

TRANS ISLAND



CORPORATE MISSION

"To develop TIBS Holdings into a major diversified regional group in transport, manufacturing, trading and investment, built on a foundation of excellence in service and product."



EXECUTIVE SUMMARY

This report sought to provide a financial analysis on Trans-Island Bus Services (TIBS) Pte Ltd. A brief milestone of TIBS and Singapore public bus system, followed by business structure, revenue composition, major competitors and ridership are incorporated.

Current issues confronting by TIBS were the rise in oil price, increase in turnover for transport-related operations, joint venture with Ezcard Pte Ltd, and with RATP (French rail operator) to bid for Singapore Marina line project were discussed.

The assessment of TIBS financial performance was based on TIBS annual report 1999* with comparison to its major competitor DelGro Pte Ltd, using DuPont ROE approach as a benchmark, reveals that TIBS is performing well.

Valuation models like Operating Cash Flow Model (OCF), Free Cash Flow to Equity Model (FCFE), Dividends Valuation Model (DDM), Net Tangible Asset Backing Model and Earnings Capitalisation Model were used to estimate TIBS' share price.

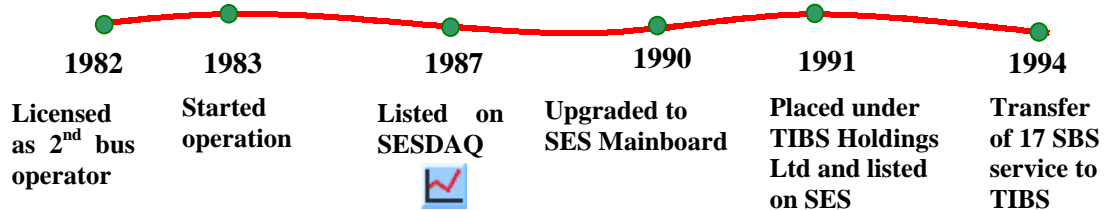
Lastly, comparisons of the estimated and market share price were discussed.

* TIBS Annual Report 2000 was unavailable at the time this report is done.



1.0 CORPORATE PROFILE

1.1 HISTORY OF TRANS-ISLAND BUS SERVICES LIMITED (TIBS)



Trans-Island Bus Services was inaugurated on 31 May 1982 by Mr Ong Teng Cheong, the then Minister for Communications (centre).

TIBS was incorporated on 31st May 1982, second major public bus operator in Singapore, after Singapore Bus Services (SBS). TIBS rolled into operations on 3rd April 1983 with initial fleet of 37 buses on 2 services. This provided healthy competition to SBS, to enhance the performance and efficiency and ultimately bring about a better service level.

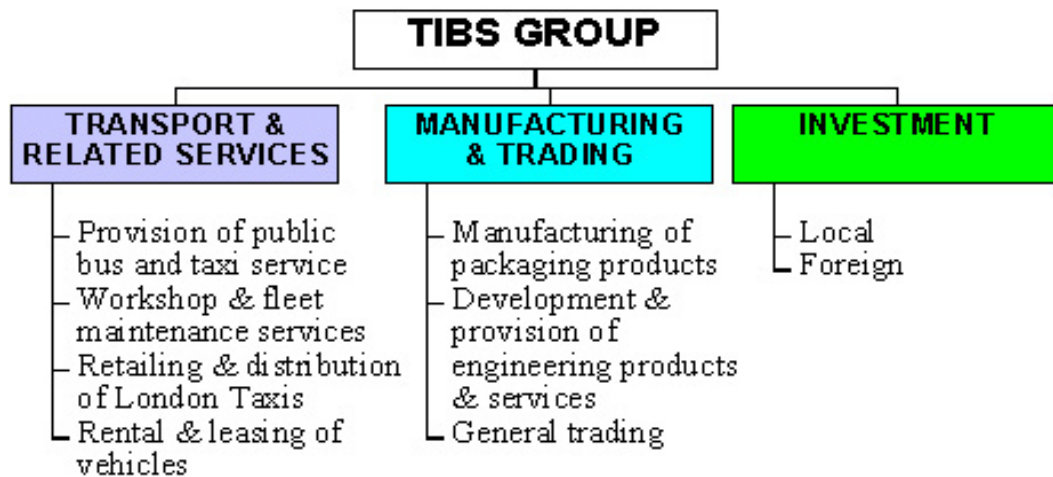
Trans-Island Bus was listed on SESDAQ in 1987. By 1990, Trans-Island Bus had upgraded to the Mainboard of the Singapore Stock Exchange (SES). In 1991, Trans-Island Bus was restructured, with its subsidiaries placed under a holdings company called TIBS Holdings Ltd. It was listed on SES in replacement of Trans-Island Bus. In August 1994, the government announced the transfer of 17 SBS service to TIBS, with its responsibilities expanded to areas like Bukit Panjang New Town and upcoming towns like Sengkang, Punggol, Sembawang and Simpang.

Today, TIBS' network and bus fleet have expanded with more than 600 buses on 53 routes. It operates from three major interchanges in the northern part of Singapore,



namely, Choa Chu Kang Interchange, Yishun Interchange, and Woodlands Regional Interchange.

TIBS focuses its attention into three main business areas; manufacturing and trading, transport and related business, and investment.





2.0 THE PUBLIC TRANSPORT INDUSTRY

2.1 HISTORY OF THE PUBLIC TRANSPORT SYSTEM

From trams and trolley buses to air-conditioned buses to Mass Rapid Transit (MRT) and Light Rail Transit (LRT), below highlights a short history of Singapore public transport system.

1902

Singapore Electric Tramsaway Limited was the first company to be given permission to build, equip and run tramways, which started running in 1905.

1925

Shanghai Electric Construction Company Limited established the Singapore Traction Company (STC), with a 30-year monopoly to run trolley buses and motorbuses within the town.

1927 - 1962

During this period, electric tramcars were replaced by the trolley buses and phased out by faster motorbuses.



1955

Problems like operational difficulties, poor management, labour unrest and frequent work stoppages manipulated by communist-controlled unions, paralysed the whole bus system. In 1956, the 'Great STC Strike' lasted 146 days.

1970

The bus system underwent the first major reorganisation by amalgamating the ten Chinese bus companies into three bus companies and grouped into four regional sectors.

1. Amalgamated Bus Company Ltd.-eastern sector.
2. The Associated Bus Services (Pte) Ltd-western sector.
3. United Bus Ltd-northern sector.
4. STC-southern sector.



1971 - 1973

STC closed down due to great financial losses in 1971. In 1973 Second reorganisation merged the three bus companies into a single unified organization, Singapore Bus Service (SBS).



1975

City Shuttle Service (CSS) was introduced to ply between fringe car parks and Central Business District, was jointly operated by the Singapore Shuttle Bus Private Limited and the NTUC Comfort



1987-1990

7 November 1987 - the first MRT section of five stations on the Toa Payoh to Yio Chu Kang. Official ceremony commemorating the completion of the 67 kilometre, 42-station Singapore Mass Rapid Transit (SMRT) system.



1997-1999

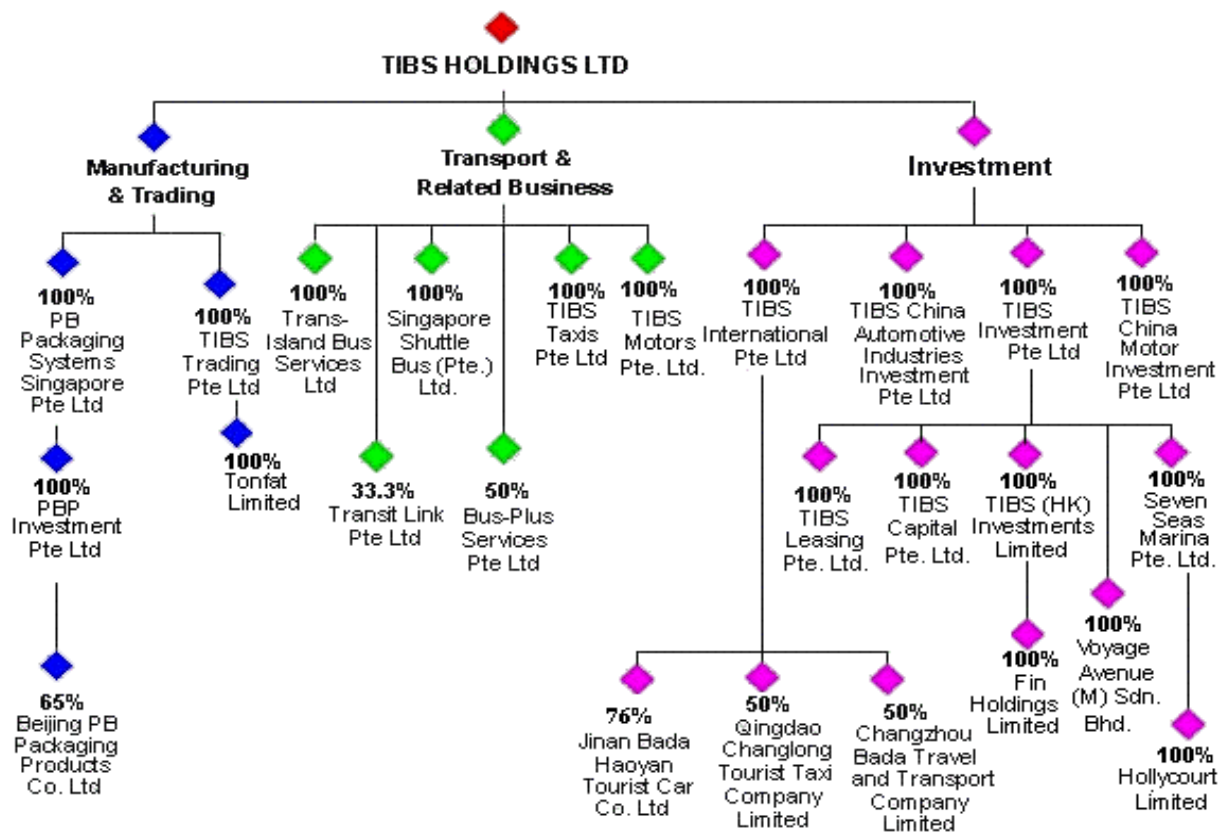
12 July 1997 - SMRT's wholly owned subsidiary, Singapore Light Rail Transit (LRT) Pte Ltd is incorporated.
6 November 1999 - The opening of Bukit Panjang LRT system.





2.2 BUSINESS STRUCTURE

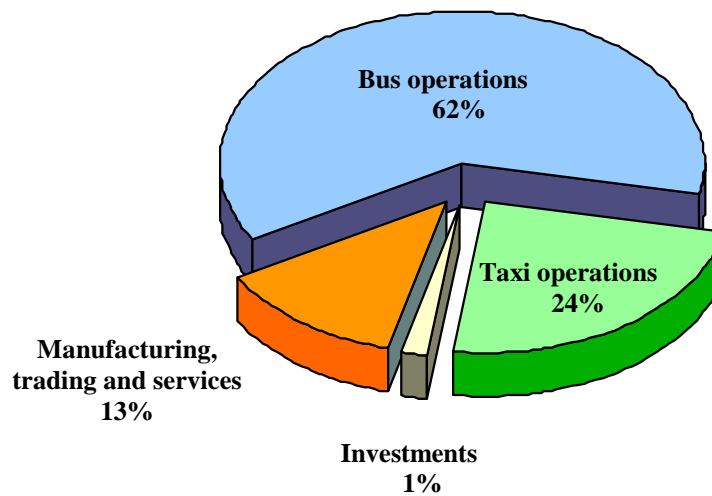
As a diversified regional group, TIBS Holdings Limited has its activities categorized into three main sectors: (1) **transportation and related services business**, (2) **trading business** and (3) **investments**. The following chart had its businesses listed out:





2.3 REVENUE COMPOSITION

The bulk of TIBS Holdings' total revenue of SGD\$199,484,000 in 1999 was generated from bus and taxi operations. Bus operations accounted for 62% of 1999 revenues; taxi operations, 24%; manufacturing, trading and servicing, 13% and investment, 1%.





2.4 MAJOR COMPETITORS

There are two major players in the market, Comfort Group Ltd and Delgro Corporation Ltd (Delgro), TIBS have to compete against.

The Comfort Group of companies is a homegrown land transport conglomerate and Singapore's industry leader in taxi operations with operations in Singapore and China. They provide public taxi transport by renting of taxis to hirer and also workshops for repairing, inspection, general maintenance of motor vehicles and distribution of motor vehicles and scooters. The group also operates a driving school, Kampong Ubi Test Centre, Their CabLink system, its \$32 million satellite-based taxi despatch service, has revolutionised taxi services to unprecedented efficiency levels.



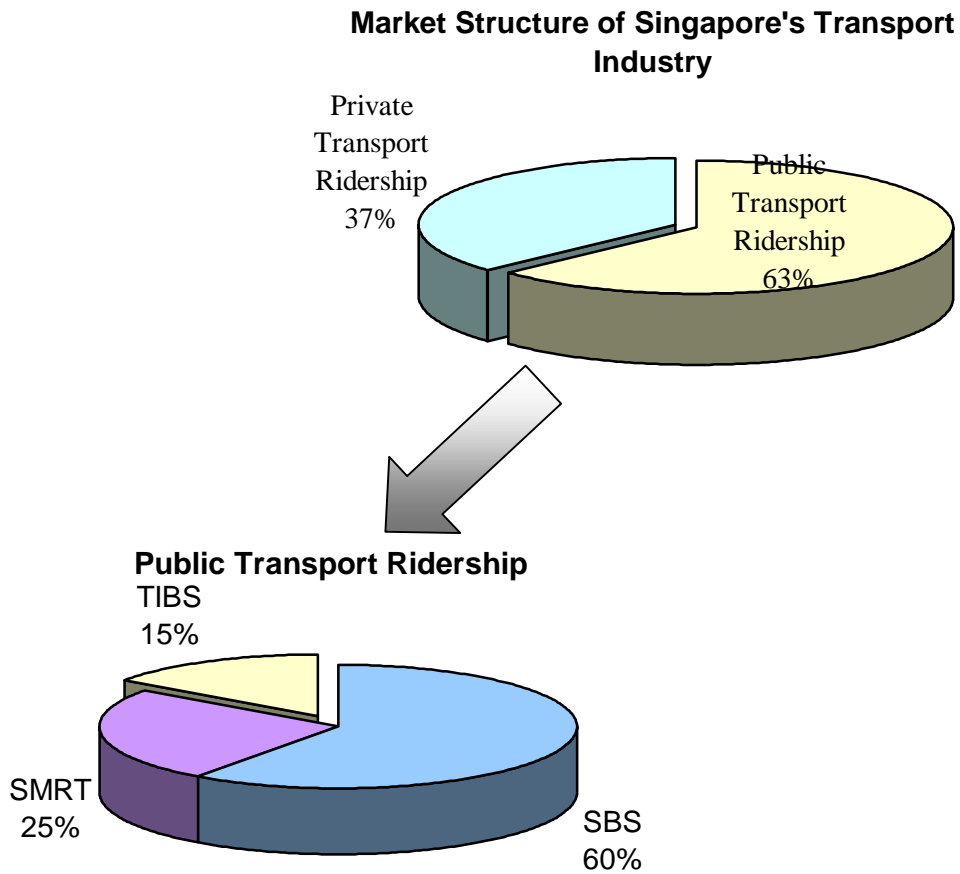
The transport-based DelGro Group is an investment holding company and provides management and corporate service support to its various strategic business units involved in public and personal transport. Delgro have a 75per cent stake in the listed Singapore Bus Services Ltd (SBS) and it also jointly owned CityCab that provides taxi services with Singapore Technologies Automotive Ltd. Other activities of the group include engineering and property development.





2.5 RIDERSHIP

The market structure of Singapore transport industry and the breakdown of ridership for the public transport segment are illustrated as below:





3.0 CURRENT ISSUES

3.1 INCREASED FUEL COSTS

Crude Oil Price Hitting US\$35 Per Barrel

As the crude oil price rises to the year high of US\$35 per barrel, market is likely to expect share counters in the transport/storage/communication industry to experience both trading interest and selling pressure.

<http://www.asiastockwatch.com/asw/frontdoor>.

As a hike in fuel prices implies an increase in transportation and logistic costs, many would think that business operating expenses for companies here would similarly increased and hence yield a thinner profit margin (The Straits Times, 19th September 2000).

Impact on its Share Price

Even though the hike in oil price may affect TIBS, this increase is not really significant enough to create an impact on its share price. This is because any extreme swings in oil prices are being moderated by their Fuel Equalisation account which was set up as directed by Public Transportation Council.

3.2 INCREASE IN TURNOVER FOR BUS AND TRANSPORT-RELATED OPERATIONS

After the 5% bonus rebate is withdrawn in year 2000 and the take over of 17 SBS's Bus services in Choa Chu Kang and Bukit Batok in exchange for TIBS' eight bus services in Sengkang and Punggol, TIBS profit margin will be expected to increase for the financial year ending 31st December 2000.

Impact on its Share Prices

As bus fleet is expected to increase, operating expenses are also expected to rise due to an increase in manpower. However, with efficient management and continued efforts towards higher productivity in their bus operations, its profitability remains optimistic.



3.3 INCORPORATION OF JOINT VENTURE COMPANY KNOWN AS EZCARD PTE LTD

On the 28th Oct 2000, TIBS Holdings formed a joint venture company, known as EZCard Pte Ltd, with SBS and SMRT to provide multi-purpose stored value “smart” cards for use on public transport as well as an alternative mode of payment in Singapore. TIBS will hold a 15% stake in the joint venture, 45% for SBS and 40% for SMRT (<http://www.shareinvestor.com>).

Impact on its Share Price

3.4 TIBS PARTNERS FRENCH RAIL OPERATOR TO JOINTLY BID FOR SINGAPORE’S MARINA LINE PROJECT

On the 12th of Feb 2001, TIBS signed an agreement with French rail company RATP to work towards the bidding for the proposed S\$1 billion Marina Line rapid transit system project. The six-station and driverless project will involve the operation and maintenance of the new underground transport system which should be completed in 2005.

According to Mr Ng Ser Miang, managing director of TIBS Holdings, the agreement may lead to a joint venture with RATP which will facilitate both TIBS’ moves in expanding its current public transportation coverage in Singapore as well as enhancing TIBS shareholders’ value (The Business Times, 13th Feb 2001).

Impact on share prices

Upon making this announcement on 12th Feb 2001, the share price rose slightly from SGD\$1.080 to a day high of SGD\$1.150. A small number of optimistic investors reacted immediately to the news as market analysts and observers also viewed that TIBS has potential for future joint ventures.



4.0 DUPONT ROE ASSESSMENT

The DuPont System is an indicator of performance, which divides the ROE ratio into three components represented by profit margin, asset turnover and leverage.

The ROE ratio 'indicates the rate of return that management has earned on the capital provided by the owner after accounting for payments to all other capital suppliers' (Reilly and Norton, 1999, p.297).

$$ROE = \frac{\text{Net Income}}{\text{Common Equity}} = \frac{\text{Net Income}}{\text{Net Sales}} \times \frac{\text{Net Sales}}{\text{Total Assets}} \times \frac{\text{Total Assets}}{\text{Common Equity}}$$

3.1 TIBS PERFORMANCE FOR 1999

TIBS' ROE is 4.8387 for the financial year under 31st December 1999. Using the DuPont System, TIBS' ROE is calculated as follows:-

TIBS					
YEAR	SALES/TOTAL ASSETS	NET PROFIT MARGIN (%)	RETURN ON TOTAL ASSETS	TOTAL ASSETS/EQUITY	RETURN ON EQUITY (%)
1999	0.6277	3.7005%	2.3230	2.0830	4.8387

$$\begin{aligned}
 ROE &= \text{Profit Margin} \times \text{Total Asset Turnover} \times \text{Financial Leverage} \\
 &= 3.7005 \times 0.6277 \times 2.0830 \\
 &= \mathbf{4.8387}
 \end{aligned}$$

4.1.1 PROFIT MARGIN (NET INCOME/ NET SALES)

For every dollar worth of sales, TIBS makes a profit of 3.7005%. This is a relatively low figure and TIBS should increase their Net Income by decreasing their operating expenses in a bid to increase their Profit.



4.1.2 TOTAL ASSET TURNOVER (NET SALES/ TOTAL ASSETS)

Every dollar worth of assets generates 0.6277 times in sales. This is a relatively high figure as TIBS has a large amount of assets which is prevalent in its industry. It is thus evident that TIBS is effective in its use of its total asset base. For TIBS to have higher total asset turnover, it should increase its sales.

4.1.3 FINANCIAL LEVERAGE (TOTAL ASSETS/ TOTAL EQUITY)

For every S\$2.083 of assets, there is a dollar of equity, which means TIBS financed approximately half of its assets with equity with the remainder financed through debt. TIBS can increase this figure by having less equity.

4.2 TIBS PERFORMANCE OVER TIME

TIBS					
YEAR	SALES/TOTAL ASSETS	NET PROFIT MARGIN (%)	RETURN ON TOTAL ASSETS	TOTAL ASSETS/ EQUITY	RETURN ON EQUITY (%)
1994	0.7851	9.6557%	7.5810	1.3910	10.5454
1995	0.6112	4.3424%	2.6539	1.9220	5.1006
1996	0.5979	-3.2882%	(1.9661)	2.2687	(4.4604)
1997	0.5700	0.2459%	0.1402	2.0767	0.2911
1998	0.6049	1.6116%	0.9748	2.1347	2.0810
1999	0.6277	3.7005%	2.3230	2.0830	4.8387

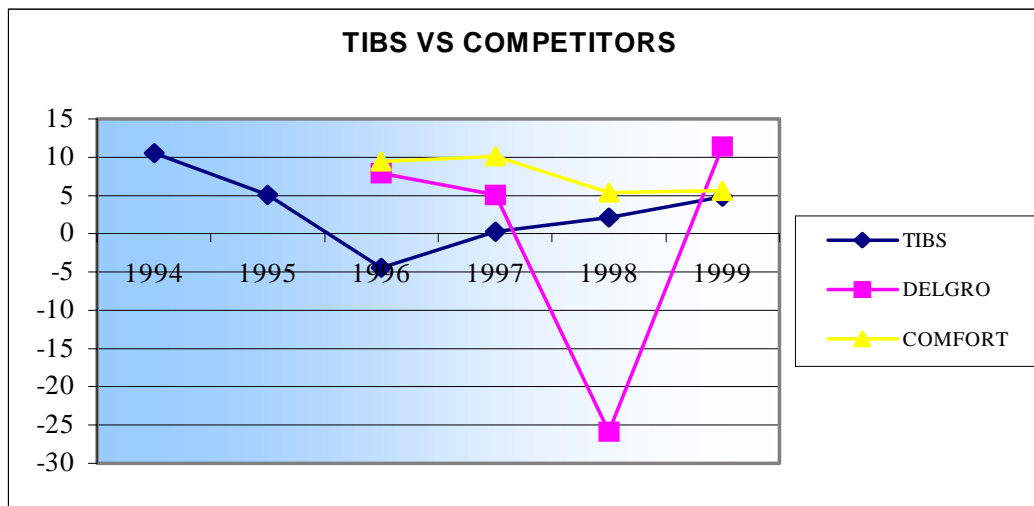
ROE rose progressively from 1997 to 1999 with an abrupt decline from 1995 to 1996. This abrupt decline was attributed to an increase in depreciation arising from the purchase of 384 new buses and higher manpower cost in 1995 and 1996. The drop in profit margin in 1996 was caused by the introduction of the SMRT's North-West route which further aggravated their performance.

4.3 TIBS PERFORMANCE AGAINST COMPETITORS



DELGRO					
YEAR	SALES/TOTAL ASSETS	NET PROFIT MARGIN (%)	RETURN ON TOTAL ASSETS	TOTAL ASSETS/EQUITY	RETURN ON EQUITY (%)
1996	0.7414	9.3288%	6.9162	1.1422	7.8998
1997	0.4635	5.5775%	2.5851	1.9436	5.0246
1998	0.5170	-25.0800%	(12.9673)	1.9962	(25.8848)
1999	0.5349	12.5972%	6.7380	1.6967	11.4323

COMFORT					
YEAR	SALES/TOTAL ASSETS	NET PROFIT MARGIN (%)	RETURN ON TOTAL ASSETS	TOTAL ASSETS/EQUITY	RETURN ON EQUITY (%)
1996	0.4426	16.9577%	7.5049	1.2566	9.4304
1997	0.5186	14.4388%	7.4873	1.3439	10.0622
1998	0.5331	6.6281%	3.5337	1.5265	5.3943
1999	0.5707	6.1976%	3.5369	1.5781	5.5814



In spite of the economic problems in the region, TIBS still performed well in 1998 as compared to its major competitors, with growth mainly from the transport related sector. It can be seen from the table above that a steady growth has been maintained since 1997. The economic crisis had, however, adversely affected the group's main competitors with drastic declines in their ROEs.

1999 saw the recovery of most corporations from the economic crisis and DelGro was no exception, making a strong recovery with a dramatic increase in ROE. Comfort also made a gradual recovery with a slight rise in ROE.



5.0 ASSUMPTIONS OF VALUATION MODELS

5.1 GENERAL ASSUMPTIONS

- The growth rate for TIBS is estimated to be constant at 6% for an infinite period. The estimation of this growth rate is supported by our current issues and this rate will be used consistently throughout all other valuation models.
- The intrinsic value of the share of common stock is assumed to be the present value of all future dividends.

5.2 ASSUMPTIONS FOR VALUATION MODELS

5.2.1 Dividend Valuation Model (Refer to Appendix I)

- Future dividends will grow at a constant rate for an indefinite period.
- The average market return (R_m), is calculated based on the SES-All Index extracted from SES journals from 1994-1999.
- The long-term Singapore government bonds rate has been chosen as the risk-free (R_f) rate as it is virtually default-free as it is inconceivable that the government would allow them to default and they are fairly liquid. Therefore, the five-year Singapore government bond at 4% risk free rate is used. Prime lending rate from OUB Bank as at 9th March 2001 is 5.5%.
- Dividend payments of 6% for the year 1999 as proposed have been paid out to shareholders.
- Dividends per share for year 2000 has been estimated using year 1999's paid out dividend multiplied by the growth rate.



Sensitivity of Valuation

Any change in the projected growth rate would significantly affect the valuation.

PVs	=	$\frac{D_1}{K - g}$
	=	$\frac{0.030 \times (1 + 0.06)}{0.106014 - 0.06}$
	=	0.6911

Hence, using the Dividend Discount Model (DDM), TIBS share price should have a present value of SG\$0.69.

5.2.2 Operating Cash Flow Model (Refer to Appendix II)

- The Weighted Average Cost of Capital (WACC) is used as the required rate of return.
- The operating cash flow per share for year 2000 is expected to grow with the planned acquisition of additional buses and the introduction of new bus services.

Sensitivity of Valuation

Any variation in the working expenditure and the change in working capital would affect the operating cash flow and ultimately the valuation. A change in the growth rate would also affect the valuation.



OPERATING CASHFLOW MODEL	
	1999
EBIT	6,506,046
<i>Add:</i>	
Depreciation	45,313,026
<i>Less:</i>	
Changes in Working Capital	12,507,260
Capital Expenditure	31,122,781
Tax	1,346,826
Operating Cashflow	6,842,205
Number of Shares Issued	91,916,822
Operating Cashflow Per Share	0.0744

OCF₁ Estimated Operating Cashflow for 2000	= 0.0800
	g_{ocf} = 0.0600
	WACC_j = 0.0986

V_f	=	$\frac{OCF_1}{WACC_j - g_{ocf}}$
	=	$\frac{0.0800}{0.0386}$
	=	2.0725

V_f = Value of TIBS' firm

OCF_1 = TIBS' operating cash flow in year 2000

$WACC_j$ = TIBS' weighted average cost of capital

g_{ocf} = TIBS' estimated growth rate at 6%

Hence, using the Operating Cash Flow Model (OCF), TIBS share price should have a present value of SG\$2.07.



5.2.3 Free Cash Flow To Equity Model (Refer to Appendix III)

- The Capital Asset Pricing Model (CAPM) is used as the required rate of return as these free cash flows are available to equity owners.
- Free cash flow per share for the year 2000 is expected to grow with the planned acquisition of additional buses and the introduction of new bus services (similar to that of operating cash flow per share).

Sensitivity of Valuation

Any variation in the working expenditure and the change in working capital would affect the operating cash flow and ultimately the valuation. A change in the growth rate would also affect the valuation. Interest rate variations would result in a change of free cash flow thereby affecting the valuation.

FREE CASHFLOW MODEL	
	1999
EBIT	6,506,046
<i>Add:</i>	
Depreciation	45,313,026
<i>Less:</i>	
Changes in Working Capital	12,507,260
Capital Expenditure	31,122,781
Tax	1,346,826
Operating Cashflow	6,842,205
<i>Less:</i>	
Interest	3,521,443
Free Cashflow	3,320,762
Number of Shares Issued	91,916,822
Free Cashflow Per Share	0.0361

FCF₁ Estimated Free Cashflow for 2000	=	0.0400
g_{ocf}	=	0.0600
CAPM	=	0.1060



V_s	=		$\frac{FCF_1}{CAPM - g_{ocf}}$
			$\frac{0.0460}{0.0400}$
			0.8696

V_s = Value of TIBS' shares
 FCF_1 = TIBS' free cash flow in year 2000
 CAPM = TIBS' CAPM value
 g_{ocf} = TIBS' estimated growth rate at 6%

Hence, using the Free Cash Flow To Equity Model (FCFE), TIBS share price should have a present value of SG\$0.87.

5.2.4 EARNINGS CAPITALISATION MODEL (Refer to Appendix IV)

- Earnings per share is estimated to grow due to the expected increase in net income for year 2000.

Sensitivity of Valuation

This valuation is influenced by the PE ratio and the Earnings Per Share (EPS).

PV	=	(Price Earnings (P/E) Ratio) X (Earnings Per Share ₁)
		= 15.94 X 0.08513
		= 1.3568

Hence, using the Earnings Capitalisation Model, TIBS share price should have a present value of SG\$1.35.

5.2.5 NET TANGIBLE ASSET BACKING MODEL

(Refer to Appendix V)



- Calculations were based on figures extracted directly from annual reports.

NET TANGIBLE ASSETS	=	$\frac{\text{Total Tangible Assets} - \text{Total Liabilities}}{\text{Number of Share Issued}}$
	=	$\frac{310,305,183 - 160,532,786}{91,916,822}$
	=	1.6294

Hence, using the Net Tangible Asset Backing Model, TIBS share price should have a present value of SG\$1.63.

6.0 VALUATION MODEL ASSESSMENT

The differences in our valuations and the current share price (SGD 1.090 as of 30th September 2000) of TIBS are explained in this section.

6.1 COMPARISON OF VALUATION WITH CURRENT SHARE PRICE

With reference to the Dividend Discount Model (DDM) and the Free Cash Flow To Equity Model (FCFE), TIBS share price should have a present value of SG\$0.69 and SGD0.8696 respectively. The current share price of SG\$1.09 proves to be over-valued as compared with our calculation.

However, using the Earnings Capitalisation, Operating Cash Flow and Net Tangible Asset Models, TIBS share price should have a present value of SGD1.3568, SGD2.0725, SGD1.6294 respectively. The current share price proves to be under-valued as compared with our calculations.

6.2 RATIONALE

1. The valuations are based on historical data while superceding events might have taken place, therefore caused a relatively significant deviation.



2. The expectations of investors might have somehow changed, hence affecting the volatility share prices. As some methods of calculations are based on individuals' expectations of risks, growth and required rate of return.
3. The type of market also plays a part. How fast the market can absorb the information and react to the price changes can be a possible reason for deviations.
4. The various estimations made for the year 2000 may not be accurate as predictions are based on our judgmental analysis of current issues and other economical factors. This may prove to be subjective and may differ among individuals.
5. All estimations are based on the assumption that dividends would be paid out to shareholders annually as proposed for an indefinite period, which may not be realistic in practice.
6. Each model used to value share price is based on selected variables and does not consider other contributing variables. The market price of the firm's shares should reflect all market information and influencing factors and not just variables used in the calculations for each model.



7.0 CONCLUSION

The economic crisis had affected many corporations and TIB's was not spared either. From TIBS' ROE it can be seen that its performance is considered relatively weaker when compared with Comfort and Delgro. However, TIBS' ROE can be seen to be gradually increasing over the years. TIBS should either improve their efficiency by decreasing operating expenses thereby increasing their net profit margin.

As TIBS is mostly an asset-driven company with many additional acquisitions and accumulation of assets, the Net Tangible Asset Model can be considered to be the best measure of its current value as compared to the other four models mentioned. Using this model, TIBS' current share price of SGD1.08 is undervalued and potential investors should buy TIBS' shares.



8.0 REFERENCES

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