FINANCIAL PERFORMANCE OF PRIVATIZED STATE-OWNED ENTERPRISES (SOEs) IN VIETNAM

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ABSTRACT

The literature on public financial management reform has devoted comparatively little attention to the detail and effect of reform process implementation in developing economies. This study contributes to an understanding of this phenomenon by examining the impact of privatisation on a sample of previously state owned enterprises in Vietnam. Using a detailed, financially focused methodology and drawing on data sourced from audited general purpose financial statements, our analysis suggests evidence of material variation in financial performance and position post privatisation compared to the position observed immediately prior to privatisation. Specifically, our data suggests that after being privatized, firms generally exhibit reductions in profitability, improved liquidity, some degree of improvement in working capital management, an increase in financial leverage accompanied by a higher degree of solvency risk and greater calls on cash resources for the purpose of funding capital expenditure. Our results assist with understanding the impact of privatisation as a reform technique in developing economies, and may assist policy makers and managers better target areas of likely risk, during the process of transition from public to private ownership.

Key words: Financial performance, privatization, State-Owned Enterprises, Vietnam
1. INTRODUCTION

Since the late 1970s a substantial body of literature calling into question the performance of the government sector has developed. Though this body of work has expanded to vast proportions, some common themes visible include the complaint that the government sector suffers from unclearly defined objectives, inefficient and ineffective policy implementation processes and is excessive in size relative to its economic setting. Further criticisms typically relate to the suggested existence of costly and overly bureaucratic organisational structures, low levels of responsiveness to citizens and a consequent failure to provide either an appropriate quantity or (as the case may be) quality of goods and services to taxpayers (Osborne and Gaebler 1992; Jones L. R. and Kettl 2003).

Reformist oriented public management literature often links service and organizational sustainability deficiencies with macro level economic difficulties including persistent government sector budget deficits because of excessive costs and spending compared to poorly structured and inappropriately spread taxation bases. (Osborne and Gaebler 1992; Pollitt and Bouckaert 2004).

Many of the sentiments expressed in this body of literature were echoed in the policy settings adopted by reformist governments, most notably those in the United Kingdom, New Zealand and Australia (Carlin, 2003; Carlin 2004). Consequently substantial changes in public sector management have emerged since the 1980s with various techniques, including contracting out, commercialization, corporatization, privatization used as a basis for improving cost effectiveness and efficiency in government.

Of these techniques, privatization has been perhaps most consistently employed throughout the world, often under conditions of considerable controversy. Privatization is the process through which governments either wholly or partly sell their interests in state-owned enterprises (SOEs) to private sector investors in the hope that the inefficient performance of these firms can be improved by the application of the discipline associated with private ownership (Megginson, Nash et al. 1994).

Having initially been viewed as a radical, perhaps even desperate policy initiative of the most closely associated with the Thatcher government in Britain from 1979 onwards, privatization has come to be accepted as a potential instrument of economic policy for governments of many persuasions throughout the world. Indeed, the increasing tendency towards the use of this technique shows no sign of slackening in the 21st century (D'souza and Megginson 1999; Megginson and Netter 2001).

Understandably, given the widespread application of privatization as a tool of public policy and the high degree of materiality (in dollar and GDP proportionate terms) of many programs of privatization, the phenomenon has attracted considerable attention from researchers. Some of the work which has resulted from this attention has been empirical in its basis, with a particular focus on the performance implications of a switch from public to private ownership modes.
Despite considerable growth in the volume of extant scholarly literature focused on the question of the impact of management reform in the public sector, comparatively little is known about the impact of such initiatives in the developing world, particularly in instances where sweeping public financial management reform programs are of relatively recent origin.

Vietnam represents a case in point. Only in the post millennium period has the embrace of market based solutions been a significant phenomenon, made more interesting by the continued presence of a one party political system still nominally socialist in its focus. Consequently, this paper contributes to the literature by providing insights into the financial performance and position of a group of former state owned enterprises both before and after their transition to private ownership and listed company status. In doing so, this paper contributes to the development of a better understanding of the impact of financial management reform techniques in settings foreign to those where they originated and were originally implemented. The results may therefore inform policy decisions in economies still in the process of transitioning to greater openness and levels of competition.

The remainder of the paper is structured as follows. Section 2 sets out a review of some relevant literature and how this paper relates to previous work in this field. Section 3 sets out relevant details pertaining to the dataset drawn upon for the purposes of the research reported in this paper and the methodology employed. Section 4 sets out key empirical results, while section 5 sets out some conclusions and suggestions for further research.

2. LITERATURE REVIEW

A considerable body of literature dealing with the subject of public sector management and financial management reform now exists. Within that, there exists a body of literature focused on the particular phenomenon of privatization. An often cited example of this type of work is embodied in Megginson, Nash and Randenborgh (1994). These authors compared the pre- and post-privatization financial and operating performance on 61 companies in 18 countries spanning 32 industries which had experienced full or partial privatization through public share selling over the period between 1961 and 1990. Their results suggested that after being privatized, former SOEs increased real sales, became more profitable, increased levels of capital spending, improved operating efficiency levels, had lower debt and increased dividend payouts (Megginson, Nash et al. 1994).

While providing a range of useful insights, the Megginson et al. study sample contained very few firms from developing countries, leading to some concerns about the capacity to meaningfully generalize their results. To overcome this, Boubakri and Cosset (1998) used the same basic methodology as had been employed in the Megginson et al. study method to examine financial and operating performance of privatized firms in developing countries. Their sample included 79 companies from 21 developing countries which also experienced full or partial privatization over the period 1980 to 1992. Their results were consistent with those reported by Megginson et al.
Both these works represented important contributions to the literature, but nonetheless left unexplored niches. For example, none of the firms included in the samples drawn upon in the Megginson et al study or the Boubakri and Cosset study were from socialist countries undergoing the transition to the embrace of market based principles. Further, while the studies used aggregate financial data to characterize the position of firms after the point of privatization, the datasets drawn upon for the basis of this earlier research were not sufficiently rich to allow detailed drilling into the causes of the phenomena these authors observed.

Partly filling this gap in knowledge, Wei, D’souza, and Hassan (2003) conducted a study on 208 privatized firms in China, a current socialist country, during the period from 1990 to 1997. The results of that study are consistent with those of the earlier studies cited above, save for their conclusions in relation to post privatisation profitability. Wei et al documented that, after being privatized, the firms in their sample did not exhibit significant change in profitability (Wei 2003). Again, this research did not aim to discover the reasons for changed/unchanged profitability, for improvement in outputs, for sale efficiency and so forth, so it is not possible to determine from the results any detailed explanation for the observed phenomenon.

Another gap in the existing literature has been the failure of existing studies to document the association between privatization and a range of key business metrics such as working capital management efficiency, capital intensity, cashflow profile and the level of free cashflow generated by enterprises. Yet an understanding of factors such as these is important in the context of developing detailed insights into the journey of transition undertaken by firms as they are reconfigured from public to private ownership.

Vietnam commenced a program of nationwide economic reform, known as Doi Moi, in 1986. This program represented a wide ranging agenda aimed at stimulating economic growth and improving the capacity for Vietnam to achieve both self sufficiency and higher levels of prosperity than had previously been generated. A substantial element of this agenda was a move towards greater private participation in the economic system. At the beginning of Doi Moi in 1986, Vietnam had around 12,300 SOEs many of which were unprofitable and exhibited signs of substantial inefficiency.

A concerted effort to attack this problem commenced in 1989 with the dissolution of many unprofitable SOEs and rearrangement of others. As a result, by the beginning of the privatization process which commenced in 1992, the number of SOEs in Vietnam had declined to around 6,500 enterprises (CIEM 2002; Vu 2005).

The process of privatization, or equitisation as it is known in Vietnam, has attracted some degree of attention from researchers. Early studies chiefly focused on explaining privatization in Vietnam in its particular political and institutional setting (CIEM 2002; MekongEconomics 2002; Arkadie and Do 2004; Vu 2005; Sjoholm 2006). While useful, this first wave of literature did not contribute to an understanding of the effects of privatization on the financial performance of privatized firms (Chu 2004; Sjoholm 2006).
To date, two detailed studies have been conducted concerning the financial implications of privatizations in Vietnam. The most substantial of these was conducted by the Central Institute for Economic Management (CIEM 2002).

This study was based on a survey of approximately 422 privatized firms located in 15 cities and provinces of Vietnam. The results of this study, based on data pertaining to sales, value-added, number of workers, wages, total assets, export, and profit on sales ratios led the authors to conclude that privatization could generate positive results. However, the study was not without weaknesses, the most substantial relating to data validity. The data drawn upon for the purposes of the study was largely sourced via questionnaires and interviews with privatized firms' managers. There is some degree of concern that the managers of these organizations were cautious to avoid reporting conspicuous over or under performance, both of which could, in all the circumstances, have given rise to embarrassment (CIEM 2002).

Another considerable study was conducted by Webster & Amin (1998), employing a survey of 14 privatized firms in 1998 with a focus on sales, profits, employment and changes in ownership. The authors of this study also concluded that in general privatization had proved a successful policy. One noteworthy point was the discovery of difficulties in working capital and absence of investment capital financing in the sample of privatized firms. However, the causes of full implications of these factors were not developed in the analysis of the study’s results.

This study is based on a detailed dataset compiled from the financial statements of 21 companies listed in Ho Chi Minh security center both before and after their listing. As distinct from previous studies, we report in considerable detail on observed changes in factors such as profitability, liquidity, working capital management, investment policy and cashflow, not only at the point of privatization, but over a period of three years post privatization. Consequently, this study offers insights into the changing face of post privatized SOEs in a socialist transitional economy not previously available. Further details of the dataset drawn upon and the research method employed for the purposes of the study are set out in section 3, below.

3. DATA AND METHODOLOGY

Since the objective of this study is to provide detailed evidence pertaining to the impact of the transition from state owned enterprise to private venture, the sample of organizations examined were all originally configured as SOEs but were subsequently reconfigured as private sector enterprises.

Unlike other studies where the data relied upon for the purposes of analysis has been drawn from surveys, interviews and other similar sources, this study, focusing as it does on the financial dimension of the public to private transition, requires a richer and more consistent dataset. For that reason, the study is based on disclosures contained in annual audited (and published) financial statements. In Vietnam, under present regulations, these are only readily available from enterprises listed on one of the two official stock exchanges. One of these operates in Hanoi. At the conclusion of 2006, there were 87 firms
listed on the Hanoi exchange. The other operates in Ho Chi Minh City, where 104 firms were listed by the same point.

However, the Hanoi exchange is a more recent phenomenon than the Ho Chi Minh City exchange, with the result that most listings on the former took place in 2005 or later. Therefore, given that a key objective of this study is to track the changing fortunes of post privatized SOEs over a medium term time frame, it was not possible to gather a meaningful research sample based on Hanoi listed entities. This therefore led to a focus, for the purposes of this paper, on organizations listed on the Ho Chi Minh City Securities Exchange.

For inclusion in the research sample, it was necessary that firms had been state owned enterprises prior to privatization (as opposed to private businesses which had taken advantage of an initial public offering process), and that audited financial statements were available for the organization for the year immediately prior to listing and for a period of three years thereafter. These requirements yielded a total research sample of 21 firms. Of these, 5 were listed in 2000, 4 in 2001, 10 in 2002 and 2 in 2003. Approximately two thirds of the organizations in the sample were from the manufacturing and materials sectors, while the remainders were service enterprises. Details of the set of firms included in the research sample are set out in appendix 1.

Because each listing year also yields a research sample too small for meaningful analysis, this study employs a data pooling technique whereby irrespective of the actual calendar year of listing, all data pertaining to each firm’s year prior to listing, year of listing and each successive year post listing is pooled for the purposes of aggregate analysis.

This resulted in a dataset comprising 21 observations for the year prior to listing (t-1), the year of listing (t=0), one year post listing (t=1), two years post listing (t=2) and three years post listing (t=3). The aggregated t-1 data set comprised 5 firm year observations drawn from 1999 (relating to the five firms which listed for the first time in 2000), 4 from 2001, 10 from 2002 and 2 from 2003, respectively. Each of the other pooled datasets was constructed in the same manner.

For each year each firm is included in the research sample, a variety of data pertaining to five key dimensions was gathered. These were

1) Profitability;
2) Liquidity,
3) Working capital efficiency;
4) Financing; and
5) Cash flow.

To measure these categories, after considering data availability, the ratios set out in Table 1, below, were gathered.
### Table 1: Ratios used for analyzing financial performance of privatized firms

<table>
<thead>
<tr>
<th>O.</th>
<th>Categories</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Profitability</td>
<td>Return on Assets = OPBT/Average Total Assets&lt;br&gt;Asset Turnover = Net Sales/Average Total Assets&lt;br&gt;Profit Margin = OPBT/Net Sales&lt;br&gt;Gross Profit Margin = Gross Profit/Net Sales&lt;br&gt;Selling and Admin to Sales = Selling &amp; Admin Expenses/Net sales&lt;br&gt;Cost of doing business to Sale = CODB/Net Sales&lt;br&gt;Where: Cost of Doing Business = Selling Exp. + Admin + Other Expenses</td>
</tr>
<tr>
<td>2</td>
<td>Liquidity</td>
<td>Current Ratio = Current Assets/Current Liabilities&lt;br&gt;Quick Ratio = Cash, Cash equivalents &amp; Receivables/Current Liabilities&lt;br&gt;Working capital on Sales = (Current Assets- Current Liabilities)/Net Sales</td>
</tr>
<tr>
<td>3</td>
<td>Working capital efficiency</td>
<td>Account Receivable Days = 365<em>Average AR/Net Sales&lt;br&gt;Account Payable Days = 365</em>Average AP/Purchase&lt;br&gt;Purchase = Cost of Goods Sold + (Ending Inv. - Beginning Inv.)&lt;br&gt;Inventory days = 365*Average Inventory/Cost of Goods Sold&lt;br&gt;Cash Conversion Cycle = AR Days + Inventory Days - AP days</td>
</tr>
<tr>
<td>4</td>
<td>Financing</td>
<td>Debt to Equity = Total Debts/Total Equity&lt;br&gt;Financial leverage = Total Asset/Average Owner Equity&lt;br&gt;ROE = ROA*Financial Leverage</td>
</tr>
<tr>
<td>5</td>
<td>Free cash flow (FCFF)</td>
<td>FCFF = EBITDA - Changes in Net Working Capital - CAPEX-Income Tax</td>
</tr>
</tbody>
</table>

Time series data pertaining to each of the five dimensions was pooled and analysed, with the results being set out in section 4, below.

### 4. RESULTS

- **Effects on profitability:**

To measure profitability, the study uses six ratios: return on assets (ROA); asset turnover; profit margin; gross profit margin; selling and administration on sales; and cost of doing business on sales. The key findings were that profit margins earned by the firms in our sample over the three years post listing declined, on average. The main driver for this decline in profitability seems to have come on the pricing side of the equation, with downwards pressure on prices not being offset by less material declines in cost structures post listing. These results are set out in more detail in Table 2, overleaf.
Table 2: Summary of effects on profitability of privatized firms after listing

<table>
<thead>
<tr>
<th>O</th>
<th>Ratios</th>
<th>Meaning for examination (Hoggett, Edwards et al. 2003)</th>
<th>Whole sample</th>
<th>Group by listing year</th>
<th>Manufacturing company</th>
<th>Trade &amp; services companies</th>
<th>Generally verified sources of change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ROA</td>
<td>Amount of OPBT(^{(*)}) generated by one VND of assets</td>
<td>Gradual decrease</td>
<td>Gradual decrease</td>
<td>Gradual decrease</td>
<td>Gradual decrease</td>
<td>OPBT increased at lower rate than average total assets</td>
</tr>
<tr>
<td>2</td>
<td>Asset turnover</td>
<td>Amount of sales generated by one VND of assets</td>
<td>Up-down, increasing trend</td>
<td>Increase</td>
<td>Increase with oscillation</td>
<td>Insignificant increase</td>
<td>Net sales increase at higher rate than total assets do</td>
</tr>
<tr>
<td>3</td>
<td>Profit margin</td>
<td>Amount of OPBT generated by one dollar of net sales</td>
<td>Significant decrease</td>
<td>Significant decrease</td>
<td>Significant decrease</td>
<td>Significant decrease</td>
<td>Reduction in selling price, increases in cost of goods sold and other expenses</td>
</tr>
<tr>
<td>4</td>
<td>Gross profit margin</td>
<td>Amount of gross margin generated by one dollar of sales</td>
<td>Significant decrease</td>
<td>Decrease, except firms listed in 2001</td>
<td>Insignificant decrease</td>
<td>Significant decrease</td>
<td>Reduction in selling price, and Increases in cost of goods sold.</td>
</tr>
<tr>
<td>5</td>
<td>Selling and Admin. on Sale</td>
<td>Ability to minimize expenditures for selling and administration</td>
<td>Insignificant decrease</td>
<td>Decrease, except for firms listed in 2000, 01</td>
<td>Insignificant decrease</td>
<td>Significant decrease</td>
<td>Management team tried to minimize the expenses, but not much</td>
</tr>
<tr>
<td>6</td>
<td>Cost of doing business on Sale</td>
<td>Ability to minimize expenditure for selling, administration, and extraordinary activities</td>
<td>Insignificant decrease</td>
<td>Decrease, except for firms listed in 2000, 01</td>
<td>Insignificant decrease</td>
<td>Significant decrease</td>
<td>Management team tried to minimize the expenses, but with little effect</td>
</tr>
</tbody>
</table>

\(^{(*)}\) OPBT used to eliminate the effect of tax regulation of the State
• **Effects on Liquidity**

To examine the liquidity or solvency of former SOEs, the study employed three ratios: the current ratio, quick ratio, and net working capital on sales. The analysis is also carried out in three dimensions: 1) whole sample with 21 firms; 2) four groups by listing year: 2000-listing, 2001-listing, 2002-listing, and 2003-listing; and 3) two sub-groups by industry: manufacturing-company group; and trade and services one. The results of calculation are represented in mean and weighted mean.

Overall, the results suggest that post listing, the firms included within the sample improved their working capital management practices. Thus, the mean observed values for the current and quick ratios fell, while the level of net working capital required to sustain a unit of sales activity fell.

While the absolute level of liquidity exhibited by the sample firms fell in the three years immediately post listing, there was no evidence to suggest that the level achieved by that stage had declined to levels which would suggest, per se, that the continued financial viability of the sample enterprises ought be treated as doubtful. Overall results are summarized in Table 3, below.
### Table 3: Summary of effects on liquidity of privatized firms after listing

<table>
<thead>
<tr>
<th>O</th>
<th>Ratios</th>
<th>Meaning for examination (Hoggett, Edwards et al. 2003)</th>
<th>Whole sample</th>
<th>Group by listing year</th>
<th>Manufacturing company</th>
<th>Trade &amp; services companies</th>
<th>Generally verified sources of change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Current ratio</strong></td>
<td>Ability of firm to meet short-term debt obligations; High ratio means strong ability to pay short obligations; Too high ratio means firm invest more capital in low profitable assets; Rule of thumb for safety: 2.0</td>
<td>High rate before listing; Strong ability to pay short debts; Decrease from 3.0 to lower rate at around 2.0</td>
<td>Moderate value, but 2000-listing firms in pre-listing; Strong ability to meet short debts; Decrease from various rate to around 2.0</td>
<td>High rate in pre-listing; Strong ability to pay short debts; Big adjustment from around 4.0 to around 2.0</td>
<td>Moderate value pre-listing; Ability to pay short debts; Ratio varies around rate of 2.0</td>
<td>There is an improvement in structure of current assets and current liability toward lower current assets and higher current liabilities.</td>
</tr>
<tr>
<td>2</td>
<td><strong>Quick ratio</strong></td>
<td>Similarity as current ratio, but no inventory used for calculation because of its transferability to cash; Rule of thumb for safe: 1.0</td>
<td>High rate before listing; Strong ability to pay short debts; Decrease from 2.0 to lower rate at around 1.0</td>
<td>Moderate value, but 2000, 01-listing firms in pre-listing; Strong ability to meet short debts; Decrease from various rate to around 1.0</td>
<td>High rate in pre-listing year; Strong ability to pay short debts; Big adjustment from around 2.5 to around 1.0</td>
<td>Moderate value pre-listing; Ability to pay short debts; Ratio varies around rate of 1.0</td>
<td>There is an improvement in structure of current assets and current liability toward lower current assets and higher current liabilities. Inventory takes high portion in current assets.</td>
</tr>
<tr>
<td>3</td>
<td><strong>Net working capital on Sales</strong></td>
<td>Amount of working capital used to generate one VND of net sale; The lower ratio the higher efficiency of using working capital</td>
<td>Improvement in using net working capital</td>
<td>Firms listed in 2000 and 2003 have significant improvement</td>
<td>Significant improvement</td>
<td>Insignificant improvement</td>
<td>There is a trend of lower current assets and higher current liabilities; Significant increase in sales</td>
</tr>
</tbody>
</table>
- **Effects on working capital efficiency**

Consistent with the commentary pertaining to liquidity, there was strong evidence that the sample firms actively improved their working capital management practices over the three years immediately post listing.

Our data suggests that the main driver of this overall improvement lay in better receivables management, with average days receivable across the sample as a whole falling from approximately 100 days at the commencement of our measurement interval to around 60 days by the third year post listing.

By way of contrast, average inventory days lengthened slightly, though the overall result in this dimension was dominated by the impact of substantial inventory days lengthening in the case of the subsample of firms listed in 2002. However, even allowing for the potential impact of this phenomenon, there was far less clear evidence of systematic improvement in inventory management than was the case in relation to receivables.

The data also suggests that firms in the sample on average took longer intervals to pay their suppliers (in the order of approximately 20 days) at the three year post listing point than had been the case at listing. However, there is no evidence that this resulted from financial distress or a lack of liquidity on the part of these firms, which, according to our data (see table 3 and related discussion, above) had maintained liquidity at lower, albeit adequate levels at the 3 year post listing point when compared to the position at listing.

Finally, consistent with the observations set out above, the overall funding gap position for the firms in our sample improved, suggesting an improved overall free cashflow position. The results are set out in more detail in Table 4, below.
<table>
<thead>
<tr>
<th>O</th>
<th>Ratios</th>
<th>Meaning for examination (Hoggett, Edwards et al. 2003; Flanagan 2005)</th>
<th>Whole sample</th>
<th>Group by listing year</th>
<th>Manufacturing company</th>
<th>Trade &amp; services companies</th>
<th>Generally verified sources of change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Account receivable days</td>
<td>Days one company need to collect their receivables; The gradually shorter period reveals the improvement of credit sale management</td>
<td>Significant reduction of collection days from around 100 days to around 60 days</td>
<td>Significant time reduction in firms listed in 2000, 2002; Little adjustment in firms listed in 2001, 2003</td>
<td>Significant shortening time for collection</td>
<td>Significant shortening time for collection</td>
<td>Effective approaches for credit sale have been applied: credit selection, terms, collection techniques; Reduction of selling price and other incentives. These led to lower profitability; New methods of selling have possibly applied</td>
</tr>
<tr>
<td>2</td>
<td>Inventory days</td>
<td>Number of days which inventory remains in reservation before sale; The short period reflects the high speed of selling goods and services</td>
<td>Insignificant lengthening days for sale of goods and services; Dominated by firms listed in 2002</td>
<td>Nine firms listed in 2002 have significant increase time for inventory turn, other groups have insignificant reduction of days</td>
<td>Insignificant shortening time for turning inventory</td>
<td>Significant increase in days for turning inventory</td>
<td>Manufacturing firms have not changed their plan of production, reservation Trade and service firms have purchased and stored more inventory than the sale requirements</td>
</tr>
<tr>
<td>3</td>
<td>Account payable days</td>
<td>Number of days which a company takes to pay suppliers. The long time indicates ability to appropriate suppliers’ capitals without interest</td>
<td>Longer time to pay suppliers</td>
<td>Longer period occurred in firms listed in 2000, 01, noise in 02 listing firms and shorter time in firms listed in 2003</td>
<td>An increase from around 40 days to around 60 days for paying suppliers</td>
<td>Decrease from 104 days to 90 days for paying suppliers</td>
<td>An improvement in manufacturing firms; Trade and service firms are under suppliers’ pressure or being self-motivated to pay debts</td>
</tr>
<tr>
<td>4</td>
<td>Funding gap</td>
<td>Number of days a firm takes to complete its one business cycle; The shorter gap indicate the short time a firm has cash available</td>
<td>Significant shortening in funding gap from 130 days to 83 days. Dominated by manufacturing firms</td>
<td>Significant shortening in funding gap</td>
<td>Significant shortening in funding gap from 152 to 82 days</td>
<td>Significant lengthening in funding gap. Increase from 48 to 88 days</td>
<td>Improvement in account receivable dominates the shortening funding gap of manufacturing firms; Funding gap of trade and service firms is dominated by shortening of payable days and</td>
</tr>
</tbody>
</table>
lengthening inventory days
Effects on Financing

In order to assess capital structure and efficiency of capital usage of divested firms we use four ratios: debt on equity ratio, financial leverage, current liabilities on total debts, and return on equity (ROE). Also, the calculations are carried out in three dimensions: whole samples with 21 companies; four groups by listing year; and two sub-groups by industry classification.

The main observations pertinent to the financing strategies adopted by firms in the post listing period is that they did increase their reliance on debt capital, relative to equity capital.

As the balance sheets of our sample firms expanded in the post listing period, they exhibited a preference for debt financing over equity financing, with the result that classic measures of capital structure including the debt / equity ratio and the leverage ratio all increased (on average) by a substantial margin.

Interestingly, much of the additional debt taken on by the firms in our sample appears to have been short term in its maturity profile. It is difficult to know the precise reason for this, but it is possible that explanations include the relative ease of obtaining short term financing products versus longer term financing products in the Vietnamese marketplace, and the relative cost and complexity of longer term financing arrangements versus shorter term arrangements.

Assuming the capacity to roll over debt facilities with maturities shorter than those of the assets to which they relate, this may represent a viable financing strategy, but does suggest an increased degree of structural financial risk embedded in the capital structures of our sample firms by the third year post listing.

Over the same period, due principally to the decline in profitability we reported above, the overall levels of returns on equity declined, suggesting a worsened risk / return tradeoff position, at least in the short run.

The results are summarized in Table 5, below.
Table 5: Summary of effects on financing

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Debt to Equity ratio</td>
<td>Proportion of debt and equity that a firm finance its assets; High ratio indicates high portion of debt in assets. It also reflects higher profitability but high risk of bankruptcy</td>
<td>Significant increase and peak value at year two post-listing</td>
<td>Increase in all groups except for one which listed in 2001</td>
<td>Significant increase and peak value at year two post-listing</td>
<td>Insignificant increase but highest value at year two post listing</td>
<td>Management awareness of using more debts other than using equity; High demand of capital for operation, especially at year two post-listing</td>
</tr>
<tr>
<td>2</td>
<td>Financial leverage</td>
<td>Portion of equity one firm used to finance its assets; High financial leverage leads to high return on equity (ROE)</td>
<td>Gradual increase after listing; Highest value at year two post listing</td>
<td>Gradual increase in groups except for one listed in 2001</td>
<td>Significant increase from 1.8 to 2.2; Highest value at year two post listing</td>
<td>Nearly unchanged, swing around 2.5; Highest value at year two post listing</td>
<td>It seems that firms get to the marginal point at 2.5; Higher demand of capital for operation; Highest debt in year two post-listing lead to highest financial leverage</td>
</tr>
<tr>
<td>3</td>
<td>Current liabilities on total debts</td>
<td>Measure the solvency level; High ratio reveals high risk but high profitability. This ratio might reflect the firm's difficulties in approaching the long-term loans.</td>
<td>Current liabilities account for around 90% of total debts</td>
<td>Current liabilities account for high portion in total debts</td>
<td>Current liabilities account for around 90% of total debts</td>
<td>Current liabilities account for around 90% of total debts</td>
<td>Possible reasons: high interest rate of long-term debts; complex procedures and condition for long term loans; Financial managers’ decisions; High portion of current assets to maintain the safe liquidity level</td>
</tr>
<tr>
<td>4</td>
<td>Return on Equity (ROE)</td>
<td>Firm’s efficiency at generating profits from every dollar of net assets; The bigger ROE, the higher efficiency</td>
<td>Significant decrease</td>
<td>Significant decrease in groups except for one listed in 2001</td>
<td>Insignificant decrease; Swing around 20%</td>
<td>Significant decrease Maintain at 30%</td>
<td>Dominated by ROA and Financial Leverage; The increase of financial leverage could not cover the decrease of ROA</td>
</tr>
</tbody>
</table>
• **Effects on Free Cash Flow for the Firms**

Our final element of financial analysis was to estimate the free cashflow to the firm (FCFF) generated by our sample of enterprises over the period under review. We estimated free cashflow to the firm by adjusting EBITDA for net changes in working capital (consistent with our discussion above), capital expenditure and taxation costs.

Overall sample FCFF and its components in pre- and post-listing periods are depicted in Chart 1, below.

Scrupiny of the results suggests that overall FCFF varied insignificantly at the three year post listing point from the position which had been exhibited in the year prior to listing. However, a decomposition of the aggregate result yields interesting insights. While improvements to working capital management had a positive impact on the free cashflow position of the sample as a whole, this was offset by increased capital expenditure profiles, particularly in the first and second year post listing.

A variety of explanations could potentially be offered for this pattern, though one which may explain the increased call on capital expenditures in the post listing period relates to the possibility that on average, the capital stock under the control of the entities within the sample was at or close to the point of obsolescence by the time of listing. The increased managerial freedom and access to capital associated with the listing event may have provided managers with the capacity to rejuvenate their enterprises by injecting capital which in a previous organizational guise had either been unavailable or at least, relatively more scarce.

If this explanation holds true, then our results suggest that after an initial spike, capital demands should return to lower levels, in turn suggesting the possibility of materially improved FCFF levels in future periods – though these are not captured in our dataset.
5. CONCLUSION

Our results depict the challenges faced by a sample of firms moving from the public to the private domain in an economy itself undergoing rapid transformation. In contrast to earlier literature which tended to paint pictures at relatively aggregate levels, our results have focused on the key individual financial levers which go to building up a profile of enterprise value generation potential.

We show, in contrast to the results published in earlier literature, that improved profitability is by no means a guaranteed outcome of the decision to transition from public to private ownership, particularly if that transition also occurs against the backdrop of a general recourse to greater competition in product and service markets.

The data we gathered in relation to our sample of firms suggests that they faced very substantial challenges in their first years of private operation. They found margin maintenance difficult, and were in general unable to reduce their cost structures by an amount sufficiently great to fully compensate, with the result that profitability fell, even in the face of expanded sales volumes.

They faced the need to replace obsolete equipment in order to better face more competitive open markets being created as other elements of the government’s Doi Moi process, and this in turn required them to increase their reliance on external capital, principally debt. The manner in which the capital structure of our sample of firms evolved over time, with substantial reliance on short term debt, suggests difficulties faced in the absence of deep and liquid debt capital markets, and the need for managers within newly privatized organizations to better understand the inherent risks associated with financing strategies characterized by material maturity mismatches.

On the other hand, the enterprises included in our sample did succeed in making improvements on the working capital management side of the business – particularly in relation to receivables and payables, while performance on inventory management lagged. This may be due to the inherently greater level of complexity associated with the management of inventory, when compared against the decisions typically faced in the management of receivables and payables.

Although the overall level of free cashflow generation by our sample of firms had not materially increased by the conclusion of the third year post listing compared to the position at the year prior to listing, it is not accurate to depict the firms as not having undergone substantial change during that period. Overall, we found evidence to suggest that the firms in our sample were managed more leanly (e.g lower cost structures, lower buffer liquidity holdings), with a greater tolerance and or appetite for risk (material capital expenditures funded chiefly through debt) and with a greater capacity to expand at a rate commensurate with demand, given easier access to capital – notwithstanding the concerns we expressed above in relation to the manner in which that capital was typically structured.
From a policy perspective, the results shed light on the implications of the privatization policy, and its capacity to operate successfully and consistently as an element of a broader portfolio of policies aimed at stimulating economic growth and health. Our results suggest that irrespective of any of the concerns which might typically be raised in relation to privatization programs such as that adopted in Vietnam (e.g narrow wealth transfer effects, etc), the enterprises were generally more financially and operationally robust after a three year journey into the realm of the private domain than they had been at the point of privatization – and in that sense, more able to contribute to growth and employment on a sustainable basis than may otherwise have been the case.
### Appendix 1: Sample of privatized and listed companies in Vietnam

<table>
<thead>
<tr>
<th>O.</th>
<th>Stock Code</th>
<th>Company Name</th>
<th>Industry</th>
<th>Priv. date</th>
<th>Listing date</th>
<th>Total Assets</th>
<th>Shares volume standing at listing date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AGF</td>
<td>An Giang Fisheries Import &amp; Export JS Com.</td>
<td>M</td>
<td>28/06/01</td>
<td>2/05/02</td>
<td>127,138,000</td>
<td>4,179,130</td>
</tr>
<tr>
<td>2</td>
<td>BBC</td>
<td>Bien Hoa Confectionery Corporation</td>
<td>M</td>
<td>1/12/98</td>
<td>19/12/01</td>
<td>107,175,000</td>
<td>5,600,000</td>
</tr>
<tr>
<td>3</td>
<td>BPC</td>
<td>Bim Son Packaging Joint-Stock Company</td>
<td>M</td>
<td>8/01/99</td>
<td>11/04/02</td>
<td>51,867,000</td>
<td>3,800,000</td>
</tr>
<tr>
<td>4</td>
<td>BT6</td>
<td>Chau Thoi Concrete Corporation No. 620</td>
<td>M</td>
<td>28/03/00</td>
<td>18/04/02</td>
<td>176,123,000</td>
<td>5,882,690</td>
</tr>
<tr>
<td>5</td>
<td>BTC</td>
<td>Binh Trieu Construction and Engineering JS Com.</td>
<td>M</td>
<td>10/12/98</td>
<td>21/01/02</td>
<td>43,933,000</td>
<td>1,261,345</td>
</tr>
<tr>
<td>6</td>
<td>CAN</td>
<td>Halong Canned Food Corporation</td>
<td>M</td>
<td>31/12/98</td>
<td>22/10/01</td>
<td>59,143,000</td>
<td>3,500,000</td>
</tr>
<tr>
<td>7</td>
<td>DPC</td>
<td>DA Nang Plastic JS Company</td>
<td>M</td>
<td>4/08/00</td>
<td>28/11/01</td>
<td>37,200,000</td>
<td>1,587,280</td>
</tr>
<tr>
<td>8</td>
<td>GIL</td>
<td>Binh Thanh Import-Export, Production &amp; Trade JS Com.</td>
<td>M</td>
<td>24/11/00</td>
<td>2/01/02</td>
<td>59,626,000</td>
<td>1,700,000</td>
</tr>
<tr>
<td>9</td>
<td>GMD</td>
<td>General Forwarding &amp; Agency Corporation</td>
<td>T&amp; S</td>
<td>24/07/93</td>
<td>22/04/02</td>
<td>429,650,000</td>
<td>17,718,455</td>
</tr>
<tr>
<td>10</td>
<td>HAP</td>
<td>HAPACO JS Company</td>
<td>M</td>
<td>28/10/99</td>
<td>4/08/00</td>
<td>19,566,000</td>
<td>1,008,000</td>
</tr>
<tr>
<td>11</td>
<td>HAS</td>
<td>Hanoi P&amp;T Construction &amp; Installation JS Com.</td>
<td>T&amp; S</td>
<td>13/10/00</td>
<td>19/12/02</td>
<td>85,850,000</td>
<td>1,200,000</td>
</tr>
<tr>
<td>12</td>
<td>KHA</td>
<td>Khanh Hoi Import Export Joint-Stock Company</td>
<td>T&amp; S</td>
<td>7/03/01</td>
<td>19/08/02</td>
<td>60,226,000</td>
<td>1,900,000</td>
</tr>
<tr>
<td>13</td>
<td>LAF</td>
<td>Long An Food Processing Export JS Company</td>
<td>M</td>
<td>1/07/95</td>
<td>15/12/00</td>
<td>67,034,000</td>
<td>19,308,200</td>
</tr>
<tr>
<td>14</td>
<td>PMS</td>
<td>Petroleum Mechanical Stock Company</td>
<td>M</td>
<td>31/05/99</td>
<td>4/11/03</td>
<td>55,436,000</td>
<td>3,200,000</td>
</tr>
<tr>
<td>15</td>
<td>REE</td>
<td>Refrigeration Electrical Engineering Corporation Cables And Telecom Materials Joint-Stock Com.</td>
<td>M</td>
<td>13/11/93</td>
<td>28/07/00</td>
<td>212,427,000</td>
<td>15,000,000</td>
</tr>
<tr>
<td>16</td>
<td>SAM</td>
<td>Import-Export &amp; Economic Co-Operation JS Com.</td>
<td>M</td>
<td>30/03/98</td>
<td>28/07/00</td>
<td>155,038,000</td>
<td>12,000,000</td>
</tr>
<tr>
<td>17</td>
<td>SAV</td>
<td>T &amp; S</td>
<td>10/04/01</td>
<td>9/05/02</td>
<td>114,076,000</td>
<td>174,377,000</td>
<td>17,663,000</td>
</tr>
<tr>
<td>18</td>
<td>SGH</td>
<td>Sai Gon Hotel JS Company</td>
<td>T&amp; S</td>
<td>15/01/97</td>
<td>16/07/01</td>
<td>24,971,000</td>
<td>1,766,300</td>
</tr>
<tr>
<td>19</td>
<td>TMS</td>
<td>Trans-Forwarding And Warehousing Corporation</td>
<td>T&amp; S</td>
<td>3/12/99</td>
<td>4/08/00</td>
<td>65,153,000</td>
<td>2,200,000</td>
</tr>
<tr>
<td>20</td>
<td>TS4</td>
<td>Sea Food Joint-Stock Company No. 4</td>
<td>M</td>
<td>11/01/01</td>
<td>8/08/02</td>
<td>25,304,000</td>
<td>1,500,000</td>
</tr>
<tr>
<td>21</td>
<td>VTC</td>
<td>VTC Telecommunications JS Company</td>
<td>T&amp; S</td>
<td>8/09/99</td>
<td>12/02/03</td>
<td>35,875,000</td>
<td>1,797,740</td>
</tr>
</tbody>
</table>
REFERENCES


