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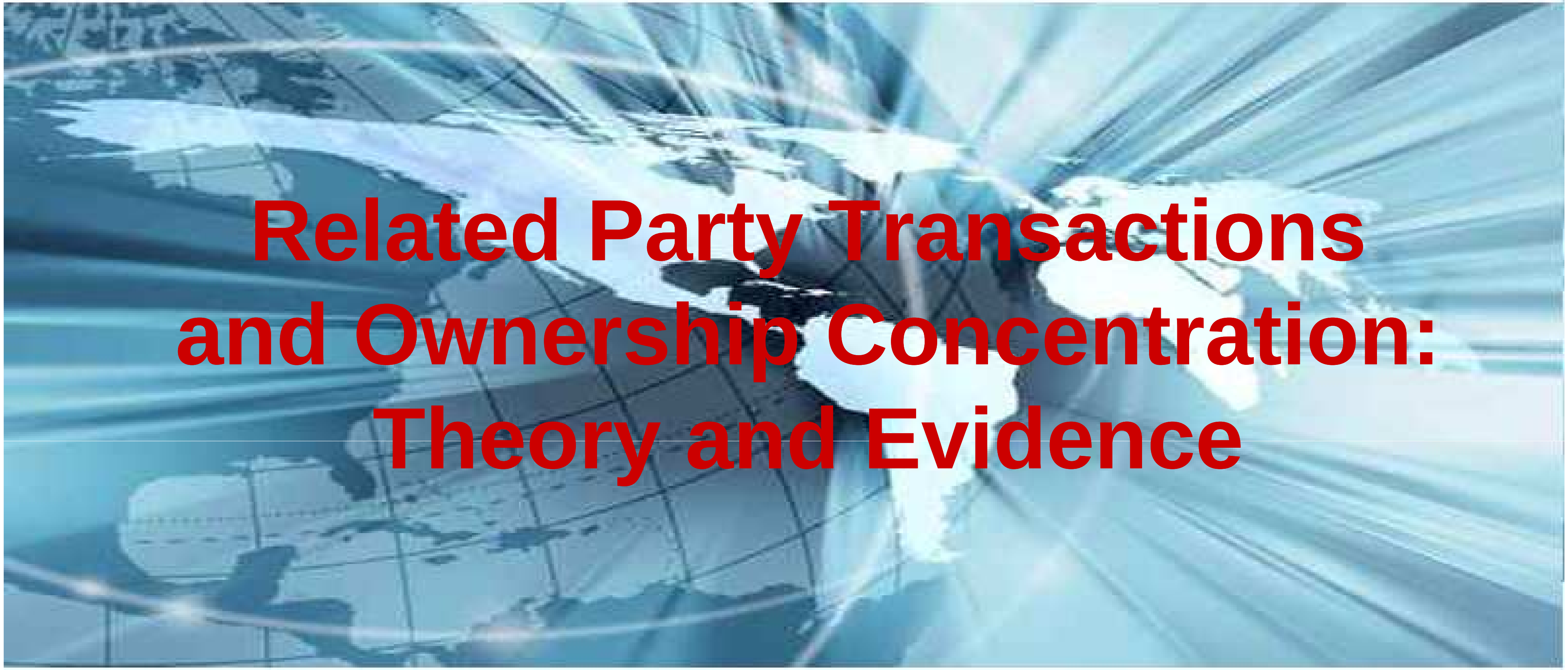

Related Party Transactions and Ownership Concentration: Theory and Evidence

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January 6, 2010

Abstract

- We model the effect of ownership concentration and analyze its impact on related party transaction.
- It is easy for minority shareholders of companies to suffer from ownership concentration of controlling shareholders.
- Cash flow rights held by the controlling shareholders of firms represent higher ownership concentration of their subsidiaries.
- We find that higher ownership concentration speeds up related party transaction.

Introduction

- Kim et al. (2005) examines whether the tunneling behavior exists in the internal capital market within a business group (chaebol) in Korea.
- The so-called tunneling behavior within a chaebol (Korean business groups) benefits the controlling shareholders by distorting the allocation of internal funds.
- We find another form of allocating internal fund that also benefits controlling shareholders. In this paper, we call it related party transaction.

Introduction

- Gordon et al. (2007) discuss the techniques of auditing related party transactions and find the definition of related parties varies across regulatory bodies.
- Related party transactions should be assessed in the context of the company's overall governance structure, particularly given the importance of managements' assertions about the existence and nature of these transactions.

Introduction

- In Taiwan, the authority regulates the total amount companies invest in China.
- We first model the effects of related party transaction with companies' corporate governance arrangements.
  - Does ownership concentration result in related party transactions ?
- We further make three empirical hypotheses to test whether the controlling shareholders of the mother companies in Taiwan transfer resources to their subsidiaries in China.

Introduction

- Young (2005) finds that the high level of related-party transactions creates a trend toward its relationship with concentrated ownership.
- Controlling shareholders may have strong incentives to divert resources in ways that make them better off at the expense of other shareholders (Wruck, 1989).
- Since the controlling shareholder discretion and agency problems both contribute to ownership concentration, these agency problems may reinforce each other (Stulz, 2005).

The Model-Previous research

- As observed by Johnson et al. (2000), looting of firms by controlling shareholders may be assets transferred, profits siphoned, and propping troubled firms by using loan guarantees.
- The definition of tunneling quoted by Baek et al. (2006) is the degree to which the controlling shareholders of the business group siphon resources out of firms to increase their wealth.
- A number of studies explicitly model the expropriation of minority shareholders by the controlling shareholders (Shleifer and Wolfenzon, 2002).

The Model-Previous research

- Almeida and Wolfenzon (2006) finds that single individuals or families control a large number of firms which is referred as a family business group.
  - Controlling shareholders have the authority to allocate new investment across two countries, and charge with identifying effective ways of transferring resources (Scharfstein et al., 2000).
  - Controlling shareholders transfer, or tunnel profits across firms (Bertrand et al., 2002) ; especially in all East Asian countries, control is enhanced through cross-holdings among firms (Claessens et al., 2000).

The Model-Mathematical Model

The company is only controlled and founded by its controlling shareholders alone.

$$R = R_m + R_d$$

where the subscript m means the mother company and d means the subsidiary.

The Model-Mathematical Model

To evaluate the relationship between the subsidiary and its mother company, investors have their utility in the IPO as

$$\begin{cases} p_h R - I > 0 \\ p_l R - I - B < 0 \end{cases}$$

To estimate the value added brought by the subsidiary, the controlling shareholders of the mother company evaluate the investment of the subsidiary as the following

$$\left[p_l R_d - (I - G)\right] + \left[p_l R_m - (B + G)\right] \geq 0$$

The Model-Mathematical Model

The incentive to siphon resources from the subsidiary to the mother company can be drawn by

$$p_h R_m \geq p_l R_m + B$$

Pledgeable income contributed by the subsidiary to the mother company as

$$p_h \left(R_m - \frac{B}{\Delta p} \right)$$

The Model-Mathematical Model

the controlling shareholders of the mother company also suffer the risk of enforcing corporate governance arrangements, which cause the possibility of being scrutinized together. To put up with the potential risk, the investment they make in the subsidiary must satisfy their individual rationality constraint as

$$p_h\left(R-\frac{B}{\Delta p}\right)\geq I-G$$

The Model-Mathematical Model

On the other side, the newly founded company's manager (the entrepreneur) also wants to extract private benefits without operating the company continuously.

$$p_h \frac{B}{\Delta p} - \left(p_h R - I \right) > 0$$

We can thus derive the cost of minority shareholders to buy the newly founded company's stock as

$$p_h R - I < p_h \frac{B}{\Delta p}$$

The Model-Mathematical Model

The minority shareholders of the mother company have kept the stock on their hands already. However, the newly founded subsidiary has been a burden for them because

$$\left[p_l R_d - (I - G)\right] + \left[p_l R_m - (B + G)\right] < 0$$

More companies, less monitoring?

$$U_d = \begin{cases} 0 & G < \bar{G} \\ p_h R_d - G & G \geq \bar{G} \end{cases}$$

Hypothesis

1. The revenue transferred between the subsidiary and its parent companies does not contribute to the parent companies' revenue.
2. While the newly founded company's revenue is partly transferred to its parent companies, this does not reduce the subsidiary's value.
3. The mother company's capital transferred to subsidiaries in China will not have an impact on the mother company's revenue.

Empirical equations

$$moincome = \alpha_0 + \alpha_1 mode + \alpha_2 demo + \alpha_3 trafund + \alpha_4 invest + \alpha_5 contri$$

$$deincome = \alpha_0 + \alpha_1 mode + \alpha_2 demo + \alpha_3 trafund + \alpha_4 invest + \alpha_5 contri$$

- We retrieve data from Taiwan Economic Journal (TEJ) Database. Our sample contains 282 data of listed companies on the Taiwan Stock Exchange (TSE) from March 2004 to September 2006.

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Results of hypotheses by simple regression

Test	Independent Variable	Dependent Variable	Coefficient	R^2
H1	mode	moincome	1.4490***	0.0712
H2	demo	deincome	0.9815***	0.2529
H3	invest	moincome	4.3356***	0.6269

Asterisks denote significance levels: * = 10%; ** = 5%; and *** = 1%

Results of hypotheses by univariate regression

Dependent Variable	moincome	deincome	Dependent Variable	moincome
Intercept	3284444.89***	815105.565***	Intercept	2682476.21***
demo	1.1052**	1.0303***	invest	4.3396***
mode	1.4912***	1.0328***	contri	-770.8616
Adj- R^2	9.82%	59.52%	Adj- R^2	62.43%
Hypothesis	H1	H2	Hypothesis	H3

Results of hypotheses by simple regression

Dependent Variable	moincome	deincome
Intercept	1105589.34**	745502.326***
demo	1.2045***	1.0342***
mode	1.7813***	1.0468***
trafund	0.6144**	0.0016
invest	4.5127***	0.1637**
contri	-1625.4188	614.8396
Adj- R^2	78.18%	60.01%
Hypothesis	All	All

Test	Dependent Variable	Independ-ent Variable	Coefficient	R^2
H1	moincome	mode	1.4490***	0.0712
H2	deincome	demo	0.9815***	0.2529
H3	moincome	invest	4.3356***	0.6269
FIX	moincome	mode	1.8896***	0.7821
		demo	1.2280***	
		invest	4.5246***	

Results of hypotheses by simple regression

- We simplify the capital transfer beyond related party sales and find that related party sales do contribute the revenue of mother companies in Taiwan.
- In other words, we find the revenue in Taiwan companies tend to be inflated by their controlling shareholders. Besides, the foreign investment through an offshore company also enhances the level of revenue in mother companies in Taiwan. On the other hand, the subsidiaries in Taiwan mainly depend on its sales with mother companies to operate normally.
- It is why we revise the econometric model of the revenue of subsidiaries in Taiwan.

Results of hypotheses by simple regression

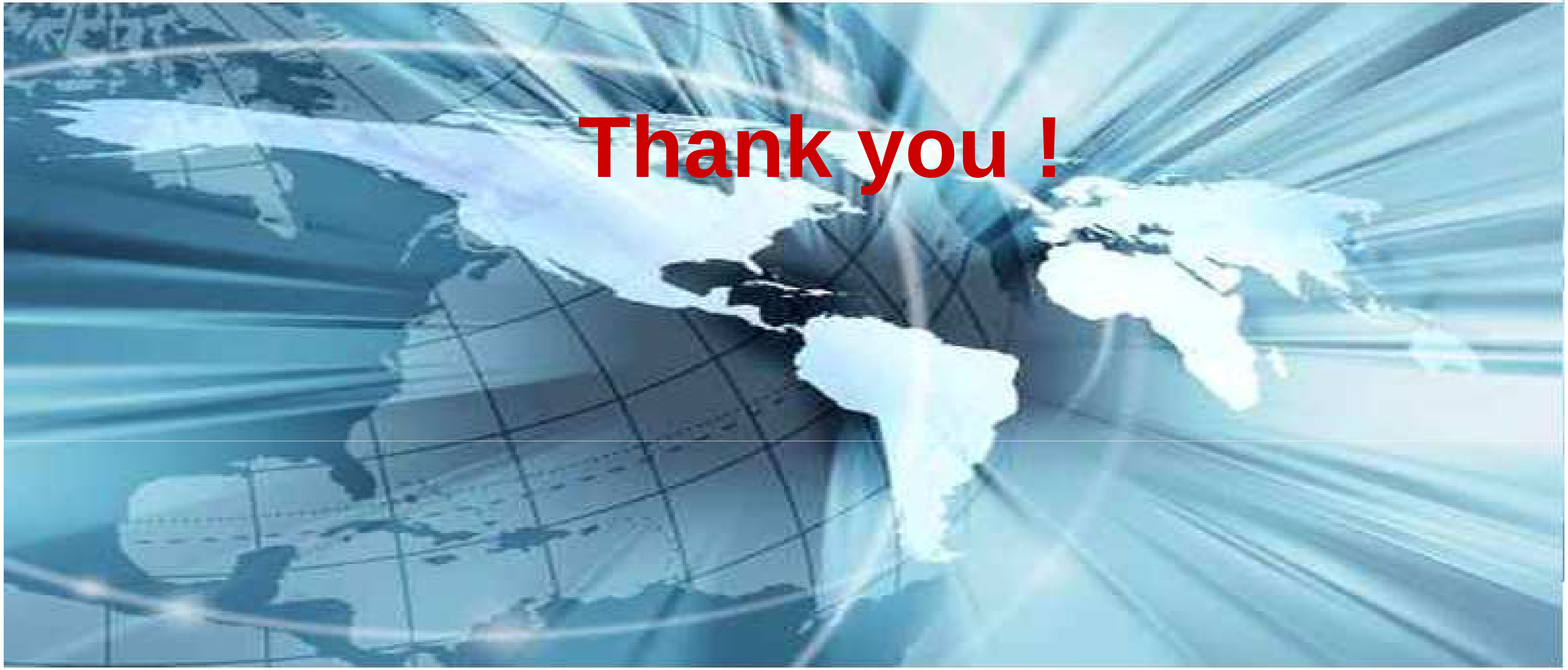
- Although capital transfer beyond related party transaction contributes to fasten the cooperation through inter-firms sales, it also inflates the revenue of business groups.
- It is worth noting that controlling shareholders-controlled companies, in comparison with other firms, have a higher level of related party transactions with their associates. The income contributed by subsidiaries in China is not significant in our paper, however.

Conclusions

- Companies may offer trade credits and other lending with related party purchases and sales to those parties.
- In this paper, we do not test net credits within group-controlled companies. While most of these transactions occur between the listed company and its major subsidiaries, only related party transactions with their mother companies show on the formal statement.
- Concentrating on capital transfer beyond the related party transactions with the business relationship across countries increases the power of our tests.

Conclusions

- Ownership concentration in our sample of China subsidiaries is strikingly high and primarily represents controlling shareholders of the same families in Taiwan.
- No matter whom the entrepreneur is, listed companies may have similar abilities to conduct transactions with their associates.
- Although capital transfer beyond related party transaction contributes to fasten the cooperation through inter-firms sales, it also inflates the revenue of business groups.


Thank you !