Whence the privatized firm dividend premium?

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Research questions

- Do firms really pay higher dividends post privatization?
- If so, why? And what factors enable privatized firms to pay a dividend premium?
- Is the privatized firm payout premium different to the pay-out of standardized listed firms?

Privatization

- Government and government controlled entity which sells shares or assets to a non-government entity including both indirect and direct sales of up to a 100% stake to an identifiable buyer and / or floatation of stock on a stock exchange.
- 1980s, 1990s and early 2000s - Period of extensive *Privatization* in the EU, BRIC and South American countries.

Literature findings: Privatization

1. Megginson, Nash & van Randenborgh (1994) - 61 firms, 18 economies, 1961-90. Strong performance improvement, increase in capital spending and dividends and reduction in debt 3-years post privatization.
2. Boubakri & Cosset (1998) - 79 firms, 21 developing economies, 1980-92. Similar findings.
3. D'Souza & Megginson (1999) - 85 firms, 28 OECD economies, 1990-96. Non-competitive industries exhibit higher dividend pay outs, firm efficiency, profitability, and sales output and larger reductions in leverage 3-years post privatization.
4. Boubakri, Cossett & Guedhami (2005) and D'Souza, Megginson & Nash (2005) - Similar findings + developing markets are influenced by macro-economic reforms, financial and trade liberalization and corporate governance.
5. von Eije and Megginson (2008) find that, in 2005, while the average cash dividend by 4,070 non-privatized firms was Euro 21 M, the average cash dividend payment by 83 privatized firms was Euro 308 M.

But the **WHY** question is still unanswered in the literature.

Corporate payout theories

1. Life-cycle theory (DeAngelo, DeAngelo & Stulz, 2006)
    1. Are privatized firms in a phase of financial life cycle that makes them better candidates for paying dividends. i.e. do they exhibit significantly higher RETE?
2. Agency conflicts (Jensen & Meckling, 1976; Jensen, 1986; LLSV, 2000; Chay & Suh, 2009; among others)
    1. Free cash flows?
    2. Shareholder protection across countries: LLSV Outcome versus Substitution hypotheses?
3. Traditional signaling theory (Miler & Modigliani, 1961; John & Williams, 1985; Miller & Rock, 1985, among others)
    1. Dividends contain information because managers used it to signal the future changes in earnings.
    2. Not much empirical evidence supporting this hypothesis though

Gaps in literature

1. Why privatized firms pay higher dividends post privatization?
2. What factors influence this difference in the payout policies?
3. Does higher pay out stems from differences in signalling motives, agency conflicts or the phase of the financial life-cycle from pre- to post- privatization (or all three)?

Data description

1. No. of firms: 409 privatized firms, 6,193 non-privatized firms and 82,612 firm years.
   - 245 firms privatized b/w 1990 - 2009.
   - 121 firms available data for 3-years pre- and post- privatization.
2. Sample period - 1990 - 2011.
3. Databases - Datastream, Worldscope, World Bank's Privatization Transactions.
4. Markets - 26 economies - EU, BRIC, Canada, Australia etc.
5. Criteria of privatization -
   - Control (Govt. own $< 50\%$) *vs.* Revenue Privatization (Govt. own $> 50\%$).
   - Competitive *vs.* Non-competitive (FI's & Utilities) Industry.
   - Emerging *vs.* Developed Markets (IMF Advanced Economies).

Classic proxy variables

- Payout (Positive) - Dividend amount (von Eije & Megginson, 2008), Dividend scaled by Earning and Net Income (Megginson, Nash & van Randenborgh, 1994) and Sales (Brockman & Unlu, 2009).
- Size (Positive) - Market Capitalization (Fama & French, 2001).
- Profitability (Positive) - After Tax Earnings to Total Assets (Megginson *et al.*, 1994).
- Liquidity (Positive) - RETE (DeAngelo *et al.*, 2006) and Cash to Total Assets (Dittmar & Mahrt-Smith, 2007).
- Ownership (Negative) - Insider holding (> 5%) (Megginson *et al.*, 1994).

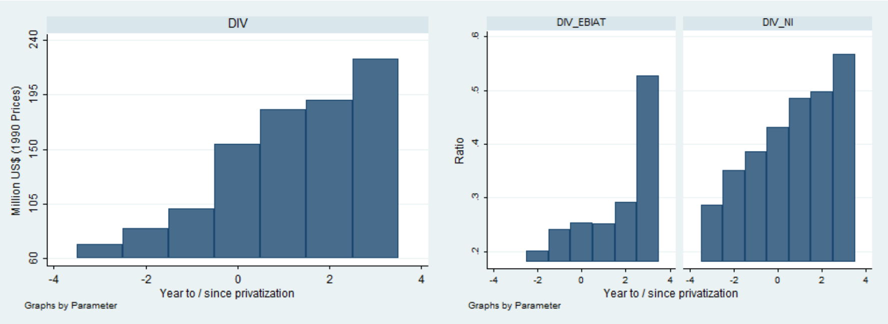
Classic proxy variables *contd.*

- Risk (Positive) - Net Income Volatility (von Eije & Megginson, 2008).
- Growth (Positive) - Total Assets, Market to Book (Fama & French, 2001) and Sales (Boubakri & Cosset, 1998).
- Leverage (Negative) - Total Debt to Total Assets (D'Souza & Megginson, 1999).
- Transparency (Positive) - Earnings Reporting Frequency (von Eije & Megginson, 2008).
- Efficiency - No. of Employees (Negative) and Sales to Employees (Positive) (Boubakri & Cosset, 1998 and D'Souza & Megginson, 1999).

3- Years pre- and post- privatization

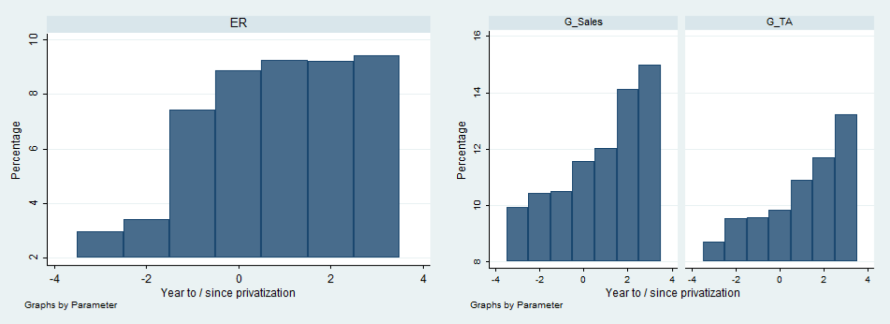
- Full sample - 121 firms
  1. Increase - Firm-level dividend amount and scaled payout, profitability, efficiency, growth opportunity, transparency, size and income volatility.
  2. Decline - Firm-level ownership concentration.
  3. Unchanged / insignificant - Firm-level cash holding, leverage, no. of employees and market to book.
- Sub-samples
  1. Control (38 firms) *vs.* Revenue (83 firms),
  2. Competitive (90 firms) *vs.* Non-competitive (31 firms) and
  3. Emerging (42 firms) *vs.* Developed (79 firms).
- Post-privatization increase in payout is associated with an increase in profitability, operating efficiency, sales and transparency; and a decline in ownership-concentration.

3- Years pre- and post- privatization *contd.*



Evidence does not support the life cycle theory to explicate a dividend premium.

3- Years pre- and post- privatization *contd.*



Multivariate analysis - 3- Years pre- and post-privatization

1. A random effects panel regression:-
   1. Estimated on 91 privatized firms.
   2. With interaction terms in the post-privatization three year period to capture changes in effects of firm traits at privatization.
2. Performance:-
   1. Influence strengthens (ER and G_Sales)
3. Free cash flow hypothesis:-
   1. LLSV (2000) Substitution model: civil law country firms pay out more and pay out increases even more (albeit not significantly so) than in common law countries after privatization.
   2. Transparency (ERF) reduces pay out post privatization.
4. Life-cycle hypothesis:-
   1. A negative influence of G_TA emerges after privatization. As G_TA tends to increase post privatization this effect cannot explain the dividend premium.

Privatized *vs.* non-privatized firms

1. Higher proportion of privatized firm-level payout - (72% *vs.* 64%) post 1996.
2. Higher mean (US$ 144 *vs.* US$ 36) and median (US$ 5.82 *vs.* US$ 1.31) dividend payout by privatized firms since 1990.
3. Significantly higher mean (0.30 *vs.* 0.21) and median (0.14 *vs.* 0.13) DIV_EBIAT by privatized firms since 1990.
4. Privatized firms are bigger, with higher profitability, ownership concentration, sales growth, debt level, transparency and employee count compared to non-privatized firms.
5. Non-privatized firms exhibit higher retained earnings and income volatility.

Multivariate analysis - Privatized *vs.* non-privatized firms

1. Privatized firms pay significantly more - both with and w/o control variables.
2. Control variables for full sample (privatized and non-privatized) -
   - Positive relation - Size (market value and employee count), profitability, cash holding, income volatility, operating efficiency and shareholder protection.
   - Negative relation - Retained earnings, ownership, growth opportunity, leverage, transparency and dividend tax penalty.
3. Difference-in-difference test -
   - Privatization dummy is not significant.
   - Positive relation - Profitability, operating efficiency, sales growth, ownership reduction, ERF and employee count.

Robustness test

1. Results consistent with non-privatized firms and different forms of privatization *viz.* Revenue, Control, Competitive, Non-competitive, Developed and Emerging.

2. Dividend tax has no effect on privatized firm payout premium. Interaction tax proxies are insignificant in both favorable and unfavorable circumstances - dividend tax preference (La Porta *et al.*, 2000) and dividend tax penalty (Poterba and Summers, 1984, Jacob and Jacob, 2013 and Becker *et al.*, 2013).

3. Multivariate analysis results consistent for the control group and a sub-set of privatized firms. Control group is matched with 'almost' identical privatized firms on the Fama & French (2001) criteria: country of origin, firm size (+/- 10%), net income (+/- 5%) and growth in total assets. Diff-in-diff findings in the matched sample are substantively identical to findings in the full sample of firms.

Conclusion

1. Privatization leads to harsher product market competition, higher capital market scrutiny and change in firm's objective function resulting in an increase in the agency conflicts and the uncertainty regarding the firm's future prospects.
2. Compared to non-privatized firms, privatized firms are not only more profitable but also pay a higher proportion of their profits as dividends.
3. Relatively higher payout among civil law country SOE firms render marginal support to LLSV (2000) "substitution hypothesis".
4. Next, pay out increase despite increase in growth opportunities and risk associated with a reduction in insider holdings, a rise in cash and a reduction in leverage (new agency cost parameters) accompanied with improved operating performance and profitability hints towards the importance of firm performance and reduced agency issues post-listing as a tenable explanation.