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Measuring the People Management and Shareholder Value Creation Relationship. An Empirical Approach from Italian Firms

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Summary – 1. The European approach to the creation of value - 2. Value Based Management: corporate culture and value measures - 3. The creation of value and Italian listed companies - 4. The importance of a correct human capital management - 5. Human capital development and corporate return: some Italian cases - 6. Key findings - 7. Research dataset and methodology - 8. Research findings

Abstract

Italian companies are characterized by the presence of many small- and medium-size firms, along with some large organizations facing new challenges to improve financial results. In recent years being an Italian market player has not been so easy - even those with large and considerable production capacity – because market conditions do not always allow firms to sustain long-term competitive advantages. This is even more true considering the economic and financial crisis that began in the late summer of 2008; however, this goes beyond the purpose of this study on Aida's dataset update.

Moreover, this paper considers shareholder value theory as well as the thesis supporting the relationship between employee development and responsibility, productivity improvement, employee commitment and financial performances. These considerations confirm that leadership development practices need to

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be integrated in workplaces to take real advantage of greater productivity creation and, as a consequence, greater shareholder value creation (Rappaport, 2006).

The paper develops two different methodologies: a qualitative one (case histories) and a quantitative one (multiple regression).

The first part of the paper, sections 1-3 (M. Pellicelli), presents the shareholder value theory and the value based management principles in the European context. In particular, we will analyse the significant results obtained by companies listed on the Italian stock market in terms of total shareholder return.

The second part of the paper, sections 4-6 (C. Casalegno), presents leadership and leadership development theory and analyses the principal factors adopted by listed Italian companies that have obtained the best shareholder value results.

In the third part, sections 7-8 (E. Cerruti), we illustrate the methodology and the dataset characteristics used, the characteristics of the variables set chosen, and the research results for the listed Italian companies. Finally, we analyse in detail the level and the intensity of the relationship between human capital and the dynamic of shareholder value creation.

1 – The European approach to the creation of value

It has been theorized (Mella, Pellicelli M., 2008) that large *managerial capitalistic firms*⁴ are characterized by several clear-cut phenomena. Managerial governance tends to privilege the profitability of capital – the Return on Equity (ROE) – more than earnings as an absolute value of wealth; thus profit, understood as a residual economic value, once the production factors and capital costs are covered, loses its relevance as a measure of wealth produced by the firm and as a return for the entrepreneur.

In fact, firms can be viewed not only as *productive* (of utility) and *economic* (in terms of value) transformers but also as *financial* transformers that transform capital raised as *equity* and debt into productive investments that produce an operating income guaranteeing adequate levels of revenue, interest and dividends (Mella, 2008).

Moreover, management, particularly in public companies – where shareholders are more sensitive to the increase in the value of their shares than to immediate profits – must try not so much to satisfy the profit needs of investors in equity but to produce over time an increase in share values. Thus, management tends inevitably to be aimed at producing value for the shareholder and guaranteeing profits that exceed the opportunity cost of capital; in other words, the return held to be fair or satisfactory to shareholders.

The classical approach, which viewed the firm as an instrument for profit, becomes outdated in this context, replaced by one that sees an increase in the value of invested

4 After the third phase in Greiner's model (1972) was completed, large firms were increasingly entrusted to management; this development has produced a separation between the ownership of capital and management power. The model describes the various phases of the organizational development of each firm in order to derive the general rules to guide the changes in the organizational structure based on age and size. In each phase during which the organizational rules are stable, every period of "evolution" is associated with a period of "revolution", where there is a serious upheaval in the functioning and functionality of the organization. The phases are as follows: Phase I – Development linked to creativity and a crisis in command; Phase II – Development linked to authority and a crisis in autonomy; Phase III – Development linked to the delegation of authority and a crisis in control; Phase IV – Development linked to coordination and a crisis in bureaucracy; Phase V – Development linked to collaboration; Phase VI – Development linked to extra-organizational recombinations.

capital as the main objective of the firm's activity; this latter approach has favoured the development of Shareholder Value Theory. The popularity of this theory is tied to the spread of the fragmented-ownership firm, or the *public company*, which is widespread in America; in Italy, on the other hand, the theory of the maximization of the economic value of capital is one of the guiding principles of the Business Economics School founded by Zappa (1937).

From the scientific point of view, substituting profit maximization with capital value goes back to the work by Fisher (1930), who derived the value of capital from the present value of the future earnings flows generated by the capital, comparing the present value with the investment cost.

This premise spawned a series of studies aimed at determining the discount rate that would balance the two values.

Some of these contributions, which were mainly by economists, explicitly present the concept of the maximization of the value of capital, which was then also taken up by academics studying the firm (Hicks, 1965).

In any event, we must distinguish between the two approaches for value creation: the European approach and the North American one.

The North American approach is typical of an advanced capitalist economy where, on the one hand, production occurs through large firms (typically public companies), and on the other financial markets play an important role as both collectors of capital and evaluators of the value of business initiatives. In this context the market represents the yardstick for a firm's performance and the place where the competitive comparison occurs regarding its strategies.

Thus the concept of value has a strongly financial significance that links it to share value, the necessary condition for which is profitability. The market share value depends only in part on the investment policies of capital holders or on the firm's financial policies that aim at positively exploiting the financial lever. The true engine for the production of value is still management's capacity to achieve and maintain positions of competitive advantage.

The European approach to value creation can be placed in a context that is very different from the North American ones⁵.

The European productive context is, in fact, characterized by small- and medium-size firms, often family enterprises, along with a much more limited dependence on the financial market, with limited equity capital and ample use of debt capital. For such firms, even when profits are high the distribution of dividends is less important than the growth of equity value (Pellicelli M., 2007).

⁵ One of the leading Italian proponents of the European approach to value theory is Luigi Guatri; among his many works on this subject we should mention: Guatri (1991), Guatri and Massari (1992), and Guatri and Vicari (1994).

Achieving a high level of profitability is precisely the condition for increasing the value of the firm's economic capital (Mella, 2005) in order to gain a listing on the stock exchange.

2 – Value Based Management: corporate culture and value measures

In this context, starting in the 1990s, first in the Anglo-Saxon countries and only subsequently in Europe, the principles on which Value Based Management is based gained wide acceptance as a managerial approach that accepts as the main objective of firms the production of value for capital in terms of both dividends and capital gains.

In order to obtain shareholder value, it is essential that the culture within the organization change. Corporate culture is one of the factors behind the success of shareholder value, and it influences the behaviour of those people on whom the firm's results depend. *“To maximize shareholder wealth, management must generate, evaluate, and select business strategies that will increase the corporate value”* (Morin, Jarrel, 2001). *“Strictly speaking, firms are considered as systems for the creation of economic and financial value for their shareholders, and their performance – profit and the value of capital – is measured by a coherent system of monetary values.”* (Mella, Gazzola, 2004).

Value Based Management (VBM) is not a new management technique; rather it is the *conscious, systematic and prevalent application of a set of traditional methods specifically aimed, as a whole, at maximizing the value created for shareholders, directing decisions not so much toward producing profits as toward the production of profitability, controlling at the same time both the processes for the economic transformation of costs into prices and the processes for capital investment* (Mella, Pellicelli M., 2008).

Value Based Management does not adopt special techniques but carries out economic measurements based on the rational schemes tested by management science, with an “awareness” that management must produce a measurable effect in terms of an increase in the value of equity capital, in general, and in the value of shares in particular.

Its distinctive feature with respect to profit-oriented management is that it considers every decision – strategic or routine – every relationship with the external and internal environment, every technique to measure and influence the fundamental economic and financial variables as directed toward the creation of value for shareholders.

The introduction of Value Based Management through a governance decision cannot be immediate but must be viewed as the start of a wideranging project based on the rules of organizational planning.

Implementing VBM means clearly and precisely defining the objectives to achieve; verifying the organization's capacity to undertake change; identifying and removing obstacles; estimating the necessary resources; and defining the criteria for evaluating results.

To increase the possibility of success for this project of change, several principles must be followed, which can be summed up as follows: a) the will for governance; b) the acceptance and commitment of management; c) the adjustment of strategies; d) teamwork; e) the development of pilot projects; f) modular implementation; g) adequate resources; h) receptiveness to change; i) communication; j) continual training; k) frequent revision.

Morin and Jarrel clearly refer to the double interpretation of VBM, describing it as: a “*mental attitude/selection of operational methods*”. Value Based Management “*is both a philosophy and a methodology for managing companies. As a philosophy, it focuses on the overriding objective of creating as much value as possible for the shareholders. ... As a methodology, VBM provides an integrated framework for making strategic and operating decisions*” (Morin & Jarrel, 2001, p. 28).

Serven instead (1998) states that: “*Value Based Management is the recognition that shareholder value is the result of the thousands of decisions made by individuals in an enterprise every day. Shareholder value is created, or destroyed, one decision at a time. This is the critical perspective that is necessary for corporations to consistently grow shareholder value*” (Serven, 1988, p. 10).

Mella’s model (Mella, Pellicelli M., 2008), which views firms as systems of *efficient transformation*, is particularly suited to represent the Value Based Management approach in capitalistic firms, especially as regards the European context.

We can examine how this model (presented in Fig. 1) operates from various points of view.

We can observe the model from the top-down:

- a) an enterprise develops a business idea and, on the basis of external information, produces a business plan containing the strategy for its implementation, the forecasted product value, the productive processes, and the required capital; the business transformation transforms business risk into strategic actions and plans the business operation in a way that satisfies the Managerial Objectives (MO) and the stakeholder objectives (environmental objectives); the value of the business and the Economic Value Added (EVA) produced is quantified;
- b) returns held to be fair and satisfactory are specified for capital suppliers: “ce” (cost of equity) and “cd” (cost of debt), and the maximum *wacc* (*weighted average capital cost*) to sustain the production of value is determined;
- c) the managerial transformation translates the business plan into operational plans that quantify the factor requirements for production and the relative prices and unit costs;
- d) production costs are determined along with the selling prices that cover these and at the same time guarantee an adequate *roc* (*return on cost*), in order to produce the levels of *roi* (*return on investment*) and *roe* (*return on equity*) deemed necessary by the busi-

ness transformation, taking into account the levels of *rod* (return on debt) and the optimum financial lever;

- e) this data is used to quantify the invested capital requirements; the shares covered by E and D (equity and debt, respectively) are determined; the actual value of *wacc* is calculated;
- f) capital is raised and Invested Capital, IC, is formed; this is a condition for achieving the economic transformation;
- g) the economic transformation produces value for the client (maximum quality/price ratio), thereby obtaining the Operating Income (OI) that is used to repay the debt and equity;
- h) the three indicators for the efficiency of the financial transformation, *roi*, *roe* and *rod* – which are the bases for the calculation of EVA and the Economic Value of the Firm (EVF) – are compared to the managerial objectives to check that the levels of EVA and EVF perform satisfactorily in the business transformation;
- i) Value Based Management acts at the managerial transformation level, since it must translate strategic inputs and the desired value performance into a coherent organizational system that can be achieved by and function through ascertainable value drivers as well as be continually monitored. A bottom-up view of the model reveals that the productive, economic and financial transformations are *instruments* for the business transformation, whose efficiency is measured by its capacity to produce value in terms of EVA and EVF.

The only approach possible for capitalistic firms is to continually increase business performance, and thus increase the value produced. The entire strategy must be directed at the production of value.

For this reason the fundamental business objectives, represented in the model by MO, are typical objectives of financial efficiency; that is, they:

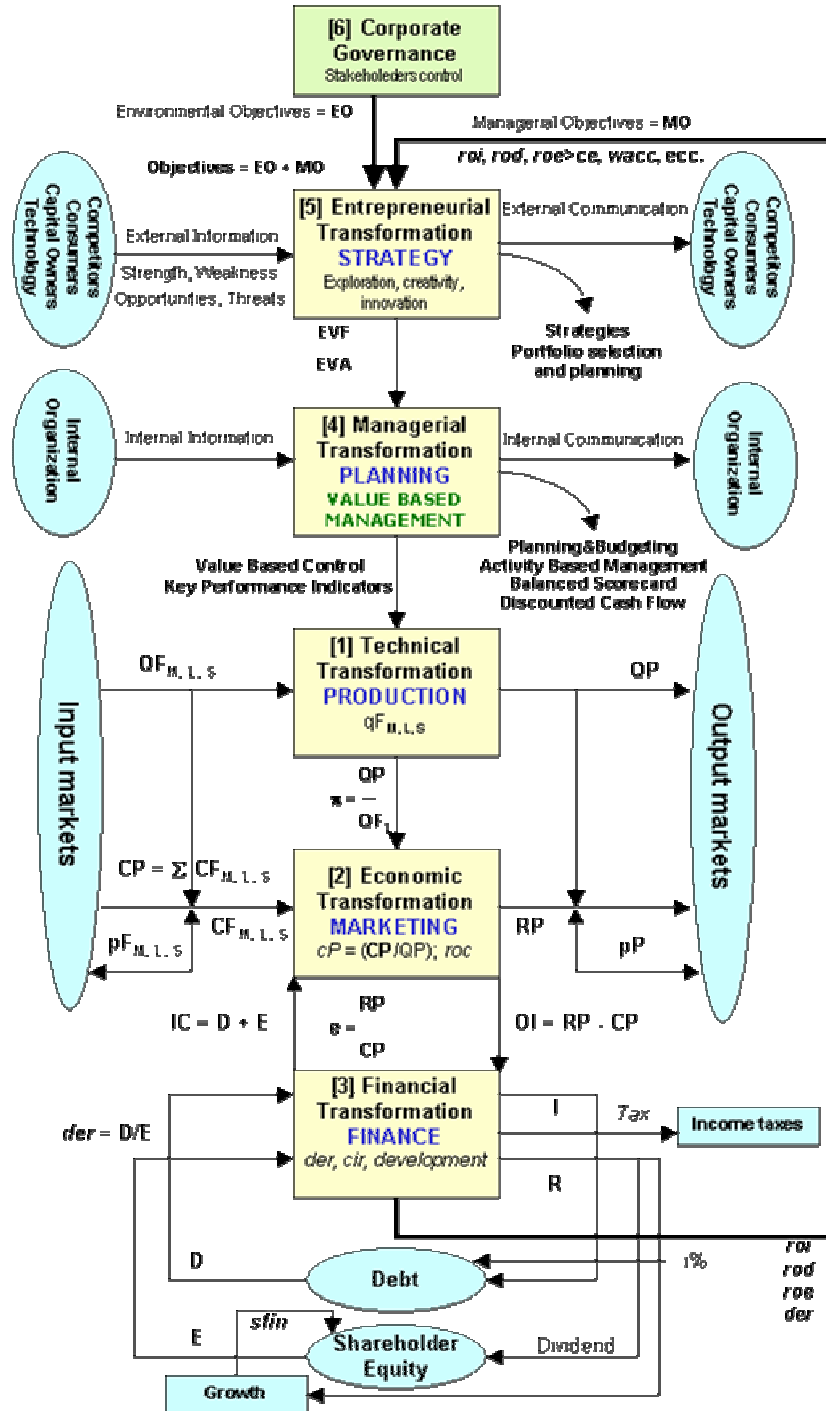
- 1) balance the financial structure: *der* objective;
- 2) optimise the cost of equity, “*ce*”, and cost of debt, “*cd*”, and thus reduce *wacc*, the fundamental driver of EVA;
- 3) try, in short, to achieve a $roe > ce$ that produces shareholder value;
- 4) set appropriate *roi* objectives to sustain the production of value.

The portfolio strategies, along with the EVA and EVF objectives they seek to achieve, become the inputs for the managerial transformation, which aims at organizational efficiency by transforming the strategies into achievable plans and programs and by monitoring their actual attainment as a condition for the achievement of the desired levels of value production.

Also significant are the contributions by Cornelius and Davies (1997) proposing the introduction of Value Based Management in organizations at two different stages: the first stage requires the construction of a framework of reference for objectives and for

organizational culture and structure; the second stage must develop an integrated system for planning, resource allocation, performance measures, and management pay.

Fig. 1 – The firm as a cognitive system for efficient transformation



Source: Mella's model (Mella, Pellicelli M., 2008).

Thus, during the first stage the creation of value is the primary objective; this, in turn, is divided into sub-objectives at the business unit, function and area levels. It is therefore necessary to introduce *value drivers* that guide decisions and *value metrics* to measure performance.

In order to be effective, Value Based Management principles must be accepted by the organizational personnel at each level and form the basis for their motivation. Moreover, the authority and responsibility for the creation of value must be clearly defined in the organizational structure. If the first stage produces an enterprise with defined objectives, shared values and an organizational structure adapted to the new decisions, it is possible to move toward a system following a circular path.

The decision-making phase regarding strategy, in the second stage, is the most important. Above all, it is necessary to understand the composition of the business portfolio, know the core competencies of the businesses, and build up long-lasting competitive advantages (Pellicelli G., 2005). After determining the strategies, the necessary resources must be allocated. In a business portfolio, resources must be directed toward those businesses that produce value and removed from those that destroy value. At the same time, it is necessary to assess whether or not business units that produce limited value can improve their performance through adequate investment. To implement the strategies, objectives must be defined for each level of the organization (targeting) and a measurement system set up to verify whether and to what extent these objectives have been achieved. Finally, it is necessary to act on the motivations – monetary and otherwise – that guide management's behaviour.

This approach has been taken up by other authors as well, such as Arnold (2000): “*Value-based management is a managerial approach in which the primary purpose is long-term shareholder wealth maximization. The objective of a firm, its systems, strategy, processes, analytical techniques, performance measurements and culture have as their guiding objective shareholder wealth maximization.*” (Arnold, 2000, p.9).

Ashworth and James (2001), in particular, have written about *value drivers* and *value metrics* and described the introduction of VBM as a cascading approach based on performance measures for each level of the organization:

- a) *evaluation of management at the corporate level*, for which the most significant measure is Total Shareholder Return (TSR);
- b) *evaluation of strategies*, which often makes use of Total Business Return (TBR);
- c) *evaluation of the business units*, where Economic Profit (EP) is usually preferred for measuring the value created by the business units (or by the divisions) over a given period;
- d) *evaluation of functions and processes*, for which Ashworth and James propose the key performance indicators of the individual functions and processes.

This approach is particularly important in large companies because the owners entrust their capital to management, who thus is responsible for managing the company

and achieving maximum results. “*An important aspect concerns the measurement of the results obtained in relation to the resources available to management, and the relative choice of indices to measure the success of a company's strategies and the effectiveness of the current management*” (Casalegno, Pellicelli M., 2008). It is a long-standing tradition to adopt accounting indices mainly based on earnings; over time other measures have been introduced to give more precise indications of shareholder value (Pellicelli M., 2007): “market based” measures, such as the Market Value Added (MVA) and the Total Shareholder Return (TSR), and “internal” measures, such as the Economic Value Added (EVA) and Total Business Return (TBR).

3 – The creation of value and Italian listed companies

Starting from the principles presented in the literature on the implementation of VBM and the research by consulting firms⁶, we have searched for those variables which, more than any others, influence the creation of value for the shareholders of Italian listed companies; the Total Shareholder Return (TSR) is the value metric we believe to be significant in order to evaluate the creation of value for shareholders at the corporate level.

This choice is based on the advantages and weaknesses of accounting measures and measures that are based on stock market evaluations.

Accounting measures, such as Earning per Share (EPS), Return on Investment (ROI) and Return on Equity (ROE) have the advantage that they are simple and easy to calculate. Nevertheless, there are weaknesses in the calculation of the creation of value, in particular Earnings per Share, which is the most common index, even though it is not suitable for comparing companies in different sectors. It is less significant for evaluating results and the expectations of investors, and it also depends to a large extent on the accounting principles and the criteria adopted in the balance sheet valuations. Moreover, EPS does not consider the value of money in relation to time; and we must also remember that EPS, and ROE as well, often have no correlation with the trend in stock prices.

We have also considered the advantages of a second group of indices that uses the stock market as a reference point, such as price-to-book ratio, price earnings ratio and dividend yield. The price-to-book ratio is more common in the U.S. than in Europe. This expresses the advantage for shareholders and represents the ratio between market capitalization and the company's own capital. The price earnings ratio is useful for those shareholders who already own shares and not for those who have yet to buy them, and it represents the ratio between the current price of a share and the earnings per share. The dividend yield, which expresses the ratio between dividends per share and the share

⁶ We can cite in this regard research by the Boston Consulting Group, Braxton Associates, McKinsey and Stern Stewart & Co.

price, can also provide useful information. This ratio expresses the percentage of the current share price represented by the dividend.

However, these indices refer to the short-term, while the creation of value depends on long-term cash flows. On the other hand, measures that are based on stock market evaluations, such as MVA, MBR and TSR, present problems involving stock price fluctuations, which can depend on factors outside the control of management as well as those management can act on (specific information, for example, acquisitions or mergers).

The latter measures present three problems in the interpretation of the data.

1) The first problem derives from the fluctuation in the price of shares. This value is determined by multiplying the number of shares issued and their market price.

2) The market price at any moment also expresses the valuation of the future flow of dividends (discounted at a given rate). When the market receives new information about the future of the company, the valuation changes.

3) The information on which the market bases its valuations is the same as that available to the general public or to the financial analysts (during conferences and press releases), but such information is not necessarily always true. The future is always uncertain; only those within the company have the means at their disposal to reduce uncertainty.

In particular, MVA does not explain when the value was created, nor whether there will be further increases in the future. MBR is calculated starting from the balance sheet. This makes the calculation easier, but it subjects the index to accounting distortions.

While both MVA and MBR measure the creation of value as a comparison between the market value of shareholder investments and the value of the capital shareholders have invested at a certain date, Total Shareholder Returns determines how much shareholders have received over a certain period of time (dividends) plus the appreciation of share values. TSR is important for two reasons. Above all, it expresses what is of most interest to investors. Secondly, it is widely used by both stock market oversight authorities and financial analysts. TSR is the sum of the increase in share prices and the distributed dividends over a given period of time (usually less than three years).

It is easy to calculate and interpret and is not based on accounting data, and thus is not subject to distortions due to valuation criteria. Moreover, it is not affected by the size of the company, unlike MVA, which greatly favours large companies (Ashworth, James, 2001). Nevertheless, TSR does not express the creation of value if used alone. It needs to be compared with the return the investor would have obtained from an investment of equal risk.

This problem can easily be overcome by comparing over the same period the TSR of a company with that of a sample of companies with similar characteristics. The price per share is affected by forces other than those of management alone. Experience shows

that stock markets react to divergences in expectations and results rather than to the levels of the latter.

Stock prices have already incorporated forecasts of future cash flows. If the forecasts change the market reacts. As a result a company that for some time has had excellent results finds it difficult to increase TSR. TSR is thus the measure of how the company responds to market expectations. A turnaround can occur whereby, starting from modest expectations, results that exceed the forecast lead to a notable increase in the market price, since investors “discount” the increase in future cash flow.

Therefore, for our analysis we have selected the Total Shareholder Return index, since it allows us to carry out long-term analyses that provide comparisons with other firms and is suitable for comparisons of the performance of groups of other firms or of sector averages. We have adopted its simplest form. TSR is thus calculated as the capital appreciation plus dividend yield relating to a share for a particular period (Cornelius, Davies, 2007). This can be expressed with the formula:

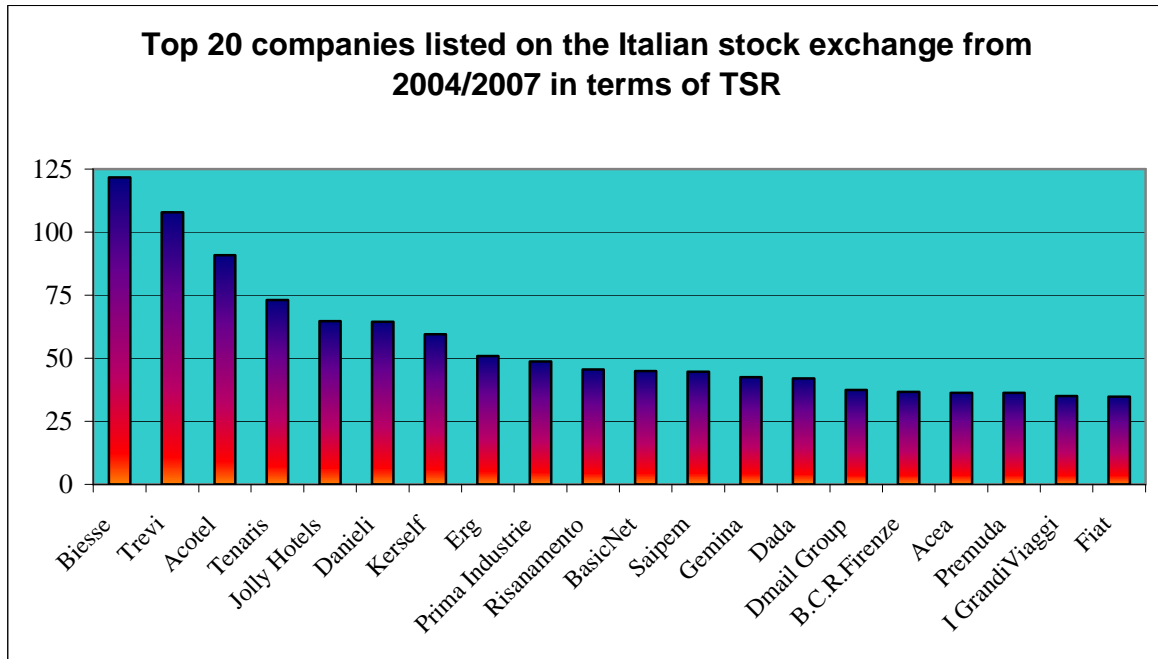
$$TSR = \frac{\text{Dividend per share} + (\text{Share price at period - end} - \text{Original share price})}{\text{Share price at start of period}} \times 100$$

Nevertheless we must pay attention to the data obtained since its evaluation can be effected by stock market fluctuations. Thus we chose to analyse the average of the variation rates over four years.

Table 1 presents the top 20 companies in terms of the variation in TSR over the four years (the sample includes 305 companies listed on the Italian stock exchange from 2004/2007). *Fig. 2* graphically shows the ranking and variations from *Tab. 1*.

Tab. 1 – The top 20 companies listed on the Italian stock exchange in terms of growth performance

Ranking based on average rates of TSR variation for the period 2004/2007			
1. Biesse	121.71	11. BasicNet	45.04
2. Trevi	108.00	12. Saipem	44.76
3. Acotel	90.96	13. Gemina	42.58
4. Tenaris	73.12	14. Dada	42.05
5. Jolly Hotels	64.86	15. Dmail Group	37.46
6. Danieli	64.54	16. Banca Cassa Risparmio Firenze	36.72
7. Kerself	59.63	17. Acea	36.38
8. Erg	51.05	18. Premuda	36.37
9. Prima Industrie	48.73	19. I Grandi Viaggi	35.09
10. Risanamento	45.70	20. Fiat	34.82

Fig. 2 – Ranking of companies listed on the Italian stock exchange

Source: average 2004/2007 variation rates in terms of TSR based on share prices and dividends, provided by Sole24Ore from 31/12/2004 – 31/12/2005 – 30/12/2006 - 28/12/2007.

4 – The importance of a correct human capital management

The link between employee engagement and financial performances is a strong one; as shown by many research studies, companies with high-engagement employees have higher retention rates, which helps contain recruiting and training costs. According to authors such as De Cenzo and Robbins (1996) and Armstrong (2006), hierarchy has been substituted by networks in the last twenty years and the bureaucratic system⁷ has been transformed into a more flexible process. What is called control-based management is evolving into a more friendly approach in which communication is the most important tool⁸. Barlett and Ghoshal (2002) identify important changes managers should undertake in this “war of talent” era. First of all, they must understand that, without denying the need for the prudent use of financial resources, for most companies today capital is not the resource that constrains growth; human, not financial, capital must be the starting point and ongoing foundation of a successful strategy.

People detain human capital and intellectual capital⁹; this is considered and valued by Fitz-Enz (1998, 2000, 2001) as a profit lever in the knowledge economy.

⁷ Auteri E.(2002), *Management delle Risorse Umane*, Guerini & Associati

⁸ For more references: Malone T., (2004) *The future of work: How the new order of business will shape your organization, your management style and your life*. Harvard Business School Press.

⁹ See also Rodov I., Leliaert P. (2002), *FiMIAM: Financial method of intangible assets measurement*, *Journal of Intellectual Capital*

People are knowledge levers (Bahra 2001) because they have intellectual capital that is a very important intangible asset which, according to Fitz-Enz, can and should be measured.

Moreover, Fitz-Enz (1978) was the first to develop a set of useful and systematic methods for practitioners to utilize in their companies; thus, people and human capital inside the company must be measured because they have a big impact on final results and, above all, on company value creation.

We can talk about a double level of human capital; one involves the single employee while the second concerns the community, which represents the entire organizational knowledge.

According to Ulrich et. al. (1999), human capital can be valued by employee capability multiplied by his/her commitment; managers can increase employee results through the level of employee capability and the average commitment of the whole workforce.

To make human capital the most strategic lever for achieving competitive advantage, it is necessary to understand that this intangible is portable, it does not lose its value over time, and it can correlate customer perception with company values. This, in fact, is true; for instance, the front line can show company value outside the firm.

But the most important thing is that human capital can *put everything together*; investments in physical assets, technology, new products and distribution systems work thanks to human capital, and this must be a mantra for leaders.

According to Barber (2005), capital-oriented measures do not help to evaluate what is called “people business”, because they cover weaknesses and show volatility where it does not exist. He thus suggests a *people-oriented* equation which uses employee productivity instead of capital productivity (ROI).

The average cost of employees per person employed is equivalent to the cost of capital. The amount of people employed correspond to the amount of invested capital.

The standard calculation for economic profit can be reformulated – by substituting some basic components and by using standard algebra – to focus on the productivity of people rather than capital.

This equation yields the same result but highlights the employee-related performance drivers of a people-intensive business, which is the amount of strategic choices about strategic resources.

It is possible to calculate economic profit using the Return of Investment index (ROI), the Cost of Capital (COC) and the percentage of Invested Capital, as shown below:

$$\text{ECONOMIC PROFIT: } [\text{ROI}-\text{COC}]\text{IC}$$

Replacing "return on investment" with its equivalent "earnings divided by invested capital" we obtain:

$$\left[\frac{E}{IC} - COC \right] IC$$

Using algebra the equation becomes:

$$E - [COC \times IC]$$

Replacing "earnings" with its equivalent "revenue minus personnel costs minus supplier costs minus depreciation" we obtain:

$$R - PC(\text{personel costs}) - SC - D - [COC \times IC]$$

Using algebra to factor in a key people-oriented element, the number of people employed, and introducing two metrics, namely, employee productivity and average personnel cost per employee, we obtain:

$$= \left(\frac{R - SC - D - [COC \times IC]}{\underbrace{P}_{\text{Employee Productivity}}} - \frac{PC}{\underbrace{P}_{\text{Avg. Cost / Person}}} \right) P \quad \text{People employed}$$

$$\text{ECONOMIC PROFIT} = [EPR - ACP]P$$

EPR is the *employee productivity* and ACP the *average cost per person*.

Intangibles are embedded in the value chain, so it is not so clear what kind of intangible is the source of profit or what specific balance of intangible and tangible assets should get the credit (or blame) for the results; the computation is always difficult.

Having considered all these items, it is important to understand which drivers are able to engage higher potential human capital. According to The 2007 Watson Wyatt WorkEurope™ survey findings, we can talk about three top drivers: strategic decision and leadership, communication and customer focus. Maximizing business performance is one key element in retaining top talent, which is an important issue that challenges today's senior executives. This issue is strongly related to employee engagement. Programmes that increase trust, empowerment and customer focus increase engagement and therefore confer a competitive advantage.

Moreover, we also need to underscore that today the complexity of managing people is increasing because of the strong competition in every market, the effects of globalization and deregulation, and the speed at which invested capital is moved around. In this context of worldwide economic difficulty, strategic workforce planning can help

organizations reduce the negative impact of workforce complexities on their business performance.

The top management team has available, in general, a lot of choices to encourage managers and other employees to invest their own efforts to achieve company goals and implement strategies; leadership, power and company culture are the three best resources – tied together – to manage and to take into account in every organization.

When you want to talk about the essence of leadership, you talk about something tied to change; change can reshape every organizational system. Leadership is the best motivational lever in every organization, and companies can achieve results when leadership principles are present at every organizational level.

But, first of all, what is leadership? Some commentators link leadership closely with the idea of management. Some regard the two as synonymous, others consider management a subset of leadership. According to Burns (1978), leadership is a particular power management approach. Being a leader is a way of behaviour aimed at achieving particular goals; we are not speaking about personal goals, but common goals for the whole company. Thus, leaders are particular types of power holders, though not every holder reveals himself as a leader.

Moreover, a leader can take on different behaviour; it depends on the way he wants to achieve the company's strategic results. Leadership style can be transformational or transactional, both of which are types of behaviour with the greatest effect on overall company management. Burns (1978) has studied these styles for a huge part of his career and Wright et. al. (1998) have given an exhaustive definition of them. When we talk about a transactional leader we are referring (Burns, 1978) to a manager who has chosen to lead his/her followers (single person or team groups) to final results using benefits and reward management, or – if the work done does not satisfy him/her – punishment for mistakes made. People with this way of managing have followers just because of benefits they can gain from their own job accomplishments. In this case leadership power not only entails valuating, correcting and training followers when their productivity does not hit the mark, but also planning benefits and rewards once goals are achieved.

According to Wright et. al. (1998), a transformational leader is somebody who can motivate people and team groups to achieve greater efficiency and effectiveness. Transformational leaders focus their entire communication on planned organizational goals, whose achievement is possible only when the efforts of followers are focused on final results. In this way, every company member is “transformed” and becomes more engaged in achieving results because of shared goals.

For instance, consider Steve Jobs¹⁰. He has applied this kind of leadership and, as a result, has transformed employee motivation so as to conform to Apple's objectives. In this way Jobs has led Apple to continued success.

Business strategies cannot be implemented only by a leader's efforts (CEO or top management); it is necessary to develop leadership principles at every level of the organization: this involves leadership development.

There is a big difference between "developing leaders" and "leadership development". When we refer to leadership development we mean the whole corporate context; according to Ulrich et. al. (1999), for years the leadership challenge regarding the achievement of competitive advantage has demonstrated that companies work best when every part of them work together. In other words, without talented people who know how to use their own skills for the entire company's wellbeing, the business is usually destined to fail.

Leadership development is the set of strategies adopted by an organization to make every employee a leader of him/herself: engaged and able to pull on the others, a decision maker, and *result-based* (that means being not just a mentor or somebody who knows how to get the best from others, but also knowing in which direction the organization should go and what the most important goals are for achieving competitive advantage).

The implications of leadership development lead to a very important consequence: everybody works together to achieve common results. Every corporate level is characterized by leadership values which, according to Eisenhower, "*is the art of getting someone else to do something you want done because he wants to do it*"¹¹.

The key words are *engagement* and *commitment*; according to Carlsen (2008), engaged and committed employees are proud to work for their employer, dedicated to the organization, and willing to make the extra effort necessary to achieve the goals of the enterprise. Engagement is also a leading indicator of financial performance. Banks and other companies that increase their engagement levels can expect to significantly improve their financial performance.

When we talk about engagement, we are referring to something connected to customer satisfaction. The reason why comes from a simple analysis: engaged employees work better and clients are satisfied with the services they provide. When clients are satisfied they do not buy just one time, but many times; they start to have confidence in the front line. The result is more revenues from sales, which can also mean benefits for employees; in this way they become more and more engaged and can deliver greater customer satisfaction. This is the virtuous circle that leads a company to the best financial goals.

¹⁰ According to Fortune (2007), Steve Jobs tops the list of the 25 most powerful people in business, six positions higher than his main competitor, Bill Gates.

¹¹ Eisenhower D., from Carlsen, Brian, *Human Capital: Will your people go the extra mile?*, Northwestern Financial Review, May 15-May 31, 2008.

What are the best and the most effective leadership development practices?

Carlsen (2008) gives some tips; after attracting and selecting the best talent, it is necessary to communicate company strategy at every level, connect and guide new employees, and link investment in training to business drivers and key positions.

For instance, consider Virgin Atlantic Airways Ltd. The leadership development program of this airline has helped the company achieve the long-term goal of increasing profits by 7 percent in the last few years. The program was led by business objectives (we can talk about result-based leadership) rather than human resource processes; company managers were given training in workshops where they were taught Virgin's leadership principles and management behaviour. The key points of Virgin's program were the following:

- Management vacancies were filled internally to safeguard the corporate culture (after 9/11 it was necessary above all to restore US company pride)
- A result-based leadership development program
- Use of 360-degree feedback and identification of the management team's strengths and weaknesses
- Leadership development programs to enable management to have a very short-term decision-making ability
- The decision to send all of Virgin's 120 managers to personal development workshops (May 2006). The workshops began with individual coaching sessions to develop personal objectives for the managers. These were followed by a series of activities that aimed to instill Virgin's leadership principles into management behaviour.

As we can see, training programs are the fundamentals of leadership development; after recruiting the most talented people, companies need to shape corporate culture in their minds through correct training. For this reason, today most of the biggest companies around the world use new specialists in their own structures; for example, the CLO, Chief Learning Officer. A Chief Learning Officer is the highest-ranking corporate officer concerning the talent or learning management of an organization; he/she typically reports directly to the CEO and can be an expert in corporate or personal training, with degrees in education, instructional design, or the like.

The willingness of companies to start development plans has been evident from the beginning of 2000. For instance, we can focus on research by the Xchange Corporate University, entitled the Fifth Annual Benchmarking Report (2001). This research has shown the importance of attracting and training new talent; it has also shown that the most important challenge has been training and developing leaders inside the company thanks to tailored leadership development curricula.

Of the CLOs participating in the survey on which the Fifth Annual Benchmarking Study is based, half are heads of corporate universities that are organized into colleges. Of this half, 62 percent of respondents indicated they head a leadership college and 43

percent a management/executive education college. Senior managers and middle managers together represent about a third of the audience for corporate university programs. These findings illustrate the importance organizations assign to developing their top talent.

Even in Italy the majority of the biggest public companies are developing leadership development programs to achieve managerial training excellence.

In a country where, of course, inflation, competition and recession are shaping every industry sector, companies now know they need human capital as a profit lever, as is the case in other countries.

Thus, in recent years Italian companies have also resolved that people productivity is a very important asset and that it is necessary to understand what the best people development practices are to attract and retain the most talented employees.

Our research also analysed the link between shareholder return and the people efficiency index; as shown in the third part of this paper, shareholder return increases when employee investments as a whole – both wages and training costs and benefits – increase. Having talented people is a strong profit lever for companies, and organizations, in general, can achieve value from fewer trained and skilled people than from more people who are unskilled and non-decision-makers. For that reason the biggest Italian companies are trying to invest in employee education and training by building internal corporate universities, using non-conventional training, and boosting employees with any type of assessment.

Therefore, incomes do not depend on employee numbers but on the skills they have and can improve; when leadership development programs work, employee productivity increases.

Tracking employee efficiency (calculated as total revenues divided by total labour costs¹²) has become commonplace in today's environment, where the bottom line is the focus, regardless of the industry. Our research shows that when labour costs increase, productivity is higher, because people feel embedded in the company tapestry; and when they work they do so simply because they view the company's goals as their own.

These, then, are the results organizations can achieve with the application of leadership development programs; but what does this mean in Italy at the moment? The case histories below can give some examples.

5 – Human capital development and corporate return: some Italian cases

A vast literature has arisen concerning the importance of human capital for value creation (Storey, 1998; Pfeffer, 1999, 2005; Ulrich et. al., 2005; Hamel and Prahalad, 2005; Cohn et. al., 2005; Armstrong, 2006; Burke, 2006).

¹² For this research we used Aida data.

According to Watson Wyatt's findings (2002, 2005) – presented in The Human Capital Index Report – companies with superior human capital practices can create substantially more shareholder value than companies with average human capital practices. Excellent human capital practices prevail, regardless of the economy, and the same key practices that are associated with higher value show up in bull, bear and flat markets.

In addition, one of Watson Wyatt's most important findings underscores that the most effective way to provide every organization with talented team groups is to develop them from the inside by also using leadership development practices.

Moreover, when you hear about leadership development you hear about motivation, talent management, training, and company efforts to have decision-making leaders at every level; in Italy, the majority of leadership development practices involve training: formal and traditional training (curricula, training plans, coaching sessions) and non-conventional training (outside sessions such as boat racing, team building in nature, cooking lessons, etc.). We have to underscore that investments in this way are increasing, as shown by the case studies below.

5.1 – *BasicNet*

The BasicNet Group operates in the clothing, footwear and accessories sector for sport and free time with the brands Kappa, Robe di Kappa, Jesus Jeans, K-Way and Superga.

The Group is part of BasicNet S.p.A. (11th place in the Top 20 TSR ranking) – based in Turin – which has been listed on the Italian Stock Exchange since November 1999.

BasicEducation is the BasicNet SpA division specialized in development and the creation of organization training programs. The mission is to transmit knowledge and the “Basic philosophy”. We can mention in this regard corporate culture and the importance of making employees feel a part of the organization. Corporate culture development is important inside and outside the Group; every stakeholder must feel embedded in the Basicnet architecture, and this goal is achievable only through an appropriate training. The teaching staff is basically composed of internal teachers that guarantee a continual flow of corporate values and the development of personal and professional skills. The BasicEducation classroom is provided with a high degree of technology to make students get the most out of the lessons, and the curricula is chosen to make everybody feel he is in the right place at the right time and to satisfy any job demand; they can be collective or individual (it depends on personal training needs). The training goals are: to train new employees, update present employee training, train territory agents, train businessmen and managers, store managers and front lines for the franchising project.

Lastly, talent management and decision making capacity development are also felt to be important assets; 2007 human resource manager, Roberto Visconti – under presi-

dent Marco Boglione's advice – published a survey on the intranet company platform concerning the effectiveness of some human resource practices¹³. The most important findings were:

- about a third of the employees answered (which is quite a good result, if we consider that the survey was not mandatory)
- leadership development practices (communication, inclusiveness, supervisory skills, executive skills, systems), along with learning capacity improvement practices, are the most important practices in terms of obtaining the best productivity from every employee.
- human capital is today considered one of the most important company assets.

5.2 – Biesse

The Biesse Group (first place in the Top 20 TSR ranking) has a specialized Corporate School for training and education; the mission is to contribute to the group's success by developing skills and promoting good practices and company values.

The school acts on behalf of the Biesse Group, designing and running educational programs in three main areas:

- the development of management and leadership skills;
- the reinforcement of technical competencies for the different professional families in the company;
- continuous education of all group personnel in basic abilities such as English and computer skills.

The school has rooms and infrastructure for on-site courses and a dedicated web platform for distance e-learning; programs are designed by integrating the know-how developed inside the company with the knowledge and the experiences of universities, consulting firms, and education professionals.

Education is an important part of Biesse's structure; the Corporate School also operates as an educational and vocational training center for the Marche Region and is involved in different European Programs in partnership with educational agencies in Italy and abroad.

Moreover, the Biesse Corporate School operates training courses in collaboration with the educational system: among these are the Master in Business and International Management, organized in collaboration with Urbino University (Italy) and a group of American and European Business Schools.

¹³ The data is from a 2007 human resource survey sent - by the author - to the biggest companies in northwest Italy.

5.3 – Saipem

The Group (12th place in the Top 20 TSR ranking) is viewed as the largest, most powerful, most international and best-balanced turnkey contractor in the oil and gas industry. Saipem has a Career Centre and relies on Eni Corporate University for new graduates and to recruit new talent.

The Corporate University is a structure that manages orientation, recruitment, selection, training and knowledge management, and its mission is to align human resources with the company's strategies, overseeing the entire "cycle of knowledge", which ranges from needs analysis of critical professional skills, to the "construction" of integrated academic courses of study in partnership with the university system, to the selection of new talent and their training throughout the entire course of their professional lives. In particular, Eni Corporate University:

- manages the entire orientation, recruitment, selection and training process for the personnel of the Eni and Saipem Group;
- evaluates and develops the knowledge assets and the managerial, technical and professional skills of personnel through promoting innovative training programmes and knowledge management systems, and by viewing training as a strategic lever in knowledge management;
- promotes and develops innovative partnerships with academic institutions aimed at creating integrated training paths in the energy sector;
- promotes the Group's corporate culture

Eni Corporate University has some fundamental principles: to involve everybody, not just employees, who are part of the process of creating value for the company; provide classroom lessons integrated with distance networking; and use Information & Communication Technology instruments as part of a learning-on-demand approach.

Moreover, the importance of knowledge as an intangible asset is recognized; the knowledge and skills of individuals represent important factors in determining a company's competitive advantage. For this reason, Eni Corporate University has planned an integrated system to develop knowledge and also implemented specific intervention programmes in the knowledge management field that involve, in particular, setting up "Practice Communities" consisting of "virtual networks" of "knowledge workers" who have a common knowledge base and work on similar processes and operational activities.

The Saipem Group is a technology-intensive company which has always given priority to the development of the knowledge and skills of its people; this case shows, in particular, how much brand leadership is developed in companies. According to Ulrich and Smallwood (2008), leadership brand implies that leaders' knowledge, skills and values are shaped by customer expectations.

A leadership brand exists in a company when customer expectations translate into employee actions because of leadership practices, and in this case training and focusing on knowledge management represents a leadership development practice.

5.4 – Fiat Group Automobiles

At the end of 2004, Fiat Group Automobiles (Italy's largest Group: 20th place in the Top 20 TSR ranking) started to undergo a deep change in its structure; in June 2004 Sergio Marchionne was named Fiat Group managing director and, after some conflict with German manager Herbert Demel, in 2005 assumed command. In 2004 the challenges looked insurmountable; Fiat Automobile's share of the Italian market had slipped from 52% at the beginning of the 1990s to below 28% in 2003. The Group had expanded into insurance, banking and energy and had neglected its auto division. Investments were low and the management culture was stagnant; but it was not the fault of just one or a few people: it was a culture problem: *“Wrong models, wrong retailing networks, wrong brands, maybe also wrong leaders [...] nothing done or planned was right¹⁴”*. Marchionne not only began by stripping away layers of management to make the organization flatter, starting at the top (ten percent of the roughly 20,000 white collar employees in and around Turin were fired. *“This was a very hierarchical, status driven, relationship-driven organization”*, said Marchionne); from the beginning the real personal mission of this leader has been to lead people to a common corporate culture and common results. The product, its quality, customer satisfaction and brand development have become the focus of every Group activity.

It is also important to underscore that even in this case there is a big focus on talent development; Fiat Group's first goal has been (and continues today) to fill vacancies from the inside. The training role is fundamental to support the employees' personal success; curricula to improve professional skills, curricula specific for every corporate function, and training programs to develop a virtuous cycle of learning have been studied and planned to achieve a concept of leadership development similar to the one at General Electric. Since 2005 many training workshops have been organized with the participation of different foreign researchers – such as Kim James, a Cranfield School of Management researcher, who showed (Autumn 2006) a systematic approach concerning leadership essence¹⁵.

The proposed and adopted training programs focus on leadership development practices and seek to be coherent with corporate human resource processes.

¹⁴ Sergio Marchionne, workshop 12 giugno 2006.

¹⁵ She talks about non-‘deficit’ models of learning that focus on the organization as a system, a whole entity in which relationships and shared meanings are crucial items for leadership to be taken up at many levels.

It is important to underline that during Marchionne's management the Fiat Group's share price has increased (from 4 euros in 2003 to 23 euros in July 2007), with good financial results in 2006 as well: “*We closed last fiscal year with the first positive net profit after five years....*,” said Marchionne.

Strategic human resource management and organizational change based on leadership principles have been the fundamental principles of the new concept at the Fiat Group. According to Marchionne, results show that even in Italy – with low flexibility in the industry structure – leadership development principles can lead to the best financial results.

6 – Key findings

The second part of this research shows the importance of leadership development and corporate culture for a company; this issue reveals itself to be necessary for employee commitment to corporate business strategies, since every single employee is an important part of the firm.

What is called *strategic human resources management* starts directly from the top managers; we can talk about leaders, not just *managers*. A leader's job is, above all, to manage the workforce and communicate with it at every level, to let everybody know the importance of his own contribution in achieving corporate strategic goals. To make this happen, strategic goals must be clear and well known to everybody in the organizational structure.

Corporate culture is inoculated when training programs are planned in a strategic way; for example, Erg (8th place in the Top TRS ranking) and Grandi Viaggi (19th place) also believe that the strategic way to achieve financial goals is to train people according to company principles.

7 – Research dataset and methodology

Some of the latest research has explained and tested the relevance of a multiple set of variables on firm performance. Most of these studies have stressed that the more companies increased their performance, the more this performance depended on leadership management and formation (see the previous sections of the paper) and not on average wages or bonuses. Quoting from some of the few studies recently published, Buck et. al. (2003) revealed that long-term incentive plans are associated with reductions – and not increments – in the sensitivity of executives' total rewards to shareholder return, and Bruce et. al. (2007) demonstrated for the UK that bonus schemes are not associated with increases in shareholder returns.

Our main hypothesis is based on the studies reviewed in the previous sections of this paper. We assumed that company performance is based on human capital performance and that this depends on neither salary nor bonuses.

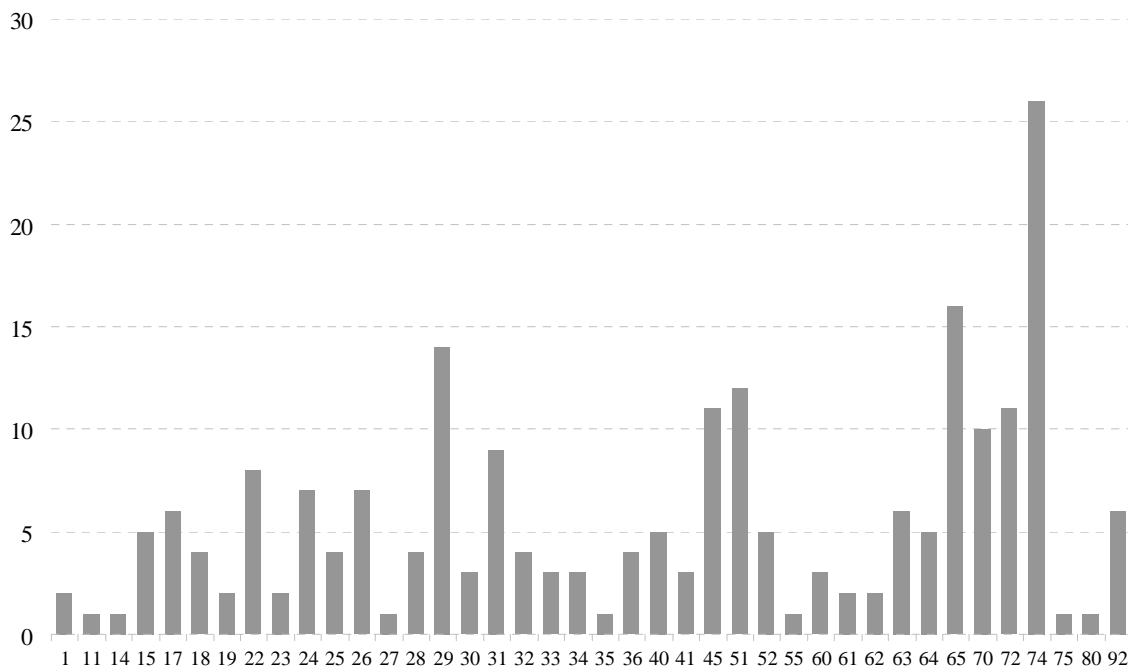
In fact, we try to argue that a firm's performance can be explained by other benefits not directly paid to human capital (like bonuses or incentives) but paid by firms to develop training programmes.

7.1 -- *Research dataset*

The sample comprises 228 of the 336 companies listed on the Italian stock market during 2007.

The sample includes all the companies present both in *Il Sole 24 Ore* and in the AIDA database; banks were not present in AIDA and inactive companies have been excluded. The sample reveals the concentration of companies listed on the ISM (Italian Stock Market) in Lombardy (40%), Emilia-Romagna (15.8%) and Piemonte and Lazio (both 11.8%).

Fig. 3 – Distribution of companies on the Italian Stock Market by branch of activity



An analysis of the frequency by branch of activity reveals that the majority of firms (11.4%) are in the category of business to business services, followed by financial services (excluding insurance companies) and pension funds (7%) (excluding banks).

Tab. 2 – Concentration of companies on the Italian Stock Market by Region

	Absolute frequency	Relative frequency	Percentage of valid case	Cumulated percentage
Campania	2	0,9	0,9	0,9
Emilia-Romagna	36	15,8	15,8	16,7
Friuli	4	1,8	1,8	18,4
Lazio	27	11,8	11,8	30,3
Liguria	3	1,3	1,3	31,6
Lombardia	92	40,4	40,4	71,9
Marche	5	2,2	2,2	74,1
Molise	1	0,4	0,4	74,6
Piemonte	27	11,8	11,8	86,4
Puglia	1	0,4	0,4	86,8
Sardegna	2	0,9	0,9	87,7
Toscana	13	5,7	5,7	93,4
Veneto	15	6,6	6,6	100,0
Total	228	100,0	100,0	

7.2 – Methodology and variables

The control variables have been chosen based on their relevance/irrelevance (as stressed in the literature) in influencing firms' performance. Company performance is presented in terms of TSR.

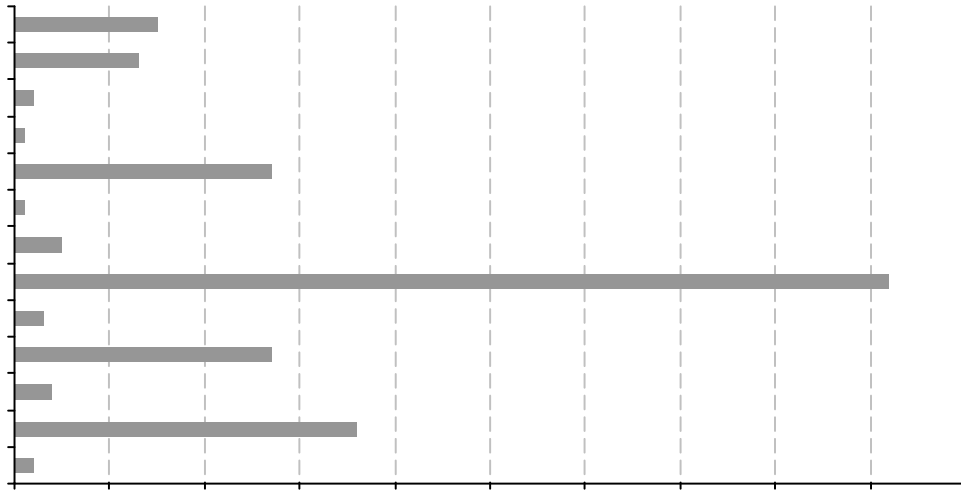
The index has been developed based on the data collected from Il Sole 24Ore for the financial years 2004, 2005, 2006 and 2007. This four-year set of data complicated the model but on the other hand facilitated the cross-section analyses. A reliable measure of performance, total shareholders' return requires the estimation of an average performance, the total shareholders' return relationship across four periods.

Therefore, the TSR index has been calculated as an increasing rate of total shareholders' return for the years indicated. The TSR distribution analysis shows a concentration in the second quartile, and the median value is 11.36.

Tab. 3 – Companies performance in terms of TSR: increasing rate frequency

	Companies performance		
	CLASSES of TSR increasing rate	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY
WORST	-47,79 - 0	58	25%
MEDIUM	0 - 10	46	20%
HIGH	11 - 40	111	48%
VERY HIGH	41 - 121,71	14	6%
TOTAL		229	100%

Fig. 3 – Concentration of companies on the Italian Stock Market by Region



The curve is asymmetric, with few cases lying out on the right side (higher observation). Outliers are the best performance companies; their values are noticeably higher than the others.

Very high performance companies, with average rates of increasing TSR from 41 to 121.71, represent only 6% of the sample (229 firms), while the most concentrated class (48%) is the high one (11 to 40 on the TSR index).

It is important to notice that 25% of the sample registered a negative rate of TSR index. This means that in those companies shareholders' value has been progressively disrupted (and could continue to be so).

Most of the theories (i.e. Porter 2008; Ullman 1958; Solow 1956; Barro 1991; Mathur 1999) over the years have stressed that firms' performance, H_i , is a function of a variety of variables, as expressed in [1]:

$$[1] \quad H_i = f(G_{ij}; R_i; P_i; V_i; M_i; F_i; O_i; E_i; S_i; I_i; C_i; A_i; L_i; T_i)$$

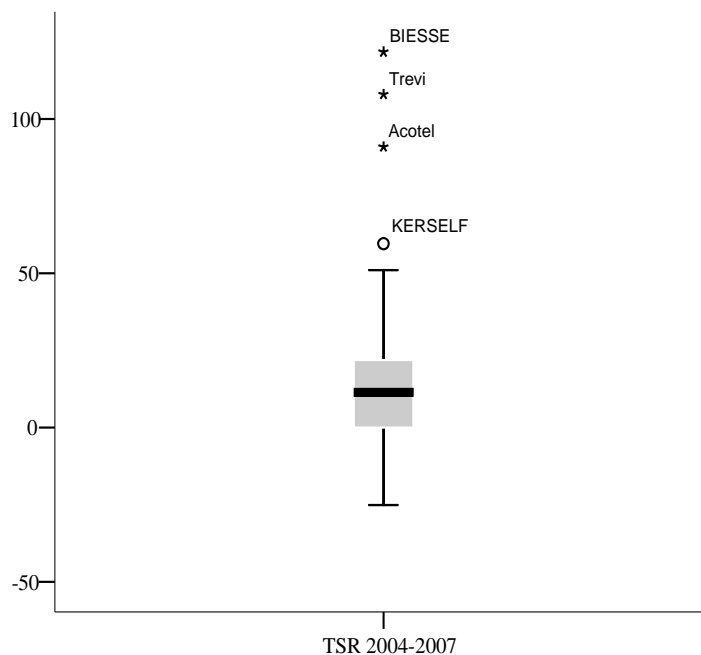
Where G_{ij} is the GDP of the region j where firm i is located; R_i are the total revenues of firm i ; P the profit; V the valued added per capita; M employee efficiency; F the revenues per capita; E the number of employees; O the Return on Equity index; S the Return on sales; I the Return on investment; C the Return on assets; A the branch of activity of firm i ; L the cost of labour and T the profit per employee.

The control variables used are:

- context richness and economic wealth where firms are located, branch of activities measured as an average increasing rate of the regions' GDP, and ATECO code of activity branches;

- the inner firm performance indexes in terms of average increasing rate of revenues, profits, ROA, ROS, ROI, ROE;
- the company human labour productivity indexes as an average increasing rate of revenues per capita, value added per capita, profit per employee, labour costs per capita, employee efficiency, number of employees.

Fig. 5 – Increasing TSR 2004-2007



Control variables were collected for the same period (where available from the data source; this means that for most of the sample the increasing rate has been calculated over three years instead of four) from AIDA (Bureau van Dijk).

The correlation matrix identifies a positive relation between TSR, on the one hand, and ROS and ROE, ROI, employees efficiency, GDP, PPE and revenue per capita, on the other.

The cross-analysis of correlation coefficient of other pair variables stress some interesting aspects¹⁶, some of which confirm the quality of the data collected:

¹⁶ The multicollinearity analysis has also been worked out, but the results are not significant for the following phases of the research.

- profit and revenues are highly and significantly related, and so too are revenues per capita with revenues;

- every variable seems related to GDP. Richness of context does not influence company performance. Today companies listed on the stock market are usually characterized by an international placement and markets (and sometimes shareholders too);

- moreover, the branches of activity present a very significant negative relation;

- obviously, employee efficiency is significantly related to revenues per capita;

- ROE is strictly related both to ROI and ROS, while the already-underscored relation with TSR is less important. In other words, the capability to attract risk capital is highly related to sales efficiency and the capability to attract credit and capital.

Tab. 4 – Correlations

		Correlation matrix														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	GDP	Pearson's r														
		Sig.														
		N														
2	Revenue	Pearson's r	-0,072													
		Sig.	0,369													
		N	159													
3	PPE	Pearson's r	0,135	-,761(**)												
		Sig.	0,127	0,000												
		N	130	130												
4	TSR	Pearson's r	0,133	-0,115	0,057											
		Sig.	0,092	0,213	0,576											
		N	163	120	99											
5	Value added per capita	Pearson's r	-0,133	0,063	0,022	-0,049										
		Sig.	0,159	0,509	0,820	0,655										
		N	113	113	113	86										
6	Labour cost per capita	Pearson's r	-0,056	-0,030	0,044	-0,112	,854(**)									
		Sig.	0,550	0,752	0,641	0,300	0,000									
		N	116	116	115	87	110									
7	Employees efficiency	Pearson's r	0,046	-0,050	0,096	0,133	0,137	0,030								
		Sig.	0,576	0,544	0,281	0,163	0,148	0,754								
		N	149	149	129	112	112	114								
8	Revenue per capita	Pearson's r	-0,120	,632(**)	0,033	0,081	,725(**)	,658(**)	,498(**)							
		Sig.	0,191	0,000	0,717	0,448	0,000	0,000	0,000							
		N	120	120	120	91	111	112	119							
9	Employees	Pearson's r	0,021	-0,007	0,019	0,031	-0,167	-,286(**)	0,012	-0,166						
		Sig.	0,815	0,933	0,828	0,762	0,077	0,002	0,893	0,070						
		N	130	130	130	99	113	115	129	120						
10	ROE	Pearson's r	0,149	-,352(**)	,352(**)	,292(**)	0,121	0,197	0,059	0,047	0,042					
		Sig.	0,079	0,000	0,000	0,002	0,239	0,051	0,508	0,642	0,660					
		N	139	139	112	106	97	99	130	102	112					
11	ROS	Pearson's r	0,155	0,056	0,094	,329(**)	-,390(**)	-,291(**)	0,051	-0,165	0,030	,645(**)				
		Sig.	0,087	0,536	0,343	0,001	0,000	0,004	0,586	0,109	0,762	0,000				
		N	123	123	103	96	95	95	118	96	103	119				
12	ROI	Pearson's r	0,103	0,034	,224(*)	0,147	0,010	0,101	-0,022	0,014	-0,003	,796(**)	,737(**)			
		Sig.	0,245	0,702	0,021	0,152	0,927	0,332	0,808	0,889	0,977	0,000	0,000			
		N	130	130	106	96	92	94	123	99	106	127	113			
13	ROA	Pearson's r	0,135	-0,018	0,024	0,009	-0,002	-0,007	0,006	-0,010	-0,009	0,063	0,151	0,137		
		Sig.	0,104	0,830	0,795	0,924	0,981	0,942	0,943	0,920	0,927	0,462	0,096	0,121		
		N	145	145	119	110	102	105	137	109	119	138	123	129		
14	Profit	Pearson's r	-0,098	,829(**)	-,791(**)	-0,066	-0,038	-0,048	-0,123	0,010	-0,010	-,337(**)	0,064	0,070	-0,016	
		Sig.	0,217	0,000	0,000	0,474	0,689	0,610	0,135	0,910	0,912	0,000	0,480	0,430	0,846	
		N	159	159	130	120	113	116	149	120	130	139	123	130	145	
15	Activity	Pearson's r	-,145(*)	0,105	0,013	-0,054	-0,008	-0,047	0,060	0,045	0,083	-0,136	-0,034	0,011	-0,103	0,096
		Sig.	0,032	0,195	0,883	0,500	0,930	0,620	0,474	0,634	0,358	0,114	0,712	0,906	0,223	0,233
		N	221	155	126	159	110	113	145	116	126	137	120	128	141	155

*. Correlation is significant at 0,05 level.

**.. Correlation is significant at 0,01 level.

Less obvious are the following relations:

- profit per employees has a negative relation both to profits and revenues, which means that the economic performance of companies does not depend on the mere quantity of human capital (as the regression below demonstrates);

- labour cost per capita has a strong relation to value added per capita. There is a significant relation between the richness created by the companies on the territory and the total expenditure *for* employees (which becomes expenditures *of* the employees on the territory, thus increasing the spin-off generated by firms).

8 – Research findings

To explore the relationship between firms' performance and their assumed main control variable, a linear regression in SPSS was used to estimate the following equation:

$$[2] \quad H_i = \beta_0 + \beta_1 G_{ij} + \beta_2 R_i + \beta_3 P_i + \beta_4 V_i + \beta_5 M_i + \beta_6 F_i + \beta_7 E_i + \beta_8 S_i + \beta_9 I_i + \beta_{10} C_i + \beta_{11} L_i + \beta_{14} T_i$$

Where, as in [1], G_{ij} is the GDP of region j where firm i is located; R_i are the total revenues of firm i ; P the profit; V the valued added per capita; M the employee efficiency; F the revenues per capita; E the number of employees; S the Return on sales; I the Return on investment; C the Return on assets; L the cost of labour and T the profit per employee.

The results of the linear regression model for the companies listed on the ISM reveal that employee efficiency explains, along with the cost of labour per capita, ROI and (obviously) profits and revenues.

Revenue per capita has a negative relation with TSR variance, as well as with value added per capita and the increase in the number of employees.

Moreover, with this set of variables TSR variance is not explained by other factors such as GDP, ROS and ROA.

Instead of other variables, it is employee efficiency and labour cost that explain TSR variance. The employee efficiency index comprises all the expenditure for human capital, not only wages, bonuses or incentives. It is not the increase in the quantity of employees but rather its decrease that explains the increase in TSR. The same is observed for value added per capita.

In other words, it is not the number of employees that affects the shareholders return nor the spin-off generated on the territory.

The results confirm the main hypothesis: the return to shareholders depends on the capability of the companies to motivate, compensate and train employees.

It is clear that all these assumptions do not contemplate the economic and financial effects of the crisis that began in the late summer of 2008, but this goes beyond the purpose of this study, which focuses on Aida's dataset update. Nevertheless, this could be a suggestion for further research.

Tab. 5 – Regression model, ANOVA and coefficients

Model

	R	R ²	R ² correct	Standard error
1	,651(b)	,424	,291	21,5734647

ANOVA(a,b)

Model		Square sum	df	Square mean	F	Sig.
1	Regression	17788,308	12	1482,359	3,185	,002
	Residual	24201,548	52	465,414		
	Total	41989,856	64			

a Dependent: TSR

b Linear regression that pass through the origin

Coefficients(a,b)						
	Not standardized coefficient		Standardized coefficient	t		Sig.
	B	Standard error	Beta			
Mi	38,389	29,479	1,285	1,302		0,199
Li	58,168	36,846	0,648	1,579		0,120
Pi	1,666	0,842	0,475	1,978		0,053
Ri	8,568	7,359	0,396	1,164		0,250
Ii	0,906	0,613	0,367	1,478		0,145
Ti	0,735	0,825	0,222	0,891		0,377
Gi	7,787	8,956	0,100	0,870		0,389
Si	-0,013	0,777	-0,004	-0,016		0,987
Ci	-0,001	0,011	-0,010	-0,085		0,933
Ei	-3,387	3,132	-0,204	-1,081		0,285
Vi	-29,923	17,479	-0,389	-1,712		0,093
Fi	-38,564	28,143	-1,379	-1,370		0,176

a. Dependent: TSR

b. Linear regression pass through the origin

Tab. 6 – ATECO Code

CODE	DESCRIPTION
1	Agriculture, hunting and related service activities
2	Forestry, logging and related service activities
5	Fishing, fish farming and related service activities
10	Mining of coal and lignite; extraction of peat
11	Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction, excluding surveying
12	Mining of uranium and thorium ores
13	Mining of metal ores
14	Other mining and quarrying

- 15 Manufacture of food products and beverages
- 16 Manufacture of tobacco products
- 17 Manufacture of textiles
- 18 Manufacture of wearing apparel; dressing and dyeing of fur
- 19 Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear
Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of
- 20 straw and plaiting materials
- 21 Manufacture of pulp, paper and paper products
- 22 Publishing, printing and reproduction of recorded media
- 23 Manufacture of coke, refined petroleum products and nuclear fuel
- 24 Manufacture of chemicals and chemical products
- 25 Manufacture of rubber and plastic products
- 26 Manufacture of other non-metallic mineral products
- 27 Manufacture of basic metals
- 28 Manufacture of fabricated metal products, except machinery and equipment
- 29 Manufacture of machinery and equipment n.e.c.
- 30 Manufacture of office machinery and computers
- 31 Manufacture of electrical machinery and apparatus n.e.c.
- 32 Manufacture of radio, television and communication equipment and apparatus
- 33 Manufacture of medical, precision and optical instruments, watches and clocks
- 34 Manufacture of motor vehicles, trailers and semi-trailers
- 35 Manufacture of other transport equipment
- 36 Manufacture of furniture; manufacturing n.e.c.
- 37 Recycling
- 40 Electricity, gas, steam and hot water supply
- 41 Collection, purification and distribution of water
- 45 Construction
- 50 Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel
- 51 Wholesale trade and commission trade, except of motor vehicles and motorcycles
- 52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods
- 55 Hotels and restaurants
- 60 Land transport; transport via pipelines
- 61 Water transport
- 62 Air transport
- 63 Supporting and auxiliary transport activities; activities of travel agencies
- 64 Post and telecommunications
- 65 Financial intermediation, except insurance and pension funding
- 66 Insurance and pension funding, except compulsory social security
- 67 Activities auxiliary to financial intermediation
- 70 Real estate activities
- 71 Renting of machinery and equipment without operator and of personal and household goods
- 72 Computer and related activities
- 73 Research and development

- 74 Other business activities
- 75 Public administration and defence; compulsory social security
- 80 Education
- 85 Health and social work
- 90 Sewage and refuse disposal, sanitation and similar activities
- 91 Activities of membership organizations n.e.c.
- 92 Recreational, cultural and sporting activities
- 93 Other service activities
- 95 Activities of households as employers of domestic staff
- 96 Undifferentiated goods producing activities of private households for own use
- 97 Undifferentiated services producing activities of private households for own use
- 99 Extra-territorial organizations and bodies

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