more likely to occur in a liberalized system. Indeed, competitive pressure and the pursuit of market shares increase may lead some insurance companies to bad practices in terms of pricing and policyholders selection process.
- 2. Deregulation of the insurance market:** global experience has shown that insolvencies have occurred much more in markets with less control. To exemplify, 70% of bankruptcies occurred in the United States and the United Kingdom.
- 3. Expected catastrophe losses :** Natural disasters have a great impact on the development of insolvencies. The global trend of deterioration associated with expected catastrophe losses has clearly increased.
- 4. Interest rates:** Interest rate risk and market risk in general are risks that can affect the solvency of an insurance company, especially when its assets are not properly matched to its liabilities. The analysis of these insolvency cases shows that our country has several similarities that will contribute to the risk of insolvency of insurance companies, including:
  1. Tariff liberalization: mainly in the automotive sector even though that pricing criteria are always set by regulation;
  2. Volatility in financial markets and commodity markets;
  3. The high damage caused by natural disasters in the world;
  4. The ongoing discussions on the implementation of several compulsory guarantees: natural disasters and housing.

**Solvency Regulation of Moroccan Insurance Companies Analysis:-**

Regulation of the solvency of insurance companies: The prudential rules regulate the activity of insurers to guarantee the security of contracts and also protect the insured against insolvency risk of their insurers in Morocco. The current regulation on the solvency of insurance companies is ensured by the combination of several factors:

**A minimum share capital:-**

The practice of insurance operations is conditioned by the holding of a minimum capital of fifty million dirhams (50,000,000 MAD). The constitution of this capital is conditioned by the following criteria:-

1. At the subscription, the share capital must be fully paid in cash,
2. All shares are registered. They are not be converted to bearer shares during the term of the company,
3. The administration may require the building of a share capital greater than the minimum said amount in relation to the insurance operations that the insurance company intends to carry out,
4. Any transfer of more than 10% and any takeover of more than 30% must first have the authorization of the administration.

**Adequate evaluation of technical commitments:-**

The Article 238 of the Insurance Code is straightforward. It states that "Insurance and reinsurance companies must at all times record their liabilities and represent to their assets sufficient technical provisions for the full payment of

liabilities in respect of insured persons, policyholders and beneficiaries of contracts and those relating to reinsurance acceptances, They are calculated without deduction of the reinsurance ceded".

These provisions are described in the decree of the Minister of Finance and Privatization N°1548-05 of Ramadan 6th 1426 (October 10th 2005) related to insurance and reinsurance companies. They are financed by premiums and are used to liquidate commitments of insurance companies vis-à-vis insured persons and beneficiaries. These provisions include:-

1. Life insurance, mainly mathematical provisions, defined as the difference between the present value of the insurer's commitments and the insured persons
2. In non-life insurance, the current regulations require the establishment of estimated technical provisions. This mainly concerns the provision for payable claims (PSAP), the provision for risks in progress, the provision for unearned premiums and other different provisions that the reader will find in details in Articles 16 and 17 of the Order of October 10<sup>th</sup> 2005.
3. The method of calculating these provisions is detailed in the following chapter. Besides, prudential technical provisions are also included and discussed below.

#### **Prudential technical provisions :-**

In addition to the above technical provisions that are used to pay commitments to the insured persons and the rightholders, financed by premiums. Insurance companies should set up prudential technical provisions that is financed by shareholders through the technical result. These provisions are as follows:-

1. Provision for permanent impairment is established to offset the long-term depreciation of investments. This depreciation is assessed individually as an investment over a period of three months and the provision can only be constituted when the depreciation rate exceeds 25%.
2. Provision for payment risk : aims to cover liabilities in case of a « decline in the value » of all assets except depreciable securities. This decline in value recognized at the end of the financial year by asset type as soon as the realizable value of the assets is below the value of the balance sheet of the company.
3. Provision for loss fluctuations is to compensate for the possible technical loss arising at the end of the financial year for certain insurance lines such as motor civil liability and workplace
4. Capitalization provision intends to offset the depreciation of the values included in the assets of the company and the decrease in their income. The asset in question consists of fixed-rate debt securities. This provision smooth out the results corresponding to the capital gains or losses achieved on securities sold before their term in case of rate changes. It is supplied by the positive difference between the sales price or repayment of a security and its net book value. Withdrawal on the same provision is made in the opposite case.
5. Provision for financial risk aims at offsetting the decline in the return on assets related to guaranteed interest rate of liabilities of life insurance contracts other than those in units of account and the special management of pensions. It is constituted when the rate of return of the investments that is decreased by one-tenth is less than the guaranteed rate. The amount to be constituted is equal to the difference between the mathematical provisions in the inventory and the mathematical provisions calculated with the aforementioned technical rate.

Management provision is mainly for life insurance companies, it comes as a result of the liberalization of charges and it is intended to cover future management expenses not otherwise covered. Its amount is based on a provisional income statement on a consistent set of contracts according to strict rules set out in Article 15 of the decree of October 10<sup>th</sup> 2005. For each homogeneous set of contracts, the amount of the provision is equal to the present value of future management expenses minus the present value of future contract resources.

#### **Asset allocation rules:-**

Article 238 of the Insurance Code points out that insurance and reinsurance companies must at all times "represent to their assets" the technical commitments. These items must be sure and liquid. They must comply with rules of dispersion of diversification, limitation and are not subject to any compensation or any privileges or guarantees other than those provided in article 276 of the law of the insurance code. The list of these assets, which is eligible for representation of technical commitments, is set out in the insurance regulations (Article 27 of the decree of October 10<sup>th</sup> 2005).

#### **Rules of dispersion:-**

Dispersion rules are set out in Article 32 of the above decree and is about limitations that are related to the representative asset. There is two types of limitations: limitations by issuers and limitations by elements. These limitations range from 2.5% to 10% depending on the nature of the asset. It is important to mention that the

government securities or guarantees by it do not undergo any limitations and that shares and stocks are limited to 10% of the representative asset.

#### **Rules of risk diversification:-**

The purpose of risk diversification rules is to encourage insurance companies to diversify their investments and to limit their investment in the same type of asset. This is to mitigate the risk of concentration in the same asset class (stock market crash, real estate speculation, etc.). These rules are in Article 33 of the above decree and are about limitations related to technical provisions. We also note two limitations:-

1. State securities or guaranteed by it : these are not subject to any limitation related to technical provisions and must represent at least 30% of the technical provisions;
2. The Other securities that are not guaranteed by the State are limited to 70% of technical provisions.

#### **Satisfaction of Solvency margin:-**

The Moroccan regulation is not clearly defined when it comes to solvency but it provided the purpose of the "solvency margin". Article 239 of the Insurance Code states that « Insurance and reinsurance companies should, in addition to the technical provisions, justify at all times the existence of a solvency margin that is to meet the operating risks, specific to the random nature of insurance operations ". This definition highlights the following characteristics of the solvency margin

1. This is in addition to the technical provisions
2. Satisfaction of solvency margin should be permanent
3. It aims at dealing with operating risks

Nonetheless, in reality, the principle of permanence in the satisfaction of the solvency margin is very difficult to abide. Indeed, the solvency margin is measured only once a year when the financial statements are communicated to the administration. Moreover, this definition limits the risks to be covered by the "operating risks", whereas solvency should normally cover all possible risks, whether they relate to operations or not.

Historically, the solvency margin has been set up in common agreement with the market and without a legal basis, of Minister of Finance's instruction n ° 18 of 29 March 1996 on solvency indicators and operating rules of insurance companies. Indeed, the administration justified it as "an important measure for the assessment of the financial situation of any insurance company.

This measure was introduced after the shock of the liquidation of 5 insurance companies. Consequently, its implementation was accompanied by the obligation of full transparency and periodic audit of the accounts. The solvency approach, as introduced in 1996, is a fixed ratio approach that is composed of two elements The constituent elements representing the cover elements and the minimum amount of solvency margin.

The constituent elements consist of the following components:-

1. Share capital or settlement funds;
2. Half of the unpaid portion of the share capital or of the remaining portion to reimburse the Loan for Settlement Funds
3. Regulatory or free reserves that do not correspond to the commitments, including the capitalization reserve;
4. Deferred profits;
5. Capital gain
6. Net of the following element:
7. Losses ;
8. The remaining amortization on commissions, administration fees and other intangible assets.

#### **Acte 1: 1<sup>st</sup>amendement(octobre 2005):-**

The decree of the Minister of Finance of October 10<sup>th</sup> 2005 introduced the first changes to the solvency margin after an initial implementation by a circular (circular of March 18<sup>th</sup> 1996). These amendments reinforced the solvency margin requirements by reducing the constituent elements and strengthening the minimum requirements by introducing new indicators.

Actually, the constituent elements have been strengthened for the mutual insurance companies, integrating the loans for the increase of the settlement fund. In addition, other measures were introduced by this Order, in particular:

1. The limitation of capital gain to 20% for life insurance and 60% for non-life insurance because these capital gain are not entirely owned by the shareholders. Indeed, the remaining of capital gain will be used to finance profit sharing (the statutory minimum of 70% of life result ) and another part to the payment of deferred tax

2. Deduction of treasury shares held because, in case of difficulties, the value of these shares is zero and can not finance solvency margin deficiency of the insurance company ;
3. The deduction of investments in unlisted subsidiaries other than unlisted real estate companies.

The minimum amount is determined by distinguishing between the two branches of life and non-life insurance. The minimum capital for non-life insurance operations is determined by "workplace accident", "Automobile civil liability", "other categories of direct insurance" and "reinsurance acceptances" branches. The risks that are taken into consideration are technical insurance risks that are reflected in the following indicators: premiums, claims and technical provisions. Technical provisions include provisions for unearned premiums and provisions for claims payable. Reinsurance is a reducing factor in the solvency margin requirement as this is an additional protection for the insurance company. However, reinsurance rates differ across insurance lines. Hence, for the life insurance line, the reinsurance rates are 85% for savings products and 50% for death products.

#### **Act2: 2<sup>nd</sup> Amendment in 2009 (December 2009):-**

This amendment has once again restrengthened the solvency margin requirements. The items to be deducted were increased by the introduction of off-balance sheet commitments and intangible assets

#### **The necessity of solvency report:-**

The necessity of solvency report and the setting up of an internal control system are among the latest changes and innovations in the Insurance Code. These two measures are implemented respectively by Articles 17-239-1 and 239-2 of the Insurance Code. Article 239-1 states that: "At the end of each financial year, the board of directors or the management board should submit a report on the solvency of the company in accordance with the requirements set up by the administration. The solvency report should contain an analysis of the conditions under which the company is able to meet all its commitments. This report is communicated to the administration and to the auditors. This provision is an important step forward in strengthening the financial guarantees of insurance companies. It compensates for the inadequacy found in Article 238 related to the solvency margin, which was limited to the obligation to cover the operational risks. Thus, it encourages insurance companies to be more observant in the management of their assets and liabilities and to adopt investment strategies that comply with the requirements of the liabilities of insurance companies. The details to be provided in this report are set up in Article 53-1 of the Decree of December 8<sup>th</sup> 2008, and should contain at least the following information:-

An analysis of the conditions under which the company guarantees - by setting up technical provisions -its commitments to insured persons and justifying that these provisions are sufficient to cover all commitments;

1. A presentation of the company's policy regarding reinsurance
2. Analysis of the findings
3. Analysis of the actual solvency margin
4. List the risks encountered by the company and the degree of control
5. An analysis of the conditions under which the company is able, in the short and long term, to meet all of its commitments based on the stress tests outcomes that may affect the solvency of the company .

Finally, this is the first element of the prospective solvency analysis and a step forward in the adoption of the international solvency standards that is required by the AICA The application of the Internal Control Circular

As previously mentioned, this new system was set up by Article 239-2 of the Insurance Code and the details of application are set up in Circular No. DAPS / EA / 08/11 of August 16, 2008 related to the internal control of insurance and reinsurance companies. Its objective is "to encourage insurance and reinsurance companies to better control the risks they incur" by inviting them to have an "internal control system" and an "internal audit structure that reports directly to the board of directors or supervisory board "and whose mission is to verify the effectiveness of the internal control system.

Indeed, insurance companies should ensure, with reasonable insurance, with a "sufficient knowledge of risks and how to manage it, purposefully to protect the assets". This being said, insurance companies should:-

1. Ensure the identification, assessment, control and monitoring of risks related to company, financial, market, liquidity and settlement commitments as well as IT and legal risks;
2. Set up some means adapted to the volume and the complexity of the company's activities.

It should be noted that the assessment of financial risks should be done on a regular basis by carrying out "simulations of the impact of interest rates changes, stock prices on assets and liabilities and comparative estimates of the Liabilities and asset liquidity ".

As for the other risks, the insurance and reinsurance companies "should have an assessment system allowing an independent and objective evaluation of insured risks and claims". This amendment is also a step forward in the adoption of the international standards required by the AICA.

### Conclusion:-

Briefly, the paper placed emphasis on the undergoing regulation in Morocco and highlighted three levels of risk management:

1. Macroeconomic rate risk
2. Risks relating to the internal control of the insurance company, which can be considered as managerial and corporate governance.
3. Risk Management related to the company's off-balance sheet commitments and intangible assets

The writing of a solvency report as required by law reinforces the need for an effective production and an up-to-date mechanisms that is to be put in place in order to an effective control and management of the asset/liability of companies. The implementation of a genuine supervisory and control authority for the Moroccan insurance market intends to respond in the upcoming years to the requirements for strengthening the governance and risk management of national companies. And most importantly, the system must be constantly evaluated, revised and be benchmarked against the system of countries in Europe and other countries with advanced and historical insurance practices.

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