

**A PROPOSAL ON HOW TO APPLY THE
BALANCED SCORECARD TO THE
COLLECTIVE INVESTMENT
MANAGERIAL FIRMS.**

**Muñoz Colomina, Clara I.
Urquía Grande, Elena
Sevillano Martín, Fco. Javier**

(Universidad Complutense de Madrid)

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A PROPOSAL ON HOW TO APPLY THE BALANCED SCORECARD TO THE COLLECTIVE INVESTMENT MANAGERIAL FIRMS.

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Collective investment companies, as other institutions in the financial sector, are actually going through moments of great volatility. Consequently these firms need to reformulate their strategic forecast for the next years. This need arises, among other factors, from the collapse of global financial markets, progressive liberalizations in tax and company regulation and the evolution in information technology.

Collective investments are very appealing for small investors, as they allow them to benefit from the skills of a professional management, as well as to spread different risks with a diversified portfolio in the different mutual funds. Nevertheless in moments of crisis such as the world is experiencing now, the great volatility of markets and capital losses clearly offset the attractiveness of the portfolio management.

The starting point is to take into account the new scenario now developing in collective investment management firms: increasing competence, less captive clients, a more independent sales force, and decrease in their P&L account. With this background we propose to use a planning tool that, in the last ten years, has proven itself to be a great help in improving the management of the firms. The aim is to identify their core activities in order to define a better strategy, gain new clients, and improve the quality of their services. The final purpose is to increase their return on investment.

Taking into account all the above mentioned reasons we have considered the collective investment management firms in Spain a good field to apply Balanced Scorecard as a device to improve management control .

In our research paper, we propose a balanced scorecard model, exploring three possible strategic scenarios, together with an operating simulation of this device with a five years' scope for these type of firms. To obtain this model we have used dynamic systems theory and other information technology instruments.

Keywords: undertaking for collective investment management companies, balanced scorecard , strategy, dynamic systems, simulation.

Postal Address: Facultad CCEE. Campus de Somosaguas s/n. 28223 Madrid. (Spain) E-mail: cimunnoz@ccee.ucm.es

I. INTRODUCTION

The industrial world used to be the privileged place to apply sophisticated management tools. Researchers shared a common belief that reality seemed there easier to quantify, and benefits from the new management instruments were much more evident. The industry had a large payroll, worked with small margins and used a lot of capital. As a matter of consequence any management improvement was likely to have a tremendous impact on the bottom line. On the opposite the financial world seemed to be a much less sophisticated world. Designing the right products seemed to be the road to success. Investment in assets, cost problems, human resources management played a secondary role.

The situation has changed dramatically as deregulation has driven fiercer competition among financial institutions., thus making managers to focus on day to day management as margins began to shrink. Realising that they lacked knowledge as well as experience to cope with the new scenario they turned for help to the recipes already proved successful in the industrial world.

This paper is about one of this attempts to introduce a sophisticated management tool, the balanced scorecard in a specific financial area that is the fund management sector. The reason for selecting such an area is the fact that fund management is undergoing a strong process of regulation change as well as a technological one. New products appear, more difficult to understand by the average consumer, the skills as well as the motivation of the selling force become a key factor for success, supervision by the regulatory bodies is tighter, internet is going to change many habits...

To make such a study we have followed the next steps:

- 1) A brief analysis about the balanced scorecard as it is a widely known management tool.
- 2) A brief description of the fund management situation in Spain and a definition of an average company as a sample for this study.
- 3) A definition of the processes and thus the value chain in this company.
- 4) The result of all this will be the drafting of a balanced scorecard for this typical firm. with all the strategic maps drawn.

5) Finally we will prove the usefulness of the new technique, analysing the new tool not only in static terms but also in dynamic ones as we will see through a simulation program the impact in the firm of a new market scenario using the balanced scorecard .

2. THE BALANCED SCORECARD AS A DYNAMIC INSTRUMENT TO ADOPT STRATEGIES

Strategy is a corporate concept in order to define a narrow relation between fixing an objective and how to reach it. It means a temporal dimension oriented to future and includes partial strategies of different sections or product lines, all of them connected. It allows to determine business nature in a single company, and configuration for a long period of time.

It has to be one strategy, defined and formulated responding to business characteristics such as history, financial human and technical resources, and managers objectives. In this sense, K.R. Andrews (1996) names it as corporate strategy and defines it like: “ a joint of decisions that, in a single company, expose general objectives, generate main politics, plan actions in order to reach objectives, and define the kind of business to practice, the type or human and economic organization to present and the nature of the economic value added offered to shareholders, employees, customers, and society in general” .

Corporate strategy is a dynamic concept that, in order to be implemented, has to consider variability of elements in every situation, and is necessary to have a flexible capacity of response available in order to cope to new circumstances. For example, nowadays new concerns in organizative, ethics and human factors, have obliged to include in this concept non economical objectives. On the other side, the end of a corporate strategy is not when it becomes implemented, but is necessary a continuous adaptation to a new environment. This is the only way to reduce risks when a company loses competition. (Porter, 1997).

When, in 1992, D. Norton and R. Kaplan published “The Balanced Scorecard”, they developed an instrument in order to divert the attention, effort

and learning of members in an organization oriented to manage strategy and planning (Ballarin & Davila, 1999). To do that, they defended the combination of several metrics to measure results in different ways: both financial and non financial, forecast and historical, describing short term and long term objectives, with internal and external perspectives, but all of them balanced in order to communicate the strategy of executive managers of the entity.

In a short period of time, many articles appeared about the Balanced Scorecard, and main companies, and other kind of entities, began to implement it. This implementation has followed, in general terms, the model defined by the primitive authors, pointing the fact of dividing organizations in four perspectives (financial, clients, internal process and strategic growth) the firm. and making a classification of main indicators for every activity. We have called the latter perspective of strategic growth because the most important lead indicators are there compiled., Nevertheless, some authors and many implementations have shown that it could be necessary to add a new perspective in order to show sectorial aspects of the company (Ballarin & Dávila, 2000), (Millan & Muñoz, 2002). This sectorial perspective will show those aspects about the activity of the company and could be essential to reach success like competitive advantages, promotion strategies, entry barriers, etc.

Unless implementation, initially, had a limited scope, as it was designed like an instrument to management, later on it has been discovered that it is also an important tool to help in strategic planning to the firms and, since 2000, BSC is considered as a fundamental instrument for global strategic management of the companies, as well as being in accordance with the budget.

It is significant that technological, social and political changes since eighties, led to consider that accounting traditional systems (especially budget), has to be eliminated as they couldn't show creative and flexibility capabilities in companies, and they have to be replaced by new control systems to offer financial and non financial information, quantitative and qualitative, forecast and historical, about the company and its environment. However, BSC issue allows to combine both a control system for management as showed, in a single screen, easy to read, essential and enough information to take decisions in the short term and a strategic tool in the long term for a manager. Therefore,

BSC is complemented by budgetary systems, as the first one represent a model to manage and control strategy and the second one, is useful for tactical planning as how to run resources to initiate strategic initiatives.

From this perspective, implementation of a BSC begins with the aims definition, indicators selection and definition of the strategic maps. These strategic maps should be able to describe strategy hypotheses as well as the process to transform intangible assets into tangible results about consumers and finance, to determine cause-effect between followed results by strategy, and finally distinguish between lead and lag indicators. The process to define an strategic map has to be developed in a top-down way. It has to begin with a first level strategy definition related to increase value for shareholders, go on with a different value proposition oriented to customers, later on will be aligned with internal process activities and, finally, intangible assets to reach those objectives will be defined. In this way, strategic maps will be useful for companies to show strategies in a coherent, integrated and systematic way, offering essential aspects to be applied in an efficient way by the management system of the company. In this process of implementation, strategic maps will show basic strategies, through a volume of explicit causal relations, showed by mathematical and statistical formulations, using analytical models.

3.Scope of work: The UCITS management companies in Spain

In order to understand the objectives, sense and purpose of this research paper it s useful to describe briefly the field we have chosen: the Undertaking Collective Investment Transferable Securities management firms. It is also necessary to make a brief description of the current situation in which this business is undergoing.

To begin with, the collective investment gather the investment in different financial markets of many witholders or investors (who can be either physical or institutional). This type of investment has experienced an incredible growth. The main reason is the growing complexity of the financial world, far beyond the understanding of the average small investors. The latter prefer to trust

professional companies to obtain a clever management of their small or medium portfolios in order to maximize their expected return on their investment. The preceding comment can be easily illustrated by the analysis of the evolution of the family savings. In 1988 bank deposits represented the 60% of the total amount invested by the Spanish families. By 1998, the percentage had moved to near a 30 %, following the acquisition of a wide range of collective investment products available to the families such as management funds, pension funds and life insurances.

The UCITS management firms are companies by shares whose social objective is the representation and management of funds as well as other assets of collective investment institutions regulated by law. These management companies in Spain used to need the “Comisión Nacional de Mercado de Valores”, from now onwards the CNMV (which is the Spanish financial markets’ regulatory body) authorization, as well as to be registered in the Commercial Register and in a special CNMV register. Since the approval of the new law on financial markets in 2002 the administrative process to be a management firm in Spain has been modified: now to be incorporated they need the approval of the Minister of Economy and to be registered afterwards in the CNMV special Register. The current regulation, composed by the Spanish Royal Decree 1393/90 and the European Directive 85/611/EC recently modified by th Directive 2001/107/EC which look for the coordination of laws in Europe, regulations and administrative provisions relating the undertakings collective investment and transferable securities for the management companies, makes this financial field a very controlled one. So, the Spanish government sets the rules for the creation of these firms and afterwards the CNMV will control their activities. Its important to know that these companies are obliged to inform of every relevant facts affecting their activities such as changes in their shareholding, as well as to provide the CNMV with several activity reports of the Investment Fundson and companies managed on a regular basis (for example the Balance Sheet, Income Statement portfolio holdings,..etc) every month. This control is basically justified by the need to protect the small investor (who is the major holder of the institution) but as we will see this complicates the activity

value chain of these firms. They also have to inform on a quarterly basis to the witholders and shareholders.

On the other side, the Spanish Government has just passed a tax law in 2002. This law makes easier and cheaper to change from one fund to another for the small investor. This change is likely to introduce a fiercer competition among UCITS management firms, which will drive them to apply changes in their commercial strategies. These firms will have to build a closer and more personal relationship with the investors in order to improve their fidelity. These movements towards client fidelization will imply an intensive training of the sales force as well as a bigger investment in new information and communication technologies.

Taking into account the wide range of products the Spanish UCITS management firms can offer, we have chosen for our research paper the four we think are more representative such as : a fixed income fund, a variable income fund, a mixed income fund and a foreign fund. It's also important to point out that the UCITS management firms must act according to the level of risk their investors are willing to bear. For this reason the management firms must be aware of the level of risk of every fund due to the need of meeting their investors' profile. In our simulation we will include a metric to measure the risk of each product or fund. Consequently the management of every fund is determined by the profile of the withholder and so the Spanish UCITS management firms must manage the necessary tools in order to know precisely their investors' profile. Therefore, within this profile we could include two basic factors: the clients' profit-risk profile and the clients' tax situation. This task belongs mainly to the company's sales force again, which must receive the appropriate training in order to be able to perceive the clients' specific profile taking into account their individual situation.

To summarize, to deal with the changes recently occurred and to be occurred in this sector (new tax regulations, coordination with the European Union requirements..etc) and also in order to have a clear and more flexible strategic planification, the UCITS management firms need a tool to help them manage the situation.

4. Application of the Balanced Scorecard to the Spanish UCITS management firms.

In order to define the strategic planning of an average UCITS independent management firm in Spain, we have first started with, once having analyzed the statistics data about the sector, defining a proposal of a value chain for the management firms. The second point will be to establish the financial and accounting statements of it.

a) The activity value chain

In this sense we are addressing the first issue by separating the operative process of these firms from the innovation process. The last process refers to the research of the launching of new types of funds tailored to the changing needs of the clients (occurring just now in the Spanish financial market).

Referring to the operative process the client already captured by the management firm must formulate its buying order and must provide a check or make a bank transfer for the amount of the purchase directed to the fund's bank account. The money will be sent to the current account opened in the depositary in the name of the fund. The client must receive a certificate corresponding to the executed purchase. Once the UCITS management firm know the daily flow of subscriptions and reimbursements and it has to adjust the fund portfolio to invest the new money or to sell some securities, depending if there is a positive or negative balance in the portfolio. Everyday, the firm will give the appropriate orders to the stockbroking firm it is working with, always according to the strategy designed by the portfolio managers.

When the order comes from a new client the company needs to introduce its personal data to the database, apart from giving him the fund prospectus and its last quarterly report. Afterwards the management firm shall have to develop a maintenance work treated in the directive 2001/107/EC which will be incorporated to the Spanish law within this year, as the Government will send in

March of 2003 the draft bill to the Spanish Parliament. Among others we could mention the obligation of:

- sending the client every term on a quarterly basis now, each semester once the new law will be approved within this year 2003 information about the results of his fund
- providing the client every year with the necessary information to fill in his tax forms
- registering the circumstances that could affect the specific participations of the client (for example a pledge of the fund)

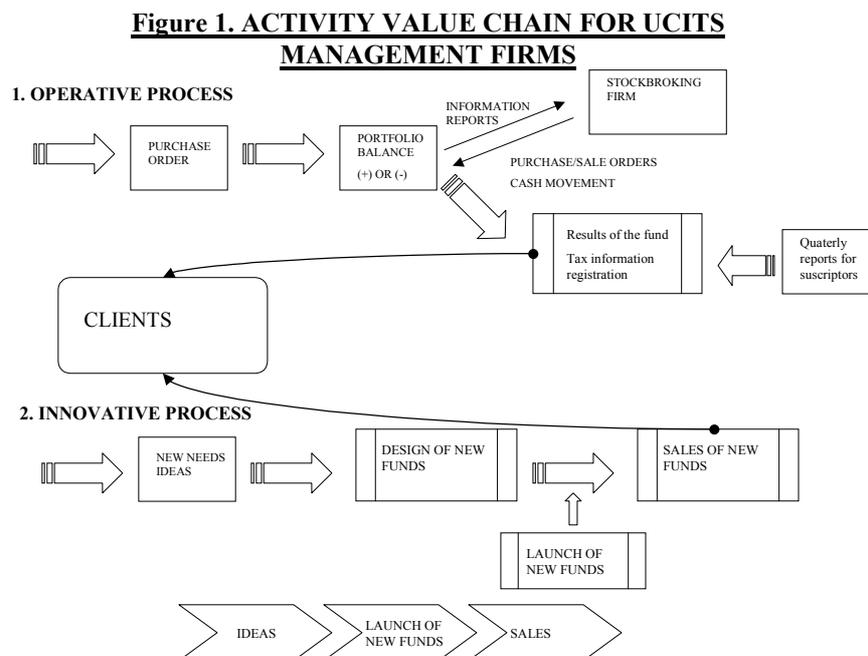
In the case of redemption, the process is exactly the opposite with the difference that the seller must wait seventy two hours before getting his money back, so as the management firm can liquidate its investment. (the time will be different depending on the kind of funds).

It's very useful to be able to detect the process of changing from one fund to another, whether it belongs to the same firm or to a rival company. For marketing purposes the firm must study if the movement between funds is due to a change in the commission policy of the fund or due to a "cannibalization" process, that is the launching of a new fund that only succeeds to attract former clients. All this apply to the relationship of the management firm with the client but from the internal point of view the firm must update its portfolio depending on the execution of the buy and sell orders of its clients and the corresponding cash movements, incorporating the information received from the stockbroking firm and from the depositary. Also, the firm has to value the fund on a day to day basis publishing the NAV (the net asset value) in order to comply with the existing regulations.

In other words, the key of the success of this process is to avoid making mistakes, to be always accurate and sending the information on time and finally it's very important for the client to feel that his investment is always liquid. All these factors will contribute to create a good image of the firm in the mind of the client.

When coming to the innovative process it's basic for the salesmen to be able to perceive the changing needs of their clients in order to launch new funds. The UCITS management firms shall evaluate the success of their

present funds depending on which funds are the recipients of the money brought by the clients, but success means also to anticipate market changes starting to design new funds before competitors. This innovation process has its own chain value which begins with a knowledge of the clients new desires as transmitted by the sales force. Afterwards the portfolio managers will have to give shape to these desires designing the appropriate fund. For example, during the years 2000-2002 the bad performances in the stockmarket have the clients very worried by risk, so the type of funds they wanted were a money market guarantee fund and so the portfolio managers needed to design one. Another example could be if some clients may desire to invest part of their funds in the Real Estate business and so managers have to set up a fund investing in Real Estate securities for all Europe and with great liquidity or Real State Funds which invest directly in real asset but with reduced liquidity (twice a year). Moreover the firm must study the potential profitability of the fund, according to the expected number of investors. Finally the management firm should analyze if its portfolio managers have the necessary qualifications to handle the new products.



Source: own design

b) The establishment of the financial and accounting statements

In respect to the second issue we must stress the fact that the management business is mainly based on volume. In effect, the income is proportionally related to the funds raised by the company while the cost structure of the firm is relatively rigid. There is no need for big capital investments as a typical service company and there isn't any stock to finance nor any client suppliers lag as all operations are performed cash. Besides, the capital investments can be pictured as launching investments.

During the life of the firm no more important investments are needed. In the cost structure we could divide three kind of costs: variable, fixed and semi-variable. The fixed costs will be the lease of the office and the managers payroll, the semi-variable costs will be: the sales force payroll, the advertising costs, the computers costs and the administration personnel salary. Finally it must be mentioned that 74,21% of the variable costs are represented by the commissions paid to the intermediaries.

On the revenue side, the 93% of the revenue of a Spanish average UCITS management firm comes from applying a commission to the volume of the managed portfolio. Several assumptions have been made, bearing in mind the specialities of these management firms in Spain. The first assumption refers to the different commissions set by law for the several products these firms manage. In our simulation we have applied the respective commission for the four type of funds we chose and its evolution:

<u>Year</u>	<u>2000</u>	<u>2001</u>
For the Fixed Income Fund	1,5%	1%
Variable Income Fund	2%	1,5%
Mixed Income Fund	1,75%	1,5%
Foreign Fund	2,5%	2%

The second assumption is the average volume an independent Spanish firm manages divided in the different types of funds.(see Figure 2)

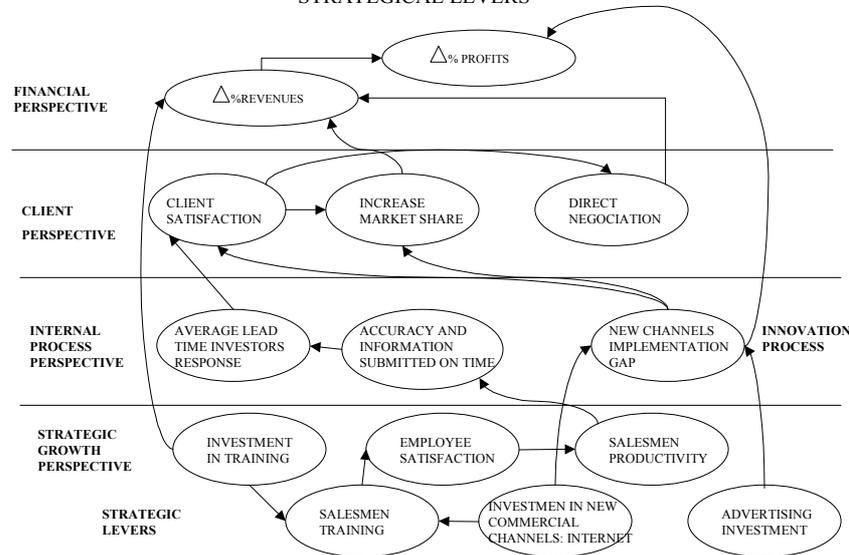
The third and last assumption, within the revenue structure, is that 50% of the portfolio managed by each fund is indirectly negotiated.

So, in this activity once the business is established the costs' structure is relatively rigid. In synthetic terms, it's the same to manage 24 millions of € than 240 million, because the strategy remains standard and the only thing that changes is the volume of the orders transmitted to the stockbroking firm. The administrative costs due to an operative management firm are very rigid. Only if increasing volume means the introduction in new financial markets (derivatives or structured funds) can we speak of new costs (for example an increase of portfolio managers). Therefore, the only variable item is the commercial one which is composed, above all, of the commissions paid to the intermediary firms.(see Figure 2)

On the basis of the cost structure there must be a schedule of the income statement, assuming the commercial structure does not change and instead the portfolio volume managed does change.

Once a prospective of the financial and accounting statements has been analysed as well as the value chain of a UCITS management firm in Spain with its key activities we could define a strategic plan for them. In the short term, the management firms should "stick to the knitting" trying to keep the sales volume figures (therefore the revenues) and the market share. In the long run once these objectives have been achieved, these firms should invest in new technologies and in proper training for their sales force and portfolio managers. These achievements will induce the management firms to obtain both a financial and commercial success.

FIGURE 2. STRATEGIC MAPS AND OPTIMAL ORCHESTRATION OF THE STRATEGICAL LEVERS



5.The simulation of the balanced scorecard

As the situation in this field is changing very quickly, a dynamic BSC is needed so that's why we designed a simulation of the BSC applied to the UCITS management firms with two strategic scenarios, precisely two these firms are currently undergoing. This way, the strategy is implemented during two phases and will require a careful orchestration of the strategic levers. Although there is some latitude with respect to the magnitude of specific decisions the users of this simulation can make within the strategic framework, there is little choice with respect to the timing of those decisions. Indeed, one of the important issues to be taken into account with a simulation experience is that timing is crucial. Therefore, it is important that the management firms know what to do but it's essential for them to know when to do it and how much of it to do, based on the feedback given by the BSC from carefully chosen strategic indicators. The BSC metrics will provide the assistance necessary to get both the timing and the magnitude of the strategy correctly.

So, these two strategic scenarios make possible the definition of the simulation of the balanced scorecard as a dynamic tool to be used in the firms and can be defined as follows:

Scenario I: applying tactic objectives focused mainly on improving the financial and commercial figures

Scenario II: applying new business prospects in the UCITS management firms

a) Scenario I: applying tactic objectives

From the financial perspective the basic aim will be to increase the revenues of the management company. For that purpose we establish several indicators to check the results:

- Revenue Gap in percentage with reference to the projected revenues
- Profit Gap in percentage with reference with the projected costs and revenues.

Besides we have to take into account the monetary restriction that the management companies faces; so we have to introduce the indicator of the cash situation. On the other side, to fulfill the regulations the company must comply with specific indicator which is the solvency ratio.

Finally, it's necessary to check that the costs are within the expectations; to do so we will add an extra indicator: the profit margin existing at any time.

In any case due note must be taken that the management company is in its harvesting phase so another important factor it's the sales volume maintenance.

From the client point of view, and knowing that the main problem of these institutions is currently a commercial one, it is convenient to control the relative position of the company through an indicator showing the sales increase related to the increase of the total funds under management in the market. That's why the increase in the market share is a relevant indicator. An independent management company is not mainly interested in its market share which is minimum compared with the sector, but in its increase, so the ratio can be

expressed as the relation between the increase in the sales of the company and the increase of the total market sales.

The central indicator in this phase and from this perspective is the increase of the funds under management classified by total volume and the number of investors as the management company is interested in having a high number of clients. Its much more risky when all the volume is concentrated in a small number of investors. The volume of new funds under management will be the difference between the suscriptions and the reimbursements of the funds.

Besides, we must include an indicator that is specific of the variable income fund to measure the impact if there is a change in the commissions structure of the fund.

We must also take into account that the profit of the client depends on the fund he invests in and consequently we could measure the percentage of the total money invested in high yield funds (never the fixed income fund).

Finally, it's relevant to see what percentage of the income is obtained directly and not through the ditribution channel, that's why we must introduce the indicator: volume of the portfolio obtained by direct negotiation/ total volume managed in the portfolio.

The fact that the commercial side is the key of the business justifies the use of many indicators.

From the internal process point of view , it will be appropriate to include two indicators in the innovation process:

- new funds on pipeline and
- average lead time until the launching of the new fund. It's the time that goes from the decision to launch a new fund until the fund is set up, the average time is 90 days which is the current time for an independent management company in Spain at the present time. An increase of this average time would mean that the company is loosing competitiveness and is not giving a timely response to the new needs of its clients. Although now the Finance Law has been approved in November 2002, the Commercial Register inscription is voluntary, so the time will naturally be reduced.

From another point of view, in this business the administrative process is not really critical. So you need to count only on two indicators to analyze its efficiency :

- number of complaints received by the clients in an specific period, it can be measured by the number of complaints divided by the total number of clients. We start from a two percent figure and in this field it is considered that beyond a five percent the indicator would be alarming.
- Referring to the after sale service we must include an indicator measuring the fastness of the information given to the client after a purchase order has been performed.

The level of risk of each fund designed by the portfolio managers will be measured by the modified duration, whose formula we include in figure number

From the strategic growth point of view it is basic for the success of a UCIT management firm to direct the effort to improve the relationship with the client so it is necessary to measure:

- the employee satisfaction: it is an indirect way to see his motivation and commitment to the company. This is considered to be basic to achieve success specially in the commercial area. The range of this essential indicator will vary from 0 to 100 and it will be calculated using surveys and treating them statistically.
- The productivity of the salesmen: we can relate the amount of new funds raised to the number of salesmen
- The commercial effort can be represented by an indicator relating the number of new clients with the number of salesmen.

II. b) Scenario 2: applying new business prospects in the firm

Once the tactic objectives in scenario 1 have been achieved, it's time for investing in the long term. It's time to invest in new technologies such as launching a new distribution channel through internet: and providing proper training to the sales men in order to maintain success in the long term.

If we picture ourselves in the second phase ,let´s see what changes must be introduced in the balanced scoreboard to take into account the impact of the new commercial channel and the more prepared sales force as the main lead indicators for the strategic plan to work.

From the financial point of view the goal was to increase the sales and to obtain a profit on sales. It is not useful to change the financial indicators. They must keep ,measuring the deviations on the new targets for revenue and profits and continue analysing the margin.

The cash indicator must remain. In spite of the new cash brought by the capital increase, this is still a suitable indicator as the company is investing heavily. The cash indicator must always be kept in view at a moment when there is no clear proof of the success of the new strategy.

In the case of the client point of view, we must adjust the indicators to measure the success of the new selling strategy. It is relevant to see if the new channel is rapidly increasing the volume of sales.It is not useful anymore to keep the indicator relating the change in the variable income fund structure of commissions to the volume of the fund. If this effect exists it will already have occurred before the beginning of the second phase. On the contrary we must include two new indicators:

- Volume raised through the new internet channel
- Number of new clients brought by internet

The first phase indicator referring to the direct sales in relation to the sales through intermediaries must now be changed to reflect the three channels:

- volume by internet
- direct volume
- volume by intermediaries

Just the same we will take the same approach to change the client satisfaction indicator to another one:

- satisfaction of the internet client

Still we could maintain the first one:

- satisfaction of the traditional client

The internal process point of view must also include in this phase:

- an indicator showing the number of process failures related to the number of operations. (technology is a much more key issue in the internet channel than in the traditional process and is a new concern for the firm).
- Moreover if the technology is working properly it is a much more relevant factor for the achievement of the proposed goals than in the former channels.

When talking about the computer system the most important point is to be sure that the internet software is implemented on time , so a suitable indicator would be the gap between the realisation of the internet project and the scheduled date of implementation.

Finally from the strategic growth point of view it is basic for the success of a UCIT management firm to provide proper training to the salesmen. If we look at the training and growth point of view in this phase the firm must measure specifically:

- the productivity in the internet channel
- the degree of satisfaction with the internet channel of the employees

Also,we could also propose some indicators about their awareness of the new products:

- number of salesmen receiving training divided by the total number of salesmen
- -number of hours devoted to training courses by the number of courses taken as indicators showing if the human and technical resources are meeting the expectations.

It is essential to see if the clients use the new service to ask for information, the time to answer their requests and the percentage of clients who make a consultation and afterwards subscribe a fund.

Summing up, we need to make changes in the balanced scoreboard to acknowledge that in the second phase the investment process is beginning (as well in the building up of the internet facility as in the process of employees training). So, investment is going to represent a basic role.

On the opposite, specific indicators of the new channel must be included to judge if the new channel is performing according to the expectations,

because success in this area is essential to the rescue and later consolidation strategy of the firm.

After some time, when the new channel will be consolidated we may think of substituting the specific indicators related to the channel by some others much more global.

	STRATEGIC OBJECTIVES	STRATEGIC METRICS
FINANCIAL PERSPECTIVE	INCREASE THE REVENUES	F1: REVENUE GAP WITH REFERENCE TO THE PROJECTED REVENUES F2: PROFIT GAP WITH REFERENCE TO THE PROJECTED COST AND REVENUES F3: PROFIT MARGIN
	FULFILL MONETARY RESTRICTIONS	F4: CASH SITUATION F5: SOLVENCY RATIO
CLIENT PERSPECTIVE	INCREASE THE MARKET SHARE	C1: % OF INCREASE IN MARKET SHARE (INCREASE IN SALES COMPANY/INCREASE TOTAL MARKET SALES)
	CONTROL THE RELATIVE POSITION OF THE COMPANY	C2: FUNDS SALES INCREASE/FUNDS INCREASE UNDER MANAGEMENT IN THE MARKET
	INCREASE NUMBER OF CLIENTS	C3: SUSCRIPTIONS-REIMBURSEMENTS C4: TOTAL VOLUME FUNDS MANAGED/N° INVESTORS
	INCREASE IN THE DIRECT NEGOCIATION	C5: VOLUME OF THE FUNDS PORTFOLIO OBTAINED BY DIRECT NEGOTIATION/TOTAL VOLUME MANAGED IN THE PORTFOLIO
INTERNAL PROCESS PERSPECTIVE	INNOVATION PROCESS (INCREASE THE FIRM'S COMPETITIVITY)	I1: NEW FUNDS ON PIPELINE I2: AVERAGE LEAD TIME UNTILL THE LAUNCHING OF THE NEW FUND
	IMPROVE THE OPERATIVE PROCESS	I3: N° OF INVESTORS' COMPLAINTS IN A PERIOD/TOTAL N° OF INVESTORS I4: MEASURE OF THE FASTNESS OF THE GLOBAL INFORMATION GIVEN TO THE CLIENT (DAYS)
	FUNDS CONTROL RISK	I5: MODIFIED DURATION

STRATEGIC GROW PROCESS	IMPROVE THE SALESMEN AND PORTFOLIO MANAGERS EFFORT	G1: EMPLOYEE SATISFACTION (STATISTICAL SURVEYS) G2: COMMERCIAL EFFORT: N° NEW CLIENTS/N° SALESMEN G3: PORTFOLIO MANAGERS EFFORT: N° NEW FUNSD/N° PORFOLIO MANAGERS
	SUCCESS OF A NEW DISTRIBUTION CHANNEL THROUGH INERNET	G4: PRODUCTIVITY OF THE INTERNET CHANNEL G5: DEGREE OF SATISFACTION WITH THE INTERNET EMPLOYEES

III. c) The development of the simulation computer program

We have undergone to create a simulation model to answer the need to motivate the managers about the usefulness of this new management tool and specially to teach them how to create one, how to use it and how to understand its results. The technological side has been essential to the development of this simulation. The program is based on the system dynamics, the database used is SYBASE and the programming language PEARL. We have also used three EXCELL spreadsheets (see Figure 5). We have established ,when designing the simulation ,a serie of hypotesis on the mathematical relations between dependent and independent indicators, lead and lag indicators.

Finally we must say that this simulation aims to teach by itself the methodology leading to create a balanced scoreboard,so that the manager can understand its internal logic by interacting with the program. This will help the managers to understand that the balanced scoreboard is a very useful tool for the strategic and tactic planning. The firm will have to give an answer to the changing situation of the market to provide its clients with a wide range of products and financial services suited for them and ensuring the firm a reasonable profitability.

During the simulation the users will receive a balanced scoreboard partly designed .They will have to replace some indicators to take into account the change in the strategy and they will be able to play with some variables to improve the management of the firm.

<u>NEW TECHNOLOGIES USED FOR THE DEVELOPMENT OF THE SIMULATION COMPUTER PROGRAM</u>		
1 ST PROCESS	2 ND PROCESS	3 RD PROCESS
USER PROCESS	EXECUTIVE INFORMATION SYSTEM	SIMULATION MODELS
EXCEL	PEARL	ITHINK
FREE DATA PRESENTATION: EASY ACCESS FOR USERS TIME COMPARABILITY	FREE DATA PRESENTATION: EASY ACCESS FOR USERS TIME COMPARABILITY	SIMULATION WITH HYPOTHESYS AND HISTORICAL DATA
DATA FROM DIFERENT SOURCES JOIN TEXT AND GRAPHICS	SPECIFIC INTERFACE FOR THE USER AND DATA WAREHOUSE RETRIEVE MULTIDIMENSIONAL FORMAT	CAUSE EFECT HYPOTHESYS SIMULATION OF SRTATEGIC DECISSIONS EFECTIVE TOOL FOR THE COMMUNICATION OF STRATEGIC DECCISION AND COST-EFECT HYPOTHESYS.

FIGURE 3: SIMULATION PROGRAM FIGURE



6. Conclusions and future development

In our research work, whose preliminary sketch we are presenting here we have tried to analyze the possibility of applying a widely used managing model: the balanced scorecard to a specific kind of companies the UCITS management companies belonging to the Spanish financial markets. Taking into account the present situation and the possibilities to cope with the new business needs we have noticed that the BSC is not only a useful tool to manage and planify strategically a firm but also opens new development possibilities through the appropriate software designs. This tool will be useful to face the changes in this field of activity.

7. References

AFI, Analistas Financieros Internacionales [1996]: "Guía del Sistema Financiero Español, en el nuevo contexto europeo". Editorial Escuela de Finanzas aplicadas, 2000, Madrid.

Andrews, K.R. [1987]: "The concept of corporate strategy". Ed IRWIN, USA.

Aracil, J. (1986) "Introducción a la dinámica de sistemas". Ed. Alianza. Madrid.

Ballarín, E. y Dávila A. [1996]: "El Cuadro de Mando Integral", *Documento de Trabajo del IESE*, número DT-2639. IESE, Universidad de Navarra.

Ballve, A. (2002). "Cuadro de Mando: organizando información para crear valor". Ed. Gestión 2000. Barcelona

Banegas, R.; Nevada, D. y Tejada, A.[2000]:" El Cuadro de Mando como instrumento de control en la gestión social: Recursos Humanos y medio ambiente", *Revista Española de Financiación y Contabilidad*, volumen XXIX, núm.103, pp. :107-147.

Boesen,T. [1999]: "Creating Budget-less Organizations with the Balanced Scorecard", *The Balanced Scorecard report*. Harvard Publishing Business, Boston.

Cañibano, L.; García-Ayuso, M y Sánchez, P.[1999]:"La relevancia de los intangibles para la valoración y la gestión de empresas: revisión de la literatura", *Revista Española de Financiación y Contabilidad*, extraordinario núm.100, pp.17-88.

"Citibank : Evaluación del desempeño", Caso C-700. IESE, Universidad de Navarra.

Dávila, A. [1999]: " El Cuadro de Mando Integral ", *Revista de Antiguos del IESE*, Septiembre, pp. 34-42.

Deschamps, B.; Mehta, D. (1988) "Chief Financial Officer: Strategy formulation and implementation". Ed. John Wiley & Sons. USA.

Escobar, T. [1999]: "El papel del cuadro de mando en la gestión estratégica de la empresa", *Revista Española de Financiación y Contabilidad*, vol.XXVIII, núm. 102, pp. 1075-1099.

Fernández, A. [2000]:" Alineando el presupuesto y los incentivos con el Cuadro de Mando Integral ", *Continuidad Madrid-Barcelona*. Diciembre 2000,pp. :1-14.

García Suárez, J.L., Arias Álvarez, A.M y Machado, A [1999]: "Metodología para el diseño e implantación de un sistema de información de gestión para PYMES", *Revista Española de Financiación y Contabilidad*, vol.XXVIII, núm.102, Octubre – Diciembre 1999, pp. :1101-1144.

General Electric Company (A). Caso C-220, IESE, Universidad de Navarra,1964

Kaplan, R. "Presente y futuro del cuadro de mando integral". Harvard Deusto Finanzas y Contabilidad, nº 48, julio-agosto 2002.

Kaplan, R y Norton, D. [1997]: "El Cuadro de Mando Integral" Editorial Gestión 2000, Barcelona.

Kaplan, R y Norton, D. [2001] : "Cómo utilizar el Cuadro de Mando Integral para implantar y gestionar su estrategia ", Editorial Gestión 2000, Barcelona.

Kaplan, R.S. y Norton, D.P [2001]: " Transforming the Balanced Scorecard from performance measurement to strategic management: Part I ",*American Accounting Association*, vol.15, nº 1, pp 87-104.

Kaplan, R.S. y Norton, D.P [2001]: " Transforming the Balanced Scorecard from performance measurement to strategic management: Part II ",*American Accounting Association*, vol.15, nº 2, pp 147-160.

Lauzel, P-; Cibert, A. (1962) "Des ratios au tableau de bord". Ed. Enterprise Moderne. Paris.

Millán, A.; Muñoz, C.I. (2002) "El cuadro de mando integral para las entidades aseguradoras". Cuadernos de la Fundación Mapfre, nº 70. Madrid.

Olve, N.; Roy, J.; Wetter, M. (2002) "Implantando y gestionando el cuadro de mando integral". Ed. Gestión 2000. Barcelona

Ortiz, J.M. [1999]: "David Norton y los maestros del Cuadro de Mando Integral" *Revista de Dirección y Progreso*, núm. ¿? Pp. : 68-73.

Ripoll, V.M. y Guevara, L.M [2000]: "Capital intelectual: Contribución de la Contabilidad de Gestión", Universidad de Valencia, pp 1-12.

Rosanas Martí, J.M. [1999]: "El caso del Cuadro de Mando Integral ", *Expansión*, 12 de Noviembre de 1999.

Rucci, A.J, Steven P.K y Quinn, R.T. [2000] : " The Employee-Customer-Profit chain at Sears ", *Harvard Business Review on point*, nº3537, Boston.

Schneiderman, A.M. [2001]: "How to build a Balanced Scorecard", www.schneiderman.com.

Senn, J.A. (1987) "Information Systems in Management". Ed. Wadsworth Publishing Co. USA.

Simons, R. [2000]: "Control in an age of empowerment", *Harvard Business Review on point*, product number 3545, March-April 1995, pp.16-75.

Vavra, T.G. (2002) " Cómo medir la satisfacción del cliente según la ISO9001: 2000". Ed. Fundación Confemetal. Madrid

Vogel, M.H. [2000]: "Gerenciar sólo por indicadores financieros es un suicidio", www.tablero-de-comando.com.