

MONETARY POLICY AND THE FINANCIAL DECISIONS OF FIRMS – EMPIRICAL STUDY IN VIETNAM

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Motivation & Background

- The effectiveness of monetary policy need to be examined in a broader scope.
- How does MP impact on firm's financial decisions?
 - Modigliani & Miller (MM, 1958)
 - Pecking order theory
 - Trade – off theory
 - ...

Motivation & Background

- Internal issues of firms:
 - Forms of business organization: Dewenter and Malalesta (2001); Tian (2003) ...
 - Capital structure: Bernanke and Gertler (1989), Bernanke et al (1998), Carlstrom and Fuerst (1997), Kiyotaki and Moore (1997) ...
 - Ownership structure: Jensen and Meckling (1976); Thomsen and Pedersen (1996) ...
 - Size of firm: Cihan Yalcin, Sprios Bougheas and Paul Mizen (2002); Fazzari, Hubbard and Petersen (1988)

Research questions

- H_0 : Financing decision (capital mobilizing) of companies is affected by monetary policy.
- H_1 : Investment decision of companies is affected by monetary policy.
- H_2 : Profit distribution decision is affected by monetary policy.

Data sample

- A survey of 500 companies operating in Hanoi, Ho Chi Minh City, and Da Nang
- The questions were constructed by criteria suggested by VCCI.
- Three important decisions of firm: financing decision, investment decision, and profit distribution decision.

Data

- Financial data of firms are hand-collected from consolidated annually audited financial reports every year from 2009 to 2015.
- The Dataset from Vietstock.vn

Variables

- Main dependent variables used in this paper include variables on capital structure (CS: debt ratio, LTD: long-term, STD: short-term debt ratio, BD: bank-debt ratio), investment policy (INVEST), distribution policy (PAYOUT: probability of dividend payment as well as POR and DPS the amount of dividend payment). The firm performance is proxied by ROA and ROE

Variables

- Herfindahl index or Herfindahl-Hirschman index (H-index or HHI) is widely used to assess the concentration/dispersion of a specific issue. Initially, it is used to assess the competition in a market or industry under the formula:
- $HHI = \sum_{i=1}^n s_i^2$
- In which, s_i is the market share of company i in a specific market/industry. Herfindahl index takes the value from 0 to 1. The smaller H-index is, the more perfect that market is. The closer H-index is to 1, there is more likely to be a monopoly or dominating company in the market/industry.

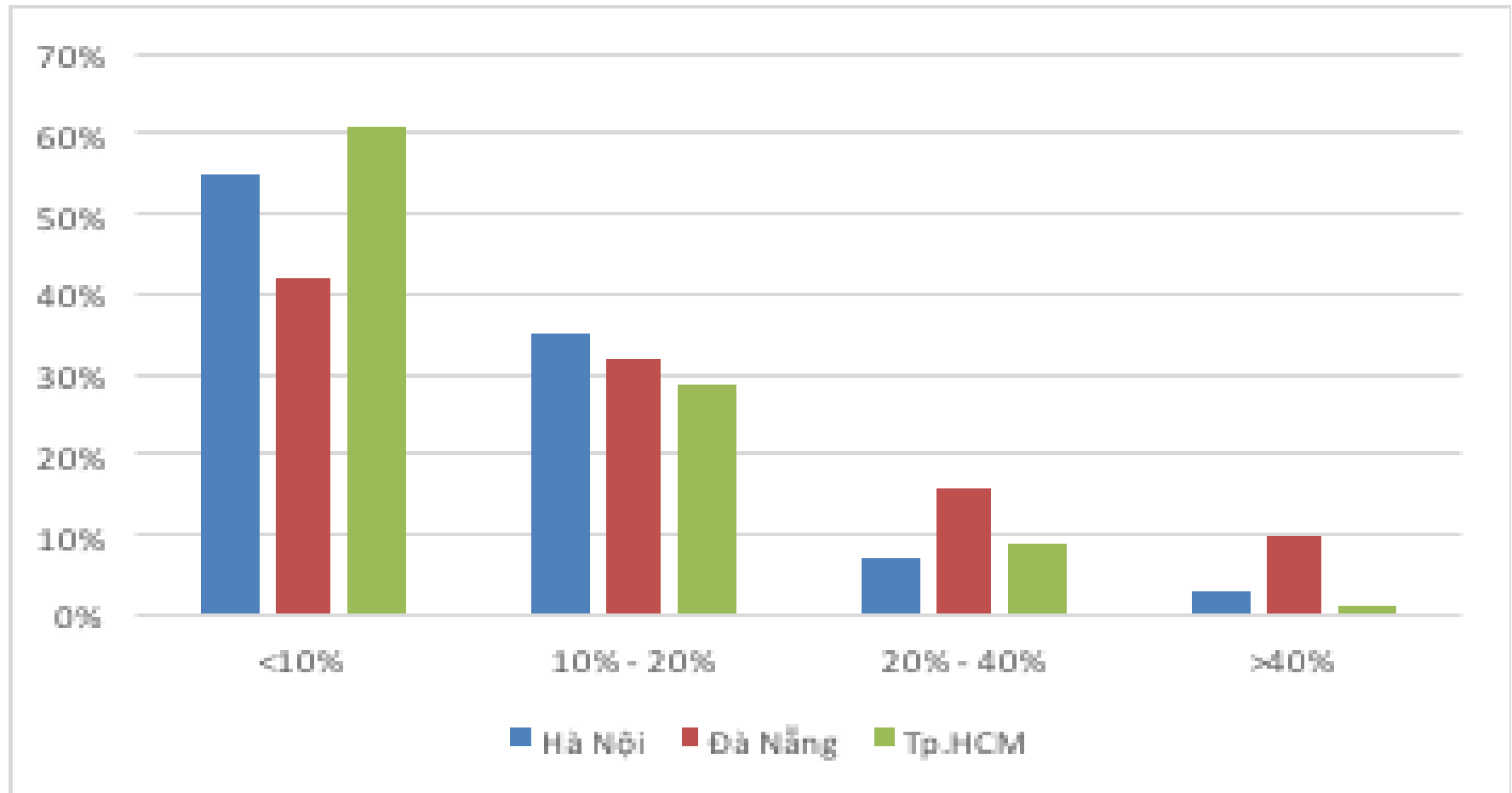
Characteristics of firms

Table 1: Structure of companies in Hanoi, Ho Chi Minh City, Da Nang

Type of businesses	Limited liability companies	Joint stock companies	Other types of businesses
Average	50.21%	33.37%	12.74%
Hanoi	33.17%	55.37%	6.61%
Ho Chi Minh City	69.23%	20.19%	10.57%
Da Nang	48.24%	24.56%	21.05%

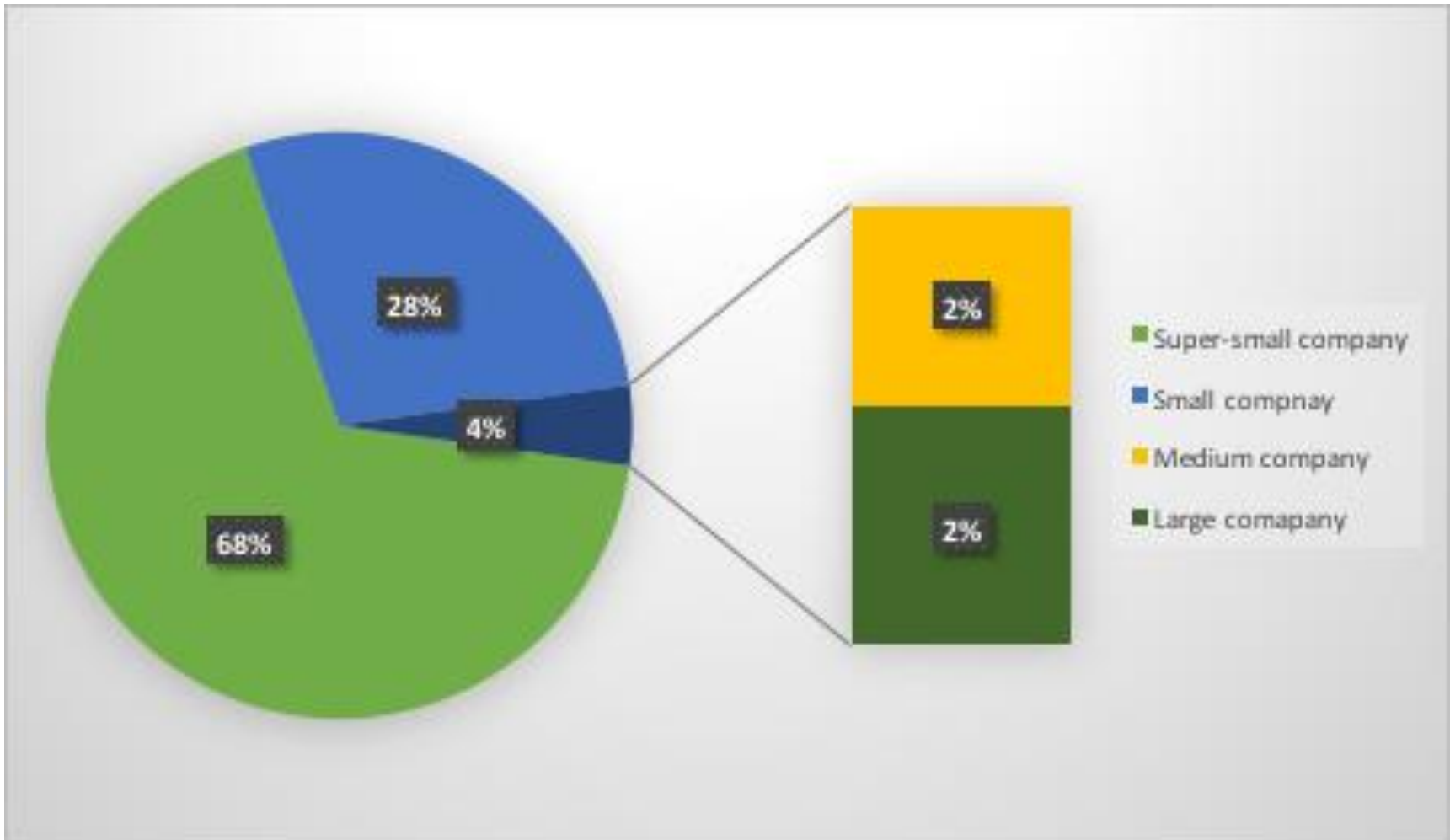
Characteristics of firms

- Figure 1: Total debt to Equity



Characteristics of firms

- Figure 2: Size of firm



Characteristics of firms

Table 2. Statistics describe the data Descriptive Statistics

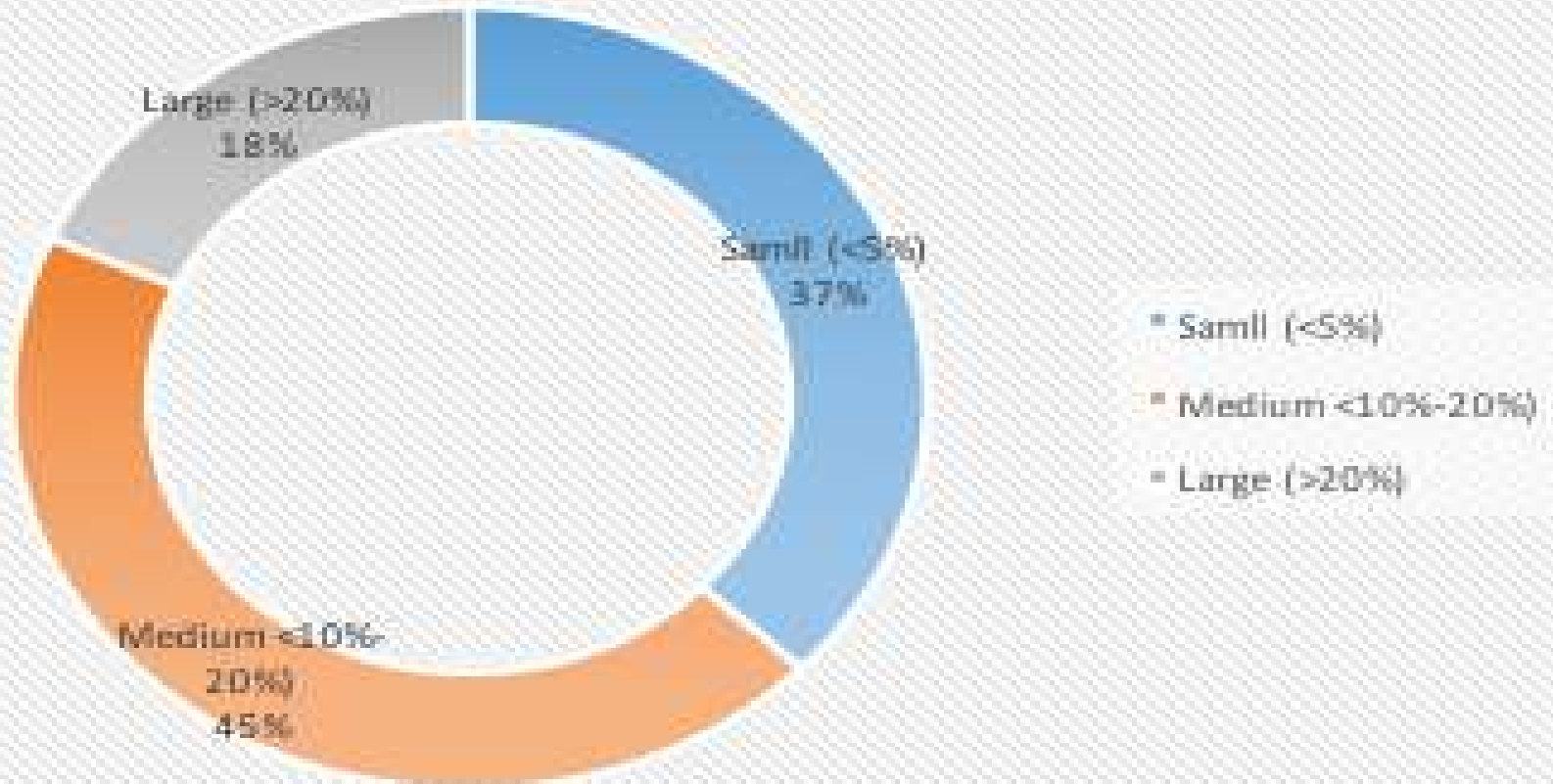
Variables	Number of observations	Mean	Median	Standard Deviation	Maximum	Minimum
<i>Corporate ownership structure</i>						
STATE	3,827	0.2196	0.1104	0.2445	0.7956	0.0000
INSTITUTION	3,828	0.3819	0.4087	0.2605	0.9603	0.0000
FOREIGN	3,828	0.0895	0.0000	0.1637	0.4900	0.0000
MANAGER	3,827	0.0570	0.0062	0.1098	0.5550	0.0000
LARGEST	3,827	0.4669	0.5095	0.2268	0.9672	0.0000
HINDEX_ALL	3,768	0.3718	0.3068	0.2434	0.9999	0.0000
HINDEX_LARGE	3,761	0.4525	0.3834	0.2200	0.9999	0.0000
HINDEX_INSTI	3,761	0.5940	0.5741	0.3120	1.0000	0.0000
HINDEX_FOREIGN	3,754	0.2964	0.0000	0.3729	1.0000	0.0000
<i>Corporate statistics</i>						
CS	4,257	0.5080	0.5315	0.2226	0.9417	0.0419
STD	4,258	0.4042	0.3947	0.2109	0.9013	0.0291
LTD	4,260	0.1050	0.0365	0.1462	0.6388	0.0000

Results

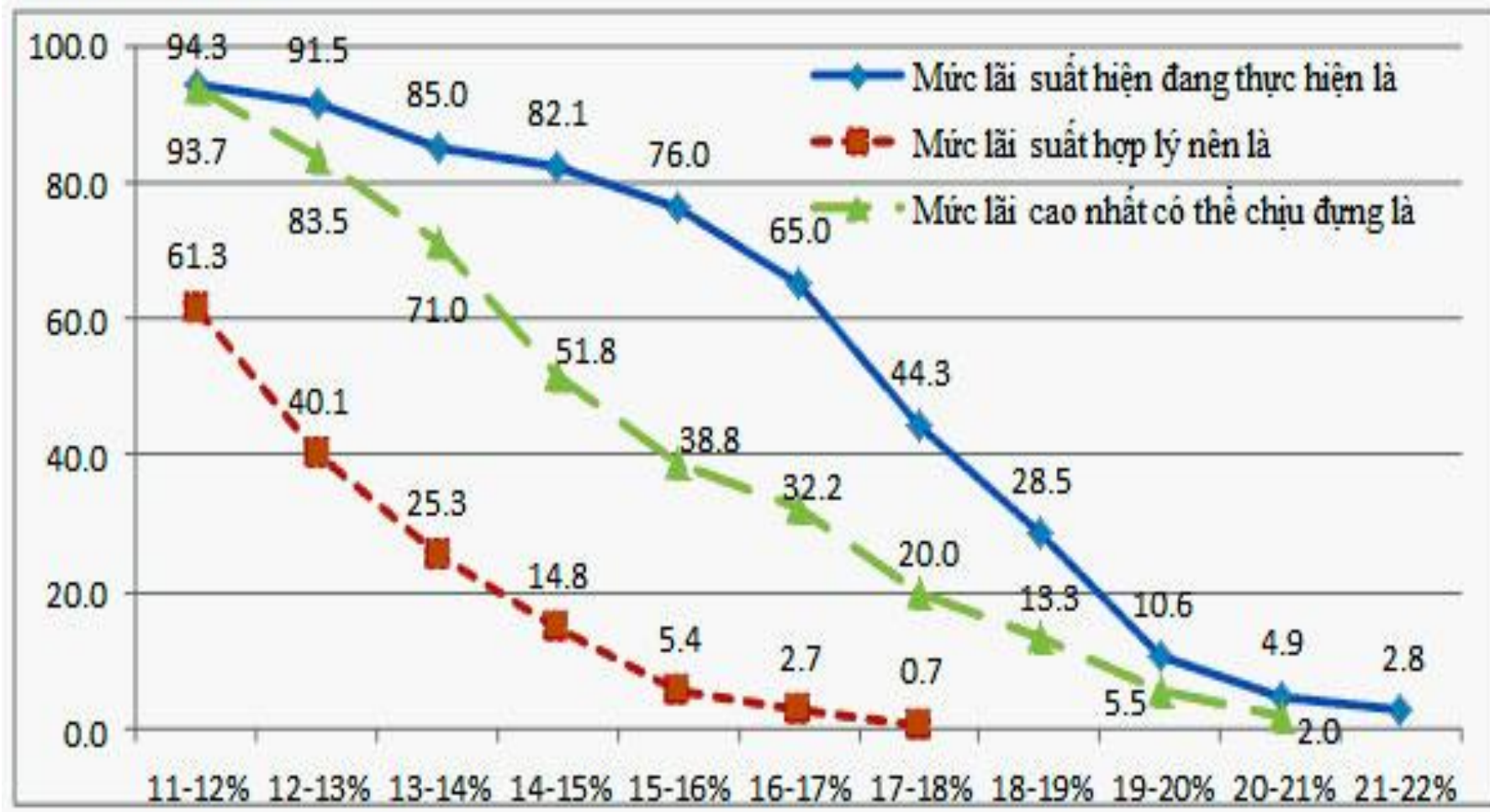
(1) Financing decisions response to monetary policy

Joint stock companies (JSC) and limited liability companies (LLC) have differences in characteristics, and the tendency of exposure to monetary policy.

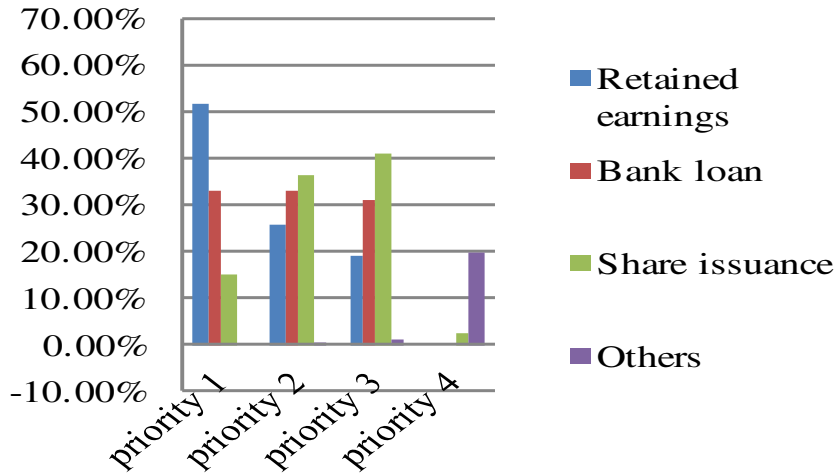
How much MP impacted on Capital structure?



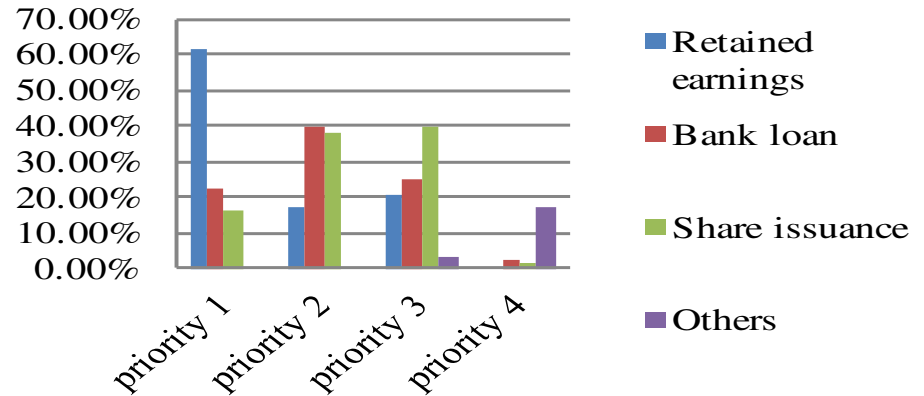
Opinion on lending rates (VCCI survey)



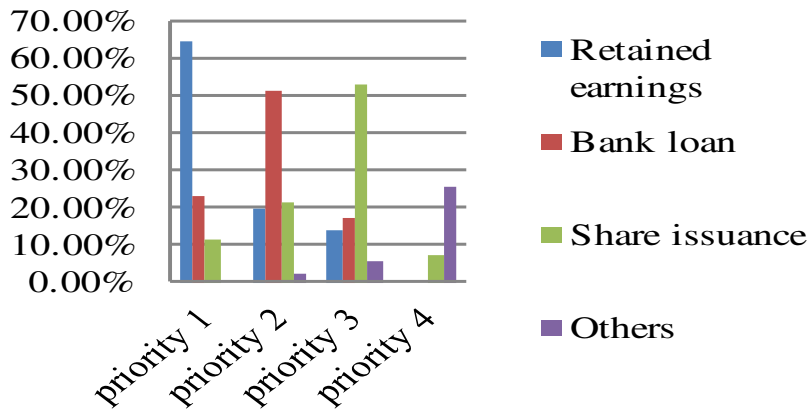
Expected interest rate - JSC - Hanoi



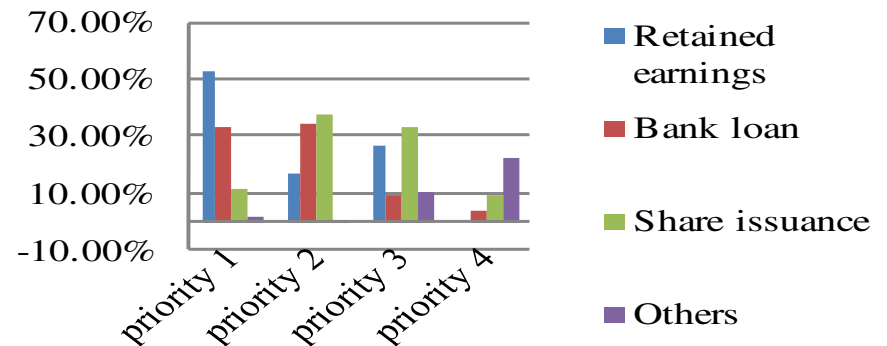
Higher interest rate than expectation - JSC - Hanoi



Expected interest rate - LLC - Hanoi



Higher interest rate than expectation - LLC - Hanoi



Results

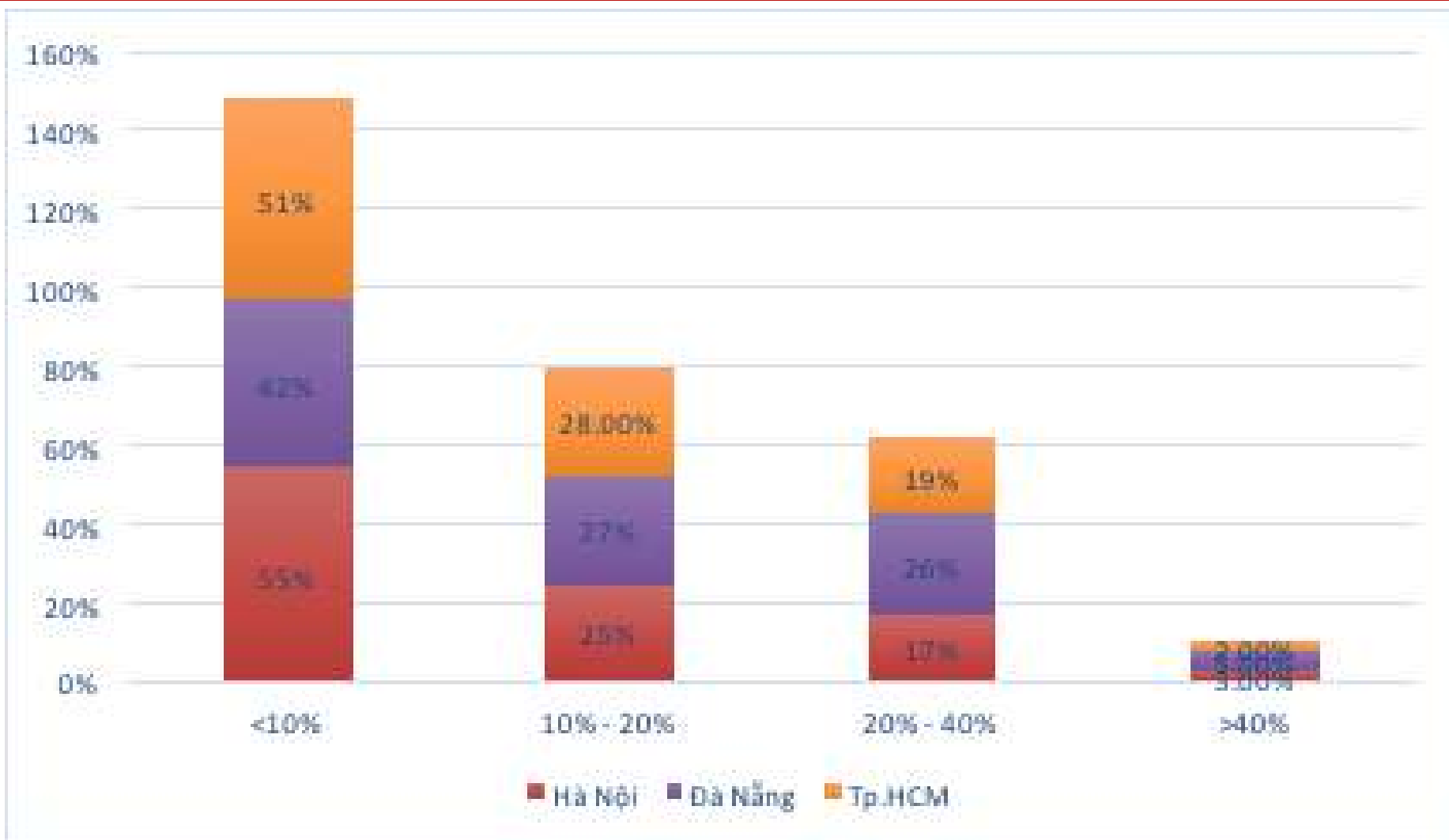
(2) Investment decisions response to monetary policy

- In terms of investment decision, those Companies of various types of business have different choices of employing the financing resources for long-term investment

How much MP impacted on investment?



Opinion on growth of fixed assets



Results

(3) Profit distribution decision response to monetary policy

- exists the dissimilarity in the evaluation of the influence of monetary policy on their profit distribution decisions.
- the levels of difference also vary among indicators used to research, for instance, the proxy of the profitability (indicator: ROE), the proxy of profit distribution method (indicator: dividend and profit distribution), the proxy of survey (from “no impact” to “significant impact”)

Table 2. The impact of monetary policy on the profit distribution decision of Companies in Hanoi

io	Type of business	Profitability	No impact	Insignificant impact	Low impact	Average impact	Relatively high impact	High impact	Extremely high impact
ii	Joint stock companies	<i>ROE</i>	8.15%	23.70%	22.96%	20.74%	16.30%	2.96%	0.74
		<i>Dividend</i>	10.37%	23.70%	10.37%	19.26%	15.56%	11.11%	2.96
	Limited liability companies	<i>ROE</i>	5.50%	29.36%	20.18%	19.27%	19.27%	4.59%	0.00
		<i>Profit distribution</i>	8.26%	23.85%	6.42%	29.36%	9.17%	5.50%	0.92

Table 3. The impact of monetary policy on the profit distribution decision of companies

		Hanoi	Da Nang	Ho Chi Minh City
Joint stock companies	<i>ROE</i>	20.00%	17.85%	5.56%
Limited liability companies		23.86%	25.72%	9.63%
Joint stock companies	<i>Dividend</i>	29.63%	25.00%	16.67%
Limited liability companies	<i>Distributed profit</i>	15.59%	1.43%	20.48%

Table 4. The impact of monetary policy on the profit distribution decision of companies in Da Nang

Location	Type of business	Profitability	No impact	Insignificant impact	Low impact	Average impact	Relatively high impact	High impact	Extremely high impact
Da Nang	Joint stock companies	<i>ROE</i>	7.14%	17.86%	25.00%	21.43%	10.71%	3.57%	3.57%
		<i>Dividend</i>	7.14%	28.57%	25.00%	14.29%	7.14%	3.57%	14.29%
	Limited liability companies	<i>ROE</i>	14.29%	32.86%	14.29%	12.86%	22.86%	2.86%	0.00%
		<i>Profit distribution</i>	30.00%	37.14%	14.29%	10.00%	1.43%	0.00%	0.00%

Internal factors - Ownership structure

- We deploy a variety of methodology to solve the potential endogeneity problem and to find the effect of ownership concentration and ownership types on the value of firm.
- We found that ownership concentration and ownership types affect the firm value mostly through capital structure.

Conclusions

- Monetary policy had different influences on the companies in three locations and the levels of transmission to the companies in Da Nang and Ho Chi Minh City are higher than that in Hanoi

Thank You !

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