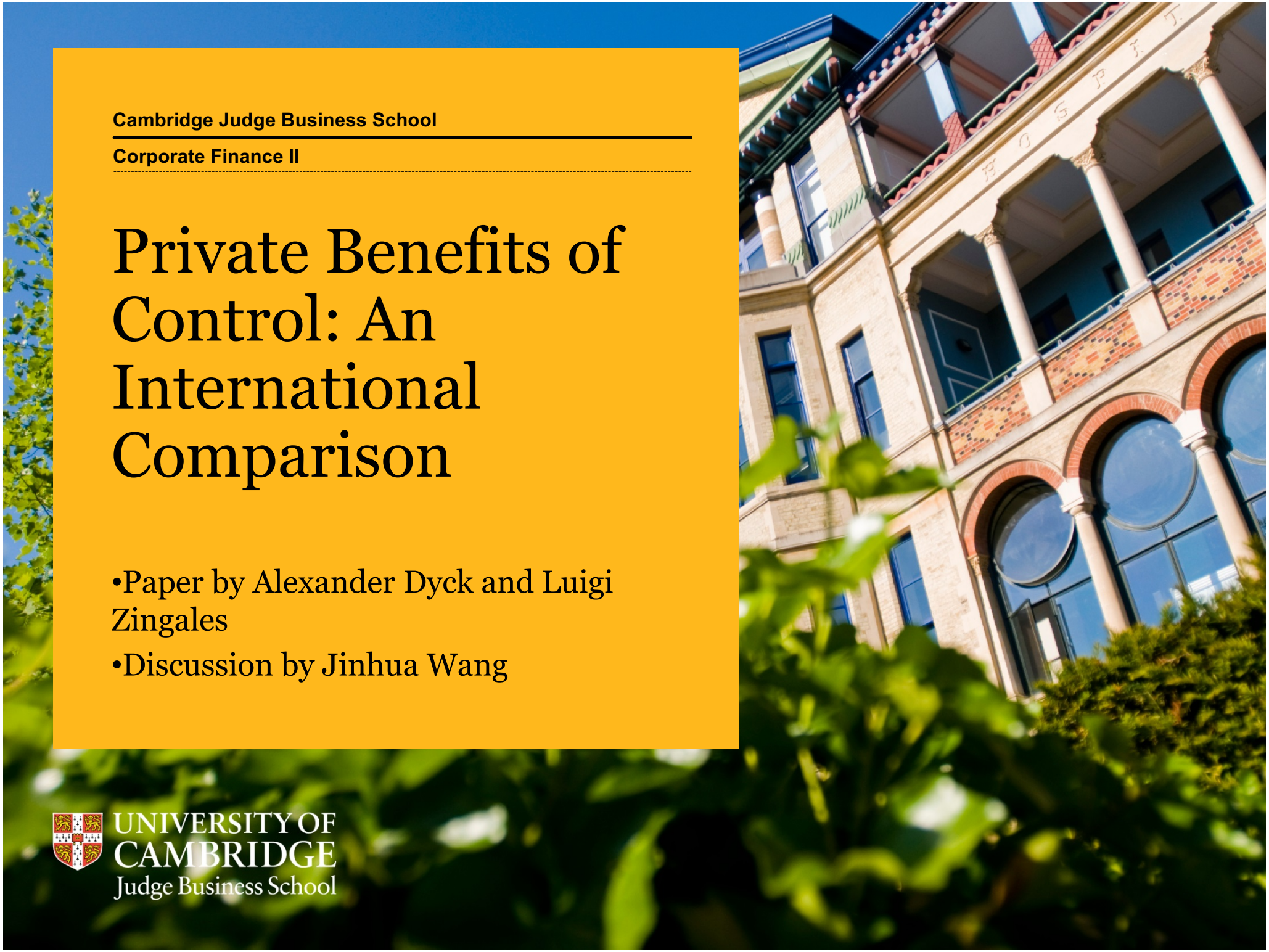

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Corporate Finance II

Private Benefits of Control: An International Comparison

- Paper by Alexander Dyck and Luigi Zingales
- Discussion by Jinhua Wang

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Research Motivation

- Private benefit is an agency cost that reduces the efficiency of financial market
- Private benefit of control has become a centerpiece of the recent literature in corporate finance.

Size

Impact

Curb

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Outline

1. Size of private benefits of control
2. Barclay and Holderness (1989) measure of block premium
3. Private benefits of control and financial development
    1) Theoretical prediction
    2) Empirical tests
4. What curbs private benefits of control
    1) Theoretical prediction
    2) Empirical tests
5. Conclusion
6. Critique

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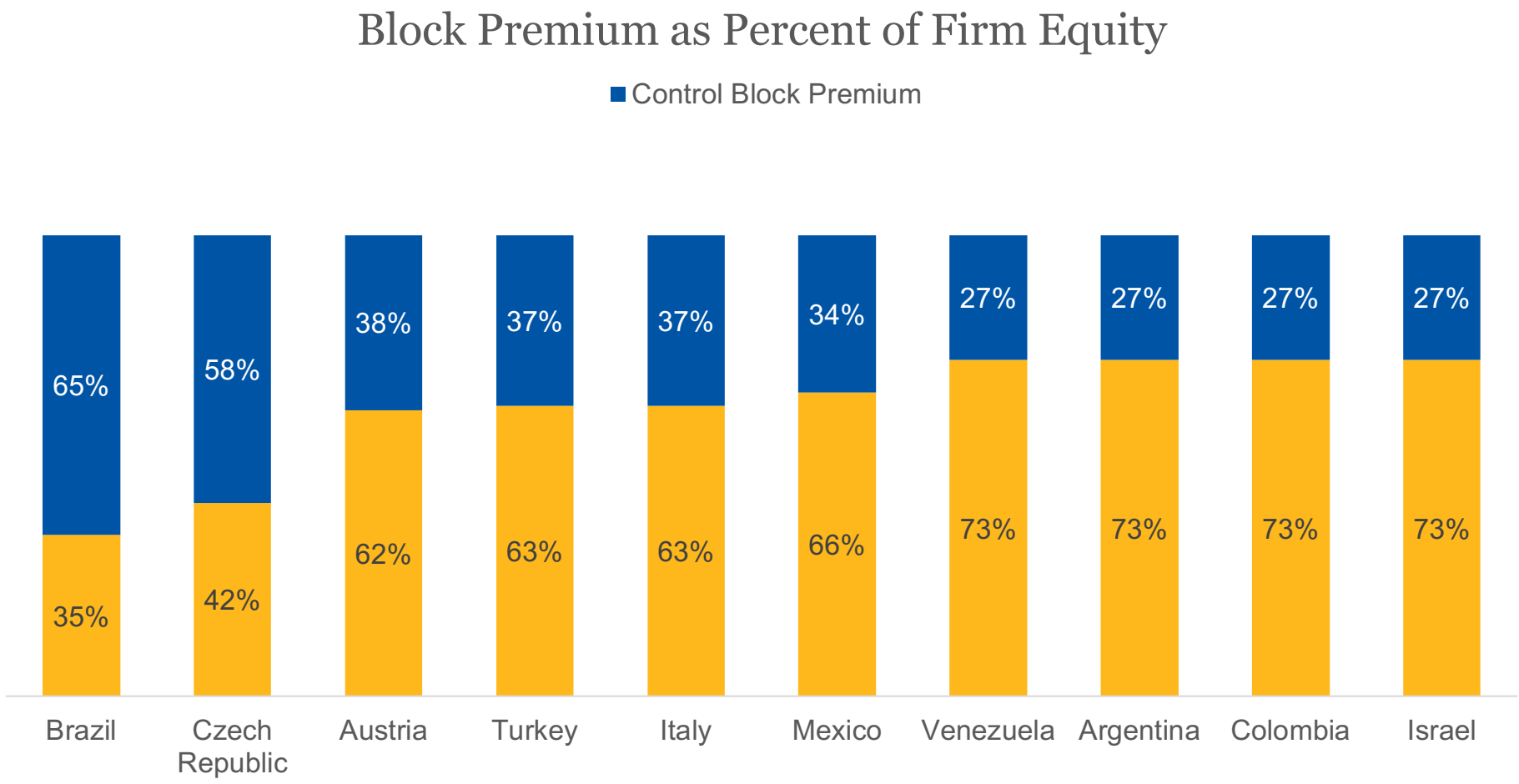
Private Benefit of Control

Block Premium Measure



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Measure

Barclay and Holderness (1989)

- $P = \lambda(B_b + \alpha Y_b) + (1-\lambda)(B_s + \alpha Y_s)$
- $\frac{P}{\alpha} = \frac{\lambda B_b + (1-\lambda)B_S}{\alpha} + \lambda Y_b + (1-\lambda)Y_s$
- $\frac{Control\ Premium}{\alpha} = \frac{\lambda B_b + (1-\lambda)B_S}{\alpha} + \lambda Y_b + (1-\lambda)Y_s - \boldsymbol{Y_b}$

$$= \frac{\lambda B_b + (1-\lambda)B_S}{\alpha} - (1-\lambda)(Y_b - Y_s)$$

- $Control\ Premium = \lambda B_b + (1-\lambda)B_S - \alpha(1-\lambda)(Y_b - Y_s)$

$\boldsymbol{B_{s,b}}$: *the level of private benefits extracted by the seller (buyer).*

$\boldsymbol{Y_{s,b}}$: *the level of security benefits generated by the seller (buyer).*

$\boldsymbol{\alpha}$: *size of controlling block*

$\boldsymbol{P}$: *price paid for controlling block*

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Measure

Barclay and Holderness (1989)

- $Control\ Premium = \lambda B_b + (1-\lambda)B_S - \alpha(1-\lambda)(Y_b - Y_s)$
- $In\ a\ perfectly\ competitive\ market, \lambda = 1$
  - $Control\ Premium = B_b$
- $When\ Y_b = Y_s$
  - $Control\ Premium = \lambda B_b + (1-\lambda)B_S$
- $When\ Y_b \neq Y_s$
  - $Bias = \alpha(1-\lambda)(Y_b - Y_s)$

Whenever a control block changes hands, they measure the difference between price per share measured by the acquirer and the price quoted in the market the day after the sale's announcement.

Financial Development

Theoretical Predictions

In countries with **high** private benefits of control:

- (**Financial Market Development**) Importance of equity market relative to GDP should be smaller
- (**Ownership Concentration**) Percentage of companies widely held should be smaller
- (**Privatization**) A revenue maximizing government should prefer to sell control in private transactions rather than in public offerings.

Financial Development

Test (Ownership Concentration)

	Ownership Concentration	
Independent Variables	OLS	Instrumental Variables
Country control premia	0.365 *** (0.124)	**0.591 ** (0.261)**
Log per capita income	-0.047 *** (0.015)	-0.033 (0.021)
Constant	0.807 *** (0.127)	0.659 *** (0.207)
Number of obs.	36	36
R-squared	0.445	

Dependent variable:

Percentage of equity controlled by the three largest shareholders in the 10 largest nonfinancial firms where the state is not a shareholder.

Countries with higher private benefits have more concentrated ownership.

One standard deviation increase in the size of private benefits translates into 11 percent more of the equity held by the largest three shareholders in the instrumental variable specification.

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Financial Development

Test (Privatization)

	Percentage of Privatizations as Asset Sales (not share offerings)	
Independent Variables	OLS	Instrumental Variables
Country control premia	0.999 *** (0.240)	**2.005 ** (0.797)**
Log per capita income	-0.024 *** (0.057)	-0.022 (0.061)
Constant	0.554 *** (0.505)	0.037 *** (0.583)
Number of obs.	36	36
R-squared	0.276	

Dependent variable:

Percentage of privatization that took place as a private asset sales.

In countries with large private benefits, governments are more likely to divest companies through private sales.

A one standard deviation increase in the size of private benefits translates into 36 percent more firms being privatized through private negotiations.

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Financial Development

Test (Financial Market Development)

	Equity Market Capitalization / GNP	
Independent Variables	OLS	Instrumental Variables
Country control premia	-1.265 *** (0.413)	**-3.747 ** (1.307)**
Log per capita income	-0.041 (0.065)	-0.168 (0.103)
Constant	-0.943 (0.614)	2.319 ** (0.988)
Number of obs.	37	37
R-squared	0.213	

Dependent variable:

The ratio of the stock market capitalization held by minority investors to GNP.

A one standard deviation increase in private benefits translates into a 67 percent decline in the percent of external equity capitalization / GNP.

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What Curbs Private Benefits of Control

Theoretical Predictions

- Legal Institutions
  - Legal Environment
  - Disclosure Standards
  - Enforcement

- Extra-legal Institutions
  - Product Market Competition
  - Public Opinion Pressure
  - Internal Policing Through Moral Norms
  - Labor as Monitor
  - Government as Monitor Through Tax Enforcement

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What Curbs Private Benefits of Control

Tests (Legal Institutions)

	Dependent Variable: Block Premium		
Independent Variables	(1)	(2)	(3)
Antidirector rights	**-0.026 ** (0.012)**		-0.003 (0.019)
Rule of law	**-0.026 *** (0.010)**		-0.006 (0.011)
Catholic		0.019 (0.056)	
Tax compliance		-0.064 *** (0.021)	-0.061 * (0.033)
Newspaper circulation / population		-0.020 ** (0.009)	-0.018 * (0.010)
Competition laws		-0.042 (0.036)	

Dependent variable:

Block Premium (Private Benefits of Control)

Antidirector rights:

Extent of legal protection for minority investors.

Rule of law:

The quality of law enforcement.

Countries with more antidirector rights have lower private benefits of control.

Countries with better law enforcement have lower private benefits of control.

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What Curbs Private Benefits of Control

Tests (Extra Legal Institutions)

	Dependent Variable: Block Premium		
Independent Variables	(1)	(2)	(3)
Antidirector rights	-0.026 ** (0.012)		-0.003 (0.019)
Rule of law	-0.026 *** (0.010)		-0.006 (0.011)
Catholic		0.019 (0.056)	
Tax compliance		**-0.064 *** (0.021)**	-0.061 * (0.033)
Newspaper circulation / population		**-0.020 ** (0.009)**	-0.018 * (0.010)
Competition laws		-0.042 (0.036)	

Dependent variable:

Block Premium (Private Benefits of Control)

Newspaper circulation/population:

Public opinion pressure.

Tax compliance:

Tax enforcement and attitudes of citizens.

Countries where newspapers are more diffused have lower private benefits.

Countries with higher degree of tax compliance have lower private benefits of control.

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What Curbs Private Benefits of Control

Tests (Legal Families)

	Dependent Variable: Block Premium			
Independent Variables	(1)	(2)	(3)	(4)
English origin	**-0.155 ** (0.067)**		0.043 (0.044)	-0.024 (0.062)
Soviet origin	0.128 (0.201)			0.141 (0.207)
German origin	**-0.228 ** (0.097)**			-0.121 (0.084)
Scandinavian origin	**-0.189 *** (0.058)**			-0.098 * (0.053)
Tax compliance		-0.070 *** (0.021)	-0.087 *** (0.027)	-0.066 *** (0.022)
Newspaper circulation		-0.021 ** (0.010)	-0.015 (0.011)	-0.003 (0.008)

Dependent variable:

Block Premium (Private Benefits of Control)

Reference Category:

French Origin

The levels of private benefits are significantly lower in countries with German, English, and Scandinavian legal origins than French legal origins.

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Conclusion

- In countries where private benefits of control are large:
  - Ownership is more concentrated
  - Privatizations are less likely to take place as public offerings
  - Capital markets are less developed by several measures
- Institutional variables curbs private benefits of control:
  - Better accounting standards
  - Better legal protection of minority shareholders
  - Better law enforcement
  - More intense product market competition
  - High level of diffusion of the press
  - High rate of tax compliance
- Tax enforcement reduces private benefits

Critique

Measure of block premium

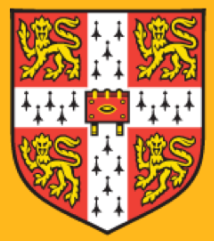
- Measure of block premium assumes symmetric information – the market price one day after the control change hands reflects the “true” value of the security.
- However, the controlling party might have superior information that is not reflected in the market price.
- Therefore, the measure of block premium might be biased.
- To reduce this bias, suggest measuring CAR from the day of the sales announcement through delisting or 126 trading days after the announcement, which ever comes first. (Schwert, G.W. (1996))

Critique
Methodology

- The nature of block transactions limits the sample size in this paper (393 observations from 39 countries), which affects the robustness of results.

- Kalay, A., Karakaş, O. and Pant, S. (2014) suggest a synthetic option method to measure the value of voting rights, which is also a good estimate of private benefits of control.

- It allows for the estimation of the value of voting rights for a much broader range of stocks.



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