# **RESEARCH ARTICLE**

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# Factors Affecting Disclosure of Accounting Information and Tax Rates Effects on The Risk Level of Listed Viet Nam Medicine Firms During Global Economic Crisis - And Roles of IT governance and Data Security in Risk Management-

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#### ABSTRACT

There are many factors affecting disclosure of accounting information and have impacts on risk level of business, such as: the following factors influenced on the disclosure level: tax rate, financial leverage, acquiring company size, recognized percentage of overprice for expected future profitability in relation to the transaction value. This research paper also analyzes the impacts of tax policy on market risk for the listed firms in the medicine industry as it becomes vital. First of all, we found that the beta values for many companies in general are appropriate by using quantitative and analytical methods for the estimation of asset and equity beta of 9 listed Vietnamese medicine companies with a better traditional model.Next, we have noted that under three different scenarios of adjustments in tax rates (25%, 25% and 28%), the equity beta values will not spread significantly, even if the is down to 20% and the risk dispersion will increase 0,512 to 0,513. Third, this analysis found that the risk-dispersion level in this sample analysis could be held to a minimum, if the tax rate is raised to 28% or to 25%, we found beta values and tax rate has positive correlation. Not only the paper propose some policy suggestion, bit it also recommends risk management plans including IT governance and security and risk to reduce operational risk. Specifically, it also proposes suggestions for enhancing disclosure policy of accounting information and risk policies of businesses.

# **ARTICLE HISTORY**

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#### **KEYWORDS**

beta, disclosure of accounting information, It risk, capital structure, economic crisis, risk, tax rate, medicine industry

**JEL CLASSIFICATION** G010, G100,G390

#### **INTRODUCTION**

Vietnam medicine industry has obtained achievements in recent years, esp. during covid 19. Following the success of previous years, the face of the health sector has changed dramatically, quality of health care is strong when the proportion of people visiting health stations has increased significantly. high technology continues to conquer new heights, typically the "super difficult" organ transplants ... It is worth mentioning that in the past year, Vietnam's health has become the destination of thousands people in the country because medical examination and treatment quality.

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# **Research Issues**

The study will address some issues, such as: whether the risk level of stock investment firms under the different changing scenarios of tax rates increase or decrease so much.

Beside, Several hypotheses for the above issues:

Hypothesis 1: because tax may strongly affect business returns, changing tax scenarios could strongly affect firm risk.

Hypothesis 2: as tax policy is vital for the business development, there will be large disperse in beta or risk values estimated.

# Literature review

Raith (2001) has documented changes in the strength of commodity market pressure, principals have specifically given their agents more opportunities to cut costs, and agents are therefore working harder. Greater rivalry at the same time often results in increased instability in earnings at the level in firms and rewards for executives.

Beside, Needham (2002) pointed out, that while debt financing in certain circumstances usually minimizes the overall total tax burden of parties by offering a deduction of interest, in the sense of the fund it is often ineffective for many reasons, including a lack of Portfolio Company Tax Ability, adverse tax handling of contingent debt and special equity Tax Benefits.

Within the three-factor model, Fama, Eugene F., and French, Kenneth R. (2004), also said "value" ("value") and "size" ("size"). They also said that a share return not only depends on the beta on the stock, but also on the beta on equity investment. The Beta sector is used in Fama and French's threefactor model, which supports Sharpe, Treynor and Lintner's CAPM model.

Anderson (2009) acknowledged that the consumer expense tax elasticity is comparatively low, while the inflation elasticity predicted from the home price is significantly higher. Nicole, Martin and Enzo (2012) have no effect on domestic price rise. And their results indicate that land capital income taxes are not sufficient steps to prevent house prices from rising excessively.

The key determinants of capital structures in companies were then identified by Maia (2010) as being sensitized to these systemic sources of risk by companies which have an asymmetrically low and high leverage impact. And for low-income companies, sudden disruptions are comparatively more significant, and the possibility of financial instability appears to be mirrored in corporate exposure to stock discount rates. Minnis (2011) observed that the audited entities, private US corporations, had considerably smaller loan rates. When assessing the interest rate, borrowers put greater weight on audited financial reports.

Next, Umar (2011) observed that businesses that uphold strong governance systems have debt levels higher (47%) than firms with bad management frameworks per income unit. Huy (2012) observed that beta values are not uniformly distributed in building communities. Chen et all (2013) supported regulatory concerns that undue reliance on shortterm borrowing and insatisfactory equity had exacerbated risks of debt and driven Lehman Brothers to undercapitalization and unsustainable risk exposure.

The model reinforces the importance of the link between the capital structure and risk management. Gunaratha (2013) has disclosed that the extent of financial leverage has a considerable positive association with financial risk in various industries in Sri Lanka.

Flifel (2012) said today that the expectation of efficient capital markets, particularly in this time of crisis, is highly problematic and is questioned by research that shows demand has been skewed by long memory detection. A major negative impact of Leverage on firm results has been noticed by Gabrijelcic and all (2013). And companies which had funding of foreign debt were more competitive than their competitors.

| (source: Viet Nam commercial banks) |                |           |                          |  |  |  |
|-------------------------------------|----------------|-----------|--------------------------|--|--|--|
| Year                                | Borrowing      | Deposit   | Note                     |  |  |  |
|                                     | Interest rates | Rates     |                          |  |  |  |
| 2011                                | 18%-22%        | 13%-14%   |                          |  |  |  |
| 2010                                | 19%-20%        | 13%-14%   | Approximately            |  |  |  |
| 2009                                | 9%-12%         | 9%-10%    | (2007: required reserves |  |  |  |
| 2008                                | 19%-21%        | 15%-16,5% | ratio at SBV is changed  |  |  |  |
| 2007                                | 12%-15%        | 9%-11%    | from 5% to 10%)          |  |  |  |
|                                     |                |           | (2009: special           |  |  |  |
|                                     |                |           | supporting interest rate |  |  |  |
|                                     |                |           | is 4%)                   |  |  |  |

**Exhibit 1** – Interest rates in banking industry during crisis

Exhibit 2 – Basic interest rate changes in Viet Nam

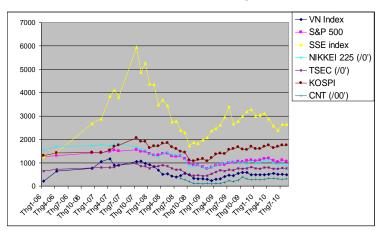


Exhibit 2- VNI Index and other stock market index during crisis 2006-2010

#### **CONCEPTUAL THEORIES**

#### The impact of fiscal policy on the economy

Tax policy is one among major fiscal policies. When the government decides to change the tax policy or tax rates, the mobility of capital in the markets will be affected.

Two instruments may be used by the central bank and government or the finance ministry: fiscal and monetary policies to meet macroeconomic objectives. Tax rates will rapidly influence consumer demand and healthy business growth and production, whether expansion or contraction is one of the fiscal policies.

#### **METHODOLOGY**

The 2007-2011 period, for the purposes of estimating systemic risk outcomes, contains data from Vietnam stock exchanges (HOSE and HNX).

This thesis uses the framework of empirical science and in particular the framework of tax scenario analysis. Analytical data comes from the position of VN stock exchange listed tech firms and the current tax rate is 25%.

Finally, with both the businesses, organisations and government involved, we use the findings to formulate legislation.

# **General Data Analysis**

The study review contains 8 listed entities on the stock market with data

Next, we measure these companies in term of stock beta valuation and use their capital flexibility to measure their asset beta values. Secondly, to see the strength of the beta values we adjust the tax rate from 25% to 28% and 20%. We also note that var of asset beta, calculated at 0,057 (same), is present in three scenarios.

# **Empirical Research Findings and Discussion**

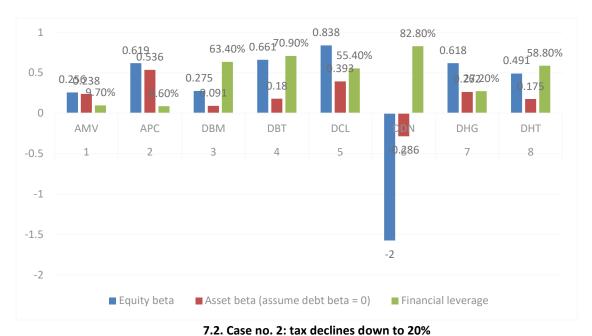
In the segment below details was included on the VN stock exchange (mainly HOSE and HNX) of 8 stock coded medicine firms. In scenario 1, the current tax rate is adjusted to 28%. Then, in contrast to the current FL degree, scenario 2 was down to 20%. Briefly, three examples are included in the risk level study of these listed entities in the following section.

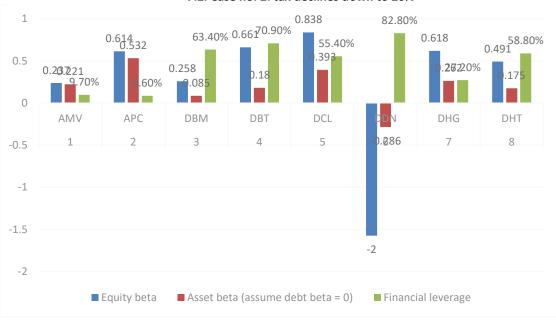
7.1. Case no. 1: tax rises up to 28%

If corporate tax rates increases up to 28%, all beta values of total 6 listed firms on VN stock investment market as below:

Chart 1 – Beta values at (t = 28%)

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As we can see from the above 2 charts, Equity and asset beta values with small fluctuation.

| Comparing statistical results in 3 scenarios of changing tax rate: |              |                    |                      |  |
|--|--------------|--------------------|----------------------|--|
|  | Tax rate 25% | Tax rate up to 28% | Tax rate down to 20% |  |
| Mean Equity beta   | 0.271        | 0.273              | 0.268                |  |
| Var Equity beta  | 0.595        | 0.596              | 0.595                |  |
| Mean asset beta  | 0.198        | 0.199              | 0.195                |  |
| Var asset beta   | 0.057        | 0.057              | 0.057                |  |

What we can analyze from the above data and below chart 3 is that:

Mean asset beta values and tax rate has a positive correlation : when tax rate up to 28%, beta value also up to 0.199, and down to 195 if tax rate down to 20%

Mean equity beta value and tax rate also has a positive correlation: up to 0.273 in case tax rate up to 28%, and down to 0.268 in case tax rate down to 20%.

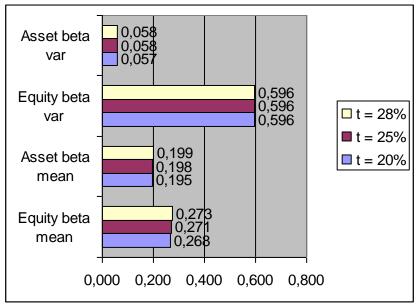


Chart 3 – There cases of changing tax and beta values

# **Conclusion and Policy suggestion**

In conclusion, by adjusting macro policy and legal frameworks and legislation for digital industry growth, the government must consider the impacts on business risk movements. The Finance Ministry seeks to improve the productivity of fiscal policies and fiscal policies that are required in accordance with other macro-policies. The state bank of Vietnam also raises the productivity of capital sources for tech firms as we should remember that the risk level decreases to 0.195 for the tax rate down to 20%.

# IT security policy suggestion

Additionally, cyber security and IT risk management and governance have been becoming vital to businesses, esp. In medicine industry.

"Recent cyber attacks indicate that the health care industry is particularly vulnerable, and this could disrupt patient care and hospital operations." A comprehensive risk management process for information security in health includes the following steps:

☑ Step 1: Establish an appropriate culture, select an information security team and build a knowledge base. Including appointing an information security officer and employing qualified experts to assist with risk analysis, building a culture that protects the privacy of personally identifiable information throughout the team function.

<sup>ℤ</sup>Step 2: Document your actions, findings and actions. These documents provide detailed instructions for the actions taken so that personnel in the health organization can take measures to ensure safety.

☑ Step 3: Perform security risk analysis. Risk analysis assesses threats and potential

vulnerabilities to the confidentiality, integrity, and readiness of the security of electronic personally identifiable information (PII). In general, risk analysis will involve identifying electronic storage places (PII) how to create, receive, maintain and transmit (create a "data map"); identify potential threats and vulnerabilities to data; assess risks and their relevance - how threats exploit vulnerabilities and affect data security, integrity, availability. The results will be communicated in the organization's risk management strategy.

# Financial accounting disclosure and risk management policy suggestion

Beside, in order to reduce risk, as a part of risk management plan, we need to improve transparency of financial accounting data, as well as giving details on disclosure policy of financial accounting information of these listed medicine firms.

Financial accounting provides economic and financial information mainly for people outside the enterprise, so it needs a high legal value and a certain pattern according to the provisions of the law (presentation method, form of expression, time). Meanwhile, management accounting mainly provides information for business owners in making business decisions, which are not mandatory, so they have the form of expression and immediate reporting upon request.

In addition, the Vietnamese Accounting Standards also set out basic requirements for the quality of accounting information, in particular: - Honesty: The accounting information and data must be recorded and reported on the basis of adequate, objective and true evidences on the current situation, the nature of content and the value of business operations. sacrifices. - Objective: Accounting information and data must be recorded and reported strictly according to reality, not distorted or distorted. - Sufficient: All arising economic and financial operations related to the accounting period must be recorded and reported fully, not omitted. - Timely: Accounting information and data must be recorded and reported promptly, on or before the prescribed deadline, without delay. Easy to understand: The information and accounting data presented in the financial statements must be clear, easy to understand for users. Information on complex issues in the financial statements must be explained in the explanation.

# Author note

My sincere thanks are for the editorial office and Lecturers/Doctors at Banking University and International University of Japan. Through the qualitative analysis, please kindly email me if any error found.

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