# Whether Different Changing Tax Rates Cause the Risk Level of Viet Nam Construction Firms Increase or Decrease so Much?

Dinh Tran Ngoc Huy[1]

[1] International University of Japan

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## Abstract

The emerging stock market in Viet Nam has been affected by the financial crisis 2007-2009. This study analyzes the impacts of tax policy on market risk for the listed firms in the construction industry as it becomes necessary.First, by using quantitative and analytical methods to estimate asset and equity beta of total 104 listed companies in Viet Nam construction industry with a proper traditional model, we found out that the beta values, in general, for many companies are acceptable.Second, under 3 different scenarios of changing tax rates (20

***Index terms***— equity beta, financial structure, financial crisis, risk, tax rate real estate industry.

## 1 Introduction

ogether with the development of real estate industry, throughout many recent years, Viet Nam construction industry is considered as one of active economic sectors, which has certain positive effect for the economy.

This paper is organized as follow. The research issues and literature review will be covered in next sessions 2 and 3, for a short summary. Then, methodology and conceptual theories are introduced in session 4 and 5. Session 6 describes the data in empirical analysis. Session 7 presents empirical results and findings. Next, session 8 covers the analytical results. Then, session 9 presents analysis of risk. Lastly, session 10 will conclude with some policy suggestions. This paper also supports readers with references, exhibits and relevant web sources.

## 2 II.

## 3 Research Issues

We mention some issues on the estimating of impacts of tax rates on beta for listed construction companies in Viet Nam stock exchange as following:

## 4 Issue

Whether the risk level of construction firms under the different changing scenarios of tax rates increase or decrease so much.

Issue 2 : Whether the disperse distribution of beta values become large in the different changing scenarios of tax rates estimated in the construction industry.

III.

## 5 Literature Review

Smith (2004) mentions in Chicago, properties located in a designated TIF (tax increment financing) district will exhibit higher rates of appreciation after the area is designated a qualifying TIF district when compared to those properties selling outside TIF districts, and when compared to properties that sell within TIF district boundaries prior to designation.

Robert et all (2011) recognized a significant positive relation between changes in intercorporate investment and changes in corporate marginal tax rates on ordinary income.

George and Jot Yau (2012) found that there is a positive relationship between transaction cost and price volatility, suggesting that the imposition of a transaction tax could increase financial market fragility, increasing the likelihood of a financial crisis rather than reducing it.

Next, Ruud et all (2013) said that greater tax bias is associated with significantly higher aggregate bank leverage, and this in turn is associated with a significantly greater chance of crisis.

Then, Sung, Mark and Laura (2013) also indicated that business property values are more responsive to changes in tax rates as compared to residential property.

Finally, tax rate can be considered as one among many factors that affect business risk of real estate firms.
IV.

# 6 Conceptual Theories

a) The impact of fiscal policy on the economy Tax policy is one among major fiscal policies. If the government changes the tax or expenditure policy, the economy will be affected because the aggregate demand fluctuates, level of economic activities fluctuates, level of income changes and the allocation of economic resources in the public sector in relative to private sector changes.

In a specific industry such as construction industry, on the one hand, using tax policy with a decrease or increase in tax rate could affect tax revenues, profit after tax and financial results and compensation and jobs of the industry. On the other hand, using tax policies could increase the financial results of this industry and therefore, affect the tax revenues, compensation and jobs.

During and after financial crises such as the 2007-2009 crisis, there raises concerns about fiscal policies or public policies of many countries, in both developed and developing markets.

V.

# 7 Methodology

Because the period 2007-2011 is the time the local economy experienced impacts from financial crisis, in this study, we use the live data from the stock exchange market in Viet Nam (HOSE and HNX) during the four or five years period to estimate systemic risk results and tax impacts.

In this research, analytical research method is used and specially, tax rate scenario analysis method is used. Analytical data is from the situation of listed construction firms in VN stock exchange and cuurent tax rate is 25%.

Finally, we use the results to suggest policy for both these enterprises, relevant organizations and government.

# 8 VI.

# 9 General Data Analysis

The research sample has 104 listed firms in the construction market with the live data from the stock exchange.

Firstly, we estimate equity beta values of these firms and use financial leverage to estimate asset beta values of them. Secondly, we change the tax rate from 25% to 28% and 20% to see the sensitivity of beta values. In 3 cases (rate = 20%, 25%, and 28%), asset beta mean is estimated at 0,306, 0,307 and 0,308. Also in 3 scenarios, we find out var of asset beta estimated at 0,064 (almost the same) which shows small risk dispersion. Tax rate changes almost has no effect on asset beta var under financial leverage.

# 10 VII.

# 11 Empirical Research Findings and Discussion

In the below section, data used are from total 104 listed construction companies on VN stock exchange (HOSE and HNX mainly). In the scenario 1, current tax rate is 25% which is used to calculate market risk (beta). Then, two (2) tax rate scenarios are changed up to 28% and down to 20%, compared to the current corporate tax rate.

Market risk (beta) under the impact of tax rate, includes: 1) equity beta; and 2) asset beta.

? Scenario 1: current tax rate is 25%

In the case of tax rate of 25%, all beta values of 104 listed firms on VN construction market as following: Equity beta mean values in all 3 scenarios are little high ($> 1$) but asset beta mean values are small. In the case of current tax rate of 25%, equity beta value fluctuates in a wide range from 0,115 (min) up to 2,884 (max) and asset beta fluctuates from 0,008 (min) up to 1,458 (max). If corporate tax rate increases to 28%, equity beta moves from 0,105 (min) up to 2,884 (max) and asset beta moves from 0,008 (min) up to 1,458 (max). Hence, we note that there is a change in equity beta min value if corporate tax increases. When tax rate decreases down to 20%, equity beta value changes from 0,091 (min) up to 2,884 (max) and asset beta changes from 0,007 (min) up to 1,458 (max). So, there is small changes in equity/asset beta min values when tax decreases In scenario 3.

Beside, Exhibit 7 informs us that in the case 28% tax rate, average equity beta value of 104 listed firms decreases up to 0,0924 while average asset beta value of these 104 firms increase slightly up to 0,0008. Then,

when tax rate reduces to 20%, average equity beta value of 104 listed firms reduce to 0,0983 and average asset beta value of 104 firms down to 0,0013.

The below chart 1 shows us : when tax rate decreases down to 20%, average equity and asset beta values decrease slightly (1,008 và 0,306) compared to those at the initial rate of 25% (1,106 và 0,307). At the same time, when tax rate increases up to 28%, average equity beta decreases slightly whereas average asset beta value increases slightly (to 1,014 và 0,308). However, the fluctuation of equity and asset beta values (0,303 và 0,064) in the case of 20% tax rate is higher than or equal to (>=) the results in the rest 2 tax rate cases.

Chart 1 : Comparing statistical results of three (3) scenarios of changing tax rate IX.

# 12 Risk Analysis

In the case of decreasing tax rate, (20%), the market and companies can receive more benefits such as generating more jobs and compensation, but the government budget can have deficit and the government has to cut expenses. Changes in tax rates can have both positive and negative impacts on the local market.

In the case of increasing tax rate (28%), the government will have budget to finance public expenditures but the tax could reduce both demand and supply.

# 13 Conclusion and Policy Suggestion

In summary, the government continues to increase the effectiveness of building the legal system and regulation and macro policies supporting the plan of developing both the construction together with the real estate market. The Ministry of Finance Continue to increase the effectiveness of fiscal policies and tax policies which are needed to combine with other macro policies at the same time, although we could note that in this study when tax rate is going to increase up to 28%, the value of equity beta mean decreases down to 1,014, from 1,106.

The State Bank of Viet Nam continues to increase the effectiveness of capital providing channels for both construction and real estate companies.

Finally, this paper suggests implications for further research and policy suggestion for the Viet Nam government and relevant organizations, economists and investors from current market conditions.

# 14 References Références Referencias

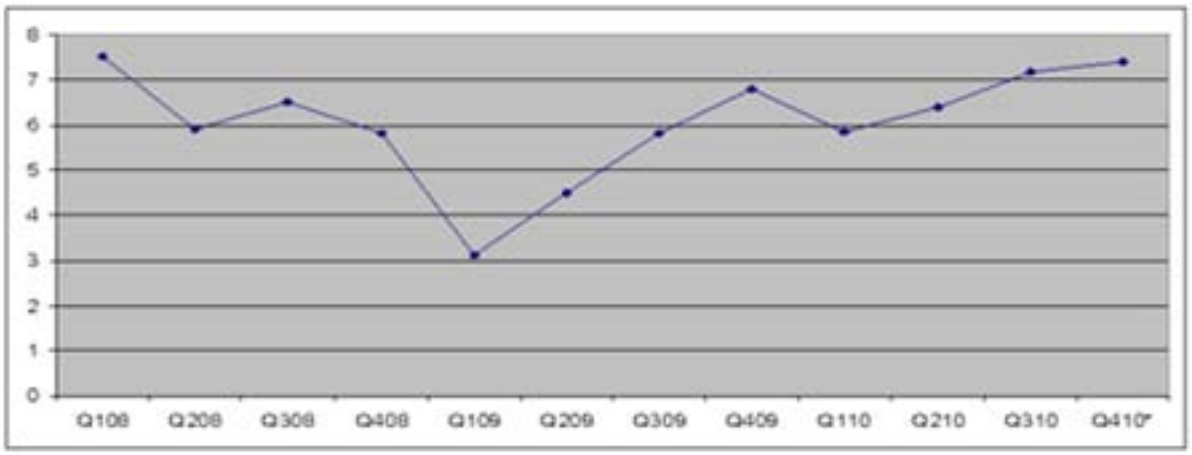
1. **??**jinkya, Bijal., and Kumar, Mahesh., (2012) CNT 1,062 0,134 0,0000 0,000 0,000 0,000 2 DCC 1,299 0,578 0,0000 0,000 0,000 0,000 3 DIG 1,772 0,964 0,0000 0,000 0,000 0,000 4 FPC 0,484 0,229 0,0000 0,000 0,000 0,000 5 HBC 1,030 0,277 0,0000 0,000 0,000 0,000 6 L10 0,909 0,193 0,0000 0,000 0,000 0,000 7 MCG 1,595 0,543 0,0000 0,000 0,000 0,000 8 VNE 1,700 0,606 0,0000 0,000 0,000 0,000 9 L35 0,295 0,095 0,0074 0,002 -0,012 -0,004 LM3 0,337 0,040 0,0000 0,000 0,000 0,000 LO5 0,745 0,179 0,0000 0,000 0,000 0,000 L62 0,606 0,171 0,0000 0,000 0,000 0,000 L61 0,856 0,261 0,0000 0,000 0,000 0,000 L43 0,709 0,217 0,0000 0,000 0,000 0,000 L44 1,277 0,252 0,0000 0,000 0,000 0,000 B82 0,860 0,146 0,0000 0,000 0,000 0,000 BCE 0,955 0,515 0,0152 0,008 -0,024 -0,013 C92 0,800 0,121 0,0000 0,000 0,000 0,000 CIC 0,919 0,248 0,0000 0,000 0,000 0,000 CID 0,891 0,423 0,0000 0,000 0,000 0,000 CSC 1,023 0,217 0,0000 0,000 0,000 0,000 CT6 0,435 0,122 0,0118 0,003 -0,018 -0,005 CTD 0,950 0,574 0,0000 0,000 0,000 0,000 CTM 2,869 1,458 0,0000 0,000 0,000 0,000 CVN 0,995 0,605 0,0131 0,008 -0,021 -0,013 CX8 0,180 0,034 0,0057 0,001 -0,009 -0,002 DC2 0,323 0,116 0,0076 0,003 -0,012 -0,004 DLR 0,243 0,064 0,0068 0,002 -0,011 -0,003 HUT 1,084 0,143 0,0000 0,000 0,000 0,000 L18 1,069 0,156 0,0000 0,000 0,000 0,000 LCS 0,141 0,037 0,0079 0,002 -0,012 -0,003 1,410 0,271 0,0000 0,000 0,000 0,000 CTN 0,922 0,160 0,0000 0,000 0,000 0,000 V11 1,148 0,161 0,0000 0,000 0,000 0,000 V12 1,521 0,181 0,0000 0,000 0,000 0,000 V15 1,566 0,582 0,0000 0,000 0,000 0,000 V21 0,971 0,012 -0,8459 0,000 -0,857 -0,001 VC1 1,815 0,525 0,0000 0,000 0,000 0,000 VC2 1,240 0,220 0,0000 0,000 0,000 0,000 96 VC3 1,256 0,195 0,0000 0,000 0,000 0,000 97 VC5 1,266 0,181 0,0000 0,000 0,000 0,000 98 VC6 1,123 0,287 0,0000 0,000 0,000 0,000 99 VC7 1,106 0,252 0,0000 0,000 0,000 0,000 VC9 1,140 0,124 0,0000 0,000 0,000 0,000 VCC 0,971 0,188 0,0000 0,000 0,000 0,000 VCG 1,505 0,186 0,0000 0,000 0,000 0,000 VCH 1,286 0,018 -1,1056 0,001 -1,121 -0,001 VMC 1,503 0,292 0,0000 0,000 0,000 0,000 Average -0,0924 0,0008 -0,0983 -0,0013 [1] [2] [3]

[1] Decrease so Much?

[2] © 2013 Global Journals Inc. (US)

[3] T h g 1 -0 6 T h g 4 -0 6 T h g 7 -0 6 T h g 1 0 -0 6 T h g 1 -0 7 T h g 4 -0 7 T h g 7 -0 7 T h g 1 0 -0 7 T h g 1 -0 8 T h g 4 -0 8 T h g 7 -0 8 T h g 1 0 -0 8 T h g 1 -0 9 T h g 4 -0 9 T h g 7 -0 9 T h g 1 0 -0 9 T h g 1 -1 0 T h g 4 -1 0 T h g 7 -1 0


Figure 1:




**8**

Figure 2: Exhibit 8 :

**1**

| | construction market (t = 25%) | | |
|---|---|---|---|
| Order No. | Company stock code | Equity beta | Asset beta (assume debt beta = 0) |
| 1 | CNT | 1,062 | 0,134 |
| 2 | DCC | 1,299 | 0,578 |
| 3 | DIG | 1,772 | 0,964 |
| 4 | FPC | 0,484 | 0,229 |
| 5 | HBC | 1,030 | 0,277 |
| 6 | L10 | 0,909 | 0,193 |
| 7 | MCG | 1,595 | 0,543 |
| 8 | VNE | 1,700 | 0,606 |
| 9 | L35 | 0,295 | 0,095 |
| 10 | LM3 | 0,337 | 0,040 |
| 11 | LO5 | 0,745 | 0,179 |
| 12 | L62 | 0,606 | 0,171 |
| 13 | L61 | 0,856 | 0,261 |
| 14 | L43 | 0,709 | 0,217 |
| 15 | L44 | 1,277 | 0,252 |
| 16 | B82 | 0,860 | 0,146 |
| 17 | BCE | 0,955 | 0,515 |
| 18 | C92 | 0,800 | 0,121 |
| 19 | CIC | 0,919 | 0,248 |
| 20 | CID | 0,891 | 0,423 |
| 21 | CSC | 1,023 | 0,217 |
| 22 | CT6 | 0,435 | 0,122 |
| 23 | CTD | 0,950 | 0,574 |
| 24 | CTM | 2,869 | 1,458 |
| 25 | CVN | 0,995 | 0,605 |
| 26 | CX8 | 0,180 | 0,034 |

Figure 3: Table 1 :

**2**

| | | (t = 28%) | |
|---|---|---|---|
| Order No. | Company stock code | Equity beta | Asset beta (assume debt beta = 0) |
| 1 | CNT | 1,062 | 0,134 |
| 2 | DCC | 1,299 | 0,578 |
| 3 | DIG | 1,772 | 0,964 |
| 4 | FPC | 0,484 | 0,229 |
| 5 | HBC | 1,030 | 0,277 |

*[Note: ? Scenario 3: tax rate decreases down to 20%If corporate tax rate decreases down to 20%, all beta values of total 104 listed firms on the construction market in VN as following:]*

Figure 4: Table 2 :

**3**

| Order No. | Company stock code | Equity beta (t = 20%) | Asset beta (assume debt beta = 0) |
|---|---|---|---|
| 1 | CNT | 1,062 | 0,134 |
| 2 | DCC | 1,299 | 0,578 |
| 3 | DIG | 1,772 | 0,964 |
| 4 | FPC | 0,484 | 0,229 |
| 5 | HBC | 1,030 | 0,277 |
| 6 | L10 | 0,909 | 0,193 |
| 7 | MCG | 1,595 | 0,543 |
| 8 | VNE | 1,700 | 0,606 |
| 9 | L35 | 0,284 | 0,091 |
| 10 | LM3 | 0,337 | 0,040 |
| 11 | LO5 | 0,745 | 0,179 |
| 12 | L62 | 0,606 | 0,171 |
| 13 | L61 | 0,856 | 0,261 |
| 14 | L43 | 0,709 | 0,217 |
| 15 | L44 | 1,277 | 0,252 |
| 16 | B82 | 0,860 | 0,146 |
| 17 | BCE | 0,931 | 0,502 |

*[Note: © 2013 Global Journals Inc. (US)]*

Figure 5: Table 3 :

0,400
0,600
0,800
1,000
1,200
0,000
0,200

1,008 1,106 1,014 0,306 0,307 0,253
0,303 0,308 0,296 0,064 0,064 0,064
Equity Beta Mean Asset Beta Mean
Equity Beta VAR Asset Beta VAR
X.

t = 20% t = 25% t = 28%

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*[Note: © 2013 Global Journals Inc. (US)]*

Figure 6:

Decrease so Much?
Y , Taxation aspects of Mergers and Acquisitions, Asia-Pacific Tax Bulletin 2. 2013Butt, Tanuj., and Mark, Humphery -Jenner., (2013), Stock Return Volatility, earOperating Performance and Stock Returns: International Evidence on Drivers of ( the "Low Volatility" Anomaly, Journal of Banking and Finance 3. Eugene, Fama ) F., and French, Kenneth R., (2004), The Capital Asset Pricing Model: Theory C and Evidence, Journal of Economic Perspectives 4. Flifel, Kaouther., (2012), 14 Financial Markets between Efficiency and Persistence : Empirical Evidence on Y Daily Data, Asian Journal of Finance and Accounting 5. Grullon, Gustavo., 2013yandres, Evgeny., and Zhdanov, Alexei., (2012), Real Options, Volatility and earStock Returns, Journal of Finance 6. Hai, Nguyen Minh., Hien, Phan Tat., and ( Linh, Dang Huyen., (2013), Phân tích tác ? ?ng c?a phá giá ti?n t? ??n t?ng ) tr??ng kinh t? VN th?i k? 2000-2012, Journal of Economic Development 7. Huy, C Dinh T.N., (2012), Estimating Beta of Viet Nam listed construction companies 16 groups during the crisis, Journal of Integration and Development 8. Kimberly, Y Clausing A., (2012), In Search of Corporate Tax Incidence, Tax Law Review 2013. Ling, Amy., (2013), Tax Issues Relating to Intangibles, Asia-Pacific Tax earBulletin 10. Pereiro, Luis E.,(2010), The Beta Dilemma in Emerging Markets, ( Journal of Applied Corporate Finance 11. Saleem, Kashif., (2011), Time Varying ) Correlations between Stock and Bond Returns : Empirical Evidence from Russia, C Asian Journal of Finance and Accounting Research 1. Ang, A., Chen, J., (2007), 18 CAPM Over the Long Run: 1926-2001, Journal of Empirical Finance 2. Baker, Kent H., Singleton, Clay J., and Veit, Theodore E., (2011), Survey Research in Corporate Finance: Bridging The Gap Between Theory and Practice, Oxford University Press 3. ADB and Viet Nam Fact Sheet, 2010 Other web sources (Source : Bureau Statistic) Order Rank Company name 1 CÃ?"NG TY CP LÂM S?N PISICO QU?NG NAM 2 CÃ?"NG TY CP VÀNG B?C ?Á QUÝ SJC C?N TH? 3 CÃ?"NG TY CP S?I PHÚ NAM 4 CÃ?"NG TY CP VÀNG B?C ?Á QUÝ B?N THÀNH 5 CÃ?"NG TY CP MAY CHI?N TH?NG 6 CÃ?"NG TY TNHH DU L?CH TR?N VI?T 7 N.A 8 CÃ?"NG TY TNHH TRUY?N THÃ?"NG ADT 9 CÃ?"NG TY CP K?T N?I NHÂN TÀI 10 10 CÃ?"NG TY TNHH THI?T L?P 11 11 CÃ?"NG TY TNHH-CH? BI?N TH?Y S?N VÀ XNK TRANG KHANH 12 12 CÃ?"NG TY S?N XU?T TH??NG M?I VÀ ??U T? TAM MINH 13 13 CÃ?"NG TY TNHH TH??NG M?I S?N XU?T HÙNG HUY 14 14 CÃ?"NG TY TNHH TH??NG M?I HOÀNG ??O 15 15 CÃ?"NG TY TNHH TH??NG M?I XÂY D?NG DI?U LONG 16 16 CÃ?"NG TY CP XÂY D?NG NHÀ VÀ PHÁT TRI?N H? T?NG HÀ N?I 17 CÃ?"NG TY CP X?NG D?U TH??NG M?I SÃ?"NG TRÀ 18 CÃ?"NG TY CP S?I PHÚ TH?NH 19 CÃ?"NG TY TNHH DU L?CH VÀ TH??NG M?I SÃ?"NG H?NG 20 CÃ?"NG TY CP D?U TH?C V?T BÌNH ??NH 21 CÃ?"NG TY CP V?T T? M? ??A CH?T 22 CÃ?"NG TY TNHH MTV SÀI GÒN B?N TRE 23 CÃ?"NG TY TNHH H?I VI?T 24 CÃ?"NG TY TNHH MAY PHÙ ?á»?"NG 25 CÃ?"NG TY TNHH TH??NG M?I VÀ D?CH V? K? THU?T TESCO 26 CÃ?"NG TY TNHH TH??NG M?I PHÚC THÁI 27 CÃ?"NG TY TNHH MINH ??NG 28 CÃ?"NG TY TNHH TH??NG M?I VÀ D?CH V? V?N T?I NG?C KHÁNH 29 CÃ?"NG TY TNHH TH??NG M?I D?CH V? VÂN PHÁT 30 CÃ?"NG TY CP V?N T?I VÀ D?CH V? PETROLIMEX NGH? T?NH 31 CÃ?"NG TY TNHH TH??NG M?I S?N XU?T TÂN BÌNH 32 CÃ?"NG TY TNHH NGUYÊN LI?U GI?Y DUNG QU?T 33 CÃ?"NG TY TNHH B?NH VI?N ?A KHOA T? NHÂN AN SINH 34 CÃ?"NG TY TNHH IN L?A NH?T PH??NG 35 CÃ?"NG TY CP D?U KHÍ SÀI GÒN-PHÚ YÊN 36 CÃ?"NG TY CP BÊ TÃ?"NG ??NG H?I 37 CÃ?"NG TY CP GIÀY BÌNH ??NH 38 CÃ?"NG TY CP ??U T? PHÁT TRI?N THIÊN S?N Exhibit 6 : Risk and financial leverage of 104 listed construction firms on VN stock exchange period 2007-2011 Exhibit 3 : Inflation, GDP growth and macroeconomics factors Year Inflation GDP USD/VND rate 2011 18% 5,89% 20.670 2010 11,75% (Estimated at Dec 2010) 6,5% (expected) 19.495 2009 6,88% 5,2% 17.000 2008 22% 6,23%

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | PVV | 1,332 | 0,048 | -1,0390 | 0,002 | -1,062 | -0,002 |
| | PVX | 1,304 | 0,311 | 0,0000 | 0,000 | 0,000 | 0,000 |
| | PXI | 1,332 | 0,029 | -1,2267 | 0,002 | -1,242 | -0,003 |
| | PXS | 1,406 | 0,172 | -0,8528 | 0,004 | -0,888 | -0,007 |
| | PXT | 1,521 | 0,206 | -0,8922 | 0,005 | -0,931 | -0,008 |
| | SDP | | | | | | |

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Figure 8:

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LHC 0,755 0,358 0,0000 0,000 0,000 0,000 LIG 0,436 0,091 0,0133 0,003 -0,020 -0,004 LUT 1,433 0,730 0,0000 0,000 0,000 0,000 MCO 0,755 0,127 0,0000 0,000 0,000 0,000 NSN 0,115 0,014 0,0040 0,000 -0,006 -0,001 PHC 1,667 0,409 0,0000 0,000 0,000 0,000 QTC 0,259 0,110 0,0000 0,000 0,000 0,000 TV2 0,822 0,207 0,0000 0,000 0,000 0,000 TV4 0,666 0,241 0,0000 0,000 0,000 0,000 VE1 1,475 0,776 0,0000 0,000 0,000 0,000 VE2 0,595 0,358 0,0080 0,005 -0,013 -0,008 VE3 0,598 0,403 0,0064 0,004 -0,010 -0,007 VE9 0,704 0,430 0,0000 0,000 0,000 0,000

Decrease so Much?

VHH 0,440 0,226 0,0075 0,004 -0,012 -0,006 SNG 1,264 0,484 0,0000 0,000 0,000 0,000 SSS 1,074 0,385 0,0000 0,000 0,000 0,000 STL 1,634 0,066 0,0000 0,000 0,000 0,000 SJM 1,030 0,389 0,0000 0,000 0,000 0,000 SJE 1,399 0,324 0,0000 0,000 0,000 0,000 SJC 1,103 0,266 0,0000 0,000 0,000 0,000 SIC 1,568 0,365 0,0000 0,000 0,000 0,000 SEL 0,220 0,059 0,0060 0,002 -0,009 -0,003 SDT 1,406 0,435 0,0000 0,000 0,000 0,000 SDS 0,929 0,071 0,0000 0,000 0,000 0,000 SDJ 1,257 0,249 0,0000 0,000 0,000 0,000 SDH 2,884 1,290 0,0000 0,000 0,000 0,000 SDB 0,214 0,043 0,0066 0,001 -0,010 -0,002 SD9 1,456 0,415 0,0000 0,000 0,000 0,000 SD8 1,210 0,103 0,0000 0,000 0,000 0,000 SD7 1,461 0,243 0,0000 0,000 0,000 0,000 SD6 1,670 0,479 0,0000 0,000 0,000 0,000 SD5 1,332 0,503 0,0000 0,000 0,000 0,000 SD4 1,114 0,233 0,0000 0,000 0,000 0,000 SD3 1,361 0,695 0,0000 0,000 0,000 0,000 SD2 1,386 0,450 0,0000 0,000 0,000 0,000 SD1 0,198 0,034 0,0064 0,001 -0,010 -0,002 S99 1,286 0,800 0,0000 0,000 0,000 0,000 S96 1,706 0,480 0,0000 0,000 0,000 0,000 S91 1,213 0,386 0,0000 0,000 0,000 0,000 S74 1,250 0,443 0,0000 0,000 0,000 0,000 S64 1,099 0,358 0,0000 0,000 0,000 0,000 S55 1,251 0,476 0,0000 0,000 0,000 0,000 S27 1,213 0,008 -1,1001 0,000 -1,110 0,000 S12 1,180 0,202 0,0000 0,000 0,000 0,000 MEC 1,410 0,040 -1,1349 0,001 -1,157 -0,002 ICG 1,634 0,795 0,0000 0,000 0,000 0,000 PHH 1,069 0,108 -0,6835 0,003 -0,709 -0,004 PIV 0,598 0,325 -0,1312 0,007 -0,155 -0,011 PVA 1,932 0,209 0,0000 0,000 0,000 0,000 PVE 1,580 0,499 0,0000 0,000 0,000 0,000 PVR 1,670 0,440 -0,7345 0,008 -0,778 -0,013

[Approximately ()][Approximately []]Exhibit Exhibit 1 : Interest rates in banking industry during crisis Year Borrowing Interest ra

*Source : State Bank of Viet Nam and Viet Nam economy)*, Approximately . 2000. p. 9.