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Paper Title:
Why do firms go private in Australia?

Presented by

Mamunur Rashid

PhD student, School of Economics and Finance
Curtin University, Perth, Western Australia

Paper Jointly authored by:

Subhrendu Rath, PhD

A/Professor, School of Economics and Finance
Curtin University, Perth, Western Australia



Abstract

□ Theme

We analyze the importance of information asymmetry vis-a-vis undervaluation as determinants in going private transactions

□ Context

Firms listed in the ASX

□ Findings

Our empirical results show that market undervaluation, rather than information asymmetry per se, is the dominant factor in the decision to go private

What Does the Literature Suggest?

- ❑ Prior research on PE has been exclusively limited to US and UK samples; it is also questionable if those evidences can be generalized in the Australian context
- ❑ Australian studies on going private transactions exhibit only one empirical study (Chapple et al. 2010) on PE deals thus far, exploring the financial and governance characteristics of Australian PE deals

What Does the Literature Suggest?

□ Studies that motivate our study:

Chapple, Clarkson and King (2010, AF) => Australia

Bharath and Dittmar (2010, RFS) => USA

Weir, Laing and Wright (2005, JBFA) => UK

Weir, Laing and Wright (2005, AFE) => UK

Weir and Wright (2006, ABR) => UK

What is the Story?

Asymmetric Information

Outside shareholders/investors do not have sufficient information

Market Undervaluation

Low analyst following

Low share price

Future investment is difficult

With more information, managerial perception is different

Going Private (P E Takeovers)

What are we looking for?

□ **Asymmetric Information**

We propose that information asymmetry increases the likelihood of going private (PE)

□ **Market Undervaluation**

We propose that low market valuation increases the likelihood of going private (PE)

Data and Research Design

□ Data

Sample consists of all successful PE takeover target firms listed on the ASX and made between 1990 and 2010.

Sample was drawn from Securities Data Corporation (SDC) Platinum ANZ M&A Database, Bureau Van-Dijk ORBIS Global Database, Aspect Huntley Morning Star DatAnalysis and FinAnalysis Database

All variables are measured as of the balance sheet date prior to the year of the announcement of the takeover activity

A matched sample of firms (matched by time & industry) that were acquired by public companies was also constructed

Data and Research Design

All Non-PTP Deals

All Going Private

Only Private Equity

Year	Number	Percent	Number	Percent	Number	Percent
1990 – 1992	171	4.24	11	2.13	0	0.00
1993 – 1995	340	8.44	34	6.58	1	0.77
1996 – 1998	462	11.47	40	7.74	5	3.88
1999 – 2001	341	8.46	51	9.86	19	14.73
2002 – 2004	777	19.29	93	17.98	33	25.58
2005 – 2007	799	19.83	133	25.73	52	40.31
2008 – 2010	1139	28.27	155	29.98	19	14.73
Total	4029	100%	517	100%	129	100%

Data and Research Design

Sub-total

Total

All PTP Deals

517

Less: Acquirers or targets with status of
'Subsidiary' or 'Joint Venture'

95

422

Less: Deals not financed (wholly/partly)
by private equity firms

244

178

Less: Information not available for the last
3 years

49

129

Final Total of Private Equity deals

129

Data and Research Design

□ Model Specification

We test the association between valuation and information asymmetry:

$$\text{Val}_i = a + \beta_1 \text{Asy}_i + \beta_2 \text{Con}_i + \varepsilon_i \quad (1)$$

We use logistic regression to model a firm's decision to go private. We estimate the probability P_i of a firm going private as:

$$L_i = \text{Ln} [P_i / (1 - P_i)] = \alpha + \beta_1 \text{Asy}_i + \beta_2 \text{Con}_i + \varepsilon_i \quad (2)$$

We then test the joint effect of information asymmetry and valuation measures on going private decision as follows:

$$L_i = \text{Ln} [P_i / (1 - P_i)] = \alpha + \beta_1 \text{Asy}_i + \beta_2 \text{Asy}_i * \text{Val}_i + \beta_3 \text{Con}_i + \varepsilon_i \quad (3)$$

Data and Research Design

□ Variables Selection

Information Asymmetry

LNAGE, LNTA, LNSA & INST

Valuation

EV Ratio, MTB Ratio

Controls

CURR, LVG, FCF, CAPEX

Univariate Analysis

Mean

Median

	PE	Non-PE	t-stat	p-value	PE	Non-PE	z-stat	p-value
LNAGE	2.110	2.12	0.13	0.551	2.190	2.190	0.13	0.899
INST	0.256	0.424	7.92**	<0.001	0.218	0.405	7.46**	<0.001
LNTA	18.76	18.32	-1.89*	0.029	18.82	18.27	-1.89	0.058
LNSA	18.08	17.25	-2.42**	0.008	18.35	17.48	-2.25*	0.024
EV	2.009	3.586	4.60**	<0.001	1.163	2.725	8.82**	<0.001
MTB	1.034	4.508	9.10**	0.000	1.050	3.330	13.33**	<0.000
LVG	0.496	0.380	-2.91**	0.002	0.465	0.336	-3.64**	<0.001
CURR	4.095	1.332	-3.32**	<0.001	2.25	1.23	-8.80**	<0.001
FCF	0.100	0.037	-1.45	0.074	0.104	0.093	-0.57	0.569
CAPEX	0.085	0.109	1.07	0.142	0.041	0.041	0.20	0.845

Multicolleniarity Test

	LNAGE	INST	LNTA	LNSA	EV	MTB	LVG	CURR	FCF	CAPEX
LNAGE	1	0.099	0.117	0.165	-0.059	0.029	0.099	0.019	0.068	0.077
INST	0.097	1	0.278	0.098	0.203	0.389	-0.083	-0.315	0.047	0.016
LNTA	0.153	0.257	1	0.698	-0.118	-0.109	0.255	0.031	0.469	-0.141
LNSA	0.193	0.079	0.672	1	-0.086	-0.136	0.385	0.008	0.592	-0.083
EV	-0.091	0.041	-0.097	-0.083	1	0.425	-0.165	-0.295	-0.056	0.007
MTB	-0.044	0.193	-0.212	-0.151	0.166	1	-0.208	-0.495	0.013	0.113
LVG	0.098	-0.085	0.092	0.261	-0.094	0.031	1	-0.024	0.217	-0.149
CURR	-0.041	-0.182	-0.072	-0.093	-0.079	-0.105	-0.035	1	-0.091	0.068
FCF	0.085	-0.008	0.422	0.451	-0.029	-0.452	-0.031	-0.043	1	0.039
CAPEX	0.021	0.079	-0.339	-0.275	-0.036	0.362	-0.022	-0.001	-0.358	1

Information Asymmetry & Valuation

	MTB				EV			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Constant	2.862 (4.113)**	1.588 (2.406)**	2.092 (0.833)	0.814 (0.417)	3.894 (7.214)**	3.279 (6.697)**	6.688 (4.178)**	4.751 (4.038)**
LNAGE	-0.096 (-0.489)				-0.252 (-1.417)			
INST		2.947 (3.242)**				0.329 (0.397)		
LNTA			0.032 (0.229)				-0.178 (-2.188)*	
LNSA				0.111 (0.943)				-0.081 (-1.271)
LVG	0.249 (0.215)	0.376 (0.336)	0.204 (0.172)	-0.035 (-0.028)	-0.812 (-1.561)	-0.866 (-1.644)	-0.783 (-1.515)	-0.697 (-1.402)
CURR	-0.063 (-1.689)	-0.047 (-1.433)	-0.062 (-1.705)	-0.059 (-1.701)	-0.037 (-2.915)**	-0.034 (-2.712)**	-0.038 (-3.165)**	-0.037 (-2.951)**
FCF	-3.744 (-2.313)*	-3.787 (-2.321)*	-3.829 (-2.186)*	-4.137 (-2.265)*	-0.394 (-0.927)	-0.467 (-1.099)	-0.133 (-0.299)	-0.199 (-0.451)
CAPEX	4.439 (1.888)	4.162 (1.685)	4.479 (1.811)	4.616 (1.932)	-0.838 (-0.977)	-0.944 (-1.136)	-1.312 (-1.562)	-1.066 (-1.283)
No of obs	258	258	258	258	258	258	258	258
R ²	0.266	0.289	0.266	0.271	0.026	0.021	0.031	0.024
F-statistic	18.29	20.55	18.25	18.75	1.353	1.046	1.587	1.251
p-(F-stat)	<0.001	<0.001	<0.001	<0.001	0.243	0.391	0.165	0.286

Information Asymmetry & PE T/O

	(1)	(2)	(3)	(4)	Mg/effects
Constant	-3.591 (-5.389)**	-1.991 (-2.989)**	-5.133 (-2.806)**	-5.054 (-3.779)**	
LNAGE	-0.098 (-0.551)				-0.028
INST		-4.432 (-4.534)**			-0.213
LNTA			0.074 (0.785)		0.329
LNSA				0.078 (1.072)	0.307
LVG	2.007 (3.443)**	1.783 (2.985)**	1.916 (3.297)**	1.757 (2.892)**	0.119
CURR	1.627 (6.509)**	1.519 (5.931)**	1.624 (6.451)**	1.628 (6.461)**	0.662
FCF	1.014 (1.644)	1.069 (1.619)	0.826 (1.278)	0.635 (0.918)	0.000
CAPEX	-1.528 (-1.216)	-1.071 (-0.709)	-1.344 (-1.047)	-1.321 (-1.059)	-0.021
No of obs.	258	258	258	258	
McFadden R ²	0.323	0.388	0.324	0.325	
LR statistic	115.47	138.89	115.79	116.33	
Prob (LR stat)	<0.001	<0.001	<0.001	<0.001	

Information Asymmetry, Valuation & PE T/O

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Mg/effects
Constant	-4.459 (-2.98)**	-3.361 (-5.07)**	-4.016 (-1.89)	-1.772 (-2.47)*	-1.256 (-0.29)	-4.348 (-2.31)*	-6.751 (-2.39)*	-4.728 (-3.49)**	
LNAGE	4.925 (4.63)**	0.108 (0.56)							0.242
LNAGE*MTB	-3.023 (-4.84)**								-0.749
LNAGE*EV		-0.101 (-2.84)**							-0.089
INST			38.46 (3.46)**	-2.325 (-2.07)*					0.098
INST*MTB			-33.22 (-3.91)**						-0.833
INST*EV				-1.088 (-3.87)**					-0.134
LNTA					0.337 (1.46)	0.076 (0.76)			0.325
LNTA*MTB					-0.347 (-4.66)**				-0.698
LNTA*EV						-0.012 (-2.58)**			-0.094
LNSA							0.649 (3.42)**	0.098 (1.34)	0.432
LNSA*MTB							-0.329 (-4.69)**		-0.642
LNSA*EV								-0.011 (-2.42)*	-0.083
McFad R ²	0.811	0.348	0.891	0.444	0.822	0.348	0.816	0.346	

Further Analysis on Valuation

MTB

EV

PE

Non PE

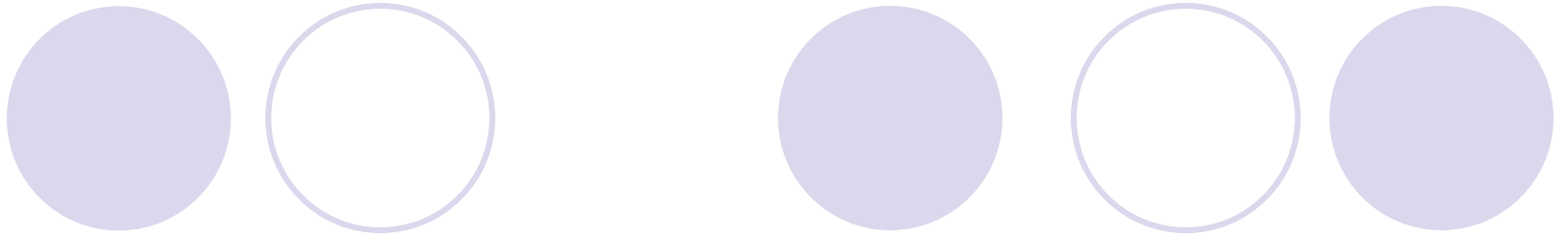
PE

Non PE

	Average	N	%	N	%	Average	N	%	N	%
Q1	0.647	51	39.53	0	0	0.795	46	35.66	5	3.88
Q2	1.128	49	37.98	3	2.33	1.237	40	31.01	12	9.30
Q3	1.608	27	20.93	25	19.38	1.894	23	17.83	29	22.48
Q4	2.961	2	1.55	49	37.98	2.868	10	7.75	41	31.78
Q5	7.474	0	0	52	40.31	7.155	10	7.75	42	32.56

Concluding Remarks

- ❑ Valuation metrics are stronger driving force
- ❑ Weak association => information asymmetry and valuation
- ❑ Institutional holding is a strong deterrent in PE takeovers
- ❑ Current and Leverage ratio are also significant and positive revealing the opportunistic behaviour of PE firms
- ❑ This evidence is new and an addition to the prior Australian studies in that we explicitly model the interplay between information asymmetry and undervaluation



Thank You All

Questions and/or Suggestions