THE PORTUGUESE INSURANCE INDUSTRY:
BASIS FOR STRATEGIC PROCESS DECISION

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ABSTRACT

Nowadays, the Portuguese insurance industry operates in a market with a much more aggressive structure than a few decades ago. Markets and the economy have become globalised since the last decade of the 20th century. Market forces have gradually shifted – power is now mainly on the demand side. In order to meet the new requirements, the insurance industry must develop a strong strategic ability to respond to constant changes of the new international economic order.

One of the basic aspects of this strategic development will focus on the ability to predict the future. We introduce the subject by briefly describing the sector, its organisational structure in the Portuguese market, and challenges arising from the development of the European Union. We then analyse the economic and financial structure of the sector.

From this point of view, we aim at the possibility of designing models that could explain the demand for insurance, claims and technical reserves evolution. Such models, (even if based on the past), would resolve, at least partly, one of the greatest difficulties experienced by insurance companies when estimating the budget. Thus, we examine the existence of variables that explain the previous points, which are capable of forming a basis for designing models that are simple but efficient, and can be used for strategic planning.

KEY–WORDS: Insurance Industry, Demand for insurance, Models of demand, Explanatory variables, Strategic planning.

1. INTRODUCTION

The *insurance* is characterized by, on the one hand, constituting an economic good with a typed demand and, on the other, rendering an economic social service that is essential to the sustained economic development as a guarantee of restoration of the social patrimony, by means of the restitution of damaged or destroyed goods (*patrimonial insurances*), consequential losses (*profit loss*) or the (in)ability to generate means of subsistence (*personal insurances*) or even the compensation for damages caused to third parties (*civil responsibility*), as a consequence of more and more complex risks – due to technical and technological advances – and the growing dimension of the capitals at risk.

The main objective of the *insurance* is thus minimizing losses deriving from accidents or other similar accidental events, not generally controllable by Man. It responds, thereto, to an intrinsic human need – the search for *safety*. Two different visions on the *insurance* may arise:

i) a STATIC VISION, according to which we are in view of a sector that stands out from an inverted production cycle, in which the insurer receives a price (in advance) for the rendering of a service. This is a somewhat obsolete view, which cannot be undervalued, but rather complemented by a

ii) DYNAMIC VISION, upon which the insurer sells a product, *safety*, an intangible future good, being its acquisition an *opportunity cost*, in the sense that the client buys a product in a "situation of certainty" in exchange for a future product or service "in a situation of uncertainty". In other words (Sigma), the consumer buys the assurance of guaranteeing, in the future, a given state of a good (safe object).

2. CHARACTERIZATION OF THE SECTOR

2.1 THE DEMAND

Insurance companies (insurers) constitute a significant group of institutional investors since they capture savings (financial means) for medium and long term investment, thus constituting, precisely due to that, an important factor in the dynamisation of the economy... It is not surprising, therefore, that it is a very sensitive sector to the evolution of the economy, growing with it or suffering the consequences of the economic crisis almost immediately. Namely in Portugal, where the insurance has always been regarded as a non essential consumer good... Thus, a modest contribution for the *GDP* in the past: only in 1995 would it surpass 5%...

We have been assisting, however, to a strong dynamic in the sector over the last years. In 2002, the contribution of the insurances to the *GDP* was 6,70% and in 2005 7,3%, still below but gradually getting closer to the average in the EU.

The demand for insurances is still, in fact, an elastic good as compared to the economy. Indeed, the elasticity in the demand for insurances in 2002 in comparison to 2001 was inferior to 1 (0,976), thus showing a tendency that the increase in the demand for insurances would be inferior to the growth of the economy in 2003.

This situation does not seem to be exclusive of the Portuguese case, since in its magazine, with regards to the analysis of the world demand for insurances (2004), Sigma concludes that in 2002, although "confronted with unfavourable economic conditions", the real growth in the demand for insurances at the world level was significant, 5,5% in comparison to 2001 in real terms (in Portugal, only 1,2%) as a consequence of the behaviour of the emerging markets, of which 3,0% were related to LIFE insurance and 9,2% to NON-LIFE insurance.

2.2 The offer

The demand for insurance products derives from the ever growing conscience concerning the possibility of the materialization of personal or patrimonial risks. This awareness is most likely related especially to issues of economic nature – concerning development – but also cultural, related to the concerns with *safety*, with have an impact on the volume of the *offer*.

In Portugal, the number of insurers, between 1995 and 2005, was reduced from 95 to -- companies, being such that the "exits" were mainly due to merger and acquisition or concentration processes. However, 243 European insurers began their activity or were legally authorized to do so in 2003 under the EU principle of Freedom to Provide Services (FPS).

Despite this fact, the group of national insurers maintains a relative stability in its joint market share (increasing, however, from 72,60% in 1995 to --,--% in 2005).

The volume of the premiums per insurer is still low in Portugal as compared to the EU average, not surpassing 3,58% (referring only to the Europe of 15, since there aren't any data available on the current structure of the Union). As a result, the entry of international insurers in the Portuguese market, which is still happening now, allows us to conclude (confirm) that there is still an effective room for growth in our market, which makes it desirable, namely by major European insurers, as the recent acquisitions seem to demonstrate.

3. ECONOMIC AND FINANCIAL STRUCTURE

The importance of the insurance business sector in the Portuguese economy may be observed through the volume of premiums processed superior to 9,6 billion euros, being this amount equivalent to 7,4% of the *GDP* and the total investments that, in 2005, surpassed– billion euros, being this amount equivalent to more than --% of the *GDP*, of which --% derive from investments in assets assigned to technical provisions.

It is important to dispose of a technical-accounting analysis which may serve as a basis to the decision-making process. In this sense, it is important to know, to a certain depth, the structure of the accounts of the sector, not only to "feed" the planning tasks with efficient data in order to minimize the typical bias of the methods of data collection and treatment, but also and chiefly to serve the process of strategic reflection of the sector.

The entire process of investigation was based on the chart of accounts in effect since 1994 in the sector, and the necessary adaptations and conversions were performed in the items of the previous plans, not only to safeguard their comparability during the entire selected period of analysis, but specially to bring it near to the current model structure for the non-financial sectors within a perspective of approaching the habits of the common citizen with regards to the instruments for the remission of the companies' accounts.

It was followed by the *fair value* directives, which imposed the adoption of the *NCIs* to every company quoted in the stock market – Regulation 1606/2002 (EC) of the European Parliament and the Council - whose application has not brought, until now, sensitive alterations to the chart of accounts in effect. This is not surprising, since we are aware that the Portuguese insurance sector was one of the first in Europe to introduce the registration of a significant part of its assets at their market value, including the ones representing the technical provisions.

Meanwhile, after the *fair value* directives, a directive called *Accounting Modernization* (no 2003/51/EC) would be published and transformed into national law by the DL 35/2005 of 17/2, also applicable to insurance companies, which refers to the "possibility of the entities, to which the *NCIs* are not applicable, to opt for its application in the terms of the regulation no 1606/2002", aiming at "ensuring the equality of the competition conditions regarding the societies that apply the *NCIs*".

As in any other business, in the insurance industry, one may consider, generally speaking, that value is created when the income surpasses the capital cost (Graphic 1). The value increase may be assessed according to three variables: activity results, profitability of the investments and quantity and cost of the invested capital (financing).

Graphic 1 – Results from the Activity
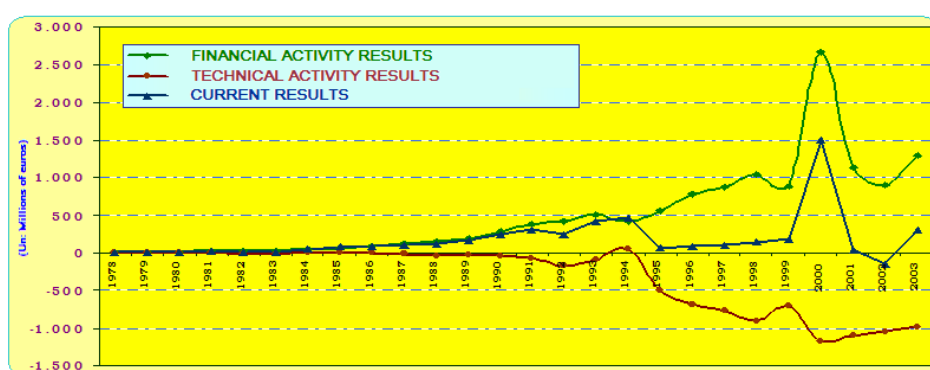
In the insurance activity liabilities are managed (in banking, money…). As a matter of fact, the intrinsic mechanism of the "insurance" aims at "allowing the insurance companies to contract debts at a no-risk interest rate, issuing insurance policies" (Pereira da Silva, 1993), investing the financial resources thereby obtained in assets paid at the market's interest rate…

As we may observe from the analysis of the graphic, the technical profits have been negative in the majority of the years analyzed here, situation which is already typically structural and has been systematically covered by the financial results. In many of the years, these were not sufficient to cover the losses of the technical activity, which resulted in major net losses for the financial periods.

Due to different needs, including structural needs, the insurance companies should pursue, on the one hand, the maximization of the results of their normal activity and (Graphic 2) still manage, on the other hand, to obtain the maximum income from the investments - minimizing the underlying

risks - at a level always superior to the cost of the invested capital, which seems to have almost always occurred in the last decades, the exceptions referring positively to occasional transactions (2000) or negatively to the reinforcement of the regulatory re-evaluation reserve (2002).

*Graphic 2* – Profitabilities in the Portuguese insurance sector
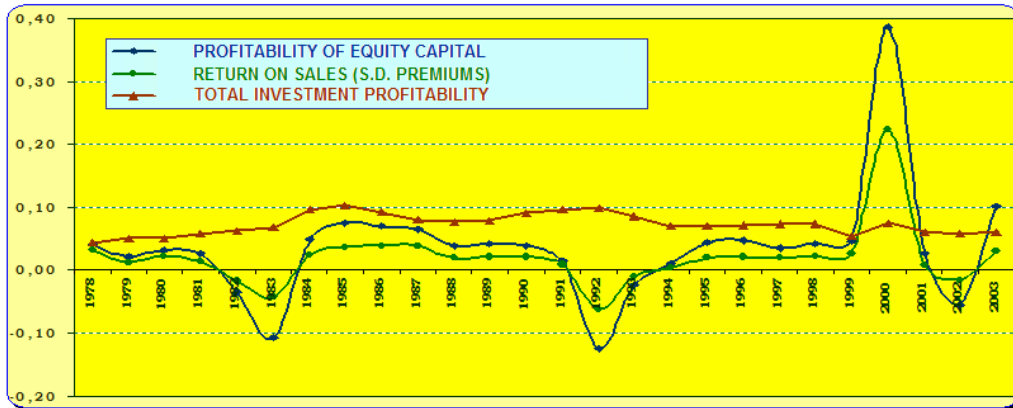
It may be thus inferred that more than value creation, the activity of the sector contributes decisively to the value creation of the other economic entities through the financial investments to which they are obliged.

Aiming at reinforcing the operability of the insurance in order to enable the market to have the "best" selection of insurance (or reinsurance) companies, we may perform the analysis of some indicators, among which we consider three basic requirements as the most important ones, namely: i) time stability (experience), ii) diversity and quality of the technical services in the subscription of the contract and mainly at the time of the claim (realisation of the risks), which in average represent about 2/3 of the premiums, and iii) financial solvency consubstantiated in a minimum level of own funds to face the randomness of the business.

In the system currently in effect in the EU, the guarantee of the liabilities assumed by the insurance companies arising from the insurance contracts is achieved by the following three ways (Graphic 3):

1) Trough sufficient technical provisions – static level of solvency – cautiously calculated;

Graphic 3 – Coverage of liabilities
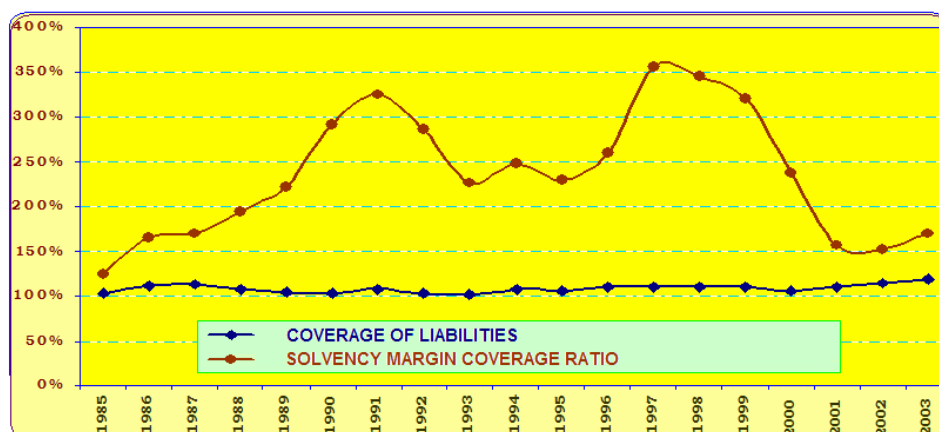
2) Trough the coverage of liabilities, i.e., by the volume of investments applied according to matching, liquidity, security and profitability principles, deriving from the representation of technical provisions by adequate and equivalent assets. In 1986, these assets represented 111% of the technical provisions, in 1994 more than 106% and, in 2003 almost 119% of the respective value. The consequent goal is to guarantee the immediate bonds arising from the subscribed contracts;

3) Trough the solvency margin, authentic additional and dynamic reserve, constituted by significant components of own funds of the insurance companies to cover the borrowed capitals put at their disposal, thus guaranteeing, in complement to the technical provisions, the stability and continuity of the whole of the insurance business.

Namely with regards to the premises for the calculation of the solvency margin, its basis is fixed on a *risk based capital* model that implies the risk analysis of three fundamental pillars: i) minimum capital requirements, ii) efficiency of the risk managing systems and internal control systems and iii) market discipline, consubstantiated in a solvency algorithm built on the basis of an accounting system at fair value. Thus, one admits greater requirements in terms of technical provisions and solvency margin values, which have an influence upon a higher necessary volume of own capitals.

4. STRATEGIC FORMULATION

We are currently in view of a market that is strongly competitive and in permanent change, especially after the (re)opening to the private initiative (1984), which stimulated the intensification of the competition, but has brought along a significant increase of *competences* to deal with the unexpected, *creativity* and *innovation* of products and processes.

Thus, currently, the offer of the Portuguese insurance market is, regarding this issue, at a minimum required level in European terms. In other levels of development, such as the demand for insurances, that is probably not the case, although we regard it mainly as a cultural issue. Such is the case with the density of the demand which we have already referred to...

The new strategies – even for the so called universal insurers (i.e., exploring all classes and types of insurances) - will be mainly the focus on certain core markets (regions) where they have effective competitive advantages to explore.

The Portuguese insurance market is an open and strongly competitive market and has been enjoying a sustained growth in the demand – a little more than 17,5% in average over the last years in real terms (27,1% since 1986). Thus, the Portuguese insurers must keep up with the

natural speed of the (European) insurance single market in which they operate or they will never be able to overcome their current regional insurers' character.

One of the fundamental aspects to determine the future strategies of the insurers operating in Portugal will be the guarantee of a higher value offer to the client (insured) as compared to their competitors – this detail will make each company look different to the eyes of the consumer - and this will certainly be the central objective of each operator, insurer or mediator in the (new) market.

For the insurers – whose product has an intangible nature and relates to "products" (risks) formally not desired by anyone, offering the client a higher value implies two fundamental strategic aspects:

⇨ to supply good products at the best price (*competitiveness*) that enables the consumer to have a minimum loss in his/her own value chain (quality of the service)

⇨ to achieve good results (*profitability).*

Such (higher) value offer also implies the structuring and optimization of every sector that constitutes the sector's value chain which, in the words of Porter (1998,) designates a series of activities related and developed by the sector to satisfy the needs of the respective clients (Figure 1), from the relations with the suppliers of services and production and sales cycles to the product distribution stage and after-sale service to the final consumer.

Figure I – Generic value chain for the insurance sector
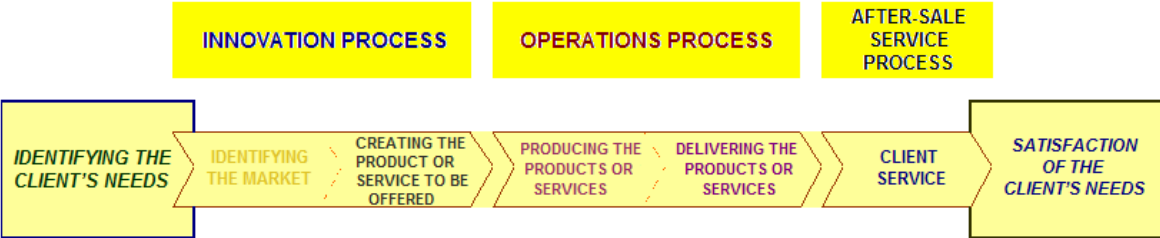
We may divide the planning process into three stages apparently inseparable, since they are complementary:

1) ANALYSIS, centred on the knowledge of the expectations and the study of the surrounding environment (external analysis) trying to identify *opportunities* and *threats* and the diagnosis (internal analysis) trying to point out *strong* and *weak* points.

In this particular case, we considered the S.W.O.T analysis the most adequate to study the strategic definition of insurers, since it is a qualitative application model of identification of the competitive positions in confrontation with the conditions of the surrounding environment and, still, considering the type of the existing market, with very diversified products.

Within the external analysis we tried to follow *Porter's five competitive forces* model (1990); with regards to the internal analysis we pursued the *value chain* model, also from Porter.

In the analysis of the *strategic factors* (internal and external), we considered as most adequate the elaboration of a descriptive table supported by a survey conducted with high qualified professionals within the sector – whose development should obey to *brainstorming*-like techniques, according to the model of *Wheelen & Hunger* followed by us – afterwards object of reflection under the perspective of *weight*[1] and *relevance*[2] and whose result shall allow to identify *strong and weak points* for the activity on its whole and *opportunities and threats* deriving from the surrounding environment. At last (*Table 1*), the respective interconnection will be conformable to a S.W.O.T. matrix which will allow to guide the company's strategic planning process.

Table 1 - *S.W.O.T. matrix (1)*

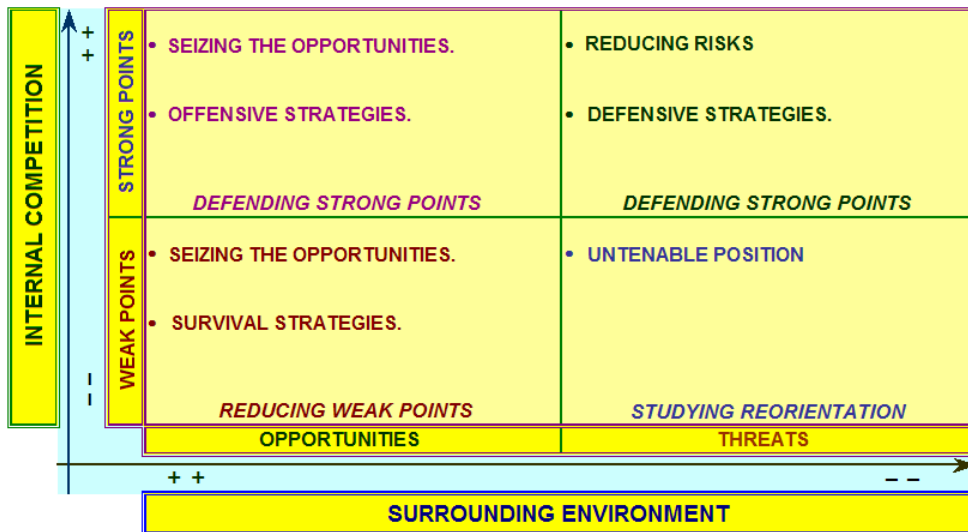|	STRONG POINTS	WEAK POINTS
OPPORTUNITIES	• EXTENSIVE MARKET PENETRATION, BENEFITING FROM THE OPERATORS' IMAGE. • CLIENT LOYALTY, EXPLOITING NEW NEEDS (RISKS), THE ABILITY TO INNOVATE AND THE SYNERGIES WITH THE BANKING SECTOR (BANCASSURANCE).	• EXPANDING THE DISTRIBUTION NETWORK (BANKING) TO " RETAIL " PRODUCTS. • INTERNAL REORGANIZATION (STRUCTURE), NAMELY OF THE INTERNAL CONTROL PROCESS AND THE DECISION-MAKING PROCESS, BRINGING IT CLOSER TO THE CLIENT.
THREATS	• PREPARING THE INTERNATIONALIZATION PROCESS • INTIATING THE AMALGAMATION PROCESS (MERGER) WITH SMALLER INSURERS. • IMPLEMENTING CONSUMER INFORMATION PROGRAMMES	• INNOVATION IN CONTRACTS RELATED TO EVENTS OF GREAT NOTORIETY • PRODUCT AND PROCESS INNOVATION PROGRAMMES • MEDIUM TERM DIMENSION INCREASE

2) SELECTION, trying to identify future alternative scenarios to the allocation of resources, aiming at (Table 2):

- Defending or even optimizing the strong points in view of situations of force towards the competition (++) through permanent innovation in new products and markets, and
- Reducing or overcoming existing weak points, facing the exiguity of the national market (unavoidable reality that must be overcome) through adequate strategies between the strategic potential and the position of the exhibited results.

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[1] I.e., the comparison between the organization's strategic factors with the relevant competition and/or the standards of the sector of activity.
[2] That is, the effect that the factor will have in the organization's ability to compete within the analysed industry.

Table 2 –S.W.O.T. matrix (2)

		SEIZING THE OPPORTUNITIES.	REDUCING RISKS
INTERNAL COMPETITION	STRONG POINTS	OFFENSIVE STRATEGIES.	DEFENSIVE STRATEGIES.
		DEFENDING STRONG POINTS	*DEFENDING STRONG POINTS*
	WEAK POINTS	SEIZING THE OPPORTUNITIES.	UNTENABLE POSITION
		SURVIVAL STRATEGIES.	
		REDUCING WEAK POINTS	*STUDYING REORIENTATION*
		OPPORTUNITIES	THREATS

SURROUNDING ENVIRONMENT

3) IMPLEMENTATION, consisting of resources' planning and organizational structure. In our opinion, it shall be achievable based on the study of the past. Without ignoring that the future will never be a mere extrapolation of the past (*Hamel and Prahalad*, 1995), any extrapolation model should take into consideration eventual predictable determining factors.

5. FORMALIZATION OF THE STRATEGIC DECISION

The current reality of the Portuguese market –insurers not being an exception – is that the companies are operating in a market, the European, with more freedom so that each company develops and renders quality services, with competitors more qualified and with more power, which requires a new form of management thinking.

However, such improvising capacity does not do without research on new flexible and decentralized managing models, i.e., which are able to bring the decision centre closer to the client so that for each strategic unit (*UEN*) a better adaptation to the business realities will be possible, based on an approach of per client results control (*direct profit per client*). In this particular case, management accounting plays a fundamental role, namely in the creation of an INTEGRATED ACCOUNTING INFORMATION SYSTEM that is functional and at the service of the (general) company's administration, which is able to allow a good and adequate management of all resources: operational, economic, financial, strategic, introducing a per client market approach.
These models shall allow quantifying the forecasts, especially with regards to the future of the market, thus optimizing long term planning tasks (prospective), a sustained and consistent basis of the budget plans for shorter periods, now at a more operational level, for the several products and other necessary resources, so as to allow responding to the change in the demand.

The prediction model that we followed was the analysis and extrapolation of time series, which constitutes one of the possible instruments (resources) of the planning tasks and allows (re)acknowledging how certain phenomena behaved in the past and which is their predictable behaviour in the future, assuming that the analysis of the historical data will be a safe basis to predict future demand, according to *Markov's* chain[3], i.e., if future sales depend on current sales (the minimum guaranteed demand for insurances…), then the long term demand may be *identified*.

In this sense, we tried to determine relationships that could eventually exist between the overall demand for insurance products (LIFE and NON-LIFE) and a set of macroeconomic variables in conformity with the reasoning and experience somehow capable of simultaneously explain that demand.

If it was possible to find explanatory variables for the respective variations, considering the strong relation between insurances and economy proved by many authors, then we would have been able to overcome one of the difficulties felt within the planning tasks and future prediction.

The several steps followed in this work were, in short, the following:

1 – construction of the *database* at current prices and its transformation at constant prices, since 1960, inclusive;

2 – *analysis of the correlation* between the variables and the impact that each one of them would have in the demand for insurance products, claims and technical provisions, task which, in the whole, has allowed us to study the relationships between each one of the macroeconomic variables with the dependent variables analyzed, excluding as a consequence of subsequent studies (regression analysis), the variables with strong relation between themselves (*multicollinearity* problem) or whose correlation coefficient was below 0,70;

3- *elasticity* study (demand – income) of the demand for the different insurance products, claims and technical provisions, to evaluate the sensitivity of each analyzed variable to the variations of the economy. It allowed us to confirm (conclude) that insurance consumers react to price changes, or even better, that the demand for insurances happens in function of the average income level; or, more specifically, that the insurance is an elastic, superior and essential good in the case of the *NON-LIFE* segment and in the *TOTAL* of the demand ($0 < \varepsilon < 1$) but almost a luxury in the *LIFE* segment ($\varepsilon > 1$).

4 – supported by the study of the correlation analysis and the different elasticities, in an attempt to refer to one or more linear or linearizable equations able to explain the demand for insurances and thus able to be used within the activity's planning tasks, we performed the *regression analysis*.

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[3] "When the following state of an event depends on the present state, its probable state may be estimated for any point in the future". Thus, the Markov chain helps in the basic analysis of the connection between the present and the future.

Namely, we tested the multiple linear regression model hypotheses underlying the application of the ordinary least squares method: *normality*, *homoscedasticity* and *absence of error autocorrelation*. The decision would then be made according to several statistical tests available, sequentially performed, namely:

➢ *Probability* (p) for the equation to explain the demand. Since we have tried to previously eliminate as much as possible the homoscedasticity through the correlation analysis, this work was somewhat simplified... and we have always obtained the value p=0;

➢ *Adjusted multiple determination coefficient* ($\overline{R_Y^2}$), which indicates the proportion of the dependent variance that may be statistically attributed to the knowledge of the independent variables;

➢ *Durbin-Watson (DW) first order autocorrelation test* that allows testing the existence of autocorrelation between the variables, typical when the observations are distributed over time (such in the present case). In a first stage, it would reveal itself as the most significant test in terms of decision;

➢ Multicollinearity test (condition number), to test the level of the relations of the independent variables between themselves, since when it is very high the regression coefficients loose "reliability";

➢ (*Kolmogorov-Smirnov's) error normality test,* to test the normality of the perturbation terms (errors) considering that the non verification of the normality of random perturbations would risk the validity of the statistical tests;

➢ *White's homoscedasticity test*, to conclude that the error variance (dispersion) is constant[4], that is, to guarantee that there are no homoscedasticity problems.

In view of the high determination coefficient values and since the data refer to time series, we may suspect that there is a possibility of the existence of spurious relations when the least squares method is applied, namely the presence of potentially non-stationary tendencies. In order to test it, the *augmented Dickey-Fuller test (ADF)* was performed. The obtained results allowed for the conclusion that there is a unitary root in every value series, so they are not stationary.

6. CONCLUSION

Considering that every crisis simultaneously implies a risk and an opportunity (*Vasconcelos e Sá*, 1999), the future might be in the insurers that are best strategically positioned in the market and are able to incorporate important concepts such as:

⇨ *business flexibility*, requiring a greater autonomy, i.e., the concession of the decision-making capability to levels that are closer to the client,

⇨ *business internationalization*, which might constitute a factor of development, especially for the insurers that already have a solid competitive position in the presently regionalized market,

⇨ *product diversification* or, alternatively, a *specialized offer*, through the commercialization of insurance programmes that are structured and adapted to each client's needs, that is, supplying different answers in different market structures,

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[4] Distribution of zero average and constant variance.

⇨ *rendering a better service,* namely at the time of risk realisation and especially in the regulation of the claim,

⇨ *professionalization of the distribution channels* as a key element for the business expansion and private savings capture.

A special priority (*Figure III*) should be granted to the production and the post-sale service, so as to overcome the risk aversion that restricts initiative or, in other words, to triumph over the fear of taking the risk and the fright of failure, which are typically Portuguese features, by adopting a set of four vectors - that we may designate as *virtuous diamond*: a production policy of high flexibility and quality in the performance under the perspective of low product and service cost/price, striving for promptness in the rendering of the post-sale service, especially at the time of the claim.

Figure III – Virtuous Strategy Diamond…
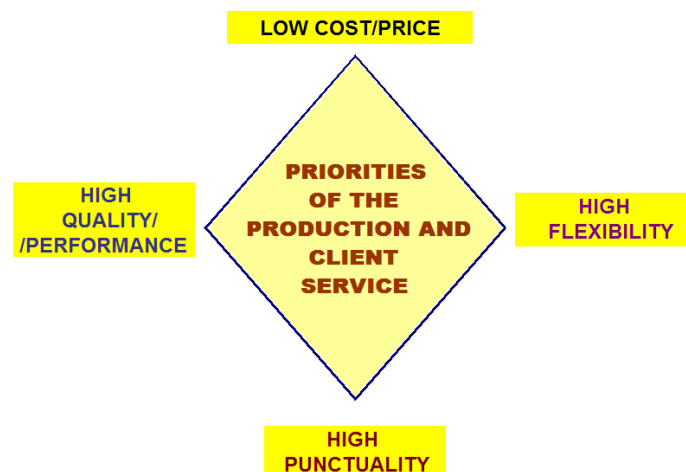
As a logical corollary of this *diamond*, the strategic decision process will be finally based on three fundamental vectors within this scope, which are: i) the S.W.O.T analysis based on the results of a survey always performed with those who, within the insurance companies, hold intervention powers with regards to the strategy; ii) the demand's elasticity, studying the different relations between the variables considered to best define the strategy; iii) the regression analysis that allows for the quantification of the relations between the dependent and explanatory variables, so as to be able to obtain a sustained and safe prediction.

At last, we performed the application of the regression equations (*Table 5*) that we had estimated for the year 2005. As it may be observed, the resulting deviations towards the volume of the respective values of the different dependent variables considered are not very relevant.

Table *5* –Prediction vs Real Data 2003

DEPENDENT VARIABLE (CONSTANT PRICES)	PREDICTION 2003	REAL VALUES	DEVIATION	%
LIFE PREMIUMS	1.414,983	1.636,217	221,234	15,64%
NON-LIFE PREMIUMS	1.243,457	1.225,062	-18,395	-1,48%
TOTAL PREMIUMS	2.412,421	2.861,279	448,858	18,61%

DEPENDENT VARIABLE (CURRENT PRICES)	PREDICTION 2003	REAL VALUES	DEVIATION	%
LIFE PREMIUMS	4.669,443	5.303,749	634,306	13,58%
NON-LIFE PREMIUMS	4.103,407	3.539,164	-564,243	-13,75%
TOTAL PREMIUMS	7.960,991	8.842,913	881,992	11,08%

It is interesting to note that the deviations towards the predictions, namely at constant prices, are inferior in the aggregate that shall have achieved maturity[5] in strategic terms: the non-life segment. This circumstance is not, however, confirmed by its transformation at current prices, being the unfavourable deviation reflected by the crisis we are in and that affects the internal demand and investment.

The use of these regression equations in the prediction that we performed of the demand for the year 2003 at market prices, allows to conclude that the real growth in the demand for insurances (y = 5.304 e 8.843 million euros), would be superior in the LIFE segment (13,58%) and in the aggregate Total (11,08%) which derives from the mere application of the respective equations ($\hat{y}$ = 4.669 and 7.961 million euros) and inferior in the NON LIFE segment (y = 3.539 *vs.* $\hat{y}$ = 4.103).

Some of these prediction instruments may be used, namely in the orientation and management of the sector's investment policy, in terms of future and even control for strategically relevant economic sectors, at the service of the superior national strategy.

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[5] Concept of the life cycle…

However, as a corollary, no *predictor* will be able to "imagine" the future in a consistent way, if he/she does not dispose of useful information on the global market and the (surrounding) environment in which the company moves and if there is no liberty to resort to adequate treatment of the information available, in order to be able to dispose of useful and adequate decision instruments.

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