

Whether The Risk Level of Viet Nam Real Estate Firms under the Different Changing Tax Rates Increase or Decrease So Much?

Dinh Tran Ngoc Huy

Banking University, 26 Nguyen Cong Tru str, District 1, HCM city, Viet nam – GSIM,
International University of Japan, Japan

dtanhuy2010@gmail.com

Abstract- Under the volatility of stock price, and changes in macro factors such as inflation and interest rates, the real estate market in Viet Nam has entered the recession stage after the year 2008 and after the bubbles in housing prices. This study analyzes the impacts of tax policy on market risk for the listed firms in the real estate industry as it becomes necessary. First, by using quantitative and analytical methods to estimate asset and equity beta of total 45 listed companies in Viet Nam real estate 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%, 25% and 28%), we recognized that there is not large disperse in equity beta values, estimated at 0,918, 0,927 and 0,934.

Third, by changing tax rates in 3 scenarios (25%, 20% and 28%), we recognized both equity and asset beta mean values have positive relationship with the increasing level of tax rate.

Finally, this paper provides some outcomes that could provide companies and government more evidence in establishing their policies in governance.

General Terms- Market risk volatility, corporate finance

Keywords- Equity beta; financial structure; financial crisis; risk; tax rate; real estate industry.

JEL Classification: G010, G100, G390

1. INTRODUCTION

Throughout many recent years, Viet Nam real estate market is evaluated as one of active markets, 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. RESEARCH ISSUES

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

Issue 1: Whether the risk level of real estate firms under the different changing scenarios of tax rates increase or decrease so much?

Issue 2: Because Viet Nam is an emerging and immature financial market and the stock market still in the starting stage, whether the disperse distribution of beta values become large in the different changing scenarios of tax rates estimated in the real estate industry.

3. LITERATURE REVIEW

John (1999) mentions a two-rate tax system where land is taxed at a higher rate than structures in his research on two-rate property tax effects on land development.

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.

Anderson (2009) recognized that the user cost tax elasticities are relatively small while the expected house price inflation elasticity is substantially larger and therefore plays a greater role in affecting housing market demand.

Nicole, Martin and Enzo (2012) found that transaction taxes have no impact on house price growth. And their findings suggest that capital gain taxes on real estate are not suitable measures to prevent excessive house price growth.

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.

4. CONCEPTUAL THEORIES

The impact of fiscal policy on the economy

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 an economy, fiscal policy is always used together with monetary policy.

The role of fiscal policy

In most of nations and in Viet Nam, fiscal policy can be either deficit or surplus or neutral. If the fiscal policy has deficit, the government has to finance to deficit by issuing government bonds. On the other hand, in the case of surplus budget, the government can slow down the speed of economic growth and stabilize prices when inflation is high.

The combination of monetary and fiscal policies during the crisis period

The central bank and government or Ministry of Finance could use two tools: fiscal and monetary policies to perform macro economic goals. Fiscal policy can affect quickly the aggregate demand and good market whereas monetary policy affects quickly interest rate, inflation and financial markets and asset markets. The using of different tools has the same effect on the economy: either expansion or contraction.

Beside, the performing still depends on the independence or dependence between government and central bank of each nation.

5. METHODOLOGY

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

In this study, analytical research method and specially, tax rate scenario analysis method is used. Nalytical data is from the situation of listed real estate 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.

6. GENERAL DATA ANALYSIS

The research sample has 45 listed firms in the real estate market with the live date 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 0,437, 0,441 and 0,444. Also in 3 scenarios, we find out var of asset beta estimated at 0,111 (almost the same). Tax rate changes almost has no effect on asset beta var under financial leverage.

7. EMPIRICAL RESEARCH FINDINGS & DISCUSSION

In the below section, data used are from 45 listed real estate 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 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.

7.1 Scenario 1: current tax rate is 25%

In the case of tax rate of 25%, all beta values of 45 listed firms on VN real estate market as following:

Table 1 – Market risk of listed companies on VN real estate market (t = 25%)

Order No.	Company stock code	Equity beta	Asset beta (assume debt beta = 0)
1	API	1,692	1,586
2	ASM	1,505	0,526
3	BCI	1,203	0,542
4	CCI	0,481	0,147
5	CLG	0,387	0,093
6	D2D	1,315	0,484
8	DLG	0,576	0,191
9	DTA	0,977	0,467
10	DXG	1,444	0,456
11	HAG	0,863	0,403
12	HDC	1,191	0,427
13	HDG	1,626	0,635
14	IDJ	1,202	0,779

15	IDV	0,429	0,083
16	IJC	0,426	0,124
17	ITA	1,168	0,780
18	ITC	0,412	0,236
19	KBC	1,052	0,413
20	KDH	1,179	0,737
21	LCG	1,709	1,016
22	LGL	0,738	0,324
23	LHG	0,551	0,216
24	NBB	1,040	0,357
25	NHA	1,404	1,038
26	NTL	1,580	0,711
27	NVN	0,169	0,062
28	OGC	0,617	0,282
29	PDR	0,201	0,081
30	PPI	0,381	0,169
31	PVL	1,098	0,772
32	QCG	0,727	0,294
33	RCL	1,777	0,995
34	SC5	1,447	0,232
35	SDU	1,376	0,571
36	SJS	1,529	0,810
37	SZL	0,586	0,355
38	TDH	1,177	0,771
39	TIX	0,486	0,196
40	UDC	0,217	0,071
41	UIC	1,302	0,362
42	VCR	0,510	0,319
43	VIC	0,782	0,192
44	VPH	0,070	0,019
45	VRC	0,206	0,074

Note: Raw data, not adjusted

7.2. Scenario 2: tax rate increases up to 28%

If corporate tax rates increases up to 28%, all beta values of total 45 listed firms on VN real estate market as below:

Table 2 – Market risks of listed real estate firms (t = 28%)

Order No.	Company stock code	Equity beta	Asset beta (assume debt beta = 0)
1	API	1,6954	1,5894
2	ASM	1,5049	0,5263
3	BCI	1,2028	0,5415

4	CCI	0,4939	0,1509
5	CLG	0,3986	0,0961
6	D2D	1,3150	0,4843
8	DLG	0,5903	0,1957
9	DTA	0,9952	0,4760
10	DXG	1,4444	0,4557
11	HAG	0,8630	0,4032
12	HDC	1,1912	0,4270
13	HDG	1,6257	0,6347
14	IDJ	1,2187	0,7896
15	IDV	0,4426	0,0853
16	IJC	0,4372	0,1274
17	ITA	1,1676	0,7797
18	ITC	0,4124	0,2359
19	KBC	1,0521	0,4132
20	KDH	1,1940	0,7467
21	LCG	1,7088	1,0160
22	LGL	0,7528	0,3308
23	LHG	0,5633	0,2211
24	NBB	1,0402	0,3573
25	NHA	1,4163	1,0463
26	NTL	1,5795	0,7112
27	NVN	0,1777	0,0652
28	OGC	0,6291	0,2874
29	PDR	0,2106	0,0844
30	PPI	0,3963	0,1761
31	PVL	1,1082	0,7798
32	QCG	0,7428	0,3006
33	RCL	1,7769	0,9947
34	SC5	1,4473	0,2316
35	SDU	1,3764	0,5709
36	SJS	1,5295	0,8095
37	SZL	0,5856	0,3553
38	TDH	1,1772	0,7709
39	TIX	0,4861	0,1963
40	UDC	0,2273	0,0745
41	UIC	1,3019	0,3616
42	VCR	0,5266	0,3298
43	VIC	0,7815	0,1925
44	VPH	0,0758	0,0200
45	VRC	0,2158	0,0774

7.3. Scenario 3: tax rate decreases down to 20%
If corporate tax rate decreases down to 20%, all beta values of total 45 listed firms on the real estate market in VN as following:

Table 3 – Market risk of listed real estate firms (t = 20%)

Order No.	Company stock code	Equity beta	Asset beta (assume debt beta = 0)
1	API	1,6868	1,5814
2	ASM	1,5049	0,5263
3	BCI	1,2028	0,5415
4	CCI	0,4620	0,1412
5	CLG	0,3701	0,0892
6	D2D	1,3150	0,4843
8	DLG	0,5538	0,1836
9	DTA	0,9489	0,4538
10	DXG	1,4444	0,4557
11	HAG	0,8630	0,4032
12	HDC	1,1912	0,4270
13	HDG	1,6257	0,6347
14	IDJ	1,1757	0,7618
15	IDV	0,4085	0,0787
16	IJC	0,4083	0,1190
17	ITA	1,1676	0,7797
18	ITC	0,4124	0,2359
19	KBC	1,0521	0,4132
20	KDH	1,1553	0,7225
21	LCG	1,7088	1,0160
22	LGL	0,7148	0,3141
23	LHG	0,5321	0,2088
24	NBB	1,0402	0,3573
25	NHA	1,3850	1,0232
26	NTL	1,5795	0,7112
27	NVN	0,1554	0,0570
28	OGC	0,5984	0,2734
29	PDR	0,1860	0,0746
30	PPI	0,3574	0,1589
31	PVL	1,0803	0,7601
32	QCG	0,7027	0,2844
33	RCL	1,7769	0,9947
34	SC5	1,4473	0,2316
35	SDU	1,3764	0,5709

36	SJS	1,5295	0,8095
37	SZL	0,5856	0,3553
38	TDH	1,1772	0,7709
39	TIX	0,4861	0,1963
40	UDC	0,2014	0,0660
41	UIC	1,3019	0,3616
42	VCR	0,4838	0,3030
43	VIC	0,7815	0,1925
44	VPH	0,0625	0,0165
45	VRC	0,1900	0,0681

All three above tables and data inform us that values of equity and asset beta in the case of increasing tax rate up to 28% or decreasing rate down to 20% have small fluctuation. The number of listed real estate firms in all 3 cases with equity beta value higher than (>) 1 is 22 and with asset beta > 1 is 3.

8. COMPARING STATISTICAL RESULTS IN 3 TAX SCENARIOS

a. tax rate = 25%

Statistic results	Equity beta	Asset beta (assume debt beta = 0)
MAX	1,777	1,586
MIN	0,070	0,019
MEAN	0,927	0,441
VAR	0,2468	0,1111
Note: Sample size : 45		

b. tax rate = 28%

Statistic results	Equity beta	Asset beta (assume debt beta = 0)
MAX	1,777	1,589
MIN	0,076	0,020
MEAN	0,934	0,444
VAR	0,2435	0,1111
Note: Sample size : 45		

c. tax rate = 20%

Statistic results	Equity beta	Asset beta (assume debt beta = 0)
MAX	1,777	1,581
MIN	0,062	0,017
MEAN	0,918	0,437
VAR	0,2521	0,1110
Note: Sample size : 45		

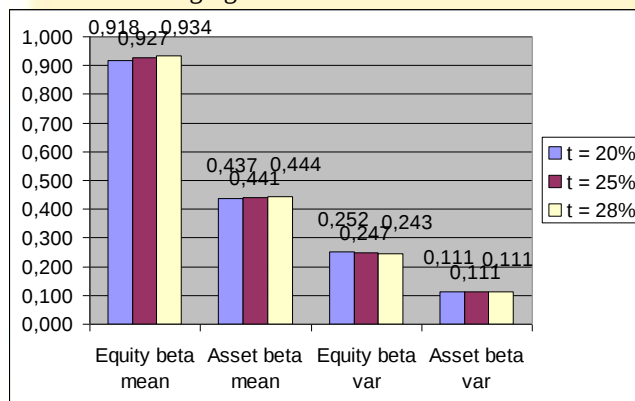
Based on above results, we find out:

In the case of current tax rate of 25%, equity beta value fluctuates from 0,070 (min) up to 1,777 (max) and asset beta fluctuates from 0,019 (min) up to 1,586 (max). If corporate tax rate increases to 28%, equity beta moves from 0,076 (min) up to 1,777 (max) and asset beta moves from 0,020 (min) up to 1,589 (max). When tax rate decreases down to 20%, equity beta value changes from 0,062 (min) up to 1,777 (max) and asset beta changes from 0,017 (min) up to 1,581 (max).

Beside, Exhibit 7 informs us that in the case 28% tax rate, average equity beta value of 45 listed firms increases up to 0,0061 and average asset beta value of these 45 firms increase slightly up to 0,0028. Then, when tax rate reduces to 20%, average equity beta value of 45 listed firms reduce to 0,0095 and average asset beta value of 45 firms down to 0,0043.

The below chart 1 shows us ; when tax rate decreases down to 20%, average equity and asset beta values decrease slightly (0,918 và 0,437) compared to those at the initial rate of 25% (0,927 và 0,441). At the same time, when tax rate increases up to 28%, average equity and asset beta values increase slightly (to 0,934 và 0,444). However, the fluctuation of equity and asset beta values (0,252 và 0,111) in the case of 20% tax rate is higher than or equal to ($\geq$) the results in the rest 2 tax rate cases.

Chart 1 – Comparing statistical results of three (3) scenarios of changing tax rate



9. RISK ANALYSIS

Under the case of decreasing tax rate, (20%), the economy and the companies can receive more benefits but the government budget can have deficit and the government has to cut expenses.

In the case of increasing tax rate (28%), the government will have budget to finance public expenditures but the economy and firms can reduce the cash flow.

10. CONCLUSION & POLICY SUGGESTION

For the Government

Continue to increase the effectiveness of building the legal system and regulation and macro policies supporting the plan of developing the real estate market, including but not

limit to, supporting solutions for maintaining investment ratio and liquidity channels for firms in the real estate market.

For The Ministry of Finance

Continue to coordinate with other Ministries to increase the effectiveness of fiscal policies and tax policies supporting businesses.

Tax policy needs to combine with other macro policies at the same time to help real estate firms to increase financial strength.

For the State Bank of Viet Nam (SBV)

Continue to increase the effectiveness of capital providing channels for real estate companies, and partly resolve the inventory amount in real estate.

Furthermore, in the crisis period, policies needed to issue based on the manner that react quickly to impacts from the crisis and shocks. In particularly, interest rate policy needs to increase or decrease suitably interest rates in order to stimulate demand and consuming and investment, as well as control inflation (with the current trend of decreasing rates). For exchange rate policy, controlling or decreasing VND to be suitable to exporting policies.

In short, macro policies aim to support the operation of real estate firms and market, including the resolving of real estate inventories.

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.

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Author's Biography with Photo



Dinh Tran Ngoc Huy

MBA degree from
International University of
Japan, Japan

EXHIBIT

Exhibit 1 – Interest rates in banking industry during crisis

(Source: Viet Nam commercial banks)

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

Exhibit 2 – Basic interest rate changes in Viet Nam (Source: State Bank of Viet Nam and Viet Nam economy)

Year	Basic rate	Note
2011	9%	
2010	8%	
2009	7%	
2008	8,75%-14%	Approximately, fluctuated
2007	8,25%	
2006	8,25%	
2005	7,8%	
2004	7,5%	
2003	7,5%	
2002	7,44%	
2001	7,2%-8,7%	Approximately, fluctuated
2000	9%	

Exhibit 3 – Inflation, GDP growth and macroeconomics factors
(Source: Viet Nam commercial banks and economic statistical bureau)

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%	17.700
2007	12,63%	8,44%	16.132
2006	6,6%	8,17%	
2005	8,4%		
Note	approximately		

Exhibit 4: GDP growth Việt Nam 2006-2010 (source: Bureau Statistic)

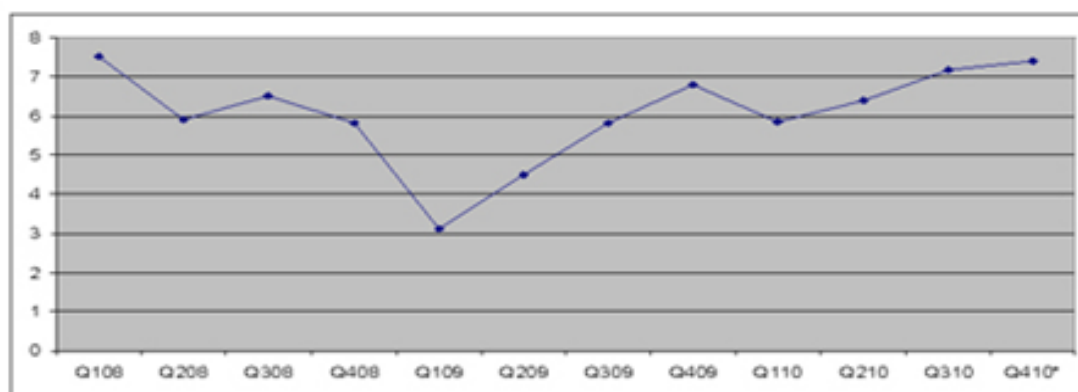


Exhibit 5: Top 40 among top 500 SMEs with the highest growth speed in 2012
(Source: Vietnamnet and Viet Nam report)

Order	Rank	Company name	CEO	Tax code	Industry
1	1	CÔNG TY CP LÂM SẢN PISICO QUẢNG NAM	Phan Văn Cường	4000405162	Kinh doanh nông, lâm sản
2	2	CÔNG TY CP VÀNG BẠC ĐÁ QUỲ SJC CẦN THƠ	Lê Phát Vinh	1800636290	Vàng, bạc, đá quý
3	3	CÔNG TY CP SƠI PHÚ NAM	Hoàng Văn Thám	3300491474	Sản xuất sợi, dệt
4	4	CÔNG TY CP VÀNG BẠC ĐÁ QUỲ BẾN THÀNH	Tê Trí Dũng	300847936	Vàng, bạc, đá quý
5	5	CÔNG TY CP MAY CHIẾN THẮNG	Ninh Thị Ty	100101058	Ngành may
6	6	CÔNG TY TNHH DU LỊCH TRẦN VIỆT	Nguyễn Mạnh Cường	301069809	Du lịch, khách sạn
7	7	N.A		2012701	
8	8	CÔNG TY TNHH TRUYỀN THÔNG ADT	Đặng Huy Thắng	100905796	Sản xuất khác
9	9	CÔNG TY CP KẾT NỐI NHÂN TÀI	Tiêu Yến Trinh	305202145	Kinh doanh tổng hợp khác
10	10	CÔNG TY TNHH THIẾT LẬP	Nguyễn Hoàng Ân	1500441413	Sản xuất, kinh doanh, chế biến gạo,

					bột mỳ, ngũ cốc...
11	11	CÔNG TY TNHH-CHẾ BIẾN THỦY SẢN VÀ XNK TRANG KHANH	Trần Tuấn Khanh	1900287501	Nuôi trồng, chế biến, kinh doanh thủy sản và các sản phẩm thịt
12	12	CÔNG TY SẢN XUẤT THƯƠNG MẠI VÀ ĐẦU TƯ TAM MINH	Lưu Tuấn Anh	4300327589	Sản xuất đồ gỗ, nội thất
13	13	CÔNG TY TNHH THƯƠNG MẠI SẢN XUẤT HÙNG HUY	Voòng A Hoa	302259111	Sản xuất và gia công giấy, dép
14	14	CÔNG TY TNHH THƯƠNG MẠI HOÀNG ĐẠO	Hồ Hoàng Bách	301434963	Sản xuất, kinh doanh thuốc lá, nguyên liệu thuốc lá
15	15	CÔNG TY TNHH THƯƠNG MẠI XÂY DỰNG ĐIỀU LONG	Đặng Thị Linh Phương	302000905	Kinh doanh tổng hợp khác
16	16	CÔNG TY CP XÂY DỰNG NHÀ VÀ PHÁT TRIỂN HÀ TẦNG HÀ NỘI	Phạm Thanh Nam	101370536	Xây dựng nhà và các công trình kỹ thuật dân dụng; hoạt động xây dựng chuyên dụng
17	17	CÔNG TY CP XĂNG DẦU THƯƠNG MẠI SÔNG TRÀ	Nguyễn Anh	4300334642	Kinh doanh xăng dầu, khí đốt, nhiên liệu và các sản phẩm liên quan
18	18	CÔNG TY CP SOI PHÚ THANH	Nguyễn Văn Cường	3300471069	Sản xuất sợi, dệt
19	19	CÔNG TY TNHH DU LỊCH VÀ THƯƠNG MẠI SÔNG HỒNG	Lê Công Hoàng	100237411	Kinh doanh xăng dầu, khí đốt, nhiên liệu và các sản phẩm liên quan
20	20	CÔNG TY CP DẦU THỨC VẬT BÌNH ĐỊNH	Nguyễn Thị Thùy Giao	4100399995	Sản xuất thực phẩm chế biến: sữa, đường, cà phê, dầu ăn, bánh kẹo...
21	21	CÔNG TY CP VẬT TƯ MỎ ĐỊA CHẤT	Lê Nhật Tân	101453768	Kinh doanh tổng hợp khác
22	22	CÔNG TY TNHH MTV SÀI GÒN BÊN TRE	Nguyễn Ngọc Minh Hùng	1300419650	Bán lẻ, kinh doanh siêu thị
23	23	CÔNG TY TNHH HẢI VIỆT	Nguyễn Văn Ri	3700443193	Kinh doanh nông, lâm sản
24	24	CÔNG TY TNHH MAY PHÙ ĐỒNG	Dương Đức Thanh	100598947	Ngành may
25	25	CÔNG TY TNHH THƯƠNG MẠI VÀ DỊCH VỤ KỸ THUẬT TESCO	Trần Thanh Bình	101507773	Sản xuất, kinh doanh ô tô, phụ tùng ô tô
26	26	CÔNG TY TNHH THƯƠNG MẠI PHÚC THÁI	Bùi Xuân Huy	600346391	Kinh doanh xăng dầu, khí đốt, nhiên liệu và các sản phẩm liên quan
27	27	CÔNG TY TNHH MINH ĐĂNG	Nguyễn Thị Cẩm Nhung	2200258144	Nuôi trồng, chế biến, kinh doanh thủy sản

					và các sản phẩm thịt
28	28	CÔNG TY TNHH THƯƠNG MẠI VÀ DỊCH VỤ VÂN TÀI NGỌC KHÁNH	Trần Ngọc Huân	4000377194	Kinh doanh xăng dầu, khí đốt, nhiên liệu và các sản phẩm liên quan
29	29	CÔNG TY TNHH THƯƠNG MẠI DỊCH VỤ VÂN PHÁT	Cao Ngọc Anh	303332212	Kinh doanh tổng hợp khác
30	30	CÔNG TY CP VÂN TÀI VÀ DỊCH VỤ PETROLIMEX NGHỆ TĨNH	Võ Văn Tân	2900428497	Kinh doanh xăng dầu, khí đốt, nhiên liệu và các sản phẩm liên quan
31	31	CÔNG TY TNHH THƯƠNG MẠI SẢN XUẤT TÂN BÌNH	Trần Trí Thức	3900326063	Sản xuất đồ gỗ, nội thất
32	32	CÔNG TY TNHH NGUYÊN LIỆU GIẤY DUNG QUẤT	Nguyễn Nị	4300308498	Sản xuất đồ gỗ, nội thất
33	33	CÔNG TY TNHH BỆNH VIỆN ĐA KHOA TỰ NHÂN AN SINH	Ngô Đăng Sơn Anh	302774433	Sản xuất khác
34	34	CÔNG TY TNHH IN LƯA NHẤT PHƯƠNG	Huỳnh Thị Thanh Thủy	301441840	Sản xuất giấy, in ấn, xuất bản
35	35	CÔNG TY CP DẦU KHÍ SÀI GÒN-PHÚ YÊN	Trần Công Chương	4400344901	Kinh doanh xăng dầu, khí đốt, nhiên liệu và các sản phẩm liên quan
36	36	CÔNG TY CP BÊ TÔNG ĐĂNG HẢI	Phan Văn Khanh	400619838	Sản xuất, kinh doanh vật liệu xây dựng: xi măng, gạch xây, đá, cát...
37	37	CÔNG TY CP GIẤY BÌNH ĐỊNH	Võ Ngọc Thủy	4100258761	Sản xuất và gia công giấy, dếp
38	38	CÔNG TY CP ĐẦU TƯ PHÁT TRIỂN THIÊN SƠN	Vũ Văn Tuyên	101536301	Sản xuất, kinh doanh vật liệu xây dựng: xi măng, gạch xây, đá, cát...
39	39	HTX THƯƠNG MẠI ĐÔ THÀNH	Hàng Thanh Dân	302804374	Kinh doanh thực phẩm chế biến: sữa, đường, cà phê, dầu ăn, bánh kẹo.....
40	40	CÔNG TY CP XÂY DỰNG TỔNG HỢP 269	Trương Duy Niệm	3000244523	Xây dựng nhà và các công trình kỹ thuật dân dụng; hoạt động xây dựng chuyên dụng

Exhibit 6: Risk and financial leverage date of 45 listed real estate firms on VN stock exchange period 2007-2011

Order No.	Company stock code	Equity beta	Asset beta (assume debt beta = 0)	Note	Financial leverage
1	API	1,692	1,586	RCL as comparable	6,3%
2	ASM	1,505	0,526		65,0%

3	BCI	1,203	0,542		55,0%
4	CCI	0,481	0,147	UIC as comparable	69,4%
5	CLG	0,387	0,093	UIC as comparable	75,9%
6	D2D	1,315	0,484		63,2%
8	DLG	0,576	0,191	SC5 as comparable	66,9%
9	DTA	0,977	0,467	RCL as comparable	52,2%
10	DXG	1,444	0,456		68,4%
11	HAG	0,863	0,403		53,3%
12	HDC	1,191	0,427		64,2%
13	HDG	1,626	0,635		61,0%
14	IDJ	1,202	0,779	API as comparable	35,2%
15	IDV	0,429	0,083	RCL as comparable	80,7%
16	IJC	0,426	0,124	BCI as comparable	70,9%
17	ITA	1,168	0,780		33,2%
18	ITC	0,412	0,236		42,8%
19	KBC	1,052	0,413		60,7%
20	KDH	1,179	0,737	LCG as comparable	37,5%
21	LCG	1,709	1,016		40,5%
22	LGL	0,738	0,324	DXG as comparable	56,1%
23	LHG	0,551	0,216	DLG as comparable	60,8%
24	NBB	1,040	0,357		65,6%
25	NHA	1,404	1,038	RCL as comparable	26,1%
26	NTL	1,580	0,711		55,0%
27	NVN	0,169	0,062	CLG as comparable	63,3%
28	OGC	0,617	0,282	ITA as comparable	54,3%
29	PDR	0,201	0,081	IJC as comparable	59,9%
30	PPI	0,381	0,169	LGL as comparable	55,5%
31	PVL	1,098	0,772	DXG as comparable	29,6%
32	QCG	0,727	0,294	SJS as comparable	59,5%
33	RCL	1,777	0,995		44,0%
34	SC5	1,447	0,232		84,0%
35	SDU	1,376	0,571		58,5%
36	SJS	1,529	0,810		47,1%
37	SZL	0,586	0,355		39,3%
38	TDH	1,177	0,771		34,5%
39	TIX	0,486	0,196		59,6%
40	UDC	0,217	0,071	LHG as comparable	67,2%
41	UIC	1,302	0,362		72,2%
42	VCR	0,510	0,319	LGL as comparable	37,4%
43	VIC	0,782	0,192		75,4%

44	VPH	0,070	0,019	UDC as comparable	73,5%
45	VRC	0,206	0,074	CCI as comparable	64,1%
Note: Raw data, not adjusted				Average	55,6%

Exhibit 7 – Increase/decrease risk level of listed real estate firms under changing scenarios of tax rates : 25%, 28%, 20% period 2007 - 2011

Order No.	Company stock code	t = 25%		t = 28%		t = 20%	
		Equity beta	Asset beta	+ / -(equity beta)	+ / -(asset beta)	+ / -(equity beta)	+ / -(asset beta)
1	API	1,692	1,586	0,0034	0,0034	-0,0052	-0,0046
2	ASM	1,505	0,526	-0,0001	0,0003	-0,0001	0,0003
3	BCI	1,203	0,542	-0,0002	-0,0005	-0,0002	-0,0005
4	CCI	0,481	0,147	0,0129	0,0039	-0,0190	-0,0058
5	CLG	0,387	0,093	0,0116	0,0031	-0,0169	-0,0038
6	D2D	1,315	0,484	0,0000	0,0003	0,0000	0,0003
8	DLG	0,576	0,191	0,0143	0,0047	-0,0222	-0,0074
9	DTA	0,977	0,467	0,0182	0,0090	-0,0281	-0,0132
10	DXG	1,444	0,456	0,0004	-0,0003	0,0004	-0,0003
11	HAG	0,863	0,403	0,0000	0,0002	0,0000	0,0002
12	HDC	1,191	0,427	0,0002	0,0000	0,0002	0,0000
13	HDG	1,626	0,635	-0,0003	-0,0003	-0,0003	-0,0003
14	IDJ	1,202	0,779	0,0167	0,0106	-0,0263	-0,0172
15	IDV	0,429	0,083	0,0136	0,0023	-0,0205	-0,0043
16	IIC	0,426	0,124	0,0112	0,0034	-0,0177	-0,0050
17	ITA	1,168	0,78	-0,0004	-0,0003	-0,0004	-0,0003
18	ITC	0,412	0,236	0,0004	-0,0001	0,0004	-0,0001
19	KBC	1,052	0,413	0,0001	0,0002	0,0001	0,0002
20	KDH	1,179	0,737	0,0150	0,0097	-0,0237	-0,0145
21	LCG	1,709	1,016	-0,0002	0,0000	-0,0002	0,0000
22	LGL	0,738	0,324	0,0148	0,0068	-0,0232	-0,0099
23	LHG	0,551	0,216	0,0123	0,0051	-0,0189	-0,0072
24	NBB	1,04	0,357	0,0002	0,0003	0,0002	0,0003
25	NHA	1,404	1,038	0,0123	0,0083	-0,0190	-0,0148
26	NTL	1,58	0,711	-0,0005	0,0002	-0,0005	0,0002
27	NVN	0,169	0,062	0,0087	0,0032	-0,0136	-0,0050
28	OGC	0,617	0,282	0,0121	0,0054	-0,0186	-0,0086
29	PDR	0,201	0,081	0,0096	0,0034	-0,0150	-0,0064
30	PPI	0,381	0,169	0,0153	0,0071	-0,0236	-0,0101
31	PVL	1,098	0,772	0,0102	0,0078	-0,0177	-0,0119
32	QCG	0,727	0,294	0,0158	0,0066	-0,0243	-0,0096

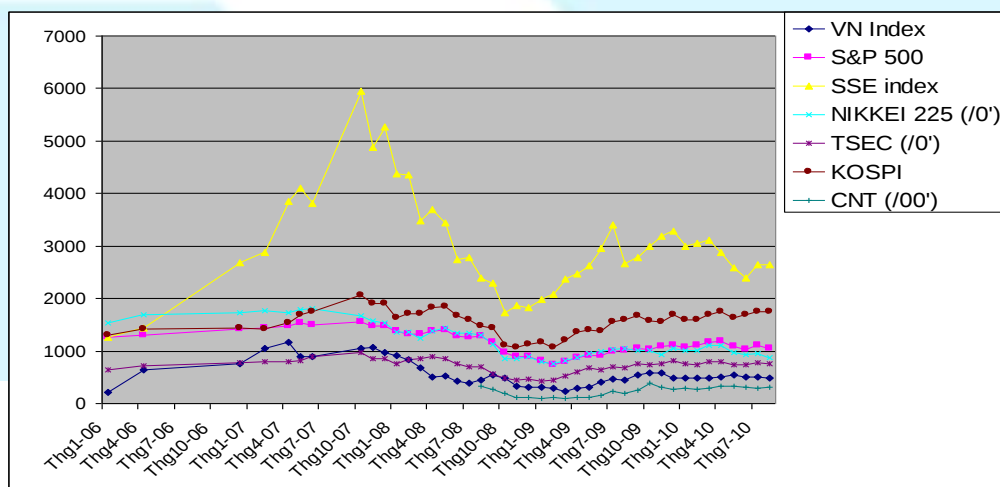
33	RCL	1,777	0,995	-0,0001	-0,0003	-0,0001	-0,0003
34	SC5	1,447	0,232	0,0003	-0,0004	0,0003	-0,0004
35	SDU	1,376	0,571	0,0004	-0,0001	0,0004	-0,0001
36	SJS	1,529	0,81	0,0005	-0,0005	0,0005	-0,0005
37	SZL	0,586	0,355	-0,0004	0,0003	-0,0004	0,0003
38	TDH	1,177	0,771	0,0002	-0,0001	0,0002	-0,0001
39	TIX	0,486	0,196	0,0001	0,0003	0,0001	0,0003
40	UDC	0,217	0,071	0,0103	0,0035	-0,0156	-0,0050
41	UIC	1,302	0,362	-0,0001	-0,0004	-0,0001	-0,0004
42	VCR	0,51	0,319	0,0166	0,0108	-0,0262	-0,0160
43	VIC	0,782	0,192	-0,0005	0,0005	-0,0005	0,0005
44	VPH	0,07	0,019	0,0058	0,0010	-0,0075	-0,0025
45	VRC	0,206	0,074	0,0098	0,0034	-0,0160	-0,0059
Average				0,0061	0,0028	-0,0095	-0,0043

Exhibit 8 – Debt amount in VN real estate at February 2013

Order	Field (debt amount)	Value 28/2/2013 (b vnd)	Ratio	% Increase/decrease compared to 31/12/2012
1	Industrial zone	15.172	7%	15%
2	Building city and residential zone	41.388	18%	-4%
3	Office for rent	31.267	14%	-1,60%
4	House repairing and purchase	55.153	25%	3,30%
5	House repairing and Purchase to Sell	37.852	17%	4,70%
6	Mua quyền sử dụng đất	12.893	6%	-1,20%
7	Real esate Investment, business	30.890	14%	2,40%
Total		224.615		

(Source: VN Financial journal)

Exhibit 9- VNI Index and other stock market index during crisis 2006-2010



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.