CHAPTER 2

SHARE PRICING

2.1 Privatization and the Capital Market

Divestment as a form of privatization usually involves the public listing of stocks of newly privatized state enterprises. This may also facilitate the financing of capacity expansion of these enterprises. However, the practice of floating the equity of newly-privatized state enterprises/agencies has been relatively new in Malaysia.

There has been some discussion of the effects of privatization on the development of capital markets. According to Bishop and Kay (1989), underpricing is common in South Korea and Singapore, but even more prevalent in Malaysia. It is believed that underpricing may be a deliberate means to effect a redistribution of wealth. In Malaysia, it seems to have been used as a tool to redistribute corporate wealth to the indigeneous population. Ariff and Chung (1993) have indicated that deliberate underpricing may help to attain public policy goals and also to reduce the political costs to the government in case of the failure of share issues.

2.2 Underpricing of Initial Public Offerings (IPOs)

Many studies have presented convincing empirical evidence that initial public equity offerings (IPOs) have been underpriced on average. A new issue is said to be underpriced when initial returns, calculated as the relative difference between the offer price and the price at the time of listing, are positive. That is, when the new issue is traded above its issue price upon listing.

$$\text{Initial returns} = \frac{\text{Price on first day/week/month}}{\text{Issue price}}$$

The magnitude of the underpricing, or issue price discount, varies with the state of the market.

The average extent of underpricing of Canadian IPOs and their US counterparts ranged from 9 to 11.5 percent in the first three days after issue. Reilly and Hatfield (1969) found an average price discount of 9.9 percent in the performance of 53 new equity issues during 1963-65 in the U.S. This was then confirmed by Reilly (1973, 1977) in his study on 62 new issues in 1969 and 486 new issues during 1972-75. Koh and Tee (1985), who looked at price performance and risk for 62 new issues in Singapore during 1973-84, found a 36.5 percent discount during the first month of trading.

Dawson (1985) examined 29 new equity issues in 1978-84 and found them underpriced, on average, by 37.5 percent against the market price on the first day of trading in Singapore. Othman Yong (1991), who studied new issues in Malaysia from 1983 to 1988, showed that returns from these investments were high, averaging 167 percent on the first day.

2.2.1 Reasons for Underpricing

Several hypotheses have been suggested to explain underpricing of new issues. One of the simplest propositions is the 'naive hypothesis' which states that underpricing represents a 'risk premium' which investors demand because the lack of a performance history for the issue increases uncertainty about future performance. Beatty and Ritter (1986) have contended that the greater the ex-ante uncertainty, the greater the underpricing. Hence, the IPOs must be underpriced if relatively uninformed potential investors are to be induced to submit bids.

Another hypothesis introduced by Ivo Welch (1992) states that the IPO market may be subject to information "cascades". In this model, potential investors not only pay attention to their own information about a new issue, but also follow other investors. If the investor finds that no one else wants to buy, he may decide not to buy even if he

2.3 Underpricing of Privatized Entities in Malaysia

Underpricing of initial public offerings (IPOs) by private firms has been widespread. A large number of studies have revealed the frequent incidence of large initial returns on the first day and in the first week of trading.

Our concern here is not with the underpricing of IPOs of originally private firms but with the share price performance of privatized government entities, or government-linked companies (GLC).

One of the reasons given for the underpricing of IPOs of private firms is ex-ante uncertainty, as private firms are subjected to less or no scrutiny in the years before their listing. But ex-ante uncertainty about the performance of privatized entities is much lower than for private firms because a government entity's performance would be made known to those bidding for shares in these firms. Since ex-ante uncertainty is lower in privatized firms, underpricing should not result.

A number of reasons that may affect the decisions of investment bankers on the offer prices of the privatized government entities have been given.

Privatization programmes are the brainchilds of governments and it is politically important that the privatization programme be initially successful. Thus, for the privatisation process to be successful, it must attract a lot of buyers. On such occasions, the government has no choice but to compromise revenue objectives rather than lose sales. In such a situation, the government would probably have to intentionally underprice an offer. It is important to improve the chances of success of the offer as failure would have serious political costs.

Another key goal of deliberate underpricing of the offer is to achieve wider share ownership, ostensibly to gain more equitable wealth distribution. Unfortunately, this objective of wider share ownership has been negated by the practice of 'stagging', i.e. small individual investors selling their shares for quick profits, shortly after they are listed.

As Bishop and Kay (1989) have suggested:

> "The government has thus been confronted with a considerable dilemma: to increase share ownership among a risk - averse public unused to share-dealing - it is necessary to offer tempting discounts, but a large discount means that substantial gains can be made by early sales, in which case wider share ownership has little endurance."

Another reason would be that underpricing an offer could act as an incentive to increase the probability of participation in successive privatization share issues.

According to Ariff and Chung (1993), the average underpricing of private IPOs in Malaysia, Singapore and the United Kingdom has been estimated to be 104.0 percent, 36.5 percent and 9.1 percent respectively. They found that the average adjusted returns from privatized IPOs due to underpricing in all three markets were systematically higher than the averages for private IPOs, i.e. by 133.5 percent, 41.7 percent and 14.0 percent respectively in Malaysia, Singapore and the United Kingdom.

It is interesting to note that there are differences in the average adjusted returns between privatized and private IPOs. Could these differences be due to intentional underpricing by issuers to attain public policy goals. If significant, such premiums would be evidence of a higher degree of underpricing for privatized entities. Such premiums could be due to temporary demand shifts, perhaps owing to intense campaigns aimed at obtaining higher than equilibrium prices at listing times to minimize political costs (Aggrawal and Rivoli, 1990).

The objective of this study is to investigate the price performance of privatized share issues at the time of initial listing compared to the price performance of new issues of private stock.

It is known that there is a difference in the average adjusted returns between private and privatized initial public offerings (IPOs). There could be intentional underpricing of privatized IPOs by the issuers to achieve public policy goals. This chapter will focus on whether the difference in average adjusted returns between private and privatized IPOs is statistically significant, and whether there is intentional underpricing of privatized IPOs.

2.3.1 Data and Methodology

This study uses secondary data collected from daily price records of the Kuala Lumpur Stock Exchange (KLSE), the prospectuses of new share offers, and the Annual Companies' Handbook. The sample includes 12 government entities that were privatized between 1984 to 1992. Twenty private IPOs listed on the KLSE in the same period (1984-92) were also selected randomly. The companies obtained are from the KLSE's main board as the privatized entities are only listed on the main board of the KLSE.

Only 20 private IPOs were selected as we are only interested in undertaking a student-t test (small sample test) as there are only 12 privatized entities in our sample.

Market Adjusted Initial Return

The initial return of the issue is defined as the percentage change in price from the offer price to the first day listing price. It is then adjusted for market changes using industrial indices as a proxy) for the period between the issue of the prospectus and the first official listing.

$$SA_i = \frac{I_{oi}}{I_{Li}} \times S_{Li}$$

where I_{oi} = KLSE industrial index on the date the prospectus for stock i is issued

I_{Li} = KLSE industrial index on the date the stock i is officially listed

S_{Li} = Closing price of stock i on the first trading day

SA_i = Adjusted market price of stock i on the first trading day

Adjusted Initial Return

$$AIR_i = \frac{SA_i - So_i}{So_i} \times 100$$

where AIR_i = adjusted initial return to stock i

SA_i = adjusted market price of stock i on the first trading day

So_i = offer price of stock i

See Tables 2.1 and 2.2 for the calculations of the adjusted initial returns for both privatized and private companies respectively. In order to obtain the adjusted initial

returns for stock i, we need to obtain the adjusted market price to compare it with the offer price. Since the length of time between the day of offer and the first day of trading could be between two to three weeks, there could also be changes in market sentiment bringing about price movements. Therefore, it is necessary to allow for such movement in the adjusted market price.

For example, let us look at Table 2.1 and take stock 'MAS' as an example. The closing stock index on the day of offer is given as 482.39 points, but the closing stock index on the first day of trading is 405.14 points, showing that the stock market price index declined by quite a lot. The market had exhibited a downward trend, which could be caused by unfavourable factors such as investors not wanting to buy stocks due to lack of confidence. Thus, the closing price on the first day of trading - which was RM2.45 - needs to be adjusted for such market movements for our purposes. The adjusted market price would then be RM2.92.

TABLE 2.1

AVERAGE ADJUSTED MARKET RETURNS OF THE IPOs OF PRIVATIZED COMPANIES

PRIVATIZED COMPANIES	CLOSING STOCK INDICES ON DAY OF OFFER	CLOSING STOCK INDICES ON DAY OF INITIAL LISTING OR FIRST DAY OF TRADING	OFFER PRICE (RM)	CLOSING PRICE OF FIRST DAY OF TRADING (RM)	ADJUSTED MARKET PRICE (RM)	ADJUSTED INITIAL RETURNS (%)
MAS	482.39	405.14	1.80	2.45	2.92	62.00
SPORTS TOTO	754.33	970.95	2.00	9.55	8.27	313.50
MISC	455.71	598.04	2.40	5.00	4.58	90.83
TRADEWINDS (M)	573.08	614.31	1.10	1.83	1.71	55.45
CEMENT MANUFACTURER SARAWAK	722.77	809.36	1.30	2.17	1.94	49.23
CIMA	614.07	538.17	1.00	1.91	2.18	118.00
TELEKOM	957.08	946.86	5.00	6.10	6.17	23.40
EON	1166.79	1243.17	5.00	8.15	7.65	53.00
KEDAH CEMENT HOLDINGS	1015.21	1091.32	2.00	2.60	2.42	21.00
PROTON	1091.65	1121.99	5.00	6.60	6.42	28.40
TMB	1161.10	1048.23	4.50	8.75	9.69	115.33
KCT	1037.10	1109.84	3.10	8.40	7.85	153.22

Source: KLSE Research Department.

TABLE 2.2

AVERAGE ADJUSTED MARKET RETURNS OF THE IPOs OF PRIVATE COMPANIES

PRIVATE COMPANIES	CLOSING STOCK INDICES ON DAY OF OFFER	CLOSING STOCK INDICES ON DAY OF INITIAL LISTING OR FIRST DAY OF TRADING	OFFER PRICE (RM)	CLOSING PRICE OF FIRST DAY OF TRADING (RM)	ADJUSTED MARKET PRICE (RM)	ADJUSTED INITIAL RETURNS (%)
SUNGEI WAY HOLDINGS	629.49	672.64	1.30	3.84	3.59	176.15
MARUICHI MALAYSIA	389.55	360.92	1.00	1.59	1.72	72.00
MECHMAR BESTOBELL	469.95	380.72	1.00	1.40	1.73	73.00
JOH BAN HUAT	977.23	975.39	1.80	3.04	3.05	69.44
MALAYSIAN HELICOPTER SERVICES	934.41	1025.39	1.35	3.18	2.90	114.81
MYLEX	950.44	1008.67	2.50	4.48	4.22	68.80
NESTLE (M)	991.50	1081.32	5.20	8.90	8.16	59.92
SHAPADU KONTENA	1026.96	1058.76	2.80	4.42	4.29	53.21
LEONG HUP HOLDINGS	1089.29	1010.08	2.60	3.44	3.71	42.69
H & R JOHNSON (M)	1046.19	1109.50	2.50	5.10	4.81	92.40
RESORTS WORLD	1002.46	1138.28	2.30	5.50	4.84	110.43
SIAH BROS.	977.58	1039.05	2.30	3.04	2.86	24.35
HO HUP CONSTRUCTION	1133.32	1006.78	3.00	4.00	5.07	69.00
NANYANG PRESS (M)	813.46	889.05	1.60	3.00	2.80	75.00
SCIENTEX INDUSTRIES	1138.28	1212.33	1.70	4.20	4.64	173.00
METROJAYA	1016.69	974.54	1.90	2.06	2.15	13.16
ANCOM	1202.83	1151.93	1.80	3.50	3.65	102.78
IJM CORP.	410.44	426.04	1.00	1.18	1.14	14.00
PARKWAY	1022.25	977.38	3.80	4.18	4.37	15.00
WEMBLEY INDUSTRIES	1025.73	943.83	1.45	1.48	1.61	11.00

Source: KLSE Research Department.

TABLE 2.3

STATISTICAL RESULTS OF ADJUSTED INITIAL RETURNS OF PRIVATIZED COMPANIES

PRIVATIZED COMPANIES	ADJUSTED INITIAL RETURNS (%)	$(ARig-\bar{P}g)$	$(ARig-\bar{P}g)^2$
MAS	62.00	-30.36	921.73
SPORTS TOTO	313.50	221.14	48,902.40
MISC	90.83	-1.43	2.04
TRADEWINDS	55.45	-36.91	1,362.35
CEMENT MANUFACTURER SARAWAK	49.23	-43.13	1,860.20
CIMA	118.00	25.64	657.41
TELEKOM	23.40	-68.96	4,755.48
EON	53.00	-14.46	209.09
KEDAH CEMENT HOLDINGS	21.00	-71.36	5,092.25
PROTON	28.40	-63.96	4,090.88
TNB	115.33	22.97	527.62
KCT	153.22	60.86	3,703.94
	1,108.26		72,085.89

has favourable information. To prevent this from happening, the issuer may want to underprice an issue to induce some potential investors to buy, and thus induce a cascade in which all subsequent investors want to buy irrespective of their own information.

In many countries, however, it may be required that offer prices must be set based on book values. But for companies with valuable growth opportunities not reflected in their book values, underpricing would result.

Another explanation of underpricing focuses on information asymmetries between issuing firms and their investment bankers. Baron and Holmstrom (1980) hypothesise that investment bankers take advantage of their superior knowledge of market conditions to underprice offerings, which permits them to expend less marketing effort and also to ingratiate themselves with purchasing clients.

Other factors that may result in IPO underpricing include industry sector and market conditions, e.g. whether it is bullish or bearish. There is a whole list of rational and irrational explanations given for 'underpricing'. Some have been criticized on the grounds of either the extreme assumptions that are made or the unnecessarily convoluted stories involved. Nevertheless, underpricing has persisted for a long time and there is no evidence of its early demise.

We refer to $\bar{P}g$ as the average adjusted initial returns of privatized firms. It is calculated as:

$$\bar{P}g = \sum_{i=1}^{n} ARig/n \quad \text{where}$$

n is the number of companies in the sample

$$\therefore \bar{P}g = \frac{1108.26}{12} = 92.36$$

$$(ARig - \bar{P}g)^2 = 72,085.89$$

$$\text{Variance} = \frac{\sum(ARig - \bar{P}g)^2}{n}$$

$$= \frac{72085.89}{12}$$

$$= 6007.16$$

$$\text{STANDARD DEVIATION} = \sqrt{\left[\frac{\sum ARig - \bar{P}g)^2}{n}\right]}$$

$$S_1 = \sqrt{6007.16}$$

$$S_1 = 77.51$$

TABLE 2.4

STATISTICAL RESULTS OF ADJUSTED INITIAL RETURNS OF PRIVATE COMPANIES

PRIVATE COMPANIES	ADJUSTED INITIAL RETURNS (%)	$(ARing - \bar{P}ng)$	$(ARing - \bar{P}ng)^2$
SUNGEI WAY HOLDINGS	176.15	104.64	10,949.53
MARUICHI MALAYSIA	72.00	0.49	0.24
MECHMAR BESTOBELL	73.00	1.49	2.22
GOH BAN HUAT	69.44	-2.07	4.28
MALAYSIAN HELICOPTER	114.81	43.30	1,874.89
NYLEX	68.80	-2.71	7.34
NESTLE (M)	59.92	-11.59	134.33
SHAPADU KONTENA	53.21	-18.30	334.89
LEONG HUP HOLDINGS	42.69	-28.82	830.59
H & R JOHNSON (M)	92.40	20.89	436.39
RESORTS WORLD	110.43	38.92	1,514.77
SIAH BROS.	24.35	-47.16	2,224.07
HO HUP CONSTRUCTION	69.00	-2.51	6.30
NANYANG PRESS (M)	75.00	3.49	12.18
SCIENTEX INDUSTRIES	173.00	101.49	10,300.22
METROJAYA	13.16	-58.35	3,404.72
ANCOM	102.78	31.27	977.81
IJM CORP.	14.00	-57.51	3,307.40
PARKMAY	15.00	-56.51	3,193.38
WEMBLEY INDUSTRIES	11.00	-60.51	3,661.46
	1,430.14		43,177.01

We refer to $\bar{P}ng$ as the average adjusted initial returns of private companies. It is calculated as:

$$\bar{P}ng = \sum_{1=1}^{n} ARing/n$$

where n is the number of companies in the sample.

$$\therefore \quad \bar{P}ng/p = \frac{1430.14}{20} = 71.51$$

$$\sum(ARing-\bar{P}ng)^2 = 43.177.01$$

$$\text{Variance} = \frac{\sum(ARing-\bar{P}ng)^2}{n}$$

$$= \frac{43,177.01}{20}$$

$$= 2,158.85$$

$$\text{STANDARD DEVIATION} = \sqrt{\left[\frac{\sum(ARing-\bar{P}ng)^2}{n}\right]}$$

$$S_2 = \sqrt{2,158.85}$$

$$S_2 = 46.46$$

The pooled standard error is given as:

$$Sp = \sqrt{\frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}}$$

We have the test statistic:

$$t = \frac{(\bar{P}g - \bar{P}ng) - 0}{S\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

$$Sp = \sqrt{\frac{(12 - 1)6,007.16 + (20 - 1)2,158.85}{12 + 20 - 2}}$$

$$Sp = \sqrt{\frac{107,096.91}{30}}$$

$$Sp = \sqrt{3,569.897}$$

$$Sp = 59.75$$

$$t = \frac{(\bar{P}g - \bar{P}ng)}{S\sqrt{\frac{1}{n1} + \frac{1}{n2}}} \quad \text{with } n_1+n_2-2 \text{ degree of freedom}$$

$$t = \frac{92.36 - 71.51}{59.75\sqrt{\frac{1}{12} + \frac{1}{20}}}$$

$$t = \frac{20.85}{59.75\sqrt{0.133}}$$

$$t = \frac{20.85}{21.802775}$$

$$t = 0.956$$

Ho : $\bar{P}g - \bar{P}ng = 0$

Hl : $\bar{P}g - \bar{P}ng > 0$

Significance level is 5%

Degrees of freedom is $(N_1 + N_2) - 2$

Critical value = 1.697

AVERAGE ADJUSTED INITIAL RETURNS OF
PRIVATE AND PRIVATIZED ENTITIES

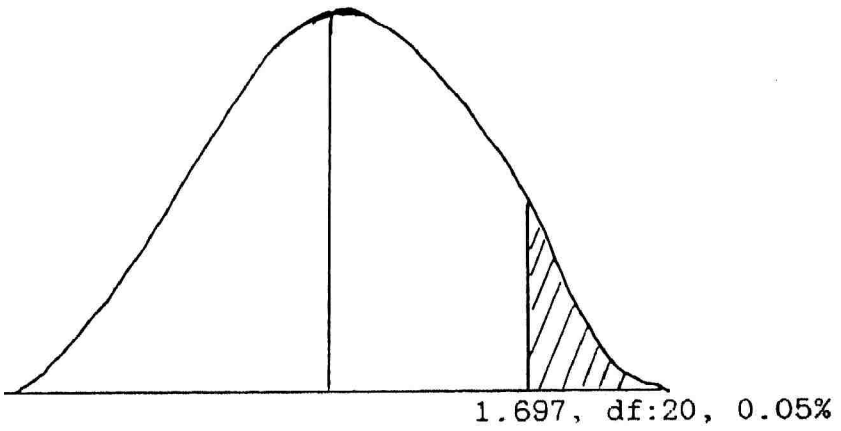

Figure 2.1

In the analysis, risk is assumed to be constant. Therefore, the data is not adjusted for risk. We only use the KLSE industrial indices to remove the influence of market movements. The data were further analysed to see if the excess returns for privatized entities were significantly larger than for private companies. We use the student t-test, with < 5% level of significance.

Setting our hypothesis to be:

$H_o : \bar{P}g - \bar{P}ng = 0$

$H_1 : \bar{P}g - \bar{P}ng > 0$

$$t = \frac{(\bar{P}g - \bar{P}ng)}{S\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

2.3.2 Results and Interpretations

The average adjusted initial returns of the privatized firms "$\bar{P}g$" is 92.4 percent (see Table 2.3). The average adjusted initial returns of private or non-government firms "$\bar{P}ng$" is 71.5 percent (see Table 2.4).

Hence, both private and privatized entities have experienced considerable underpricing of their shares. Although privatized firms' average adjusted initial returns were larger than the average adjusted initial returns for private firms, the differences in underpricing were not found to be statistically significant. It is also difficult to suggest deliberate underpricing of government entities as the degree of private firms' underpricing is almost as large.

2.4 Different Methods of Valuing New Issues

Most new issues have been able to give a premium on the first day of its listing because there is a tendency for them to be underpriced. A study of performance of new issues listed on the KLSE in the period between 1983 and 1988 shows that the average rate of return from the offer price to the price on the first day of trading was around 167 percent (Othman, 1991). Compared to the performance of new issues in other markets, those in Malaysia gave the highest initial returns. The analysis also shows that new

issues have higher average premiums in a rising market compared to a declining one. (A rising market refers to periods when the market index in the KLSE is moving upwards), (Investors Digest, November 1992).

However, fixing a subscription price for a new issue is not an easy task compared to pricing shares already listed on the stock exchange. Hence, there is no comparable situation in terms of issue price for utilities such as Telekom or TNB when they were offered to the public.

There are a number of methods which can be adopted in valuing a block of shares. There is no one method that can give a precise value, but the price should indicate the range within which an existing shareholder may sell or an intending shareholder will offer to buy the shares. A potential shareholder seeks to measure the returns that accrue from his individual investment. Therefore, before choosing any method of valuation, one must bear in mind the purpose of valuation. The most common methods used for share valuation are the following:

(1) Net Tangible Assets Backing (NTAB)

$$NTAB = \frac{\text{Total shareholders' funds (ordinary)}}{\text{Number of shares issued (ordinary)}}$$

The value of the share using this method is obtained by dividing the sum of all assets less liabilities (at 'going concern' values) by the number

of ordinary shares in the issue. If there are preference shares or debentures in the issue, these would normally be deducted from the net assets value plus any premium payable on redemption.

Since the valuation is for investment purposes, the potential earning power of the company and the safety of the capital invested are the primary considerations. Therefore, based on the above circumstances, the current value of the assets to the business as a going concern should be used in calculating the net tangible assets. The above method provides a minimum valuation of the asset of the company. This balance sheet does not take potential earnings into account.

(2) Price/Earnings Ratio or Multiples (P/E Ratio)

$$\text{P/E ratio} = \frac{\text{Market price per ordinary share}}{\text{Earnings per ordinary share (EPS)}}$$

The P/E ratio represents the number of years that it will take to recoup the purchase price of a share in terms of earnings per share. The P/E ratio is used as a yardstick to measure the extent to which the market has taken future growth prospects into account in valuing a share, as a number of investors are concerned with capital growth rather than annual income.

P/E ratios vary widely between industries since they represent investors' expectations of a company, e.g. high P/E ratios are associated with growth companies. Also, financially strong companies that have been successful and are expected to continue to be so in the future will generally have higher P/E ratios.

Generally, the P/E ratio, or multiple, can be subjective based on qualitative factors such as the type of industry, management of the company and current market conditions. For flotation purposes, a range of P/E multiples have been set by the Malaysian Capital Issues Committee (CIC). Since March 1993, the Securities Commission has replaced CIC as a one-stop agency to regulate the securities and financial market in the country (see Appendix 1).

(3) Discounted Cashflow Valuation (DCF)

The DCF is a financial technique based on the anticipated free cash flows of the company over a number of years. The valuation is equal to a stream of future cash flows discounted at a predetermined rate. Thus, it is possible to compute the present value of the future super profit stream expected over a period of say, five years.

Having decided on the required payback period and the discounted rate of return, the future earnings stream can be discounted in order to arrive at one

possible price at which a share may be bought or a bid may be made. One must remember that the DCF method merely helps to provide another yardstick against which to measure the price of a share. It may be sound in theory, but in practice, it tends to be subjective.

In valuing the offer prices of some of the privatized entities, both NTAB and P/E ratio methods were used (see Appendix 2).

2.5 Analysing New Issues Using NTA and P/E Ratio Methods

The next part of this chapter studies the massive underpricing of IPOs of both private and privatized stocks. The analysis will conclusively show that large underpricing does exist.

In Malaysia, it is without doubt that the privatization programme is the brainchild of the government, and therefore, it is politically important that any public offer of privatized stock needs to be successful. In order to encourage the successful sale of privatized stocks, it is believed that there has been deliberate underpricing of stocks by the government, to achieve public acceptability, wider share ownership, and inter-ethnic wealth redistribution.

To further support my analysis of whether there has been deliberate government underpricing of the IPOs, I

have undertaken a study of the NTAB and P/E ratios or multiples of privatized companies. Data relating to the NTAB, prospective gross earnings per share (gross EPS), prospective gross earning multiples based on the offer price, and offer prices have been obtained from the prospectuses of companies, the Investors' Digest magazine and the Annual Companies' Handbook.

Table 2.5 provides us with a picture of the value of net tangible assets (NTAs), gross earnings per share (EPS) and gross earning multiples or gross price/earning (P/E) ratios. We look at prospective values as obtained from the prospectuses of companies prior to their public offers.

Column 1 of Table 2.5 looks at the NTA of the ten companies under study. Column 2 provides the offer price per share. In all cases, the offer price has been much higher than the value of NTAs. Since the offer price has been much higher than the value of the NTAs, we can conclude that the prices fixed for all the IPOs have not fallen below the minimum value of company assets. But to set the offer price in line with the value of NTAs would overlook the future prospects of a company; therefore, it is more accurate if we also look at their prospective gross earning multiples.

The offer prices for companies such as EON, PROTON, Telekom and TNB have been much higher than those suggested by their NTAs. The difference between the offer price and the value of the NTAs may be attributed to `goodwill´. The basis of valuation of `goodwill´ has traditionally been in terms of expected `superprofits of a business´ for a number of years. In relation to companies such as TNB and Telekom, `goodwill´ can be anticipated because of their monopoly positions in the markets, and therefore the likely monopoly rents or profits which should be earned in the future.

Though the offer prices all register values much higher than the values of their NTAs, we cannot conclude that underpricing of the IPOs has been deliberate. But to just relate the offer prices to the values of the NTA alone may not be sound as most valuations tend to be based on historical costs and potential earnings of a growing company may not be reflected.

As noted earlier, one common criterion used for judging the degree of underpricing is the price-to-earnings ratio or price earnings multiples.

TABLE 2.5

POST-PRIVATIZATION SHARE PERFORMANCE IN TERMS OF GROSS EARNINGS MULTIPLES

Privatized Companies	Net Tangible Assets (NTAs) (RM)	Offer Price Per Share (RM)	Prospective Gross Earnings Per Share (Sen)	Prospective Gross Earnings Multiples based on Offer Price Per Share	Gross Earnings Multiples based on Closing Prices on Day 1 of Trading	Gross Earnings Multiples based on end of Week 1 Closing Price	Gross Earnings Multiples based on end of Month 1 Closing Price	Gross Earnings Multiples based on end of Month 3 Closing Price
Malaysian Airlines	1.62	1.80	30.4	5.9	8.1	7.24	7.76	9.14
Malaysian International Shipping Corporation	1.46	2.40	47.4	5.1	10.5	10.65	11.1	15.1
Tradewinds (M)	0.96	1.10	20.1	5.47	9.1	8.36	8.46	9.5
Cement Manufacturers Sarawak	1.19	1.30	20.1	6.47	10.8	11.2	10.55	10.2
Kedah Cement Holdings	0.87	2.00	18.6	10.75	14.0	14.9	15.1	16.0
Edaran Otomobil	1.00	4.30	51.2	8.4	16.0	15.7	12.0	13.7
Perusahaan Otomobil Nasional	1.56	5.00	81.0	6.2	8.15	8.02	7.78	7.04
Telekom Malaysia	2.70	5.00	35.5	14.1	17.2	16.9	19.15	20.7
Tenaga Nasional	3.04	4.50	42.84	10.5	20.42	19.26	20.07	22.3
Kelang Container Terminal	1.30	3.10	42.70	7.26	19.7	17.92	17.1	16.9

Source: KLSE Research Department.

In Table 2.5, the prospective gross earnings per share (EPS), prospective gross earnings multiples based on the offer price, as well as the closing price on the first day of trading have been calculated. In column 4, the prospective gross earnings multiples, or P/E ratios, based on the offer price have been calculated. These P/E ratios have been found to fall within the range given in the guidelines set by the Capital Issues Committee (CIC).

Table 2.6 gives us the guidelines on the range of the price earnings multiples according to sectors/industries as set by the Capital Issues Committee (CIC). The P/E multiples cover a range from approximately 3.5 to 15.5 (the range for banks and utilities is relatively higher, from 8.5 to 15.5).

The CIC, being a principal market regulator, is avowedly risk-averse and conservative in its pricing policy. Since most of the offer prices set are based on guidelines given by the CIC, there is a tendency to experience heavy underpricing of the IPOs.

TABLE 2.6

RANGE OF P/E RATIOS BY SECTOR OR INDUSTRY (1993)

SECTOR/INDUSTRY	P/E RATIOS OR MULTIPLES
Property	3.5 - 10.5
Services	4.0 - 11.0
Trading	4.0 - 11.0
Transportation	4.0 - 11.0
Contracting & Construction	4.5 - 11.5
Tourism (including hotels)	4.5 - 11.5
Insurance	5.0 - 12.0
Manufacturing	5.0 - 12.0
Gaming	6.0 - 13.0
Finance	6.0 - 13.0
Stockbroking companies	6.0 - 13.0
Plantations	7.5 - 14.5
Utilities	8.0 - 15.0
Banks	8.5 - 15.5

Source: KLSE Research Department.

Columns 5, 6, 7 and 8 of Table 2.5 look at the gross earnings multiples on the first day of trading, and at the end of the first week of trading, first month of trading and third month of trading respectively. In all cases, it has exhibited considerable underpricing as the P/E multiples

registered much higher values on the first day of trading as compared to the values given for the IPOs. In the case of Telekom and TNB, the P/E multiples increased over a period of three months.

Further analysis has also been undertaken with regards to the time periods that underpricing may last. While initial returns are found to be significantly positive, such returns need to be maintained over a period of a few years.

Table 2.7 looks at the P/E multiples for a period of five years after the IPOs. It was possible to show movement of prices and adjusted P/E ratios over a period of five years for those companies that were privatized in the late 1980s, such as MAS and MISC. But for companies that were only listed in the KLSE in 1992 (for example, TNB and KCT), only two years of movement could be observed.

We look at the low and the high for a calendar year and then take the average figure to give us the mid-range price. Next, we look at the adjusted earnings per share. The EPS for each year has been adjusted for changes in the number of shares for bonus, rights or share splits. Such figures are obtained from the Companies' Annual Reports. Taking the mid-range prices and dividing by the adjusted EPS, we obtain the adjusted P/E ratios. (Refer to Appendix 3 for the detailed calculations).

TABLE 2.7*

POST-PRIVATIZATION SHARE PERFORMANCE IN TERMS OF ADJUSTED PRICE/EARNINGS RATIO OVER A PERIOD OF FIVE YEARS

	MID-RANGE PRICES (RM)					ADJUSTED EARNINGS PER SHARE (SEN)					ADJUSTED/PRICE EARNING RATIO				
YEAR	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
MAS	3.37	5.24	5.50	9.10	8.05	28.7	30.6	41.3	42.8	53.2	11.76	17.12	13.30	21.25	15.13
MISC	6.85	6.05	8.53	5.96	6.18	33.1	45.1	49.8	50.0	55.0	20.68	12.41	17.13	11.91	11.25
Tradewinds	2.73	3.52	2.96	2.61	4.01	13.9	14.2	13.3	12.3	24.0	19.68	24.88	22.29	21.19	16.74
CMS	3.15	3.56	3.13	2.73	11.36	16.4	21.4	13.0	31.7	46.8	19.17	16.64	24.11	8.60	24.27
KCH	4.12	4.43	N.A.	N.A.	N.A.	18.0	16.6	N.A.	N.A.	N.A.	22.95	26.62	N.A.	N.A.	N.A.
EON	8.07	7.23	12.15	17.00	N.A.	57.8	49.2	80.7	82.00	N.A.	13.97	14.69	15.06	20.73	N.A.
PROTON	6.73	10.25	10.45	N.A.	N.A.	51.8	53.1	59.5	N.A.	N.A.	12.97	19.30	17.56	N.A.	N.A.
TELEKOM	9.45	12.28	17.15	20.45	N.A.	54.6	46.3	60.9	70.85	N.A.	17.30	26.34	28.17	28.90	N.A.
TNB	12.56	16.75	N.A.	N.A.	N.A.	50.8	51.0	N.A.	N.A.	N.A.	24.75	32.84	N.A.	N.A.	N.A.
KCT	7.48	8.18	N.A.	N.A.	N.A.	22.6	22.8	N.A.	N.A.	N.A.	33.17	35.96	N.A.	N.A.	N.A.

* Refer to Appendix 3.1 to 3.10 for detailed calculations.
N.A.: not available

Source: KLSE Research Department.

In most cases, the P/E ratios over the five year period have registered higher values, much higher than those found on the day the stocks were listed. High P/E ratios for companies such as MAS, Telekom, TNB and KCT have been maintained over a longer period.

The above analysis has proven that there is underpricing as the P/E ratios have registered much higher values on the first day of trading and also over a period of time. But one cannot prove conclusively that the extent of underpricing was due to the government's deliberate action. The prospective P/E ratios based on offer prices have all been set within guidelines given by the CIC. The offer prices have been much higher than the values of the NTAs. We can safely conclude that the guidelines set by the CIC have been very conservative, and in the light of a very bouyant economy, the P/E ratios for most companies where growth potential is evident, will tend to heavily underprice most of the IPOs. In fact, the market P/E ratios given for the end of 1993 and up to August 1994 were 48.2 and 36.2 respectively (Economic Report, 1994/1995).

As already mentioned, changes in market conditions will affect the direction of share prices when they make their debut on the market. A new issue will receive more attention from investors in a bull market as stock prices in general will be rising and trading will be active. On the other hand, a bear market reflects more pessimism and therefore depresses the prices of stocks.

The listing of Singapore International Airlines (SIA) in 1985 could be taken as an example to support the view that market sentiments do play an important role. The responses to IPOs depend very much on the timing, quality of issue and publicity given to the issue. In this case, the timing was a very important influence. In 1985, Singapore was in a recession and the Pan-El crisis had driven the market into the doldrums. Inspite of SIA's good record and recognition, SIA did not fetch a first day premium and finished its first trading day at a closing price of S$4.70, 6.0 percent down from its offer price of S$5.00. Also, the 1990 listings before the Gulf crisis were able to fetch premiums comparable to those in 1989 when the market was more bullish (SES Journal, July 1991). Unfortunately, the Gulf crisis had an adverse impact on financial markets worldwide. This also adversely affected Malaysian IPOs, especially in relation to the listing of Telekom in November 1992, when the adjusted initial returns for the first trading day were 23 percent compared to TNB's and KCT's returns of 115.3 percent and 153.2 percent respectively.

Post-1987 share performances as a whole were not very impressive, but privatization shares especially of MAS and MISC, have consistently outperformed the market. The performances of both MAS and MISC five years after listings have been good (see Table 2.7). Also, the initial premia were maintained over a significant period; after three months, the ratio of the average premium over the issue

price was still close to that which emerged on the first day of trading, thus stabilizing the market P/E ratio rather than reverting to the P/E ratio given in the guidelines set by the CIC. This could be due to the confidence that the public had on the privatized stocks, as they felt that such stocks, which are primarily under the control of the government, are more risk-averse.

Therefore, even if the market is not so bullish, the quality of the issues can influence the investors, as suggested by the performance of both MAS and MISC. The subsequent performance of new issues such as Telekom, TNB and KCT in the 1990s was very impressive. Besides a buoyant market with strong fundamentals, the quality of issues has had a positive impact on the privatized issues. Since the public had experienced positive returns from their past investments in privatized stocks, the demand for such stocks would be very high, resulting in very high initial premia and large P/E ratios.

In conclusion, my analysis has shown that there is heavy underpricing of privatized stocks, but there is no conclusive evidence that the government had deliberately underpriced them. Unfortunately, such heavy underpricing of privatized stocks has resulted in forgone revenue for the government. In the public flotation of the thirteen government-owned enterprises, the government has forgone considerable revenue amounting to approximately RM4.22 billion (see Table 2.8).

Generally, underpricing would encourage more people to make stock market investments. In Malaysia, such underpricing seeks to promote wider share ownership in line with the government's redistributive objectives. Unfortunately, wider share ownership cannot be sustained as there is widespread stagging, i.e. selling of shares almost immediately after acquisition for profits (Toh, 1989). This can be seen in Table 2.8 which shows that turnover has been relatively high for MISC, Sports Toto, Kedah Cement Holdings, Proton and KCT on the first day of trading. A study of the share ownership profile of some privatized companies shows that institutional investors and nominee companies have emerged as major shareholders. Table 2.9 provides an idea of the major shareholders in privatized agencies. Telekom Malaysia's major shareholders are government agencies, with both Bumiputera corporations and Bumiputera individuals holding a total of 0.74 percent. Two and a half years after listing, Bumiputera individuals were holding a total of 0.55 percent of the stock (see Table 2.9). This small percentage could be a result of stagging. The scenario is similar for TNB. After about one and a half years of listing, Bumiputera individuals only managed to own 1.71 percent of the shares. The above analysis supports the view that stagging of shares is evident and the popular government objective of encouraging wider share onwership has not been achieved.

TABLE 2.8

ESTIMATED FOREGONE REVENUE AND INITIAL PREMIA
ON THE FIRST DAY OF SECONDARY TRADING

Company	Volume of shares (million)	Issue Price (RM)	Vol. Traded on Day 1 (million)	Turnover (%)	Price on Day 1[a]	Premium (%)	Revenue[b] Foregone (RM million)
Malaysian Airlines (MAS)	70	1.80	2.390	3.4	2.45	36.1	45.50
Malaysian International Shipping Corporation (MISC)	85	2.40	15.309	16.6	5.00	108.3	221.00
Sports Toto Malaysia	5.2	2.00	1.833	35.0	9.55	377.5	39.26
Tradewinds (M)	15	1.10	2.601	17.3	1.83	66.4	10.95
Cements Manufacturers Sarawak	5	1.30	0.828	16.3	2.17	66.9	4.35
Cement Industries of Malaysia	8.8	1.00	-	-	1.91	91.0	8.00
Kedah Cement Holdings	29.2	2.00	15.770	54.0	2.60	30.0	17.52
Perusahaan Otomobil Nasional	30	5.00	21.000	70.0	6.60	32.0	48.00
Edaran Otomobil Nasional (EON)	36	5.00	3.302	9.2	8.15	63.0	113.40
Syarikat Telekom Malaysian	470.5	5.00	29.395	6.4	6.10	22.0	517.55
Tenaga Nasional	625	4.50	51.932	8.7	8.75	94.4	2,656.25
Kelang Container Terminal	50[c]	3.10	19.962	74.0	8.40	171.0	265.00
Petronas Dagangan	66.15	2.80	-	-	6.95	148.2	274.52
Hicom Holdings	82	2.10	-	-	-	-	-
Total							4,221.30

[a]Closing prices.

[b]The difference between the issue price and the price on Day 1 multiplied by the number of shares.

Source: KLSE Research Department.

TABLE 2.9

SUBSTANTIAL SHAREHOLDERS OF PRIVATIZED COMPANIES

1. **TELEKOM MALAYSIA BERHAD**

Share Distribution as at 3 June 1993		Percentage
Malaysian -	Bumiputera Corporations	0.19
	Bumiputera Individuals	0.55
Government Agencies (Minister of Finance Inc. holds 74.58%)		80.73
Nominee Companies		2.19
Other Local Companies		0.13
Individuals		0.67
Foreign -	Companies	1.70
	Individuals	13.84
		100.00

2. **TENAGA NASIONAL BERHAD**

Share Distribution as at 24 January 1994		Percentage
Malaysian -	Bumiputera Corporations	10.64
	Bumiputera Individuals	1.71
Minister of Finance Inc.		72.87
Other Malaysian Individuals		2.84
Other Companies		3.14
Foreign -	Companies	8.71
	Individuals	0.10
		100.00

3. MALAYSIAN INTERNATIONAL SHIPPING CORPORATION COMPANIES

Share Distribution as at 31 July 1993	Percentage
Government (BNM, State Governments, Government Agencies)	59.99
Bumiputeras	0.73
Other Malaysians	9.28
Foreigners	30.00
	100.00

4. MALAYSIAN AIRLINES BERHAD

Share Distribution as at 10 April 1994	Percentage
Bank Negara Malaysia	43.56
Brunei Investment Agency (BIA)	10.00
Pemegang Amanah Raya Malaysia - Skim Amanah Saham Bumiputera	9.76
EPF Board	6.87
State Financial Secretary Sarawak Inc.	5.00
State Secretary Sabah Inc.	5.00
Pemegang Amanah Raya Malaysia - Skim Amanah Saham Nasional	1.79
Bank Simpanan Nasional	1.03
Cartaban (Malaya) Nominees Sdn. Bhd.	0.72
Lembaga Tabung Angkatan Tentera (LUTH)	0.62
	83.35
Foreigners	16.65
	100.00

Source: Annual Companies Handbook.