Dear Professor,

Thank you for a thorough analysis of the results presented in the paper. Following your suggestions we decided to augment our paper in the following ways:

(1) According to your suggestion, we added the content of the discussion on the novelty and contribution of this study.

This paper is uniquely different from prior studies on pyramid structure and capital structure in that we focus on the impact of the inner structure of pyramid rather than the wedge between control right and cash flow right of the ultimate owner.

This paper contributes to the related literature in the following two ways. First, this paper extends our understanding about the relationship between ultimate ownership and capital structure. Past studies have focused on the impact of the wedge between control and cash flow rights of the ultimate controlling shareholder in pyramid firms, showing the risk of expropriation and distortions through debt financing as the increase in the wedge between control and cash flow rights (Su et al., 2013). However, the wedge between control and cash flow rights is just the result led by the pyramid structure, which is displayed as the multi-layers and multi-chains. We extend prior studies to examine the impacts of the multi-layers and multi-chains structure on capital structure deeply. Second, existing studies ignore the possible connections between different governance mechanisms. We incorporate the pyramid inner structure and regional institutional environment, which are internal and external governance mechanisms respectively, into a unified analytical framework, and therefore deepening our understanding of the interaction between different

governance mechanisms and extending the existing cross-country studies of the institutional environment from a more microscopic perspective. Our results suggest that the improvement of regional institutional environment helps to mitigate the negative impacts of pyramid structure, indicating a close interaction effect between internal and external governance mechanisms.

(2) The wedge between control and cash flow rights is just the result led by the pyramid structure, which is displayed as the multi-layers and multi-chains. The layers and chains of pyramid structure are significantly related to the wedge between control and cash flow rights of ultimate owner, so we didn't include the wedge between control and cash flow rights in the regression model to avoid Multicollinearity.

(3)According to your suggestion, we added the content on the relationship between the three institutional variables. We think that these three institutional environments can complement each other. Due to the issue of Multicollinearity, we can not include the three institutional variables in the same regression.

We think that institutional environment is an integrated notion and has several dimensions. *Marketization* usually measures the extent to which the distribution of economic resources can be determined by the market. In the literature, it is widely believed that market liberalization plays an important role in promoting free market competition and economic efficiency. *Government intervention* is the degree of the governments' intervention in local companies or economic behavior. *Law environment* means the law systems and the law enforcement condition. Although China implements the unified law system, legislation across provinces is different to a

certain extent. At the same time, the law enforcement condition among different regions varies largely in China (which can be measured by the number of lawyers as a percentage of the local population, the efficiency of the local courts and protection of property right). The three elements portray the development of institutional environment across different dimensions, but focus on different aspects. Generally speaking, in regions with higher degree of marketization, the degree of government intervention in local companies is lower and the law environment is better.

(4) Possible explanation about the relationship between the horizontal chain structure and capital structure.

From table 3 in the paper, we can see that 81.41% of pyramid structures control the listed companies only through one agency chain, while about 90% of pyramid structures have adopted multi-layers structure (more than two layers), and the multi-layers structure is far more common than the multi-chains structure. This result demonstrates that the ultimate owners are not willing to take the horizontal multi-chains structure to expand the controlled resources, which leads to the no significant impact of the horizontal multi-chains structure on capital structure.

(5) According to your suggestion, we have conducted the analysis of the group on firm's capital structure and find that firms belonging to a group will have significant positive impacts on capital structure. The regression results are present as follows.

Table 1 Multiple Regression Analysis (Group included)

Variable	LEV								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Constant	-1.244***	-1.245***	-1.242***	-1.263***	-1.255***	-1.255***	-1.263***	-1.256***	-1.254***
	(-22.949)	(-22.909)	(-22.935)	(-23.219)	(-23.115)	(-23.130)	(-23.158)	(-23.063)	(-23.078)
LLAY	0.002*			0.019***	0.023***	0.009***			

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	(1.964)			(3.773)	(3.153)	(3.013)			
SLAY		0.002*					0.019***	0.023***	0.009***
		(1.765)					(3.519)	(2.915)	(2.878)
CHAIN			0.002						
			(0.744)						
MARLLAY				-0.002***					
				(-3.713)					
GOVLLAY					-0.002***				
					(-3.003)				
LAWLLAY						-0.001***			
						(-3.372)			
MARSLAY							-0.002***		
							(-3.564)		
GOVSLAY								-0.002***	
								(-2.843)	
LAWSLAY									-0.001***
									(-3.441)
SIZE	0.078***	0.078***	0.078***	0.079***	0.079***	0.079***	0.079***	0,079***	0.079***
	(32.670)	(32.726)	(32.668)	(32.874)	(32.786)	(32.806)	(32.907)	(32,828)	(32.841)
CVA	0.129***	0.129***	0.130***	0.127***	0.128***	0.128***	0.128***	0,129***	0.128***
	(13.700)	(13.682)	(13.714)	(13.486)	(13.603)	(13.494)	(13.514)	(13,614)	(13.507)
ROA	-0.681***	-0.681***	-0.682***	-0.680***	-0.680***	-0.680***	-0.680***	-0,680***	-0.681***
	(-38.227)	(-38.218)	(-38.271)	(-38.174)	(-38.187)	(-38.200)	(-38.165)	(-38,163)	(-38.196)
TOB	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0,001	0.001
	(0.691)	(0.681)	(0.695)	(0.722)	(0.707)	(0.686)	(0.703)	(0,690)	(0.669)
Group	0.008*	0.008**	0.008**	0.007*	0.007*	0.007*	0.008**	0.008**	0.008*
	(1.883)	(2.093)	(2.196)	(1.831)	(1,827)	(1,813)	(1.983)	(2.007)	(1.957)
INDU	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
YEAR	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled	Controlled
Within R^2	0.2752	0.2753	0.2755	0.2758	0.2754	0.2751	0.2756	0.2753	0.2751
Wald value	3295.65***	3294.81***	3294.92***	3314.82***	3308.14***	3312.06***	3312.58***	3306.03***	3312.07***

Note: This table reports the results from regression results of the pyramid inner structure oncapital structure in Chinese listed companies for the sample period 2004-2009. There are 7729 firm-year observations in the sample. The value in brackets represents z values; Coefficients significantly different from zero at the 10%, 5%, and 1% level are marked *, ** and ***, respectively. The variable definitions are displayed in table 1.

(6)According to your suggestion, we described the tables thoroughly, report the definitions of all the variables, and correct the errors and typos in the paper.