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# CORPORATE GOVERNANCE AND EARNINGS MANAGEMENT BEFORE SHARE REPURCHASE ANNOUNCEMENTS IN SINGAPORE



## CHUA JIAN MING

# SUBMITTED TO LEE KONG CHIAN SCHOOL OF BUSINESS IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN FINANCE

## SUPERVISOR: PROF JEREMY GOH

## SINGAPORE MANAGEMENT UNIVERSITY

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## Corporate Governance and Earnings Management before Share Repurchase Announcements in Singapore

#### **Abstract**

Share repurchase in Singapore was legalized in 1998. It is well known that investors view share repurchase as good news. This study is based on share repurchase announcements from 2006 to 2009. The mean Cumulative Market-Adjusted Returns (CAR) for the period [0, +1] and [-1, +1] are significant at 1.25% and 1.33% respectively. In Singapore, there are positive abnormal returns following share repurchase announcements in support of the "free cash flow" hypothesis. By using the Singapore Corporate Governance Index as a proxy, the weakly governed companies exhibit the strongest, positive and significant CAR of 2.62% for the period [0, +1].

Lastly, one year prior to share repurchase announcements; companies on average manage their discretionary current accrual downwards by 1.44%. The companies with the best corporate governance manage their earnings downwards by 2.69%. In a regression, the CAR for the period [0, +1] changes by 0.1097% when the discretionary current accrual changes by 1%.

Key Words: Corporate Governance, Share Repurchase, Earnings Management

### **Table of Contents**

Acknowledgements	iv
Dedication	v
Chapter 1: Introduction	1
Share Repurchase / Buyback in Singapore	2
Some reasons for companies to repurchase shares	4
Why is Singapore chosen for this study?	6
Rationale for Sample Period	7
Chapter 2: Share Repurchase Announcements	8
Effects from Announcements of Share Repurchase	8
Share Repurchase Announcements and Corporate Governance Measures	8
Signaling Hypothesis	9
Free Cash Flow Hypothesis	
Tax Benefits Hypothesis	
Summary	
Chapter 3: Corporate Governance	
OECD Principles of Corporate Governance, 2004	15
Singapore Corporate Governance Index	16
Chapter 4: Earnings Management	
Measurements of Earnings Management	21
Chapter 5: Hypothesis Development	22
Chapter 6: Data and Sample Selection	25
Share Repurchase Announcements Data	25
SGX Industry	27
Returns Data	27
Earnings Management Data	
Companies Fundamental Data	
Singapore Corporate Governance Index Scores	
Chapter 7: Methodology	
Daily Returns	
Cumulative Abnormal Returns (CARs)	29

SCGI scores for companies
Earnings Management
Model Regressions
Regression with 2 days CAR [0, +1]33
Pearson Correlation
Chapter 8: Results and Analysis
Chapter 9: Conclusion
Key Contribution46
References
Results
Table 156
Table 2
Table 3
Table 461
Table 562
Table 663
Table 764
Table 865
Table 967
Appendixi
Appendix 1: OECD Principles of Corporate Governance (2004)i
Appendix 2: Companies Act (Chapter 50) ii

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## Dedication

To: My mother, father and brother

Everyone who have rendered help to me and made life enjoyable during the SMU journey

Centre for Corporate and Investor Responsibility, Sim Kee Boon Institute for Financial Economic

#### **Chapter 1: Introduction**

There are many papers since the early 1980s that look at the effects surrounding share repurchase announcements by listed companies in different countries. Recent papers include results from neighboring countries such as Malaysia, Thailand, Hong Kong, Australia and New Zealand.

Thus, it is interesting to examine the market reaction surrounding share repurchase announcements in Singapore. In addition, with the results of the Singapore Corporate Governance Index by the Sim Kee Boon Institute for Financial Economics, we can proxy for the level of corporate governance at the Singapore Mainboard listed companies. With that, we can further examine the effects of corporate governance on market reaction surrounding share repurchase announcements in Singapore. This can be done by classifying the companies with share repurchase announcements into portfolios based on their corporate governance scores.

Next, I look at whether companies manage their earnings prior to the share repurchase announcements in Singapore. A paper by Gong, Louis and Sun (2006) documented that managers manage their earnings downwards prior to share repurchase announcements, to benefit from share repurchases at lower prices.

I further classify the companies into portfolios based on their corporate governance scores to see if there are differences in the magnitude of earning management between companies with different levels of corporate governance practices.

#### Share Repurchase / Buyback in Singapore

On the 18<sup>th</sup> November 1998, section 76 the Companies Act was amended in Singapore to allow listed companies in Singapore to repurchase their own shares. Typically, companies are allowed to buy back up to 10% of their shares during a specified period, such as in between two "Annual General Meetings". The funds used for repurchase of shares must be paid out of company's distributable profits and shares will be deemed to be cancelled upon repurchase. These companies must also meet the financial and solvency requirements before they can embark on these repurchase transactions.

Prior to the enactment of the Act to allow share repurchase, companies had to obtain a court order under Section 73(4) before they can reduce their share capital. The old process might incur costs and delays for the companies. With the change, Singapore listed companies will be able to return surplus cash to investors through share repurchases. Alternatively, managers can use share repurchases as a tool to signal to investors that the company shares may be under-valued, and it is beneficial for the company as a whole to undertake the share repurchases.

Another suggested reason for Singapore listed companies to undertake share repurchase might include having this as a tool to prevent takeover from rival and hostile parties. This is very rarely seen in Singapore, unlike in the United States. In an illiquid market, share repurchase by the company may be a solution for minority shareholders in dispute with the majority shareholders.

For listed companies in Singapore, they can either choose to repurchase their shares through two different ways, namely "off-market acquisition on equal access scheme" and "on-market acquisition".

In the off-market acquisition, subject to approval by the shareholders, has to be made available to all the shareholders to repurchase the same or maximum percentages of their shares. It must also fulfill the conditions that these shareholders have a reasonable opportunity to take up the offer and the terms of the offer are the same.

Permission or the mandate must be given by the shareholders for transactions carried out through on-market acquisition. It must meet the requirement that the share repurchase is done at or below 105% of the average closing price of the last five trading days where shares were traded. This 5 day requirements will be rolled forward for companies that acquire their shares over a period of time. Typically, companies may choose to use this strategy for their share repurchase to minimize the disruptions to the market. The companies will also have to issue a "Daily Share Buy-Back Notice" on the "Company Announcements" section of the Singapore Exchange (SGX) website.

For the purpose of this study, I will look at the effects caused by the announcements of the companies for permission to carry out share repurchase for a specified period, such as until the next "Annual General Meeting". Investors typically view these share repurchase announcements as good news. This might be linked to the "signaling effects" as the Management has more information about the fair value of the company and future prospects relative to investors. Another explanation could be the reduction of agency costs as surplus cash is used to repurchase shares. Shareholders can benefit from the reduction of cash in the hands of the managers who use the cash to finance projects that are beneficial for the managers but detrimental to the shareholders.

During the same period in late 1997, neighboring Malaysia amended its Companies Act to allow listed companies in Malaysia to repurchase their shares. One reason cited was the advantages for the management to instill confidence among the investors via share repurchase during time of financial difficulties such as the Asian Financial Crisis in 1997.

#### Some reasons for companies to repurchase shares

By using keyword searches such as "repurchase" and "buyback" on Factiva from 1998 to 2010 and filtering news articles to sources from Singapore. The publications that I cover include "Business Times Singapore, Channel NewsAsia, Financial Times, Forbes, The Straits Times, The Edge Singapore and The Wall Street Journal Asia".

More cash-rich companies (The Straits Times, 5<sup>th</sup> May 2006) including "SingTel, StarHub and OCBC Bank" are choosing to repurchase their shares over paying back their shareholders special dividends. The share repurchases can enhance ratios like Earnings per Share (EPS) and Returns on Equity (ROE). One benefit for OCBC Bank is that it reduces volatility.

Another reason cited for repurchase of shares is to prevent takeover by other companies. OCBC Bank (The Straits Times, 7<sup>th</sup> September 2004) stated that with the successful takeover of Great Eastern Holdings, it will increase the shareholdings held by family of OCBC former chairman, Lee Seng Wee from 21.4% to 25.8% due to a share swap of Great Eastern Holdings into new OCBC shares.

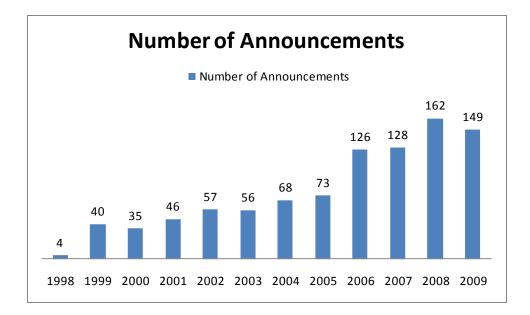
Combined with daily share repurchase by OCBC, it will help to cancel around 35.6 million shares at the prevailing price of \$13.30. This will increase the Lee's family shareholdings to 26.5%. With this move, it will increase the market capitalization of OCBC to a level similar to DBS Group Holdings and prevent a possible takeover attempt by the latter.

Companies may use it as a form of signaling to the market. One example (Business Times, 27<sup>th</sup> August 1999) is Chuan Hup Holdings. The company is the first listed company to buy back its own shares in 1999. It has a strong cash holding of S\$60 to S\$70 million and total debt of S\$42 million. Chuan Hup may be undervalued if we look at the "Price-to-Earnings ratio of Chuan Hup as only around 10 times as compared to the market average of 20 times".

In the earlier days of share repurchases in Singapore (Business Times, 20<sup>th</sup> July 1999), the people in the lower tax group can benefit from the differential in company tax rates and personal income tax rates and make a risk-free profit. Thus, the company can benefit from repurchasing its own share at a discount. For example, if SIA is buying back shares at a discount of 15% from the market price, the breakeven tax rate for the individual to make a risk-free profit is 12%.

A company can also increase its gearings by using debt to finance share repurchases (Business Times, 14<sup>th</sup> February 2002). It will increase its yield on investments in good times. However, there is the increased bankruptcy risk, should the price of shares fall due to the increased gearing in the capital mix (debt and equity).

One article (Business Times, 22<sup>nd</sup> November 2007) highlighted a possible front-running trend by directors. There are some directors buying shares on their own accounts before their companies begin actively buying back shares at higher prices. This could be resolved by directors refraining from any trades during the period when their companies are buying back shares from the market.



#### Why is Singapore chosen for this study?

There are many interesting reasons to carry out this study in Singapore. As share repurchases by companies in Singapore started only in end 1998 after the change in the Companies Act, this paper will contribute to literature pool on the effects related to Share Repurchase announcements done in many other countries.

Singapore is positioned as a financial hub that seeks to attract foreign investments in the financial sector, such as services related to banking, fund management and insurance. As such, there is a strong incentive for the Singapore government to enact laws that are friendly to foreign investors, encourage transparency for transactions as well as having internationally accounting standards. This study can see if the results are similar to the results found in other developed countries such as the US and the UK, which have huge, open global economies.

Another reason is to see if the stronger signals from the announcements of share repurchase originate from Singapore listed companies with strong operating performance, market fundamentals and better corporate governance practices. This can be compared to the rankings of the companies of the Singapore Corporate Governance Index which serve as a proxy for their level of corporate governance. Perhaps, companies with better corporate governance will send out a stronger signal in the market. One way is via share repurchase announcements.

On the other hand, companies with weaker corporate governance practices will benefit from the share repurchase exercise as the reduction of agency costs will be greater for these companies than companies with better corporate governance practices. This will be reflected by a stronger market reaction following the share repurchase announcements by the weakly governed companies than the other companies.

#### **Rationale for Sample Period**

This study covers the share repurchase announcements by Singapore listed companies for their fiscal years 2006 to 2009. This is the period where we have a big sample of share repurchase announcements and the world suffers from the financial crisis led by the US Mortgage Sub-Prime crisis.

It provides a good environment to identify companies with better operating performances and those with sufficient cash and profit to finance their share repurchase in times of difficulties. During the same period, the shares of the companies in Singapore are under-valued as investors sell as a result of the fear caused by the financial meltdown that affected Lehman Brothers and AIG.

Furthermore, the Singapore Corporate Governance Index (SCGI) is first created for the Mainboard listed Singapore companies for fiscal year 2007. For fiscal year 2008, a more comprehensive scoring is in place. The SCGI results for fiscal year 2008 can be easily matched to the share repurchase announcements in this study.

#### **Chapter 2: Share Repurchase Announcements**

#### **Effects from Announcements of Share Repurchase**

Many studies have looked at the effects of the announcements of share repurchases in different countries. Some recent papers include coverage of countries such as Malaysia (Nadarajan, Ahmad and Chandren 2009), United Kingdom (Dixon, Palmer, Stradling and Woodhead 2008), Thailand (Wang and Padgett 2007), Australia (Brown 2007), New Zealand (Koerniadi 2007), Canada (Li and McNally 2007), France (Ginglinger and L'her 2006), Germany (Heckethal and Zdantchouk 2006) and Hong Kong (Zhang, 2005).

There are other papers that look at the effects of share repurchases announcements specific to certain asset classes or types of companies. One of the paper (Brau and Holmes 2006) looks at publicly traded Real Estate Investment Trusts. Another paper (Webb 2008) looks at companies in the banking industry. Barth and Kasznik (1999) researched on companies with different amount of intangible assets and their likelihood to repurchase shares and their magnitude of positive repurchase announcement returns.

#### **Share Repurchase Announcements and Corporate Governance Measures**

There are papers trying to link the share repurchase programs with the corporate governance measures. Beside support for the signaling hypothesis (Jun, Jung and Walkling 2009), during the announcements of share repurchases, they find that companies with weaker shareholders rights experience greater bondholder wealth losses.

The paper on the relationship between bank stocks repurchase and measures of corporate governance (Webb 2008) find that in general, corporate governance techniques have little impact on market responses on bank stock repurchase announcements. The board structure and

ownership by executives and directors do not influence the market response to announcements. However, the author finds that the board structure, in some cases, might influence management decision on the extent and size of the repurchase offer.

#### **Signaling Hypothesis**

Generally, most papers document positive abnormal returns in support of the signaling hypothesis. This signaling hypothesis is derived from the information asymmetry between the managers and the investors. Managers are believed to have more information about the company, such as its future prospects and projects, as well as the "fair" valuation of shares traded in the stock market. This could be one main reason for the increased in share repurchase transactions and announcements by companies during times of financial difficulties (such as Asian Financial Crisis in 1997 and Global Financial Crisis in 2008) where shares might be severely "undervalued" by the market.

One of the earliest literatures on the signaling hypothesis and the significant positive abnormal returns upon the share repurchase announcements was by Vermaelen (1981). This was based on data from the US market. Subsequently, they are replicated in different parts of the world as mentioned above.

In Germany (Heckethal and Zdantchouk 2006), the abnormal returns around open market repurchase announcements are four times higher than in the US (12% compared to 3%). In Australia (Brown 2007), the paper look at off-market repurchases (equal access repurchases) and document 1.2% significant abnormal returns on announcement days as compared to around 8% found in US studies. In France (Ginglinger and L'her 2006), there is an overall positive reaction

from investors and 0.57% is recorded for the day of announcement of share repurchase program and the day following it.

Similarly in New Zealand (Koerniadi 2007), the average magnitude of excess returns for open market repurchases announcements and tender offer repurchase announcements are 2.8% and 3.4% respectively. The paper based on Thailand (Wang and Padgett 2007) also document some information leakages before the announcements of the share repurchases, while offering evidence for the positive abnormal returns on announcement days.

As a support for the signaling hypothesis, there is a paper (Li and McNally 2007) that measures the informational content of the Canadian open market share repurchase announcements. They found that companies are more likely to buy back shares if they have greater free cash flows, lower market-to-book ratios, poor prior stock performance and their insiders have large shareholdings. The announcements returns are strongly and positively related to the amount of private information that the insiders are aware of.

Another paper (Chemmanur, Cheng and Zhang 2008) look at accelerated share repurchases announcements as opposed to open market share repurchase announcements. It came out with eight different possible hypotheses such as "signaling and under-valuation; distribution of excess cash; target leverage ratio; takeover avoidance; employee stock option dilution; managerial opportunism; liquidity reduction; and EPS manipulation". Overall, they find that their results support only the "signaling and under-valuation" hypothesis but inconsistent with the other seven competing hypotheses.

On the other hand, there are papers which show that announcements of share repurchases may not be reliable signal. One of these (Wang and Johnson 2008) showed that increases in operating

performance, decreases in systematic risk as well as long run abnormal returns are correlated with actual share repurchase amounts but not with repurchases announcements. In a previous study (Lie 2005), both the operating performance improvements and the positive earnings announcements returns are limited to companies that actually repurchase their shares in the same fiscal quarter.

Companies that make share repurchase announcements do not have to make a firm commitment for actual repurchases and some do not repurchase at all following announcements. For this reason, Zhang (2005) used actual share repurchase data from Hong Kong to look at share price performance surrounding and following actual share repurchases.

#### **Free Cash Flow Hypothesis**

One reason for initiating share repurchase by companies could be to distribute excessive cash back to shareholders when they cannot find new or replacement investment ventures that can offer a higher return on investment. Besides using cash dividends, companies can distribute excessive cash by offering to repurchase shares.

There is a paper (Grullon and Michaely 2004) that document the market reactions to share repurchase announcements are more positive among the companies that are likely to over-invest, which is consistent with the free cash flow hypothesis.

According to Jensen (1986), share repurchases which is a form of cash payout to shareholders, will reduce the powers of the managers. The managers will incur the monitoring of the capital market once they seek financing for new projects. Thus, the managers have incentives to grow beyond the optimal size as managing a large organization will provide them benefits such as

more resources and higher compensation. Share repurchases, will thus, curtail the power, perks and benefits of these managers.

Jensen's theory (1986) was found to be applicable for specially designated dividends (SDD) and there was no reason why this should not be applied to share repurchases (Howe, He and Kao, 1992). Previously, the positive surrounding tender offer share repurchase for both SDD and share repurchases were attributable to the informational signaling hypothesis.

Dittmar (2000) also showed that share repurchases from 1977 to 1996 period may be due to managers taking advantage of the undervaluation potential while in most periods, share repurchases are used to distribute excess cash. This is done to mitigate another agency problem that may arise if companies simply put excessive cash on their balance sheet after they run out of value-creating investment opportunities.

#### **Tax Benefits Hypothesis**

Investors may be taxed at a high income tax rate if they receive cash dividends from companies. One way investor can benefit would be to get companies to repurchase their shares instead of paying cash dividends when the capital gains tax rate is lower.

However, in Singapore, there is no capital gains tax when investors choose to sell their shares at a profit. In addition, investors do not have to pay any tax on the cash dividends they received as the companies pay corporate tax on the profits made. This was in effect when Singapore adopts a one-tier corporate tax system with effect from 1 Jan 2003.

Since we are looking at the share repurchase announcements from 2006 to 2009, it should not be a factor that will influence company's decision to repurchase shares instead of paying out dividends. Both methods will yield the same benefits for the shareholders.

#### Summary

In summary, there could be many different motivations on why companies decide to repurchase their own shares. The results from this research on share repurchase announcements will hopefully shed more light on whether the "signaling and undervaluation" hypothesis or "free cash flow" hypothesis is more applicable in Singapore.

The remainder of this paper proceeds as follows. Chapter 2 provides a review of existing literature on Share Repurchase Announcements. Chapter 3 covers Corporate Governance while Chapter 4 focuses on Earnings Management. In Chapter 5, three hypotheses are proposed and will be tested in this paper. Chapter 6 reports the Data and Sample Selection. Chapter 7 highlights the key assumptions and processes used in constructing the results in this paper. Chapter 8 provides the results and the analysis of the figures. Chapter 9 concludes the whole paper.

#### **Chapter 3: Corporate Governance**

There was a proliferation of various corporate governance indices since year 2000 in attempting to measure the corporate governance practices of companies. One possible reason could be due to the eruption of major scandals involving Enron Corporation and WorldCom around the end of year 2001. At the same time, the federal government in the United States enacted Sarbanes-Oxley Act to enhance the protection of various stakeholders including minority shareholders.

It is likely that the companies with better corporate governance will have put in place something to reduce the principal-agency problem. One way is to initiate share repurchase programs when the company's shares on the stock market are being undervalued and this is a good way to create value for the existing shareholders while reducing the potential misuse of excess cash by management. Perhaps, the market may react more favorably to companies with poorer corporate governance practices when they send out a "signal" through share repurchase announcements as they try to bridge the gap of better corporate governance practices of other companies.

In part due to the scandals that happen around the world, there is greater demand for methods to measure or proxy for companies with better corporate governance practices that can safeguard the interests of the public including minority shareholders. One way is by using corporate governance indices. It will also encourage companies to perform beyond the mandated standards for company practices by regulatory authorities.

One key development in Corporate Governance was sparked by the Corporate Governance Index based on anti-takeover provisions developed by Gompers, Ishii and Metrick in 2003. In 2005, Bebchuk, Cohen and Ferrell came up with Entrenchment Index that is said to refine the Index developed by Gompers et al. With this governance Index, there was a lot of future research and development.

Other corporate governance indices include Credit Lyonnais Securities Asia (CLSA) which produced corporate governance ranking in emerging markets. These corporate governance indices may be very different in nature. Some of these ratings are include those reported by Governance Metrics International (GMI), Standard and Poor's (S&P) Disclosure Index, Standard and Poor's (S&P) Governance Rankings and Gov-Score based on data provided by Institutional Shareholder Services.

#### **OECD Principles of Corporate Governance, 2004**

The OECD (Organization for Economic Co-operation and Development) Principles of Corporate Governance, 2004, are "intended to assist OECD and non-OECD governments in their efforts to evaluate and improve the legal, institutional and regulatory framework for corporate governance in their countries, and to provide guidance and suggestions for stock exchanges, investors, corporations, and other parties that have a role in the process of developing good corporate governance."

The five areas highlighted in the OECD Principles of Corporate Governance include "The Rights of Shareholders and Key Ownership Functions", "The Equitable Treatment of Shareholders", "The Role of Stakeholders in Corporate Governance", "Disclosure and Transparency" and "The Responsibilities of the Board".

Professor Piman, together with other professors developed a Corporate Governance Index based on the OECD Principles of Corporate Governance and this is used to evaluate the corporate governance practices by companies in the five different categories in countries such as Thailand, Hong Kong, China and Singapore. This methodology is the one being in used to rank listed companies in Singapore and presented as the Singapore Corporate Governance Index (SCGI).

In time to come, this can include more countries and can be used to compare the companies across borders. With more data for the coming years, improvement of corporate governance practices by companies on an individual perspective or country perspective as a whole can be measured and presented.

#### **Singapore Corporate Governance Index**

The Singapore Corporate Governance Index is developed by the Sim Kee Boon Institute for Financial Economics, Centre for Corporate and Investor Responsibility at the Singapore Management University. The index is a company by company measure of overall corporate governance practices, based on the Organisation for Economic Cooperation and Development (OECD) Principles of Corporate Governance as well as the Singapore Code of Corporate Governance.

The SCGI database covers all the companies listed on SGX Mainboard, excluding SESDAQ and Catalist companies, exchange traded funds, funds, secondary listings, structured products, real estate investment trusts and GDRs for international securities listed overseas. The final sample consists of 592 companies with all the necessary information. All data are based on the firm's 2008 fiscal year.

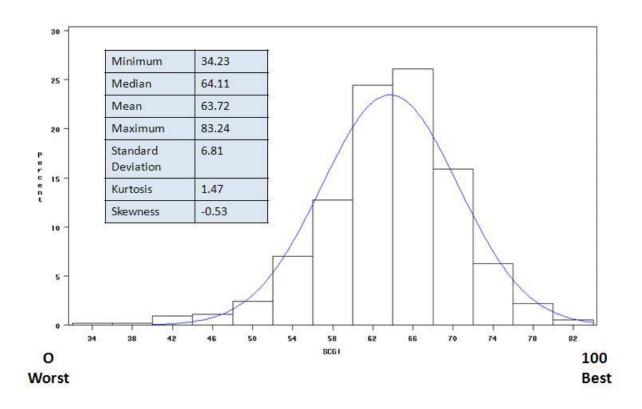
Broadly speaking, the questions used to rank the companies can be classified into the five different categories as listed in the OECD Principles of Corporate Governance. The OECD principles include "Rights of Shareholders", "Equitable treatment of Shareholders", "Roles of

Stakeholders in Corporate Governance", "Disclosure and Transparency" and "Responsibilities of the Board".

The index score is based on answers to scores computed for the main questions. For some of the main questions, there are sub-questions. The data sources for SCGI include annual reports, notices to call shareholder's meetings, general meeting minutes, company websites, analyst reports, proxy voting forms and other sources, information that is generally available for shareholders in the public domain.

The best score a company can get is 100. Penalties or reduction of points are employed to penalize companies if they do not satisfy certain requirements for good corporate governance practices. Variation across industries and variation between local and foreign domiciled companies are computed and presented in the study.

The SCGI present evidence that the companies' market value (market-to-book ratio) and financial performances (return-on-equity) are positively correlated to their SCGI scores with statistical significance. These results are robust after controlling for firm characteristics, ownership structure and other corporate governance features.



#### **Chapter 4: Earnings Management**

Earnings Management is a practice (Goel and Thakor, 2003) where managers manipulate earnings figures that are reported to the public so that they are different from the economic earnings at various points in time. These are the figures used by analysts and investors in their decision about the valuation of share prices of the companies in consideration.

In Singapore, listed companies have to follow the Financial Reporting Standards (FRS) prescribed by the Accounting Standards Committee (ASC), which is closely modeled after the International Financial Reporting Standards (IFRS) with some changes to suit the local context. The accounting laws can be quite complex and managers might be able to engage in some practices of earnings management.

In some cases, managers are known to do that in order to smooth the earnings to satisfy the predetermined consensus earnings targets by analysts as well as to reduce volatility to keep investors happy. In good times, the excessive profits may only need to lead to marginal increase in the prices of their shares. If these marginal earnings are channeled into future periods with lower earnings, the benefits will be greater and volatility will be reduced.

Consequently, during bad times, managers might be tempted to undertake "big bath earnings management" (Healy, 1985; Degeorge, Patel and Zeckhauser, 1999) by writing down more bad debts or include future expenses into the same period and will benefit from the better earnings figures in the future period. This view is supported by Gong, Louis and Sun (2006) where companies aggressively manage their earnings downwards before making repurchases in the open market to minimize the price they pay for the shares.

Existing literature (Brown, 2001) on the practice of earnings management have documented that there are many companies that meet or barely surpassed the earnings targets by analysts but there are very few companies that fail to meet the predicted earnings figures by a small amount. Furthermore, based on reports from the financial press (Degeorge, Patel and Zeckhauser, 1999), the managers are motivated by three thresholds: reporting earnings that are above zero; make at least last year's earnings; and meeting analysts' consensus earnings forecasts.

As such, there could be incentives for the managers to manipulate earnings (Beneish, 2001; Teoh, Welsh, Wong, 1998) to reflect a far better and rosy picture when the companies decide to raise capital from the market, such as going for initial public offerings (IPOs) and seasoned equity offerings (SEOs). Conversely, if the companies decide to undertake a share repurchase exercise in the near future, the managers might want to paint a very bleak outlook with low earnings. Their actions may result in the market to undervalue the shares listed on the stock exchanges, enabling them to buy up the shares from the market cheaply or to convince shareholders to sell to them in a tender offer.

In some cases, personal benefits such as bonuses, options for the shares or those with vested interests such as CEOs with large ownership of shares may encourage the managers to engage in downward earnings management prior to share repurchases. A reduction in the shares on the open market may help to increase the earnings per shares (EPS) (Hribar, Jenkins and Johnson, 2006).

Caton, Chiyachantana, Caton and Goh (2009) find that companies tend to do window dressing prior to a seasoned bond offering, but there is no evidence to suggest that rating agencies are misled by these actions.

#### **Measurements of Earnings Management**

If earnings are managed, Beneish (2001) claims that it is more likely to be in the form of accruals rather than cash flow components of earnings. In order to proxy for the earnings managements, one existing approach (Healy and Wahlen, 1998) is to look at the total accruals and separates them into discretionary and non-discretionary accruals. The discretionary portion can then be used as a proxy for the amount of earnings management by the company.

Jones (1991) devised a way to estimate the discretionary component of total accruals as a measure of earning management and the perfect setting was facilitated by import relief provided the United States International Trade Commission. Managers have incentives to use several accruals to reduce their earnings so as to increase their chances of obtaining import relief or to increase the amount of relief given to them.

Later, the Jones (1991) model to detect earning management was modified to reduce the error found in Jones (1991) model when discretion is exercised over revenues. The modified Jones (1991) model incorporated the change in sales revenue adjusted for the change in receivables during the event period. According to Dechow, Sloan and Sweeney (1995), the modified Jones (1991) model has the best ability to detect earnings management as compared to other models at that time.

Furthermore, we can look at discretionary current accruals as managers are more likely to manage the earnings in the year preceding share repurchases. I will follow the method used in calculating discretionary current accruals by Teoh, Welsh and Wong (1998b) as a proxy of earnings management prior to the announcement of share repurchases in Singapore.

#### **Chapter 5: Hypothesis Development**

This paper looks at the "signaling" and "free cash flow" hypotheses as possible explanations proposed on the reactions during the announcements of share repurchase by the companies. Following that, we will examine if managers engage in earnings management prior to the share repurchase announcements.

# Hypothesis 1: Positive abnormal reactions surrounding the announcement dates of share repurchase

Investors, in general, view share repurchase announcements as good news and will react positively. The first explanation for the positive abnormal returns could be due to "undervaluation" hypothesis. The company is sending a signal (Grullon and Michaely, 2004) to the market that they are undervaluing the shares. This is because the managers have access to private information and is aware of the future projects, current prospects and also the "fair" valuation of the company as a whole.

Investors may react to the signal by buying up shares, which may bring it up to the fair valuation. As such, some of the companies may not undertake share repurchase exercises after their announcements. This is an example of an effective signal to the market.

The second explanation for the positive abnormal returns could be due to the "free cash flow" hypothesis. By undertaking share repurchases, managers are in essence, returning cash to the

shareholders. This action will help to reduce "agency costs" as managers will have less cash on their hands that they can use for their personal interests.

# Hypothesis 2: Companies with weaker corporate governance practices should send out a stronger signal

In support of the free cash flow hypothesis, shareholders of companies with poorer corporate governance will benefit more from the share repurchases. There will be a greater reduction in agency costs relative to companies with better corporate governance practices.

By using the free cash flow to initiate share repurchases, the managers in companies with weaker corporate governance practices will have less cash on hand for their personal benefit. For example, the manager could have used the excess cash to initiate unnecessary expansion of the company through merger and acquisitions for his own benefits including higher compensation for managing a larger company. This is detrimental to the shareholders' interests.

Dittmar and Mahrt-Smith (2007) showed that \$1.00 of cash in a poorly governed firm is valued only from \$0.42 to \$0.88. In a company with good corporate governance, it is approximately double of the amount of cash. For an average firm, it is \$0.94.

Hypothesis 3: Prior to announcements for share repurchases, companies with better corporate governance practices engage in smaller amount of earnings management (abnormal discretionary accruals) that those with poorer governance practices

Gong, Louis and Sun (2006) document that the average companies do engage in some forms of negative abnormal accruals before taking part in open market share repurchases.

Companies with better corporate governance practices tend to be more conservative with their accounting practices, as such they may engage in smaller amount of earnings management prior to share repurchases.

Managers in companies with weaker governance practices may have more "power" and authority to dictate how the companies are being run. When they are faced with the pressures to meet consensus earnings targets by analysts, these managers may find it easier, relative to those in companies with better governance practices, to manage their earnings. These can be done in the form of combining open market share repurchases and aggressive downward management of abnormal discretionary accruals to mislead the market.

#### **Chapter 6: Data and Sample Selection**

There was a sharp spike in the number of share repurchase announcements in the years 2006 to 2009. The sample size is 565. After combining with the Corporate Governance Scores of the Singapore Corporate Governance Index (SCGI), the sample size declines to 455. This is because the SCGI database (until fiscal year 2008) currently covers all the companies listed on SGX Mainboard, while SESDAQ and Catalist companies, exchange traded funds, funds, secondary listings, structured products, real estate investment trusts and GDRs for international securities listed overseas.

When I combine this sample of 455 with data collected from Bloomberg to compute figures for discretionary current accruals (earnings management), the sample size decreases to 420. The final sample for the whole studies is consistent and stays at 420.

#### **Share Repurchase Announcements Data**

For the data on share repurchase announcements, I collected the whole sample from 1998 to the current period. For the purpose of this study, we will look at the data collected from 1 January 2006 to 31 December 2009. This will provide us with 4 years of recent data to work with.

These announcements are hand collected from the SGX Archives at the National Library Board (Singapore). For the announcements after 1 Jan 2008, they are available on the SGX website (www.sgx.com)

SGX requires companies to disclose announcements in a timely manner on their SGXNet Announcements platform. This is to foster a "transparent and well-informed marketplace". Investors can benefit from retrieving information crucial to their investment decisions and issuers have to provide and improve their level of disclosure.

In particular, the announcements for share buyback or repurchase are found under the "Listed Companies Info > Shareholders' Circular". Some example of the announcements will be "Proposed Share Buy Back Mandate", "Tender Offer by XXX to repurchase its Ordinary Shares" and "Off Market Equal Access Offer".

In the circular, the company will provide the rationale for the share buyback mandate. This is an example of a typical rationale given by a listed company.

"The Share Buyback Mandate will give the Directors the flexibility to purchase Shares, if and when circumstances permit, with a view to enhancing the earnings per Share and/or the net asset value per Share. The Directors believe that Share Buybacks also provide the Company and its Directors with an alternative to facilitate the return of surplus cash over and above its ordinary capital requirements and exercise greater control over the Company's share capital structure. The Directors further believe that Share Buybacks may bolster confidence of Shareholders. With the Share Buyback Mandate, the Directors will have the ability to purchase Shares on the SGX-ST, where appropriate, to stabilize the demand for the Shares and to buffer against short-term share price volatility due to market speculation. Pursuant to the Companies Act, Shares purchased or otherwise acquired may also be held or dealt with as treasury shares.

The Share Buybacks by the Company will be made only in circumstances where it is considered to be in the best interests of the Company. Further, the Directors do not propose to carry out Share Buybacks to such an extent that would, or in circumstances that might, result in a material

adverse effect on the financial position of the Company or Group, or result in the Company being de-listed from the SGX-ST."

Other information inside the shareholders' circular may include the terms of the mandate, status of the purchased shares under the share buyback mandate, treasury shares, source of funds for share buyback, financial effects of the share buyback mandate, taxation, listing rules, take-over implications arising from share buyback, shares purchased by the company, interests of directors and substantial shareholders, and directors' recommendations.

#### **SGX Industry**

I follow the industry classification used by SGX to identify the industries of the different companies in the sample. The companies are classified into "Agriculture, Commerce, Construction, Electrical/Gas/Water, Hotels/Restaurants, Manufacturing, Mining/Quarrying, Multi-Industry, Properties, Services, Transportation/Storage/Communication".

#### **Returns Data**

The daily returns data are collected from the Wharton Research Data Services' Compustat Global database. In order to complement the dates used for the Announcements, data are collected from 1 Nov 2005 to 19 Feb 2010. The variables collected include "Data Date – Daily Prices, International Security Identification Number, Current ISO Country Code – Incorporation, Company Name, Stock Exchange Code, Price – Close – Daily and Daily Total Return Factor".

The data for the closing value of the Singapore's The Straits Times Index (STI) is downloaded from Bloomberg.

#### **Earnings Management Data**

The data used to compute earnings management are downloaded from Bloomberg database. Since these are annual data, I collected them from fiscal year 2002 to 2009. The variables include "Current Assets, Total Assets, Cash and Cash Equivalents, Short Term Portion of Long Term Debt, Current Liabilities, Changes in Accounts Receivables and Sales Revenue".

#### **Companies Fundamental Data**

Company fundamental data such as Price-to-Book ratio, Market Capitalization – denominated in Singapore Dollars (in Millions), Return on Assets (ROA), Cash dividends paid per common share and Total Outstanding Common Shares are downloaded from Bloomberg.

#### **Singapore Corporate Governance Index Scores**

The data are obtained from the Sim Kee Boon Institute for Financial Economics, Centre for Corporate and Investor Responsibility. For the purpose of this study, the results for the fiscal year 2008 Singapore Corporate Governance Index are being used to proxy for the level of corporate governance practices of Singapore listed companies.

#### **Chapter 7: Methodology**

#### **Daily Returns**

Firstly, I calculated the daily returns of the companies in the sample. The closing price, taken from the WRDS Compustat Global – Security Daily database, is adjusted for stock splits, stock dividends and changes due to payment of cash dividends. Based on the closing price, the daily returns is simply (Closing Price – Previous Closing Price) / (Previous Closing Price). One thing to take note is the daily returns are computed based on trading days and not calendar days.

This is repeated to calculate daily returns of The Straits Times Index (STI). The Straits Times Index is a market value-weighted stock market index based on the 30 representative companies listed on the Singapore Exchange. It is taken as a proxy for the Singapore Market Return.

By finding the difference of the daily returns of the listed company and daily returns of the STI, we can find the market-adjusted returns.

### Market – adjusted Returns Model: $A_{i,t} = R_{i,t} - R_{m,t}$

#### **Cumulative Abnormal Returns (CARs)**

For the purpose of this paper, two days cumulative abnormal returns [0, +1] and three days cumulative abnormal returns [-1, +1] following the announcement of share repurchases are calculated. The two-day CARs are used for the regression models found in this paper.

Cumulative Abnormal Returns Model: 
$$CAR_{T1|T2} = \sum_{j=1}^{N} \sum_{t=T_1}^{T_2} A_{i,t}$$

#### **SCGI scores for companies**

The fiscal year 2008 SCGI scores for the Singapore listed companies are tag to the CARs. These companies are sorted into 4 portfolios, each representing 1/4 of their rankings on the SCGI. The companies with the best corporate governance practices are found in portfolio 1 while the companies with the worst corporate governance practices are found in portfolio 4.

#### **Earnings Management**

I follow the method used by Teoh, Welch and Wong (1998a) in their paper "Earnings Management and the underperformance of the seasoned equity offerings" to calculate the amount of discretionary current accruals by each company as a proxy of their level of earnings management prior to the share repurchase announcements.

Net Income reported in the company's financial statements consists of two components, namely Cash Flow from Operations and Total Accruals. As such, to calculate the amount of Total Accruals, we simply take the reported Net Income (found in the Income Statement) less the amount of Cash Flow from Operations (found in the Cash Flow statement).

Total Accruals (TAC) can be further separated into current accruals (CA) and long term accruals (LA).

#### TAC = CA + LA = Net Income - Cash Flow from Operations (1)

For my paper, I will be focusing on the current accruals used as a proxy for earnings management prior to the announcement of company share repurchases. To compute current

accruals, we find the change in noncash current assets minus the change in operating current liabilities.

The data required to calculate current accruals is downloaded from Bloomberg. They include the change in current assets during period t, the change in cash and cash equivalents during period t, the change in current liabilities during period t and the change in current maturity of long term debt.

$$CA = \Delta [current \ assets - cash]$$
  
-  $\Delta [current \ liabilities$   
- current maturity of long term debt] (2)

I use a modified Jones (1991) model, found in Teoh, Welch and Wong (1998a), to compute the amount of discretionary and non discretionary accruals in a given year. The companies in this sample are all classified following SGX's Industry classification system for different industries, namely "Agriculture, Commerce, Construction, Electrical/Gas/Water, Hotels/Restaurants, Manufacturing, Mining/Quarrying, Multi-Industry, Properties, Services, Transportation/Storage/Communication".

I perform an ordinary least square regression for current accruals of a given year (dependent variable) regressed on changes in sales revenue for the year. The rationale is because the company's current accruals should be linked to the changes in the sales revenue.

$$\frac{CA_{jt}}{TA_{j,t-1}} = \alpha_0 \left(\frac{1}{TA_{j,t-1}}\right) + \alpha_1 \left(\frac{\Delta SALES_{jt}}{TA_{j,t-1}}\right) + \varepsilon_{jt}$$
(3)

The regression is done for the companies (represented as firm j in the equation) that belong in same industry, based on SGX's Industry classification system, but excluding the companies (represented as firm i in the equation) that initiate share repurchase announcements. Before performing the regression, I have to compute the change in sale of each company in year t, current accruals of each company in year t, total assets of each company in year t-1. The total assets as of the end of previous year are used to deflate all variables including the intercept term in the cross-sectional regression to reduce heteroskedasticity.

In order to estimate the coefficients  $\alpha_0$  and  $\alpha_1$ , I carry out the cross-sectional regression for each industry and in each year from year -2 to year 0. Year 0 is the year, from 2006 to 2009, in which the company make the share repurchase announcement.

$$NDCA_{it} = \widehat{\alpha}_0 \left( \frac{1}{TA_{i,t-1}} \right) + \widehat{\alpha}_1 \left( \frac{\Delta SALES_{it} - \Delta A/R_{it}}{TA_{i,t-1}} \right)$$
(4)

With the estimated coefficients  $\hat{\alpha}_0$  and  $\hat{\alpha}_1$  for different industries in different years, the non discretionary current accruals (NDCA) can be calculated for the companies (represented as firm i in the equation) that initiate the share repurchase announcements. This portion of current accruals is considered to be independent of the company manager's control. The change in trade

receivables in year t is subtracted from sales growth. This is done to reduce the possibility of manipulation of sales by the company managers prior to the share repurchase announcements.

$$DCA_{it} = \frac{CA_{it}}{TA_{i,t-1}} - NDCA_{it}$$
(5)

Finally, discretionary current accruals (DCA) are computed simply by subtracting non discretionary current accruals (NDCA) from current accruals (CA). Discretionary current accruals will be used as proxies of earnings management prior to the share repurchase announcements. Thus, DCA<sub>it</sub> represent the amount of earning management of firm i in year t.

#### **Model Regressions**

#### **Regression with 2 days CAR [0, +1]**

The Cumulative Market-Adjusted Returns (CAR) [0, +1] around the Share Repurchase Announcements (dependent variable) is used to regress against the Corporate Governance Dummy Variable, Earning Management (Discretionary Current Accruals) 1 year before Share Repurchase Announcements, Price-To-Book Ratio, Market Capitalization and Return on Assets. All values are based on the Singapore Dollar Currency.

Companies in portfolio 4, which contains the companies with the worst corporate governance practices, are rated as 1 for the Corporate Governance Dummy Variable. The other companies in the three portfolios are rated as 0.

$$= \alpha_{i} + \beta_{i}(CGdum_{i}) + \gamma_{1,i}(DCA_{t-1}) + \gamma_{2,i}(PB) + \gamma_{3,i}(Log_{MC})$$

$$+ \gamma_{4,i}(ROA) + \gamma_{5,i}(CG SubIndex A) + \gamma_{6,i}(CG SubIndex B)$$

$$+ \gamma_{7,i}(CG SubIndex C) + \gamma_{8,i}(CG SubIndex D) + \gamma_{9,i}(CG SubIndex E)$$

$$+ \gamma_{10,i}(Sector 1 Dummy) + \gamma_{11,i}(Sector 2 Dummy)$$

$$+ \gamma_{12,i}(Sector 3 Dummy) + \gamma_{13,i}(Sector 4 Dummy)$$

$$+ \gamma_{14,i}(Sector 5 Dummy)$$

In the Regression Model,  $CAR_i$  represents the Cumulative Market-adjusted Returns [0, +1]; CGdum<sub>i</sub> is the Corporate Governance Dummy variable;  $DCA_{t-1}$  represents the Discretionary Current Accruals - 1 year before Share Repurchase Announcements, PB represents the Price-To-Book Ratio;  $Log_{MC}$  is the log of market capitalization of the company in millions of dollars; and *ROA* signify the Return on Assets. All values are based on the Singapore Dollar Currency.

CG Sub Index A, B, C, D and E refers to the scores on five different categories on the Singapore Corporate Governance Index namely "Rights of Shareholders, Equitable treatment of Shareholders, Roles of Stakeholders in Corporate Governance, Disclosure and Transparency, and Responsibilities of the Board" respectively.

5 different sector dummy variables are assigned to companies in different industries in order to control for industry specific level of governance. The dummy variable means the number 1 is assigned for the particular company belonging to the sector while the number 0 is assigned for the other companies not in the sector. Sector 1 refers to companies in the Manufacturing industry; Sector 2 refers to companies in the Hotels, Restaurants and Service industries; Sector 3 refers to

companies in the Commerce and Finance industries; Sector 4 refers to companies in the Construction and Properties industries; and Sector 5 refers to companies in the Agriculture, Multi-Industries, Transportation, Storage and Communication industries.

### **Pearson Correlation**

Pearson Correlation Coefficients are shown for the variables used in the regression models.

The variables included are the Cumulative Market-adjusted Returns (CAR) [0, +1], Corporate Governance Dummy variable, Corporate Governance scores from the Singapore Corporate Governance Index, Earning Management (Discretionary Current Accruals) 1 year before Share Repurchase Announcements, Price-To-Book Ratio, Log of Market Capitalization, and Return on Assets.

### **Chapter 8: Results and Analysis**

From Table 1, we can look at the 420 Share Repurchase Announcements in Singapore from the years 2006 to 2009. The descriptive statistics of the full sample including the Mean, 25<sup>th</sup> Percentile, Median and 75<sup>th</sup> Percentile of Price-To-Book Ratio, Market Capitalization in Millions (Singapore Dollars) and Return on Assets are presented in Panel A of Table 1.

In Panel B of Table 1, we can see the full sample breakdown in years, from 2006 to 2009. By looking at the mean of the Price-To-Book Ratio across the years, we can see that it increases from 2.12 to 2.49 from 2006 to 2007. In 2008, there is the global financial crisis, which also led to the collapse of the Lehman Brother Bank in the United States. The Price-To-Book Ratio for the year 2008 is 1.22. In 2009, with the success of the monetary stimulus package provided by governments worldwide, the Price-To-Book Ratio for 2009 is higher and the mean value is 1.83.

From the mean value of Market Capitalization, we can see that the average company fell by more than 50% in market valuation in the year 2008 when compared to the year 2007 before the global financial crisis. This will be a good opportunity for the stronger companies with surplus cash flow to send a signal to the market that they are undervalued simply by announcing their intentions to repurchase their shares.

In the year 2008, we can also see that the Return on Assets (ROA) is much lower as compared to the other years as many companies reported losses during the year of the global financial crisis. We can see a recovery in the year 2009 when the ROA rose to 5.10 from 2.84 in the previous year.

Another key observation is that in the year 2008, there are more companies conducting share repurchases to take advantage of the poor market sentiment as compared to all the previous years.

For the year 2008, our sample size is 123. This figure is 91, 97 and 109 for the years 2006, 2007 and 2009 respectively. Some of these companies that announced share repurchases in the year 2008 include "Singapore Telecommunications, United Overseas Bank, Oversea-Chinese Banking Corporation, DBS Group Holdings, Singapore Airlines, Capitaland, Yangzijiang Shipbuilding, Singapore Exchange, Singapore Technologies Engineering, Keppel Corporation, Sembcorp Industries and Starhub."

#### [Insert Table 1 Here]

Table 2 shows the breakdown of sample companies for this study into different industries based on SGX's Industry Classification.

We can see that there is only 1 company that falls under Agriculture Industry that made an announcement for share repurchase. This company is "Golden Agri-Resources Ltd". In contrast, there are 165 companies classified under Manufacturing. The other industries covered by this study include "Commerce, Construction, Finance, Hotels and Restaurants, Multi-Industries, Properties, Services, and Transportation, Storage and Communications".

[Insert Table 2 Here]

In Table 3, Panel A shows the Daily Market-Adjusted Returns for period [-5, +5] around the Share Repurchase Announcements. We can see that for Day 0, the Mean Market-Adjusted Daily Return is 0.56%. For Day 1, the Mean Market-Adjusted Daily Return is 0.75%. These results are significant. The market reaction seems to be the strongest for Day 0 and Day 1. Also, for all the 5 days before and 5 days after the share repurchase announcements, the Mean Market-Adjusted Daily Return values are all positive.

Hypothesis 1 states that there are positive abnormal reactions surrounding the announcement dates of share repurchase. Investors, in general, view share repurchase announcements as good news. The positive daily mean market-adjusted daily returns lend support to both the "Undervaluation" hypothesis where the manager send a signal to the market that the company is being undervalued and "Free Cash Flow" hypothesis where the excess cash is being used to repurchase shares and reduce agency problem between the shareholders and the managers.

Panel B shows the Cumulative Market-Adjusted Returns for periods [0, -1] and [-1, +1] around the Share Repurchase Announcements. The mean Cumulative Market-Adjusted Returns value for the period [0, +1] is 1.25% and the period [-1, +1] is 1.33%. Both results are positive and highly significant at the 1% level using a two-tailed test. These results support hypothesis 1 which emphasizes on the positive abnormal market returns surrounding the share repurchase announcements.

[Insert Table 3 Here]

For Table 4, the whole sample is sorted into 4 portfolios based on their Corporate Governance (CG) scores from the Singapore Corporate Governance Index. Portfolio 1 contains the samples with the highest CG scores while Portfolio 4 contains the samples with the lowest CG scores. The higher the CG score, the better the governance level of the company.

We can see that the 2 days [0, +1] Cumulative Market-Adjusted Returns increases from Portfolio 1 to 4. They are 0.46%, 0.92%, 1.01% and 2.62% respectively. These results are significant for Portfolios 2, 3 and 4.

It shows companies with weaker corporate governance practices, upon announcing their intention to repurchase their own shares, have a much stronger and positive reaction from the market. The results support hypothesis 2 where companies with weaker corporate governance practices should send out a stronger signal. According to the "Free Cash Flow" hypothesis, shareholders are reacting positively in response to a possible reduction or mitigation of the agency problem.

Managers in companies with weaker corporate governance, upon share repurchase, will have less cash on their hands. The cash could be potentially be allocated to projects that may benefit the managers but detrimental to the shareholders. In turn, the managers may be subjected to more monitoring by shareholders when they decide to seek financing for future projects.

[Insert Table 4 Here]

In Table 5, we look at earnings management prior to the Share Repurchase Announcements in Singapore. This is done by following Teoh, Welch and Wong (1998) paper's method on using discretionary current accruals as a proxy for earnings management. This paper looks at one year before and two years before the Share Repurchase Announcements.

The mean value for discretionary current accruals 1 year before share repurchase announcements  $(DCA_{t-1})$  is -1.44% with t value of -1.68. For discretionary current accruals 2 years before share repurchase announcements  $(DCA_{t-2})$ , it is -0.43% with t value of -0.43.

We further sort these earnings management figures into 4 different portfolios by their Corporate Governance (CG) scores from the Singapore Corporate Governance Index. Portfolio 1 contains samples with the highest CG scores while Portfolio 4 contains samples with the lowest CG Scores. The higher the CG score, the better the Corporate Governance level of the company. For Portfolios 1, 2 and 4 for the first year discretionary current accruals, the mean is negative.

Hypothesis 3 states that prior to announcements for share repurchases, companies with better corporate governance practices engage in smaller amount of earnings management (abnormal discretionary current accruals) that those with poorer governance practices. The results show that, similar to Gong, Louis and Sun (2006), there are some downward earnings management prior to announcements from share repurchases. The magnitude of downward earnings management is greater for one year before share repurchase announcements than two years before share repurchase announcements.

However, one year prior to share repurchase announcements; companies with the worst governance (in portfolio 4) manage their discretionary current accrual downwards by 1.92% while those with the best governance (in portfolio 1) manage earnings downwards by 2.69%.

### [Insert Table 5 Here]

In Table 6, announcements made by companies on share repurchase are sorted in their order over the period from year 2006 to 2009. They are classified under 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> announcements made by the companies in the sample. Some of the companies make only one announcement over the four years period while there are companies that make up to the maximum of 4 announcements in the same period.

By looking at the CAR for period [0, +1] around share repurchase announcements, the 1<sup>st</sup> announcements have the strongest and significant mean market reaction of 1.54%. The 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> announcements made by the companies are 1.43%, 0.72% and -1.36% respectively. This shows that the market is very supportive of companies making their first announcements about share repurchase in the four years period. The magnitude of market reaction decrease when companies make their 2<sup>nd</sup> and 3<sup>rd</sup> announcements. On the 4<sup>th</sup> announcements, the news is generally of no surprise to the market and it is even negative during the share repurchase announcement period.

[Insert Table 6 Here]

In Table 7, Companies are sorted in a 2-by-2 matrix, based on their CG scores on the Singapore Corporate Governance Index and their amount of positive / negative earnings management (discretionary current accrual) one year before share repurchase announcements.

In general, for the companies with higher corporate governance scores, the market reaction upon share repurchase announcements is of similar magnitude, 0.75% and 0.65%, for upward and downward earnings management respectively.

However, companies with lower corporate governance scores and engage in upward earnings management report a strong and highly significant CAR of 2.89%. The companies with similar level of governance but engage in downward earnings management only resulted in CAR of 0.89%. The results support the free cash flow hypothesis where companies with lower corporate governance exhibit the strongest market reaction, possibly due to the greater reduction of agency costs for shareholders when compared to those of better governed companies.

#### [Insert Table 7 Here]

In Table 8, the Cumulative Market-Adjusted Returns (CAR) [0, +1] around the Share Repurchase Announcements (dependent variable) is used to regress against Governance Dummy Variable, Discretionary Current Accrual – 1 year before Share Repurchase Announcements, Price-To-Book Ratio, Log of Market Capitalization and Return on Assets. A total of 4 different models are shown below. The sample size is 420 for all the 4 models. We can see that the results for Governance Dummy variable are all positive and significant from Models 1, 3 and 4 at 5% level. This shows that for companies with the weakest corporate governance with CG scores of 61.81, market reactions are strong during the share repurchase announcements. The coefficients of the Price-To-Book Ratios are also positive.

In a regression, the CAR for the period [0, +1] changes by 0.1097% when the discretionary current accrual changes by 1%. The results are highly significant for Models 1 and 4 at 1% level. Perhaps, the market is reacting positively to positive earning management by the managers, and investors trust the financial results provided by the managers.

For models 5 and 6, the 5 CG Sub-indices that make up the Singapore Corporate Governance Index are used as control variables. The Governance Dummy variable still remains significant.

In model 6, there are 5 Sector Dummy Variable used to control for governance effects in different sectors, but only results for sectors 1 to 4 are being displayed. This is due to issues with running a regression containing 5 dummy variables which may result in biasness. The regression is repeated for all different combinations of sectors 1 to 5 and the results for sector 5 (not displayed in Table 8) are insignificant.

#### [Insert Table 8 Here]

In Table 9, Pearson Correlation Coefficients are shown for the variables used in the regression models. Variables included are the Cumulative Market-adjusted Returns [0, +1], Corporate Governance dummy variable, CG scores from the Singapore Corporate Governance Index,

Discretionary Current Accrual – 1 year before Share Repurchase Announcements, Price-To-Book Ratio, Market Capitalization and Return on Assets.

The Corporate Governance Dummy variable, which proxy for the companies with the worst corporate governance scores, those that score below 61.81 in the Singapore Corporate Governance Index, shows a strong correlation with the cumulative market-adjusted returns [0, +1] with magnitude of 0.0965 and significance at 5% level. The Corporate Governance Dummy variable is also correlated with the Price-To-Book Ratio, Market Capitalization and Returns on Assets. Similarly, the Singapore Corporate Governance Index scores are also correlated with these 3 ratios. In the regression models 1 to 4 above in Table 6, only the Corporate Governance Dummy variable is being used.

The Discretionary Current Accruals – one year before share repurchase announcements, is strongly and positively correlated with the cumulative market-adjusted returns [0, +1] with magnitude of 0.2338 and significant at 1% level. In Table 5, we observe that for the average companies, the magnitude of downward earnings management prior to share repurchase announcements is 1.44%. The results in Table 6 shows that the higher the amount of earning management, the stronger the market reaction. Perhaps, this could be due to the investors believed in the financial numbers produced by the managers and reacted positively to them.

The Return on Assets figure is strongly and positively correlated with the Price-To-Book Ratio with magnitude of 0.2514 and significance at 1% level. Similarly, the Price-To-Book Ratio is positively correlated with the log of market capitalization with magnitude of 0.3083 and significance at 1% level.

[Insert Table 9 Here]

### **Chapter 9: Conclusion**

With this study, we can see that investors in the Singapore market react positively to the share repurchase announcements. Upon classification of these companies into four different portfolios based on their governance level, by using the scores from the Singapore Corporate Governance Index, we can examine the difference in market reactions.

In the later part of this study, we look at the earnings management by following Teoh, Welch and Wong (1998) paper's to compute Discretionary Current Accruals, one year before and two years before share repurchase announcements.

The market reactions both from the daily market market-adjusted returns and cumulative marketadjusted returns are all positive surrounding the announcements on share repurchase. The results support hypothesis 1 where the manager can use share repurchase announcement as a signal to the market that the company is under-valued. An alternative explanation will be the reduction of agency problems between shareholders and managers when excess cash is being used to repurchase shares.

When the companies are distributed into four different portfolios, based on their corporate governance scores from the Singapore Corporate Governance Index, there is a trend where the best companies have the smallest positive market reactions while the worst companies have the largest positive market reactions. The mean CAR for the period [0, +1] increase in a monotonically sequence from Portfolio 1 to 4. The weakly governed companies exhibit the strongest, positive and significant CAR of 2.62%.

The results are in support of hypothesis 2 where companies with weaker corporate governance practices should send out a stronger signal. In weakly governed companies, the excess cash

channeled into share repurchases will help to reduce agency problems caused by managers using the cash for their personal interests. Thus, the reduction in agency problems through share repurchases will be greater for companies with weak corporate governance than companies with strong corporate governance.

Furthermore, contrary to hypothesis 3, the results for one year prior to share repurchase announcements; companies with the worst governance manage their discretionary current accrual downwards by 1.44% while those with the best governance manage earnings downwards by 2.69%.

On the whole, the magnitude of downward earnings management is greater for one year before share repurchase announcements than two years before share repurchase announcements.

### **Key Contribution**

In this paper, I hope to contribute to existing literature on share repurchase announcements. This paper will contribute to the existing event-study research being done on the Singapore Market. By classifying companies based on their governance level, the results provide further support for the "Free Cash Flow" hypothesis. This paper also can show that on average companies manage their earnings downward prior to the share repurchase announcements.

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# Results

# Table 1

Sample Statistics of 420 Share Repurchase Announcements events in Singapore from 2006 to 2009. The Price-To-Book Ratio, Market Capitalization (MM\$) and Return on Assets for the sample can be seen in the Table. All values are based on the Singapore Dollar Currency.

Panel A: Sample Statistics

Variable	Ν	Mean	25th	Median	75th
			Percentile		Percentile
Price-To-Book Ratio	420	1.87	0.67	1.14	1.85
Market Capitalization	420	2509.19	59.58	167.34	694.59
( <b>MM</b> \$)					
<b>Return on Assets</b>	420	5.98	1.64	5.90	10.52

Sample Statistics of 420 Share Repurchase Announcements events in Singapore from 2006 to 2009 classified by years. The Price-To-Book Ratio, Market Capitalization (MM\$) and Return on Assets for the sample can be seen in the Table. All values are based on the Singapore Dollar Currency.

Panel B: Sample Statistics (Year)

Year	Variable	Ν	Mean	25th Percentile	Median	75th Percentile
2006	Price-To-Book Ratio	91	2.12	0.87	1.27	2.16
	Market Capitalization (MM\$)	91	3004.75	79.83	217.67	1412.91
	<b>Return on Assets</b>	91	7.56	3.04	6.73	10.81
2007	Price-To-Book Ratio	97	2.49	1.00	1.57	2.43
	Market Capitalization (MM\$)	97	3275.40	88.87	224.64	1254.66
	Return on Assets	97	9.44	3.53	8.07	13.51
2008	Price-To-Book Ratio	123	1.22	0.35	0.61	1.22
	Market Capitalization (MM\$)	123	1348.31	36.41	89.80	314.11
	<b>Return on Assets</b>	123	2.84	0.65	4.41	8.90
2009	Price-To-Book Ratio	109	1.83	0.78	1.17	1.83
	Market Capitalization (MM\$)	109	2723.59	68.86	172.91	629.84
	<b>Return on Assets</b>	109	5.10	0.79	5.08	9.24

Classification of the sample Share Repurchase Announcements companies from 2006 to 2009 into different industries by using SGX's Industry Classification.

		Frequency	Cumulative Percent
1	0.24	1	0.24
50	11.90	51	12.14
9	2.14	60	14.29
32	7.62	92	21.90
9	2.14	101	24.05
165	39.29	266	63.33
18	4.29	284	67.62
34	8.10	318	75.71
62	14.76	380	90.48
40	9.52	420	100.00
	50 9 32 9 165 18 34 62	50       11.90         9       2.14         32       7.62         9       2.14         165       39.29         18       4.29         34       8.10         62       14.76	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

Panel A shows the Daily Market-Adjusted Returns for period [-5, +5] around the Share Repurchase Announcements.

Ν	Mean	Median	T stats
382	0.0033	-0.0009	1.39
383	0.0025	-0.0015	1.20
382	0.0052**	-0.0003	2.34
391	0.0010	0.0007	0.46
387	0.0009	-0.0017	0.39
407	0.0056*	0.0010	1.72
394	0.0075***	0.0037	2.91
401	0.0046	-0.0015	1.47
393	0.0062	0.0000	1.79
401	0.0029	-0.0013	1.26
395	0.0031	0.0004	1.29
	382           383           382           391           387           407           394           401           393           401	382         0.0033           383         0.0025           382         0.0052**           391         0.0010           387         0.0009           407         0.0056*           394         0.0075***           401         0.0046           393         0.0062           401         0.0029	382         0.0033         -0.0009           383         0.0025         -0.0015           382         0.0052**         -0.0003           391         0.0010         0.0007           387         0.0009         -0.0017           407         0.0056*         0.0010           394         0.0075***         0.0037           401         0.0046         -0.0015           393         0.0062         0.0000           401         0.0029         -0.0013

Panel A: Daily

Returns

Panel B shows the Cumulative Market-Adjusted Returns for periods [0, -1] and [-1, +1] around the Share Repurchase Announcements.

I and D.								
CAR	Ν	Mean	Median	T stats				
[-1, +1]	420	0.0133***	0.0040	3.10				
[0, +1]	420	0.0125***	0.0034	3.14				

Panel B: CAR

Samples are sorted into 4 different portfolios by their Corporate Governance (CG) Scores from the Singapore Corporate Governance Index. Portfolio 1 contains samples with the highest CG scores while Portfolio 4 contains samples with the lowest CG Scores. The higher the CG score, the better the Corporate Governance level of the company. The Cumulative Market-adjusted returns [0, +1] around Share Repurchase Announcements, Price-To-Book Ratio, Market Capitalization (MM\$) and Return on Assets can be seen in the Table below. All values are based on the Singapore Dollar Currency.

Portfolio	N	CAR [0,+1]	Price-To-Book Ratio	Market Capitalization (MM\$)	Return on Assets	T stats
1	104	0.0046	3.62	8100.87	8.11	1.16
2	105	0.0092*	1.38	1449.59	6.95	1.66
3	106	0.0101**	1.18	339.18	5.88	2.05
4	105	0.0262*	1.30	221.04	2.98	1.93
ALL	420	0.0125***	1.87	2509.19	5.98	3.14

Samples are sorted into 4 different portfolios by their Corporate Governance (CG) Scores from the Singapore Corporate Governance Index. Portfolio 1 contains samples with the highest CG scores while Portfolio 4 contains samples with the lowest CG Scores. The higher the CG score, the better the Corporate Governance level of the company. The Discretionary Current Accruals, as a proxy for Earning Management, are shown for 1 year and 2 years before the Share Repurchase Announcements.

		DCA (1 year before)			DCA (2 years before)		
Portfolio	Ν	Mean	Median	T Stats	Mean	Median	T stats
1	104	-0.0269**	-0.0079	-2.44	-0.0190	-0.0069	-1.61
2	105	-0.0115	-0.0180	-0.67	-0.0292*	-0.0050	-1.70
3	106	0.0000	-0.0025	0.00	0.0077	-0.0055	0.39
4	105	-0.0192	-0.0089	-0.84	0.0233	-0.0177	0.85
ALL	420	-0.0144*	-0.0079	-1.68	-0.0043	-0.0085	-0.43

Announcements by companies on share repurchase are sorted in their order over the period from year 2006 to 2009. They are classified under 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> announcements made by the companies in the sample.

Announcement (Order)	Variable	Ν	Mean	Median	T Stats
$1^{st}$	CAR [0,+1]	232	0.0154**	0.0045	2.40
	Price-To-Book Ratio	232	1.57	1.05	12.55
	Market Capitalization (MM\$)	232	1652.73	141.23	4.27
	Return on Assets	232	6.12	5.73	8.59
2 <sup>nd</sup>	CAR [0,+1]	113	0.0143**	0.0044	2.39
	Price-To-Book Ratio	113	2.16	1.22	5.15
	Market Capitalization (MM\$)	113	2704.90	198.12	3.60
	Return on Assets	113	6.24	6.13	7.72
3 <sup>rd</sup>	CAR [0,+1]	52	0.0072	0.0009	1.24
	Price-To-Book Ratio	52	1.80	0.91	3.02
	Market Capitalization (MM\$)	52	3161.35	248.49	3.22
	Return on Assets	52	4.38	4.68	3.30
4 <sup>th</sup>	CAR [0,+1]	23	-0.0136*	-0.0115	-1.95
	Price-To-Book Ratio	23	3.60	1.72	2.81
	Market Capitalization (MM\$)	23	8712.37	1159.96	2.97
	Return on Assets	23	6.78	5.11	5.04

Panel A: Announcements by Frequency

Companies are sorted in a 2-by-2 matrix, based on their CG scores on the Singapore Corporate Governance Index and positive / negative discretionary current accrual one year before share repurchase announcements.

			Positive DCA			
	Variable	Ν	Mean	Median	T Stats	
	CAR [0,+1]	93	0.0075	0.0069	1.61	
TT' - h	Price-To-Book Ratio	93	2.23	1.33	6.29	
Higher CG	Market Capitalization (MM\$)	93	5462.72	470.57	4.45	
	<b>Return on Assets</b>	93	7.67	7.67	11.95	

# 2-by-2 matrix (CG and Positive / Negative DCA)

	CAR [0,+1]	97	0.0289**	0.0075	2.40
Lower	<b>Price-To-Book Ratio</b>	97	1.37	0.88	6.20
Lower CG	Market Capitalization (MM\$)	97	306.16	125.46	5.96
	<b>Return on Assets</b>	97	4.52	4.67	4.35

Negative DCA						
N Mean Median T Stats						
116	0.0064	0.0031	1.32			
116	2.71	1.48	5.59			
116	4195.39	243.83	5.42			
116	7.41	6.12	8.14			

114	0.0089	-0.0017	1.05
114	1.13	0.93	14.41
114	258.46	84.46	4.90
114	4.37	5.54	3.97

The Cumulative Market-adjusted returns [0, +1] around the Share Repurchase Announcements (dependent variable) is used to regress against Corporate Governance Dummy Variable, Discretionary Current Accrual – 1 year before Share Repurchase Announcements, Price-To-Book Ratio, Market Capitalization (MM\$) in Singapore Dollar Currency and Return on Assets. A total of 5 different models are shown below. For Models 5 and 6, dependent variables of the 5 Sub-Indices of the Singapore Corporate Governance Index are added. 5 Sector Dummy variables are used to control for governance effects in different industries.

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Intercept	0.0094**	0.0190	0.0050	0.0096	0.0252	-0.0133
	(2.09)	(1.51)	(0.35)	(0.70)	(0.41)	(0.20)
Governance Dummy	0.0189**		0.0218**	0.0209**	0.0226*	0.0248*
	(2.12)		(2.17)	(2.15)	(1.67)	(1.82)
DCA (1 year before)	0.1102***			0.1097***	0.0849***	0.0888***
	(4.97)			(4.82)	(3.65)	(3.75)
<b>Price-To-Book Ratio</b>		0.0038***	0.0037***	0.0035***	0.0041***	0.0044***
		(2.98)	(2.92)	(2.84)	(3.23)	(3.43)
Log (Market Cap)		-0.0044	-0.0011	-0.0018	0.0037	0.0050
		(0.86)	(0.21)	(0.34)	(0.59)	(0.73)
<b>Return on Assets</b>		-0.0004	-0.0003	-0.0004	-0.0003	-0.0003
		(1.00)	(0.71)	(0.97)	(0.72)	(0.65)
CG Sub-Index A					0.0003	0.0005
					(0.31)	(0.54)
CG Sub-Index B					-0.0004	-0.0005
					(0.89)	(1.03)
CG Sub-Index C					-0.0005	-0.0004
					(1.69)	(1.38)
CG Sub-Index D					0.0000	0.0000
					(0.08)	(0.00)
CG Sub-Index E					0.0004	0.0005
					(0.74)	(0.96)
Sector 1 Dummy						0.0198
						(1.38)
Sector 2 Dummy						0.0260
						(1.63)
Sector 3 Dummy						0.0182
						(1.21)
Sector 4 Dummy						0.0212
						(1.23)
Ν	420	404	404	404	395	395
Adj R-Square	0.0602	0.0147	0.0238	0.0754	0.0638	0.0611
F Value	14.42***	3.01**	3.46***	7.57***	3.68***	2.83***

\*, \*\*, and \*\*\* denote statistical significance at the 10%, 5% and 1% level respectively, using a two-tailed test.

#### Table 9

Pearson Correlation Coefficients are shown for the variables used in the regression models. Variables included are the Cumulative Market-adjusted Returns [0,+1], Corporate Governance Dummy Variable, Corporate Governance scores from the Singapore Corporate Governance Index, Discretionary Current Accrual – 1 year before Share Repurchase Announcements, Price-To-Book Ratio, Market Capitalization (MM\$) in Singapore Dollar Currency and Return on Assets.

Pearson Correlation Coefficients											
Prob >  r  under H0: Rho=0											
	CAR [0,+1]	CG Dummy	SCGI Scores	DCA (1 year before)	Price-To- Book Ratio	Log (Market Cap)	Return on Assets				
CAR [0,+1]	1										
CG Dummy	0.0965**	1									
	0.0482										
SCGI Scores	0.0049	-0.6564***	1								
	0.9200	<.0001									
DCA (1 year before)	0.2338***	-0.0161	0.0463	1							
	<.0001	0.7422	0.3435								
Price-To-Book	0.1306***	-0.0954*	0.1371***	0.0524	1						
Ratio	0.0074	0.0507	0.0049	0.2845							
Log (Market Cap)	-0.0057	-0.3076***	0.3941***	0.0433	0.3083***	1					
	0.9099	<.0001	<.0001	0.3855	<.0001						
Return on Assets	-0.0178	-0.1743***	0.2287***	0.0549	0.2514***	0.1864***	1				
	0.7165	0.0003	<.0001	0.2617	<.0001	0.0002					

\*, \*\*, and \*\*\* denote statistical significance at the 10%, 5% and 1% level respectively, using a two-tailed test.

#### Appendix

#### **Appendix 1: OECD Principles of Corporate Governance (2004) Rights of Shareholders**

The corporate governance framework should protect and facilitate the exercise of shareholders' rights.

#### **Equitable treatment of Shareholders**

The corporate governance framework should ensure the equitable treatment of all shareholders, including minority and foreign shareholders. All shareholders should have the opportunity to obtain effective redress for violation of their rights.

#### **Roles of stakeholders in Corporate Governance**

The corporate governance framework should recognize the rights of stakeholders established by law or through mutual agreements and encourage active co-operation between corporations and stakeholders in creating wealth, jobs, and the sustainability of financially sound enterprises.

#### **Disclosure and Transparency**

The corporate governance framework should ensure that timely and accurate disclosure is made on all material matters regarding the corporation, including the financial situation, performance, ownership, and governance of the company.

#### **Responsibilities of the Board**

The corporate governance framework should ensure the strategic guidance of the company, the effective monitoring of management by the board, and the board's accountability to the company and the shareholders.

#### **Appendix 2: Companies Act (Chapter 50)**

http://statutes.agc.gov.sg/, accessed 6<sup>th</sup> April 2010

#### Special resolution for reduction of share capital

**73.** (*Repealed by Act 21 of 2005*)

#### Consequences of company financing dealings in its shares, etc.

76A. —(1) The following contracts or transactions made or entered into in contravention of section 76 shall be void:

(a) a contract or transaction by which a company acquires or purports to acquire its own shares or units of its own shares, or shares or units of shares in its holding company; and

(b) a contract or transaction by which a company lends money on the security of its own shares or units of its own shares, or on the security of shares or units of shares in its holding company.

[13/87]

(2) Subject to subsection (1), a contract or transaction made or entered into in contravention of section 76, or a contract or transaction related to such contract or transaction, shall be voidable at the option of the company. The company may, subject to the following provisions of this section, avoid any contract or transaction to which this subsection applies by giving notice in writing to the other party or parties to the contract or transaction.

(3) The Court may, on the application of a member of a company, a holder of debentures of a company, a trustee for the holders of debentures of a company or a director of a company, by order, authorise the member, holder of debentures, trustee or director to give a notice or notices under subsection (2) in the name of the company.

(4) Where —

(a) a company makes or performs a contract, or engages in a transaction;

(b) the contract is made or performed, or the transaction is engaged in, in contravention of section 76 or the contract or transaction is related to a contract that was made or performed, or to a transaction that was engaged in, in contravention of that section; and

(c) the Court is satisfied, on the application of the company or of any other person, that the company or that other person has suffered, or is likely to suffer, loss or damage as a result of — (i) the making or performance of the contract or the engaging in of the transaction;

(ii) the making or performance of a related contract or the engaging in of a related transaction; (iii) the contract or transaction being void by reason of subsection (1) or avoided under subsection (2); or

(iv) a related contract or transaction being void by reason of subsection (1) or avoided under subsection (2),

the Court may make such order or orders as it thinks just and equitable (including, without limiting the generality of the foregoing, all or any of the orders mentioned in subsection (5)) against any party to the contract or transaction or to the related contract or transaction, or against the company or against any person who aided, abetted, counselled or procured, or was, by act or omission, in any way, directly or indirectly, knowingly concerned in or party to the contravention.

(5) The orders that may be made under subsection (4) include —

[13/87]

[13/87]

[13/87]

(a) an order directing a person to refund money or return property to the company or to another person;

(b) an order directing a person to pay to the company or to another person a specified amount of the loss or damage suffered by the company or other person; and

(c) an order directing a person to indemnify the company or another person against any loss or damage that the company or other person may suffer as a result of the contract or transaction or as a result of the contract or transaction being or having become void.

[13/87]

(6) If a certificate signed by not less than 2 directors, or by a director and a secretary, of a company stating that the requirements of section 76 (9A), (9B) or (10) (as the case may be), inclusive, have been complied with in relation to the proposed giving by the company of financial assistance for the purposes of an acquisition or proposed acquisition by a person of shares or units in the company or in a holding company of the company is given to a person — (a) the person to whom the certificate is given is not under any liability to have an order made against him under subsection (4) by reason of any contract made or performed, or any transaction engaged in, by him in reliance on the certificate; and

(b) any such contract or transaction is not invalid, and is not voidable under subsection (2), by reason that the contract is made or performed, or the transaction is engaged in, in contravention of section 76 or is related to a contract that was made or performed, or to a transaction that was engaged in, in contravention of that section.

#### [13/87;21/2005]

(7) Subsection (6) does not apply in relation to a person to whom a certificate is given under that subsection in relation to a contract or transaction if the Court, on application by the company concerned or any other person who has suffered, or is likely to suffer, loss or damage as a result of the making or performance of the contract or the engaging in of the transaction, or the making or performance of a related contract or the engaging in of a related transaction, by order, declares that it is satisfied that the person to whom the certificate was given became aware before the contract was made or the transaction was engaged in that the requirements of section 76 (9A), (9B) or (10) (as the case may be) had not been complied with in relation to the financial assistance to which the certificate related.

#### [13/87;21/2005]

(8) For the purposes of subsection (7), a person shall, in the absence of proof to the contrary, be deemed to have been aware at a particular time of any matter of which an employee or agent of the person having duties or acting on behalf of the person in relation to the relevant contract or transaction was aware at the time.

#### [13/87]

(9) In any proceeding, a document purporting to be a certificate given under subsection (6) shall, in the absence of proof to the contrary, be deemed to be such a certificate and to have been duly given.

#### [13/87]

(10) A person who has possession of a certificate given under subsection (6) shall, in the absence of proof to the contrary, be deemed to be the person to whom the certificate was given.

#### [13/87]

(11) If a person signs a certificate stating that the requirements of section 76 (9A), (9B) or (10) (as the case may be) have been complied with in relation to the proposed giving by a company of financial assistance and any of those requirements had not been complied with in respect of the

proposed giving of that assistance at the time when the certificate was signed by that person, the person shall be guilty of an offence and shall be liable on conviction to a fine not exceeding \$5,000 or to imprisonment for a term not exceeding 12 months or to both.

#### [13/87;21/2005]

[13/87:21/2005]

(12) It is a defence to a prosecution for an offence under subsection (11) if the defendant proves that at the time when he signed the certificate he believed on reasonable grounds that all the requirements of section 76 (9A), (9B) or (10) (as the case may be) had been complied with in respect of the proposed giving of financial assistance to which the certificate relates.

(13) The power of a Court under section 391 to relieve a person to whom that section applies, wholly or partly and on such terms as the Court thinks fit, from a liability referred to in that section extends to relieving a person against whom an order may be made under subsection (4) from the liability to have such an order made against him.

(14) If a company makes a contract or engages in a transaction under which it gives financial assistance as mentioned in section 76 (1) (*a*) or lends money as mentioned in section 76 (1) (*c*), any contract or transaction made or engaged in as a result of or by means of, or in relation to, that financial assistance or money shall be deemed for the purposes of this section to be related to the first-mentioned contract or transaction.

[13/87] (15) Any rights or liabilities of a person under this section (including rights or liabilities under an order made by the Court under this section) are in addition to and not in derogation of any rights or liabilities of that person apart from this section but, where there would be any inconsistency between the rights and liabilities of a person under this section or under an order made by the Court under this section and the rights and liabilities of that person apart from this section, the provisions of this section or of the order made by the Court shall prevail.

#### Company may acquire its own shares

**76B.**—(1) Notwithstanding section 76, a company may, in accordance with this section and sections 76C to 76G, purchase or otherwise acquire shares issued by it if it is expressly permitted to do so by its articles.

(2) This section and sections 76C to 76G shall apply to ordinary shares, stocks and preference shares.

[36/2000]

[38/98;36/2000]

(3) The total number of ordinary shares and stocks in any class that may be purchased or acquired by a company during the relevant period shall not exceed 10% (or such other percentage as the Minister may by notification prescribe) of the total number of ordinary shares and stocks of the company in that class ascertained —

(a) as at the date of the last annual general meeting of the company held before any resolution passed pursuant to section 76C, 76D, 76DA or 76E; or

(b) as at the date of such resolution,

whichever is the higher, unless ----

(i) the company has, at any time during the relevant period, reduced its share capital by a special resolution under section 78B or 78C; or

#### [13/87]

[13/87]

(ii) the Court has, at any time during the relevant period, made an order under section 78I confirming the reduction of share capital of the company.

#### [21/2005]

(3A) Where a company has reduced its share capital by a special resolution under section 78B or 78C, or the Court has made an order under section 78I, the total number of ordinary shares and stocks of the company in any class shall, notwithstanding subsection (3) (a) and (b), be taken to be the total number of ordinary shares and stocks of the company in that class as altered by the special resolution of the company or the order of the Court, as the case may be.

[21/2005]

(3B) The total number of preference shares in any class which are not redeemable under section 70 that may be purchased or acquired by a company during the relevant period shall not exceed 10% (or such other percentage as the Minister may by notification prescribe) of the total number of non-redeemable preference shares of the company in that class ascertained —

(a) as at the date of the last annual general meeting of the company held before any resolution passed pursuant to section 76C, 76D, 76DA or 76E; or

(b) as at the date of such resolution,

whichever is the higher, unless ----

(i) the company has, at any time during the relevant period, reduced its share capital by a special resolution under section 78B or 78C; or

(ii) the Court has, at any time during the relevant period, made an order under section 78I confirming the reduction of share capital of the company.

[21/2005]

(3C) Where a company has reduced its share capital by a special resolution under section 78B or 78C, or the Court has made an order under section 78I, the total number of non-redeemable preference shares of the company in any class shall, notwithstanding subsection (3B) (*a*) and (*b*), be taken to be the total number of non-redeemable preference shares of the company in that class as altered by the special resolution of the company or the order of the Court, as the case may be.

[21/2005]

(3D) There shall be no limit on the number of redeemable preference shares that may be purchased or acquired by a company during the relevant period.

[36/2000]

(3E) For the purposes of this section, any of the company's ordinary shares held as treasury shares shall be disregarded.

#### [21/2005]

(4) In subsection (3), "relevant period" means the period commencing from the date the last annual general meeting of the company was held or if no such meeting was held the date it was required by law to be held before the resolution in question is passed, and expiring on the date the next annual general meeting is or is required by law to be held, whichever is the earlier, after the date the resolution in question is passed.

[38/98]

(5) Ordinary shares that are purchased or acquired by a company pursuant to section 76C, 76D, 76DA or 76E shall, unless held in treasury in accordance with section 76H, be deemed to be cancelled immediately on purchase or acquisition.

[21/2005]

(5A) Preference shares that are purchased or acquired by a company pursuant to section 76C, 76D, 76DA or 76E shall be deemed to be cancelled immediately on purchase or acquisition.

#### [21/2005]

[38/98]

(6) On the cancellation of a share under subsection (5) or (5A), the rights and privileges attached to that share expire.

#### [38/98;21/2005]

(7) For the purposes of this section, shares are deemed to be purchased or acquired on the date on which the company would, apart from subsection (5), become entitled to exercise the rights attached to the shares.

(8) Within 30 days of the passing of a resolution referred to in section 76C, 76D, 76DA or 76E, the directors of the company shall lodge with the Registrar a copy of the resolution.

[38/98;8/2003]

(9) Within 30 days of the purchase or acquisition of the shares, the directors of the company shall lodge with the Registrar the notice of the purchase or acquisition in the prescribed form with the following particulars:

(a) the date of the purchase or acquisition;

(b) the number of shares purchased or acquired;

(c) the number of shares cancelled;

(d) the number of shares held as treasury shares;

(e) the company's issued share capital before the purchase or acquisition;

(f) the company's issued share capital after the purchase or acquisition;

(g) the amount of consideration paid by the company for the purchase or acquisition of the shares;(h) whether the shares were purchased or acquired out of the profits or the capital of the company; and

(i) such other particulars as may be required in the prescribed form.

[38/98;8/2003;21/2005]

(10) Nothing in this section or in sections 76C to 76G shall be construed so as to limit or affect an order of the Court made under any section that requires a company to purchase or acquire its own shares.

[38/98]

[UK, 1985, s. 162; Aust., Co. Law Rev. Act, 1998, Sch. 1 (ss. 257A, 257B, 257H); Aust., 2001, s. 254Y; NZ, 1993, ss. 58, 59, 66]

#### Authority for off-market acquisition on equal access scheme

**76C.**—(1) A company, whether or not it is listed on a securities exchange, may make a purchase or acquisition of its own shares otherwise than on a securities exchange (referred to in this section as an off-market purchase) if the purchase or acquisition is made in accordance with an equal access scheme authorised in advance by the company in general meeting.

[38/98;42/2001]

(2) The notice specifying the intention to propose the resolution to authorise an off-market purchase referred to in subsection (1) must —

(a) specify the maximum number of shares or the maximum percentage of ordinary issued share capital authorised to be purchased or acquired;

(b) determine the maximum price which may be paid for the shares;

(c) specify a date on which the authority is to expire, being a date that must not be later than the date on which the next annual general meeting of the company is or is required by law to be held, whichever is the earlier; and

(d) specify the sources of funds to be used for the purchase or acquisition including the amount of financing and its impact on the company's financial position.

[38/98] (3) The resolution authorising an off-market purchase referred to in subsection (2) must state the particulars referred to in subsection (2) (a), (b) and (c).

[38/98]

[38/98]

[38/98]

(4) The authority for an off-market purchase referred to in subsection (2) may, from time to time, be varied or revoked by the company in general meeting.

(5) A resolution to confer or vary the authority for an off-market purchase under this section may determine the maximum price for purchase or acquisition by —

(a) specifying a particular sum; or

(b) providing a basis or formula for calculating the amount of the price in question without reference to any person's discretion or opinion.

(6) For the purposes of this section and sections 76D and 76DA, an "equal access scheme" means a scheme which satisfies all the following conditions:

(a) the offers under the scheme are to be made to every person who holds shares to purchase or acquire the same percentage of their shares;

(b) all of those persons have a reasonable opportunity to accept the offers made to them; and
(c) the terms of all the offers are the same except that there shall be disregarded —

(i) differences in consideration attributable to the fact that the offers relate to shares with different accrued dividend entitlements;

(ii) differences in consideration attributable to the fact that the offers relate to shares with different amounts remaining unpaid; and

(iii) differences in the offers introduced solely to ensure that each member is left with a whole number of shares.

[38/98;8/2003]

[Aust., Co. Law Rev. Act, 1998, Sch. 1 (s. 257B)]

#### Authority for selective off-market acquisition

**76D.**—(1) A company may make a purchase or acquisition of its own shares otherwise than on a securities exchange and not in accordance with an equal access scheme (referred to in this section as a selective off-market purchase) if —

(a) the purchase or acquisition is made in accordance with an agreement authorised in advance under subsection (2); and

(b) the company is not listed on a securities exchange.

#### [38/98;42/2001]

(2) The terms of the agreement for a selective off-market purchase must be authorised by a special resolution of the company, with no votes being cast by any person whose shares are proposed to be purchased or acquired or by his associated persons, and subsections (3) to (13) shall apply with respect to that authority and to resolutions conferring it.

[38/98]

(3) The notice specifying the intention to propose a special resolution to authorise an agreement for a selective off-market purchase must —

(a) specify a date on which the authority is to expire, being a date that must not be later than the date on which the next annual general meeting of the company is or is required by law to be held, whichever is the earlier; and

(b) specify the sources of funds to be used for the purchase or acquisition including the amount of financing and its impact on the company's financial position.

[38/98]

[38/98]

[8/2003]

[38/98]

(4) The special resolution authorising a selective off-market purchase referred to in subsection (2) must state the expiry date referred to in subsection (3) (a).

(4A) If the special resolution referred to in subsection (2) is proposed to be passed by written means under section 184A —

(a) a person whose shares are proposed to be purchased or acquired or any of his associated persons shall not be regarded as a member having the right to vote on the resolution at a general meeting of the company for the purposes of section 184A;

(b) subsection (7) does not apply; but all documents referred to in this section shall be given to all members having the right to vote on the resolution at a general meeting for the purposes of section 184A at or before the time —

(i) agreement to the resolution is sought in accordance with section 184C; or

(ii) documents referred to in section 183 (3A) in respect of the resolution are served on or made accessible to them in accordance with section 183 (3A),

as the case may be.

(5) The authority referred to in subsection (2) may, from time to time, be varied or revoked by a special resolution with no votes being cast by any person whose shares are proposed to be purchased or acquired or by his associated persons.

(6) For the purposes of subsections (2) and (5) —

(a) a member or his associated persons who holds any of the shares to which the resolution relates is regarded as exercising the voting rights carried by those shares not only if he votes in respect of them on a poll on the question whether the resolution shall be passed, but also if he votes on the resolution otherwise than on a poll;

(b) notwithstanding anything in the company's articles, any member of the company may demand a poll on that question; and

(c) a vote and a demand for a poll by a person as proxy for a member or any of his associated persons are the same respectively as a vote and a demand by the member.

[38/98]

(7) The special resolution referred to in subsection (2) is not effective for the purposes of this section unless (if the proposed agreement is in writing) a copy of the agreement or (if not) a written memorandum of its terms is available for inspection by members of the company both — (a) at the company's registered office for not less than 15 days ending with the date of the meeting at which the resolution is passed; and

(b) at the meeting itself.

[38/98]

(8) A memorandum of terms so made available must include the names of any members holding shares to which the agreement relates and where a member holds such shares as nominee for another person, the name of that other person; and a copy of the agreement so made available

must have annexed to it a written memorandum specifying any such names which do not appear in the agreement itself.

(9) A company may agree to a variation of an existing agreement so approved, but only if the variation is authorised, before it is agreed to, by a special resolution of the company, with no votes being cast by any person whose shares are proposed to be purchased or acquired or by his associated persons.

[38/98] (10) Subsections (3) to (7) shall apply to the authority for a proposed variation as they apply to the authority for a proposed agreement except that a copy of the original agreement or (as the case may require) a memorandum of its terms, together with any variations previously made, must also be available for inspection in accordance with subsection (7).

# (11) The rights of a company under an agreement for a selective off-market purchase approved under this section shall not be capable of being assigned except by order of the Court made pursuant to any provision of this Act or any other written law.

[38/98]

[38/98]

[38/98]

(12) An agreement by a company to release its rights under an agreement for a selective offmarket purchase approved under this section is void unless the terms of the release agreement are approved in advance before the agreement is entered into by a special resolution of the company with no votes being cast by any person whose shares are proposed to be purchased or acquired or by his associated persons; and subsections (3) to (7) shall apply to the approval for a proposed release agreement as they apply to authority for the proposed variation of an existing agreement. [38/98]

(13) A resolution to confer or vary authority for a selective off-market purchase under this section may determine the maximum price for purchase or acquisition by —

(a) specifying a particular sum; or

(b) providing a basis or formula for calculating the amount of the price in question without reference to any person's discretion or opinion.

(14) For the purposes of this section, "associated person" in relation to a person means —(a) the person's spouse, child or step-child; or

(b) a person who would, by virtue of section 7 (5), be treated as an associate of the firstmentioned person.

[38/98]

[38/98]

#### [*UK*, 1985, s. 164; Aust., Co. Law Rev. Act 1998, Sch. 1 (s. 257D)] Contingent purchase contract

**76DA.**—(1) A company may, whether or not it is listed on a securities exchange, make a purchase or acquisition of its own shares under a contingent purchase contract if the proposed contingent purchase contract is authorised in advance by a special resolution of the company.

[8/2003]

(2) Subject to subsection (3), the authority under subsection (1) may, from time to time, be varied or revoked by a special resolution of the company.

[8/2003]

(3) The notice specifying the intention to propose a special resolution to authorise a contingent purchase contract must specify a date on which the authority is to expire and that date must not

be later than the date on which the next annual general meeting of the company is or is required by law to be held, whichever is the earlier.

(4) The special resolution referred to in subsection (1) is invalid for the purposes of this section unless a copy of the proposed contingent purchase contract is available for inspection by members of the company —

(a) at the company's registered office for not less than 15 days ending with the date of the meeting at which the resolution is passed; and

(b) at the meeting itself.

(5) A company may agree to a variation of an existing contingent purchase contract so approved if, and only if, the variation is authorised, before it is agreed to, by a special resolution of the company.

(6) Subsections (2), (3) and (4) shall apply to the authority for a proposed variation as they apply to the authority for a proposed contingent purchase contract, except that a copy of the original contract, together with any variations previously made, must also be available for inspection in accordance with subsection (4).

(7) The company may only make an offer to enter into a contingent purchase contract in accordance with all of the following conditions:

(a) the offer must be made to every person who holds shares of the same class in the company;(b) the number of shares that a company is obliged or entitled to purchase or acquire under the contract from any person, in relation to the total number of shares of the same class held by that person, must be of the same proportion for every person who holds shares of that class to whom the offer is made; and

(c) the terms of all offers in respect of each class of shares must be the same.

#### [8/2003]

[8/2003]

[8/2003]

(8) For the avoidance of doubt, the company may purchase or acquire shares under a contingent purchase contract from any person whether or not the offer to enter into the contract was originally made to him.

(9) In this section, "contingent purchase contract" means a contract entered into by a company and relating to any of its shares —

(a) which does not amount to a contract to purchase or acquire those shares; but(b) under which the company may (subject to any condition) become entitled or obliged to purchase or acquire those shares.

#### [UK, 1985, s. 165]

#### Authority for market acquisition

**76E.**—(1) A company shall not make a purchase or acquisition of its own shares on a securities exchange (referred to in this section as a market purchase) unless the purchase or acquisition has been authorised in advance by the company in general meeting.

[38/98;42/2001]

(2) The notice specifying the intention to propose the resolution to authorise a market purchase must —

#### [8/2003]

[8/2003]

[8/2003]

[8/2003]

(a) specify the maximum number of shares or the maximum percentage of ordinary issued share capital authorised to be purchased or acquired;

(b) determine the maximum price which may be paid for the shares;

(c) specify a date on which the authority is to expire, being a date that must not be later than the date on which the next annual general meeting of the company is or is required by law to be held, whichever is the earlier; and

(d) specify the sources of funds to be used for the purchase or acquisition including the amount of financing and its impact on the company's financial position.

(3) The authority for a market purchase may be unconditional or subject to conditions and must state the particulars referred to in subsection (2) (a), (b) and (c).

[38/98] (4) The authority for a market purchase may, from time to time, be varied or revoked by the company in general meeting but the variation must comply with subsections (2) and (3).

[38/98]

[38/98]

[38/98]

(5) A resolution to confer or vary authority for a market purchase under this section may determine the maximum price for purchase or acquisition by —

(a) specifying a particular sum; or

(b) providing a basis or formula for calculating the amount of the price in question without reference to any person's discretion or opinion.

#### [UK, 1985, s. 166]

#### Payments to be made only if company is solvent

76F. —(1) A payment made by a company in consideration of —

(a) acquiring any right with respect to the purchase or acquisition of its own shares in accordance with section 76C, 76D, 76DA or 76E;

(b) the variation of an agreement approved under section 76D or 76DA; or

(c) the release of any of the company's obligations with respect to the purchase or acquisition of any of its own shares under an agreement approved under section 76D or 76DA,

may be made out of the company's capital or profits so long as the company is solvent.

[21/2005]
 (2) If the requirements in subsection (1) are not satisfied in relation to an agreement —

(a) in a case within subsection (1) (*a*), no purchase or acquisition by the company of its own shares in pursuance of that agreement is lawful;

(b) in a case within subsection (1) (*b*), no such purchase or acquisition following the variation is lawful; and

(c) in a case within subsection (1) (c), the purported release is void.

[21/2005]

[21/2005]

(3) Every director or manager of a company who approves or authorises, the purchase or acquisition of the company's own shares or the release of obligations, knowing that the company is not solvent shall, without prejudice to any other liability, be guilty of an offence and shall be liable on conviction to a fine not exceeding \$100,000 or to imprisonment for a term not exceeding 3 years.

(4) For the purposes of this section, a company is solvent if —

(a) the company is able to pay its debts in full at the time of the payment referred to in subsection (1) and will be able to pay its debts as they fall due in the normal course of business during the period of 12 months immediately following the date of the payment; and

(b) the value of the company's assets is not less than the value of its liabilities (including contingent liabilities) and will not after the proposed purchase, acquisition or release, become less than the value of its liabilities (including contingent liabilities).

[21/2005]

[21/2005]

[21/2005]

(5) In determining, for the purposes of subsection (4), whether the value of a company's assets is less than the value of its liabilities (including contingent liabilities), the directors or managers of a company —

(a) must have regard to —

(i) the most recent financial statements of the company that comply with section 201 (1A), (3) and (3A), as the case may be; and

(ii) all other circumstances that the directors or managers know or ought to know affect, or may affect, the value of the company's assets and the value of the company's liabilities (including contingent liabilities); and

(b) may rely on valuations of assets or estimates of liabilities that are reasonable in the circumstances.

(6) In determining, for the purposes of subsection (5), the value of a contingent liability, the directors or managers of a company may take into account —

(a) the likelihood of the contingency occurring; and

(b) any claim the company is entitled to make and can reasonably expect to be met to reduce or extinguish the contingent liability.

#### [Companies, s. 76F (modified)]

#### Reduction of capital or profits or both on cancellation of repurchased shares

**76G.** Where under section 76C, 76D, 76DA or 76E, shares of a company are purchased or acquired, and cancelled under section 76B (5), the company shall —

(a) reduce the amount of its share capital where the shares were purchased or acquired out of the capital of the company;

(b) reduce the amount of its profits where the shares were purchased or acquired out of the profits of the company; or

(c) reduce the amount of its share capital and profits proportionately where the shares were purchased or acquired out of both the capital and the profits of the company,

by the total amount of the purchase price paid by the company for the shares cancelled.

#### **Treasury shares**

**76H.**—(1) Where ordinary shares or stocks are purchased or otherwise acquired by a company in accordance with sections 76B to 76G, the company may —

(a) hold the shares or stocks (or any of them); or

(b) deal with any of them, at any time, in accordance with section 76K.

#### [21/2005]

[21/2005]

(2) Where ordinary shares or stocks are held under subsection (1) (*a*) then, for the purposes of section 190 (Register and index of members), the company shall be entered in the register as the member holding those shares or stocks.

[21/2005]

#### [UK, 1985, s. 162A; UK, Treasury Shares, reg. 3]

#### **Treasury shares: maximum holdings**

**76I.**—(1) Where a company has shares of only one class, the aggregate number of shares held as treasury shares shall not at any time exceed 10% of the total number of shares of the company at that time.

(2) Where the share capital of a company is divided into shares of different classes, the aggregate number of the shares of any class held as treasury shares shall not at any time exceed 10% of the total number of the shares in that class at that time.

(3) Where subsection (1) or (2) is contravened by a company, the company shall dispose of or cancel the excess shares in accordance with section 76K before the end of the period of 6 months beginning with the day on which that contravention occurs, or such further period as the Registrar may allow.

(4) In subsection (3), "the excess shares" means such number of the shares, held by the company as treasury shares at the time in question, as resulted in the limit being exceeded.

[UK, 1985, s. 162B; UK, Treasury Shares, reg. 3]

#### Treasury shares: voting and other rights

**76J.**—(1) This section shall apply to shares which are held by a company as treasury shares.

(2) The company shall not exercise any right in respect of the treasury shares and any purported exercise of such a right is void.

(3) The rights to which subsection (2) applies include any right to attend or vote at meetings (including meetings under section 210) and for the purposes of this Act, the company shall be treated as having no right to vote and the treasury shares shall be treated as having no voting rights.

(4) No dividend may be paid, and no other distribution (whether in cash or otherwise) of the company's assets (including any distribution of assets to members on a winding up) may be made, to the company in respect of the treasury shares.

(5) Nothing in this section is to be taken as preventing —

(a) an allotment of shares as fully paid bonus shares in respect of the treasury shares; or (b) the subdivision or consolidation of any treasury share into treasury shares of a smaller amount, if the total value of the treasury shares after the subdivision or consolidation is the same as the total value of the treasury share before the subdivision or consolidation, as the case may be. [21/2005]

(6) Any shares allotted as fully paid bonus shares in respect of the treasury shares shall be treated for the purposes of this Act as if they were purchased by the company at the time they were allotted, in circumstances in which section 76H applied.

[UK, 1985, s. 162C; UK, Treasury Shares, reg. 3]

#### [21/2005]

[21/2005]

[21/2005]

[21/2005]

[21/2005]

## [21/2005]

[21/2005]

### [21/2005]

#### Treasury shares: disposal and cancellation

76K. —(1) Where shares are held as treasury shares, a company may at any time —

(a) sell the shares (or any of them) for cash;

(b) transfer the shares (or any of them) for the purposes of or pursuant to an employees' share scheme;

(c) transfer the shares (or any of them) as consideration for the acquisition of shares in or assets of another company or assets of a person;

(d) cancel the shares (or any of them); or

(e) sell, transfer or otherwise use the treasury shares for such other purposes as the Minister may by order prescribe.

[21/2005]

(2) In subsection (1) (*a*), "cash", in relation to a sale of shares by a company, means —

(a) cash (including foreign currency) received by the company;

(b) a cheque received by the company in good faith which the directors have no reason for suspecting will not be paid;

(c) a release of a liability of the company for a liquidated sum; or

(d) an undertaking to pay cash to the company on or before a date not more than 90 days after the date on which the company agrees to sell the shares.

[21/2005]

(3) But if the company receives a notice under section 215 (Power to acquire shares of shareholders dissenting from scheme or contract approved by 90% majority) that a person desires to acquire any of the shares, the company shall not, under subsection (1), sell or transfer the shares to which the notice relates except to that person.

[21/2005]

(4) The directors may take such steps as are requisite to enable the company to cancel its shares under subsection (1) without complying with section 78B (Reduction of share capital by private company), 78C (Reduction of share capital by public company) or 78I (Court order approving reduction).

[21/2005]

(5) Within 30 days of the cancellation or disposal of treasury shares in accordance with subsection (1), the directors of the company shall lodge with the Registrar the notice of the cancellation or disposal of treasury shares in the prescribed form with such particulars as may be required in the form, together with payment of the prescribed fee.

[21/2005]

[UK, 1985, s. 162D; UK, Treasury Shares, reg. 3]