STOCKHOLM SCHOOL OF ECONOMICS

MASTER'S THESIS IN FINANCE

WHAT ARGUMENTS DRIVE SWEDISH COMPANIES IN THE CHOICE BETWEEN PAYING OUT CASH THROUGH DIVIDENDS AND SHARE REPURCHASES?

Carl Ivarsson♦ Andreas Nabseth♠

ABSTRACT

The aim of this paper is to examine Swedish companies' payout policies. First, what arguments drive Swedish companies to leave substantial amounts of money on the table by paying considerable amounts of cash in dividends when share repurchases are more tax beneficial to shareholders? Second, are the arguments rational? An interview study has been carried out covering a significant part of the value of the Stockholm Stock Exchange. On the basis of the interview results, previous research and opinions expressed in media, 10 arguments have been deducted; (1) Tax Irrelevance (2) Speculation (3) Equal Treatment (4) Historical Traditions (5) Lack of Ideas (6) Manipulation of Share Price (7) Lack of Knowledge (8) Share Price Influence on Repurchase Decision (9) Reduction of Shareholder Base and (10) Abuse of Asymmetric Information. The rationality of the arguments have been analysed on the basis of data and logical reasoning. The main findings of the thesis are the stated arguments and the conclusion that they do not seem to be rational explanations.

TUTOR

Professor Clas Bergström

PRESENTATION

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Room 550 13.15-15.00

♦ 19145@student.hhs.se ♠ 19026@student.hhs.se

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When a fellow says, "It ain't the money but the principle of the thing," it's the money

Frank McKinney "Kin" Hubbard

1. Introduction

Payout alternatives for Swedish companies have historically been limited mainly to dividends. In March 2000 a new law was enforced allowing companies to repurchase their own shares. Following the new law and increasing profits, companies' payout policies have lately been cause of discussion in the media. During the past five years, 2001 to 2005, companies on the Stockholm Stock Exchange have paid out approximately SEK 500 billion[1] through dividends and share repurchases to shareholders. Roughly one third of this amount has been paid out through share repurchases; excluding repurchases made by AstraZeneca (SEK 73 billion) the proportion comes down to one fifth. Following Modigliani & Miller (1958) shareholders should be indifferent between dividends and share repurchases because they both create the same wealth. However, adding taxes, there are arguments for using share repurchases over dividends. The tax-paying shareholder is, all else equal, better off if companies cut dividends and repurchase shares instead. Taxes paid is lower and the shareholder gets the option to postpone tax liabilities. Thus, we are astonished by the fact that share repurchases only make up one fifth of total cash paid out to shareholders on the Stockholm Stock Exchange. The aim of this thesis is to shed light on companies' payout policies and investigate the "Swedish dividend puzzle":

First*, what arguments make Swedish companies leave substantial amounts of money on the table by paying considerable amounts of cash in dividends when share repurchases are more tax beneficial to shareholders?* Second*, are the arguments rational?*

That is, we do not consider capital structure issues, but take the amount of cash to be paid out as given and delimitate our thesis to normatively investigate why companies prefer to pay out the decided amount of cash in dividends when share repurchases are more tax effective, and if the arguments for using dividends are rational. Previous studies on Swedish payout policies have not had this focal point, but concentrated on concerns about optimal capital structure and share price performance following a dividend or share repurchase. Hopefully our thesis will contribute to the understanding of Swedish payout policies and sort out misapprehensions relating to dividends and share repurchases, which should ultimately lead to more rational payout decisions.

1.1 Methodology and Delimitations

Unlike many previous studies on payout policies we choose to answer our specific questions normatively, which is not readily made econometrically. We search for Swedish practitioners' arguments for preferring dividends to share repurchases in interviews, research and media.

[1] For all data on share repurchases and dividends in the introduction, see section "3. Facts and Figures" and Appendix C.

Starting in a simple theoretical Modigliani & Miller framework we see a clear preference for share repurchases. Turning to empirical data we find, however, dividends to be the dominating payout method. This observation is the fundament for our interviews. The interviews were made to reveal practitioners' arguments for dividends. The number of interviews amounts to 16, carried out between December 2005 and February 2006 in Stockholm, Sweden. We have interviewed five companies, five investment companies, four funds, the Ministry of Industry, Division for State Enterprises and the Swedish Shareholders' Association[2]. Through our interviews we have covered 60 percent of the voting influence on the Stockholm Stock Exchange. That is, we have covered 60 percent of the influence on Swedish payout policies, giving us a firm foundation to stand on when we determine what arguments influence companies' payout decisions. Due to reasons of secrecy and many interview objects reluctance to speak freely if being quoted, we decided to grant them anonymity in their answers. This decision was based on our aim of getting the actual motives behind chosen payout policies rather than presenting who said what. It is also important to point out that before performing our interviews we could not know what arguments would be presented to us. Discovering many potential apprehensions of dividends and share repurchases relating to financial theory that are not testable but rather explanatory in its nature, we consequently decided to take a less common course, but still one chosen by many scholars.[3]

1.2 Outline

The remainder of this thesis is organized as follows. Section 2 provides the reader with a general background on share repurchases in Sweden. In section 3, a descriptive data set on dividends and share repurchases is presented, showing share repurchases' low share of total amounts paid out to shareholders. In section 4 we, theoretically, show the tax advantage of share repurchases over dividends in a simple Modigliani & Miller framework with taxes. In section 5 we address the respective tax situation for different shareholder groups and its impact on payout preference in the simple Modigliani & Miller framework with taxes. Section 6 takes the Modigliani & Miller framework one step further, adding transaction costs. In section 7 further arguments behind the "Swedish dividend puzzle" are looked for in practitioners' opinions expressed in interviews, relevant research and media. That is, we expand the Modigliani & Miller framework to the real world. Arguments found, or stated "rationalizations", have been structured into 10 common held views for why dividends should be preferred over more tax efficient share repurchases. The rationality of these arguments is tested for on the basis of data and logical reasoning. Finally, we discuss our results in section 8 and conclude in section 9.

[2] In Swedish: Aktiespararna. The organization, with about 80,000 paying members, is working in private individuals' interest in stock market related issues.
[3] Without further comparisons we would like to point out that neither Modigliani & Miller, in their famous paper of 1961, nor Black in the widely acknowledged "The Dividend Puzzle" of 1976 had a single econometric test or reference to empirical data.

2. Background on Share Repurchases in Sweden

In 1999 the Swedish government handed over a proposition to the parliament proposing that companies were to be allowed to repurchase their own shares. Ever since 1895 companies had been prohibited to trade in their own shares. The original reason for the ban was to protect the debt holders.[4] In Sweden the ban was also motivated by fear that share repurchases may be used for share price manipulation.[5] The government's arguments for proposing a new law permitting companies to repurchase shares were to facilitate a better utilisation of companies' capital and that the available payout alternatives for companies were not sufficient. Another reason stated was to assist companies in their expansion efforts by allowing repurchased shares to be used as mean of payment in acquisitions. The government also wanted to accommodate shareholders' wish of having the possibility to decide the timing of income, which is not possible with a dividend.[6] At the time of the proposition Sweden was the only country in the European Union that did not allow share repurchases.[7] The new law was also intended to improve Swedish companies' competitiveness to foreign companies and to make it easier to attract foreign investments.[8] It is important to note that the proposition was preceded by influential lobbying by the Swedish industry that demanded that Sweden should adapt to the rest of the European Union.[9]

The government expected the tax income to decrease due to less paid out cash through dividends.[10] It also estimated that Swedish companies would pay out SEK 11 billion to natural persons and SEK 13 billion to artificial persons via dividends in 2000. According to the governments' assumption 10 percent of this would be shifted to stock repurchases, causing a tax loss of SEK 440 million. However, the government also argued that share repurchases, leading to higher taxable capital gains, would to some extent, offset the tax loss.[11]

The new law allowing companies to repurchase their own shares was enforced on the 10th of March in 2000. The law is incorporated into chapter 19 of the Swedish Companies Act[12] and can be summarized as follows:

- Only public companies listed on a Swedish stock exchange or market place are allowed to repurchase shares.

4 Prop. 1999/2000:34, p. 51.
5 Prop. 1999/2000:34, p. 53.
6 Prop. 1999/2000:34, p. 54-55.
7 Prop. 1999/2000:34, p. 51.
8 Prop. 1999/2000:34, p. 55.
9 Interview source.
10 Prop. 1999/2000:34, p. 108.
11 Prop. 1999/2000:34, p. 108. Due to incomplete information we are unable to replicate the governments calculation, but potential tax savings, pre the business related holdings law, from share repurchases compared to dividends should be approximately SEK 8 billion on paid out cash 2005.
12 In Swedish: Aktiebolagslagen (SFS 2005:551).

- Share repurchases must be conducted on the open market or via tender offers. Privately negotiated deals are therefore prohibited.
- The company is only allowed to hold 10 percent of its outstanding shares. This implies that a company cannot repurchase more than 10 percent of outstanding shares without terminating shares already repurchased. The company decides whether to terminate or keep repurchased shares. Repurchased shares have no voting right at shareholders' meetings.
- The amount used for a share repurchase must be covered by unrestricted equity and must not be excessive with regard to the company's financial position and liquid funds requirements.
- The decision to grant the board the right to perform share repurchases must be taken at a shareholders' general meeting. Two thirds of the votes given have to be in favour and at least two thirds of total votes have to be represented.

In addition there are recommendations concerning share repurchases issued by the Stockholm Stock Exchange Committee.[13] The recommendations aim at minimising the risks of share price manipulation. A decision to repurchase shares is to be made public immediately and information should be given on:

- Time frame in which the right to repurchase is valid.
- Number of existing own shares held by the company.
- Maximum number of shares to be repurchased.
- Purpose of the share repurchase program.
- Additional conditions associated with the program.

A company that repurchases shares is obliged to the following:

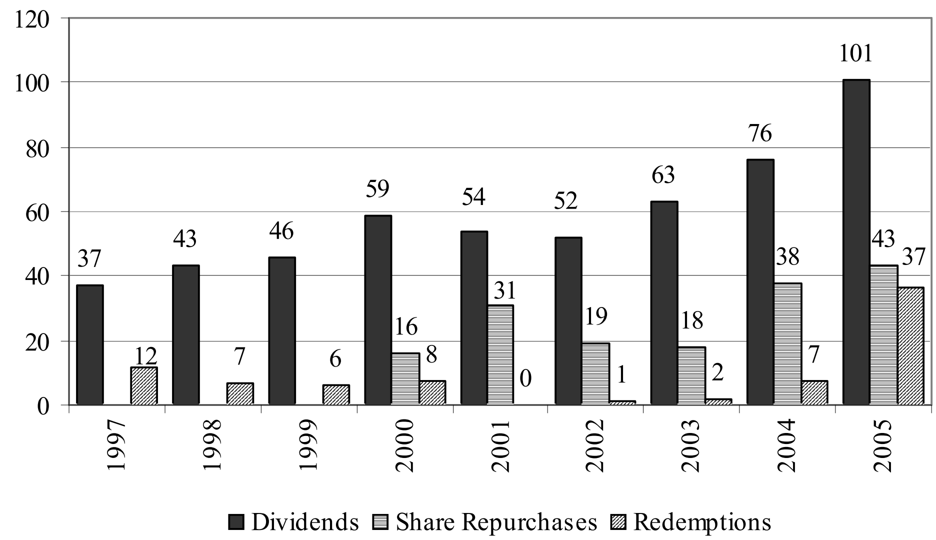
- A company can only repurchase shares during one day equivalent to a maximum of 25 percent of the average daily volume during the previous four weeks. Block trades are an exception to this rule.
- Block trades have to be at least 250 round lots.
- The company is only allowed to trade within the prevailing bid-ask spread.
- A trade in the own share should be reported as soon as possible to the Stockholm Stock Exchange and no later than 30 minutes before the opening of the following trading day.
- The company is not allowed to trade in its own share during the 30-day period preceding the announcement of the company's annual or interim report.
- The notification to the Stockholm Stock Exchange should contain number of shares traded, price paid or highest and lowest price paid if appropriate, and number of own shares held by the company.

[13]"Stockholmsbörsen, Noteringsavtal med handledningstext gällande fr o m den 1 juli 2005".

3. Facts and Figures[14]

In this section data on dividends and share repurchases over time is presented to give the reader a picture of share repurchases' low share of the total cash paid out to shareholders. The data is presented on aggregated level.

Graph 3.1 shows the development of cash paid out in dividends, share repurchases and redemptions[15] from 1997 to 2005. Dividends show a steady increasing trend. Share repurchases on the other hand are more volatile, being substantially lower in 2002 and 2003 compared to 2001. Redemptions were uncommon until 2005 when they increased significantly and cash paid out through redemptions amounted to almost as much as cash paid out through share repurchases.



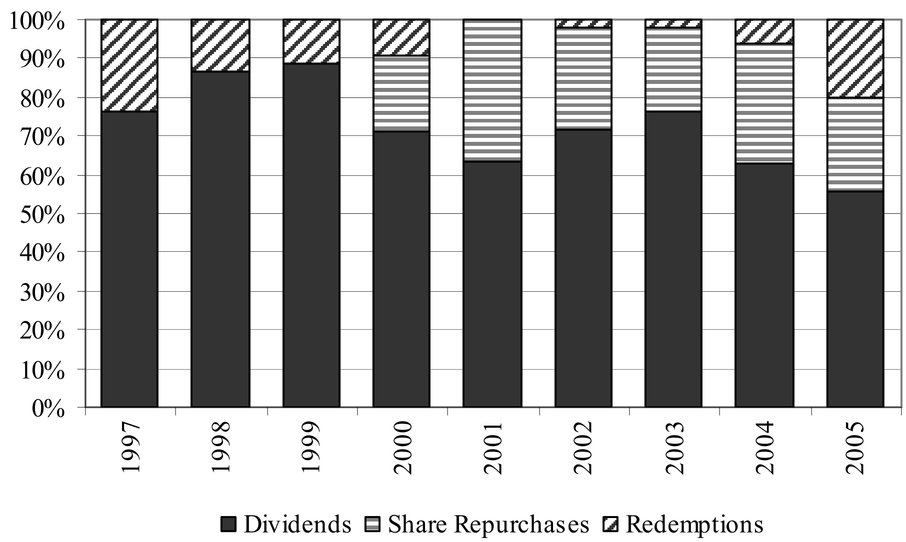
Graph 3.1 Cash Paid Out in Dividends, Share Repurchases and Redemptions 1997 to 2005 (SEK billion)[16]

[14] It is our hope that our extensive data set, presented in this section and in Appendix C, will be useful fur future studies of Swedish payout policies. Data source for share repurchases and redemptions is the Stockholm Stock Exchange and respective company's annual reports. Data source for dividend data is JCF.

[15] Share redemptions are similar to share repurchases but there are important differences to point out. Share repurchases can be made continuously over the stock market. A redemption is a one-time event where a prospectus has to be written specifying a pre-set redemption price and a defined application period. For a further explanation of redemptions see Appendix A.

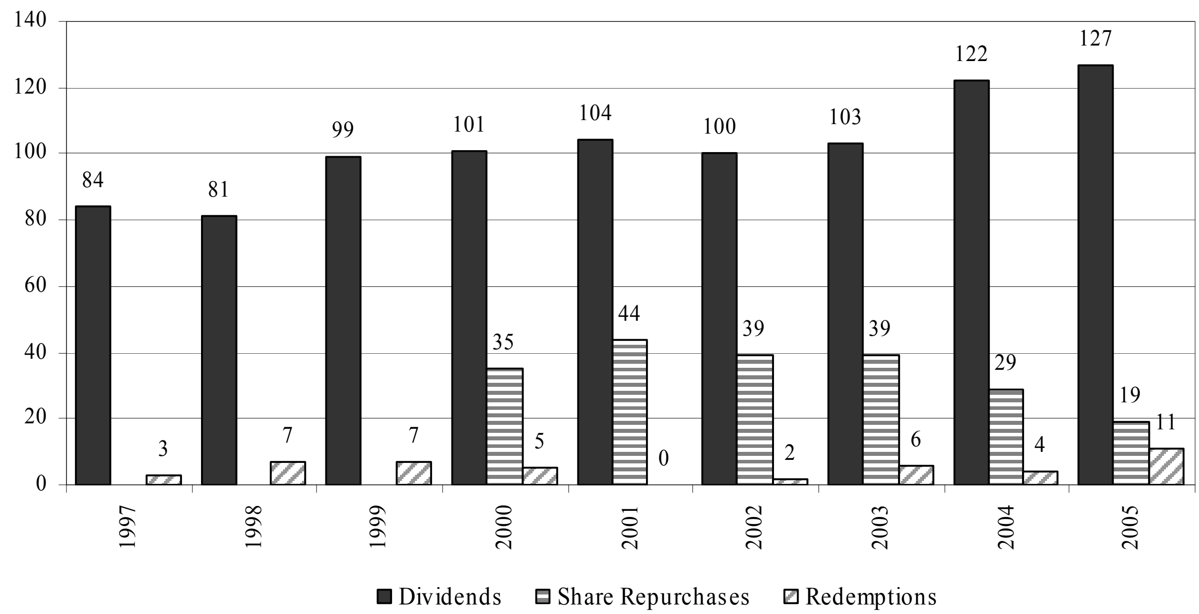
[16] Redemption programs where shares in other companies have been distributed to shareholders have been excluded from this thesis due to the fact that it is not an alternative for paying out cash and does not trigger any immediate tax consequences.

Graph 3.2 shows each alternative's share of total cash paid out throughout 1997 to 2005. The government estimated that 10 percent of total cash paid out in the future would come through share repurchases. Looking at the graph, the 10 percent figure seems to have been an underestimation. In 2001, the first full fiscal year share repurchases were allowed, 36 percent of all cash paid out was through share repurchases. The low point thereafter was in 2003 when the share amounted to 22 percent. Redemptions mainly disappeared after the introduction of share repurchases. They were, however, popularised again in 2005 when mandatory redemptions were a common alternative to pay out cash.



Graph 3.2 Dividends', Share Repurchases' and Redemptions' Share of Total Cash Paid Out 1997 to 2005

Companies on the Stockholm Stock Exchange have repurchased shares for approximately SEK 165 billion throughout 2000 to 2005. Due to AstraZeneca's (SEK 73 billion) extensive repurchases it is therefore interesting to look not only at total cash paid out but also more closely at the number of companies that have paid out cash using dividends, share repurchases and/or redemptions. As can be seen in graph 3.3 the number of companies using dividends are substantially higher than the number of companies using share repurchases or redemptions. The number of companies using dividends has increased in recent years while the number of companies using share repurchases has decreased.



Graph 3.3 Number of Companies Undertaking each Payout Alternative per Year 2000 to 2005

Since different owners are subject to different tax rules it is interesting to categorize share repurchases by type of major owner in the company. The different owner groups identified are; investment companies, private individuals, industrial owners, financial owners, foundations and governments. In table 3.1 one can see that the most common largest owner is a private individual.[17]

Table 3.1 Categorization of Repurchasing Companies by Major Owner 2000 to 2005[18]

Owner	Total no. of Companies	Owner with 10% Votes or More	No. of Total Companies Repurchased	% Repurchased
Private Individual	111	105	24	22
Financial Owner	57	41	10	18
Investment Company	38	37	14	37
Industrial Owner	34	34	8	24
Foundation	9	9	5	56
Government	4	4	2	50

From the data presented in this section it is clear that a dividend is the most common alternative for a company to pay out cash to its owners and the payout alternative also has increased in popularity at the expense of share repurchases. This we find very interesting. In the next section we therefore turn to a Modigliani & Miller framework with taxes to see if taxes can help us understand the preference for dividends over share repurchases in Sweden.

[17] Private individuals holding their stake through a privately owned company or together with a husband/wife/child have been included in the group Private Individual.
[18] Owners controlling 10 percent or more of the votes can structure their ownership as a business related holding. See section "5.9. Business Related Owners" for more information concerning the tax effects.

4. Share Repurchases versus Dividends in a Modigliani & Miller Framework with Taxes

Modigliani & Miller's (1958) irrelevance theorem shows that in a world without taxes, transaction costs or other market imperfections and when the investment policy of a firm is held constant, its payout policy has no consequence for shareholders' wealth. Higher dividends lead to lower retained earnings and capital gains, and vice versa, leaving total wealth of the shareholders unchanged. In this world the value of the firm is divided between the equity and debt holders. Adding taxes, the government takes a part of the cash flows paid out by the company. Black (1976) therefore argues that firms should eliminate dividend payouts to minimize the government's part.[19] Available cash should be retained or used to repurchase shares.

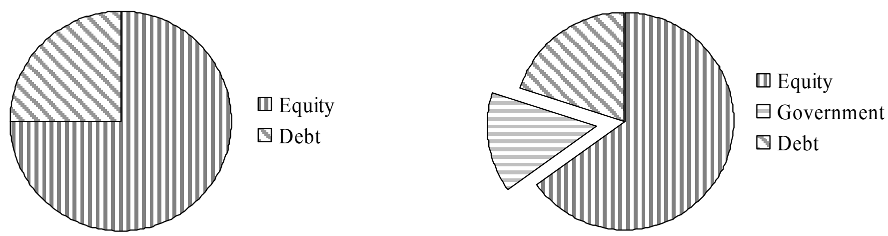


Figure 4.1 The Introduction of Taxes Gives the Government a Claim to the Company's Cash Flows

To investigate how the governments' part of the cash flow is affected by paying out cash either through dividends or share repurchases we look at tax payments over time in an eternity model and a two-period model.

In the eternity period model in table 4.1 the investor purchases shares at time 0 for 100. The value of the shares increases by 10 each year. Yearly payout from the firm is 10, causing the value to drop back to 100. Payout alternatives are dividends and share repurchases. The procedure is repeated in eternity. 30 percent of the *entire* dividend amount is paid in taxes. 30 percent of the capital *gain* is paid in taxes. Thus, taxes paid on the share repurchase are lower than taxes paid on the dividend each year. The remaining acquisition value is divided between the remaining shares; becoming lower and lower per share. Consequently, taxes paid on the share repurchase get higher and higher for every year. However, due to the standard rule[20] the maximum tax base on a capital gain is 80 percent of the divestment price. Therefore

[19] In Black's (1976) words: "In a world where dividends are taxed more heavily (for most investors) than capital gains, and where capital gains are not taxed until realized, a corporation that pays no dividends will be more attractive to taxable individual investors than a similar corporation that pays dividends. This will tend to increase the price of the non-dividend-paying corporation's stock. Many corporations will be tempted to eliminate dividend payments."

[20] In Swedish: Schablonregeln. Chapter 48 15§ income tax law (Inkomstskattelag (1999:1229), (IL)) states that a shareholder is entitled to use 20 percent of the divestment price as acquisition price when calculating the tax on capital gains.

taxes paid on the share repurchase will never be higher than 24 percent of the payout. The dividend will always be taxed at 30 percent. When the shares are divested in the dividend scenario there is no capital gain and therefore no tax. In the share repurchase scenario there is a capital gain and a maximum tax of 24 percent. Had it not been for the standard rule total taxes paid in eternity would be the same in both scenarios. For the investor who never divests, the added value of share repurchases over dividends is a minimum of (1 – 0.24)/(1 – 0.3) – 1 = 8.06 percent.

Table 4.1 Tax Payments Over Time in an Eternity Model

Time	0	1	2	3	4	5		17	18	19	20	Horizon
Share Purchase	-100											
Share Divestment												100
Payout alt: Dividend		10.0	10.0	10.0	10.0	10.0	»»	10.0	10.0	10.0	10.0	
Tax		3.0	3.0	3.0	3.0	3.0	»»	3.0	3.0	3.0	3.0	0
Payout alt: Share Repurchase		10.0	10.0	10.0	10.0	10.0	»»	10.0	10.0	10.0	10.0	
Capital Gain		0.9	1.7	2.5	3.2	3.8	»»	8.0	8.0	8.0	8.0	
Tax		0.3	0.5	0.7	1.0	1.1	»»	2.4	2.4	2.4	2.4	24
Difference in Tax		2.7	2.5	2.3	2.0	1.9	»»	0.6	0.6	0.6	0.6	-24

Assumptions: Purchase price: 100, yearly share price increase: 10, yearly payout: 10

The added value of the share repurchase is lower in a two period model. With the same setting as above, but divesting the shares immediately after the first dividend is received, the advantage of a share repurchase is smaller.

Table 4.2 Tax Payments Over Time in a Two Period Model

Time	0	1	1
Share Purchase	-100		
Share Divestment			100
Payout alt: Dividend		10.0	
Tax		3.0	0.0
Payout alt: Share Repurchase		10.0	
Capital Gain		0.9	9.1
Tax		0.3	2.7
Difference in Tax		2.7	-2.7

Assumptions: Purchase price: 100, yearly share price increase: 10, yearly payout: 10

Due to a limited capital gain the standard rule is never used and total taxes paid are equal in both scenarios. The advantage of a share repurchase is reduced to the time value of money (by postponing tax liabilities) with this shorter holding period. The longer holding period the greater value added of share repurchases.[21]

[21] It should be noted that the examples are simplified. In real life the share price usually is reduced by less than one-to-one ex-dividend (See for example Lasfer & Zenonos 2003). This makes a share repurchase even more appealing since there is also a tax on a capital gain in the dividend scenario. There is no tax on shares sold with a capital loss. Consequently, a share repurchase is much more favourable than a dividend in such scenarios.

5. Shareholder Groups and Taxation

In the previous section we showed that in a simple Modigliani & Miller framework share repurchases are superior to dividends; taxes paid is lower and the shareholder gets the option to postpone tax liabilities. The crucial assumption was that shareholders' dividends and capital gains are taxed at 30 percent. This is not the case for all shareholders; many are tax-exempt on dividends and capital gains. In this section we address the respective tax situation for different shareholder groups and its impact on payout preference in a Modigliani & Miller framework with taxes.

5.1 Private Individuals

Private individual's proceeds from shares are taxed in the capital type of income.[22] The taxation is regulated in the income tax law. Capital gains as well as dividends are taxed proportionally at 30 percent and capital losses are tax deductible to 100 percent against capital gains and to 70 percent in the absence of capital gains.[23] A capital gain or loss is determined by the difference between the divestment price and the acquisition price less costs associated with the transaction. The investor has, through the standard rule, the opportunity to determine the acquisition price to 20 percent of the divestment price.[24] Consequently, the tax on dividends is always higher than the tax on capital gains. The 30 percent taxation of dividends is based on the *entire* amount received. The taxation of capital gains will never be higher than 24 percent of the entire amount received from the divestment, since the tax base is limited to the *gain.* For the tax on a capital gain to be as high as the tax on a dividend the gain needs to be infinite, however, in this case the standard rule makes it possible to limit the tax to 30 percent of 80 percent of the divestment price equalling 24 percent. From this obvious immediate tax benefit private individuals should prefer share repurchases over dividends.

5.2 Investment Companies

An investment company is an entity, which entirely or almost entirely invests in securities and similar assets. The purpose of an investment company is to offer its owners a well diversified portfolio.[25] Capital gains are tax exempt and capital losses are non-tax deductible. Received dividends are taxed at 30 percent; however, the dividend an investment company passes on to its owners is tax deductible. The taxation of investment companies is template based and calculated on the base of 1.5 percent of the value of the assets at the start of the fiscal year.[26]

[22] In Swedish: Inkomstslag kapital.
[23] Lodin et al. 2005.
[24] Chapter 48 IL 15§.
[25] Lodin et al. 2005.
[26] Chapter 39 IL 14§.

Assets at Year Start	+
Received Dividends	+
Interest Paid	-
Operating Costs	-
Dividends Paid	-
Tax Base	

Figure 5.2.1 Simplified Presentation of Factors Affecting an Investment Company's Tax Base

As shown in figure 5.2.1 an investment company's tax base increases with the assets at year start and the dividends received. From this amount, interest paid, operating costs and dividends paid are deducted to reduce the tax base. An important difference compared to operating companies is that dividends paid are considered to be a cost. Since capital gains are tax exempt and dividends are not for an investment company share repurchases should be an attractive alternative for receiving cash from a pure fiscal standpoint. By receiving cash through share repurchases rather than dividends an investment company would be able to minimise the amount of dividends it needs to pay in order to eliminate its tax burden. Maximizing assets under management should be attractive for an investment company since it is supposed to be a better investor than its individual shareholders.

5.3 Mutual/Investment Funds

Mutual Funds were introduced as a legal concept to provide an alternative to investment companies. A mutual fund is an entity that manages and invests other people's money. The fund usually makes money by charging a fixed percentage fee of assets under management. The larger wealth under management the larger fee the manager receives. The taxation of mutual funds resembles to a large extent the taxation of investment companies. Capital gains are tax exempt for mutual funds[27] and dividends are taxed at 30 percent.[28] It is possible for a mutual fund to fully avoid taxes by passing through received dividends to its owners. Dividends from a mutual fund are taxed at the individual level, just as dividends from shares. The taxed dividends the investor in a mutual fund receives are commonly received as new fund shares.[29] That is, the manager reinvests them. From the fee structure it is a logical consequence that a large fund value is preferred over a small since it generates a larger profit to the fund manager. A rational fund manager should thus prefer share repurchases over dividends since it maximises the fund value and makes it possible to manage it without "tax-leakage".

5.4 Foundations

A foundation that fulfils *the purpose, the activity and the continuation requirements*[30] is tax-exempt. That is, a foundation that works for a common good cause, as long it is not limited to a single family or a small group of people, can receive tax free dividends and capital gains. A foundation that does not fulfil the

[27] Chapter 39 IL 14§.
[28] Chapter 65 IL 14§.
[29] Interview source.
[30] In Swedish: Ändamålskravet, Verksamhetskravet and Fullföljdskravet, Chapter 7 IL 3§.

requirements is taxed at 30 percent on dividends as well as on capital gains. A charitable foundation should be indifferent between receiving dividends and share repurchases from a tax perspective since it does not have to pay taxes on either of them. A non-charitable foundation on the other hand should by the same reasoning presented for private individuals above prefer share repurchases.

5.5 Pension Funds

Pension funds like the AP-funds are totally freed from taxes.[31] From a tax perspective pension funds should be indifferent between dividends and share repurchases.

5.6 The State

The Swedish state is totally freed from taxes.[32] The Swedish state should be indifferent between dividends and share repurchases from a tax perspective.

5.7 Foreign Owners

Foreign owners are affected by three factors; taxation rules in the home country, Swedish taxation rules and double taxation agreements.[33] However, they have in common how Swedish taxation rules treat them. Foreign owners should prefer share repurchases since capital gains are not subject to withholding taxes as dividends are.

5.8 Companies

Companies are taxed in the same manner for capital gains and dividends as private individuals. The only difference being that the tax rate is 28 percent.[34]

5.9 Business Related Owners

A company's share holding in another company is considered to be a business related holding[35] if one or more of the following requirements is fulfilled:[36]

- The share is not stock listed.
- The holding represents 10 percent or more of the votes in the company.
- The holing is motivated by business considerations.

Dividends and capital gains from a business related holding are tax exempt[37] given that the share is held at least one year from the date it became a business related holding.[38] From a tax perspective a company holding a business related holding should be indifferent between receiving dividends and share

[31] Chapter 7 IL 2§.
[32] Chapter 7 IL 2§.
[33] In Swedish: Dubbelbeskattningsavtal.
[34] Lodin et al. 2005.
[35] In Swedish: Näringsbetingade andelar.
[36] Chapter 24 IL 14§.
[37] Chapter 24 IL 17§.
[38] Chapter 24 IL 20§ and Chapter 25 5§ & 6§.

repurchases since it does not have to pay taxes on either of them. The business related holdings law for capital profits was enforced on the 1st of July 2003 and for dividends on the 1st of January 2004.[39]

5.10 Summary of Different Shareholders' Payout Preferences

Table 5.10.1 below summarises what payout alternative the different shareholder groups on the Stockholm Stock Exchange should prefer.

Table 5.10.1 Summary of Payout Preferences

Owner type	**Preferred alternative from a tax perspective**
Private individual	Share repurchase
Investment company	Share repurchase
Mutual fund	Share repurchase
Charitable foundation	Indifferent
Non-charitable foundation	Share repurchase
Pension fund	Indifferent
The State	Indifferent
Foreign owner	Share repurchase
Company	Share repurchase
Business related owner	Indifferent

As can be seen a majority of the owner groups should prefer share repurchases over dividends. Given the fact that a dividend is a much more common choice than a share repurchase, as shown in section "3. Facts and Figures", the obvious conclusion has to be that there are other factors that the companies and owners perceive to be more important than money lost from paying taxes. To investigate these factors we expand our Modigliani & Miller framework in the following section.

[39] Prop. 2002/03:96, p. 152.

6. Transaction Costs Added to the Modigliani & Miller Framework

In the Modigliani & Miller framework with only taxes share repurchases were superior to dividends for a majority of the owners. This fact is not supported by reality as shown in section "3. Facts and Figures". In this section we expand our Modigliani & Miller framework to include transaction costs to see if these can explain the preference for dividends over share repurchases in Sweden.

Transaction costs consist of different parameters.[40] First, the actual fee paid to the broker. Second, the bid-ask spread. Third, the depth in the market, limiting the actual volume the market can process on a timely and frictionless manner.[41] The parameters are of different importance to different investors. For a small investor selling a limited number of shares, the most important factors are the spread; determining the actual selling price possible to fetch immediately, and the fee paid to the broker; determining the fraction of the selling price the investor has to give up. For an investor with a larger stake, the important factors are the spread, for the same reason as above, and the depth. The depth determines the volume of shares possible for the investor to sell over the market without distorting the market equilibrium. The fee is less important since it is very small percentage wise for investors of sizeable fortunes.[42]

Banerjee et al. (2005) show that all else equal companies with a liquid[43] stock should payout cash through share repurchases and companies with an illiquid stock should payout cash trough dividends. The argument for this is that in a liquid stock it is easy for the shareholder to replicate the dividend effect by selling a fraction of his/her shares. From this transaction the shareholder would receive the same amount of cash as from the dividend, but pay less taxes and would be better off with a larger total fortune. On the other hand, a company with an illiquid stock, making it harder for the shareholder to replicate the dividend effect, would be more likely to pay dividends. This reasoning is supported by Dong et al. (2004). Surveying Dutch individual investors, they find that some investors express a preference for dividends[44] when the cost for cashing in dividends is less than the cost for selling shares corresponding to the dividend amount.[45] From the arguments above it has been shown that by adding transaction costs to the Modigliani & Miller framework one can find logic for dividends, which is turned to now.

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[40] For a detailed description of transaction costs and its components and effects see Harris (2003).

[41] The spread and depth could be said to be the liquidity part of the transaction cost.

[42] Online broker Nordnet offers broker fees of 0.04 percent and below, corresponding to a SEK 400 fee on a SEK 1,000,000 trade. This can be compared to the potential SEK 300,000 tax burden on an equally sized dividend or SEK 240,000 on an equivalent capital gain.

[43] Small spread and deep depth.

[44] The mean score was 4.20 (and significantly different from 4.00) on a scale from 7 to 1, where 7 expressed the highest attractiveness for dividends in light of transaction costs and 1 the lowest.

[45] The results from the Dutch survey are not directly applicable in a Swedish setting due to different tax systems. Dividends and capital gains are taxed the exact same way in the Netherlands and capital gains are taxed, whether realized or not. Thus, there is no tax advantage for share repurchases in the Netherlands. The overall conclusion that dividends should be more attractive if it is very expensive to trade, however, still seems valid in a Swedish setting.

To a private individual the tax advantage of share repurchases is a minimum six percent. The transaction cost therefore needs to be at least six percent to logically make him/her prefer share repurchases over dividends. The lowest transaction fee offered by a broker for trading shares in Sweden is SEK 9.[46] For a transaction fee of SEK 9 to be equivalent to 6 percent or more the trade needs to be at least (9/0.06) = SEK 150. Applying the expected three percent dividend yield for the entire Stockholm Stock Exchange in 2006,[47] the average stock position needs to be at least (150/0.03) = SEK 5000[48] to generate a dividend of SEK 150 or more.[49]

Every company has discretion in deciding the size of the round lot of its shares. The recommendation by the Stockholm Stock Exchange for companies on the A-list is a half base amount (SEK 19,850) and a quarter of a base amount for companies listed on the Attract 40- and the O-list (SEK 9,925).[50] Consequently, the private investor should not be concerned about the transaction costs given that he/she holds a round lot.

The average spread for all companies listed on the Stockholm Stock Exchange is 1.7 percent and the median spread is 0.5 percent.[51] Thus, the spread is relatively small compared to the potential tax advantage (minimum six percent) of share repurchases and should not be of great concern. As stated previously in this section, the investor with a larger stake should be more concerned about the possibility to sell a larger number of shares over the year in order to replicate the cash flow of the dividend. Here, two things are important to point out. First, a company has the possibility to repurchase shares in blocks as long as the trade fulfils the requirements with respect to price.[52] Thus, a company can offer concerned owners to repurchase their relative fraction of the repurchase program in block trades. Second, the average turnover velocity[53] on the Stockholm Stock Exchange is 85 percent.[54] This implies that it in most companies should be possible for major owners to divest a stake corresponding to the dividend yield, if a share repurchase had been made instead of a dividend, over the course of a year.

Before concluding the impact of transaction costs it is important to highlight that certain investors would find share repurchases extra appealing if transaction costs were high. Investors who wish to stay fully

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[46] Offered by online broker Aktiedirekt.se.
[47] Direkt: ”SME-Indikatorn: Direktavkastning verksamhetsår -06 spås bli 3%, 2006-01-10”.
[48] A raised concern is the situation for investors receiving odd round lots after a share repurchase, the arguments presented here, however, is equally valid regardless of odd round lots or not.
[49] It should be noted that the investor concerned of transaction costs’ impact on the ability to replicate dividends would probably avoid the about 120 companies that did not pay dividends for 2005 and would thus have an even higher dividend yield on her/his stock portfolio, making the required average position even smaller.
[50] www.avanza.se.
[51] Publication: “Basic Data Per Orderbook, SEK Stockholm Stock Exchange, September 2004”.
[52] See section “2. Background on Share Repurchases in Sweden”.
[53] Turnover velocity is a measure of the fraction of all outstanding shares being traded in one year.
[54] Publication: “Basic Data Per Orderbook, SEK Stockholm Stock Exchange, September 2004”.

invested in the risky asset and not have any cash holdings would prefer share repurchases if transaction costs were high since it would be expensive for the investor to reinvest the money received in dividends.

In this section it has been shown that in some cases transaction costs can make a dividend a more attractive payout alternative to some shareholders. However, it has also been shown that most shareholders should prefer share repurchases. To summarize the analysis of transaction costs it has to be concluded that the prevailing payout policies of Swedish companies are not yet rational and we now turn to the next section of this thesis and other potential explanations drawing on practitioners opinions expressed in interviews and media.

7. Other Explanations for Why Dividends are Preferred

So far we have shown that taxes and transaction costs do not merit the prevailing payout policies of Swedish companies. Therefore, in this section we address practitioners' arguments for preferring dividends to share repurchases. The arguments investigated have been expressed to us in interviews, and in media. The arguments are presented in subsections and the rationality behind them is analysed on the basis of data and logical reasoning.

7.1 Tax Irrelevance

Discussing tax benefits of share repurchases in interviews with tax-exempt owners, all expressed an understanding and appreciation of the concept. However, stating: "*The tax argument may be all good and true, but it is not valid for us, we do not pay taxes*."

This statement may be faulty for two reasons. First, as shown above in section "5. Shareholder Groups and Taxation", mutual funds as well as investment companies should be better off from share repurchases than dividends despite that they do not, given the passing through of dividends, pay any taxes. The second reason is more intricate. Decisive for knowing if taxes are irrelevant is to investigate; which owner group determines the value of the company? For the tax irrelevance argument we assume the value of a company to be the net present value (NPV) of all payouts to shareholders. The first key issue is: Would an investor be willing to pay more for a stock if he/she would get to keep more of the payouts? We argue that a rational investor should be willing to pay more for an asset with a higher NPV than for an asset with a lower NPV. In the presence of taxes it is then obvious that a share in a company is of different value to different holders of it. Dividends received in eternity amounting to a NPV of 100 for a tax exempt owner are only worth 70 for a private individual facing a 30 percent tax rate.

To investigate the tax irrelevance argument we turn to the actual situation in a stock listed company. Presented in table 7.1.1 is the ownership structure of Swedish company Axfood. All shares in the company have the same voting right and right to the firm's profit and capital. The Ax:son Johnson family is the controlling owner with roughly 45 percent of the capital and there are a number of tax exempt foundations and pension funds holding the stock. In total the tax exempt capital stake held is estimated to be about 48 percent. Foreign owners own about 22 percent of the company and Swedish mutual funds about 16 percent. The remaining 14 percent is owned by Swedish corporations and private individuals.

To simplify our investigation we consider Axfood to be owned by four different owner groups facing different tax situations. The tax exempt owners pay no taxes on dividends. Foreign owners pay a withholding tax in Sweden of 30 percent on dividends.[55] Funds pay no taxes on dividends but have to

[55] It is important to note that foreign owners have the possibility, depending on home country, to receive the withholding tax back. Actual tax paid by this group is thus very unclear.

channel them to their owners, who in turn pay a 30 percent tax on dividends.[56] The average fund management fee is assumed to be 1.2 percent and for valuing the fees an arbitrary discount rate of 10 percent has been applied. For simplicity, corporations have been assigned the same tax rate as private individuals (30 percent).

To determine the NPV of Axfood, we start out by assigning the tax-exempt owners' 48 percent ownership stake a value of 48. The foreign owners lose 6.60 (0.30*22) in dividend taxes, making their stake worth 15.40.[57] The private individuals and corporations lose 4.20 (0.30*14) in dividend taxes, making their stake worth 9.80. Since the value of the investments in a fund in the long run has to be the same as the value of them to the investors in the fund, the funds are subject to a dual tax effect. First, 30 percent is lost in dividend taxes paid by the investors. Second, the funds lose management fees on the non-reinvested money lost in taxes. Applying the above stated assumptions the value of these lost fees is 0.58 ((0.3*16*0.012)/0.1). The value lost to the fund investors and the fund manager is consequently 4.80 + 0.58 = 5.38. The effects are summarized in table 7.1.1 and it is obvious that 16.18 percent of the value of the firm is lost due to taxes on dividends. Comparing the NPV of 83.82 to the NPV of 100 if all shareholders were tax-exempt a potential 19 percent (100/83.82) value increase emerges.

Table 7.1.1 Ownership Stake by Category and the Dividend Tax Impact on the Value of Axfood[58]

Owner Group	Stake	NPV Tax Effect	NPV Stake
Tax Exempt	48%	0.00	48.00
Foreign	22%	-6.60	15.40
Funds	16%	-0.58-4.80	10.62
Corporations & Individuals	14%	-4.20	9.80
Sum	100%	-16.18	83.82

The second key issue is: Is Axfood trading at 100, the value to the investor with the maximum value, or is it trading at 83.82, the value to the average investor in the company? This question is not readily answered since by answering it one owner group needs to be pointed out as irrational. If the company is trading at 83.82 it is irrational by the tax exempt owner not to increase his/her holding until the price reaches 100. On the other hand, if the company is trading at 100 it would be irrational by tax-paying investors to invest in it and those investors should divest the stake if already owning it.[59] Without taking a firm stance on exact trading value of Axfood, we argue that by increasing the after-tax cash flows to tax-paying shareholders,[60] they should be willing to pay more for the firm. This makes the share price go up; to the

[56] All fund investors are assumed to be private individuals.
[57] Assuming that no foreign owner has a tax situation in its domicile forcing it to pay more than a 30 percent tax.
[58] The ownership data has been created by combining data from SIS Ägarservice as of 2005-09-28 and from the Axfood Annual Report 2004. SIS Ägarservice lists the 200 largest shareholders, the rest of the shareholders have been assumed to be Swedish private individuals.
[59] For investors paying a 30 percent tax it would actually be irrational to pay more than 70.
[60] This can be achieved by changing payout policy to share repurchases.

benefit of all investors, regardless if they are paying taxes or not. This conclusion is inline with Black's statement in 1976.

7.2 Speculation

A widely spread argument against share repurchases is that it is speculative and that companies should not speculate in its own stock.[61] Critics argue that the share price at the time of the repurchase and its future movements affect the future value of the company. That is, they argue that shareholders lose if the company repurchases "overvalued" shares that later plummet. Daily newspaper Svenska Dagbladet wrote in 2003: "*Stock listed companies waste their money*."[62] The conclusion was made after looking at all companies that had repurchased shares in 2000 and 2001 and realising that a majority of them traded lower in 2003. The chief lawyer at the Swedish Shareholders' Association, Lars Milberg, follows up by saying: "*No one is so bad at valuing the own share as the managers themselves*." He argues that companies should not repurchase shares at all. In the article Lars Kenneth Dahlqvist at Handelsbanken states: "*Stock trades are always easier, knowing the outcome, but the repurchases were made when our profits were higher than (cash) needed in the operations."* Peter Gimble at Skanska concludes: "*Unfortunately we had no clue that the share would fall this much."*

The, probably, most commented case in media, as well as in our interviews, is ABB. Throughout 1998 to 2000 ABB repurchased shares for USD 1,192 million.[63] 2001 was the last year ABB repurchased shares, buying for USD 1,615 million and selling for USD 282 million.[64] The share price decreased sharply afterwards and unable to recover the money ABB had spent on buying the shares it eventually found itself forced to do an equity offering to secure the survival of the company. In interviews in 2003 Jacob Wallenberg, board member of ABB, said that the repurchases were made to very high prices and that the following sharp decrease in the stock price caused large losses to ABB. Regretting the repurchases, he stated that the entire situation would not have arisen if the stock market had remained unchanged.[65]

To investigate the effects of payouts on the value of a company after the cash is paid out and if changes in the share price constitute a speculative aspect of share repurchases, we introduce a setting with no taxes or transaction costs. These simplifying assumptions do not change the results. We also introduce the following:

[61] That share repurchases can be speculative was a common argument in our interview series.
[62] Svenska Dagbladet Näringsliv, 2003-07-10, "Återköpsfloppen".
[63] ABB repurchased the shares on the SWX Swiss Exchange; therefore the repurchases do not show up in the statistics of this thesis covering share repurchases on the Stockholm Stock Exchange. ABB press release 2003-04-14, "ABB nominates two new board members" and ABB Annual Report 2000.
[64] ABB Annual Report 2001.
[65] Veckans Affärer, 2003-08-25, "Jag ångrar återköpen".

The stock listed Company A has 10 shareholders $(S_1, S_2, S_3 ... S_{10})$. Each holds 10 shares making total outstanding shares 100. Each share has a market value of 1 and Company A wishes to pay out 10. The company has two options to do so; a dividend or a share repurchase. It is also assumed that a trader in the market has no information on who the seller or the buyer in any specific transaction is. The decision process, in a trade, is that a trader decides to buy or sell and then enters the market and executes the deal at market price.

Table 7.2.1 Summary of Setting

Company A	
10 Shareholders	$S_1,\ldots,S_{10}$
Outstanding Shares	100
Price per Share	1
Market Value	100
Wish to Pay Out	10

In Scenario 1 the company chooses to repurchase 10 shares. One of the shareholders (S_{10}) divests his/her stake and the value of the company decreases to 90 (100-10) equally owned by 9 shareholders. Consequently S_{10} has eliminated his/her exposure to the company and $S_1,..., S_9$ have increased their relative exposure to one ninth of the company each.

In Scenario 2 the company pays a dividend of 10, and each shareholder receives 1 (0.1 per share). The share price decreases from 1 to 0.9 following the dividend pay out and the value of the company consequently decreases to 90 (100-10). As in the scenario above one shareholder (S_{10}) divests his/her stake in the company. The other 9 shareholders decide to reinvest their received dividends. By reinvesting the received 9 they can acquire the 10 shares á 0.9 that S_{10} divests. $S_1,..., S_9$ each have increased their relative exposure to one ninth of the company and S_{10} has eliminated his/her exposure to the company.

The situation at the company level is the following after the two scenarios:

Table 7.2.2 Scenario 1 - After Share Repurchase

Company A - Share Repurchase	
9 Shareholders	$S_1,\ldots,S_9$
Outstanding Shares	90
Price per Share	1
Market Value	90
Paid Out	10

Table 7.2.3 Scenario 2 - After Dividend

Company A - Dividend	
9 Shareholders	$S_1,\ldots,S_9$
Outstanding Shares	100
Price per Share	0.9
Market Value	90
Paid Out	10

At the shareholder level the situation is the following:

Table 7.2.4 Scenario 1 - After Share Repurchase

Shareholder Situation				**Owner**
Share Repurchase	**Shares**	**Cash**	**Value**	**Stake**
$S_1,\ldots,S_9$	10	0	90	1/9
S_{10}	0	10	10	0

Table 7.2.5 Scenario 2 - After Dividend

Shareholder Situation				**Owner**
Dividend	**Shares**	**Cash**	**Value**	**Stake**
$S_1,\ldots,S_9$	11.11	0	90	1/9
S_{10}	0	10	10	0

As can be seen, by not participating in the repurchase $S_1,...,S_9$ achieve the same position as in the dividend case when reinvesting the proceeds in the share. S_{10} holds no share and has received 10 in both cases. The conclusion is that it is possible to create an equal position for all shareholders regardless of payout policy chosen.

Above we showed that the choice of payout policy is irrelevant for different active shareholders for the relative exposure to the company. The next step is to determine if it is speculative for a company to hold its own shares.

We assume the same settings as above. Company A decides to pay out cash through a share repurchase.

Company A

Asset	100	Equity	100

Figure 7.2.1 Initial Situation of Company A

Company A has an asset with a market value of 100 and corresponding equity of 100. The company repurchases 10 of the 100 outstanding shares paying 1 á share and finances it by taking on debt. After the repurchase the company can either cancel the shares and decrease the outstanding shares to 90 or keep them in its own custody. The latter is the supposedly speculative action. The two choices would look the following:

Company A

Asset	100	Equity	100
TS	10	Debt	10

Figure 7.2.2 Choice 1 – Holding the Shares[66]

Company A

Asset	100	Equity	90
		Debt	10

Figure 7.2.3 Choice 2 – Cancelling the Shares

The important issue now is whether the choice to keep the shares in the company or not affects the value of the company and the shareholders stake depending on the development of the share price. The value of

[66] In a Swedish judicial setting a company is not allowed to show its own shares in its balance sheet and they have no value, however, it serves the purpose of this presentation.

the asset doubles. Given that the company held the shares the following situation would occur according to the speculation argument:

Company A

Asset	200	Equity	210
TS	20	Debt	10

Figure 7.2.4 Choice 1 – After Increase in Asset and Shares

→

Company A

Asset	200	Equity	210
Cash	20	Debt	10

Figure 7.2.5 Choice 1 – After Divestment

The value of the 10 shares has doubled and on the asset side there is now an asset of 200 and treasury shares worth 20. Since the value of the debt[67] is not affected by the increase in share price equity has to increase in order for the balance sheet to balance and it increases by 110. In order to lock in the "profit" from the increase in share price the company divests the shares. Shareholder S_{10}[68] who now regrets the decision to sell the shares acquires the 10 shares á 2 for a total of 20. The company has an asset of 200 and 20 in cash, 100 outstanding shares and 10 shareholders each holding 10 shares. The speculation argument states that the company and shareholders $S_1,..., S_9$ are better off from the decision taken to "speculate" in the company's stock.

The other choice would have been to be more prudent and not "speculate" in the share by cancelling the repurchased shares. As above, the market value of the asset doubles shortly after the repurchase.

Company A

Asset	200	Equity	190
		Debt	10

Figure 7.2.6 Choice 2 – After Increase in Asset

→

Company A

Asset	200	Equity	210
Cash	20	Debt	10

Figure 7.2.7 Choice 2 – After Equity Offering

Since the company did not hold its own shares it should not, logically, have been affected by the movement in the share price. The asset is worth 200 and equity and debt are worth 190 and 10 respectively. Is it now possible for the company and its shareholders to replicate the position the company would have had, if it had decided to "speculate"? The company could make an equity offering to raise 20. As above shareholder S_{10} regrets the decision to sell and acquires shares for 20. This brings the company's cash to 20 and equity to 210. There are now 10 shareholders each holding the same position as in the "speculative" case. The achieved position of the "speculative" and the prudent company is exactly the same.

67 Theoretically the value of debt can be affected indirectly by movements in the share price since it may affect perceived risk of non-payment. That is, however, not critical to our presentation.

68 The presentation would still be valid if a new shareholder S_{11} decided to buy the shares.

In some countries the law requires all shares that are repurchased to be terminated with the argument that if the restriction was not there, companies could repurchase their own shares when they are undervalued and sell them when they are overvalued, making a tidy profit. However our examples show that the ban is unnecessary, the achieved position can be replicated through an equity offering. By enforcing the same restrictions for divesting repurchased shares as for directed share issues the 10 percent limit on holding own shares is also unnecessary.

We have shown that it is not more speculative for a company to hold its own shares than to terminate them and, in the case of a capital need, do an equity offering. Furthermore, we have shown that shareholders can position themselves in the very same wealth position and relative ownership stake (exposure) in the company regardless of a dividend or a share repurchase. From the two steps shown it should be obvious from the replication possibility that a share repurchase is not more speculative than a dividend. This is also supported by that fact that shares held by the own company lack cash flow- as well as voting rights and thereby, by definition, are worthless.

Before ending this section we return to the criticised share repurchases in ABB. The situation arose because of the following factors:

Table 7.2.6 ABB's Dividends and Share Repurchases 1998 to 2001 (USD million)

	1998	1999	2000	2001	Sum	%
Share Repurchase	155	637	400	1 333	2 525	56
Dividend	460	503	531	502	1 996	44
	615	1 140	931	1 835	4 521	

From 1998 until 2001 ABB decreased equity with USD 4,521 million through dividends and share repurchases. Despite the fact that 44 percent of cash paid out was through dividends the focus was purely on the share repurchases. Little attention has been brought to the following two facts; in June 2000 ABB sold put options to a bank giving the bank the right to sell 4.6 million ABB shares to the company at prices in a range between CHF 102 and CHF 212. In 2001 ABB found its debt position challenging and thus borrowed (sic) money to repurchase shares; "*The main operational challenge was to reduce net debt. In the first quarter, we borrowed to buy treasury shares for resale into the U.S., but the share placement was later cancelled due to poor market conditions*."[69] Analysing what actually happened in the ABB case it becomes apparent that the share repurchases as such were not speculative. However, the fact that ABB traded in put options in its own share and borrowed heavily in hope of reducing net debt by the help of an increasing share price was. As clearly shown above, a share repurchase is not more speculative than a dividend. However, as for a dividend, or any other capital outflow, the company must be in position to cope with the capital outflow in order for it not to be speculative. What ABB did to speculate was to trade

[69] ABB Annual Report 2001.

in put options and stretch the balance sheet even further when the debt burden already was too heavy. To summarize, the key takeaway from the ABB-case is that faced by a stressed debt situation the management borrowed money to pay out to its shareholders; thereby increasing the leverage of the company.

7.3 Equal Treatment of Shareholders

Many companies and owners state in our interviews that dividends are attractive since they treat all shareholders equally. Everyone receives cash on the same day. Treating shareholders equally is stated to be very important and in a share repurchase only participating shareholders receive cash. "*…it is important that each shareholder receives his/her part of the distributed amount. This may not be achieved by way of repurchase of shares over the market, where only the shareholders who choose to sell their shares will participate*".[70] Most practitioners take the standpoint that equal treatment of shareholders implies that if the company pays out cash to shareholders, all should receive a part of the cash. This is the case in a dividend payout where every shareholder receives cash at the same time, which gives rise to an immediate tax liability. The liability is different for different shareholders depending on tax situation. Only shareholders who sell receive cash which they are taxed for in a share repurchase. The shareholders who decide not to sell any shares are compensated through a relatively larger ownership stake in the company since the total share base decreases. Shareholders who decide to keep all their shares can also postpone their tax liability; something that can be of importance given the time value of money. In a share repurchase program, shareholders are granted the freedom to choose if they wish to participate or not and therefore have discretion over the timing of cash flows to them. Thus, we argue that share repurchases is the method that treats shareholders equally; everyone gets the same option to decide on whether they want cash or not. The shareholders that do not participate are compensated through a larger ownership stake. With a dividend the shareholder does not need to make a decision, but his/her options are reduced and for most owners money disappears in taxes. With a share repurchase all shareholders get the same option but have to make a decision, but most importantly they only pay taxes if they sell shares, and that tax is going to be lower than with a dividend. We argue that the freedom of choice is of greatest importance and if a shareholder wants to get money out of the company he/she must be prepared to make an active choice – passive investors might be better off investing in passive investment forms, such as mutual funds. If the company wants all owners to receive cash whether they want to or not a mandatory redemption should be preferred over dividends since it is more tax effective.[71]

[70] "Information to the shareholders in Atlas Copco concerning split and redemption of shares". 2005-12-05. This quote is intended to illustrate a perceived drawback of share repurchases and how important this issue is for companies. The quote as such is comparing a redemption to a share repurchase.
[71] For an overview of redemptions made in Sweden see Appendix C.

7.4 Historical Traditions

That dividends are preferred to share repurchases probably has much to do with historical traditions. Having interviewed managers from 28 U.S. companies Lintner (1956) concluded that dividends are sticky, tied to long-term sustainable earnings, paid by mature companies, smoothed from year to year, and that managers target a long-term payout ratio when deciding on dividend policy. In a similar study Brav et al. (2004) survey 384 financial executives in the U.S. in order to determine what factors drive dividends and share repurchases today. In line with Lintner (1956) the authors find that managers are very reluctant to cut dividends and that keeping the dividend level is a priority on par with investment decisions. Interesting is that beyond keeping the level of dividends per share, payout policy is subordinate to investment decisions. Based on a thorough review of annual reports and our interviews with Swedish practitioners, we find these conclusions to be applicable in Sweden too.

In our interviews, many company representatives state that shareholders expect to get (increasing) dividends. It would be very harmful to the stock if the dividend was cut – shareholders would lose confidence in the company. Some company representatives go as far as to say that they would sell off assets or omit profitable investments before decreasing the dividend. We find this peculiar given that most owners[72] express a long-term perspective on their investments. That is, it should be possible for the company to communicate a more effective payout method that call for dividend cuts to shareholders. Cancelling dividends for a commitment to yearly returning share repurchases of the same amount has been argued in our interviews to be "a communicative challenge" as well as "impossible". Most company representatives state that it is very difficult to communicate effectively and this fact probably has great explanatory power for why companies favour dividends over share repurchases. This is particularly interesting in light of that many owners have declared that they are against dividend cuts due to the downward pressure on the stock price, but at the same time admit that if management has proposed an action they believe would create value, they would view the dividend cut as a good investment opportunity. Since all practitioners argued that it is value enhancing to minimize tax, it is of questionable rationale to oppose dividend cuts in favour of share repurchases for fear of share price drops. If one believes that long run share prices eventually will reflect the true value of a firm, the rationale is even weaker, taking into account the outspoken long term investment horizon. Clinging to historical dividend policies appears to be irrational. We argue that a company should not be run after what it did yesterday. Management's key decision variable should be what is best for the shareholders today and tomorrow.

7.5 Lack of Ideas and Good Investments

When a company increases the dividend it is usually interpreted as a sign of good times ahead.[73] Companies making share repurchases, on the other hand, have drawn criticism for lacking ideas and

[72] In our interviews.
[73] See for example Bhattacharya 1979 and Miller & Rock 1985.

having uncreative boards and managements. In 2000 Tor Marthin, at the time vice president of AMF Pension, expressed: *"Companies that make share repurchases have a lacking creativity… …With the share repurchases, the companies signal that they do not have any own ideas, which is an evident lack.*"[74] This view has been further emphasised by newspaper Dagens Industri: "*Repurchases could be interpreted as a signal that the board sees lacking possibilities to make money in the future. The company's cash is distributed to the owners instead of being invested in new profitable investments... …But those shareholders who receive money from share repurchase programs should carefully consider if their generous company has reached the end of the road. Boards with many ideas usually do not like less money to play with.*"[75] In our interviews share repurchases were described as a sign of "lacking fantasy" in one case and "to be the same as giving up" on two occasions by proponents of dividends.[76] A manager who likes to avoid criticism and being presented in media as incompetent could choose dividends over share repurchases.

There seems to be a misconception of the fact that a dividend and a share repurchase constitute the very same thing; a transfer of capital to the shareholders from the company.[77] Given that the capital is to be paid out it is logically hard to fathom how the choice of payout method affects the value of the current and future investments of a firm. One possible explanation, which also is indirectly expressed in our interviews,[78] is that companies perceive dividends and share repurchases to consist of *different* cash. Thaler (1985) presents mental accounting and argues that organisations and individuals mentally divide capital at their disposal into different categories despite the fact that it all is cash. The same mental accounting seems to take place among investors and managers when it comes to paid out cash.[79] Despite the fact that cash paid out is not invested in the operation regardless of method, investors and media often perceive the method chosen as a sign of the ability of management and board as well as the prospects of the company. Cash from share repurchases often seems to be taken as a sign of bad times ahead, whereas cash from dividends seems to be taken as a sign of good times ahead. We consider this classification to be false and argue that management should not be concerned about drawing short run criticism, but maximise the value to the shareholders.

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[74] Dagens Industri, 2000-11-02, "Tungviktare dömer ut återköp av aktier".
[75] Dagens Industri, 2005-11-18, "Aktierna som lever på konstgjord andning".
[76] This is strange given that share repurchases are generally appreciated in the U.S. and U.K. Lasfer (2000) shows that share repurchase announcements are accompanied with positive abnormal returns in the U.S. and U.K.
[77] It is important to highlight that this thesis' main focus is the choice of payout method once the decision to pay out cash is taken. A discussion on the actual choice to pay out cash would take us back to Black (1976) and Modigliani & Miller (1958 & 1961).
[78] On several occasions dividend paying companies stated: "We do not distribute capital through share repurchases since we consider us to have good investments.".
[79] A good example of this is the ABB-case described in section "7.2 Speculation" where the share repurchases but not the dividends were criticized.

7.6 Management's Incentive to Manipulate the Share Price

One common argument against share repurchases is that many companies have incentive programs tied to the share price. Gunnar Ek at Aktiespararna stated in 2003:*"The size (of options programs) should be reasonable so that it is not an end in itself to raise the price. Many share repurchase programs are questionable. It has definitely gone too far with all share repurchases."*[80] That is, investors are afraid that management will place an order to repurchase shares close to the strike date of the share options to be sure that they end up in the money. That is, by introducing the company as a buyer, the management will let the company pay a premium over the market price to sellers in the market, thereby benefiting the wealth of the management and the sellers at the expense of the remaining shareholders. However with the rules set up by the Stockholm Stock Exchange[81] there is very little risk that management will be able to manipulate a share price increase since it is only allowed to trade between the prevailing buy and sell price. However, the risk remains that management close to expire date of the options repurchase shares, when the options are in the money, to prevent the stock from falling. The shareholders will thereby reward the management, not for profit improvements, but for share price manipulation.

To investigate if the fear of Swedish owners are valid, an appropriate investigation method would have been to look at each individual share option scheme, to see if companies are more likely to repurchase shares close to the strike date of the share options.[82] However, since there is no official record on share option schemes in Sweden, data on strike dates is very scarce and we have looked on it from a broader perspective. We have relied on data provided by Nordic Investor Services (2005).

Category 1: Companies with Option Programs (95)
Category 2: All Listed Companies on the Stockholm Stock Exchange (253)

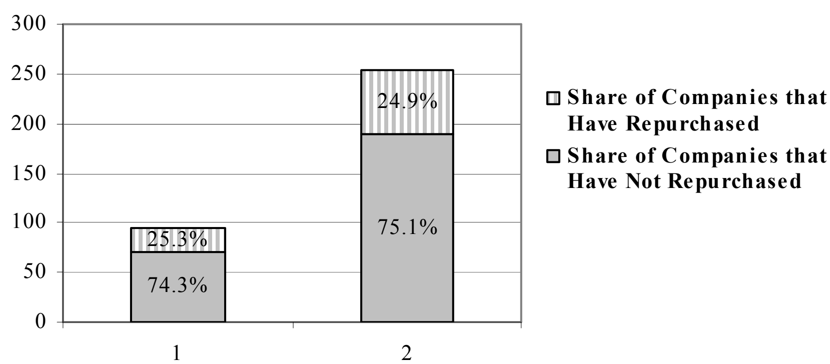

Figure 7.6.1 Share of Companies with Option Programs that have Repurchased Shares versus Share of all Listed Companies that have Repurchased Shares 2000 to 2005

[80] Dagens Industri, 2003-03-11, "Byt bonus mot rabatt på aktier".
[81] See section "2. Background on Share Repurchases in Sweden".
[82] For the analysis to be fully correct, it is also necessary to control for changed terms of share option schemes following a dividend, share repurchase or equity offering.

In figure 7.6.1 one can see that of the 95 listed companies that have share option programs, 25.3 percent have repurchased shares, whereas the corresponding figure for all listed companies on the Stockholm Stock Exchange is 24.9 percent. This indicates that companies with share option programs are no different in terms of repurchase programs compared to other companies. If shareholders believe there is a risk that management will try to manipulate the share price, this is easily controlled for by putting a ban on share repurchases close to the expire date of the options. As stated in section “2. Background on Share Repurchases in Sweden”, the company is not allowed to trade in its own share during the 30-day period preceding the announcement of the company’s annual or interim report. We think this restriction should apply to option schemes as well. The period should be long enough for the share price to adapt to new information and be uninfluenced by the share repurchases. Important to note is that there are owner representatives that express trust in the management they have appointed and believe that management do not have strong incentives to manipulate the share price. These owners point to that compared to the U.S., option programs in Sweden are not designed to generate excessive wealth to the management, being much more modest and transparent. Therefore company managements in Sweden should not have the same strong incentives as those of their counterparts in the U.S. Combining this fact with a contractual 30 day restriction to repurchase, option programs should be no deterrent for share repurchases.

7.7 Lack of Knowledge among Individual Investors

In interviews, company representatives have declared that one of the most important reasons for why they prefer dividends is the lack of knowledge, about share repurchases, and in general among individual investors. The lack of knowledge may be explained by the fact that over the last decades the number of shareholders in Sweden has increased substantially.[83] Today they amount to about 2.4 million.[84] Most importantly, of the total shareholder base, 50.3 percent own shares in only one single company, indicating that they have very little interest in and knowledge of the stock market. The ignorance of many shareholders was clearly seen in the case of TeliaSonera’s redemption in 2005, in which two hundred thousand shareholders did not participate, thereby loosing the value of their redemption rights.[85] TeliaSonera was heavily criticised for the redemption, and this year it is actually proposing, in addition to the regular dividend, an extra-dividend instead of a share repurchase or a redemption.[86] There is also support for the company representatives’ argument of lack of knowledge in that one third of all share divestments are wrongly accounted for in shareholders’ capital income-tax return form.[87] One interview object stated that the management in a company should work for the best of all shareholders, regardless if some shareholders are not knowledgeable enough to understand all aspects of actions taken and in that case management should engage in popular adult education, making it possible to undertake the

[83] Interview source.
[84] “VPC Ownership Statistics as of 31 December 2005”.
[85] Dagens Industri, 2005-11-02, ”TeliaSoneras ägare slipper skattematematik”.
[86] Press release, ”TeliaSonera Januari – December 2005”.
[87] Dagens Industri, 2005-11-02, ”TeliaSoneras ägare slipper skattematematik”.

potentially controversial action. We agree with the interview object, and argue that a manager should never be able to blame not knowledgeable shareholders for failing to undertake value enhancing measures.

7.8 The Share Price's Influence on Managers' Decision to Repurchase

Managers have expressed that the share price affects the decision to repurchase. Cheap shares are attractive to repurchase. On the other hand, managers are reluctant to repurchase expensive shares.[88] Investors could expect that if management switch to a share repurchase based payout policy, cash flows to them would be partly decided by managements' view on the true value of the share. That is, an amount of money is decided to be paid out over the year, the company starts repurchasing shares, however, after some time the stock rallies and the management becomes reluctant to continue to repurchase shares and actual cash paid out would be lower compared to the case of a flat share price. Payouts through share repurchases would then be more volatile than the sticky dividend payouts investors have grown accustomed to.[89] Payouts would to an even lesser degree than before be determined by investment needs in the company, since an additional determinant factor, share price development, is introduced. Shareholders could thus prefer dividends to share repurchases because of concerns over the share price's influence on total cash paid out.

This argument is analysed in two ways. First, we empirically investigate the share price development following share repurchases. Second, the arguments' fundamental logic is analysed.

To test if managers are more likely to repurchase shares if the share is perceived to be undervalued, we use our data on all share repurchases made from March 2000 until December 2004. Altogether 5,455 individual share repurchases have been made by 76 companies.[90] Portfolios have been formed consisting of all companies that have repurchased shares in a certain month. All companies have received equal weight in the portfolios and the holding period for each portfolio is one year. The holding period has been defined to one year due to the fact that we consider it unlikely that managers repurchase shares based on a belief of a short-term spike or reversal in share price. If managers actually repurchase shares when they perceive them to be undervalued it is considered to be more likely that they do so from perceived long term fundamental undervaluation. 53 portfolios consisting of on average 10.7 repurchasing companies have been formed.[91] The returns of the portfolios have been compared to the return of Affärsvärldens

[88] In a study by Brav et al. (2004) 86.4 percent of managers surveyed expressed that the price of the share is of importance for the decision to repurchase shares or not.

[89] The view that cash paid out would be more volatile if share repurchases were used instead of dividends was common in our interviews. The potential volatility and uncertainty of payouts was put forth as a big problem.

[90] Share repurchases by Atle, Castellum, Diös Anders Holmen, Mandamus, Scandiaconsult, Scandic Hotels, Spendrups and SäkI during the year 2000 have been excluded from the set due to that acquisition prices have not been reported to the Stockholm Stock Exchange.

[91] Six months in the year 2000 have been excluded due to the none-reported acquisition prices and there was one month in which no share repurchase was made.

Generalindex for each holding period. Affärsvärldens Generalindex is an index tracking the Stockholm Stock Exchange. The index takes dividends paid into account.

Table 7.8.1 Portfolios Formed of Share Repurchasing Companies Compared to Index

	Portfolios	Index
Observations	53	53
Positive Returns	41	29
% Positive Returns	*77.4%*	*54.7%*
Average Return	14.0%	1.9%
Index beating Observations	37	
% Index beating Observations	*69.8%*	

Table 7.8.1 presents the outcome of the observations. 37 observations have outperformed the index. The average yearly return for the 53 portfolios is 14.0 percent and 1.9 percent for the index. To test statistically if the portfolios have outperformed the market we perform the test below. If there is no connection between repurchasing shares and outperforming the index we would expect 50 percent of the portfolios to outperform index and 50 percent to underperform. That is, $p_0 = 0.5$ and the following hypothesis is formed:

$H_0 : p = p_0$

$H_1 : p > p_0 \qquad \alpha = 10\%$

We test the hypothesis:

$$Z = \frac{\hat{p}_X - p_0}{\sqrt{p_0(1-p_0)/n}}$$

The null hypothesis is rejected if:

$$\frac{\hat{p}_x - p_0}{\sqrt{p_0(1-p_0)/n}} > z_\alpha$$

The observations give the following:

$$\frac{0.698 - 0.5}{\sqrt{0.5 * 0.5/53}} = 2.88$$

$$z_{0.10} = 1.29$$

Since 2.88 is greater than 1.29 the null hypothesis is rejected. Thus, it is found that share repurchasing companies have on average outperformed the index. The argument that managers are more likely to repurchase shares when the share is perceived to be undervalued seems to be true. This indicates that cash flows streams from a repurchase based payout policy could be more volatile than under a dividend policy.

Another factor beyond investment opportunities, share price, appears to affect the amount of cash paid out.[92]

Given that the amount of money is already specified and the choice of payout method does not affect investment policy, managers should not be concerned over when to repurchase shares. What should be of concern is, just as for a dividend, actual cash paid out. Once the decision is made to pay out an amount of cash the effect is the same regardless of method.[93] Unrestricted equity decreases and each shareholder has the possibility to retain his/her ownership stake in the company. Once the shares are terminated future share price changes have no effect on the capital paid out, exactly as if a dividend had taken place.[94]

It has been shown that managers seem to care about prevailing share price when repurchasing shares. We have argued that this is unnecessary. A company wishing to replace dividends with repurchases should instruct its managers to repurchase shares regularly regardless of prevailing market price. As long as the repurchases are made at market price, no concern should be paid to future share price development. In relation to paid out capital shareholders should only be concerned about received cash.[95] If the share price falls, it would, all else equal, have fallen in the case of a dividend as well.

7.9 Reduction of Shareholder Base[96]

The importance of having many shareholders have been a frequent argument against share repurchases.[97] In January 2000 Håkan Bergström, CEO of Seco Tools, stated: *"One of the dilemmas for Seco is that the liquidity in the share already is too low. The way I see it the risks of ownership concentration and thinner trading in the share are forgotten aspects of repurchases."*[98] An expressed opinion in our interview series is "Share repurchases may be a good thing but it is not something for us, we already have fewer shareholders than we wish"[99] The company Lundbergs has been heavily criticised for repurchasing shares. In 2001 Dagens Industri stated that shareholder after shareholder is selling his/her stake and leaving the company and prophesised that the company would have no outside shareholders in two years.[100] One reason companies prefer dividends is fear of a decreasing shareholder base.

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[92] Other factors can have affected the results; repurchasing firms are in general stable and profitable firms. These firms had a better price development than average during the stock market crash. There is a high concentration of banks and real estate companies, which have fared well during the entire time period. If we are correct in this thesis, the value of a firm increases if it repurchases shares instead of paying dividends. This effect could also explain the result. The reader should be aware of potential effects this could have on the result.
[93] With respect to taxes and transaction costs.
[94] The issue of terminating shares and its potential effects is more thoroughly investigated in the section "7.2 Speculation".
[95] Remember that the perspective in this thesis is that the decision of how much to pay out is already taken. Potential investment possibilities is therefore not relevant here.
[96] Number of shareholders.
[97] See for example: Dagens Industri, 2003-03-04, "Broströms VD räknar med att klara tillväxtmål".
[98] Dagens Industri, 2000-01-19, "Rör inte våra pengar!".
[99] CEO at a company at the Stockholm Stock Exchange.
[100] Dagens Industri, 2001-05-30, "Missbruket av återköp ökar".

To investigate this established "fact" we have looked at all companies[101] making share repurchases to see if the shareholder base has decreased or increased following a share repurchase. The number of shareholders at the end of the year before the repurchase has been compared to the number of shareholders at the end of the year the share repurchases took place.

Table 7.9.1 Changes in Number of Shareholders Following Share Repurchases

	Increase in no. of Shareholders	% Increase	Decrease in no. of Shareholders	% Decrease	Total no. of Observations
All Companies	73	44.5	91	55.5	164
Companies with >10,000 Owners	31	36.9	53	63.1	84
Companies with <10,000 Owners	42	52.5	38	47.5	80

63 companies that have made share repurchases have been included in the sample. The 63 companies render us 164 observations. In 91 cases (55.5 percent) the number of shareholders has decreased following the share repurchase, a slight support for the established truth. Interesting to see, however, is if there is a size effect. It should be more harmful for a company with about 1,000 shareholders, such as Traction, than a widely held stock with almost 400,000 shareholders, such as Föreningssparbanken, if the number of shareholders decreases. Dividing the sample into two groups, one consisting of all companies with fewer than 10,000 shareholders and one group consisting of all companies with more than 10,000 shareholders the exercise above is redone. 30 companies are included in the group of companies with many shareholders and 84 individual observations. On 53 (63.1 percent) occasions the number of shareholders has decreased. In the group of stocks with fewer shareholders 33 companies are included and 80 observations have been made. On 38 (47.5 percent) occasions the number of shareholders has decreased. The number of shareholders, contrary to conventional wisdom, has increased more times than decreased for the firms with few shareholders. Another interesting point to make is that firms with many shareholders "lose" shareholders more frequently than firms with fewer shareholders. An explanation for the higher frequency to lose shareholders among larger firms might be that many observations come from companies in which the shareholders have received the shares "cost free" and maybe did not want to own them in the first place.[102]

Peter Benson at business daily Dagens Industri argued, in May 2001, that there would be no shareholders left in Lundbergs in two years. In table 7.9.2 one can see that the decrease in shareholder base in 2001 was

[101] Due to lacking historical ownership data a few observations have had to be omitted for companies de-listed following M&A-activity.

[102] For example: Shareholders of Volvo received shares, as a dividend, in Swedish Match, which thus became one of the most widely held shares on the Stockholm Stock Exchange. It does not seem to be unfeasible to assume that some shareholders could see themselves as shareholders in a car company but not in a tobacco company.

69 shareholders (1.0 percent).[103] In 2002 and 2004 considerably smaller repurchase programs were undertaken, in both years the shareholder base *increased* with more than 10 percent.

Table 7.9.2 Repurchased Shares, Outstanding Shares and Shareholder Base in Lundbergs 1999 to 2004[104]

	Shares Repurchased	Shares Outstanding	Shareholders	Change in Shareholder Base
1999	0	75 880 383	7 675	
2000	10 476 800	65 403 583	6 794	-881
2001	3 258 100	62 145 483	6 725	-69
2002	70 400	62 075 083	7 452	727
2003	0	62 075 083	9 020	1 568
2004	75 083	62 000 000	10 770	1 750

There is no tendency for companies with a limited universe of shareholders to "lose" shareholders following share repurchases. This shows that the established fact is faulty and the fear is unfounded. Consequently, companies should not obviously refrain from share repurchases due to ownership base concerns.

7.10 Controlling Owners' Abuse of Asymmetric Information

The risk of abuse has been argued to be an argument against share repurchases. A frequently mentioned case is the shipping company Gotlandsbolaget[105] *"This company (Gotlandsbolaget) has for many years consistently refused to provide any valuation at all of their ships. At the same time the company has repurchased almost 40 percent of the shares while the controlling owners (Jan-Eric Nilsson and family) have increased their stake, well aware of the hidden values in the company."*[106]

Many practitioners argue that share repurchases are an excellent way for some owners to take advantage of asymmetric information at the expense of the other shareholders. It is important to point out that it is not share repurchases *per se* that result in the abuse. In essence, what the controlling owners in Gotlandsbolaget did was to increase their ownership stake to a price below the "true value". There are many tools for achieving this. The controlling owners could as well have forced the company to pay an extra dividend, and used the proceeds to buy more shares in the company. To be exact, if one is critical to share repurchases in light of Gotlandsbolaget, one might as well be critical to extra dividends.[107]

[103] With the same yearly percentage decrease it would take 453 years before only 1 percent of the original shareholders are left.
[104] Shares held by the company have been deducted from shares outstanding.
[105] We like to clarify that we do not accuse Gotlandsbolaget, but just forward raised opinions.
[106] Dagens Industri, 2003-10-01, ”Skambud på Gotlandsbolaget”.
[107] It is true that a share repurchase can not lead to a forced bid for an owner increasing his/her stake as is the case for reinvesting dividends. However, reinvestments could equally well be made through relatives or other "friendly" vehicles.

Lindstedt & Oh (2000) state that controlling owners focus on maintaining or increasing their power over the companies. This can be achieved through a share repurchase; the remaining owners receive a larger ownership share without using more of their own capital. To empirically investigate if the critics are right, we have collected ownership data on all companies[108] that have made repurchases from March 2000 until December 2004 to see if the controlling owner has increased ownership stake after a repurchase. A controlling owner is defined to be a person, family, sphere or a company that owns at least 10 percent of the votes. A sphere is defined to be a group of individuals with the same ownership interest in a company.[109] Of the 75 companies[110] that have made repurchases 71 had a controlling owner. These 71 companies have together made 171 repurchases during our sample period.

Table 7.10.1: Controlling Owner Increasing/Decreasing Ownership Stake After a Share Repurchase
Total number of companies that have made repurchases 2000 to 2005: 75
Number of companies with controlling owner: 71
Number of companies with no controlling owner: 4

	2000		2001		2002		2003		2004		2005		Total no. of Observations	
Number of Companies with Controlling Owner that have Made Repurchases	30		38		35		31		24		13		171	
Controlling Owner Increased Ownership	9	30%	22	58%	17	49%	14	45%	17	71%	9	69%	88	51%
Controlling Owner NOT Increased Ownership	21	70%	16	42%	18	51%	17	55%	7	29%	4	31%	83	49%

As seen in table 7.10.1 51 percent of controlling owners have increased their ownership stake following a share repurchase and 49 percent have decreased. Before concluding that share repurchases are not used to increase ownership stake it is worth to note the observations in 2004 and 2005.[111] In the light of this we find it hard to draw any firm conclusion on this matter, however, the anxiety that share repurchases often are used to increase control over a company seems unfounded. It is possible for an owner to increase ownership stake in a company through a share repurchase. Just as in any other share transaction the owners decreasing their ownership stake are getting paid for it. As shown in the section "7.2 Speculation" the exact same effect is possible to achieve through a dividend. Since a share repurchase is not the cause of the potential abuse, but a tool among others, it should not be abandoned for dividends because of this concern.

[108] Number of companies amounts to 70. Listed foreign companies are excluded due to difficulties getting access to ownership data.
[109] The same sphere classification as in Sundqvist (2000-2004) has been used.
[110] Foreign companies listed in Stockholm have been excluded due to data availability reasons.
[111] Although with very few observations.

8. Discussion of Results

We showed that taxes (section 7.1), contradictory to tax exempt owners' belief, are important to all owners. The key question is; what owner group determines the market value of the share? The importance of taxes varies depending on the owner determining the price of the stock in the market place. However, the aim of this thesis is not to quantify the absolute effect but show the presence of it. The speculation (section 7.2) argument is commonly misunderstood. For many it seems so obvious that remaining shareholders lose from a share price decrease following a share repurchase. This easy misapprehension is probably due to a confusion of what causes the loss. Individual shareholders obviously lose if the share price decreases, and even more so than if the share repurchase had not taken place and a dividend had been paid out. This is, however, *only* because they have increased their exposure to the company. No one would argue that a shareholder would lose from a dividend if the share price decreases afterwards because he/she reinvested the proceeds. Treating shareholders equally (section 7.3) is admirable and worth striving for. Many shareholders express a desire to receive dividends. Is paying dividends to treat shareholders equally? The shareholders' right to choose timing of cash flows is lost. Even more important, many shareholders have to pay substantial amounts of taxes where others pay none. Maybe all shareholders are equal, but some shareholders appear to be more equal than others.

The stickiness in dividends and its historical explanations (section 7.4) have been visited many times before. Since we see no encompassing logic behind it we are not willing to accept it at face. We are, however, aware that many attempts have been made. Perhaps this is a question that each shareholder should answer individually; why are you willing to reduce your fortune by receiving dividends regardless of investment opportunities and tax consequences? We prefer cash value and can not understand why others do not. Until someone explains why, we continue to be dazzled by this but consider it to be an explanation for dividends, irrational as it is. Voices heard in Swedish media often state that a share repurchase is uncreative (section 7.5). Given this view it might be easy to understand why companies avoid share repurchases. How can one expect a CEO to take the risk of a front page saying that he/she is lacking ideas? Several studies show positive abnormal returns following share repurchase announcements and actual transactions. Thus, many investors are probably not endorsing this argument, but in this thesis we have chosen to present what has been said to us and what media commonly reports. Options (section 7.6) as well as share repurchases are debated topics in Sweden. We saw no correlation between option programs and share repurchases. A more reliable case could have been made with access to complete options data. Had we had access to strike dates for all option programs, it is not evident that the outcome would have been the same.

Shareholders have different knowledge levels (section 7.7). It is nice to be concerned for less knowledgeable shareholders, but at what cost? The question gets even more intricate from the fact that it is the least knowledgeable shareholders that would profit the most tax wise from share repurchases.

Concern for these shareholders might explain dividends in some cases, but a truly concerned manager should seek to enlight his/her shareholders and maximise the value of their shareholdings. The share price may affect managers' decision to repurchase shares (section 7.8) and it would thus be logical to prefer dividends. Our statistical test of this argument carries some drawbacks. Only few industries are represented, these very industries happen to be the same industries that had strong share price developments over the entire time period. A question to ask is; did the shares rise because of the share repurchases or did the share repurchases take place because the shares were going to rise? It is theoretically possible to decrease the number of shareholders through a share repurchase (section 7.9). In practice share repurchases do not seem to lead to a reduction of shareholders. Managers should definitely consider this issue, but since there is no support for it in data they should not disregard share repurchases until they see the effect in their company. Share repurchases can be used abusively (section 7.10) but so can many other corporate tools as well. Dividends may be more attractive since it appears to be so easy to abuse shareholders through share repurchases. Since it is as easy to do so through dividends and directed share issues the worry should not be greater for share repurchases.

As a general note on the arguments presented in this thesis it can be said that many of them carry some merit. However, not if taking into account that potential harm is easily contracted away or replicated by means of widely accepted tools such as dividends and equity offerings.

It should be mentioned that there are issues associated with our results since the nature of the thesis was mainly explanatory, in cases where answers were possible to obtain from fundamental financial theory it should not affect the results. In sections were answers are supported by existing data or have been reached from logical reasoning, there is more room for potential criticism and the results will probably (should) have to stand the test of future challenges before being taken as given. Despite the potential shortcomings, we argue that it is of great value to see that significant amounts of shareholders' money are being paid in unnecessary taxes, without practitioners being able to put forth rational arguments as for why.

9. Conclusion

The aim of this thesis was to shed light on companies' payout policies and examine the "Swedish dividend puzzle". First we sought to find arguments for why Swedish companies leave substantial amounts of money on the table by paying considerable amounts of cash in dividends when share repurchases are more tax beneficial to shareholders. Second and most importantly we investigated the rationality behind the arguments. In doing this we came up with 10 explanations from our interview experiences, having covered practitioners with influence on 60 percent of the value on the Stockholm Stock Exchange. Our analysis clearly shows that dividends and share repurchases are close to being two of a kind. In a tax free world they are perfectly interchangeable and replicable, with share repurchases giving extra benefits to the shareholders in form of considerable tax savings and unlimited flexibility in the real world. The most important finding of this thesis is that the arguments put forth in favour of dividends over share repurchases rest on a very fragile foundation, seemingly with limited sense and rationality. *Shareholders should require stronger arguments for why management waste their money on taxes*.

9.1 Suggestions for Further Research

In this thesis we, have among other issues, looked at the shareholder base for share repurchasing companies and authors before us have investigated short term effects on liquidity in time periods of share repurchases. We think it would be highly interesting to see a study on long run effects on liquidity of share repurchases. Are there any lasting effects once the share repurchase program is finished, and if so, which are they? The business related holdings law, introduced in 2004, causing a further de-alignment of interest between different owner groups provide an array of interesting topics for future research: Its effect on companies' investment policies as well as payout policies is yet unclear and at the same time of great importance. The presence of dual class shares is another de-alignment of interest. As such it can affect payout policies. To investigate this issue would be of great importance in a Swedish setting since it is an important part of the power structure of the stock listed companies. Given the rise of redemptions in 2005 it would be highly interesting to se how this will affect payout policies. How the value of a firm is determined depending on tax situation of its owners has been an important topic in this thesis. An elaborate study of this issue could potentially be of great importance for Swedish payout policies and therefore something we look forward greatly to read about.

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11. Appendix

Appendix A: Brief Presentation of Alternatives to Dividends and Share Repurchases

Extra dividend: An extra dividend functions exactly as a regular dividend and is taxed in the same way with the only exception that it is outspoken to be a one-time event.

Redemption: In a redemption program the shareholders get redemption rights, which they can use to redeem a fraction of their shares and get cash for from the company. Given that a shareholder has no desire to redeem shares he/she can sell the rights in the market and instead get a larger relative ownership stake in the company and a smaller cash amount from selling the redemption rights. In a redemption program the shares purchased by the company are cancelled. The cash received from divesting shares through a redemption is taxed as a capital gain.

Mandatory redemption: A mandatory redemption works mainly as a redemption with the difference that the shareholder gets redemption shares instead of redemption rights making it compulsory[112] to participate. The redemption shares are, on a pre-specified date, cancelled and replaced by an equivalent amount of cash. In that sense the mandatory redemption has the same characteristic as a dividend in that the passive shareholder receives cash on a pre-specified date, regardless if he/she likes to or not. An important reason for doing a mandatory redemption is that it is more tax favourable for most owners.

Tender offer buyback: In a tender offer buyback the company offers to purchase a fraction of each shareholders' stock[113]. The main difference for the company between a redemption and tender offer buyback is that the company is not forced to cancel the shares after a tender offer buyback.

[112] The only way a shareholder can relinquish to participate is buy selling the redemption shares, which would give the same net effect.
[113] The offer price is usually well above the prevailing market price to give the shareholders incentive to sell the specified fraction of shares back to the company.

Appendix B: Interview Questions[114]

Of your goals relating to organic growth, acquisitions, capital structure and dividend policy. Which is the most important one and why?

Your view on dividends, share repurchases, redemptions and fixed price tender offers (for an investment company as well as operational company)?

Pros and cons associated with the alternatives (for an investment company as well as operational company)?

Why have you chosen the target for dividends you have and what considerations have been made? (taxes, flexibility, key ratios, investor attractiveness, timing etc.)

Who have taken part in the decision process leading up to the dividend policy?

Is payout policy something that is discussed with the board and the owners?

Is payout policy combined with a company's investment policy something that affects the value of it?

Is payout policy an important question at time of investment in a company?

Should a company try to minimize taxes for its owners? How important are tax considerations?

Is your and your owners' tax situation considered, how and to what extent before paying out cash?

[114] Each interview consisted of two parts; one generic with questions asked in all interviews and one part with tailored questions to the particular organization. The questions were used as a starting point and followed by discussions.

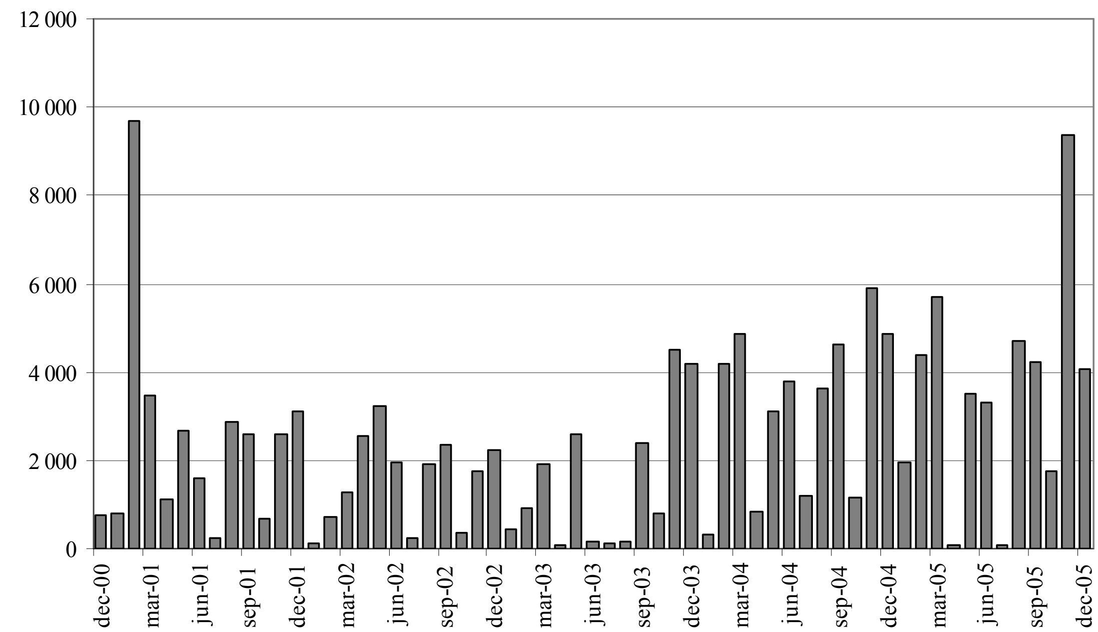
Appendix C: Data on Share Repurchases and Redemptions[115]

Table C.1 Monthly Share Repurchases on the Stockholm Stock Exchange (SEK million)[116]

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2000			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	754
2001	781	9 704	3 461	1 122	2 679	1 582	234	2 878	2 581	692	2 598	3 122
2002	106	722	1 288	2 542	3 224	1 966	243	1 896	2 344	355	1 747	2 222
2003	435	927	1 906	79	2 594	175	101	172	2 374	816	4 490	4 199
2004	312	4 197	4 857	818	3 102	3 795	1 191	3 642	4 615	1 162	5 906	4 846
2005	1 957	4 394	5 695	84	3 513	3 299	82	4 724	4 230	1 749	9 381	4 058
	3 591	19 943	17 207	4 645	15 112	10 817	1 851	13 312	16 144	4 774	24 121	19 200

Table C.2 Percentage Distribution of Share Repurchases 2000 to 2005

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2000			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2001	2.5%	30.9%	11.0%	3.6%	8.5%	5.0%	0.7%	9.2%	8.2%	2.2%	8.3%	9.9%
2002	0.6%	3.9%	6.9%	13.6%	17.3%	10.5%	1.3%	10.2%	12.6%	1.9%	9.4%	11.9%
2003	2.4%	5.1%	10.4%	0.4%	14.2%	1.0%	0.6%	0.9%	13.0%	4.5%	24.6%	23.0%
2004	0.8%	10.9%	12.6%	2.1%	8.1%	9.9%	3.1%	9.5%	12.0%	3.0%	15.4%	12.6%
2005	4.5%	10.2%	13.2%	0.2%	8.1%	7.6%	0.2%	10.9%	9.8%	4.1%	21.7%	9.4%
	2.4%	13.2%	11.4%	3.1%	10.0%	7.2%	1.2%	8.8%	10.7%	3.2%	16.0%	12.7%



Graph C.1 Monthly Share Repurchases from December 2000 to December 2005 (SEK million)

115 Data source for share repurchases and redemptions is the Stockholm Stock Exchange and respective company's annual reports.

116 Share repurchases were permitted from 2000-03-10, however data on acquisition prices were not reported until December 2000, therefore we have excluded the observations up until December 2000 in this figure.

Table C.3 Share Repurchases per Company and Year (SEK)

Company	2000	2001	2002	2003	2004	2005
Addtech		53 921 700	1 450 000	38 887 500	37 850 000	98 175 000
AstraZeneca plc	3 342 700 000	11 378 470 000	11 158 328 050	8 952 811 000	15 580 850 000	22 801 125 000
Atle	1 000 000					
Autoliv Inc.			279 248 400	370 694 600	1 025 288 300	2 891 868 686
Axfood	4 034 558	42 646 630				
Bergman & Beving	87 000 000		61 008 000		88 060 000	
Bilia		80 527 517	138 368 472		233 338 169	
Billerud			422 834 453	400 270 436	316 497 132	
Bure Equity		31 614 548				
Capona	42 000 000	21 831 806	13 583 180	3 401 174	137 097 204	
Castellum	205 000 000					
Diös Anders	n/a					
Drott	449 000 000	645 405 897	324 817 700	131 348 650		
Electrolux	48 122 000	1 749 768 550	1 701 938 489	1 686 546 868	114 191 000	
Elekta						50 005 261
Enea	1 497 000					
Eniro					100 034 474	193 229 044
Ericsson	386 000 000			429 660		
Europolitan		44 643 011				
Fabege						745 674
Fagerhult			22 000 000			
FastPartner		9 169 010	7 000 000	1 725 000	939 355	
FöreningsSparbanken					2 217 946 734	
G&L Beijer				1 073 300		
Gorthon Lines		5 847 580	3 825 928	2 877 013		
Gotland Rederiab	9 000 000	15 302 936	48 168 630	23 176 548	1 113 676	
Hagströmer & Qviberg		1 475 000	109 340			
Haldex		10 344 740	8 125 000			
Handelsbanken	187 353 080	858 930 192			3 426 568 281	2 467 815 969
Holmen	2 501 000 000					
Hufvudstaden				136 663 800		
Höganäs		119 638 064	46 722 939			
Intellecta		3 263 511	1 629 553	425 459		
Investment AB Kinnevik						537
ITAB Industri AB				27 390 000		
JM		839 066 400	115 900 000	153 272 000		
Johnson Pump						43 000
Klippan				7 980		
Lagercrantz		26 787 300	12 004 180	45 716 052		9 625 000
Latour	556 000 000	610 430 409	256 900 328	85 380 000	16 890 000	
Lindab	3 202 650	305 889				
Lundbergföretagen	404 000 000	491 819 686	12 531 200		17 306 632	
Malmbergs		4 300 000				
Mandamus	36 000 000					
Munters	28 000 000	40 837 500	25 061 950	10 592 851		
NCC	255 000 000	52 400 376	186 847 200	156		
Nordea		1 079 160 000	1 740 358 310	4 113 325 000	6 354 079 464	10 489 815 015
Närkes Elektriska	34 000 000					
OEM	1 134 953	66 234 481	22 365 368	16 790 980	3 298 000	
Optimail				7 856 989	3 466 955	2 261 750
Orc Software				11 077 500	18 538 700	
Peab		32 984 315	85 176 260			
Ratos	973 508	15 761 098	27 559 811	15 333 179	5 344 704	2 903 270
Rottneros		47 281 489	47 281 489	16 475 185	5 085 500	
Sandvik		1 674 487 610	212 942 050		2 047 387 750	
Sapa		8 761 125	72 849 226	33 621 004	14 628 250	
Sardus			5 739 100	26 072 389		
Scandiaconsult	26 000 000		2 893 004			
Scandic Hotels	463 000 000	40 913 741				
SEB			721 000 000	22 610 000	2 474 812 687	218 050 000
Semcon						3 366 835
Skanska	3 000 000 000	747 720 190				
Spendrups	1 000 000					
SSAB	960 000 000	150 080 201				
Sweco				22 610 000	17 546 166	
Swedish Match	1 120 000 000	1 167 636 266	548 244 635	958 665 581	657 898 916	1 433 309 896
SäkI	90 000 000					
The Empire		192 837				
TietoEnator					834 864 400	705 120 060
TMT One		18 296 260				
Tornet	491 000 000	368 575 174		110 039 784		
Traction	5 000 000	2 921 200	6 616 500	39 500		
Trelleborg	524 000 000	307 808 924	217 939 634	19 156 168		
Wallenstam	31 000 000	83 297 487	58 207 366	118 224 443	158 918 781	111 553 954
Wihlborgs Fastigheter				211 064 124		
Wilh Sonesson		10 087 126	23 732 676	89 230		
Volvo	386 000 000	8 327 105 134			2 531 831 450	1 763 209 700
XPonCard			13 000 000	22 600 000		
Sum	15 679 017 749	31 288 052 910	18 654 308 421	17 798 341 103	38 441 672 679	43 242 223 650
No. of Companies	34	44	39	39	29	19
Total No. of Companies	78					
Mean distribution	809 331 453		Largest distribution		22 801 125 000	
Median distribution	47 281 489		Smallest distribution		156	

Table C.4 Redemptions per Company and Year (SEK million)

	1997	1998	1999	2000	2001	2002	2003	2004	2005
AGA			3 408						
ASG		1 159							
AssiDomän				4 500					
Atlas Copco									4 192
Castellum				741					
Custos			1 647			1 421	448		
Drott								3 295	
Electrolux								3 036	
Elekta							312		
Eniro							703	795	
Gambro									9 995
Gotland Rederi AB		103							
HQ			152					100	116
HQ.se				200					
Humlegården			202						
Intrum Justitia									590
Jacobson & Widmark		46							
JM									966
Lindex									550
Poolia							137		
Ratos	754	869	115						
Sandvik									4 000
Skanska	5 000								
SKF									2 846
SSAB		3 305							2 000
Swedish Match		1 216		1 045					
Tele2									1 476
TeliaSonera									10 000
Teligent							77		
Tripep							41		
Trustor				1 200					
Wallenstam			90						
VBG						37			
VLT		53							
Volvo	5 807								
Öresund			376						
Sum	11 561	6 751	5 990	7 686	0	1 458	1 718	7 226	36 731
No. of companies	3	7	7	5	0	2	6	4	11
Total No. of Companies	36								
Mean redemption	1 758								
Median redemption	795								
Largest redemption	10 000								
Smallest redemption	37								

Table C.5 Total Cash Paid Out through Share Repurchases by Industry 2000 to 2005[117]

Industry	No. of Companies	Amount (SEK million)	% of total amount
Healthcare and Medicine	3	73 298	44.4
Banks	4	36 372	22.0
Industrials	19	18 939	11.5
Consumer goods	8	16 789	10.2
Real Estate	15	9 376	5.7
Forest	5	3 923	2.4
Investment- and Finance	10	2 676	1.6
Consultants	5	1 614	1.0
Metals	2	1 240	0.8
Telecom	2	431	0.3
Services	2	307	0.2
Shipping	2	109	0.1
Software	1	30	0.0
Total	**78**	**165 104**	**100**

[117] Data for the value of the share repurchase made by real estate company Diös Anders in 2000 is missing. Autoliv has been included in the Consumer goods group, as in Affärsvärldens Generalindex.