Full Length Research Paper

Company Performance Evaluation and the reasons of Shift : Case of Tunisian Firms

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Based on the current evaluation methods enterprises, the paper examines the relevance of the variables that may explain the difference between the market value and the market value of the company. From a sample of 30 Tunisian listed companies over a period of five years (2007-2011), our main results show that the frictional costs of market inefficiency, ie, the costs of transactions, agency conflicts and information asymmetry are the main factors that explain the difference between the book value and the stock market value of companies. Following the changes in financial theory of the firm, we also studied the determinants of value creation. The main results show that the inclusion of intangible assets such as R & D, quality products and services and know-how, remains poorly considered in the determination of expected future earnings. Discretionary accruals proxies conflicting relations and organizational dysfunction is a significant variable to predict the evolution of flows likely to be generated by the activity of the firm. Accordingly, we result that firms large sizes have a stock assets and secrete significant more value.

Keywords: asset value, market value, offset, EVA, Tobin’s Q.

INTRODUCTION

The evaluation of assets in general and businesses in particular, is an extremely important task for making financial decisions. Among these decisions we list the tender offer (OPA) or exchange (OPE), privatization, the total or partial sale of shares, the partial or complete liquidation of the company's IPO, the capital increase and the decisions of acquisition or transmission companies merge.

The literature reveals several evaluation methods. The most common ones are: the heritage method, the discounted cash flow, the method of Goodwill and comparative approach. Paradoxically, these methods often lead to different values. Thus, the question of superiority and complementarily between the different methods of evaluation to become increasingly relevant arises.

A reading in the perspective of new financial theories, in the case ‘theory’ s inefficiency, the theory of ‘agency, signal theory, the theory of transaction costs, institutional theory and behavioral theory, is a very fruitful framework analysis for analytical sources of creation and destruction of value. In particular, through these theories, we can
answer the question what the reasons for discrepancy between the two baseline assessment methods are namely, property and market approach method?

This question is the central issue of this paper which leads to other questions: which value is more beneficial for business leaders? Do potential investors have to think in terms of stocks (asset value) or in terms of flows (market value)? And what are the determinants of the value to be used to create wealth?

To derive suitable answers to these questions, this paper is organized as follows: the first section will present the different assessment methods and will mobilize several theories to show that the reasons for shifting emerge from the friction of the market. The second section will be devoted to the presentation of the research hypotheses and the definition of variables. Finally, the third and the fourth sections will be dedicated respectively to the interpretation of the main results and conclusion.

Literature Review

The approaches of assessment of firms

Referring to the literature, there are four major families of assessment methods (Pene 1985, Levy 2004 and Tytgat 2010):

- The asset-based approach in both versions, the net asset value of a share, and adjusted net assets on the other. The balance sheet and other accounting information are the main source of evaluation to shareholder wealth. This approach has been the subject of several critiques especially because it neglects the intangible investment that is increasingly seen as an indicator of growth opportunities and a variable enrichment of shareholders. Indeed, recent research shows that, nowadays, the increase in the value of firms is mainly due to their intangible and human capital (Bond and Commins 2000; maroon and Yang 2000).

- The flow valuation methods involve estimating the value of the company from its ability to generate cash flow from operating methods. These flows are discounted at a rate that reflects the risk of economic assets. This method is relatively complex and may lead to an overestimation (undervaluation) of the value due to optimistic forecasts (pessimistic) cash flow or an underestimation (overestimation) of risk in both its economic and financial dimensions.

- The method of goodwill or of value consists of book value plus an extra profit. This method is described as ‘hybrid because it retains the heritage value and the present value of anticipated cash.

- Finally, the comparative approach consists of relating the market price to the various aggregates such as earnings per share, dividend per share, cash flow per share and net assets per share. This method applies only to listed companies. It is therefore subject to cyclical variations which do not necessarily reflect the actual performance of the company.

Analysis of reasons for shifting methods of evaluation

The common assessment methods often restrict themselves to the assessment of the value of equity and to the target shareholders. Thus, we can notice a clear cut between these methods and recent developments in financial theory which are concerned with the interests of different stakeholders and of the overall value of the firm. By deviating assumptions from perfect walking, we show that frictional costs related to market inefficiencies can explain the difference between the market value and the market value (?). More specifically, the main reasons for this shift appear in the divergence of market fluidity, "neglecting" of intangible investment, asymmetric information, conflicts of interest and limited rationality of investors.

The divergence of market fluidity

Basically, the value of the company is the present value of anticipated income it generates. This income may be one of the following types:

- A relatively sustainable income consisting of future annual cash flows if the decision of the shareholders is to continue the business of the company. In this case, the value of equity is the return value of VR which is equal to the sum of discounted cash flows, cost of capital extracted from the value of debts.

- An immediate income consists of the liquidation value if the decision of the shareholders is to stop the activity of the company. In this case, the value of the company is the VP heritage value which is equal to its carrying value adjusted.

In order to maximize their wealth, shareholders choose to carry on (termination) the activity if the output value (the asset value) is greater than the asset value (the yield). In other words, the value of the company E (equity value) is given by the following equation:

\[ E = \max (VR, Vp) \] (1)

If \( \max (VR, Vp) = VR \), VR-Vp difference is called goodwill.

By cons, if \( \max (VR, Vp) = Vp \), the difference \( Vp - VR \) is called Bad-Will.

Equation (1) is based on the principle of maximizing shareholder wealth and means that when the output value is less than the intrinsic value, optimal decision of shareholders is the liquidation of the company. This corollary is obviously to be tempered when the majority or individual shareholder is the state. The latter, taking into account the social costs, benefits and potential future
development may not always conclude the liquidation of the company.

An important question here is why a well, namely the business, does it have two values: an asset value and an output value? In fact, the company is involved in two markets: the market for financial assets (shares) and the market of physical assets (building heritage assets). If these two markets were perfectly efficient, an arbitration process would converge Vp and VR.

In the case of an asset value higher than the profitability (market), rational and free shareholders for their decisions, seeing that their companies despite recovery efforts do not let them expect an adequate return should sell it as a whole or partially detached to get the best value parts. This should tend to converge both values.

In the opposite case (a value greater than the asset value return), entrepreneurs, seeing that the company exudes an exceptional profitability should come and compete in the market, which would normally result in lower profitability and over to a normal level given the risk.

The convergence of VR and VP is generally hampered by the insufficient flow of the two markets, in particular the long adjustment time on the market of physical assets. Indeed, when there is a change-of anticipation, the price adjusts quickly, but not heritage. Procurement of goods and services do not change as quickly as the price adjusts quickly, but not heritage. This should tend to converge both values.

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The immaterial investment

The creation of value is affected by the influence of an economy based increasingly on immaterial. This process is accelerated by the emergence and development of information technologies. In terms of evaluation, to intangible assets are difficult to measure because they are not always separable, but tend to be complementary and can still be much intertwined. For example, spending on R & D correspond, in major part, to the remuneration of a hand of highly skilled and have an impact in terms of training and qualifications of improvement.

In Accounting, intangible assets are not generally taken into account in the financial statements of companies. There are certainly some accounting standards that can be applied to a wider range of intangibles, but it is difficult to determine the monetary value of these goods, which are often at risk and depreciate rapidly.

Insufficient recognition of intangible assets and their increasing role in the value creation are that the financial statements have lost their meaning. However, empirical studies show that non-financial information provided by some companies (Lev & Thomas (2002), including the country OECD, allow financial markets to incorporate the intangible in the valuation of shares of listed companies (Bond and Cummins 2000) and Brynjolfsson and Yang (2000). This disparity demonstrates presumably superior methods of stock assessment in relation to heritage methods.

The influence of conflicts and agency costs

The agency theory analyzes the consequences of the separation of the management function of the property within the same firm (Berle and Means 1932). Confictual relationships most often result in costs that affect the ability of the firm to create value. According to Jensen and Meckling (1976), these costs are threefold:

- Expenditure on monitoring and incentives: these are costs incurred by the principal to limit the opportunistic behavior of the agent.
- Customs clearance costs: these are costs incurred by the agent to justify the quality of its decisions.
- Residual costs: these are opportunity costs to ‘lack of control mechanism, where the cost of control is higher than expected earnings.

In financial markets, investors anticipated flows are strongly influenced by the extent of agency problems. When conflicts of interest are important, the costs would be high and agency ‘expectations market players are down. This ratio results in a market to book (MTB) less than unity.

However, when governance mechanisms put in place are adequate and effective, expectations of market players are on the rise. Thus, the difference between the market value and asset value would be favorable and the MTB ratio is greater than unity.

The information asymmetry

In terms of evaluation, dissemination of information is fundamental to determine the true value of the company in terms of stocks (market value of goods and services) and in terms of flows (value in the stock market). When information is perfect and available, the difference between the two values tends to decrease. However, in the presence of asymmetric information ‘rational actors seeking to maximize their utility function’ tend to be of opportunistic behavior that could jeopardize the effective functioning of the market (Akerlof 1970).

What is the type of adverse selection (pre) or type moral hazard (post-contract), the ‘asymmetric information results in the dissemination of’ incomplete or incorrect information, leading to undervaluation or overvaluation of the value of ‘business. ‘In the absence of effective signals, the players on the financial market tend to offer lower prices, resulting often undervalued by the market value of the business.
The explanatory power of irrational factors

Remaining under asymmetric information and pursuing a dynamic analysis, we can say that evaluation is an ex-ante or ex-post process to estimate a value, in itself, cannot be measured, it is therefore imperfect by nature. The sources of imperfections show:

- Either the inability to collect and use all information and therefore the selective choice of information used;
- Or the quality of information used, collected or transferred;
- Or else the prism through behavioral and stakeholders in the evaluation process.

The principle of behavioral finance is the use of psychology in trying to understand some phenomena in finance. Behavioral finance calls into question the basic assumption of modern finance what the rationality of investors giving rise to the theory of efficient markets. Behavioral finance will therefore seek to highlight situations where markets are not efficient (e.g., situations of excessive volatility or calendar anomalies) and try to explain the psychology of investors. It then seeks to implement strategies to take advantage of these situations.

Optimism leads the decision maker to overestimate the probability of success and underestimate the risk of the outcome of decisions taken. Indeed, the actors that are in good mood, tend to be less vigilant and appraisers to overstate the anticipated flow. Conversely, pessimistic evaluators tend to undervalue the likelihood of success. They underestimate the information they have in order to increase the level of risk they face. This psychological bias has been demonstrated in several empirical studies (Andrew-Yuch B 2002; Yang and Ming-Shen 2005). The French financial market, the hypothesis of over-optimism is defended in several studies. More recently, Martynova and Renneboog (2008) show that irrational factors play an important role in explaining the discrepancy between the values of the company.

Hypotheses and methodology

In order to test the empirical validation of our research, we used a sample of 30 companies listed on the Tunisian Stock Exchange Tunis (TSE) over a five-year period from 2007 to 2011. These companies belong to industrial, commercial, and service sectors mainly. The study data were collected manually from the financial statements published in the official gazettes of the TSE, the issue prospectus of bonds, the share issue prospectus and activity reports available at Financial Market Council and listed on the website of the TSE.

Endogenous variables

We used two variables to explain issued from two evaluation methods namely EVA and Tobin’s Q. We argue that these two types of performance measurement allow comparison on the empirical relevance of each method score.

Economic Value Added (EVA)

EVA is the difference between net operating tax and benefit return on invested capital. This value can be expressed as follows:

\[ \text{EVA} = (K_e - WACC) \times AE \]

with:  
- \( K_e \): rate of return on capital
- \( WACC \): Weighted average cost of capital
- \( AE \): economic assets or Capital Investment

The most common adjustments to calculate the EVA include expenditures related to research and development, provisions for risks and expenses, goodwill, contracts leasing treated as leases corrections to strategic investments in economic depreciation and deferred taxes.

Tobin’s Q

Tobin’s Q reflects the creation (or destruction) of the value for all providers of funds (shareholders and financial creditors). It is often taken as a proxy for measuring the opportunities for business growth. A higher ratio to the unity means that growth opportunities are important and that the market value is greater than the asset value.

Exogenous variables and Hypothesis

One of the main issues of corporate financial theory is the study of factors likely to influence the value of companies namely profitability, financial structure, size and level of risk. In addition to these variables, we aim at supplying the vector of determinants of value measures on market imperfections. In particular, we propose to introduce proxies for information asymmetry and conflicts of interest. We present below the measurements of selected variables and the expected signs.

Economic profitability

Many empirical studies have analyzed the relationship between profitability through accounting numbers and the value created (Lev 1989). The literature assumes that the accounting result allows us to understand the creation of corporate wealth. However, in some cases, this result can explain the very low value of the company. In effect, coefficients determination relationship vary from 1% to 49%, according to the methodological specifications and
the integration of the influence of the context of the company (Dumontier 1999 and Janin 2000). Authors such as Zhang (2000), Beaver and Landsman (2001) and Frank (2002) propose to discuss the pertinence of accounting figures and suggest that some specificities company can condition the degree of relevance of accounting data.

In the Tunisian context, we estimate a positive relationship between firm value and the variable ROA measured by the ratio (economic profitability before interest and after notional tax / economic asset) Thus our first hypothesis is pronounced as follows:

H1: The economic outcome has a positive impact on the value of the company and explains the gap between the market value and the asset value.

The size

Reviews of empirical studies have tested the impact of company size on the value shows that the results found are mixed. The large size can be a source of organizational dysfunction and loss of energy and consequently adversely affect the value of the firm (C Panasian and Andrew K. Prevost (2004). However, most empirical research suggests that size affects significantly in the positive direction and the value of the company (Alberto de Miguela, Julio Pindado, Chabela de la Torre 2002). achieving economies of scale is often put forward to explain this relationship.

As part of our work, the impact of firm size is measured by the natural logarithm of total assets. Thus, we use the following assumption:

H2: The size significantly affects the value of the company and explains the difference between the market value and asset value.

The ownership structure

Empirically, several studies show the existence of a positive correlation between ownership concentration and firm performance through effective control function provided (Denis et al, 1997, Nickel et al 1997 and Denis and McConnell, 2003). More recently, Kapopoulos and Lazarou (2007) test the impact of ownership structure on the performance of a sample of 175 Greek firms listed. The authors use two performance measures namely Tobin's Q and the rate of return and hold two measures of the property, i.e., the fraction of shares owned by the CEO and the fractional share held by controlling shareholders. The results suggest a positive relationship between ownership concentration and firm value. This relationship is also verified in the Asian context (Stuo 2003 and Lins 2003).

However, Holderness (2003) argues that the concentration of ownership may harm the minority shareholders due to expropriation of their wealth as a result of strategic alliances between shareholders and managers. This has the effect of reinforcing the divergence of interest between the two parties. Thus, the author found a negative impact of ownership concentration on firm performance.

Although listed studies show a relationship (positive or negative) between ownership concentration and firm performance, other research has demonstrated the absence of a meaningful relationship.

The impact of ownership concentration on firm value is manifested in holding the control function and information on the activity of the firm. Thus, the property is more concentrated, more asymmetric information.

In the present work, we used the measure “percentage of shares held by the largest shareholder” as proxy’s asymmetric information within the enterprise. We test the relevance of this variable as an explanatory factor of the gap between the values of the business.

H3: The concentration of capital as proxy of information asymmetry explains the difference between the asset value and the market value.

The agency conflicts

According to the agency theory, conflicts of interest generate costs that negatively affect the value of the firm (Jensen and Meckling 1976, Jensen 1986, Jensen and Meckling 1993).

The extent of agency conflicts is a given that these conflicts are unobservable methodological problem. However, empirical attempts offer earnings management as a proxy to estimate the conflict between shareholders and managers (Zhong et al. Bozec 2007, Y 2008). Indeed, the financial and accounting literature has provided two perspectives to explain the motivations of managers to manage accruals, the prospect of communication and opportunistic perspective. In this study, we use the opportunistic perspective to explain the impact management statement on the value of the firm.

Based on association studies, Subramanyam (1996) found a significant positive correlation between discretionary accruals and future profitability. Cheng (2002) assumes that the relationship between discretionary accruals and future stock returns depends on the motivation of managers to report abnormal accruals. Indeed, it states the following assumption that future stock returns are negatively (or positively) associated with discretionary accruals posted to opportunistic incentives.

As part of our empirical study, we measure earnings management by the "discretionary accruals" estimated through the model of Jones (1991) modified by Dechow (1995). Like, Warfield et al. (1995) and Bartov et al. (2001), we use the absolute value of the residuals to measure the magnitude of discretionary accruals. Thus,
in an opportunistic perspective we retain the following hypothesis:

H4: The discretionary accruals proxy of agency problems negatively affects the value of performance and consequently the difference between the market value and asset value.

The tangibility of assets

The analysis of the relationship tangibility of assets and value of the firm is at the heart of the problem of shifting market value and heritage value.

In the American context, Megna and Klock (1993) found, through a sample of U.S. companies that activation of R & D and patents positively impact their Tobin’s Q, and thus lead to a better valuation of these companies market. The same authors discuss later (Megna and Klock, 2000) the effect of intangible capital in the telecom industry and release the same conclusions. Indeed, intangible assets have no value replacement, but the financial markets, they are considered by investors as sources of value creation.

However, Cazavan-jeny and Jeanjean (2006) show a negative impact of spending on R & D on the value of securities classified a sample of 197 French companies. The direction of this relationship can be justified by the fact that the intangible asset is often a source of asymmetric information and conflicts of interest. Holding the results of empirical work account we retain the following hypothesis:

H5: The intangible assets affect the value of the company as well as the difference between the market value and asset value.

The capital structure

Since the work of Modigliani and Miller (1958), the debate on the relationship between financial structure and value of the firm continues to evolve by using new variables from recent developments in financial theory. The two conceptual frameworks are the “Static Trade-off Theory” and “Pecking Order Theory”. According to the theory of compromise, the debt appears both as a source of creation and destruction of value. On the one hand, debt allows the company to achieve a tax gain (Modigliani and Miller 1963), it provides a means for disciplining managers (Jensen and Meckling 1976), and to manage conflicts related to presence of free cash flow Jensen (1986). Debt negatively affects the value of the firm following the bankruptcy costs and agency costs of shareholder -creditor relationship conflict (problem of underinvestment and asset substitution).

In a context of asymmetric information, Myers and Majjuf (1984) establish a hierarchy favoring internal to external financing. When internal resources are insufficient “s debt is privileged” s issue of new shares. When “s financial asymmetry is strong, the” debt issue is a positive signal that the company has been undervalued. Actors on the market therefore revise their anticipation on the rise and the value of it stresses that the market find its balance.

We measured the financial structure with the debt ratio (total debt / total assets). Thus, we use the following assumption:

H6: The financial structure affects the value of the firm and explains the difference between the market value and the asset value.

Economic Risk

The relationship between risk and the value of the company is often approached in terms of growth opportunities. According to the theory of real options, Tobin’s Q is expected to increase the total risk of the company. This result is consistent with the finding of Fama and French (1993) that the high-growth firms have a very high beta systematic risk. Stulz (1990) suggests that “too volatile cash flows, make more meaningful and probable decisions under or over invest and thus affect the value of the company.”

In our study, we will focus on the impact of economic risk on the value of the firm. The risk variable is measured by the change in sales.

H7: the business risk affects the value of the firm and explains the difference between the market value and the asset value.

Specification of models

We retain two models to reveal the determinants of the value of Tunisian companies and a third model to explain the reason of discrepancy between the two methods score.

The first model refers to a performance indicator hybrid is Tobin’s Q character. A superior to the unity ratio indicates that market value exceeds the asset value.

In the second model, the performance score is based on accounting information and calculated absolute namely EVA. The principle of this indicator is to what extent the company releases a surplus after paying the capital invested.

The third model is designed to test the explanatory power of the determinants of the gap between market valuation and accounting valuation. This offset is measured by the difference between the first and second model. Therefore, our models are as follows:

Model 1 : \[ QTobin = \alpha_0 + \alpha_1 \text{DEBT}_i + \alpha_2 \text{ROA}_i + \alpha_3 \text{SIZE}_i + \alpha_4 \text{RISK}_i + \alpha_5 \text{TANG}_i + \alpha_6 \text{ACCRUALS}_i + \alpha_7 \text{PROP} + \epsilon_i \]
Model 2: EVA = $\alpha_0 + \alpha_1 \text{DEBT}_{it} + \alpha_2 \text{ROA}_{it} + \alpha_3 \text{SIZE}_{it} + \alpha_4 \text{RISK}_{it} + \alpha_5 \text{TANG}_{it} + \alpha_6 \text{ACCRUALS}_{it} + \alpha_7 \text{PROP} + \xi_{it}.$

Model 3: DEC = $\alpha_0 + \alpha_1 \text{DEBT}_{it} + \alpha_2 \text{ROA}_{it} + \alpha_3 \text{SIZE}_{it} + \alpha_4 \text{RISK}_{it} + \alpha_5 \text{TANG}_{it} + \alpha_6 \text{ACCRUALS}_{it} + \alpha_7 \text{PROP} + \xi_{it}.$

The econometric panel allows you to control the heterogeneity of observations in their individual dimension, or by the inclusion of a specific effect assumed to be fixed (Fixed Effect) or by the inclusion of a specific unobservable effect (Random effects). The fixed effect estimation using deviations from individual mean and eliminate persistent differences between firms. This procedure, which favors the intra-business, has the advantage of being able to identify and measure effects that are not directly observable. The random effects model assumes independence between the error terms and the explanatory variables. To validate the heterogeneity of the specific effect compared to the explanatory variables, we performed the Hausman test (1978).

According to the results, the P-value of the Hausman test value of the first model is not significant at the 10%, which brings us to accept H0 and favor the adoption of a random effects model.

In contrast, the P-value of the Hausman test of the second model is zero which leads to reject H0 and favor the adoption of a fixed effects model. Therefore, the variable "share cap" which measures the percentage of capital held by major shareholders was excluded from this model because it has not changed during the study period.

Finally, the P-value of the Hausman test value of the third model is not significant at the 10% which brings us to accept H0 and favor the adoption of model random effects.

**EMPIRICAL RESULTS**

**Results and analysis of econometric model Tobin’s Q**

The table below summarizes the main results of regressions performed on the M1 model on the explanation of Tobin’s Q.

The results show that some variables selected explain the value of the firms in our sample. However, the explanatory power of the model is not very comfortable compared to the results obtained by the work of Bouri and Chabchoub (2008) conducted in the same context. Indeed, these authors found a better explanatory power ($R^2 = 0.78$), whereas ours is 0.421. The difference is likely due to the choice of variables tested and the retention period of analysis.

Significant variables are respectively: economic profitability, firm size and discretionary accruals:

- The economic profitability variable has a positive and significant coefficient at the 1% level. The power of this variable is important given the high elasticity that exceeds 2% (2767). The results expected and supports most of the theoretical predictions and empirical results. Investors in the stock market seem to attach great importance to the economic profitability in valuing the securities market.
- The sign of the size variable is significant at the 1% level without the weight is important. This relationship confirms the hypothesis that economies of scale could be achieved by large companies. Thus, the size of the company can be considered as a factor of wealth creation.
- The sign of the coefficient obtained by the estimated accruals variable in an opportunistic perspective, is negative and significant at 1%. This result is consistent with work and Meckling Jensen (1976) and Jensen (1986). It indicates that the agency conflicts generate costs that negatively affect the value.
- Variables economic risk, capital structure, tangibility of assets and share capital held by the officer have very low and insignificant coefficients. Investors do not seem to attach importance to these variables whose information is not always available and interpretation is often subject to confusion and ambiguity. To justify this view, we state the example of the increase in the share capital held by the leader which is a favorable indicator in the context of the theory of convergence but unfavorable from the perspective of the theory of rooting.

Econometric results and analysis of EVA model

The table below summarizes the main results of regressions performed on the M2 model on the explanation of EVA.

compared to the previous model (M1), we note that the adjusted R2 is much higher. This result means that the accounting measure is carrying information about the creation of value in the Tunisian context. Indeed, the coefficient of determination R2 is 94% for the EVA while it was 42% for Q Tobin. The Hausman test reveals a deterministic individual effect. Same econometric estimates show that the regression coefficients are high and significant majority. In particular, we note that the accruals and financial structure variables become significant.

The individual effects are fixed which means that they emerge from explanatory variables. In equation (EVA) effects appear positive for some firms and negative for other firms. Companies with positive individual effect (Air Liquide, STIP, SORIT, SRTGN ...) have explanatory variables whose effect on the EVA is significantly greater than the effect of these variables in the case of companies with negative signs. It may be that this effect comes from individual financial structure, profitability or
Table 1. Summary of the main results of the model Tobin’s Q

<table>
<thead>
<tr>
<th></th>
<th>estimated coefficients</th>
<th>Student Statistique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constante</td>
<td>4.117</td>
<td>3.028***</td>
</tr>
<tr>
<td>DEBT</td>
<td>-0.006</td>
<td>0.234</td>
</tr>
<tr>
<td>RISK</td>
<td>-0.033</td>
<td>0.625</td>
</tr>
<tr>
<td>ROE</td>
<td>2.767</td>
<td>2.480***</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.167</td>
<td>2.079***</td>
</tr>
<tr>
<td>ACC</td>
<td>-3.133</td>
<td>2.151***</td>
</tr>
<tr>
<td>PROP</td>
<td>-0.009</td>
<td>0.693</td>
</tr>
<tr>
<td>TANG</td>
<td>-0.056</td>
<td>0.158</td>
</tr>
<tr>
<td>$R^2$</td>
<td></td>
<td>0.421 (0.403)</td>
</tr>
<tr>
<td>Hausman Test</td>
<td>6.175</td>
<td></td>
</tr>
</tbody>
</table>

*** Significatif au seuil de 1%, ** Significatif au seuil de 5% et * Significatif au seuil de 10%

Table 2. Summary of main results of EVA model (see annexes)

<table>
<thead>
<tr>
<th></th>
<th>Coefficients estimés</th>
<th>La statistique de student</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONSTANT</td>
<td>-0.598</td>
<td>4.273***</td>
</tr>
<tr>
<td>DEBT</td>
<td>0.002</td>
<td>2.631***</td>
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<tr>
<td>RISK</td>
<td>0.001</td>
<td>0.870</td>
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<tr>
<td>ROE</td>
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<td>2.290***</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.031</td>
<td>3.848***</td>
</tr>
<tr>
<td>ACC</td>
<td>-0.047</td>
<td>0.891</td>
</tr>
<tr>
<td>TANG</td>
<td>-2.251</td>
<td>4.677***</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.937</td>
<td></td>
</tr>
<tr>
<td>Hausman Test</td>
<td>55.878</td>
<td></td>
</tr>
</tbody>
</table>

*** Significatif au seuil de 1%, ** Significatif au seuil de 5% et * Significatif au seuil de 10%

size. Further analysis will reveal the variables that originate from the individual effects.
- The economic profitability variable has a positive and significant elasticity of 1%. However, we notice that in the asset-based approach, the weight of this variable is relatively low. In fact, this approach is based on the stock and not on financial flows. The results found are expected and support most of the theoretical predictions and empirical results.
- The size variable has a positive and significant impact. This result is consistent with theoretical predictions and confirms the view that large firms have an important stock (assets) and more significant value.
- The financial structure variable has a positive and significant coefficient. This sign is consistent with financial theory in terms of tax gains (MOMI 1963), disciplinary variables (Jensen and Meckling 1976) and minimizing related costs free cash flow (Jensen 1986).
- The variable tangibility has a high and significant coefficient of 5%. This result confirms the principle of patrimonial approach which consists of non-intangible values that must be subtracted to determine the net worth of the company.
- Variables discretionary accruals and economic risk are not significant in explaining the EVA. The financial literature posits that the importance of conflict of interest and increased risk leads investors to demand a higher salary, the cost of capital and should therefore increase the EVA should decrease. This relationship is not confirmed by the results obtained. Accounting through particularly in terms of assessing the cost of capital are probably the reasons for lack of expected
coefficients estimated by the statistique de student:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficients estimated</th>
<th>La statistique de student</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>4.187</td>
<td>3.060***</td>
</tr>
<tr>
<td>DEBT</td>
<td>-0.005</td>
<td>0.197</td>
</tr>
<tr>
<td>RISK</td>
<td>-0.037</td>
<td>-0.691</td>
</tr>
<tr>
<td>ROE</td>
<td>2.131</td>
<td>1.872***</td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.169</td>
<td>-2.083***</td>
</tr>
<tr>
<td>ACC</td>
<td>-2.820</td>
<td>-1.898***</td>
</tr>
<tr>
<td>TANG</td>
<td>-0.063</td>
<td>-0.174</td>
</tr>
<tr>
<td>PROP</td>
<td>-0.009</td>
<td>-0.651</td>
</tr>
<tr>
<td>R²</td>
<td>0.321</td>
<td></td>
</tr>
</tbody>
</table>

correlations.

Analysis of stock market wealth gap assessment and evaluation

To determine the reasons for the differences between the two methods of market and asset valuations we compared two models selected (M1-M2) (see appendices) while maintaining the same explanatory variables. The results obtained are shown in the following table:

The explanatory variables of the gap between the asset approach (Tobin's Q) and the asset approach (EVA) are respectively the agency problems, size and profitability. Economic profitability is more significant in terms of market valuation. It seems to be inside information used by investors to value securities on the stock market. The size of the firm is a less significant but important variable in a process of heritage assessment. Finally, the discretionary accruals proxy conflicting relations and organizational dysfunction is a significant variable to predict the evolution of flows likely to be generated by the activity of the firm. The results are simple answers to explain the reasons for discrepancy between the two methods. Indeed, the correlation coefficient is relatively low and constant shows that several other factors, including the estimation is difficult, such as market liquidity, are causing lag.

CONCLUSION

In the evaluation of companies, each method holds concepts and is based on implicit assumptions that differ from one another. The discrepancy between the methods is accentuated by factors related to market imperfections. The main objective of our research is to identify key variables to explain the discrepancy between the two baseline assessment methods. Our main results show that the economic profitability, size and discretionary accruals are the main variables that explain the difference between asset management approach and market approach.

The results show that accounting values are better than the stock market explanatory power. Thus, in the Tunisian context, financial analysts based their assessment on accounting measurement process and gave more importance to the economic profitability and firm size.

Taking into account intangible assets such as R & D, quality products and services and know-how, remains weak when determining the expected future income. In contrast, investors in the market are very sensitive to the negative impact of discretionary accruals in an opportunistic perspective.

REFERENCES


