

Innovation in Corporate Finance: Enhancing Share Buy-Backs with derivatives

Defining opportunities for innovative share buy-back solutions
in the Netherlands from an international perspective

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Thesis in partial fulfillment of Master of Science degree

Management Summary

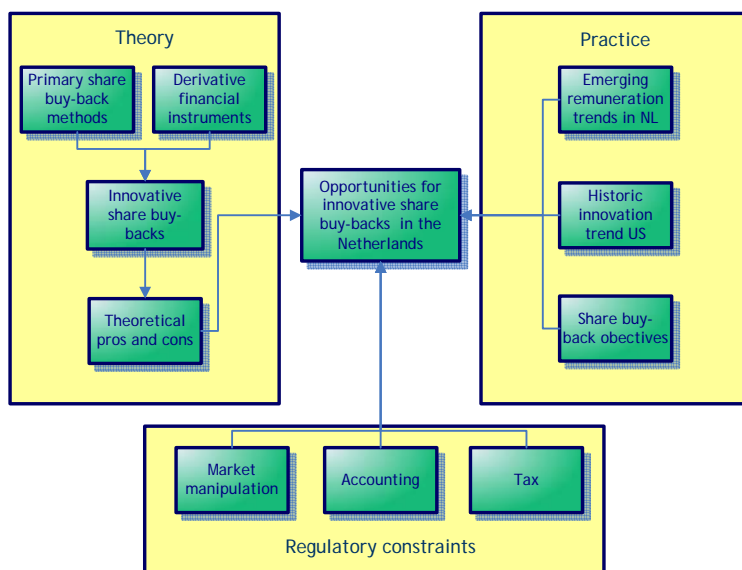
This thesis describes extensively the forthcoming of my research project on innovative share buy-backs with ABN AMRO Rothschild (AAR), in partial fulfilment of the Master of Science degree. Globally, share buy-backs are becoming increasingly dominant instruments in corporate pay-out strategies (shareholder remuneration), next to the traditional dividend. In this research project I explore the popularity of share buy-backs, with specific attention to the Netherlands and the US, but other than prior research, I also look ahead. Throughout the project I focussed on the future of share buy-backs in the Netherlands, by defining emerging trends in corporate pay-out strategies, and assessing the potential benefits of using innovative (derivative-based) share buy-back strategies, that have already been used frequently in the US:

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Problem statement

What opportunities arise from emerging trends in shareholder remuneration in the Netherlands for companies to implement innovative share buy-back solutions, through their practical and theoretical pros and cons?

To be able to answer the problem statement, and deliver a comprehensive thesis I applied a dual scope in this qualitative research: First, I described the mechanics of the primary (conventional) share buy-backs, to gain understanding for the rationales for share buy-backs, the drivers of their popularity and the emerging trends in shareholder remuneration. Second, I explored the opportunities of applying derivative financial instruments in share buy-backs, through a number of steps depicted in the conceptual model. I will summarise the project, by focusing on three elements of that model: theory, practice and regulatory constraints.

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Conceptual model



In describing the **theoretical** aspects of enhancing share buy-backs with derivatives I distinguished five strategies:

1. Share buy-back enhanced with written put options
2. Share buy-back enhanced with purchased call options
3. Accelerated Share Repurchase
4. Forward Equity Purchase
5. Share buy-back executed through Transferable Put Rights

Embedded in the structure of these strategies are theoretical pros and cons over conventional share buy-backs such as lowering the

cost of the program, hedging for price increases, controlling timing and cash flows, accelerating the execution, but also increased risks and lower flexibility.

Thereafter, I reflected the outcome to the constraints posed by the **regulatory framework** in the Netherlands and Europe, and concluded that regulation drastically limits the options and applicability of innovative share buy-backs.

To be able to conclude on the **practical** applicability of the strategies I assessed the impact of the five strategies on the main share buy-back objectives (for instance signalling undervaluation), and conceptualised historical US trend drivers of innovative share buy-backs (e.g. market sentiment), which are likely to apply in the Netherlands as well.

Finally, to come to an answer on the problem statement, I analysed to what extent the share buy-back strategies can assist companies to meet the demands for increased leverage and larger and timelier share buy-backs. These **emerging trends** in shareholder remuneration are driven by activist shareholders on the one hand and cash rich companies, with relatively low debt levels on the other.

Results

By taking the consecutive steps sketched above I was able to conclude that there are opportunities for innovative share buy-back strategies in the Netherlands, as innovative share buy-backs can offer some clear cut benefits over the primary share buy-backs¹. However, whether a company can capitalise on these benefits is governed by its circumstances and the specific method applied. Moreover, regulatory constraints often limit the optimal use of the innovative methods and regulatory ambiguity remains. Furthermore, it is not always straightforward that the innovative strategies can contribute to meeting the emerging trends in shareholder remuneration.

Two innovative share buy-back strategies are practically applicable and potentially contribute to meeting the emerging remuneration trends:

- The **accelerated share repurchase (ASR)** is an excellent instrument in dealing with activist shareholders and short term focus, due to the instant effect on financial leverage and earnings per share. However, due to unfavourable accounting treatment, which implies earnings volatility, the applicability of the ASR is limited in Europe (the Netherlands). The ASR might still be useful when circumstances, such as shareholder activism or a takeover threat, tempt the company to accept the risk of increased earnings volatility.
- A tender offer to repurchase shares effectuated via **transferable put rights (TPRs)** could be useful in the Netherlands to enhance a quick tender offer share buy-back of significant magnitude, thereby answering effectively to the emerging trend of larger and faster share buy-backs. The nature of the TPR structure is optimal for a heterogeneous shareholders base, allowing shareholders with unfavourable tax treatments as well as favourable tax treatments to benefit from the repurchase. Although this transaction does not strictly comply with the safe harbour provided for market manipulation, the tender is 'fair' to all shareholders, making market manipulation hard to prove.

The two options based innovative buy-backs do not have any specific advantages to meet the emerging remuneration trends, but are applicable none-the-less:

- Share buy-backs enhanced with series of physically settled **put options** with different maturities can bring down the cost of the repurchase program in a bullish (increasing) market. However, regulatory restrictions to the strike price lower the signalling power, and the cost benefit of this strategy. Moreover, using written put options always implies a certain downside risk.
- The share buy-back enhanced with (series of) purchased **call options** can be and even has been applied in the Netherlands, predominantly as 'insurance' to hedge against price increases of the shares during the share buy-back.

Given the ambiguity embedded in the application of innovative share buy-backs, especially in taxation and hedging aspects for the investment bank, their immediate applicability might be limited. However, this thesis provides some interesting insights in innovative share buy-backs, providing a thorough foundation for follow-up research.

¹ A summary of pros and cons of the five innovative share buy-backs over the conventional open market share buy-back is included in Table 8.1 on page 57.

Preface

The report that follows on from this preface is the physical evidence of what has been an interesting period for me. For half a year I have been given the unique opportunity to experience the dynamic world of investment banking, within a global business such as ABN AMRO Rothschild (AAR) is. The Equity Capital Markets (ECM) industry is particularly interesting as equity market performance is what drives many businesses today, thanks to the market place being where major companies have to face their owners: the shareholder.

This is especially interesting, as the role of the shareholder is becoming increasingly dominant, with Europe adopting a more Anglo-Saxon culture. The globalisation of equity markets has made European markets more accessible to American investors, which has led to an increasing presence of activist shareholders, such as the much-discussed hedge funds that recently targeted major Dutch companies, such as Stork and ASMI in 2006. Moreover, with increasing shareholder power, the probabilities of successful (hostile) take-overs are becoming more eminent. Even more special was the fact that my host company ABN AMRO has become 'victim' to activist shareholders itself, such as hedge fund TCI, eventually leading to what is possibly going to be the largest merger in the financial services industry. The more dominant role of the shareholder is put as follows by Chris Hohn of hedge fund TCI, addressing the CEO of Deutsche Borse, one of TCI's targets before ABN AMRO: "Dr. Breuer, with all due respect, I believe that the shareholders own the company, not the supervisory or the management boards."²

One of the most prominent strategies for a company to achieve a healthy relationship with its shareholders is through remuneration. This boils down to the very core of this research project: the corporate pay-out strategies of listed companies, i.e. how companies distribute their profits. Traditionally profit distribution has been executed primarily through dividends, but trends in the United States and Europe, show the increasing popularity of alternative methods such as the share buy-back.

Dutch Financial newspaper "Het Financieele Dagblad" reported on 7 March 2007 that profit distribution in the Netherlands will rise to record heights in 2007, as about € 40 billion will be returned to shareholders. Primarily responsible for the major increase of 36% with respect to 2006 shareholder remuneration is the growing popularity of share buy-backs. According to the newspaper, Dutch companies are cash rich after non-core businesses have been divested and net profits continue to rise, while activist shareholders such as hedge funds increase pressure on companies to return profits to shareholders instead of funding questionable investments or acquisitions.³ US companies have long before seen the importance of share buy-backs in remunerating shareholders, to the point that the aggregate US dollar amount spend on share buy-backs has exceeded the traditional dividend for a number of years now.

This thesis intends to explore in detail what has driven this trend of companies remunerating shareholders by repurchasing its shares and what will be future drivers. Moreover, the methods in which share buy-backs can be implemented and especially the role of derivative financial instruments in certain innovative strategies will have a prominent role in this thesis. I hope to provide the reader some new and interesting insights into shareholder remuneration and demonstrate the interesting role that innovation can play in this process.

Eelko Luning⁴

² Source: Bloomberg, April 2007

³ "Uitkering winst aan beleggers naar record", in "Het Financieele Dagblad", 7 March 2007

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Introduction

This report describes extensively the forthcoming of my research project on the opportunities of innovative share buy-back solutions in the Netherlands, focusing especially on how these can help companies to meet the emerging trends in financial markets. Share buy-backs have proven to be increasingly important and dominant in shareholder remuneration, originally starting in the US, and now progressing to Europe as well. Introducing innovation into the traditional share buy-back, through derivative financial instruments can accelerate the share buy-back and make it more effective in terms of costs and timing. As European (Dutch) companies have been hesitant to use these innovative methods until now, through this project I am intending to answer the following question: How can innovative share buy-back solutions help companies in dealing with emerging trends in shareholder remuneration strategies?

In analysing the subject matter I will obviously limit myself to listed companies, focusing on their corporate pay-out strategy and trends in the market. Moreover, I will apply a dual scope throughout the course of this thesis. The purpose of this research project is to describe innovative share buy-back solutions extensively and assess the opportunities to apply these from a Dutch (European) perspective, which I will do in the second half of the thesis. However, to be able to do that the first half of this thesis provides an introduction into the traditional (primary) share buy-back methods, their mechanics, objectives, emerging trends in financial markets, shareholder activism and shareholder remuneration.

The remainder of this thesis will be structured as follows. First, I will define the problem area, in the chapter 1, by introducing (innovative) share buy-backs and placing the phenomenon in a broader context: through capital allocation and shareholder remuneration. Moreover, I will formulate a problem statement in line with the question stated at the end of the first paragraph, and extract concrete research objectives from that statement.

In the chapter 2, I will briefly introduce the type of research, and the research methods employed. Thereafter, in chapter 3 I will place the project within the corporate context by describing the organisation in which the research project is executed, ABN AMRO Rothschild, and its holding corporation, ABN AMRO. It should be noted that although the project has a predominant external focus, it does provide ABN AMRO (Rothschild) with information, which could be useful in delivering future services.

In the chapter 4, I will introduce the research methodology and depict that in two conceptual models. Also, I will provide a general theoretical background of share buy-backs by describing corporate financial theories. Moreover, several important expressions will be defined.

Chapter 5 will be the first step in applying the methodology, as I will describe the generalised mechanics of primary share buy-backs and (emerging) trends in shareholder remuneration in general and share buy-backs specifically.

In chapters 6, 7 and 8, I will progress towards the core of the problem statement, by describing innovative share buy-backs theoretically (chapter 6), and practically (chapter 7), to be able to formulate generalised pros and cons. Thereafter, in chapter 8, I will reflect on these pros and cons of innovative share buy-back strategies, to test whether they fit the emerging trends as well as the regulatory framework in Europe (the Netherlands).

After describing the methodology and the execution of that methodology I will reflect on the results of the project by drawing conclusions and recommendations in chapter 9. In this chapter I will refer to the dual focus by identifying two levels: the mechanics and trends of primary share buy-backs, and the opportunities for innovative share buy-backs.

List of Abbreviations

AAR	ABN AMRO Rothschild
ADTV	Average Daily Trading Volume
AEX	Amsterdam Exchanges index
AFM	Autoriteit Financiële Markten
AGM	Annual General Meeting
AMX	Amsterdam Midcap index
AScX	Amsterdam Smallcap index
ASR	Accelerated Share Repurchase
B/S	Balance Sheet
BB	Buy-Back
D	Debt
DWT	Dividend Withholding Tax
E	Equity
EBIT	Earnings Before Interest and Tax
EBITDA	Earnings Before Interest, Tax, Amortization, and Depreciation
EC	European Commission
EDGAR	Database for SEC Filings & Forms
EITF	Emerging Issues Task Force
EPS	Earnings per share
ESOP	Employee Stock Option Plan
EU	European Union
FAS	Financial Accounting Standards
FPA	Forward Purchase Agreement
GAAP	Generally Accepted Accounting Principles
IAS	International Accounting Standards
IFRS	International Financial Reporting Standards
IPO	Initial Public Offering
LBO	Leveraged Buy Out
OE	Owner's Equity
OTC	Over-the-counter
P/E	Price-earnings ratio
SEC	Securities and Exchange Commission
SOx	Sarbanes-Oxley Act
TPR	Transferable Put Right
UK	United Kingdom
US	United States
VWAP	Volume Weighted Average Price

1. Problem area

In this chapter I will provide a solid foundation for my research project, by sketching the problem area and eventually the research objectives. The subject matter of this thesis is (innovation in) share buy-backs. For a better understanding of the matter, in this chapter I will place the subject matter into a broader context, before coming to a problem statement and defining a set of research objectives. However, in coming to a clearly definable problem area, it is essential to distinguish the limitations and angle for this research project first, through the scope in paragraph 1.1. I will thereafter identify the problem background in general terms in paragraph 1.2, to be able to formulate the problem statement, which will be laid out in paragraph 1.3. The implied steps needed to answer the problem statement will lead to a set of research objectives in paragraph 1.4. The objectives will govern the structure of the research through the methodological approach, which I will present in chapter 4.

1.1 Scope

This research project is focusing at so-called 'listed companies', i.e. limited liability companies that have their shares traded publicly at a stock exchange. I analyse what drives companies in their remuneration strategy towards shareholders, the role of share buy-backs in this strategy, and the potential to introduce innovative solutions in this process. Hence, companies and shareholders will be the most important stakeholders in my research project, focusing on the place where they meet: the equity market. The share buy-back scope is limited to repurchasing of ordinary shares, excluding other type of shares, such as preference shares. Geographically the scope is limited to countries that have similar economic profiles: the European Union (EU) member states, Switzerland, the United States (US) and Canada. Moreover, only listed companies are taken into consideration that have a market capitalisation⁵ of at least one billion Euros, or belong to a prominent Equity index.

1.2 Problem background: Capital Allocation

To be able to understand the role of share buy-backs within the corporate financial strategy, I will introduce the broad context of this phenomenon in this section. Also, I will go into the history of share buy-backs, show the role of the US as world leader in buy-back activity and introduce briefly the academic interests in share buy-backs.

Companies decide on share buy-backs as a part of their corporate financial pay-out strategy, which in itself is governed by capital allocation. In deciding on how to allocate capital (such as free cash flows or operating profits) any company basically has three distinct strategic options (adapted from Mauboussin, 2006):

- Reinvest in the company: capital expenditures, working capital, or acquisitions.
- Repay debt: replenishing loans or repurchasing bonds.
- Distribute capital to shareholders (shareholder remuneration)

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Shareholder remuneration is returning capital to the owners of a company

This thesis focuses on the option of distributing, or returning capital to a company's shareholders, which is also referred to as *shareholder remuneration*. In remunerating shareholders the following alternative strategies are observed:

- *Regular dividends*, which are distributed in regular intervals (e.g. quarterly, or (semi) annually), either in cash or a company's shares.
- *Special dividends*, (Dutch: super dividends), which are distributed occasionally and have a non-recurrent character.
- A *capital repayment* is another non-recurrent strategy where part of the paid-in capital⁶ is returned to the shareholders.
- *Share buy-backs*, where a company repurchases its own shares.

⁵ Market capitalization equals number of outstanding shares times share price.

⁶ Paid in capital is a part of the shareholder's equity, more information in Appendix B

An interesting issue that looms in this context is to what extent these strategies are mathematical equivalents, as capital repayments, dividends and buybacks all return cash to shareholders. Although this is not within the scope of this research project, research shows that the share buy backs and dividends are indeed identical assuming the same tax treatment, no transaction costs, similar timing, and an efficient market.⁷ The fact that these assumptions rarely hold, implies that despite any mathematical equivalence, most managers and investors conceptualise and value the four pay-out strategies entirely differently. Share buy-backs have proven their value to companies around the globe, as they convey strong signals to the market, provide a useful tool for re-leveraging the balance sheet and can be more tax-efficient than dividends.

As mentioned before in the “Financieele Dagblad” article quoted in the Preface shareholder remuneration by Dutch companies will reach record heights in the year 2007, mainly caused by the emerging popularity of share buy-backs.⁸ The increasing number of companies engaging in programs to repurchase their shares is exactly the reason to place share buy-backs in a central role in this research project. Emerging popularity of share buy-backs is not limited to the Netherlands, it is a global trend. Forced by greater shareholder activism companies increasingly remunerate their shareholders world wide. The United States (US), not coincidentally also the prime source of the current shareholder activism wave, is leading the world in share buy-back activity.

Share Buy-backs were first observed on a large scale in the US in 1929, when companies repurchased shares after they had plunged in the largest crash in Wall street history (Moerland, 2000). Until the 1980s share buy-backs remained predominantly a US activity, which accelerated in the 1990s, causing the aggregate dollar amount of buy-backs to outgrow dividend payments eventually in 1998 (Grullon and Ikenberry, 2000). Since the late 1990s the phenomenon seems to gain popularity all around the world and via the UK has reached Western European equity markets as well (Stonham, 2002).

Academics have shown great interest in share buy-backs, as numerous studies have been executed to describe for instance share buy-back methods, and the relation to other shareholder remuneration strategies, such as dividends. Moreover, event studies have been published to show the impact of share buy-backs on for instance the share price (long and short term) and the liquidity of shares. Geographic focus of prior research has traditionally been predominantly on the US, and some other countries that have strict disclosure for share buy-back activity and thus provide a lot of data, such as Canada and Hong Kong. Summarising, it is striking that most prior research on share buy-backs has a historic focus and is predominantly targeting the US equity market.

1.3 Problem statement

Contrary to prior research, where little attention has been paid to the future of share buy-backs, this study intends to focus on what trends are emerging at this point in time. In paragraph 1.2 I briefly touched upon the leading role of the US in share buy-back activity, which has often been a forecast for trends in Europe. The latest novelty in US share buy-backs has been to incorporate derivative financial instruments, such as options and forward contracts. These buy-backs are sometimes referred to as ‘synthetic repurchases’ (for instance by Gyoshev, 2001) and have grown steadily in popularity in the second half of the 1990s and into the 21st century. Some of the largest companies in the US, such as Microsoft, Bank of America, DuPont, and Lockheed Martin⁹, operating in a wide variety of industries, have used derivative financial instruments in making their share buy-backs more effective in terms of cost, signalling power, timeframe, and to hedge risks involved in the process.

⁷ See numerical example in appendix A, source: Maboussin, 2006

⁸ See par. 5.6 and “Uitkering winst aan beleggers naar record”, Het Financieele Dagblad, 7 March 2007

⁹ See data and case studies in chapters 6 and 7, and Cook and Kim, 2006

An interesting observation in this context is that continental Europe (including the Netherlands), seems to be much more hesitant in comparison to the US in applying these methods. Hence, it could be valuable to assess through a research project, why European companies have been resistant to using innovative share buy-backs. Even more interesting is to find out whether innovative share buy-back solutions might be able to answer the needs implied by the emerging trends in the near future. This will be the primary driver of the research project embedded in this thesis:

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Problem statement

What opportunities arise from emerging trends in shareholder remuneration in the Netherlands for companies to implement innovative share buy-back solutions, through their practical and theoretical pros and cons?

The research project will be governed by the research objectives, introduced below, which will together serve the purposes of formulating a satisfactory answer to the problem statement above.

1.4 Research Objectives

To be able to answer the problem statement and fully understand innovative share buy-back solutions, first a foundation should be provided by explaining the generalised concept of share buy-backs: its forms, objectives, etc. Thereafter, I will turn focus towards innovative buy-back solutions, which will be analysed from an international perspective, in order to ascertain potential local opportunities in the Netherlands. This yields a dual focus for the research project:

1. Extensively explain the mechanics of primary share buy-backs and the emerging trends in shareholder remuneration.
2. Explore the possible opportunities of applying innovative financial instruments in share buy-backs.

In formulating the research objectives this dual scope will be represented and the information from the problem background will be applied to formulate a set of goals to answer the problem statement. The first two objectives are intended to answer the first focal point sketched above.

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Research objective 1

Objective 1: Explain the growing popularity of share buy-backs, by laying out the concept and mechanics of primary share buy-backs, distinguishing international differences.
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To be able to assess the potential for using (innovative) share buy-backs in Europe (the Netherlands) in the near future, it is essential to assess the emerging trends in shareholder remuneration. Moreover, to see whether US trends might be a forecast of European trends, the rationale for international and cultural differences in these trends should be extracted.

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Research objective 2

Objective 2: Elaborate on emerging and future trends that affect corporate pay-out strategies globally and in the Netherlands.

Following up on the generalised mechanics of buy-backs, the innovative buy-backs should also be explained from a theoretical point of view.

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Research objective 3

Objective 3: Explain how innovative financial instruments can be used in enhancing a share buy-back programme and the theoretical (dis)advantages implied.

To leverage the theoretical dynamics of innovative buy-backs to a more practical level and to explain what have been the main drivers in using these methods, I will use case studies and US market data. This will also give an overview of how the trend-drivers have changed over time.

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Research
objective 4

Objective 4: Find empirical evidence of innovative share buy-backs in the US and Europe, extract trend drivers and conceptualise these in assessing generalised pros and cons.

Then to find out if any of the solutions that have a strategic match with the emerging trends, is actually applicable, I will focus on the regulatory environment as well. In a regulatory context especially market disclosure, taxation and accounting aspects are relevant in this context.

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Research
objective 5

Objective 5: Explain the impact of regulation on market manipulation, tax, and accounting on the potential of innovative share buy-backs in the Netherlands.

Summarising, through the first research two objectives I want to answer the first focal point stated above, by providing a broad theoretical analysis on share buy-backs, and sketching the future of this phenomenon. Thereafter, I want to extract potential for innovative share buy-back solutions, by answering research objectives 3 to 5, which will be translated into a methodological approach in the next chapter. I want to stress once more at this point that through this study I want to look ahead and assess the future applicability of innovative solutions, and reflect on those in the context of emerging trends. I do not intend to prove the success of share buy-backs in general, which is merely a fact proven in many event studies already.

2. Research methods

In this chapter I will focus on research methods and data collection, which are both closely related to the type of research, hence the first step should be to identify this. Blumberg, Cooper and Schindler (2005) observe that there is a widely accepted distinction between two types of research: qualitative and quantitative studies. In the context of equity markets most research is based on numbers and figures, and thus quantitative. Although I will use data in describing the background of the problem at hand, this project is primarily a qualitative study. The most important information in this project, i.e. providing the primary source in answering the problem statement, is qualitative information. Moreover, four out of five research objectives have a qualitative nature. Hence, the primary research methods will be aimed at providing qualitative information, including: literature (4.1), interviews (4.2), and case studies (4.3). In paragraph 4.4 I will describe the quantitative data sources used in this project.

Apart from the types of research, Blumberg, Cooper and Schindler (2005) also state a number of research purposes, namely: descriptive, causal, or predictive study. Although the purpose of this research project has aspects of all three, most importantly the purpose is to provide a predictive conclusion. Still, some of the research objectives stated in Chapter 1 have a descriptive or causal nature. However, these research objectives are merely steps towards answering the problem statement eventually, which has a predictive purpose.

2.1 Literature

Due to the fact that share buy-backs are conceptualised differently across managers, and investors, they are discussed extensively in academic literature, both from a theoretical as well as a practical point of view. In this thesis the definitions as well as the generalised mechanics of primary share buy-backs (e.g. methods and objectives) will be derived from academic literature.

2.2 Interviews and surveys

As primary data is essential in a qualitative study and to leverage the resources available within ABN AMRO, I have consulted and interviewed experts within various fields of expertise, including, regulation, taxation, and market trends in the Dutch and European equity markets. Moreover, to obtain a practical view on the impact of share buy-backs, I surveyed research analysts within ABN AMRO as well. Generally, the interview approach was rather unstructured, given the unexplored nature of the primary topic.

2.3 Case studies

Case studies are extremely useful in scoping results to a more pragmatic level and in providing practical evidence for often hypothetical and generalised conclusions in academic literature. Especially in the more predictive aspects of this project I will use case studies, as datasets cannot be used in this context, given the fact they are simply unavailable. Although I do not intend to answer any hypothesis with the case, to facilitate generalisation of the results as much as possible, the case studies will be presented in a similar structure.

2.4 Market data

As stated in the first paragraph of this chapter, this project is primarily a qualitative study. However, market data can be useful in concluding on the practical relevance of theoretical and conceptual frameworks. When researching share buy-backs in the Netherlands, some problems arise in gathering data as the number of practical cases in the Netherlands is still limited, although steadily growing, and no reliable database is available. Therefore, I had to consult multiple sources to create a dataset. Most important sources are data providers Bloomberg, Datastream, JCF Quant and Thomson One Banker, but also annual reports and filings with regulatory institutions, the AFM in the Netherlands and the SEC in the US.

3. Organisation

Although the focus of this research project is not on the organisation itself, describing the organisation does help in understanding the context and rationale of the project. Therefore, in this chapter I will lay-out the organisational context for my research project by sketching my host for this project, ABN AMRO Rothschild (AAR). AAR is a global business related to both the ABN AMRO and Rothschild groups. As I was hosted by the Amsterdam organisation, I should briefly describe the ABN AMRO holding in paragraph 3.1, before focusing on AAR in paragraph 3.2.

3.1 ABN AMRO Holding

ABN AMRO Holding is a global business, with subsidiaries on all continents and its banking business ABN AMRO Bank (AAB) is currently the largest Dutch bank. Apart from banking the group is active in for instance insurance, investment banking and asset management. Seemingly in line with its near future, the history of ABN AMRO has been one of mergers. Its origins date back to as far as 1824, when the "Nederlandsche Handel-Maatschappij" (Netherlands Trading Society/NTS) was founded on the initiative of the Merchant Monarch, King William I. After the

Key data - ABN AMRO Holding (2006)	
Group operating income:	€27.641 million
Operating profit before tax:	€5.073 million
Workforce:	105 thousand
Offices on all continents	
Headquartered in Amsterdam, the Netherlands	

Second World War, growing concentration of banking in the Netherlands urged NTS and the "Twentsche Bank" to merge and become the "Algemene Bank Nederland" (ABN Bank) in 1964. The consolidation wave also brought the "Rotterdamsche Bank" (established 1863) and the "Amsterdamsche Bank" (established 1871)

together in 1964, to form the "Amsterdam-Rotterdam Bank" (Amro Bank). Before these banks ultimately merged into ABN AMRO, an important acquisition took place in 1979 with ABN's takeover of Chicago-based LaSalle National Bank, to lay the foundation for what would become the second home market of the bank, the US Midwest. In March 1990, the two then-largest commercial banks in the Netherlands, ABN Bank and Amro Bank announced a merger feasibility study, which soon yielded positive results as the ABN AMRO Holding was established in May 1990. With the prospect of the internal European market from 1992, the rationale for the merger was the need to combine forces in order to expand globally and reinforce the prominent positions that the two banks occupied in their own right. The worldwide scaling up of companies and financial institutions called for a bank with a strong capital base and broad expertise. Global expansion was implemented by the acquisition of the Brazilian bank Banco Real in 1998 and Italian Banca Antonveneta in 2006 (ABN AMRO, 2007b).

After many mergers and acquisitions have resulted into current the ABN AMRO holding, the future of the company at this point is not certain. ABN AMRO has become the object of the largest ever takeover battle in the financial services industry. After it agreed on a merger with the British Barclays bank, activist shareholders, such as hedge fund TCI, have forced ABN AMRO to seriously consider other scenarios. These scenarios include a possible breakup of the holding, which according to some could create more value for the shareholders. This very much underlines the trend of increased shareholder activism in the Netherlands, which I will come back to extensively in the remainder of this thesis.

3.1.1. Organisational structure

The structure of the ABN AMRO holding, which is depicted in figure 2.1 currently comprises: seven Client Business Units (BUs), three Product BUs, two cross-BU segments, Group Functions and Services. The seven Client BUs, displayed in the top part of figure 2.1, consist of five regional BUs (Netherlands, Europe, North America, Latin America and Asia) and two global BUs, Private Clients and Global Clients. To support the seven client BUs, the three Product BUs (Global Markets, Transaction Banking and Asset Management, in the middle of figure 2.1) develop and deliver products for ABN AMRO's clients. The two client segments (marked green)

Table 3.1:
Key data
ABN AMRO

group together all products and services on a cross-BU level for consumer and commercial (corporate) clients respectively. Group Functions and Services deliver support across the ABN AMRO Group in support areas such as: risk management, human resources and sustainability, aiming to increase operational efficiency through consolidation and standardisation (ABN AMRO, 2007a).

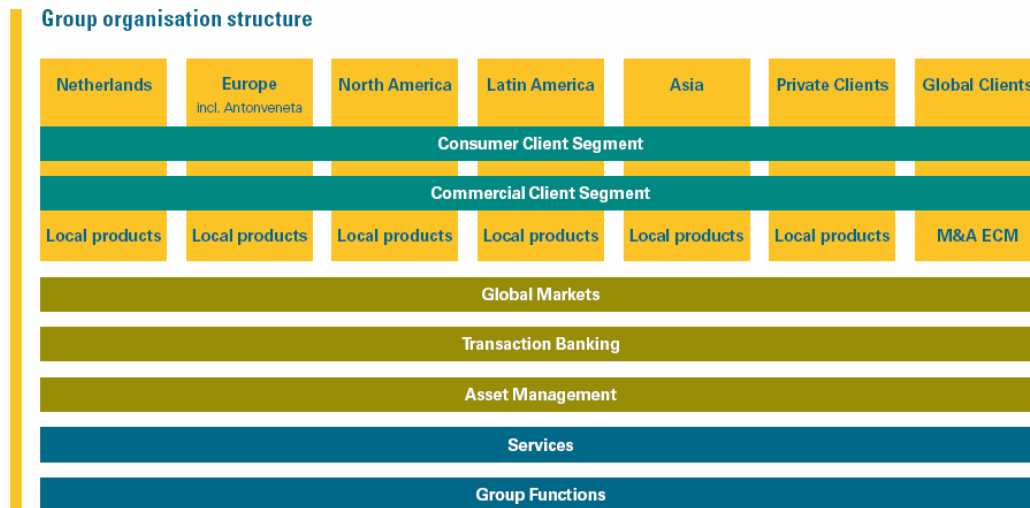


Figure 3.1: ABN AMRO organization Chart (ABN AMRO, 2007a)

3.1.2 Corporate Strategy

ABN AMRO's strategy is focussed on growth, primarily targeting the so-called 'mid market clients', where ABN AMRO traditionally has a strong position. It aims to provide clients in this segment with "high-quality and innovative products and services from across the Group" (ABN AMRO, 2007a). As figure 1.2 magnifies, product innovation has a prominent role in the strategy, in consumer and commercial client segments in creating the so-called 'Sweet spots', where products and market segments meet. The aim of thriving innovation for its clients is reflected

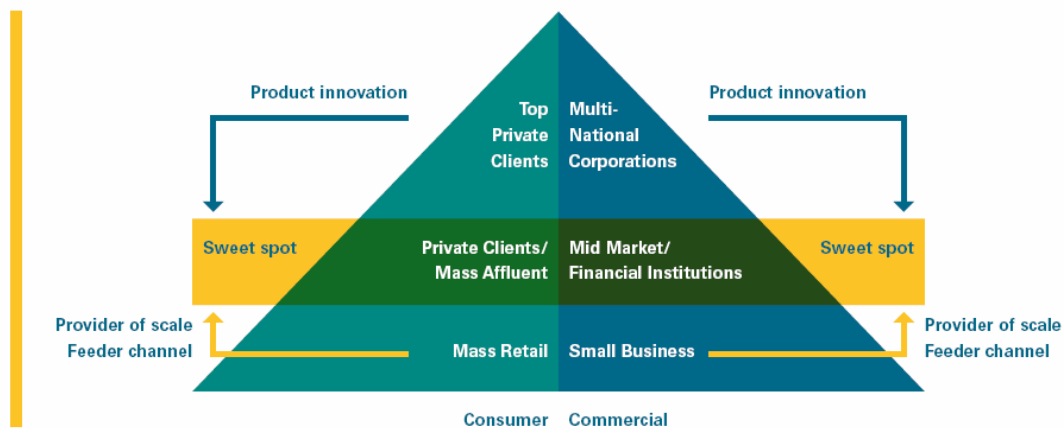


Figure 3.2: ABN AMRO Holding Strategy (ABN AMRO, 2007a)

in the subject of this thesis as well, although this thesis is not strictly limited to the mid market clients, as the relevant corporate financial transactions, apply especially to the bigger multinational corporations.

3.2 ABN AMRO Rothschild

ABN AMRO Rothschild (AAR) is the unincorporated Equity and Capital Markets (ECM) joint venture of the ABN AMRO and Rothschild groups. In essence the ECM joint venture is responsible for the origination, structuring, marketing and execution of equity market transactions worldwide, taking the role of an Investment Bank. As is depicted in figure 1.1

within the ABN AMRO organisation the ECM business is a part of the Global Clients BU, together with ABN AMRO's Mergers and Acquisition (M&A) business.

.....
Executing
share buy-
backs is one
of the
services AAR
provides

The role of an investment bank is generally to advise companies on the raising of capital, in case of ECM through equity markets. Relevant aspects of an investment banking advice include form, magnitude, targeting and timing of transactions, and an investment bank may also charge a fee for "underwriting" (guaranteeing) or financing a transaction. Thus, AAR is a services company: it originates and conducts primary and secondary offerings, including Initial Public Offerings (IPOs), block trades, accelerated bookbuild transactions, rights issues, share buybacks, and issues of equity-linked securities, such as convertible and exchangeable bonds.¹⁰ In executing transactions AAR works together in close conjunction with the Mergers & Acquisitions department, financial market disciplines such as equity sales, brokerage, and research.

Investment banks might also advise on the placing with selected investors of large tranches of

.....
Table 3.2:
Key Data
ABN AMRO
Rothschild

Key data - ABN AMRO Rothschild
Unincorporated ECM joint venture
Began operations on 1 July 1996
Offices in: Amsterdam, Auckland, Frankfurt,
Hong Kong, London, New York, Paris and Sydney
Headquartered in London, United Kingdom

shares. AAR's primary objective is to provide advice in relation to the optimisation of clients' capital management, financing and risk management requirements, through the implementation of innovative transaction structures. Just as the ABN AMRO strategy, AAR has given product

innovation a prominent place in its business practice, in line with the objectives of this research project.

¹⁰ Source: ABN AMRO Rothschild Website

4. Theoretical framework

After providing a rough starting ground for the report in the previous chapters by describing the research methods and problem area, in this chapter I will focus on the more theoretical and conceptual aspects of this research project. To provide an insight into the structure of this research project I will describe the methodology. The research methodology is intended to provide guidance in achieving the research objectives mentioned in the previous chapter, reflecting the dual focus in this project, by defining two stages that distinguish themselves with different methodological approaches. I will describe the two stages in 3.2 (primary share buy-backs) and 3.3 (innovative share buy-backs) respectively. After describing the methodological approaches of the subsequent stages in this research project, I will introduce some relevant theoretical frameworks from seminal academic writings, in paragraph 3.4. However, I will first provide definitions of some key expressions, in paragraph 3.1, which will be used frequently in this thesis and will help in understanding the conceptual models.

4.1 Definitions

In this paragraph I will define expressions used in throughout this report. The definitions are included to make sure the scope of the research is clearly stated, providing a level playing field to all readers. The terms will be put in relation to the problem statement in the paragraphs describing the methodology.

4.1.1 Share buy-back

.....
Repurchased
shares can
either be
cancelled or
held in *treasury*.

A share buy-back is also referred to as a share repurchase or, in the United States, as a stock repurchase or stock buy-back. A share buy-back is essentially the process where a listed company or an intermediary to that company purchases shares of the company itself with the intention to either keep those in treasury, or cancel the shares. In the context of this report the procedure will be referred to as a share buy-back. I define a *primary share buy-back* to be the most common share buy-back methods that do not involve any derivative financial instruments.

4.1.2 Financial instruments

According to Sutton (2004) a financial instrument can be either 'primary' or 'derivative'. In both cases by definition the instrument is a contract that gives rise to a financial asset for one party and a financial liability or equity instrument for the counterparty. The pay-off of a primary financial instrument is solely related to the performance of the instrument in itself. Examples of primary financial instruments are straightforward shares or bonds. The pay-off of a derivative financial instrument on the other hand depends on an underlying asset. Examples of derivative financial instruments are options, futures and forward contracts.

4.1.3 Financial leverage

Financial leverage is also referred to as gearing, and differentiates itself from operational leverage. For instance Sutton (2004) defines financial leverage as the ratio of interest bearing liabilities to shareholder's equity, or *debt-to-equity ratio*. Hence, high leverage implies that a company's financial structuring relies much on debt financing.

4.1.4 Listed company

In the context of this thesis, a listed company is a limited liability company that has its shares traded publicly at a stock exchange in EU member states, Switzerland, Norway, US or Canada with a market capitalisation of one billion Euros or more.

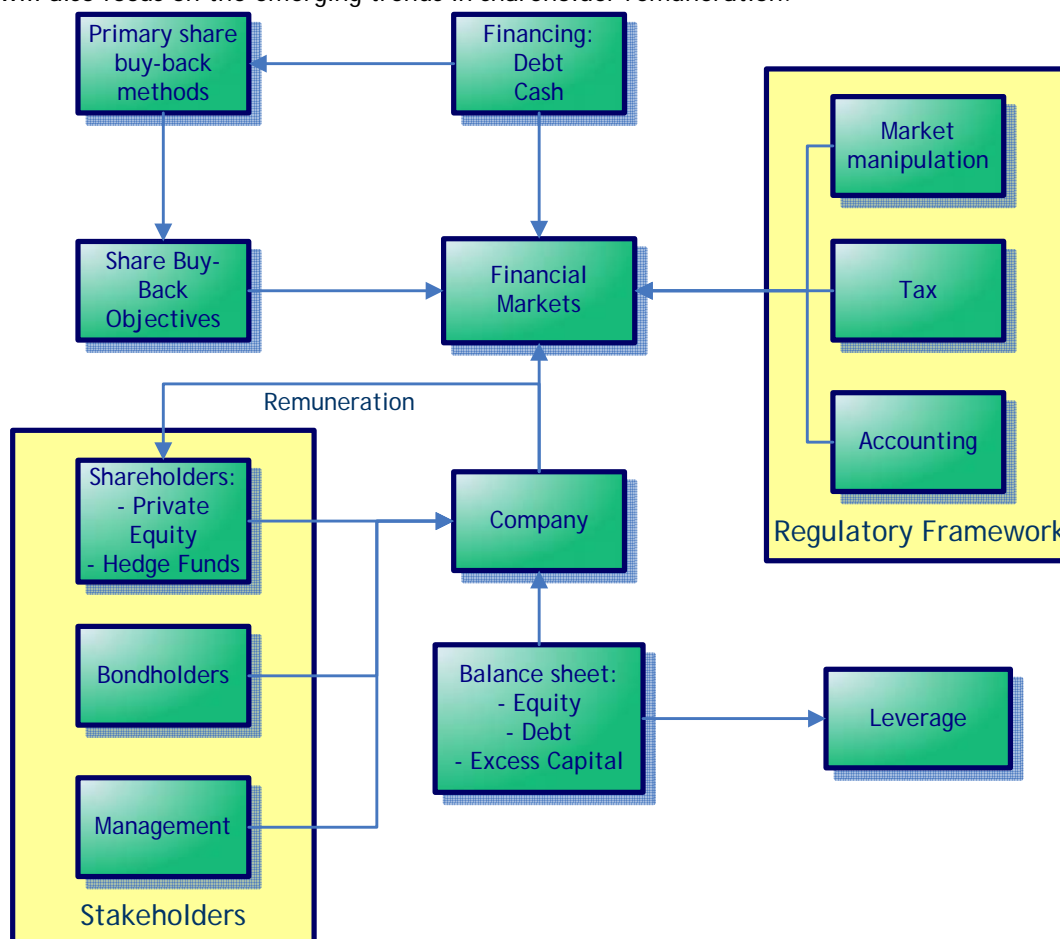
4.1.5 Innovative share buy-back

.....
 An *innovative share buy-back* is any buy-back enhanced with derivative financial instruments
 I define an innovative share buy-back to be any share buy-back strategy that is *enhanced with derivative financial instruments*. Companies or their intermediaries enhance a share buy-back with derivatives to make the buy-back more effective in for instance timing, cost, or signalling power. Alternatively, the innovative share buy-back could be referred to as a 'synthetic repurchase', as some academics do, like Grullon and Ikenberry (2000). However, due to the fact that synthetic repurchase is also used as a synonym to a specific innovative share buy-back method¹¹, this term will not be used in this thesis.

4.2 Stage one: Primary share buy-backs and their popularity

In the first stage of my research and this thesis I will provide myself as well as the reader a solid foundation in understanding what share buy-backs are all about. I will focus on the basic or primary buy-back methods, before moving on to the innovative share buy-backs in stage two. To create a certain structure for this thesis and to clarify the methodological approach I will use a conceptual model in this stage (figure 4.1). The model is intended to assist me in describing the mechanics of share buy-backs, for instance what methods, stakeholders and regulation is involved. By sketching these methods, I will also differentiate share buy-backs from other shareholder remuneration strategies, such as dividends. While taking the reader through all steps of the methodology I will also describe the morale behind the growing popularity of share buy-backs, both in nominal terms and relative to dividends. In this stage I will also focus on the emerging trends in shareholder remuneration.

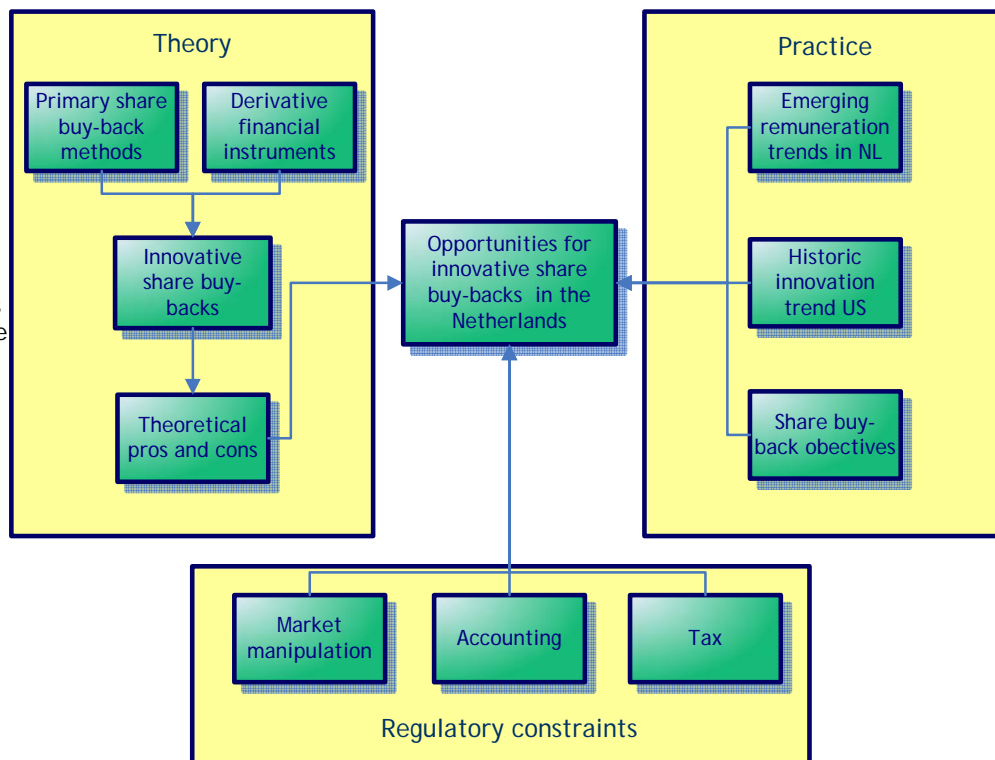
.....
 Figure 4.1
 Mechanics of primary share buy-backs



¹¹ Put writing, see chapter 6.

4.3 Stage two: Innovation in share buy-backs

In the second stage the scope of this research project will move to the innovative share buy-backs, and I will provide an answer to research objectives three, four and five. Eventually, I want to conclude on the potential for innovative buy-back solutions in the Netherlands. I will try to reach this conclusion by taking a number of methodological steps depicted in figure 4.2. I will use conclusions and the general understanding from stage one on share buy-back methods and objectives, as well as the emerging trends in shareholder remuneration. Eventually, I will define opportunities for innovative share buy-backs, by combining theoretical pros and cons with practical aspects governed by the equity markets, and reflecting the outcome to the constraints posed by the regulatory framework in the Netherlands.



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Figure 4.2
Defining
opportunities
for innovative
share buy-
backs

4.4 Theoretical background

In this section I will describe relevant theoretical implications and propositions from seminal academic literature that affect share buy-backs on a high level. These frameworks include classic economical and financial theories as well as general corporate financial theories, describing the implications of leverage and the relationship between stakeholders in a company. In later instances I will recall the general implications of these frameworks, and apply those on a more practical level and comment upon their practical applicability. In the upcoming paragraphs I will describe: the Miller Modigliani propositions, the signalling theory, and the agency theory.

4.4.1 Miller and Modigliani

Miller and Modigliani (1958) provided a cornerstone in academic writings on corporate finance, by providing their theoretical framework, which is composed of two propositions that describe mathematical relationships between a company's capital structure, its valuation, and cost of

capital. Capital structure, which essentially is governed by the equity and debt elements on a company's balance sheet, is very relevant in the share buy-back context.¹²

In their first proposition, which is often referred to as MM I, or the 'irrelevance result', Miller and Modigliani (1958) state the following: "the market value of any firm is independent of its capital structure" and "the average cost of capital is completely independent of its capital structure and is equal to the capitalisation rate of a pure equity stream in its class". This proposition implies that a company cannot change the total value of the firm by altering its capital structure, thus by taking on relatively more debt or equity.

Miller Modigliani proposition II (MM II), dictates the following: "The expected yield of a share of stock is equal to the capitalisation rate for a pure equity stream in the class, plus a premium related to financial risk equal to the debt-to-equity ratio times the spread between the capitalisation rate and interest" (Miller and Modigliani, 1958). Hence, MMII implies that the cost of equity (expected yield on shares) is a linear function of the firm's leverage (debt-to-equity ratio). Moreover, the cost of equity can be expected to rise with increasing debt.

Important assumptions to the original Miller and Modigliani propositions include a world of perfect information, without taxes. In later research Miller (1963, 1988) shows that the tax assumption has severe impact on the implications of the propositions. Most importantly, the value of the firm is in fact not independent of the leverage of the company, and theoretically an all-debt financed balance sheet might be optimal. Miller (1963) says that debt financing enhances company value as it creates a tax shield, but adds that a tax shield is only beneficial in case a company actually makes a profit.

4.4.2 Signalling theory

Unlike the MM proposition described above, the foundation of the signalling theory is imperfect information among stakeholders, shareholders especially. The informational asymmetries that arise between the management of a company and its shareholders enable the management to signal shareholders from their more in depth knowledge of the company. Leland and Pyle (1977) introduced the idea that one vehicle to express such a signal is through financial decisions, i.e. financial decisions by managers can be used to inform shareholders about undisclosed information. The signalling theory can be extended to specific financial decisions such as: dividends, share buy-backs or taking on debt. Most often signalling will be used to signal undervaluation of shares, i.e. the intrinsic value of the company is higher than its traded value.¹³ Academics like Ross, Westerfield and Jaffe (2005) argue that taking on debt is a signal for greater intrinsic firm value.

4.4.3 Agency theory and agency costs

The agency theory was first introduced by Adam Smith in his 1776 book 'Wealth of Nations', resulting from the divergence of ownership and control within a company. According to the theory the management of a company is appointed as an 'agent' to the company's owners, the shareholders. Ross, Westerfield and Jaffe (2005) summarise the agency theory by saying it is all about conflicting interests: either between bondholders and shareholders, or management and shareholders. When management and shareholders do not have the same goals, management is not strictly a perfect agent for the owners of the company. Motivated by the agency theory, Jensen (1986) says that an imperfect agent leads to problems and eventually costs: agency costs. He extends his argument by stating that the more companies restrict shareholder rights, the more likely they are to suffer higher agency costs. Shareholder rights are an important driver in share buy-back trends.

¹² I will refer to share buy-backs and capital structure in greater detail in paragraph 5.2.5.

¹³ I will elaborate on the signalling power of share buy-backs in paragraph 5.2.1, and focus on signalling power of innovative share buy-backs in chapter 6 and 8.

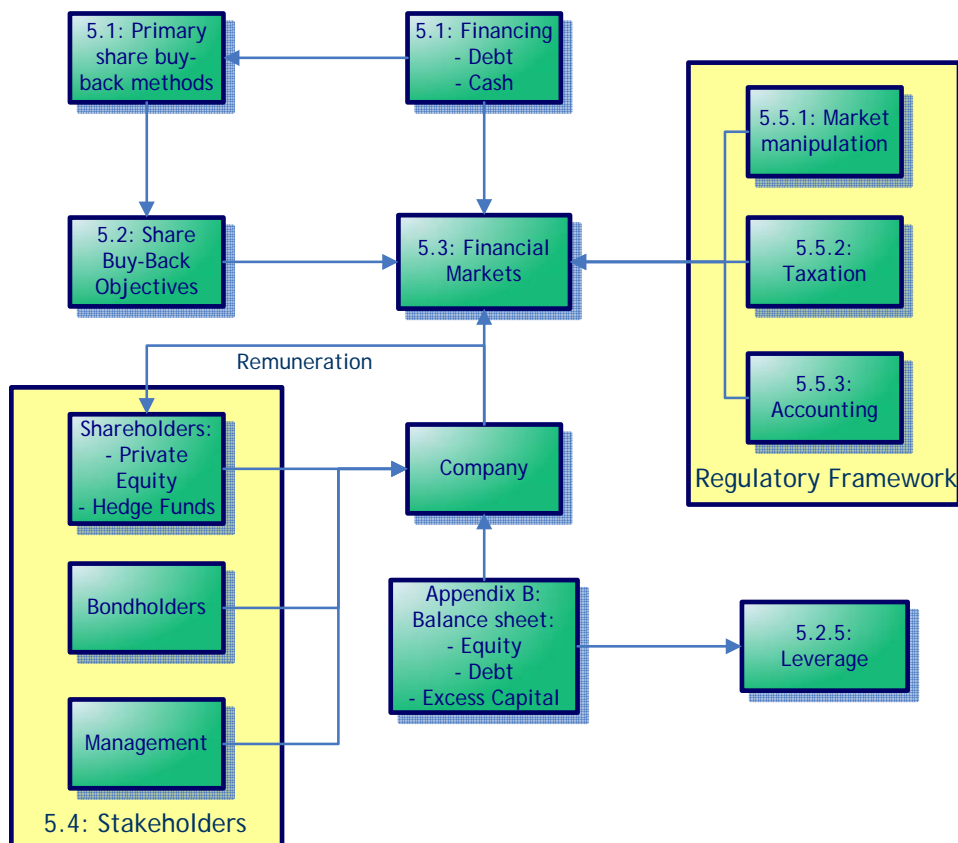
5. Primary share buy-backs and their popularity

Through this chapter I intend to provide the reader with a thorough background in the basic dynamics of share buy-backs, to provide a solid foundation to discuss innovative share buy-backs eventually. In defining the share buy-back I explained that essentially the process involves a company purchasing its own shares, aiming to create value for the shareholders of the company. This may sound straightforward, but when managers are asked about the mechanics, objectives and popularity of share buy-backs, many different answers will arise. Moreover, asking investors the exact same questions will yield an entirely different set of answers, which makes describing share buy-backs and their rationales a challenging task. An interesting quote that sums up some major aspects of share buy-backs into one sentence is provided by Warren Buffett, who stated the following¹⁴:

“When companies with outstanding businesses and comfortable financial positions find their shares selling far below intrinsic value in the marketplace, no alternative action can benefit shareholders as surely as repurchases.”

Buffet’s brief description captures some important elements of share buy-backs, which I will reflect and elaborate on in this chapter. The structure will be governed by the conceptual model introduced in the previous chapter, as indicated by figure 5.1.

Figure 5.1: Mechanics of primary share buy-backs



Through empirical data I will demonstrate the popularity of share buy-backs in paragraph 5.6. In the concluding paragraph to this chapter, 5.7, I will summarise the findings and conclude on the reasons for the popularity of share buy-backs. Moreover I will distinguish the emerging trends in the European and Dutch markets, relevant for the future of share buy-backs. Thereby I will formulate an answer to research objectives 1 and 2.

¹⁴ in the 1984 Annual Report of his investment company BerkshireHathaway

5.1 Share buy-back methods and financing

In describing share buy-backs and trends in share buy-backs it is essential to identify in general terms in what ways share buy-backs are implemented. In studying the literature, academics distinguish either three or four different share buy-back methods at the primary level. For instance Grullon and Ikenberry (2000) distinguish three methods, which are all executed publicly, i.e. via a stock exchange with a large number of counterparties, whereas Mauboussin (2006) and Vermaelen (2004) amongst others come to four methods. In my view distinguishing just three methods is somewhat limited, as a number of share buy-backs have been (partly) executed in a more private manner with selected counterparties. Hence I will describe the following share buy-back methods in this section, which I will refer to as 'primary methods' in the remainder of this report:

1. Open market repurchase program (5.1.1)
2. Fixed-price tender offer (5.1.2)
3. Dutch-auction tender offer (5.1.3)
4. Targeted share buy-back (5.1.4)

On a more detailed level underneath the four primary methods, a large number of variations can be identified, as companies have a number of variables in tailoring their share buy-back. One way of tailoring these methods is to apply specific financial instruments to the primary buy-back method, to create the innovative share buy-backs, which will be discussed in great detail later as it represents the core of the problem statement.

However, it is essential to distinguish these four primary buy-back methods and their financing

.....
Table 5.1:
Primary
share buy-
back
methods

The four primary share buy-back methods:

1. Open market repurchase program
 2. Fixed-price tender offer
 3. Dutch-auction tender offer
 4. Targeted share buy-back
- All methods can be financed by debt, excess capital, or any mix of those.

options first, to be able to understand the subtle differences in the mechanics of buy-backs enhanced with derivative financial instruments later on. With all four primary methods, a company has three distinct options in financing the transaction: either by excess capital, debt, or a mix of those¹⁵. This section will be concluded with a brief

historic data overview, to sketch actual usage of buy-back methods in paragraph 5.1.5.

5.1.1 Open market repurchase program

In distinguishing different methods for companies to buy back their own shares I should start by describing the method that is most well known and most applied throughout the world. This method is also referred to as an on-market repurchase, and often open market repurchase is mistakenly, used as a synonym for share buy-backs in general.

In an open market repurchase program a company buys its own shares on the exchange, or exchanges, where the company is listed, directly or through intermediaries, such as an investment bank or broker. It is mostly referred to as a 'program' since companies engaging in this type of buy-back will often lay-out a structure for the buy-back in terms of size and time span before executing it. The structure of this program is generally announced in a press release by the company. However, for buy-backs effectuated through a plain open market structure it should be noted that the company executing it still has a lot of flexibility. As long as regulation allows, the company can redefine the pace, timing, volume and pricing of the program at any time, which is not necessarily disclosed as the company can trade anonymously in the market. According to Paul Stonham (2002) the open market repurchase is a "blunt instrument by which the repurchasing can be flexible over timing, size and number of 'parcels', but have less control over the share price".

¹⁵ The differences in debt and excess capital financing are shown in Appendix B

Data shows that a significant number of an open-market repurchasers, in fact do not complete the program announced. Stephens and Weisbach (1998) show that most of the US companies do not complete their buybacks, as according to their data just 57% of the companies repurchase at least the number of shares announced initially, while 10% of companies repurchase only 5% or less of the announced number. In this context the US is once again leading, due to limited disclosure regulation, which is stricter in Europe and the Netherlands¹⁶.

In the Netherlands, over 60% of the companies in the AEX index have executed an open market repurchase program over the last 5 years with in varying magnitudes, on average amounting to 3.5% of the company's market capitalisation¹⁷. Globally one should conclude that the open market share buy-back is by far the preferred method of repurchasing shares. Stephens and Weisbach (1998) show data that proves 90% of all repurchase programs in the US are executed via the open market, compared to 87% of share buy-backs in the rest of the world (Vermaelen, 2005).

5.1.2 Fixed-price tender offer

The characteristics of a buy-back through a fixed-price tender offer are essentially captured by the name of the method, which is sometimes called a self-tender. According to Grullon and Ikenberry (2000) the method involves "the firm offering a single price to all shareholders for a specific number of shares". Essential element of the fixed-price tender offer is that the tender price is determined by the management of the company, the shareholders have no direct influence on the price. The tender offer is valid for specified period of time (typically two to four weeks), during which shareholders can subscribe to the offer, by accepting the tender. Once the period is over there are basically two different scenarios: the tender offer can be either undersubscribed or oversubscribed.

In case the tender offer is undersubscribed, and the company had set a certain threshold before announcing the tender, the company can decide to cancel the deal. Should the company decide to continue the repurchase, a limited number of shares are bought from the subscribers accepting the tender price. An undersubscribed tender is not necessarily a bad sign, as it might imply the share price has gained significantly during the tender, thereby effectively signalling undervalued shares¹⁸.

Should the tender offer end up oversubscribed, shareholders are mostly allotted cash for their shares on a pro rata¹⁹ basis (depending on local regulation), or in some cases the repurchase amount is extended, although local regulation may be a bottleneck.

The buy-back method of fixed-price tender offer has been used for many years, even before open market repurchases came to be common practice in equity markets. In its structuring a fixed price tender offer is closely related to companies or investors tendering the shares of another company in an acquisition.

Generally fixed price tender offers are applied by companies that want to repurchase a large percentage of their outstanding shares in a short time-frame. A successful tender often involves a significant premium to the traded share price (Mauboussin, 2006), and hence this method can be quite expensive. However, this premium also has positive aspects, as it implies once again that the company gives a strong signal that it believes the share price does not reflect its true value. I will demonstrate later that this is an important objective in executing a share buy-back.

¹⁶ More information on disclosure is provided in paragraph 5.5.1 on market manipulation

¹⁷ See appendix C

¹⁸ More information on signalling undervaluation in paragraph 5.2.1

¹⁹ Pro rata implies: if the deal is two times oversubscribed, any subscriber has the right to sell to the company 50% of the shares offered at the tender offer price.

5.1.3 Dutch-auction tender offer

As the name suggests the Dutch-auction tender offer is closely related to a fixed-price tender offer. Obviously both methods boil down a certain tender price, and a number of shares to be repurchased. However, the main difference between the two methods is that the tender price is not predetermined at the announcement of this type of buy-back, but established in a so-called Dutch-auction.

Adapted from Mauboussin (2006), the mechanics of the Dutch-auction are broadly as follows:

1. Management of a company establishes a maximum number of shares to be repurchased and a price range within which it is willing to buy (generally a premium to the market).
2. All shareholders may tender (part of) their shares during a predefined period, at any price within the established range.
3. At the end of this period, the company or the investment bank executing the auction, sums the cumulative number of shares starting at the bottom of the price range, until the maximum number of shares to be repurchased is reached. The last price observed in this process is the clearing price.
4. All tendering shareholders at or below this clearing price receive the clearing price in exchange for their shares.

In fact the Dutch-auction buy-back is the exact reverse of the book building process, which is employed in (initial) public offerings. This method of tendering has also been observed in establishing a take-over price in mergers and acquisitions.

An important exception to the procedure sketched above arises when the Dutch auction is undersubscribed, i.e. the cumulative number of shares does not amount to the maximum number of shares to be repurchased. The steps that can be taken in case of an undersubscribed tender offer two scenarios are possible, very much similar to the fixed-price tender offer: either the deal can be cancelled (as far as regulation permits), or

A recent case of an undersubscribed Dutch-auction tender offer is Microsoft's share buy-back program announced on 20 July 2006. Once again, an undersubscribed buy-back is not necessarily a bad sign, as it indicates the company has given a powerful signal to the market has and the share price picked up on that signal, which is likely to be the objective of the program in the first place.²⁰

The Dutch-auction tender offer has proved itself to be an excellent method in restructuring the shareholder-base of a company, especially useful in fending off a hostile takeover²¹. The strategy has been applied by for instance Gillette in the 1980s, when the company was under constant take-over pressure (Kale, Noe and Gay, 1989).

5.1.4 Targeted share buy-back

Many academics do not consider the targeted share buy-back as a clearly distinguishable share buy-back method. However, due to its privately negotiated nature it does not fit with the methods described above, and thus its major characteristics should be laid out here. In a targeted share repurchase, the company works out a deal through private negotiations with a single shareholder to purchase a block of shares, mostly a significant volume. Hence, the major difference to the three methods described above is the fact that only one specific shareholder is granted the opportunity to sell shares, as opposed to the shareholders in general. Targeted share repurchases can be effectuated at market price or at a discount or a premium to that market price. Surprisingly, research by Peyer and Vermaelen (2005) indicates that most privately negotiated share buy-backs have been effectuated at a discount to the market price,

²⁰ More information on signalling undervaluation in paragraph 5.2.1

²¹ Takeover deterrence as an objective for a share buy back will be discussed in greater detail in the next section, paragraph 5.2.6.

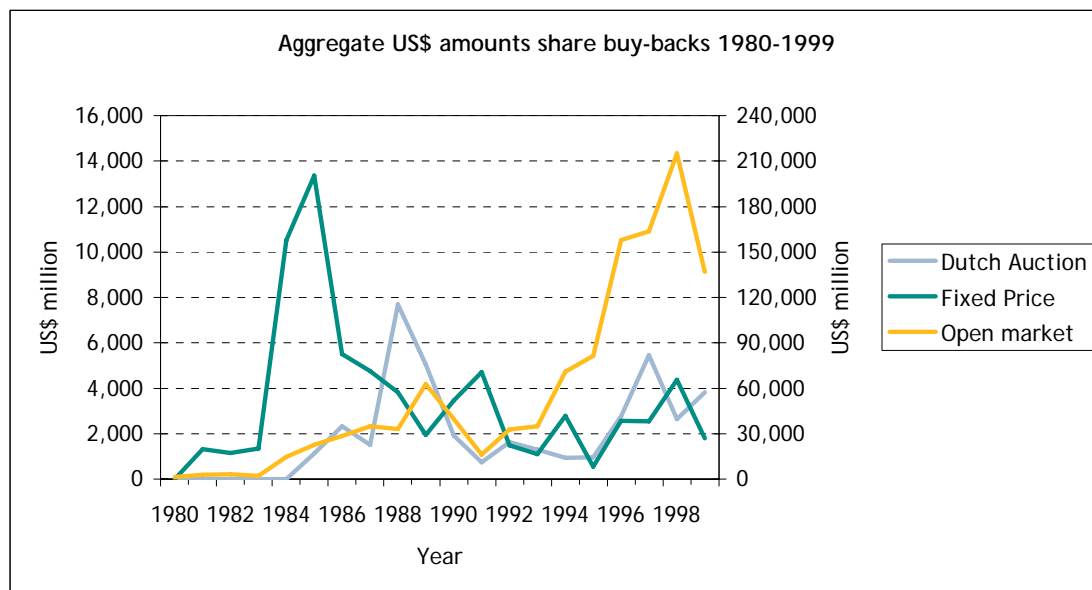
mostly because of illiquidity of shares. The same source indicated that the average premium in case the targeted share buy-back is executed above market price is 18%. Peyer and Vermaelen conclude that unlike other share buy-back methods, these premiums are determined by the bargaining strength of the company and the seller.

This type of repurchase is especially common in case of privatisations of state-owned companies or private equity and venture capital exits. Privatisations are often executed in stages, i.e. a government might sell part of its shares through an IPO, but keep a minority holding in the company. Then, if the newly listed company would want to implement a share buy-back it can simply purchase (part of) the government holding. An example of such a deal in the Netherlands is TNT's 2006 buy-back program, which was accelerated by a €585 million privately negotiated buy-back from the Dutch state. The same principle holds for private equity and venture capital investors, which often hold minority stakes in the companies they financed after a public offering.

In the 1980s targeted share buy-backs were used often applied to defer (hostile) takeover threats. Companies would repurchase the stake held by the hostile acquirer, often at a hefty premium to the market price. This type of transaction is dubbed "Greenmail"²², which is mostly not permitted by regulators. Hence, this motivation has lost popularity and data indicates Greenmail transactions have only accounted for less than 10% of targeted share buy-backs (Peyer and Vermaelen, 2005).

5.1.5 Trends in Share buy-back methods

In describing trends in share buy-back methods unfortunately meaningful data is limited to the US, as no reliable European data on share buy-backs is specified to the different methods. Hence, I will not be able to compare the trends in both continents.



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Figure 5.2:
Popularity
share buy-
back
methods US
1980-1999

Source: adapted from Grullon and Ikenberry (2000)

Figure 5.2, which is adapted from Grullon and Ikenberry (2000), shows the aggregate US\$ amount of three share buy-back types, where both tender offer methods (fixed price and Dutch auction) are shown on left axis, and open market share buy-backs on the right axis. The targeted share buy-back is included in the fixed-price category in this data-set, as this type of repurchase is mostly implemented at a fixed price. Based on the data, three major conclusions

²² See Glossary

can be drawn, reinstating some observations introduced before. Firstly, the chart clearly shows that the vast majority of share buy-backs in the 1980s and 1990s have been executed via the open market. Secondly, analysing the relative popularity of the different methods yields a clear distinction between the 1980s and 1990s, as the tender offer deals (including targeted share buy-backs) peaked in the 1980s, while the popularity of open market share buy-backs soared in the 1990s. Thirdly, it is clear that the aggregate repurchase activity through all share buy-back methods together truly accelerated in the 1990s.

5.2 Buy-back objectives

Some media manage to put the objectives of a buy-back in very simple terms, such as Business Week, which stated in an article that “the logic of buybacks is sound”²³. Still, in executing share buy-backs managers and investors state numerous motivations and objectives, which, on top of that, are typically conceptualised differently by these stakeholders. This makes the

objectives for share buy-backs an area of interest for academics, and dedicated research has been executed in theoretical studies as well as surveys of executives involved in buy-back programs. In this paragraph I will summarise some of these studies to gain insights in the main drivers for companies to repurchase their shares, focusing on the objectives in table 5.2.

The six major share buy-back objectives:

- Signal undervaluation
- Mitigate Dilution Effects
- Alternatively distribute excess capital
- Manage performance indicators
- Takeover deterrence
- Rationalize capital structure

.....
Table 5.2:
Major share
buy-back
objectives

After describing these objectives from a theoretical in paragraphs 5.2.1 until 5.2.6, I will reflect on the outcomes of a number of prior surveys, which describe what has driven companies and their executives in repurchasing shares in paragraph 5.2.7. Throughout this section, I will focus on trends, i.e. how buy-back motives have changed over time, and how emerging trends are changing the objectives currently.

5.2.1 Signal undervaluation

In academic research signalling is by far the most widely studied explanation for share buy-backs. In a seminal article, Vermaelen (1981) identifies the information-signalling hypothesis as ‘the dominant explanation for share repurchases’. The basis of signalling theory, or signalling hypothesis, introduced in paragraph 3.4.2 is that a firm’s management is better informed about the company’s true value than outside shareholders. Because of this ‘information asymmetry’, the company’s share price may not reflect the true (or intrinsic) value of that company, as the share price is based on public information only. Management of a company can signal the fact that they perceive their company as undervalued, by announcing a share buy-back. The share buy-back shows confidence in the performance of the shares, as the management considers investing in the company’s own shares the best possible investment.

If signalling is the (prime) objective of engaging in a buy-back, it is essential that the share price is elevated upon announcement. Event studies show that in signalling undervaluation, the share buy-back is indeed an instrument that can be employed to boost the share price. Stephens and Weisbach (1998) studied abnormal returns prior to the announcement of share buy-backs, and found that these abnormal returns are negative. Thereby, Stephens and Weisbach provide evidence for the hypothesis that companies employ share buy-backs to signal perceived undervaluation and support the share price. Vermaelen’s dataset (1981) shows abnormal price increases of 3.37%. Comment and Jarrell (1991) and Vermaelen (2004) compare the relative signalling power of three primary buy-back methods: the Dutch-auction and fixed-price tender offers and the open-market share repurchases program. Their research shows that the strongest signal, and consequently the largest increase in share price is obtained through a fixed-price tender offer, followed by the Dutch-auction tender offer, and the open market

²³ in “The Dirty Little Secret About Buybacks”, Business Week, 23 Jan 2006

repurchase program. This observation especially holds when we look at the short-run returns (Vermaelen, 2004), hence tenders are effectively providing a quick boost to the share price. The relative signalling power differences can be explained by the nature of the repurchase methods. As I introduced earlier the tender deals are mostly executed at a premium to the market price, and demonstrate more confidence from company management it is truly undervalued. One can also expect that the height of the premium, directly influences the signalling power, but this has not been proved empirically.

5.2.2 Improve performance indicators

The improving of performance indicators objective is closely related to the signalling of undervaluation, as through improved performance indicators, a company intends to raise its share price as well. The rationale behind this objective is implicit in the buy-back program, as the buy-back and subsequent cancellation of shares will reduce the number shares outstanding, thereby increasing the stake of remaining shareholders in the company and its profit. This effect is measured through the earnings per share²⁴ (EPS) performance indicator, which is an important variable for the valuation of a company. Thus: EPS and its implied valuation of a company can be managed effectively through share buy-backs.

However, academics and especially strategists like Mauboussin (2006) and Dobbs and Rehm (2005) argue that repurchasing shares purely to enhance EPS mechanically does not create fundamental value for shareholders. One argument to support that statement is that another performance indicator, the price-earnings ratio²⁵ (P/E), is influenced negatively by the share buy-back. Hence, a share buy-back with this objective might not be supportive of the share price, especially when it is not certain whether shares are in fact undervalued. The same sources indicate, that the EPS enhancement strategy might still work, given the tax-effect of repurchasing shares, which I will focus on in paragraphs 5.2.4 and 5.2.5.

In this context the Jensen's (1986) agency theory²⁶ might also be relevant, as improving EPS without creating substantial value, could result from a conflict of interest between management and shareholders of a company. Especially when management compensation is linked to EPS, management is not strictly a perfect agent for the owners of the company. Management may be tempted to use share buy-backs to boost EPS in the short term, foregoing to create long term, substantial value for the shareholders (Dobbs and Rehm, 2005).

Hence, I should conclude that although share buy-backs are supportive of EPS, repurchasing with solely this objective, does not provide results as favourable as the signalling objective introduced above. A true belief of undervaluation seems to be a prerequisite for a successful share buy-back.

5.2.3 Mitigate Dilution Effects

Dilution effects arise when transactions increase the number of shares outstanding, hence diluting the stake of the current shareholders, and consequently a decrease of earnings per share (EPS), which is also dubbed EPS dilution. Examples such transactions are: executing an employee stock option plan (ESOP), distributing a share dividend or the conversion of convertible debt. As explained above, EPS is an important valuation metric, so EPS dilution is likely to influence the share price negatively, so in the interest of the shareholder this risk should be hedged. The most obvious method to provide this hedge effectively is in fact repurchasing shares beforehand and holding those in its treasury. Consequently, the shares can be reissued when they are needed, having a zero net effect on EPS. Moreover, the company is spared the cost of issuing new shares.

²⁴ See glossary

²⁵ See glossary

²⁶ See paragraph 4.4.3

The rationale of this objective is closely linked to improving performance indicators, but is essentially different as shares are kept in treasury instead of cancelled. This implies this objective has a more defensive nature, as it is not aimed at boosting the share price, but merely providing a hedge. With the increasing popularity of ESOPs, both in the US as well as in Europe, mitigation of dilution effects has increasingly become a major driver in executing share buy-backs over the past years. Bens et al (2003) show empirically that repurchase activity increases with the increased dilution effect of an ESOP. Still, the Dutch data²⁷ shows that share buy-backs aimed to mitigate dilution are generally relatively smaller in magnitude compared to buy-backs with other objectives. Obviously, a share buy-back with limited magnitude and defensive nature will not provide a strong signal to the market and not likely result in strong share price gains.

5.2.4 Alternatively distribute excess capital

As I sketched earlier in chapter 1, the Problem Area, a company and its managers have three options in using their excess capital: reinvest in the business, repay debt, or return to shareholders. Returning to shareholders can be a highly attractive option if no positive Net Present Value (NPV) investments exist and a company chooses not to reduce its debt level. The recent trend of shareholder pressure on management increases the demand for good capital management, which forces companies to remove their capital reserves such as the 'cash cushion'²⁸ or 'war chest'²⁹ from the balance sheet, and return that to the shareholders.

In remunerating shareholders a share buy-back is alternative to regular dividends, special dividends and capital repayments. Hence, a motive for company's decision to repurchase shares could be the preference of a buy-back over the other remuneration techniques. As research by Grullon and Ikenberry (2000) shows and figure 5.3 depicts, in the US the aggregate US\$ amount of share buy-backs has overtaken the aggregate US\$ amounts in dividends in 1998. Three arguments that are common arguments to choose a share buy-back over dividends are: distribute one-time gains, tax efficiency and greater flexibility.

Firstly, research by Jagannath, Stephens and Weisbach (2000) shows that share buy-backs are rarely a direct substitute for dividends in distributing regular profits, however empirical evidence does show that share buy-backs are the preferred method to distribute one time gains. In their writing Jagannath, Stephens and Weisbach define one time gains as temporary, non-operating cash flows. Distributing these cash flows through share buy-backs allows a company to maintain its dividend policy, i.e. keep its dividends stable or gradually increasing, which is most appreciated by investors. This policy is also depicted in figure 5.3, which shows the aggregate US\$ amounts of dividends are gradually increasing over time, while share buy-back volumes are much more volatile. One time gains are often tied up to divestments, such as the disposal of a business unit by a company. The last years have seen an increasing number of these disposals, as private equity investors have been a driver for (Dutch) companies to divest non-core activities. A striking example in this context is Dutch TNT's sale of its logistics division to private equity investor Apollo, followed by a major share buy-back in 2006.

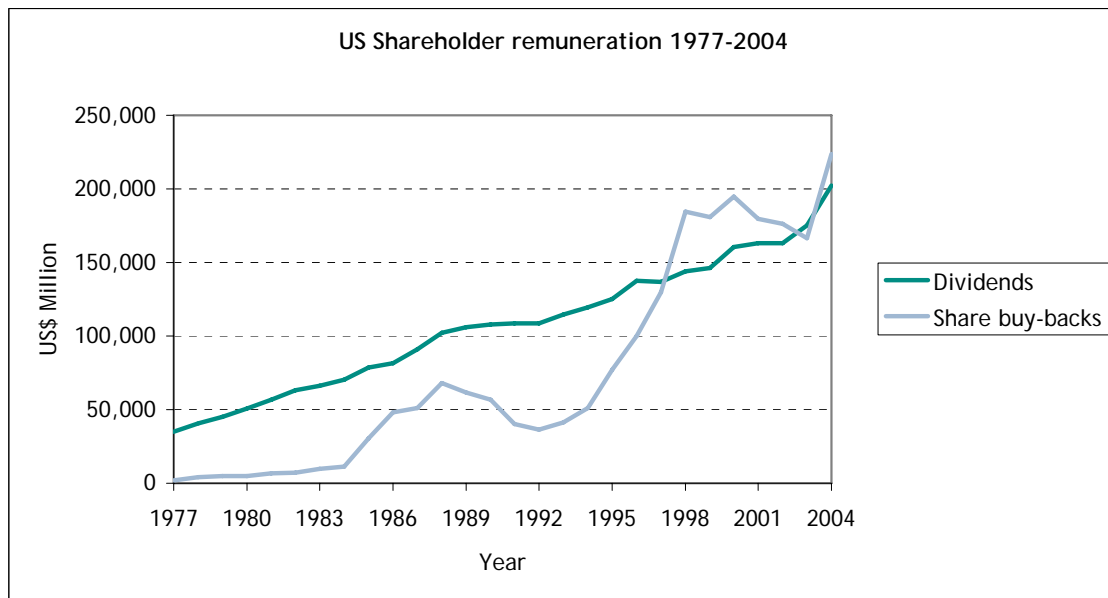
Secondly, applying share buy-backs means excess capital can be returned to shareholders in a more tax efficient manner compared to dividend. Dittmar (2000) and Grullon and Ikenberry (2000) mention that under circumstances a share buy-back is taxed with capital gains tax instead of the less favourable dividend withholding tax (DWT), or be totally exempt from DWT. I will discuss tax aspects of share buy-backs in the Netherlands in greater detail in section 5.5.2, and show the implication of regulation on Dutch share buy-backs. This shows the importance of tax and regulatory aspects as drivers for the popularity of share buy-backs, an observation I will reflect on the innovative share buy-backs as well in chapters 6, 7 and 8.

²⁷ Appendix C

²⁸ Defensive cash reserve, for instance to repay debt

²⁹ Offensive cash reserve, to finance acquisitions

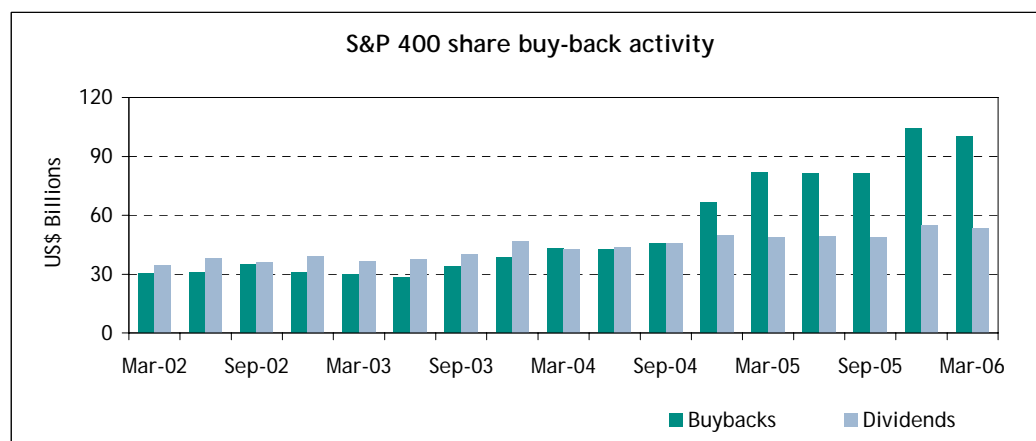
.....
Figure 5.3:
 Dividends
 vs. Share
 buy-backs
 1977-2004



Source: Maboussin (2006)

Another reason why share buy-backs are favoured in the context of shareholder remuneration is that companies are able to maintain a certain degree of flexibility, for two reasons. Firstly, the fact that announced share buy-backs, especially those on the open market, do not necessarily have to be completed provides the company with more discretion. Secondly, for repurchased shares that are not cancelled, but kept in treasury, the opportunity remains to reissue, so the company can still use the shares to for instance finance acquisitions, construct an ESOP, or distribute a share dividend.³⁰ The more flexible and discretionary nature of share buy-backs is also one of the main reasons that share buy-back activity in the US is more volatile than dividends paid, as shown in figure 5.3. Figure 5.4 extends this observation to more recent periods, focussing in on US quarterly data from the first quarter of 2002 until the first quarter in 2006.

.....
Figure 5.4:
 Quarterly
 dividends
 vs. share
 buy-backs
 in the US



Source: Standard and Poor's, June 2006

³⁰ I should add that regulatory limitations may apply to treasury shares, see also 5.5.1

5.2.5 Rationalise capital structure

The capital structure of a company is predominantly governed by the amount of debt and equity on the balance sheet, which constitute the financial leverage of a company. Therefore rationalising the capital structure is effectuated by altering the leverage, or re-leveraging the company. A share buy-back can be implemented to create a higher debt-to-equity ratio³¹, as it lowers equity, and in case of debt financing raises debt. In this context the Miller and Modigliani propositions should be recalled, which originally stated company value (and thus shareholder value) is independent of leverage (Miller and Modigliani, 1958). Later revisions of the propositions (Miller, 1963, 1988) showed however that increased leverage can create value, as a tax shield is created. This implies that a share buy-back, especially when it is debt financed, could be an effective tool to create shareholder value, which is mostly driven by the tax benefits of bearing debt on the balance sheet.

Apart from tax advantages, a recent trend seems to be, especially for companies in the financial sector to adapt their leverage to operate at the limits of their current credit rating (Hutchinson, 1999). Companies do not necessarily achieve a better credit rating by reducing debt, but instead stretch their current credit rating, to create optimal balance between leverage and cost of debt.

Moreover, applying the signalling theory Ross, Westerfield and Jaffe (2005) indicate that debt in itself is a signal for firm value. Hence, a share buy-back financed with debt and the increased leverage implied, provides a very strong signal to the market of perceived undervaluation.

Also in the re-leveraging context, the share buy-back allows a certain degree of flexibility. As long as repurchased shares are not cancelled, the company has the ability to adapt leverage over time, following up closely on trends in the interest rates, to optimise company capital structure, and closely control the cash position.

5.2.6 Takeover deterrence

In the late 1990s and beginning of the 21st century merger and acquisition activity has emerged, and no longer limits itself to companies acquiring one another, as private equity funds participate in more and larger deals. Since some of these deals have a hostile, or unsolicited character companies are looking for methods to deter these takeovers, or at least reduce the likelihood of such a takeover. One of these methods is to initiate a share buy-back. The takeover defence in share buy-backs are related to some arguments mentioned before: through increased leverage, a targeted share buy-back, and changing the constitution of its shareholder base, companies can decrease the probability of a successful hostile takeover.

First, an increasingly leveraged balance sheet can fend off potential acquirers such as private equity investors that threaten with highly leveraged buy-outs (LBOs). A company that has a higher leverage to begin with, forces a possible acquirer to use relatively more equity to finance a take-over. Miller already observed this phenomenon in the US in his 1988 writing, where he pointed out what he calls 'voluntary recapitalisations' as a means to deter hostile acquisitions.

Second, a targeted share buy-back can be used to repurchase a specific block of shares, which has landed with a potential acquirer. The general interpretation of this type of repurchases is that they are considered greenmail³², involving a significant premium to the market price to be able to trigger hostile acquirers to return their shares. Peyer and Vermaelen (2005) argue that managers are triggered to take these measures to get private benefits from control, even if they personally lose shareholder value, by paying a significant premium above market price.

³¹ See appendix B

³² See Glossary

Third, Bagwell (1988) describes the impact of a share buy-back as takeover defence, through the impact it has on the composition of the shareholder base. She assumes shareholder heterogeneity, which means shareholders differ from each other along many important economic dimensions. In the context of share buy-backs especially differences in reservation prices among shareholders are important. Executing for instance a Dutch-auction share buy-back would trigger the shareholders with the lowest reservation prices to sell their shares, as they will tender first. High reservation shareholders are left, which are most probably investors that invest in the company on the long term. Also, as a result of the composition of the remaining shareholder base a possible acquirer will need to pay a significantly higher price to acquire the company. A number of cases, especially in the 1980s have shown the power of using share buy-backs in fending off a hostile takeover. A well known case study is Gillette, recently acquired by Procter & Gamble, which has been able to fend off multiple take-overs in the 1980s by applying share buy-backs (Kale, Noe and Gay, 1989).

An important note in case of takeover deterrence is that no voting rights can be transferred to the company in a share buy-back, as regulation permits voting rights attached to shares kept in treasury to be effectuated. Obviously the same holds for shares that have been cancelled subsequent to a share buy-back. Summarising, the takeover deterrence effects should be seen in the light of altering the composition of the shareholder base and driving up acquisition costs through increased leverage.

5.2.7 Surveys on share buy-back objectives

In order to provide a more practical view on the objectives in share buy-backs sketched in the previous paragraphs, I will summarise and conclude on the results of two surveys executed by academics, albeit both focused on the US.

Baker et al (2003) have executed a survey in 1999 of 642 financial executives of US companies that have implemented an (open market) share buy-back. In the survey, managers were given five possible answers. Based on 194 valid responses, the surveyed managers cited the following as major motivations to repurchase shares:

1. Undervalued share price (74.6%)
2. Need for treasury shares (12.9%)
3. Other (10.4%)
4. Lack of profitable investment opportunities (2.1%)
5. Takeover threat (0.0%)

Looking at the responses, undervaluation is by far the most common argumentation to initiate a share buy-back, which is interesting as managers and academics seem to agree on the fact that the signalling undervaluation is in fact the prime objective. The need for treasury shares as it is stated here is linked to mitigating dilution effects, as explained before certain corporate actions create a need for treasury shares that can be issued upon execution. None of the recipients engaged in a share buy-back to fend off a takeover directly, although the current wave of shareholder activism, might have changed this attitude.

Badrinath and Varaiya (2001), report a survey executed by the Financial Executives Research Foundation in the same year. A sample of 200 US companies that completed share buy-backs, yields the five following objectives, as most commonly mentioned:

1. Increase share price
2. Rationalise the company's share structure
3. Substitute share buy-backs for cash dividends because of preferential tax treatment
4. Prevent dilution of earnings
5. Return excess cash to shareholders (e.g. forthcoming divestment)

Also in this survey it is most striking to see that takeover deterrence, which is mentioned in literature as buy-back objective, does not seem to be driving repurchase activity in practice. Increasing share price is the most commonly mentioned objective in this survey, which supports the signalling theory.

5.3 Financial markets

As share buy-backs are equity markets transactions, and the repurchasing of shares is mostly executed via a stock exchange, the impact of the financial market in the mechanics of share buy-backs should be briefly discussed. Since, the effect of share buy-backs on the share price has been discussed in great detail already, which will be left outside of the scope here. In this section I will focus primarily on prior event studies, which describe the impact of buy-backs on the liquidity of shares (5.3.1) and the cyclicity of repurchase activity (5.3.2). In the last paragraph of this section (5.3.3) I will focus on an emerging trend, which was already briefly discussed in the preface and problem area, namely the globalisation of financial markets.

5.3.1 Liquidity

In executing a share buy-back for the company, as well as its investors it is essential to maintain a certain level of liquidity in the company's shares, or better improve the liquidity, both during and after the program. Also, for regulatory reasons, liquidity is important, as repurchase activity is often limited to a percentage of total trading.³³ After the share buy-back, logical reasoning would yield the conclusion that a reduction of the shares outstanding would lead to a lower number of shares in 'free float' and hence lower trading activity.

Unfortunately academics do not always agree on the influence of repurchasing activity on the liquidity during the share buy-back. On the one hand liquidity is increased through the repurchasing activity on the buy side of the market. On the other hand, a share buy-back could have a downward pressure on liquidity, especially if it is effectuated via the open market, as the company itself is a better informed trader compared to the rest of the market (Barclay and Smith, 1988). This information-asymmetry hypothesis has found consensus support in academic literature and has been proved empirically. Ginglinger and Hamon (2007) analyse French market data and report that share buy-backs have negative impact on liquidity, as they observe wider bid-ask spreads³⁴ on trading days when a company is actually repurchasing. Moreover, Brockman and Chung (2001) show a 10% increase in the bid-ask spread on 'repurchase days', using empirical data from the Hong Kong stock exchange. Surveyed ABN AMRO analysts share the negative opinion of the quoted academics on liquidity effects of share buy-backs, both during and after the program. Negative liquidity effects provide an opportunity for using derivatives in share buy-backs, as the discretionary nature of these buy-back methods, imply that the company is not actively trading on the market. I will come back to this matter in the following chapters.

5.3.2 Cyclicity

Prior research has shown that share buy-backs are employed in all stages of the macro-economic cycle. During peaks in the economic cycle companies profits are generally rising, making companies cash rich, resulting in increased pressure on management to remunerate shareholders. During a trough in the economic cycle, companies have historically taken the opportunity to repurchase shares at low prices and signal the undervaluation of their shares. Repurchase activity also has some cyclicity in itself. Dittmar and Dittmar (2004) analyse "repurchase waves" and they conclude that repurchase activity is predominantly linked to distributing temporary earnings, as opposed to permanent earnings, which are mostly distributed via dividends.

5.3.3 Globalisation

The globalisation in European equity markets is visualised by foreign investors trading, as well as foreign banks offering their services in the local markets, thereby integrating global equity markets. ABN AMRO data indicates that over 75% of Dutch shares are currently held by foreign investors, and US based investors are among the most active investors in the Netherlands. On

³³ See paragraph 5.5.1

³⁴ Widening bid-ask spreads are an indicator of decreasing liquidity

debt markets, similar trends are going on, as loans are often syndicated by foreign banks. Apart from investors the globalisation is visualised through the increasing activity of US and UK (investment) banks in continental Europe. This means that Dutch companies will have to deal increasingly with foreign investors, and adapt to their methods and policies.

Consequently, increased international and intercontinental investment activity and services together will gradually close the traditional cultural gap between different countries through corporate governance cultures. Eventually one might think, by removing the traditional difference between Anglo-Saxon and Rhineland cultures. Weil, Gotshal and Manges (2002) survey corporate governance and conclude that the Anglo-Saxon culture is more market-oriented and shareholder-focused, which implies companies are largely focused on creating shareholder value, versus stakeholder value in the Rhineland model. As Dutch companies are primarily Rhineland companies the cultural convergence results in increasing shareholder influence and short term focus, which is clearly visible in the Netherlands, and can be translated to more shareholder remuneration. The cultural shift has also been embedded in changes in corporate governance regulation, which I will come back to in the next paragraph.³⁵

5.4 Stakeholders

As stated on a number of occasions before share buy-backs is a much employed method to remunerate shareholders and their emerging popularity are closely linked to shareholder activism. Therefore, shareholders, or in fact any investor that is a potential shareholder, are among the most prominent stakeholders in the share buy-back process. Earlier I described that the nature and composition of the shareholder base of a company can be a major factor in deciding on share buy-backs and the method employed³⁶. Therefore, I will start this section by focusing on the shareholder, by highlighting specific types of (potential) shareholders and their influence. However, more stakeholders are involved in the process, some of which I will describe in a little more detail in this section, such as bondholders, management and investment banks. Through regulation, the government and its institutions are an important stakeholder in the process as well, which I will discuss in the next section. In the last paragraph of this section, I will briefly describe specific corporate governance regulation, aimed at interacting with stakeholders, and its affects on shareholder activism and remuneration.

5.4.1 Shareholders

The composition of the shareholder base of a company can be relevant in the process of deciding to execute a share buy-back, as well as during the execution of the share buy-back. In the event a company decides to engage in a share buy-back the composition shareholder base can be a key argument in selecting a certain share buy-back method. Key aspect in this context is the heterogeneity of the shareholder base, or whether shareholders actually differ in economic decision drivers (Bagwell, 1988). These decision drivers may include: the reservation prices of shareholders, their time scope, the amount of internal regulation³⁷, and tax treatment. I will show later that applying derivatives provides a company with a tool to customise the primary share buy-back method to the composition of the shareholder base.

Furthermore, shareholders can directly or indirectly pressurise a company to return cash to its shareholders. In that perspective and in the light of emerging trends two types of (potential) shareholders should be highlighted especially: private equity investors and hedge funds. In describing those I will refer to the economic decision drivers mentioned above, and show their impact as well.

Private equity funds, as their name implies, are funds that invest capital in either non-listed assets, or acquire and subsequently de-list (parts of) listed companies, often by applying

³⁵ Paragraph 5.4.4

³⁶ See also 5.2.6

³⁷ Government regulated pension funds generally have stricter internal regulation than commercial funds.

leverage in the buy-out process (through a Leverage Buy-Out or LBO). Hence, they are mostly long term focussed investors that do not use pressure to force short term remuneration. Private equity investors do have a more indirect contribution to the emerging popularity of share buy-backs, for two reasons. First, the threat of a LBO (by private equity investors) might force companies to remove cash cushions from their balance sheet and re-leverage themselves³⁸. Second, private equity investors have contributed to increasing cash positions for listed companies, through purchases of assets, for instance by being counterparty in the divestment of non-core Business Units.

Hedge funds, other than private equity, trade in listed assets only, are much more active shareholders than any type of mutual fund, and typically exhibit a more short term focus. Kahan and Rock (2006) observe that hedge funds pursue more short term gains and have more freedom in investing as they do not face regulatory barriers that mutual funds (especially pension funds) have internally. The authors also observe that hedge funds preferably target profitable, undervalued companies with above-average cash reserves. If I reflect this to section 5.2, I should conclude that typical targets for hedge funds are preferred candidates for successful share buy-backs as well. This observation has already led to activist investors demanding companies in the US to initiate a major share buy-back (e.g. hedge fund billionaire Carl Icahn versus Motorola in 2007³⁹). Hedge fund activity is growing in the Netherlands as well, both in size as well as aggressiveness. Global growth in the number of hedge funds has been explosive over the last decade, but has now slowed somewhat⁴⁰. According to ABN AMRO data, the assets managed by hedge funds in 2006 have almost doubled compared to the assets managed three years earlier. Moreover, recent cases (TCI versus ABN AMRO, and Centaurus and Paulson versus Stork) have shown that the aggressive attitude and focus on short term gains, is no longer limited to the US and the UK.

Gaspar et al (2004) show empirically the relation between investment horizon and the corporate payout policy. Their major finding is that firms held by short-term investors (such as hedge funds) have a higher "propensity" to repurchase their shares rather than increasing dividends. The authors also conclude that overall the investment horizons of institutional investors has reduced significantly over the last decades, which could thus be a key argument for the increasing popularity of share buybacks.

5.4.2 Bondholders

Together with shareholders, the bondholders are claimholders on the company, providing financing via debt. In the light of share buy-backs the bondholder has an eminent role, as the leverage effect implied in the share buy-back⁴¹ reflects on the bondholder as well. This is especially the case when increased leverage alters the risk profile of a company significantly, which may affect its creditworthiness. Moreover, as stated before, the current trend seems to focus primarily on remunerating shareholders, and favourable pay-off policies are likely to increase over the next years. Already in 1981, Dann described the impact of share buy-backs on bondholders, through the expropriation hypothesis, which suggests share buy-backs diminish the claims of bondholders, implying a wealth transfer from bondholders to the company's remaining shareholders. The conflict of interest between shareholders and bondholders in this perspective is an excellent example of an agency problem.⁴²

³⁸ More information on leverage and takeover deterrence is provided in paragraphs 5.2.5 and 5.2.6

³⁹ In January 2007, Icahn called for the company to return \$11.2 billion in cash via share buy-backs. Source: Wall Street Journal, 19 April 2007 and 9 May 2007

⁴⁰ Appendix E

⁴¹ See Appendix B and section 5.2.5

⁴² Theoretical information on the agency theory is provided in 4.4.3

5.4.3 Investment banks

In the context of a share buy-back an investment bank can basically have three roles: provide advice, act as broker, or program manager. As a broker the bank executes trades on behalf of the company, whenever the management of a company commands. As a program manager, the bank executes the program on behalf of company, which has entered into a discretionary agreement with the bank. The timing and execution of the trades in the repurchase program are now left up to the discretion of the bank, which means the program can continue even during so-called 'close periods'.⁴³ Current developments in the Dutch taxation of share buy-backs might be undermining the discretionary role of an investment bank in share buy-backs, although at present this is still ambiguous⁴⁴. The derivative-based structures, which will be introduced in the upcoming chapters, might involve an even greater deal of discretion towards the investment bank. Investment banks are reimbursed for their role in a share buy-back through trading commission (brokerage) and fees (for advice and program management). Fee structures are typically depending on the complexity of a transaction. Hence, for an open market share buy-back fees are typically low, whereas tender offers and the more innovative share buy-backs will yield relatively higher fees for the bank.

5.4.4 Corporate governance

Corporate governance regulation provides guidelines for companies in interacting with their stakeholders and best practices for management board. In the Netherlands corporate governance guidelines have only recently been formalised, when the Tabaksblat Code was issued in 2003. In the US corporate governance has a longer formal history, although it has recently been more thoroughly documented via the Sarbanes-Oxley Act (SOx). In this section I will portray the changing role of the shareholder in the Dutch Code, and show the relation between these corporate governance guidelines and SOx. I will conclude this section with the impact on share buy-backs.

Primarily the Tabaksblat Code is based on the principle that "a company is a long-term form of collaboration between the various parties involved" (Corporate Governance Committee, 2003). Hence, the Code is stakeholder-oriented, in line with the Rhineland model introduced earlier. Still, the Tabaksblat Code, when implemented properly, does change the responsibilities of the management and the position of the shareholder. Before Tabaksblat, management rarely involved shareholders into the decision-making process, while the Code argues proper corporate governance includes the participation of shareholders in this process. The Tabaksblat Code has also given more rights to shareholders, as it allows them to include items on the agenda of the AGM and appoint non-executive directors⁴⁵. These new standards of corporate governance in the Netherlands have been enacted recently when activist hedge funds targeted Stork in 2006 and ABN AMRO in 2007. The hedge funds aggressively demanded management to split up their companies, in case of ABN AMRO via the AGM, as they believed that would create more shareholder value. The next step in activism will be so-called proxy fights⁴⁶, where groups of investors actively force strategic change, by gathering investor support.

The Sarbanes-Oxley act (SOx) is still substantially different from the Tabaksblat code as the responsibility of the board in the United States is almost entirely to the shareholder (Anglo-Saxon model): the board of directors is elected by the shareholders and must act in their best interests, otherwise they can be voted out. Despite this difference, an Erasmus University study (2003) shows that Dutch managers conceptualise the Tabaksblat code and its objectives to be very similar to SOx.

⁴³ See paragraph 5.5.1

⁴⁴ See Appendices F and G (Dutch)

⁴⁵ In Dutch: Raad van Commissarissen

⁴⁶ See Glossary

Independent from any equality with Sox, it is clear that shareholder rights are increasing through the Tabaksblat Code. US empirical data published by Jiraporn (2006) shows a direct relationship between weaker shareholder rights and less repurchase activity by these companies. Hence, the rights embedded in the Tabaksblat Code are likely to further accelerate share buy-back activity in the Netherlands

5.5 Regulatory framework

A regulatory framework is required for share buy-backs as companies repurchasing their own equity impose a certain risk of market abuse. Also, investors and companies need certainty on the tax treatment and balance sheet representation, also to be able to compare share buy-backs to other remuneration strategies. Hence, the regulatory framework for share buy-backs essentially includes the following aspects:

- Market manipulation
- Taxation
- Accounting

Corporate governance could be considered part of the regulatory framework as well, but since this regulation is primarily aimed at interacting with stakeholders, it has been described in the previous section. In the remainder of this section I will focus on European Union (EU) regulation, developments in this regulation, and how the EU regulation is effectuated in the Netherlands. Moreover, to be able to put certain trends mentioned before and hereafter in perspective I will occasionally refer to and reflect on US regulation as well.

5.5.1 Market manipulation

Share buy-back regulation in the Netherlands is mostly derived from EU regulation or directives. Concerning shareholder remuneration, Europe is generally stricter compared to the US, although the European Commission (EC) has recently loosened regulation to promote "business effectiveness and competitiveness"⁴⁷. Regulation around market manipulation and share buy-backs involves the following aspects: shareholder authorisations, safe harbours, and disclosure.

Contrary to the US, in Europe a share buy-back and the subsequent cancellation of shares needs to be authorised by the shareholders of a company⁴⁸, except for repurchase activity in conjunction with an ESOP, which is mostly exempt from shareholder authorisation. Throughout Europe it is market practice that a company routinely asks its shareholders to be authorised for a share buy-back. Before 2006 EU (and Dutch) regulation limited share buy-back capacity as a company could hold no more than 10% of its market capitalisation in treasury and limited the shareholder authorisation to an 18 month period. However, during the latest revision of the EU regulation the limitation to treasury shares was dropped and left to the member states to determine, with the traditional 10% boundary as a minimum, which has been enacted in the Netherlands in May 2007 by dropping the maximum⁴⁹. Already before May 2007 Dutch companies (for instance ASML⁵⁰), had announced authorisations over 10% of the outstanding share capital, multiple shareholder meetings were needed however to cancel the repurchased shares.

Global market manipulation regulation for share buy-backs revolves around creating 'safe harbours'. A safe harbour can broadly be defined as a provision that intends to eliminate a party's liability under the law, on the condition that the share buy-back is executed according to a set of constraints. Often compliance with a safe harbour is not mandatory, but it does

⁴⁷ See Directive 2006/68/EC

⁴⁸ Shareholders can authorize a share buy-back at the Annual General Meeting (AGM) or an extraordinary shareholder meeting. See Directive 77/91/EEC and "Burgerlijk Wetboek 2", Article 2:98.

⁴⁹ See Directive 2006/68/EC and Press Release "Ministerie van Justitie", 11 May 2007

⁵⁰ ASML announced in a press release on 29 March 2007 its AGM authorized a 30% share buy-back, and the subsequent cancellation of three times 10% of the outstanding share capital.

provide the company the most proper defence in case it is being sued for either market manipulation or insider trading. Hence: any company can deviate from the safe harbour, as long as it can prove that it is not in any way manipulating the market. European safe harbour conditions are described in EC regulation Number 2273/2003, as 'conditions for trading' and can be summarised as broadly as follows:

1. Pricing: repurchase price may not exceed the higher of the price of the last independent trade and the highest current independent bid price on the exchange.
2. Volume: the company or its intermediary may not purchase more than 25 % of the average daily trading volume (ADTV) of the shares in the market. The ADTV can be based on either the ADTV in the month preceding public disclosure of the share buy-back, or the ADTV in the twenty trading days preceding the date of the purchase.
3. Low liquidity: the repurchase may exceed the 25 % limit, provided that specific conditions are met.

Moreover, companies are restricted from trading in their own shares during so-called "closed periods", for instance around the presentation of quarterly results. A repurchase program can be continued through these closed periods in a case the company, has signed a discretionary agreement with a bank, or if it has laid out the exact structure of its share buy-back program at the announcement of the program. Continuation of a buy-back in closed periods thus has an upside, as the program can be finished quicker, but a downside as well, as flexibility is given up.

To visualise the impact of the safe harbour regulation on an open market repurchase program, I

Table 5.3:
Implication
safe
harbour

% Repurchased	No. of days required		
	15%	10%	5%
Average	179.6	119.7	59.9
Median	143.2	95.5	47.7

Source: Bloomberg, May 2007

computed the number of days required to repurchase 5%, 10% and 15% of shares outstanding respectively, for all companies in the major Dutch indices together: the AEX, AMX, and ASX indices. The results are based on trading 25% of the ADTV over the preceding six months. The results specified for each company are presented in

Appendix H, including the impact of repurchasing only 15% of ADTV. Naturally, the duration of the share buy-back will increase linear with a decreasing percentage of the ADTV.

The regulator uses disclosure requirements around transactions as the most important tool in maintaining safe harbour regulation⁵¹. The company engaged in a share buy-back is thereby given the opportunity to disclose it is in fact not manipulating the market. Prior to the start of the program full details of the share buy-back need to be made public including: the maximum consideration, the maximum number of shares to be acquired and the duration of the authorised period.

I should add that in most countries (including the Netherlands) treasury shares can only be held as such for a limited period of time (the Netherlands: three years) and treasury shares do not carry voting rights.

In the US, safe harbour regulation⁵² is broadly in line with Europe, although disclosure is much more limited. Still, also in this respect I observed some convergence, as the trend over the last years has been towards more strict disclosure. Moreover, Cook, Krigman and Leach (2003) prove that compliance with the safe harbour is widespread, but still not applied to all share buy-back programs. In general, US disclosure regulation does give management of a company more discretion and flexibility in terms of timing and volume of share buy-back programs, and more freedom since shareholder approval is not obliged.

⁵¹ In accordance with Article 19 of Directive 77/91/ EEC

⁵² The safe harbour regulation is outlined in Rule 10b-18 of the Securities and Exchange Commission

5.5.2 Taxation

As I explained in paragraph 5.2.4 before the tax treatment of share buy-backs in comparison to for instance dividends, is one of the major reasons of its popularity. Still, taxation of repurchases is different throughout the world, so generalisation of this hypothesis is not implicit. In this section I will explain the possible advantageous taxation of share buy-backs in the Netherlands and the US, to be able to conceptualise the conclusions from US academic literature as well.

In the US taxation of share buy-backs and dividends is substantially different as repurchase are taxed via capital gains tax, whereas dividends, just like in Europe, are taxed through a Dividend Withholding Tax (DWT). Hence, taxation of share buy-backs over dividends in the US is generally more favourable in the US, which explains that rationale for repurchasing shares.

In the Netherlands on the other hand the Dutch Dividend law⁵³ states that DWT is levied on share buy-backs as well as dividends. In case of a share buy-back the taxable amount constitutes of the difference between the repurchase price and the paid-in capital, which given the fact that the paid-in capital is often a fraction of the share price, can be considerable. In case the share buy-back is executed via the open market and the selling party is unidentified, the company executing the share buy-back has to account for the tax by grossing up⁵⁴ the consideration paid for the shares. Hence, repurchasing shares is relatively expensive for Dutch companies if tax needs to be levied. Still, under circumstances share buy-backs in the Netherlands can be tax exempt, thereby having a more favourable tax over dividends as well. These circumstances are laid out in the so-called "Exemption 4c", which I will discuss below. Moreover, any share buy-back with the purpose to reissue the shares in an ESOP, is exempt from DWT. Also, in case the share buy-back is executed via a tender offer or targeted trade and the selling party is identified, the unfavourable taxation can be undone, as some selling investors can reclaim DWT (e.g.: investors that qualify for the participation exemption⁵⁵, domestic institutional investors, and foreign pension funds).

Exemption 4c

I should elaborate on exemption 4c, as its implied tax advantage has been a major driver for share buy-back activity in the Netherlands. Shareholder remuneration through share buy-backs during a year is exempt from DWT, when the total value of shares repurchased is less than ten times the adjusted average cash dividends over last seven years. The average is adjusted by omitting the highest and lowest dividend over that time period, and corrected for inflation. Furthermore, the following conditions need to be met to qualify for the exemption:

- Exempt share buy-backs from the previous four years should be deducted.
- Shares should be listed on an accepted stock exchange.
- The cash dividend paid in the year the exempt share buy-back is executed should at least equal to the adjusted average dividend.
- The share buy-back should amount to at least 25% of the cash dividend of the buyback year

To create an overview of the implications of Exemption 4c for Dutch companies I have computed the share buy-back capacity for all Dutch companies in the AEX and AMX indices for the year 2007. Table 5.4 displays a summary of these share buy-back capacities, expressed as a percentage of market capitalisation. An overview of all capacities for AEX and AMX companies is included in Appendices I and J respectively. The most important conclusion is that on average, the remaining share buy-back capacity for the largest companies in the Netherlands is significantly above the former 10% threshold. Table 5.4 indicates that the average and median

⁵³ "Wet op de DividendBelasting (Wet DB), 1965", 2007 version

⁵⁴ See Glossary

⁵⁵ The participation exemption applies to investors holding a stake over 5% in a company

capacities are significantly higher if non-dividend paying companies, which obviously do not have any share buy-back capacity, are excluded from the sample.

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Table 5.4:
2007 Share
buy-back
capacity
exemption
4c

Share buy-back capacity (% of market capitalisation)				
	All constituents		Excluding non-dividend	
	AEX	AMX	AEX	AMX
Average	14,54%	17,98%	16,06%	20,81%
Median	10,52%	9,89%	13,16%	10,91%

Source: Bloomberg, Annual reports

5.5.3 Accounting

As explained on several occasions before the balance sheet is an essential element in explaining the mechanics and rationales for share buy-backs. The composition of the balance sheet is governed by the accounting rules applied, which in case of Dutch companies within the scope, are the International Financial Reporting Standards (IFRS). Under IFRS, share buy-backs are treated as deduction from owner's equity⁵⁶ (IAS 32 and Sutton, 2004), and no substantial differences in accounting treatment are presented for the different primary share buy-back methods. For instance a share buy-back executed through a tender offer at a premium to the market price technically has to be accounted for exactly the same as an open market share buy-back, consequently the reduction in retained earnings will be greater to reflect the premium. I will present in the upcoming chapters that introducing derivatives into the share buy-back program will result in substantial differences in accounting treatment. IFRS also presents guidelines on EPS accounting (IAS 33), but I will leave these rules outside the scope of this research.

The impact of IFRS on share buy-backs is an important trend driver in itself, since the constitution of these international accounting standards has forced companies to change their accounting policies from former national accounting standards⁵⁷. Changes in reporting standards may very well change the role of share buy-backs in shareholder remuneration, if the balance sheet representation is becoming more (or less) favourable. Moreover, it is broadly accepted that IFRS is converging towards US accounting standards (US GAAP), especially when compared to the former Dutch GAAP. This is an interesting fact as many trends in share buy-backs emerge in the US, before surfacing in Europe. Hence, it is likely that convergence towards US accounting standards, may imply a certain convergence towards US corporate pay-out strategies as well. This will become even more interesting in analysing potential for innovative share buy-backs in the upcoming chapters.

5.6 Popularity of share buy-backs

Throughout the chapter I have shown through US research and data that share buy-backs have been a popular tool in remunerating shareholders. In this section I want to summarise the US data and demonstrate the popularity of share buy-backs in the Netherlands as well. Vermaelen (2004) concludes that the number of open market buy-backs peaked in the late 1990s, but data shows the aggregate US\$ amount of repurchased shares continued to rise in the 2000s. According to 2006 Standard & Poor's⁵⁸ data the growth in repurchase activity continued into 2006, as the constituents of the S&P 400 index bought back a record US\$ 116 billion of shares in the second quarter of 2006. Together with Vermaelen's observation it does underline a significant trend in share buy-back activity, namely that in the US individual share buy-back programs are increasing in magnitude.

⁵⁶ See Appendix B for more details

⁵⁷ In the Netherlands: Dutch Generally Accepted Accounting Principles (Dutch GAAP)

⁵⁸ Standard & Poor's, 12 June 2006, see also figure 5.4

To demonstrate the popularity of share buy-backs in the Netherlands, I will use empirical data on the number of shares outstanding for all companies listed on Euronext Amsterdam, which is summarised in table 5.5. To create a reliable dataset I excluded any companies that were not listed for the whole period indicated in table 5.5 in computing the cumulative number of shares outstanding. Historically this number has increased year-by-year through newly issued shares. However the cumulative number of shares on Euronext Amsterdam has decreased for the first time when comparing ultimo 2006 and 2007 year-to-date data. This trend is even stronger, when focusing on the Dutch “large cap” companies, the members of the Amsterdam Exchanges Index (AEX), that display a decrease in shares outstanding each year since 2005.

Table 5.5: Shares outstanding on Euronext Amsterdam

Shares outstanding in the Netherlands, 12/2002 - 05/2007				
Date	All shares		Large caps (AEX)	
	Total number	% change	Total number	% change
10/05/2007	30,749,474,340	-0.423%	24,275,352,072	-0.624%
12/31/2006	30,880,059,995	2.684%	24,427,777,920	-2.081%
12/31/2005	30,072,898,142	1.676%	24,946,813,120	-0.404%
12/31/2004	29,577,116,289	4.646%	25,048,008,960	2.400%
12/31/2003	28,264,039,134	1.735%	24,460,831,928	1.792%
12/31/2002	27,781,952,311		24,030,154,368	

Source: JCF Quant

5.7 Conclusion

In the concluding paragraph to this chapter, I will summarise the theoretical aspects of share buy-backs and the implications of the regulatory framework and I will conclude on the reasons for their increasing popularity. Moreover, I will distinguish the emerging trends in shareholder remuneration on Dutch and global equity markets, relevant for the future of share buy-backs and the opportunities for innovative solutions to be presented in the next chapters. In doing so, I will provide an answer to research objectives 1 and 2 presented in chapter 1.

Research objective 1

Explain the growing popularity of share buy-backs, by laying out the concept and mechanics of primary share buy-backs, distinguishing international differences.

Firstly, in executing a (primary) share buy-back companies have a number of choices: they can apply a number of primary methods, finance the deal with debt or excess cash, and choose to cancel the repurchased shares or keep the shares in treasury. The buy-back method and financing applied depends on the objective a company has in repurchasing shares. All methods of repurchasing shares have proven to be successful in creating shareholder value. Tender offers effectuated at a premium are most effective, but also expensive. Hence, the open market share buy-back is the preferred method globally, as it is easy and cheap to execute, and provides more flexibility.

Secondly, in analysing the objectives for share buy-backs I found that there are basically two distinct options, as the share buy-back either has an offensive or defensive nature. Based on academic studies, signalling undervaluation (offensive nature) seems to be major rationale to engage in a share buy-back, effectively creating shareholder value. On the defensive side share buy-backs can be used to mitigate dilution effects of for instance an ESOP, or decrease the probability of a hostile takeover. Share buy-backs can also be employed to rationalise the capital structure of a company, especially when debt financed, a repurchase can aggressively increase financial leverage.

The popularity of share buy-backs has been shown through US and Dutch data, both in nominal terms and relative to dividends. In the US, where share buy-backs have long been an important shareholder remuneration strategy, the volume of share buy-backs has overtaken aggregate dividends, and Europe seems to pick up on that trend. However, the growth of buy-backs does

not seem to replace dividends. Companies that want to return more cash to their shareholders, while maintaining a prudent dividend increase, have chosen to increase shareholder remuneration through share buy-back activity. This is mainly due to the more flexible and discretionary nature of share buy-backs compared to dividends, which also explains that buy-back activity is more volatile than dividends paid. Furthermore, compared to dividends share buy-backs can be more favourable in terms of taxation.

Through this chapter, I have demonstrated that the regulatory framework poses an important set of constraints for share buy-backs, making it a crucial factor in explaining its popularity. The regulatory framework is composed of market manipulation regulation, taxation, and accounting rules. Changes in the aspects of the regulatory framework are likely to exert significant influence on share buy-back activity.

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Research
objective 2

Elaborate on emerging and future trends that affect corporate pay-out strategies globally and in the Netherlands.

Throughout the course of this chapter I have pointed out a number of emerging trends, likely to impact shareholder remuneration strategies in the future:

- Dutch companies are still cash rich and relatively under-leveraged in an international context.
- The magnitude of individual share buy-back programs is increasing.
- The globalisation of financial markets effectively makes corporate cultures converge, so the traditional Rhineland companies are becoming increasingly Anglo-Saxon, implying a stronger role for the shareholder, which is also formalised in the Dutch corporate governance code.
- Accounting rules are converging as well: IFRS accounting is more market-driven than former Dutch GAAP, and more closely resembles US GAAP.
- The increasing shareholder pressure is eminent through increased presence of activist shareholders such as hedge funds. This alters the risk appetite of companies and results in a more short term focus. Increasing shareholder rights embedded are likely to accelerate share buy-back activity in the Netherlands.
- Private equity funds effect share buy-back activity, as they might force companies to re-leverage themselves and create excess cash position via the purchase of company assets.

Concluding, the increased shareholder pressure and more short term focus, together with the possibility to increase leverage, will force companies to distribute excess cash more quickly to remunerate their shareholders. As open market share buy-backs within the safe harbour can be a lengthy process, and recently changed regulation allows for buy-backs of larger magnitudes, tender offers might become more popular. Moreover, in creating a more (time) efficient repurchase program, a discretionary agreement with an investment bank to execute the share buy-back on behalf of the company can help in accelerating the share buy-back. In the remainder of this report I will assess whether innovative, derivative-based share buy-backs can answer to the trends sketched here.

6. Theory: Innovation in share buy-backs

To describe the objective of this chapter, I would like to recall figure 4.2, the conceptual model for the second stage of the project, and focus on the theoretical part (figure 6.1). As figure 6.1 indicates, innovative share buy-backs are primary share buy-back methods enhanced with equity derivatives, which are sometimes referred to by academics (e.g. Grullon and Ikenberry, 2000) as ‘synthetic repurchases’. Both from theoretical and practical points of view using these instruments can improve the effectiveness of a share buy-back, by for instance: minimising the impact on share liquidity, increasing the pace of buy-back, providing a hedge to certain risks, or simply through lowering costs.

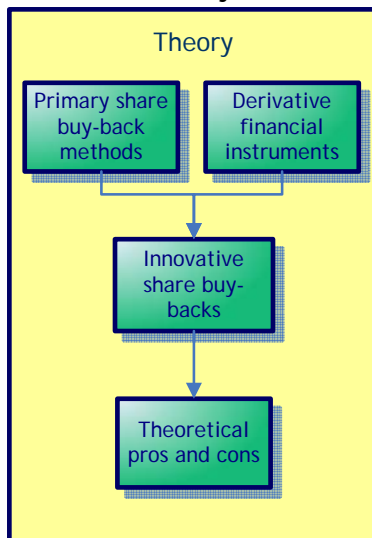


Figure 6.1: Theory of innovative share buy-backs

In this chapter I will introduce a number of financial instruments that can be used to enhance share buy-backs. Thereafter I will apply these instruments to the four primary share buy-back methods described before to create the innovative share buy-backs and conclude on their impact theoretically. In the next chapter I will take on a more practical approach by describing historical US data on

innovative buy-backs, as well as a number of case studies.

6.1 Derivative financial Instruments

As stated above, this section will briefly describe a number of derivative financial instruments that can be applied to enhance share buy-backs (paragraphs 6.1.1 until 6.1.4). In paragraph 6.1.5 I will elaborate on the settlement methods of these derivatives. Since derivatives used in share buy-backs are mostly over-the-counter (OTC) instruments I will also focus briefly on the OTC market for equity derivatives.

6.1.1 Plain vanilla options

Plain vanilla options⁵⁹ used in innovative share buy-backs include:

- Plain vanilla puts: A put option on a share gives the buyer the right to sell the underlying stock at a specified strike price at a certain date (European style) or during a fixed period of time (American style) from the writer of the option.
- Plain vanilla calls: A call option on a stock gives the buyer the right to sell the underlying stock at a specified strike price at a certain date (European style) or during a fixed period of time (American style) from the writer of the option.

Plain vanilla options can be either exchange traded, or over-the-counter (OTC) instruments. Given the strike price of an option and the price of the underlying share, an option can be either in-the-money, at-the-money, or out-of-the money.⁶⁰

6.1.2 Synthetic options

Synthetic options might replace plain vanilla options in a share buy-back, especially if the regulatory framework is more favourable, e.g. for accounting or tax reasons. McDonald (2004) shows that plain vanilla put sales and call purchases are tax-disadvantaged relative to the equivalent synthetic option. The Put Call parity⁶¹ relation can help traders in recreating an

⁵⁹ See the glossary for a brief overview of option terminology.

⁶⁰ Idem.

⁶¹ The put-call parity relationship is based on a number of conditions, including no arbitrage. An example of a synthetic option position created through the parity is the ‘covered call’ position (see glossary).

option position synthetically, through portfolios of other plain vanilla options, shares and bonds. Synthetic options are mostly OTC instruments, since illiquid instruments are needed to construct the synthetic options. Given the more strategic scope of this report, I will generalise the impact of plain vanilla and synthetic options on share buy-backs, further research could be executed later to sketch the specific impact of synthetics in share buy-backs.

6.1.3 Transferable Put Rights

Transferable Put Rights (or TPRs) are derivative financial instruments that are closely related to put options. TPRs also give shareholders the right to sell a share at a fixed price (the strike price) within a stated period (the time to maturity). However, instead of being issued by a financial institution or exchange they are always issued by the company itself on their own shares, which is sometimes referred to as issuing put warrants. Further, the instrument differentiates itself from the traditional option, as a number of TPRs is needed to be able to sell one share. In other words: the TPR is a fraction of a put. This fraction is still tradable, or transferable in itself, hence the name 'Transferable Put Rights'. The right granted through a TPR can be closely compared to rights issues on shares in equity markets. The put right is referred to as transferable because it can be traded on the market, typically a market especially created to trade TPRs. TPRs are by definition customised OTC instruments.

6.1.4 Forward contracts

A forward contract is a derivative financial instrument between two counterparties to buy or sell an asset or pool of assets at a future point in time at a predetermined price. Forward contracts are often exchanged at no cost initially, and the terms of the contract determine how it is settled at maturity (the settlement date). As I will explain in more detail below, settlement can be either financial, or physical.

6.1.5 Settlement Methods

As I stated in the examples above a derivative contract is always a contract between two counterparties, with certain a future maturity date. At that point in time the derivative contract should be settled. Settlement can basically be done in two ways: gross (physical) or net (financial). In case of gross settlement one of the counterparties will deliver the underlying asset physically to the other counterparty, mostly in return for cash (for options: the strike price). Given the physical delivery aspect this settlement method is also referred to as *physical settlement*. If the terms of the derivative contract include a net settlement, than this implies that at maturity the cash flows between the two counterparties are netted, and the balance of these cash flows should subsequently be transferred between the counterparties, which is also dubbed *financial settlement*. The financial settlement can be effectuated in cash, which is called a net cash settlement, or it can be effectuated by transferring the equivalent value in shares, which is called a net share settlement. I will demonstrate in the next section that settlement methods have a major impact on the implementation of innovative share buy-backs. In chapter 8, I will show that regulatory treatment also differs with settlement method, which can be a decisive factor in selecting a certain buy-back solution.

6.1.6 Over-the-counter derivative contracts

Within the over-the-counter (OTC) financial instruments, two different types can be distinguished: traded OTC instruments and customised instruments. The latter are generally applied in enhancing share buy-backs, where the company engages in a direct contract with customised terms, with an investment bank. Data published by the Bank for International Settlements (BIS, 2006) on OTC derivative market activity shows that OTC equity derivatives are a growing phenomenon.⁶² The same source mentions that in Europe the percentage of

⁶² OTC equity derivative positions increased 27% and 17% respectively in the second half of 2005 and first half of 2006. The notional amount outstanding in equity derivatives end June 2006 totalled US\$ 6.783 billion: US\$ 1.423 billion in forwards and swaps, and US\$ 5.361 billion in options.

equity derivatives traded via OTC markets is twice as high compared to the US, which indicates that derivative trading is more focused towards OTC markets in Europe.

6.2 Innovative share buy-back strategies

In this section I will describe the impact of including each of the derivative financial instruments sketched above into the share buy-back program.

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Table 6.1:
Types of
innovative
share buy-
backs

1. Share buy-back enhanced with written put options
2. Share buy-back enhanced with purchased call options
3. Accelerated Share Repurchase
4. Forward Equity Purchase
5. Share buy-back executed through Transferable Put Rights

I will elaborate on five specific innovative share buy-back strategies, as table 6.1 indicates. In describing these methods I will also conclude on the theoretical benefits implied by these strategies over the primary share buy-backs sketched in the previous chapter. In that process I will focus especially on the major rationales found in section 5.2: signalling power and impact on capital structure. Although the structuring of a share buy-

back enhanced with written puts and purchased calls is roughly the same, their rationale is quite different, and hence I will discuss those separately.

Each description will be composed of roughly the same elements:

- A brief rationale for the specific share buy-back solution
- Linking the innovative share buy-back to one of the primary methods
- Reference to the derivative financial instrument applied
- The mechanics at inception and settlement options of the deal at maturity
- Reflection on the contribution of the method to share buy-back objectives
- References to cases and detailed case studies

6.2.1 Share buy-back enhanced with written put options

The main rationale for a company to enhance a share buy-back program with written puts is to reduce the costs of the share buy-back by collecting put premiums upfront, especially if the company has a bullish outlook for the company's share price. A bullish outlook can be safe to assume during a share buy-back, as research has proven that a share buy-back is supportive of share price. Writing puts can thus be an effective of bringing down the net cost of the buy-back program. I will reflect on this after sketching the mechanics of this type of transaction.

The put-writing strategy is mostly linked to an open-market share buy-back, but could be combined with other strategies as well. At inception of the deal, a (synthetic) put is written by the repurchasing company, sometimes to a counterparty through an OTC market, but mostly through a directly negotiated contract with an investment bank. Although I will not go into detail on the rationale for an investment bank to enter into these put options, prior research (Atanasov et al, 2004) has shown that banks are willing to enter into these contracts, which can be profitable as the bank indirectly acquires valuable non-public information.

The exact mechanics of the deal are dependent on the strike price of the put option and the settlement method. In general one can conclude that the higher the strike price is, the higher the upfront collected premium will be. But on the other hand a higher strike price, and the higher the probability will be that the option will mature in-the-money, and hence the counterparty will exercise the option right. Physical settlement can be chosen when the company wants to effectively repurchase the shares via the option construction, whereas financial settlement is the preferred option, if the company uses the options primarily to bring down the cost of the program. The actual repurchasing of shares can consequently be initiated via an open market share buy-back.

At maturity, the share price can either be: above the strike price (out-of-the-money), or below the strike price (in-the-money). When the options mature out-of-the-money, the options will

not be exercised by counterparties, and the company has the option to adjust the strike price and renew the put writing program. When the options mature in-the-money, the options will be exercised by counterparties. Depending on settlement method the position can be net settled in cash or shares, or the bank physically delivers the shares to the company at the strike price. The latter case is not per definition negative, as the company will receive shares, albeit at the strike price, which is above market price at the time of exercise, but might still be below the share price at inception of the share buy-back.

A written puts share buy-back in general sends out a positive signal to the market, as it demonstrates a bullish outlook on the company's shares. Empirical research by Jenter, Lewellen and Warner (2006) state that companies writing puts significantly outperform their benchmarks, which indicates the put issue conveys a strong signal to the market. Obviously, the relative signalling power will be larger if the strike is above the spot price, in which case the share price is more likely to rise. There is no implied leverage effect in using put options in a share buy-back, although debt financing could also be implied in this strategy. An important disadvantage of using put options to enhance an open market share buy-back, might be the relatively lower flexibility, as the terms of the options are binding. More flexibility can be created by using series of options with different maturities rather than a single maturity, thereby replicating the open market share buy-back (Stonham, 2004).

Concluding, a written puts strategy is most effective if a company is confident that announcing the share buy-back will cause share price to increase, and the option premiums collected upfront can be used to partially fund the repurchase program. The signalling power embedded in writing puts is likely to affect the share price positively.

6.2.2 Share buy-back enhanced with purchased call options

Through the purchase of call options a company effectively hedges price risk, as the price at which share will be repurchased is capped. In a bullish market, capping the repurchase price can reduce the cost of the share buy-back. In a highly volatile market, purchasing calls can be beneficial as it provides the company with more certainty about the repurchase price.

A call-purchasing strategy is mostly linked to an open-market share buy-back, enhanced with a (synthetic) call that is purchased by the repurchasing company from a counterparty through an OTC market, or a customised contract with a bank. The cost of acquiring the call options at inception is governed by the strike price: the higher the strike, the lower the cost of purchasing the calls will be. In other words, a strike price above the spot price will make the options more affordable for the company initially, although it will increase the settlement price at maturity.

Equivalent to the written put options there is the choice to settle financially or physically at maturity. Should the share price finish above the strike price, the options will be exercised by the company, yielding the company its shares below the market price (physical settlement), or a financial compensation (financial settlement). In case the share price finishes below the strike price, the options will not be exercised, and the shares could be repurchased through the market, at a price that the company is likely to perceive as undervalued.

Concluding, through purchasing calls a company ensures its share buy-back price will never exceed the strike price of the calls. Hence, this strategy is a perfect method for the company to hedge against increasing prices or market volatility. The option premium paid at inception should be regarded as an 'insurance premium' for this hedge. The signalling power implied in the share buy-back announcement is likely to be effective in pointing out undervaluation, as the company buys insurance for a bullish market. In that perspective, the higher the strike price is, the more powerful the signal for undervaluation will be. Equivalent to the written puts strategy described above, more flexibility can be created by using series of options with

different maturities rather than a single maturity, thereby replicating an open market share buy-back (Stonham, 2004).

6.2.3 Accelerated Share Repurchase

The accelerated share repurchase (ASR) has been designed such the company obtains and retires shares at inception, enjoying the instant EPS and leverage effects, while a third party repurchases the shares via the open market afterwards. Essentially, the ASR enables the company to combine the benefits of a tender offer (quick execution) and an open market share buy-back (no premium to market price).

The ASR is closely linked to an open-market share buy-back, but has aspects of a targeted share buy-back as well, through the embedded share borrowing. The strategy is implemented by using forward contracts that have zero value initially and are financially settled at maturity, in cash or the equivalent amount of shares, mostly at the discretion of the company.

At inception, the investment bank lends and short-sells the shares to the company at the initial price, which retires the shares immediately after obtaining them. Subsequently, the bank initiates an open market share buy-back, to be able to return the borrowed shares. To be able to settle at maturity the price difference between the initial price paid by the company and the volume weighted average price (VWAP) paid by the bank in the open market, the two counterparties enter into a special financially settled forward contract. Summarising, from the perspective of the company the ASR is constructed of two elements: purchasing shares and entering into a financially settled forward contract. For the investment bank a third element is added as the bank has to purchase the borrowed shares in the open market.

At maturity, all elements of the deal need to be settled, which means:

- The investment bank returns the repurchased shares to the lender.
- The forward contract is financially settled between the counterparties: the company pays (or gets credited by) the investment bank the difference between the initial price and the VWAP.
- The bank pays the company the time value of the cash received at inception, crediting any dividends received.

ASR program are mostly not executed over long time stretches, with typical maturities varying from 3 to 6 months.

The ASR can be the ideal share buy-back solution if the company wants to repurchase shares fast, or even instantly, without paying the premium embedded in tender transactions. Also, given the nature of the deal, the ASR is suitable regardless of undervalued or overvalued shares, since the price risk in an ASR is borne by the company, although the investment bank covers the short position. Share price support is similar to an open market repurchase, but still the signal is stronger as the company shows it is determined to act instantly, and by using debt financing it can instantly enhance the balance sheet with increased leverage. Instant EPS support and re-leveraging are powerful tools in dealing with activist share holders, such as hedge funds, or fending off take-over threats⁶³. Of course, the bank has to be able to borrow the shares via institutional investors⁶⁴, which means the ASR is only practically feasible for large companies.

6.2.4 Forward Equity Purchase

The forward equity purchase enables a company to initiate a share buy-back immediately, which is only paid at maturity, so it is in fact a share buy-back financed by debt. The forward equity purchase is also referred to as structured share repurchase (Cook and Kim, 2006), or

⁶³ See section 5.2 for more information on these share buy-back objectives.

⁶⁴ Mutual funds with long-term holdings, such as pension funds are frequent lenders of shares.

Forward Purchase Agreement (FPA). The structuring of this deal is comparable to an ASR, although in this case shares are delivered at maturity instead of at inception.

The forward equity purchase is closely related to an open market share buy-back, and a forward contract is used in executing the transaction. At inception, the company enters into an agreement with an investment bank to deliver a certain number of shares at maturity at a certain strike price. The bank initiates a program in the open market to be able to deliver the share immediately. The strike price is mostly the forward price⁶⁵ for the shares plus a bonus to cover the financing cost for the bank, or the VWAP plus a financing bonus. At maturity, the forward contract is settled physically, as the bank delivers the shares to the company at the price embedded in the contract. Equivalent to the ASR typical maturities in these type of deals rarely exceed 6 months.

Unlike the ASR, the company does not enjoy instant EPS effect. However, an instant leverage effect is implied by the contingent liability to the company embedded in the forward contract. As this effect could also be created by borrowing in the market (e.g. selling bonds) and initiating an open market share buy-back, this strategy does not convey a particularly strong signal. Still, a forward equity purchase could bring down the price of the share buy-back, when the discretion provided to the investment banks (e.g. in terms of timing of trades), results in a lower average price.

6.2.5 Share buy-back executed through Transferable Put Rights (TPRs)

When a buy-back is executed by distributing TPRs to shareholders, this is implicitly a fixed price tender offer, with the strike price indicating the tender price. However, applying TPRs can optimise the tender offer, as it allows investors who choose not to tender to benefit from the repurchase premium as well, as they are able to dispose.

This share buy-back strategy distinguishes itself from the other strategies, as it is not in any related to an open market share buy-back. The derivatives used are TPRs, which are distributed to all shareholders for free. Hence all shareholders obtain rights to a free put that are tradable in themselves, with a strike that is mostly a premium over the current share price. The number of put rights needed to sell a share is governed by the percentage of shares the company wants to repurchase. For instance a repurchase of 5% would imply a shareholder needs 20 TPRs to be able to tender one share.

At inception of the transaction, the TPRs are distributed amongst shareholders. Thereafter, the tendering period starts and during a set number of weeks (typically 2 to 4 weeks) holders of TPRs have the opportunity to buy or sell their rights. Hence, investors that do not want to tender their shares (for instance because of tax reasons) can sell their TPRs at a certain price to shareholders that do intend to tender. At the end of the tendering period, shareholders can tender shares, proportional to the number of TPRs they hold.

TPRs were first used in the 1980s, by Gillette in the US, according to a detailed case study written by Kale, Noe and Gay (1989). In their case study, Kale, Noe and Gay conclude that the structure of this strategy makes it optimal for companies that have a heterogeneous shareholder base. Through a TPR strategy, the whole shareholder base, which may differ in tax treatments, or reservation prices, will benefit from the tender. Moreover, the company benefits as the remaining shareholders have higher reservation prices. The TPR based share buy-back is probable to boost share price upon announcement, as the premium to market price is a powerful signal of undervaluation. Also, tender offer share buy-backs have a much quicker timeline than open market buy-backs, hence it facilitates quick re-leveraging. Conclusion: using TPRs the share buy-back can be executed effectively for a predetermined number of shares (defined by parameter of TPRs) allowing all shareholders to benefit

⁶⁵ Using a set of pricing assumptions, including zero arbitrage, the forward price can be computed from the spot price of the shares, the risk free interest rate and any dividends during the contract period.

6.3 Conclusion

Through this chapter I intended to formulate and answer to research objective 3:

.....
Research
objective 3

Explain how innovative financial instruments can be used in enhancing a share buy-back programme and the theoretical (dis)advantages implied.

By sketching a number of innovative share buy-back strategies, I showed that (OTC) equity derivatives can be used to complement or (partially) substitute primary share buy-backs. I have distinguished five specific innovative share buy-back strategies:

1. Share buy-back enhanced with written put options
2. Share buy-back enhanced with purchased call options
3. Accelerated Share Repurchase
4. Forward Equity Purchase
5. Share buy-back executed through Transferable Put Rights

In describing the theoretical mechanics of these strategies, I have shown that derivatives are not essential for a company in acquiring its own shares, but in certain situations, using the innovative, derivative-based solution does have some clear-cut benefits, such as lower costs, enhanced signalling power, and increased time efficiency. Some of these benefits are unique for a specific method and depend on specific circumstance, as I have demonstrated above. These specific pros and cons embedded in the theoretical mechanics of the five strategies will be summarised later in table 8.1, in the conclusion to chapter 8.

However, in this paragraph I want to present some general (dis)advantages of using derivatives over the conventional open market share buy-back. First, the innovative share buy-backs have minimal impact on liquidity of the company's shares, as no informed trader is acting in the market. Second, cash flows in a derivative enhanced share buy-back are easily manageable, as the timing of the buy-back can be set through the terms of the derivatives. Moreover, all derivative-based strategies imply a discretionary agreement with a bank, which is the counterparty in the derivative contract, and hence trading can continue in "closed" periods. However, a general disadvantage over the conventional open-market buy-back is the lower flexibility of a share buy-back enhanced with derivatives: once a company enters into a derivative contract it can generally no longer cancel the transaction. Another general disadvantage that applies to selling derivatives especially, is the significant downside risk implied in these instruments. The downside risk can be minimised by using derivatives with relatively short maturities.

7. Innovative share buy-backs in practice

To leverage the theoretical structures in the previous chapter to a more practical level, I will present US data on innovative share buy-backs (7.1) and extract the trend drivers from that data (7.2). Thereafter I will present some case studies of innovative share buy-backs (7.3). As stated on a number of occasions, the US has been leading the world in this area, or as the International Financing Review puts it at the end of the 1990s:

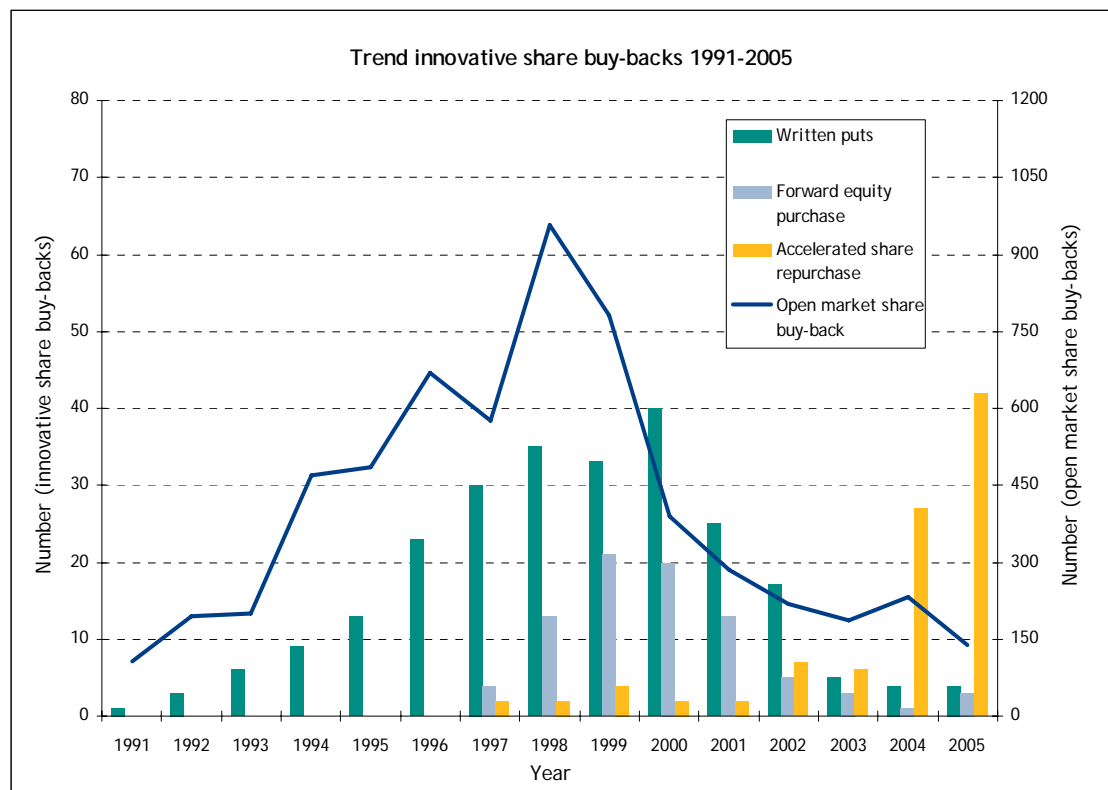
“US derivative-based share buybacks continued to steam ahead, but have yet to make a real impact in Europe.”⁶⁶

Hence, historical US data is extremely valuable as it can be used to identify what has driven companies over time in choosing specific innovative solutions, i.e. the trend drivers. These trend drivers are interesting, as they might be the future trend drivers in the Netherlands.

7.1 Innovative share buy-back trend in the US

To depict the trend in innovative share buy-backs in the US, I have edited data compiled by Cook and Kim (2006) from Standard & Poor's and the Securities Exchange Commission (SEC)⁶⁷. The dataset starts in 1991, as from that year forward listed companies in the US have been allowed by the SEC to issue put options on their own shares. US companies are, contrary to European companies, not allowed to purchase calls on their own shares, hence this category is not included. Neither is the TPR strategy, which seems to be more of a European strategy, and could also be conceptualised as a variation to the written puts strategy. In figure 7.1 below, I depicted the number of innovative share buy-backs per year, and included the number of open market share buy-backs to provide a frame of reference.

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Figure 7.1:
Innovative share buy-backs in the US



⁶⁶ International Financing Review, "First-half rate reversal accelerates swing to credit", 10 July 1999

⁶⁷ Cook and Kim (2006) counted the number of derivative based share buy-backs by searching financial statements filed in the EDGAR online database of the SEC.

The chart in figure 7.1 clearly depicts that of the innovative methods, put writing has been applied the most. As I explained in the previous chapter, writing puts can be a very useful strategy, as it brings down the cost of the repurchase program, by collecting the put premiums upfront. Along with the increasing popularity of open market share buy-backs, the number of put-writing enhanced share buy-backs increases sharply in the 1990s. During these years the markets were mostly bullish, which makes a put-writing strategy safe and profitable. In the late 1990s, right before the internet bubble, the forward agreements also reached their peak, which can be explained by the implied borrowing in this strategy, which will only be appreciated in a bullish market. US companies were still cash-rich in the early 2000s, which explains, why despite the downfall in equity markets from late 1999 onwards, the total number of innovative buy-backs peaks in 2000. With the downfall in the market the number of open market buy-backs also decreased. However, as Vermaelen (2004) states and data provided earlier⁶⁸ proves the aggregate US\$ amount of open market still increased during these years.

Accelerated Share Repurchases (ASRs) were first observed in 1997, but only started to gain significant popularity in 2002. In that year, a shift seems to occur in the application of derivatives in share buy-backs. Two reasons can be pointed out for this 'derivative preference shift' (Cook and Kim, 2006). Firstly, the accounting treatment for written puts and forward agreements became less favourable from 2002 on with the introduction of FAS150, which implied increased earnings volatility, as gains and losses on the derivatives had to be included in the profit and loss account.⁶⁹ Secondly, after the market crashed when the internet bubble burst in 2000, companies were uncertain whether they were undervalued or overvalued. The ASR filled the gap, as the implied derivative in this method does not have the unfavourable accounting treatment, and its structure makes the method applicable in a bearish or uncertain market as well. A written put strategy, as well as a forward equity purchase is rather risky in a bearish market. Hence, the usage of these strategies has declined to insignificant levels at this point, although ASRs continue to flourish⁷⁰.

7.2 US historical trend drivers

With the help of the data on innovative share buy-backs in figure 7.1, and the interpretation of that data, I conclude that the history of derivative-based share buy-backs has been governed by three dominant drivers:

- Regulation
- Market sentiment
- Accounting rules

First, regulation is rather obvious, as companies will be reluctant in engaging into strategies that are not allowed by law. The main reason for this reluctance is that acting outside the regulation implies a certain risk that the company might be accused of market manipulation. Still, I should add that most market manipulation regulation is intended to create a safe harbour, and acting outside the safe harbour does not automatically imply market abuse.⁷¹

Second, market sentiment seems to be an important factor in choosing a buy-back method, especially the expectations for the near future, i.e. whether the market will be bullish or bearish. Written put and purchased calls strategies work best in a bullish environment, whereas an ASR or forward equity purchase can also be successful in a bearish or volatile market. In this context the role of the investment bank that is counterparty to the company, is also quite interesting. As I stated earlier in the previous chapter, Atanasov et al (2004) show that

⁶⁸ See for instance paragraph 5.2.4

⁶⁹ According to US GAAP (FAS 150), the written put option and forward equity contract will be recognized as a liability, carried at fair value, with changes in fair value recognized through earnings.

⁷⁰ International Financing Review, "Share repo window stays open", 14 January 2006

⁷¹ See also paragraph 5.5.1

investment banks are willing to commit in seemingly unprofitable derivative contracts, such as put options in a bear market.

Third, accounting has proved itself extremely dominant in driving buy-back trends in the US. The impact of the implementation of FAS 150 in the US, demonstrates especially that companies are very reluctant to engage in any share buy-back method that implies a volatility risk for its profit and loss account.

7.3 Case studies

After sketching the US trend in innovative share buy-backs and highlighting the major trend drivers, I want to elaborate on a select number of companies that (successfully) applied innovative share buy-backs. I will present summarise five cases from the US as well as Europe, to represent each of the innovative methods, by the cases, focusing on the extend to which the objectives were met and the role within the corporate pay-out strategy. In doing that I will refer to four one-pagers, which are included the Appendix, describing the companies executing the transactions in a similar structure. The cases are merely included to demonstrate the practical application of innovative share buy-backs, and do not intend to provide an event study or significant prove of success.

7.3.1 Share buy-back enhanced with written put options

Microsoft⁷² has been one of the most actively repurchasing companies in the US, announcing record share buy-backs in the 1990s and into the 2000s, as it only started to pay dividends recently. Throughout the 1990s it was common practice for Microsoft to enhance their share buy-backs with written puts, predominantly to bring down the cost of the program, by collecting the tax-free put premiums upfront. In the six years starting in 1995 Microsoft repurchased over US\$ 15 billion of shares, through share buy-backs enhanced with written put options. Over these years the option premiums on average made up for about 11% of the cost of the share buy-backs. The success of the strategy is closely linked to market sentiment; throughout the 1990s the general market was bullish, as was Microsoft's share price. In such a market, writing puts can be successful, which is proven by the Microsoft case. The impact can be quite significant, besides bringing down the costs of the share buy-backs, the put premiums impacted on the company's net income as well, contributing between 3% and 12% to Microsoft's profits in the years 1995 until 2000 (Gyoshev, 2001).

7.3.2 Share buy-back enhanced with purchased calls

Dutch company ASML⁷³ executed a share buy-back by purchasing calls in 2006, aiming to mitigate dilution effects that resulted from the issuance of new shares to cover the conversion of convertible bonds. In October 2006, ASML announced that it had purchased call options, to gain the right to purchase 14.9 million of its own shares, about 3.10% of the shares outstanding. ASML paid €270 million in cash to finance the share buy-back and the underlying call options, which implies ASML has paid a 3.7% premium to the market price in order to repurchase the shares. The premium demonstrates that purchasing calls to enhance a share buy-back comes at a price, which functions as an insurance premium. Moreover, the case underlines the role call options have as a hedging instrument.

7.3.3 Accelerated Share Repurchase

The Home Depot⁷⁴ is a home improvement retailer, mostly active in the US. The company announced in December 2006, that it had executed a \$3 billion accelerated share repurchase (ASR), representing 3.2% of its market capitalisation. The ASR, which was financed with debt, is part of an extensive share buy-back program, which is executed predominantly via

⁷² One-pager on Microsoft is attached in appendix K

⁷³ See appendix L for a case-study on ASML

⁷⁴ See Appendix N for more details

conventional open market share buy-backs. The company's dividends are limited, so the share buy-backs are an important tool in remunerating shareholders. Moreover, the ASR was intended to instantly increase leverage, in part to fend off the threat of a leveraged buy-out. The transaction was clearly appreciated by investors as the share price increased steadily in the three months following the announcement of the deal.

To provide some more examples of ASRs in the US, I included a sample of bigger and smaller companies and placed the ASR within their share buy-back strategies:

Company	Year	Country	Amount	% market cap	Details on additional share buy-backs
Motorola	2006	US	\$1.2bn	2,40%	\$4bn open market program, announced 2005
Alexander & Baldwin	2006	US	\$63m	3,30%	More open market buy-backs
Hewlett-Packard	2004	US	\$1.3bn	2,50%	Additional \$3bn open market share buy-back
Home Depot	2006	US	\$3bn	3,20%	2002 -2005: repurchased 19% of shares outstanding
Rockwell Collins	2005	US	\$196m	2,30%	Total \$498m share buy-back program
DuPont	2005	US	\$3bn	7,00%	Additional \$2bn open market share buy-back
Hewlett-Packard	2005	US	\$1.7bn	2,50%	\$4.8bn share buy-back program

Source: Bloomberg, SEC filings

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Table 7.1:
 Sample ASR
 transactions

7.3.4 Forward Equity Purchase

In 2006 ASML⁷⁵ engaged in multiple forward agreements with an investment bank, to effectuate a share buy-back totalling € 400 million, or 5.25% of its market capitalisation. The share buy-back was intended to return capital from operating activities to the shareholders in a tax-efficient manner. As ASML does not pay dividends it does not have share buy-back capacity in terms of Exemption 4c⁷⁶. By engaging in the forward contract ASML argued it purchased the shares from an identifiable counterpart: the investment bank, which paid the dividend withholding tax (DWT) and subsequently reclaimed it. Thereby, ASML tried to avoid having to pay taxes for the share buy-back, which it should have done in case of a conventional open market share buy-back, with unidentifiable counterparties. In 2007, the tax authority argued that ASML was indirectly executing an open market share buy-back and hence it should have accounted for the DWT levied on the share buy-back⁷⁷. In this case I should conclude that ASML did not meet its objective of repurchasing shares tax-efficiently.

7.3.5 Share buy-back executed through Transferable Put Rights (TPRs)

In 2005 Swedish-Finnish telecommunications company TeliaSonera⁷⁸ executed a tender offer via TPRs to repurchase 4% of their shares outstanding, for about 10 billion Swedish Kroner, financed with cash. The TPR method intends to provide all shareholders the opportunity benefit from a tender offer, and given the high acceptance rate of 98.8% the company has met that objective. Only some smaller shareholders did not participate in the offer, by neither selling their shares nor their TPRs. The share buy-back was finished quickly: within two months after announcement. Although the tender price included a significant premium to the market price (about 50%), the share price never reached that level, nor during or in the six months after the transaction. A possible explanation for the lacking impact, could be that part of the premium served to compensate shareholders for taxes, but I must conclude that in this specific case the embedded signalling power was minimal.

In 2006, a similar type of transaction has been executed by another telecommunications company, Swisscom, which used TPRs to repurchase 8% of its share capital, amounting to 2.2 billion Swiss Francs. The acceptance ratio in this deal was even higher, over 99% and the timeframe was similarly short.

⁷⁵ See appendix L for a case-study on ASML

⁷⁶ See section 5.5.2

⁷⁷ See Appendix G for press release of the Dutch ministry of finance.

⁷⁸ A one-pager of this case is included in appendix N

7.4 Conclusion

Summarising this chapter and concluding on its implications I will answer research objective 4:

.....
Research
objective 4

Find empirical evidence of innovative share buy-backs in the US and Europe, extract trend drivers and conceptualise these in assessing generalised pros and cons.

Through a number of cases and US data, I demonstrated empirical evidence of innovative share buy-backs. Since US companies has been more actively using innovative share buy-backs, I used historical US data to formulate trend drivers for using these innovative strategies. These trend drivers will be conceptualised in the next chapter to assess the potential for the five specific innovative strategies defined, which will be summarised in table 8.1.

Historic data on innovative share buy-backs in the US has shown that these methods have been actively employed, although they have always been largely outnumbered by open market share buy-backs. Analysing the data from 1991 until 2004, overall the written puts strategy has been by far the most popular innovative method. Moreover, the data reveals that an important shift has occurred in the preference of specific methods around the year 2002. This shift has been mainly attributable to a change in the accounting regulation, which is therefore an important trend driver. Also reluctance towards operating outside the safe harbour regulation has a significant impact on using innovative solutions, due to the risk that the company might be accused of market manipulation. A third trend driver is market sentiment, which has been an important factor in deciding between different innovative share buy-back strategies as well.

Although I did not try to prove significant prove through the cases I presented, I demonstrated some evidence of the theoretical benefits of the specific strategies as well as the trend drivers. Moreover, the cases I studied, led to a number of interesting observations. First, it seems innovative share buy-backs are often used to execute only a part of a bigger share buy-back program⁷⁹. Second, applying innovative strategies to avoid having to pay taxes for a share buy-back, is not probable to be successful in the long term. Third, the high acceptance rates for tender offers executed via transferable put rights, shows that despite the seemingly complicated structure of the transaction, investor appreciate this type of share buy-back.

In the next chapter I will apply these findings in coming towards the opportunities for the five strategies in the Netherlands.

⁷⁹ See cases and figure 7.1

8. Innovative share buy-backs in the Netherlands

In this chapter, I will take the last step towards formulating an answer to the problem statement. I will combine previous conclusions on theoretical pros and cons of innovative share buy-backs, the emerging trends in shareholder remuneration and historic trend drivers in the US, and reflect these on the five innovative methods. The result will be presented in a comprehensive summary, table 8.1. However, first I should introduce the regulatory framework, which sheds an important influence on the practical applicability of certain methods in the Netherlands.

8.1 Regulatory framework

In the previous chapter I mentioned that regulatory issues, and specifically accounting and market manipulation regulation, has been a major trend driver in US innovative repurchase activity. Hence, it is likely that regulation will be an important driver for European (Dutch) companies to assess if certain buy-back strategies are useful and eventually selecting a preferred method. Moreover, the regulatory framework might yield other constraints that could eliminate certain strategies, or make them very unfavourable. In describing the regulatory framework for innovative share buy-backs, the foundation is the regulatory framework for share buy-backs in general, sketched in section 5.5. Parallel to that section I will focus on three aspects: market manipulation, accounting, and taxation.

8.1.1 Market manipulation

In discussing market manipulation of innovative share buy-backs I should recall that in the Netherlands, this is governed by EU regulation on market abuse⁸⁰. Specifically EC Regulation No. 2273/2003 lays out exemptions from market abuse for share buy-back programs. The regulation is not very elaborate on innovative share buy-backs, but it does allow using derivatives in enhancing share buy-backs:

“Trading in own shares in ‘buy-back’ programmes may be carried out through derivative financial instruments.”

In the safe harbour⁸¹ section of the same regulation, the EC lays out conditions for trading derivatives in the context of a share buy-back:

“Where the issuer carries out the purchase of own shares through derivative financial instruments, the exercise price of those derivative financial instruments shall not be above the higher of the price of the last independent trade and the highest current independent bid.”

Hence the EC directive implies that to operate strictly within the safe harbour, the strike price of all derivatives, whether forward contracts or options should be below the share price upon exercise. Obviously, this limits the possibilities of using derivatives in share buy-backs. However, as stated before, operating outside the safe harbour does not automatically constitute market manipulation. The directive is merely a guideline, where interpretation of the line of reasoning is essential. In case the company, or its intermediary, can prove that through the transaction, the company itself does not benefit, while all shareholders do benefit from the share buy-back, it is probable that such a transaction does not constitute market abuse. Still, acting outside a safe harbour does imply some ambiguity for the company as well as the investment banking executing the transaction. Court rulings and jurisdiction could provide more certainty, but jurisdiction is non-existent, or at best extremely limited. Given the fact that within the EU, certain derivative-based transactions have been executed, this is probably a positive sign. Still, given the ambiguity, the company is likely to be reluctant to deviate from the safe harbour, and it will impose the bank executing the transaction to operate within the safe harbour. Within the safe harbour regulation further ambiguity exists about the possibilities the investment bank has in hedging its derivative position, when

⁸⁰ For general discussion see paragraph 5.5.1

⁸¹ Dubbed conditions for trading by the EC, more information on safe harbour see paragraph 5.5.1

executing a derivative-based repurchase strategy for a company. The hedging aspects are not included in the EC safe harbour directive, and neither I will go into great detail within this thesis. Follow-up research could be executed to create more certainty on these issues.

8.1.2 Accounting

As I already introduced in describing accounting for primary share buy-backs⁸², accounting for innovative share buy-backs is generally more complicated. Equivalent to accounting for primary share buy-backs, I will describe the accounting impact, by focusing on IFRS implications. Moreover, equivalent to a repurchase without derivative enhancement, under IFRS a company should recognise the repurchased shares as a deduction in equity, and no gain or loss should be recognised on the shares.

From the US data presented in the previous chapter, I learned that earnings volatility implied in certain strategies is not appreciated by US companies. Knowing that European companies are generally more risk-averse than US companies, it is safe to assume that European (Dutch) companies have a similar averse attitude towards earnings volatility. Within IFRS, the hedge accounting standards outlined in IAS 39 provide guidelines on how and when earnings volatility can be mitigated in using derivatives. However, IAS 39 does not apply to derivatives used in share buy-backs, as hedge accounting cannot be used if the underlying asset is the company's own equity. This means the rules of IAS 32 apply, and within this set of accounting standards, possible earnings volatility is linked to settlement methods. IAS 32 yields that all derivatives that are financially settled, or could possibly be financially settled, have to be carried at fair value, with subsequent changes in fair value recognised in earnings. Hence, in order to avoid fair value changes of derivatives being recognised in earnings, the terms of the derivative financial instrument should require physical settlement.⁸³

The impact of earnings volatility is obviously not the same for all types of derivatives, and differs for each company, as it is very much related to the volatility of the underlying asset. Hence, using derivatives with possible financial settlement might still work on the short term, as the volatility effect will be lower, but any gain or loss on the instrument still has to be accounted for. However, given certain conditions and circumstances, the risk of earnings volatility could still be acceptable to the company.

8.1.3 Taxation

Similar to accounting, the taxation of innovative share buy-backs is generally more complicated than the taxation of primary share buy-backs. The taxation framework for innovative share buy-backs generally distinguishes the taxation of the derivatives and the taxation of the repurchased shares as separate entities. Therefore, the tax framework for share buy-backs outlined in the Dutch dividend law also applies to all innovative share buy-backs in its entirety. Hence, any company repurchasing shares within its remaining share buy-back capacity, according to 'Exemption 4c', does not have to levy dividend withholding tax (DWT). Exceeding the capacity, together with unidentified counterparties means the consideration paid for the shares repurchased needs to be grossed up.⁸⁴

Derivatives have a tax impact, in case the instruments have an impact on earnings. Since I concluded earlier that given the IFRS treatment, European companies enhancing a share buy-back with derivatives, will generally use physically settled derivatives, this implies the additional tax impact on the share buy-back is limited. This treatment is different for financially settled derivatives, but given the low probability of these instruments being used

⁸² See paragraph 5.5.3

⁸³ According to IAS 32 premium received by selling derivatives that require physical settlement should be recognised in equity, and subsequently the derivative should be carried at amortised costs using the effective interest rate method of IAS 39

⁸⁴ See also paragraph 5.5.2 and "Wet op de Dividend Belasting (Wet DB), 1965", 2007 version

and the ambiguity on taxation of these complicated share buy-backs I will not go into greater detail on this.

However, there remains some general taxation ambiguity in using derivatives in share buy-backs, as recent developments have shed a new light on the tax impact of the discretionary role of an investment bank. As I stated in the conclusion to chapter 7, all derivative-based strategies imply a discretionary agreement with a financial intermediary (bank) to a certain degree. I cannot elaborate on the general impact on innovative buy-backs, as the statements provided by the tax Dutch authority⁸⁵ have focussed on forward equity purchases only. However, the statements clearly demonstrate that the Dutch tax authority wants to make sure innovative methods and discretionary agreements are not used to abuse the tax exemption for share buy-backs. Hence, additional taxation for option-based transactions are not likely as long the share buy-back program as a whole complies with exemption 4c. Still, I can conclude that in general complexity and ambiguity in taxation is likely to create reluctance with companies and their managers to apply certain innovative strategies.

8.2 Implications of regulatory framework

In this section I will reflect on the impact of the regulatory framework in the EU and the Netherlands on each of the innovative share buy-back methods, concluding on market manipulation and accounting. Due to the ambiguous nature of taxation in this area, as well as the limited impact of tax in case of physical settlement, I will not go into detail on the taxation for the specific innovative share buy-back and apply the general taxation framework, unless stated differently.

8.2.1 Share buy-back enhanced with written put options

According to the market manipulation directive, a share buy-back enhanced with written put options qualifies for the safe harbour, as long as the put options are written at-the-money or out-of-the-money. This implies writing put options will yield relatively low premiums compared to in-of-the-money put options, and the signalling power decreases with lower strike prices as well. Moreover, the quantities and maturities of the options used in the share buy-back, should be chosen such that the general safe harbour trading conditions presented in 5.2.1 are not violated. These conditions can be met by using series of options with different maturities rather than a single maturity, as I introduced earlier in paragraph 6.2.1. From an accounting point of view, using put options that require physical settlement are most favourable, as the possibility of financial settlement may imply increased earnings volatility.

8.2.2 Share buy-back enhanced with purchased call options

To comply strictly with the safe harbour calls to enhance a share buy-back need to be purchased either at-the-money or in-the-money, which means the options will be relatively more expensive than out-of-the-money ones at inception. On the other hand, the lower strike brings down the costs of acquiring the shares at maturity. The effect on signalling power is similar to the put options described above, a relatively lower strike price sends out a weaker signal of undervaluation. Also, series of options with different maturities can be used to make sure the share buy-back is compliant with the safe harbour trading conditions. Similar to using put options, from an accounting point of view, call options that require physical settlement are most favourable. Any other settlement method includes a certain risk of increased earnings volatility.

8.2.3 Accelerated Share Repurchase

The strike of the embedded forward contract in the accelerated share repurchase (ASR), which is set at the volume weighted average price, complies with the safe harbour. Hence, the ASR is

⁸⁵ See appendices F and G (in Dutch)

not likely to violate the safe harbour regulation, as long as the investment bank repurchases the shares according to the conditions for trading.

However, the accelerated share repurchase by definition includes a financially settled derivative. Hence, the accounting treatment of this method implies unfavourable earnings volatility. This leads to the conclusion that the applicability of the ASR, which is still a growing phenomenon in the US, is quite limited in the Netherlands⁸⁶. The ASR might still provide itself useful in case of a severe need to quickly re-leverage, or instantly boost earnings per share when circumstances might tempt the company to accept the risk of increased earnings volatility. As I stated in 8.1.2 in these cases the execution period should be short (e.g. one to three months), to minimise the volatility impact, and the company should have strong arguments to validate the risks borne. The ambiguous tax treatment of a financially settled derivative as an element of a share buy-back adds to the risks embedded in the Accelerated Share Repurchase.

8.2.4 Forward Equity Purchase

The forward contract embedded in the forward equity purchase requires the investment bank to physically deliver the shares at maturity, so the accounting treatment of this strategy is more favourable compared to the ASR. However, it might be harder to comply with the safe harbour regulation, when the investment bank demands a bonus over the forward price to engage in a forward equity purchase, which is likely given the implied lending in this transaction. If such a bonus is discounted in the exercise price of the contract the transaction is likely to violate the safe harbour. Creativity in the terms of the derivative contract, which is probably already customised for the specific transaction, might still make the deal compliant with the safe harbour. However, prudence is advised, given the recent attitude of Dutch tax authorities, which aim to prevent Forward Equity Purchases, or Forward Purchase Agreements (FPA), from being used by companies to evade taxes in the context of the dividend law. Consequently, forward equity purchases by companies that do not have remaining share buy-back capacity in terms of Exemption 4c, are taxed as if the counterparty is unidentifiable, and hence the consideration paid for the shares by the company needs to be grossed up.⁸⁷

8.2.5 Share buy-back executed through Transferable Put Rights (TPRs)

Applying TPRs in a share buy-back is a possible method to execute a tender offer type, which is typically effectuated at a premium over the market price. Hence, the TPR strategy does not strictly comply with the safe harbour, unless the market price rises to the level of the tender price at exercise⁸⁸. However, as the company does not benefit directly from the TPRs, while all shareholders do benefit from the share buy-back it is not probable that the company is in fact manipulating the market. This means that the probability that third parties will successfully pledge for manipulation in court is minimal, but the fact that compliance is not explicit still yields some ambiguity.

Accounting treatment for TPRs is not unfavourable, as the derivatives in the transaction are physically settled. From a taxation viewpoint the TPR strategy could be useful in the Netherlands to enhance tender offer buy-backs of significant magnitude. The tender could even exceed the Exemption 4c capacity, as the TPR share buy-back allows differentiation among shareholders: those who can reclaim dividend withholding tax (DWT) can tender (part of) their shares, while other shareholders will sell their put warrants to benefit from the tender. As the selling shareholder will be identified in the tender procedure (other than the Forward Equity Purchase) the company may not be obliged to gross up, as long as enough shareholders can reclaim their DWT.

⁸⁶ US analysts seem to agree with European regulators as US GAAP accounting "masks the costs of ASR transactions". Source: International Financing Review, "Share repo window stays open", 14 January 2006

⁸⁷ See also: Press releases in Appendices F and G, and Appendix L for the ASML case study

⁸⁸ The TeliaSonera case shows that the market price can remain well below the tender price.

8.3 Conclusion and overview of pros and cons

Essentially this conclusion serves the purpose of interpreting and conceptualising and my major findings in chapters 6, 7 and 8, which I will do in two steps. First, I will summarise the impact of the regulatory framework in the Netherlands on innovative share buy-backs, to answer research objective 5. Second, I will summarise the pros and cons of the five innovative share buy-back solutions in table-format to provide a comprehensive summary, before I will answer the overall problem statement in the next chapter, the conclusions and recommendations.

.....
Research
objective 5

Explain the impact of regulation on market manipulation, tax, and accounting on the potential of innovative share buy-backs in the Netherlands.

European regulation, which is intended to prevent market manipulation, states that under circumstances enhancing share buy-backs with derivatives is compliant with the safe harbour conditions. However, these conditions do imply some limitations to innovative share buy-backs, and their possible benefits. First, the safe harbour conditions are generally not favourable for share buy-backs that involve options, as the restricted height of the strike price lowers the signalling power, it lowers the cost benefit for writing puts and increases costs for purchasing calls. Forward equity deals are not probable within safe harbour, as the investment bank will be reluctant to engage in a forward contract with an exercise price that does not include a bonus to the market price. The trading conditions laid out in the safe harbour, also imply that series of derivatives with different maturities should be used to enhance the share buy-back, rather than a contract with a single maturity.

Considering the nature of a safe harbour any company could choose to deviate from it, especially if the company can prove that it is not abusing the market. However, it is probable that companies will be reluctant to operate outside the safe harbour, as it does give up protection, which implies a certain ambiguity, and hence: risk. A tender offer via transferable put rights (TPRs) does not comply strictly with the safe harbour, but it is unlikely that this transaction constitutes market manipulation, since all shareholders will benefit from offer.

The accounting rules of IFRS are more favourable for derivatives that require physical settlement, as the possibility to settle financially implies possible earnings volatility. Consequently, the applicability of the accelerated share repurchase (ASR) is quite limited in Europe (the Netherlands). The ASR might still be useful when circumstances tempt the company to accept the risk of increased earnings volatility, for instance in case of a severe need to quickly re-leverage, or instantly boost earnings per share. To minimise the impact on earnings the maturity of the contract should be as short as possible.

Taxation for derivative-based transactions can be a complex matter and the area is rather ambiguous, which is likely to create reluctance with companies to engage in innovative share buy-backs. However, as long as the company complies with the safe harbour and the share buy-back program as a whole complies with the Dutch dividend law, tax issues are unlikely. Naturally, the Dutch tax authority wants to make sure innovative methods and discretionary agreements are not used to abuse the tax exemption for share buy-backs.

Overview of pros and cons

On the next page I have constructed an overview with pros and cons of the five innovative share buy-backs (table 8.1), which will serve as a final, summarising one-pager, before moving on to the conclusions and recommendations. In this table the solutions will be assessed in a number of categories, which are based on all prior research, including research on primary buy-backs and emerging trends (in chapter 5) and all research on innovative share buy-backs (chapters 6,7 and 8). The open market share buy-back, the most common share buy-back method, is included for comparison purposes. To be able to create an overview I used brief statements, while in the left column I placed references to the section of the report where a specific item is discussed. The reader is advised to refer to that section for more details.

Table 8.1: Pros and cons of innovative share buy-backs in the Netherlands

Strategy	Puts	Calls	ASR	Forward	TPR	Open market
Leverage (5.2.1 & 5.7)	No additional leverage effect	No additional leverage effect	Instant leverage effect	Implied debt financing	Additional leverage through size	No additional leverage effect
Short term impact (5.7)	Limited by safe harbour	Limited by safe harbour	Instant EPS effect	Delayed EPS effect	Limited by safe harbour	Limited by safe harbour
Signalling (5.2.1 & 6.2)	Signals confidence and bullish outlook. Lower signal with lower strike price.	Signals bullish outlook. Lower signal with lower strike price.	Short term impact sends strong signal	Moderate signal	Premium in tender sends strong signal	Moderate signal
Market manipulation (5.5.1 & 8.2)	Safe harbour: Strike below market price of shares	Safe harbour: Strike below market price of shares	Compliant with safe harbour	Compliance could be problematic	No strict compliance, but "fair" method	Easily compliant conditions for trading
Accounting (5.5.3 & 8.2)	Restriction: Physical settlement required	Restriction: Physical settlement required	Unfavourable earnings volatility	By definition physical settlement	By definition physical settlement	Accounting is basic
Taxation (5.5.2 & 8.2)	Ambiguity in case of financial settlement	Ambiguity in case of financial settlement	Ambiguity: Financially settled derivative	Ambiguity: Recent developments	Allows differentiation tax treatment (6.2.5)	Taxation common practice (Exemption 4c)
Liquidity (5.3.1 & 6.3)	Minimal impact	Minimal impact	Minimal impact	Minimal impact	No impact	Negative impact
Market sentiment (6.2 & 7.1)	Bullish market	Bullish market	Optimally: bearish market	Optimally: bullish market	Any market	Any market
Size (5.6 & 5.7)	Limited by safe harbour and tax capacity	Limited by safe harbour and tax capacity	Limited by safe harbour and time-frame	Limited by safe harbour and tax capacity	Enhance tender offers of significant magnitude	Limited by safe harbour and tax capacity
Costs or earnings (6.2)	Earnings: upfront premiums	Costs of premiums 'insurance'	Costs of borrowed shares	Costs of financing	Transaction costs	None
Risk (6.2)	Downside of derivative is high	Low	Downside of derivative is moderate	Downside of derivative is moderate	Low	Low
Banking fees (5.4.3)	Moderate	Moderate	High	Moderate	High	Low

9. Conclusions and recommendations

Share buy-backs are becoming an increasingly dominant factor in corporate pay-out strategies globally, a phenomenon that started in the US. As many (quantitative) studies have analysed share buy-backs, but little attention has been given to the future of share buy-backs, I intended to look ahead and assess the future applicability of innovative share buy-backs in the Netherlands. Innovative share buy-backs have emerged in the US, when companies enhanced share buy-back programs with derivative financial instruments. Although these strategies have proven themselves to be useful for many US companies, for instance in terms of costs and timing, so far these strategies have not grown popular in the Netherlands. These strategies are all the more interesting, as the role of the shareholder in Dutch companies is changing, giving rise to emerging trends in shareholder remuneration. I executed a qualitative study to assess whether Dutch companies can apply innovative share buy-backs to answer to these emerging trends. This has led to the following problem statement:

.....
Problem
statement

What opportunities arise from emerging trends in shareholder remuneration in the Netherlands for companies to implement innovative share buy-back solutions, through their practical and theoretical pros and cons?

To be able to formulate an answer to this statement, I applied a dual focus, effectuated through two subsequent stages in the research project, each having a customised research methodology⁸⁹. In the first stage I studied the primary share buy-backs, their growing popularity and emerging trends in shareholder remuneration. Subsequently, in the second stage I described innovative share buy-backs from a theoretical and practical viewpoint, and reflected the regulatory constraints. This dual focus will be reflected in this concluding chapter as well, as I will present the conclusions (section 9.1) for the two stages of the project separately. Combining the conclusions will lead to an overall answer the problem statement in 9.2. Thereafter, I will recommend on the practical applications of this research project and possibilities for further research in 9.3.

9.1 Conclusions

In this section I will answer my research objectives, and summarise the forthcoming of executing my research methodology through literature study, interviews, cases, and the analysis of empirical data.

9.1.1 Mechanics, popularity and trends of primary share buy-backs

Companies that intend to execute a share buy-back have a number of primary methods to choose, which can all be financed with debt or cash. Subsequently a repurchasing company can either cancel the repurchased shares or keep the shares in treasury. The buy-back method and financing applied depends on the objective a company has in repurchasing shares. According to academic research, the most common rationale is to signal undervaluation. Historically, the open market share buy-back has been the most popular technique to execute a share buy-back, in the United States, Europe, and the Netherlands, as it provides great flexibility and is well accepted by shareholders.

Within corporate pay-out strategies, share buy-backs are becoming an increasingly dominant factor on global equity markets. After gaining popularity in the US in the 1990s, where the aggregate amount of share buy-backs eventually overtook dividends, share buy-backs are currently gaining similar popularity in Europe, and the Netherlands. Although share buy-backs continue to grow in popularity they do not seem to substitute the most common pay-out strategy, dividends, which continue to grow steadily. Rather, buy-backs are used to distribute one-time gains, reflecting their more flexible and discretionary nature. Evident advantages of

⁸⁹ See chapter 4.

share buy-backs over dividends are the more favourable taxation, and the embedded effect on financial leverage, especially when financed with debt.

Emerging trends in shareholder remuneration are closely linked to the globalisation of financial markets and increased shareholder activism. Through globalisation of financial markets accounting standards and corporate cultures continue to converge. The latter created a stronger role for the shareholder in Dutch companies, recently enacted in the corporate governance code. Through (leveraged) buy-outs private equity investors force companies to re-leverage on the hand, while providing cash on the other by purchasing assets. Hence, Dutch companies are cash rich and often have plenty of share buy-back capacity in terms of 'Exemption 4c'⁹⁰. Together with hedge funds activism, which has a more short term focus, this will result in a demand for larger share buy-backs in a shorter timeframe.

9.1.2 Innovative share buy-backs

I have focussed my research effort on five distinct innovative share buy-back strategies, which are all transactions between a repurchasing company and an investment bank:

1. Share buy-back enhanced with written put options
2. Share buy-back enhanced with purchased call options
3. Accelerated Share Repurchase
4. Forward Equity Purchase
5. Share buy-back executed through Transferable Put Rights

When analysing these strategies from a theoretical viewpoint, compared to the conventional open market share buy-back, innovative share buy-backs have possible added value through: lowering the cost of the program, hedging and controlling cash flows, accelerating the execution, avoiding negative impact on liquidity, and the ability to continue through so-called closed periods. General disadvantages over the conventional open-market buy-back, are the lower flexibility of a share buy-back enhanced with derivatives and the significant downside risk implied, especially when selling derivatives.

US historical data reveals that accounting regulation, reluctance towards operating outside the safe harbour and market sentiment, are important trend drivers in applying innovative share buy-backs. Hence, these factors are crucial in assessing opportunities for innovative share buy-backs and eventually deciding between different innovative share buy-back strategies. Practical cases of innovative share buy-backs demonstrate that these methods are often used to execute a fraction of a bigger share buy-back program.

The regulatory framework is an important constraint in defining opportunities for innovative share buy-backs. According to European regulation under circumstances enhancing share buy-backs with derivatives is compliant with the safe harbour conditions. However, these conditions do imply some limitations to innovative share buy-backs, and thereby their possible benefits. The accounting rules of IFRS are more favourable for derivatives that require physical settlement, as the possibility to settle financially implies possible earnings volatility. Taxation for derivative-based transactions can be a complex matter and the area is still rather ambiguous, which is likely to result in reluctance with companies to apply innovative share buy-backs. However, as long as the company complies with the safe harbour and the share buy-back program as a whole complies with the Dutch dividend law, severe tax issues are unlikely.

9.2 Opportunities for innovative share buy-backs

In coming to an answer on the problem statement first and foremost I should conclude that there are definitely opportunities for innovative share buy-back strategies in the Netherlands, and Europe for that matter. The innovative share buy-backs offer some clear cut benefits over the primary share buy-backs. However, a company's ability to capitalise on these benefits is

⁹⁰ See section 5.5.2

governed by its circumstances and the specific method applied. Moreover, it is not always straightforward that the innovative strategies can contribute to meeting the emerging trends in shareholder remuneration.

Let me focus on the concrete opportunities for innovative share buy-backs, by elaborating on the five strategies defined⁹¹:

1. Share buy-backs enhanced with series of physically settled put options with different maturities can bring down the cost of the repurchase program in a bullish market. However, the safe harbour conditions are not favourable for share buy-backs that involve options, as the restricted height of the strike price lowers their signalling power, and the lowers the amount of put premiums collected upfront. Moreover, using written put options always implies a certain risk. Although this strategy will not help the company in meeting the emerging remuneration trends, in a bullish market there are definitely opportunities to employ this method.
2. The share buy-back enhanced with (series of) purchased calls can be and has been applied in the Netherlands, predominantly as insurance to hedge against price increases. Equivalent to using puts, the safe harbour conditions are relatively unfavourable, as the conditions for the exercise price increases the costs for purchasing calls and furthermore choosing this strategy will not assist a company in meeting the emerging trends in shareholder remuneration.
3. The accelerated share repurchase (ASR) is an excellent instrument in dealing with activist shareholders and short term focus, due to its instant leverage and earnings per share enhancing effects. However, due to unfavourable accounting treatment, the applicability of the ASR is limited in Europe (the Netherlands). The ASR might still be useful when circumstances, such as shareholder activism or a takeover threat, tempt the company to accept the risk of increased earnings volatility.
4. The opportunities for forward equity purchase are minimised by the safe harbour, as an investment bank will be reluctant to engage in a forward contract with an exercise price that does not include a bonus to the market price. The implied lending in this innovative strategy is in line with the trend towards increased leverage, but this effect can also be created by borrowing cash to repurchase shares in the open market. It is not very likely companies will apply derivatives that are not strictly necessary.
5. A tender offer via transferable put rights (TPRs) could be useful in the Netherlands to enhance a quick tender offer share buy-back of significant magnitude, thereby answering effectively to the emerging trend of larger and faster share buy-backs. The size of the tender offer could even exceed the 'Exemption 4c'⁹² capacity, as the nature of the TPR structure, is optimal for a heterogeneous shareholders base. Shareholders that have an unfavourable tax treatment will sell their TPRs to shareholders with a favourable tax treatment, who will tender their shares. Although, this transaction does not comply with the safe harbour, market manipulation is not very likely, due to the fairness of the tender: all shareholders can benefit.

9.3 Recommendations

Although the research project has been executed mostly from a market viewpoint, focusing on companies engaging in share buy-backs, through these recommendations I will elaborate on how ABN AMRO Rothschild could apply the forthcoming of this research project as well as sketch opportunities for further research.

Firstly, ABN AMRO Rothschild (AAR) could benefit from marketing tender offers and innovative share buy-backs more actively, as these deals will yield relatively higher fees for the bank. However, to that extend it is essential to create a deeper understanding of the attitudes of

⁹¹ See table 8.1 for an overview of pros and cons of the five innovative share buy-backs, compared to an open market share buy-back.

⁹² See section 5.5.2

managers towards these strategies. Moreover, as the regulatory framework focuses primarily on companies engaging in share buy-backs, the hedging possibilities the investment bank has for the derivative contract are still very ambiguous. AAR should research its hedging possibilities in great detail before marketing any innovative share buy-backs.

Secondly, to continue to assess the opportunities of innovative share buy-backs one should keep track of regulatory changes:

- Regulation and tax treatment of discretionary agreements in conjunction with share buy-backs is currently under discussion and might be subject to change.
- Developments in corporate governance policy and jurisdiction on the role of (active) shareholders in Dutch companies are likely to affect the attitude towards buy-backs.
- Share buy-back regulation is brief on innovative buy-back methods and market manipulation is ill-defined. Concrete jurisdiction might shed new lights on these methods, so monitoring that is essential.

Third, further research could be executed in the following areas:

- The regulatory impact of using synthetic options instead of plain vanilla options.
- The relation between height of strike prices and cost advantage of option-based strategies could be researched in more detail, and possibly modelled.
- Willingness of companies to deviate from the safe harbour as well as committing to a discretionary agreement could be researched via a survey.
- Derivatives are often associated with risk, further research could prove if this has played a role in the scarcity of innovative buy-backs in the Netherlands.
- A US trend I observed is to finance a share buy-back by issuing a convertible bond, which has the advantage... further research.

10. Glossary

Closed periods	Periods when a company and its insiders are not allowed to trade the company's shares, e.g. around results
Earnings Per Share (EPS)	EPS quantifies the portion of a company's profits allocated to each outstanding share, providing an indicator of that company's profitability.
ESOP	Through an Employee Stock Option Plan a company remunerates their staff (mostly management) by distributing call options.
Greenmail	Repurchasing shares directly (mostly at a premium) from a hostile takeover counterpart as a takeover defence.
Grossing up	Multiplying a payment in a transaction by a certain factor to make sure that the paying counterparty is responsible for paying the tax. In case of dividends and buy-backs: multiply by 100/85.
Price-earnings ratio (P/E)	The P/E ratio is a performance indicator that quantifies the price the shareholders have to pay for a share in the profits of a company.
Proxy Fight	A shareholder or group of shareholders persuades others to join forces, to gather enough shareholder proxies to win a corporate vote at an AGM or EGM.
Safe Harbour	A set of constraints that intends to eliminate a party's liability under the law, on the condition that the transaction is executed compliant with the constraints.
Underwriting	Underwriting is guaranteeing to take up any securities that are unsold in the market, so that the issuer knows for sure how much cash it is going to raise and can plan accordingly.

Derivative Glossary

Source: Chicago Board Options Exchange (www.CBOE.com)

At-the-money	An option is at-the-money if the strike price of the option is equal to the market price of the underlying security.
Call option	An option that gives the holder the right to buy an underlying instrument, such as a stock, or an index value, at a specified price for a certain, fixed period of time.
Covered call option writing	A strategy in which one sells call options while simultaneously owning an equivalent position in the underlying security.
Derivative security	A financial security whose value is determined in part from the value and characteristics of another security, the underlying security.
Exercise	To implement the right under which the holder of an option is entitled to buy (in the case of a call) or sell (in the case of a put) the underlying security.

Hedge	A conservative strategy used to limit investment loss by effecting a transaction which offsets an existing position.
In-the-money	A call option is in-the-money if the strike price is less than the market price of the underlying security. A put option is in-the-money if the strike price is greater than the market price of the underlying security.
Long position	A position wherein an investor's interest in a particular series of options is as a net holder (i.e., the number of contracts bought exceeds the number of contracts sold).
Option premium	The price of an option contract, determined in the competitive marketplace, which the buyer of the option pays to the option writer for the rights conveyed by the option contract.
Out-of-the-money	A call option is out-of-the-money if the strike price is greater than the market price of the underlying security. A put option is out-of-the-money if the strike price is less than the market price of the underlying security.
Put option	An option contract that gives the holder the right to sell an underlying instrument, such as a stock, a futures contract or an index value, at a specified price for a certain, fixed period of time.
Short position	A position wherein a person's interest in a particular series of options is as a net writer (i.e., the number of contracts sold exceeds the number of contracts bought).
Strike price	The stated price per share for which the underlying security may be purchased (in the case of a call) or sold (in the case of a put) by the option holder upon exercise of the option contract.
Underlying security	The security subject to being purchased or sold upon exercise of the option contract.

11. References

11.1 Articles

- ABN AMRO Holding N.V. (2007a). Annual Report 2006
- ABN AMRO Holding N.V. (2007b). History of ABN AMRO
- Atanasov, Vladimir A., Gyoshev, Stanley B., Szewczyk, Samuel H., and Tsetsekos, George P. (2004). Why Large Financial Institutions Buy Put Options from Companies. SSRN Working Paper series
- Badrinath, S.G. and Varaiya, N.P. (2001). The Share Repurchase Decision: Causes, Consequences and Implementation Guidelines. Financial Executives Research Foundation
- Bagwell, Laurie S. (1988). Share repurchase and takeover deterrence. *The Rand Journal of Economics*, Vol. 22, No. 1, pp 72-88
- Baker, H.Kent, Powell, Gary E. and Veit, E. Theodore (2003). Why companies use open-market repurchases: A managerial perspective. *The Quarterly Review of Economics and Finance*, Vol. 43, pp. 483-504
- Bank for International Settlements (2006). OTC derivative market activity, first half 2006.
- Bens, Daniel A., Nagar, Vencky, Skinner, Douglas J., and Franco Wong, M.H. (2003). Employee stock options, EPS dilution, and stock repurchases. *Journal of Accounting and Economics*, Vol. 36, pp. 51-90
- Brockman, P., Chung, D.Y. (2001). Managerial timing and corporate liquidity: evidence from actual share repurchases. *Journal of Financial Economics*, Vol. 61, pp. 417-448
- Chan, Konan, Ikenberry, David L. and Lee, Immo (2004). Economic Sources of Gain in Stock Repurchases. *Journal of Financial and Quantitative Analysis*, Vol. 39, pp. 461-480.
- Chung, Dennis Y., Isakoc, Dusan, and Perignon, Christophe (2006). Repurchasing Shares on a Second Trading Line. FAME Working Paper No. 162
- Comment, Robert and Jarrell, Gregg A. (1991). The Relative Signalling Power of Dutch-Auction and Fixed-Price Self-Tender Offers and Open-Market Share Repurchases. *Journal of Finance*, Vol. 46 Issue 4, pp. 1243-1271
- Cook, Douglas O. and Kim, Jin S. (2006). Derivatives in Share Repurchase Programs. Working paper.
- Cook, Douglas O., Krigman, Laurie, and Leach, J. Chris (2003). An Analysis of SEC Guidelines for Executing Open Market Repurchases. *The Journal of Business*, volume 76 (2003), pages 289-315
- Dann, L. (1981). Common Stock Repurchases: An Analysis of Returns to Bondholders and Stockholders. *Journal of Financial Economics*, Vol. 9, pp. 115-138
- Dittmar, Amy K. (2000). Why do firms repurchase stock? *Journal of Business*, Vol. 73, pp. 331-355
- Dittmar, Amy K., and Dittmar, Rober F. (2004). Stock Repurchase Waves: An Explanation of the Trends in Aggregate Corporate Payout Policy. Working paper, University of Michigan
- Dobbs and Rehm, 2005. The value of share buybacks. *McKinsey Quarterly* 2005, No. 3
- Gaspar, José-Miguel, Massa, Massimo, Matos, Pedro, Patgiri, Rajdeep, and Rehman, Zahid (2004). Can Buybacks Be A Product Of Shorter Shareholder Horizons? CEPR Discussion Paper, number 4813
- Ginglinger, Edith and Hamon, Jacques (2007). Actual Share Repurchases, Timing and Liquidity. *Journal of Banking & Finance*, Vol. 31, Issue 3, pp. 915-938.
- Grullon, Gustavo and Ikenberry, David L. (2000). What do we know about stock repurchases? *Journal of Applied Corporate Finance*, Vol. 13, pp 31-51
- Gyoshev, Stanley B. (2001). Synthetic Repurchase Programs through Put Derivatives: Theory and Evidence. PhD thesis
- Hutchinson, Dave (1999). Stock repurchase programs: economic principles. *Bank accounting & finance*, Vol. 13 Issue 2
- Ikenberry, D. and Vermaelen, Theo (1996). The option to repurchase stock. *Financial Management* Vol. 25, pp. 9-24

- International Business Project Erasmus University Rotterdam (2003). An International Survey of Corporate Governance with Emphasis on the Proposed Tabaksblat Code
- Jagannathan, M., Stephens, C.P. and Weisbach, M.S. (2000). Financial flexibility and the choice between dividends and stock repurchases. *Journal of Financial Economics*, Vol. 57, pp. 355-384
- Jensen, Michael C. (1986). Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers. *The American Economic Review*, Vol. 76, No. 2, pp. 323-329
- Jiraporn, Pornsit (2006). Share repurchases, shareholder rights, and corporate governance provisions. *North American Journal of Economics and Finance*, Vol. 17, pp. 35-47
- Jenter, Dirk, Lewellen, Katharina, and Warner, Jerold B. (2006). Security Issue Timing: What Do Managers Know, and When Do They Know It? Working Paper
- Kahan, Marcel, and Rock, Edward B. (2006). Hedge Funds in Corporate Governance and Corporate Control. *New York University Law and Economics Working Papers*, Vol. 68.
- Kale, Jayant R., Noe, Thomas H., and Gay, Gerald D. (1989). Share Repurchase through transferable put rights. *Journal of Financial Economics*, Vol. 25 pp. 141-160
- Leland, Hayne E., and Pyle, David H. (1977). Informational Asymmetries, Financial Structure, and Financial Intermediation. *The Journal of Finance*, Vol. 32, No. 2
- McDonad, Robert L. (2004). The Tax (Dis)Advantage Of A Firm Issuing Options On Its Own Stock. *Journal of Public Economics*, Vol. 88, No. 5, pp. 925-955
- McDonnel, Clive (2006). Share buybacks soar, but takeover firepower wanes. *S&P Equity Strategy*
- Miller, Merton H. (1963). The corporate income tax and the corporate financial policies. Stabilization policies.
- Miller, Merton H. (1988). The Modigliani-Miller Propositions after Thirty Years. *Journal of Economic Perspectives*, Vol. 2, No. 4, pp 99-120
- Modigliani, Franco, and Miller, Merton H. (1958). The Cost of Capital, Corporation Finance and the Theory of Investment. *The American Economic Review*, Vol. 48, No. 3, pp. 261-297
- Pettit, Justin (2001). Is a share buyback right for your company? *Harvard Business Review*, April 2001
- Peyer, Urs C., and Vermaelen, Theo (2005). The many facets of privately negotiated stock repurchases. *Journal of Financial Economics*, Vol. 75, pp. 361-395
- Ridder, Adri de (2006). Share Repurchases and Firm Behavior. Working paper
- Stephens, C.P. and Weisbach, M.S. (1998). Actual share reacquisitions in open-market repurchase programs. *Journal of Finance*, Vol. 53, pp 313-333.
- Stonham, Paul (2002) A Game Plan for Share Repurchases. *European Management Journal*, Vol. 20, No. 1, pp. 37-44
- Vermaelen, Theo (1981). Common stock repurchases and market signalling: An empirical study. *Journal of Financial Economics*, Vol. 9, pp. 138-183
- Weil, Gotshal, and Manges (2002). Comparative study of corporate governance codes relevant to the European Union and its member states. European Union, Brussels

11.2 Books

- Blumberg, Boris, Cooper, Donald R., and Schindler, Pamela S. (2005). *Business research methods*, European Edition. McGraw-Hill, London.
- Brealey, Richard A. and Myers, Stewart C. (2002). *Principles of Corporate Finance*. McGraw-Hill, New York
- Moerland, P.W. (2000). *Economische, institutionele en juridische aspecten van inkoop van eigen aandelen*. Kluwer, Deventer
- Ross, Stephen A., Westerfield Randolph W. and Jaffe, Jeffrey (2005). *Corporate Finance*. Seventh Edition. McGraw-Hill, New York
- Sutton, Timothy G. (2004). *Corporate Financial Accounting and Reporting*, Second Edition. Prentice Hall, London

11.3 Internet

ABN AMRO Rothschild (visited Dec 2006)

<http://www.abnamrorothschild.com>

Autoriteit Financiële Markten (visited Nov 2006 - Jun 2007)

<http://www.afm.nl/>

Database koersgevoelige informatie

<http://www.afm.nl/registers/default.ashx?folderid=1563>

Bank International Settlements (visited May 2007)

<http://www.bis.org/statistics/derstats.htm>

Corporate Governance Code Tabaksblat (visited Mar - May 2007)

<http://www.corpgov.nl>

Chicago Board Options Exchange (visited Feb - May 2007)

<http://www.cboe.com/Institutional/CorporateStock.aspx>

European Union directives and regulation (visited Feb - May 2007)

<http://eur-lex.europa.eu>

Het Financiële Dagblad (visited Feb - Jun 2007)

<http://www.fd.nl/Home.asp>

International Financial Law Review (visited Mar 2007)

<http://www.iflr.com/>

International Financing Review (visited Jan 2007)

<http://www.ifre.com>

Ministerie van Justitie (visited May 2007)

<http://www.minjus.nl>

Ministerie van Financiën (visited May 2007)

<http://www.minfin.nl>

US Securities and Exchange Commission (visited Jan-May 2007)

<http://www.sec.gov>

EDGAR Database

<http://www.sec.gov/edgar/searchedgar/webusers.htm>

Wall Street Journal (visited Feb - May 2007)

<http://online.wsj.com/>

Wet op de Dividendbelasting, 1965 (visited Feb - May 2007)

<http://wetten.overheid.nl/>

Appendix

Innovation in Corporate Finance: Enhancing Share Buy-Backs with derivatives

Compiled by: Eelko Luning
Date: 14 June 2007

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Appendix A - Equivalence dividends and share buy-backs

The best way to demonstrate the equivalence of dividends and buybacks looks simply at the numbers. Exhibit 11 shows a stream of distributable cash flows for a hypothetical company. Neither the pattern nor the longevity of the cash flow streams affects the result of the analysis. We then value the company at each time period. At the end of the last time period the cash flow stream is worth \$1,750, assuming the investor reinvests the cash flows at the cost of capital. (In fact, there is no need to assume investors reinvest at the cost of capital, we just need to assume they reinvest at the same rate.)

Exhibit 11: Hypothetical Company

Growth	9%	Shares outstanding	110.28
Cost of Capital	8%	Share price (t_0)	\$ 10.00

Period	1	2	3	4	5	8
Cash flows	100.0	109.1	119.1	129.9	141.8	1,000.0

Present Value at Time 0

PV cash flows	92.6	93.5	94.5	95.5	96.5	630.2
Plus realized cash	-					
Total value	1,102.8					

Present Value at Time 1

PV cash flows	101.0	102.1	103.1	104.2	680.6	
Plus realized cash	100.0					
Total value	1,191.0					

Present Value at Time 2

PV cash flows	110.2	111.4	112.5	735.0		
Plus realized cash	217.1					
Total value	1,286.3					

Present Value at Time 3

PV cash flows	120.3	121.5	793.8			
Plus realized cash	353.6					
Total value	1,389.2					

Present Value at Time 4

PV cash flows	131.3	857.3				
Plus realized cash	511.7					
Total value	1,500.3					

Present Value at Time 5

PV cash flows	925.9					
Plus realized cash	694.4					
Total value	1,620.4					

Present Value at Time 8

PV cash flows	-					
Plus realized cash	1,750.0					
Total value	1,750.0					

Assumes:

- "Dividends/repurchase occur on last day of the year
- "Dividend/repurchase proceeds are reinvested at the cost of capital
- "Stock price is at "fair value" at year-end

Source: LUCM.

We now consider two scenarios. In the first, the company pays the cash out in the form of a dividend (see Exhibit 12).

Exhibit 12: Cumulative Dividend Value

Year	Current payment	Reinvestment	Total value
1	100.0	-	100.0
2	109.1	8.0	217.1
3	119.1	17.4	353.5
4	129.9	28.3	511.7
5	141.8	40.9	694.4
6	1,000.0	55.6	1,750.0

Source: LMCM.

In the second, the company repurchases stock with the funds (see Exhibit 13).

Exhibit 13: Share Repurchase Program

Year	Starting shares	Value/ share	# Shares buyback	Adjusted shares	Adjusted value	Buyback value	Price	Reinvestment	Total value
1	110.5	\$ 10.80	9.3	101.02	1,091.0	\$ 100.0	\$ 10.80		1,191.0
2	101.0	\$ 11.88	9.4	91.67	1,069.2	\$ 109.1	\$ 11.88	8.0	1,288.3
3	91.7	\$ 12.60	9.5	82.21	1,035.7	\$ 119.1	\$ 12.60	17.4	1,389.2
4	82.2	\$ 13.60	9.5	72.67	988.6	\$ 129.9	\$ 13.60	28.3	1,500.3
5	72.7	\$ 14.69	9.6	63.02	925.9	\$ 141.8	\$ 14.69	40.9	1,620.4
6	63.0	\$ 15.87	63.0	-	-	\$ 1,000.0		55.6	1,750.0

Source: LMCM.

The analysis shows these two means of returning cash to shareholders are identical, under the following assumptions:

- No taxes
- No transaction costs
- Dividend and share repurchase proceeds are reinvested at the discount rate
- Dividends and share repurchases occur on the last day of the year
- The stock price is at fair value at year-end

Of course, reality is messier than the sterile world the model assumes. Still, the underlying principle is a central one: managers can return cash to shareholders using either dividends or share repurchase. Investors seeking current yield under the share repurchase scenario can simply sell a proportionate amount of their shares to create liquidity.

Source: Mauboussin, 2006

Appendix B - Balance sheet representation

To provide some basic insights in the impact of the share buy-back on the capital structure of a company executing it, I will briefly explain the mutations on the balance sheet after a share buy-back, i.e. its accounting. The approach chosen here applies regardless of what buy-back method chosen, as I will focus purely on three basic elements of the balance sheet: Cash (C) on the asset side, and Owner's Equity (OE) and Debt (D) on the liabilities side. Implied by the mutations on the balance sheet are the effects of the share buy-back on the leverage of a company, which will be described in the conclusion to this Appendix. The accounting standards applied are the International Accounting Standards (IAS), bundled in the International Financial Reporting Standards (IFRS). Share buy-backs and treasury shares are discussed in IAS 32: 'presentation of financial instruments'.

When describing balance sheet mutations, four different scenarios need to be defined. To come to these scenarios, I recall that there are basically two ways financing of the repurchase: debt and excess capital. Thereafter the shares that are repurchased can either be cancelled or kept in treasury. I will first describe the impact of financing and subsequently describe the difference between cancellation of shares and keeping shares in treasury, which is only visible within Owner's Equity. In understanding the Balance sheet mutations at this level, it is essential to define the elements of the Owner's Equity:

- (Paid-in) share capital
- Share premium
- Retained earnings and reserves

Initial situation

For the purpose of this section I introduce the Company X. Company X has a firm value of €100m, which in the initial situation is funded with 50% debt and 50% equity. Hence the financial leverage (debt-to-equity ratio) is 1.00 initially.

Company X has issued 10.000.000 shares at a nominal value of €1 at Euronext Amsterdam, issued at €4 each. Hence the share premium is €3 per share. As no shares are currently held in treasury Owners Equity will be composed as follows (all figures are million €):

Owner's Equity	50
(Paid-in) share capital	10
Share premium	30
Retained earnings and reserves	10

Company X shares closed at €7.50 on Euronext Amsterdam.

Excess Capital financing

The situation below describes a share buy-back, totalling 20% of the shares outstanding. Hence 2 million shares are repurchased at a cost of €15 million, financed with excess capital (cash).

Company X	→	Company X																																
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="border: none;">Assets</th> <th colspan="2" style="border: none;">Liabilities</th> </tr> </thead> <tbody> <tr> <td style="border: none;">Cash</td> <td style="border: none; text-align: right;">20</td> <td style="border: none;">Equity</td> <td style="border: none; text-align: right;">50</td> </tr> <tr> <td style="border: none;">Other</td> <td style="border: none; text-align: right;">80</td> <td style="border: none;">Debt</td> <td style="border: none; text-align: right;">50</td> </tr> <tr> <td style="border: none;">Total</td> <td style="border: none; text-align: right;">100</td> <td style="border: none;">Total</td> <td style="border: none; text-align: right;">100</td> </tr> </tbody> </table>	Assets		Liabilities		Cash	20	Equity	50	Other	80	Debt	50	Total	100	Total	100		<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="border: none;">Assets</th> <th colspan="2" style="border: none;">Liabilities</th> </tr> </thead> <tbody> <tr> <td style="border: none;">Cash</td> <td style="border: none; text-align: right;">5</td> <td style="border: none;">Equity</td> <td style="border: none; text-align: right;">35</td> </tr> <tr> <td style="border: none;">Other</td> <td style="border: none; text-align: right;">80</td> <td style="border: none;">Debt</td> <td style="border: none; text-align: right;">50</td> </tr> <tr> <td style="border: none;">Total</td> <td style="border: none; text-align: right;">85</td> <td style="border: none;">Total</td> <td style="border: none; text-align: right;">85</td> </tr> </tbody> </table>	Assets		Liabilities		Cash	5	Equity	35	Other	80	Debt	50	Total	85	Total	85
Assets		Liabilities																																
Cash	20	Equity	50																															
Other	80	Debt	50																															
Total	100	Total	100																															
Assets		Liabilities																																
Cash	5	Equity	35																															
Other	80	Debt	50																															
Total	85	Total	85																															

Leverage 1.00

Leverage 1.43

Debt Financing

The situation below describes the same share buy-back, totalling 20% of the shares outstanding. This time the 2 million shares are repurchased via debt financing.

Company X			
Assets		Liabilities	
Cash	20	Equity	50
Other	80	Debt	50
Total	100	Total	100

→

Company X			
Assets		Liabilities	
Cash	20	Equity	35
Other	80	Debt	65
Total	100	Total	100

Leverage 1.00
Leverage 1.86

Cancellation of shares vs. Treasury shares

The difference between cancelling shares or keeping them in treasury can be observed within the Owner's Equity. After the transaction described above the situation would be like this:

Cancellation	
Owner's Equity	35
(Paid-in) share capital	8
Share premium	24
Retained earnings	3

↔

Treasury shares	
Owner's Equity	35
(Paid-in) share capital	10
Share premium	30
Retained earnings	10
Shares held in treasury	-15

Summary: Leverage and Multiples

In general I have shown that repurchased shares are no longer recognized as Owner's Equity, as described by IAS 32. IAS 32 yields that shares repurchased and held in treasury should be accounted for as a deduction from equity, and no gain or loss on the treasury shares should be recognised in earnings. According to IFRS the amount of treasury shares held should be disclosed separately.

Obviously share buy-backs increase leverage, whether financed with debt or cash. It can be directly observed from the examples provided that a debt financed deal increases leverage more aggressively, effectively doubling the percentage increase of leverage.

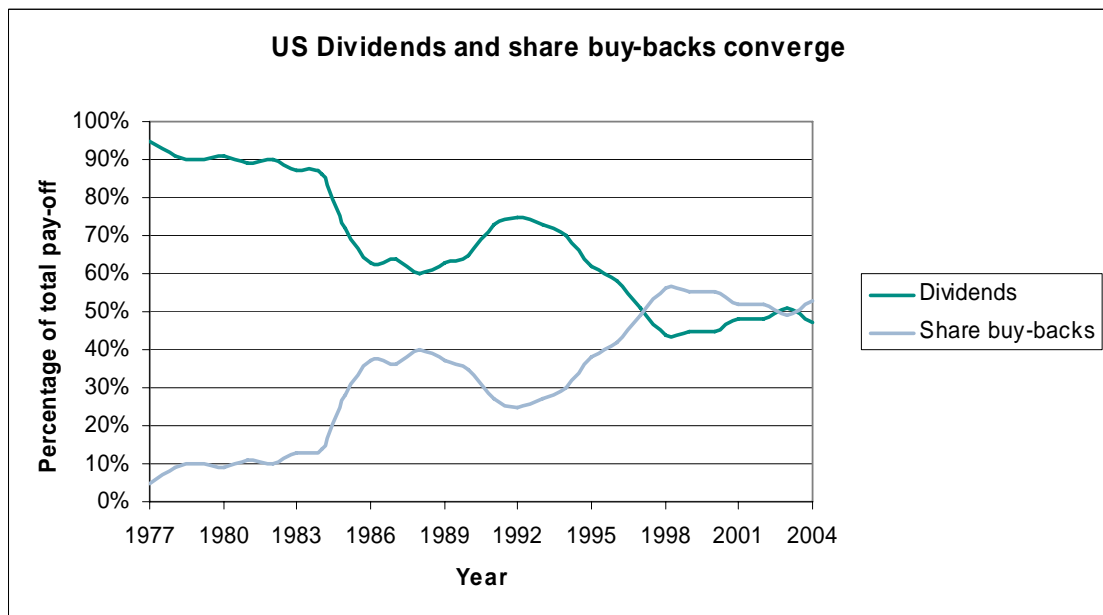
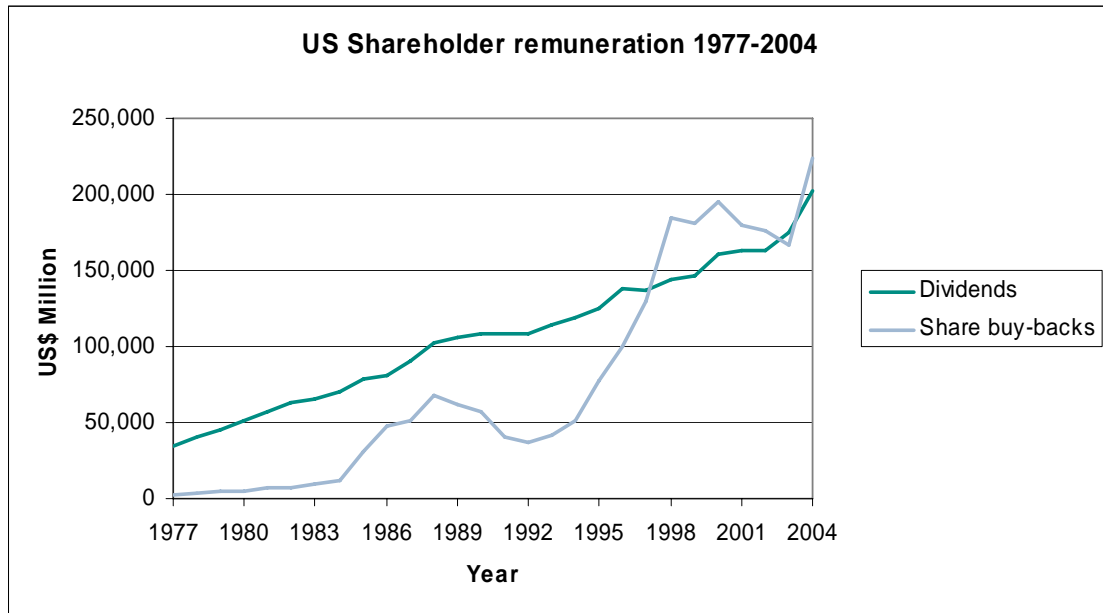
Treasury shares remain part of the issued share capital, but do not count as shares outstanding under IAS 33 "Earnings per share" (EPS), which also excludes treasury shares from the EPS calculation. However, multiples like EPS and P/E cannot be computed straightforward from these balance sheets, as the impact of the re-leveraging on earnings also depends on the cost of debt, the impact of profitability and taxes paid.

Appendix C - Overview Dutch share buy-backs 2004-2007

Company	Date	Amount (EUR m)	% of market cap
ABN AMRO	28-jun-05	2200	3,00%
ABN AMRO	8-feb-07	1000	1,40%
Aegon	10-aug-06	170,7	0,70%
Aegon	1-mrt-07	117,4	0,50%
Akzo Nobel			
ASML	19-apr-06	400	5,25%
ASML	9-okt-06	180	3,00%
ASML	14-feb-07	152	1,65%
ASML	28-mrt-07		30,00%
BE Semiconductor	27-feb-07	5	3,00%
Beter Bed Holding	9-mrt-07	5	1,00%
CSM	17-mei-05	90	5,00%
CSM	29-sep-06	190	9.00-10.00%
DSM	27-sep-06	750	10,00%
Fugro	28-jun-05	12,2	0,50%
Hagemeyer	29-jun-05	10,8	0,50%
Heineken	28-jun-05	20,4	
Heineken	1-jan-07	8,74	
Hunter Douglas	25-nov-03	65,8	4,00%
ING	28-jun-05	142	0,21%
KPN	28-jun-04	500	3,00%
KPN	26-jun-05	500	3,00%
KPN	1-mrt-05	985	6,70%
KPN	9-aug-05	250	1,60%
KPN	7-feb-06	1515	6.5 -7.0%
KPN	6-feb-07	1000	4,50%
Macintosh	28-jun-05	7,4	1,13%
New skies satellites	1-mei-03	49,8	6,67%
Nutreco	22-jun-06	50	2,77%
Philips	27-jan-05	500	2,00%
Philips	15-aug-05	1500	5,00%
Philips	17-jul-06	1500	4.0-4.5%
Philips	16-okt-06	2320	7.0-7.5%
Philips	9-jan-07	1630	5,00%
Reed Elsevier	16-feb-06	870	5,00%
Royal Dutch Shell	29-apr-04	1300	1,90%
Royal Dutch Shell	4-feb-05	5000	2.5-4.5%
Stork	26-jul-06	70	5,45%
Telegraaf	16-mrt-06	54,4	5,00%
TNT	6-dec-05	1000	10,00%
TNT	6-nov-06	415	4,15%
TNT	6-nov-06	585	5,85%
Unilever	10-feb-05	500	1,80%
Unilever	8-feb-07	750	2,03%
Vastned Offices/Industrial	15-dec-05	16,6	3,87%
Vastned Retail	13-sep-06	15,7	1,23%
Wereldhave	28-jun-05	39,32	2,00%
Wolters Kluwer	27-mrt-07	475	

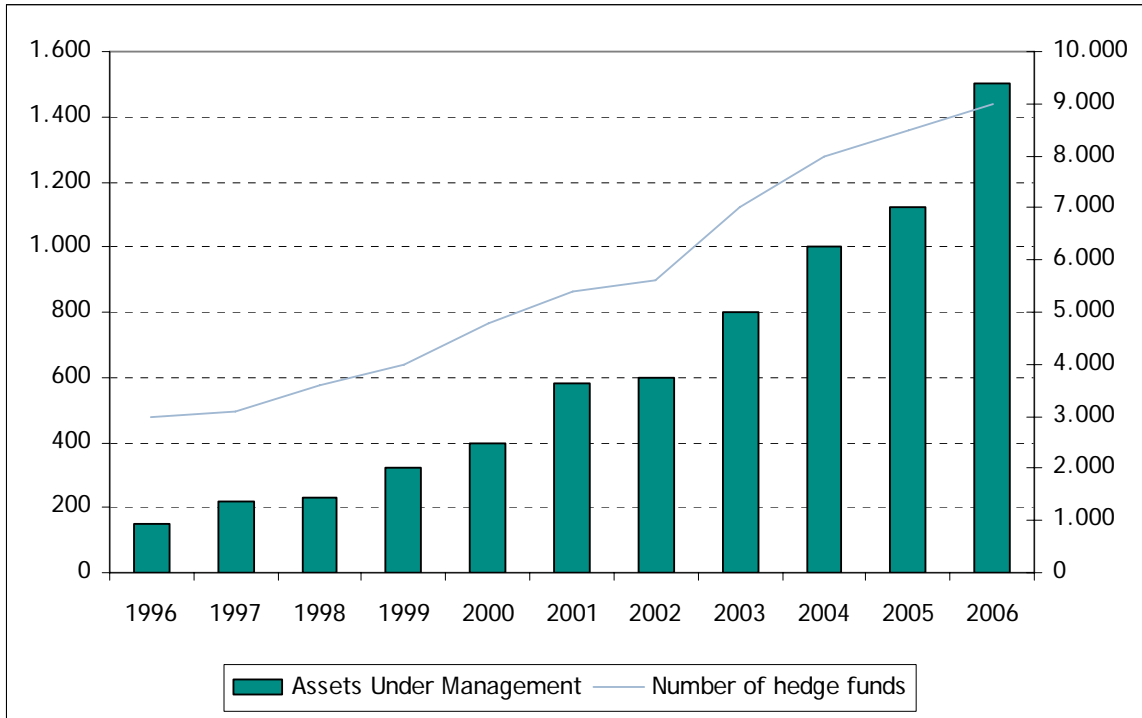
Source: Annual reports, Bloomberg, Thomson OneBanker and Dealogic M&A analytics.

Appendix D - US: dividends vs. share buy-backs



Adapted from Mauboussin (2006)

Appendix E - Magnitude of hedge funds



Source: VAN Hedge Fund Advisors International, ABN AMRO estimates

Appendix F - Het Financieele Dagblad on taxation alternative share buy-back methods (Dutch)

"Fiscus zet mes in truc inkoop eigen aandelen"

De fiscus wil inkoop van eigen aandelen via een zogenoemd tweede loket aanpakken. ABN Amro, dat betwiste inkooptransacties heeft uitgevoerd voor KPN en ASML, dreigt euro 300 mln te verliezen als de Belastingdienst in zijn opzet slaagt.

De meeste bedrijven kunnen belastingvrij eigen aandelen inkopen op de beurs. Bedrijven die niet aan de voorwaarden van deze vrijstelling voldoen - zoals KPN in 2005, ASML, CSM en dit jaar ook Philips - bewandelen een alternatieve route. Zij kopen de aandelen in via een bank onder inhouding van een voorheffing dividendbelasting. De bank vordert de voorheffing later weer terug.

Stroman

De Belastingdienst onderzoekt nu of de bank daarbij risico heeft gelopen, of dat zij alleen maar als 'stroman' optreedt in een constructie die is opgetuigd om belasting te omzeilen. In dat laatste geval haalt de fiscus een streep door de teruggaaf. Het gaat in het ergste geval om 25% van een totaalbedrag van euro 1,2 mrd.

De dreigende ingreep zet een rem op de aangekondigde inkoop van euro 1,63 mrd die Philips via het tweede loket laat uitvoeren. Sinds het elektronicaconcern het programma in januari aankondigde, heeft de uitvoerende bank ABN Amro volgens de Philips-website pas zes kleine transacties verricht. Volgens insiders aarzelt de bank over verdere inkoop wegens het lopende fiscale onderzoek.

Strop

Het onderzoek van de fiscus en de delicate positie van ABN Amro worden bevestigd door tal van goed ingevoerde bankiers, advocaten en fiscalisten, die in het spanningsveld tussen de fiscus en hun klanten anoniem willen blijven. Een woordvoerder van de bank had gisteren geen commentaar op de zaak.

Fiscalisten wijzen erop dat als de Belastingdienst zijn gelijk haalt, de strop niet volledig bij de bank terecht hoeft te komen. Afhankelijk van de gemaakte afspraken kan een deel terechtkomen bij de opdrachtgever. Een woordvoerder van KPN, dat het tweede loket alleen in 2005 gebruikte, zegt dat het telecomconcern 'geen reden heeft om te twifelen aan de uitkomsten van dat jaar.'

Drie jaar procederen

Fortis heeft voor CSM via het tweede loket een aandeleninkoop van euro 180 mln uitgevoerd, die ook onderwerp zou zijn van het onderzoek van de fiscus. De woordvoerder van Fortis doet geen uitspraak over individuele klantendossiers.

Als de fiscus besluit de constructies aan te vechten, dan zal de zaak volgens de kenners zonder twijfel worden uitgevochten tot aan het hoogste rechtscollege. 'Dan zijn we zo drie jaar verder', zegt een kenner. 'Je mag hopen dat de Belastingdienst voor die tijd precies aangeeft onder welke omstandigheden de tweedeloketregeling mag en wanneer niet.'

Alternatieve inkoop

Tal van rijke ondernemingen willen overvloedige winsten of de opbrengst van verkochte bedrijfsonderdelen uitkeren aan hun aandeelhouders. In aanvulling op dividend hebben bijvoorbeeld Shell, ABN Amro en DSM grootscheeps eigen aandelen ingekocht. Akzo start vandaag een inkoopprogramma van euro 1,6 mrd. Die inkoop ziet de fiscus in beginsel als een uitkering aan aandeelhouders omdat de waarde van de resterende aandelen erdoor stijgt, maar daarvoor geldt sinds enkele jaren een vrijstelling.

Voor bedrijven die niet voldoen aan de voorwaarden van vrijstelling, bestaat nu grote onzekerheid. Niet alleen over de fiscale behandeling van al uitgevoerde programma's als die van KPN, ASML en CSM, maar ook voor bedrijven zoals Ahold en Nutreco, die naar verluidt op een alternatieve inkoop van eigen aandelen studeren.

By HEIN HAENEN

Source: *Het Financieele Dagblad*, 3 May 2007.

Appendix G - Press Release Ministry of Finance (Dutch)

Besluit van 11 mei 2007, nr. CPP2007/983M, Stcrt. nr. 94

De staatssecretaris van Financiën heeft het volgende besloten.

In dit besluit worden de gevolgen behandeld voor de dividendbelasting van inkoop van aandelen door beursvennootschappen door middel van een zogenoemde Forward Purchase Agreement of een Second Trading Line.

1. Inleiding

Bij inkoop van eigen aandelen is dividendbelasting verschuldigd over het verschil tussen de inkoopprijs en het gemiddelde op de desbetreffende aandelen gestorte kapitaal. Dit geldt ook bij inkoop van eigen aandelen via de beurs. Aangezien in dat geval de aandeelhouder niet bekend is, dient de inkoopende vennootschap de dividendbelasting voor haar rekening te nemen. Op basis van artikel 6 van de Wet op de dividendbelasting 1965 (hierna: de Wet DB) wordt dan voor het berekenen van de belasting de opbrengst vermenigvuldigd met 100/85 (brutering), tenzij de inkoopfaciliteit van artikel 4c Wet DB van toepassing is. Om brutering te vermijden, willen beursvennootschappen eigen aandelen inkopen van bekende aandeelhouders door middel van een zogenoemde Forward Purchase Agreement (hierna: FPA) of een zogenoemde Second Trading Line (hierna: STL). Hierna behandel ik de volgende vragen bij toepassing van de FPA en de STL:

- kan de vennootschap die de aandelen op die wijze inkoop brutering van de opbrengst achterwege laten;
- is de ingehouden dividendbelasting verrekenbaar op de voet van artikel 25 van de Wet op de vennootschapsbelasting 1969 (hierna: de Wet Vpb) dan wel kan deze op de voet van artikel 10, derde lid, van de Wet DB worden teruggegeven.

2. Inkoop van beurs aandelen door middel van een FPA

Een FPA is een overeenkomst tussen een inkoopende beursvennootschap en een derde partij (doorgaans een financiële instelling) waarbij deze derde partij aandelen van de inkoopende beursvennootschap via de beurs verwerft en deze doorlevert aan de inkoopende beursvennootschap. In deze overeenkomst worden onder andere afspraken gemaakt met betrekking tot de hoeveelheid, het tempo of de prijs van de af te nemen aandelen ter inkoop.

Naar mijn mening is veelal sprake van het op indirecte wijze inkopen van eigen aandelen op de beurs van onbekende aandeelhouders. De tussengeschoven partij fungeert dan slechts als dienstverlener voor de inkoopende beursvennootschap. Om die reden dient de inkoopende beursvennootschap in die gevallen bij de inhouding rekening te houden met brutering in de zin van artikel 6 van de Wet DB. Aangezien de tussengeschoven partij dan niet als (uiteindelijk) gerechtigde van de opbrengst van de aandelen kan worden aangemerkt, bestaat voor deze partij geen recht op verrekening op de voet van artikel 25 van de Wet Vpb of teruggaaf op de voet van artikel 10, derde lid, van de Wet DB.

3. Inkoop van beurs aandelen door middel van een STL

A. De eerste situatie betreft aandeelhouders die reeds aandelen in de inkoopende beursvennootschap bezitten ten tijde van de start van het inkoopprogramma, deze aandelen niet met het oog op deze inkoop hebben verworven en deze aanbieden via de STL.

In dit geval behoeft de inkoopende vennootschap geen rekening te houden met brutering van de in te houden dividendbelasting op grond van artikel 6 van de Wet DB. De aandeelhouder kan de ingehouden dividendbelasting verrekenen op de voet van artikel 25 van de Wet Vpb dan wel terugvragen op de voet van artikel 10, derde lid, van de Wet DB. Ik acht het niet bezwaarlijk indien deze aandeelhouder via de beurs zijn oorspronkelijke positie in de inkoopende vennootschap - die hij bezat ten tijde van de start van het inkoopprogramma - weer opbouwt, mits de nieuw verworven aandelen niet opnieuw via de STL worden aangeboden.

B. De tweede situatie betreft een derde partij die via de beurs aandelen vergaart in een inkoopende beursvennootschap met het oogmerk deze aandelen vervolgens via de STL aan te bieden. Deze derde partij richt zich op het realiseren van de inkoopprovisie die wordt geboden door de inkoopende beursvennootschap. De inkoopprovisie bestaat normaliter uit een aantal basispunten bovenop de beurskoers. Deze derde partij is, evenals de derde partij bij de FPA, slechts als dienstverlener bij de transacties betrokken. De gevolgen zijn daarom hetzelfde als bij de FPA (zie onderdeel 2 hiervóór).

Source: www.minfin.nl (visited may 2007)

Appendix H - Buy-back length (days) within safe harbour

Company	25% of ADTV			15% of ADTV BB		
	% Repurchased			% Repurchased		
	15%	10%	5%	15%	10%	5%
ABN AMRO HOLDING NV	67.7	45.1	22.6	112.8	75.2	37.6
AEGON NV	114.3	76.2	38.1	190.5	127.0	63.5
KONINKLIJKE AHOLD NV	68.3	45.5	22.8	113.8	75.9	37.9
AKZO NOBEL	64.6	43.1	21.5	107.7	71.8	35.9
ARCELOR MITTAL	249.4	166.3	83.1	415.7	277.2	138.6
ASML HOLDING NV	53.6	35.7	17.9	89.3	59.6	29.8
BUHRMANN N.V.	53.6	35.8	17.9	89.4	59.6	29.8
KONINKLIJKE DSM NV	80.5	53.7	26.8	134.2	89.5	44.7
FORTIS	147.7	98.5	49.2	246.2	164.2	82.1
HAGEMEYER NV	37.0	24.7	12.3	61.7	41.1	20.6
HEINEKEN NV	182.8	121.8	60.9	304.6	203.1	101.5
ING GROEP NV-CVA	120.4	80.2	40.1	200.6	133.7	66.9
KONINKLIJKE KPN NV	97.3	64.9	32.4	162.2	108.1	54.1
KONINKLIJKE NUMICO NV	70.2	46.8	23.4	116.9	78.0	39.0
PHILIPS ELECTRONICS NV	95.3	63.5	31.8	158.8	105.8	52.9
RANDSTAD HOLDING NV	134.0	89.3	44.7	223.3	148.9	74.4
REED ELSEVIER NV	130.8	87.2	43.6	217.9	145.3	72.6
RODAMCO EUROPE NV	143.2	95.5	47.7	238.6	159.1	79.5
ROYAL DUTCH SHELL PLC-A SHS	272.9	181.9	91.0	454.8	303.2	151.6
SBM OFFSHORE NV	75.9	50.6	25.3	126.5	84.4	42.2
TNT NV	109.8	73.2	36.6	183.0	122.0	61.0
TOMTOM	58.5	39.0	19.5	97.4	65.0	32.5
UNILEVER NV-CVA	108.4	72.2	36.1	180.6	120.4	60.2
VEDIOR NV-CVA	76.0	50.7	25.3	126.7	84.5	42.2
WOLTERS KLUWER	120.1	80.1	40.0	200.2	133.4	66.7
AALBERTS INDUSTRIES NV	173.8	115.9	57.9	289.7	193.2	96.6
ASM INTERNATIONAL N.V.	104.7	69.8	34.9	174.4	116.3	58.1
KONINKLIJKE BAM GROEP NV	82.9	55.3	27.6	138.2	92.1	46.1
BINCKBANK NV	71.9	48.0	24.0	119.9	79.9	40.0
BOSKALIS WESTMINSTER-CVA	147.8	98.5	49.3	246.3	164.2	82.1
CORIO NV	144.1	96.1	48.0	240.1	160.1	80.0
CRUCCELL	59.9	39.9	20.0	99.8	66.5	33.3
CSM-CVA	164.8	109.9	54.9	274.7	183.1	91.6
FUGRO NV-CVA	117.8	78.5	39.3	196.4	130.9	65.5
GETRONICS NV	38.4	25.6	12.8	63.9	42.6	21.3
HEIJMANS N.V.-CVA	181.8	121.2	60.6	303.1	202.0	101.0
NUTRECO HOLDING N.V.	71.9	48.0	24.0	119.9	79.9	40.0

Company (continued)	25% of ADTV			15% of ADTV		
	% Repurchased			% Repurchased		
	15%	10%	5%	15%	10%	5%
OCE NV	92.7	61.8	30.9	154.5	103.0	51.5
ORDINA NV	142.9	95.3	47.6	238.2	158.8	79.4
SNS REAAL	344.6	229.7	114.9	574.3	382.8	191.4
STORK NV	124.1	82.8	41.4	206.9	137.9	69.0
TELE ATLAS NV	87.2	58.2	29.1	145.4	96.9	48.5
UNIVAR NV	184.6	123.0	61.5	307.6	205.1	102.5
USG PEOPLE NV	87.9	58.6	29.3	146.5	97.7	48.8
VAN DER MOOLEN HOLDING	92.4	61.6	30.8	154.1	102.7	51.4
VOPAK	193.7	129.1	64.6	322.9	215.2	107.6
WERELDHAVE NV	95.9	63.9	32.0	159.9	106.6	53.3
KONINKLIJKE WESSANEN NV	130.2	86.8	43.4	217.0	144.7	72.3
ARCADIS NV	227.8	151.9	75.9	379.7	253.1	126.6
BALLAST NEDAM NV	147.3	98.2	49.1	245.5	163.7	81.8
BETER BED HOLDING NV	153.8	102.5	51.3	256.4	170.9	85.5
BRUNEL INTERNATIONAL	280.1	186.8	93.4	466.9	311.3	155.6
DRAKA HOLDING	170.2	113.5	56.7	283.7	189.1	94.6
ENDEMOL NV	305.7	203.8	101.9	509.6	339.7	169.9
EUROCOMMERCIAL PROPERTIES	207.2	138.1	69.1	345.4	230.2	115.1
EXACT HOLDING NV	267.8	178.5	89.3	446.3	297.5	148.8
GRONTMIJ-CVA	170.3	113.5	56.8	283.8	189.2	94.6
HUNTER DOUGLAS NV	537.9	358.6	179.3	896.6	597.7	298.9
IMTECH NV	274.0	182.7	91.3	456.7	304.4	152.2
LAURUS NV	153.2	102.1	51.1	255.3	170.2	85.1
MACINTOSH RETAIL GROUP NV	384.1	256.1	128.0	640.2	426.8	213.4
OPG GROEP NV	276.6	184.4	92.2	460.9	307.3	153.6
PHARMING GROUP NV	74.2	49.5	24.7	123.7	82.5	41.2
SLIGRO FOOD GROUP NV	332.1	221.4	110.7	553.5	369.0	184.5
SMIT INTERNATIONAL NV	187.6	125.1	62.5	312.7	208.5	104.2
TELEGRAAF MEDIA GROEP NV	514.3	342.9	171.4	857.2	571.4	285.7
TEN CATE NV	198.8	132.5	66.3	331.3	220.8	110.4
UNIT 4 AGRESSO NV	191.6	127.7	63.9	319.3	212.9	106.4
VAN LANSCHOT NV	1532.5	1021.7	510.8	2554.2	1702.8	851.4
VASTNED OFFICES/INDUSTRIAL	165.9	110.6	55.3	276.5	184.3	92.2
VASTNED RETAIL NV	247.1	164.8	82.4	411.9	274.6	137.3
WAVIN NV	167.1	111.4	55.7	278.5	185.6	92.8
WEGENER NV-CVA	273.6	182.4	91.2	456.0	304.0	152.0
Average	177.2	118.1	59.1	295.3	196.8	98.4
Median	143.1	95.4	47.7	238.4	158.9	79.5

Appendix I - Tax Capacity AEX

Share buy-back capacity exempt from dividend withholding tax for 2007, according to Exemption 4c of the "Wet op de DividendBelasting".

Market caps and index constituents index as of 31 December 2006.

Company	Market Cap (EUR M)	Capacity (EUR M)	% Market Cap
ABN AMRO HOLDING NV	47.132	8.198,799	17,40%
AEGON NV	24.896	3.971,858	15,95%
KONINKLIJKE AHOLD NV	12.577	313,425	2,49%
AKZO NOBEL	14.136	3.822,196	27,04%
ASML HOLDING NV	9.388	-	0,00%
BUHRMANN N.V.	2.132	189,045	8,87%
KONINKLIJKE DSM NV	7.824	1.599,844	20,45%
FORTIS	42.508	13.070,826	30,75%
GETRONICS NV	777	77,940	10,04%
HAGEMEYER NV	1.890	266,442	14,10%
HEINEKEN NV	19.232	2.352,017	12,23%
ING GROEP NV-CVA	75.103	18.564,091	24,72%
KONINKLIJKE KPN NV	22.429	2.280,771	10,17%
KONINKLIJKE NUMICO NV	7.442	248,723	3,34%
PHILIPS ELECTRONICS NV	33.393	1.035,147	3,10%
REED ELSEVIER NV	10.500	4.392,168	41,83%
RODAMCO EUROPE NV	9.538	2.680,582	28,11%
ROYAL DUTCH SHELL PLC-A SHS	170.424	37.790,221	22,17%
SBM OFFSHORE NV	3.546	275,904	7,78%
TNT NV	14.901	696,232	4,67%
TOMTOM	3.533	-	0,00%
UNILEVER NV-CVA	35.924	9.690,397	26,98%
VEDIOR NV-CVA	2.730	280,2636471	10,27%
WOLTERS KLUWER	7.357	792,737321	10,77%
	All constituents:	Average	14,54%
		Median	10,52%
	Excluding non-dividend constituents:	Average	16,06%
		Median	13,16%

Source: Bloomberg, Annual reports

Appendix J - Tax Capacity AMX

Share buy-back capacity exempt from dividend withholding tax for 2007, according to Exemption 4c of the "Wet op de DividendBelasting".

Market caps and index constituents index as of 31 December 2006. Please note that Logica CMG and Univar are not included, as they do not have a seven year history. Corus is not included, as the company has been taken over.

Company	Market Cap (EUR M)	Capacity (EUR M)	% Market Cap
AALBERTS INDUSTRIES NV	1.756,922	51,823	2,95%
ASM INTERNATIONAL N.V.	900,234	-	0,00%
KONINKLIJKE BAM GROEP NV	1.954,141	213,254	10,91%
BOSKALIS WESTMINSTER-CVA	2.140,694	122,235	5,71%
CORIO NV	4.179,723	1.410,640	33,75%
CRUCELL	1.314,781	-	0,00%
CSM-CVA	2.046,549	212,561	10,39%
FUGRO NV-CVA	2.452,927	132,462	5,40%
HEIJMANS N.V. -CVA	1.036,084	208,620	20,14%
HUNTER DOUGLAS NV	2.585,164	116,791	4,52%
NUTRECO HOLDING N.V.	1.848,040	41,333	2,24%
OCE NV	1.119,731	513,391	45,85%
ORDINA NV	701,255	46,588	6,64%
PHARMING GROUP NV	349,426	-	0,00%
RANDSTAD HOLDING NV	6.060,229	569,615	9,40%
STORK NV	1.330,367	159,193	11,97%
USG PEOPLE NV	2.101,123	71,543	3,40%
VAN DER MOOLEN HOLDING	209,337	153,854	73,50%
VASTNED RETAIL NV	1.247,453	493,446	39,56%
VOPAK	2.572,967	287,898	11,19%
WERELDHAVE NV	2.134,284	909,930	42,63%
KONINKLIJKE WESSANEN NV	777,423	430,176	55,33%
	All constituents:	Average	17,98%
		Median	9,89%
	Excluding non-dividend	Average	20,81%
	constituents:	Median	10,91%

Source: Bloomberg, Annual reports

Appendix K - Case study: Microsoft

Microsoft has been one of the most actively repurchasing companies in the US, announcing record share buy-backs in the 1990s and into the 2000s. Throughout the 1990s it was common practice for Microsoft to enhance their share buy-backs with written puts, predominantly to bring down the cost of the program, by collecting the tax-free put premiums upfront.



Corporate pay-out policy

In the late 1990s Microsoft did not distribute its profits to its shareholders through dividends, but instead chose to initiate multiple share buy-backs. In the years 1995 until 2000 Microsoft returned on average about 58% of its net income to its shareholders via share buy-backs. Throughout these years written put options were incorporated in the share buy-backs.

Rationale

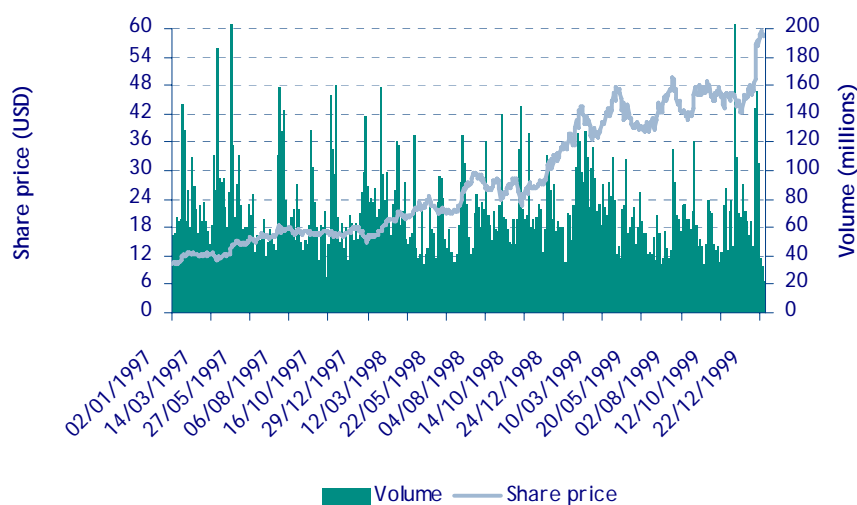
The rationale for Microsoft to repurchase shares over paying dividends has been the greater signalling power of share buy-backs. Through repurchases Microsoft intended to convey a signal of its potential to the market, which was also a driver for Microsoft to enhance its share buy-backs with written put options. The options were often purchased in-the-money, thereby providing a strong signal. However, the options seldom matured in-the-money, as Microsoft did not purchase the shares with the intention to be exercised and receive the shares at maturity, but predominantly wanted to collect the upfront put premiums.

Transaction

In the six years starting in 1995 Microsoft repurchased over \$ 15 billion worth of shares, through share buy-backs, which were enhanced with put options. The option premiums, which were collected tax-free in, on average made up for about 11% of the cost of the share buy-backs.

Conclusion

Throughout the 1990s the general market was bullish, as was Microsoft's share price, depicted by the chart, which shows Microsoft's share price over the last three years of the 1990s. In such a market, writing puts can be very successful, which is proven by the Microsoft case. Not only did the put premiums bring down the costs of the share buy-backs, the premiums constituted 3% to 12% of the company's net income in the years 1995 until 2000.



Sources: Bloomberg, SEC filings, and Gyoshev (2006)

Appendix L - Case study: ASML



ASML is a globally active provider of lithography systems for the semiconductor industry, manufacturing complex machines used in the production of integrated circuits or chips. ASML is headquartered in the Netherlands, and its shares are traded on Euronext Amsterdam and NASDAQ. ASML has been one of the most innovative companies in terms of share buy-back strategies, in part because it does not pay ordinary dividends to its shareholders.

Corporate pay-out policy

In light of the growth potential of the company, ASML considers buying back shares the better option to create value for the shareholders over dividends. By not distributing any dividends, according to the Dutch taxation law, the company does not have 'Exemption 4c' share buy-back capacity, which has urged the company to look into alternative remuneration strategies, which might still be tax-efficient. In 2006, ASML was authorised to repurchase 10% of its shares outstanding, and to that extent executed a share buy-back enhanced with purchased call options and entered into a Forward Equity Purchase.

After these transactions ASML remained actively pursuing alternative shareholder remuneration strategies (other than dividends), announcing its AGM authorised another 30% share buy-back in March 2007. To pursue tax-efficiency, in May 2007 ASML announced it will implement a capital repayment instead of the share buy-back announced earlier.

Rationales

The rationales for executing the two transactions I am analysing in this case study were completely different. The purchased calls were intended to mitigate dilution effects, resulting from the issuance of new shares to cover the conversion of convertible bonds. The forward equity purchase on the other hand was intended as a tax-efficient alternative to remunerate its shareholders. Obviously, in both cases ASML cancelled its repurchased shares. Additional shares were repurchased in 2007 to cover employee stock options, under .

Transactions

Forward Equity Purchase

Between 19 April 2006 and 13 July 2006 ASML engaged in multiple forward agreements with an investment bank, to represent a total of € 400 million, 5.25% of its market capitalisation. By engaging in the forward contract ASML argued it purchased the shares from an identifiable counterpart: the investment bank, which paid the DWT and subsequently reclaimed it. Thereby, ASML tried to avoid having to pay taxes for the share buy-back, avoiding grossing up the consideration paid, which it should have done in case of an open market share buy-back with unidentifiable counterparties.

Purchased Calls

On 9 October ASML announced that it had purchased call options, to gain the right to purchase 14.9 million of its own shares, about 3.10% of the shares outstanding. ASML paid €270 million in cash to finance the share buy-back and the underlying call options. According to my calculations this implies ASML has paid a 3.7% premium to the market price in order to repurchase the shares. The premium demonstrates that purchasing calls to enhance a share buy-back comes at a price, the insurance premium. The significant premium also demonstrates that ASML had to purchase relatively expensive shares, so probably in-the-money calls, compliant with the safe harbour.

Conclusion

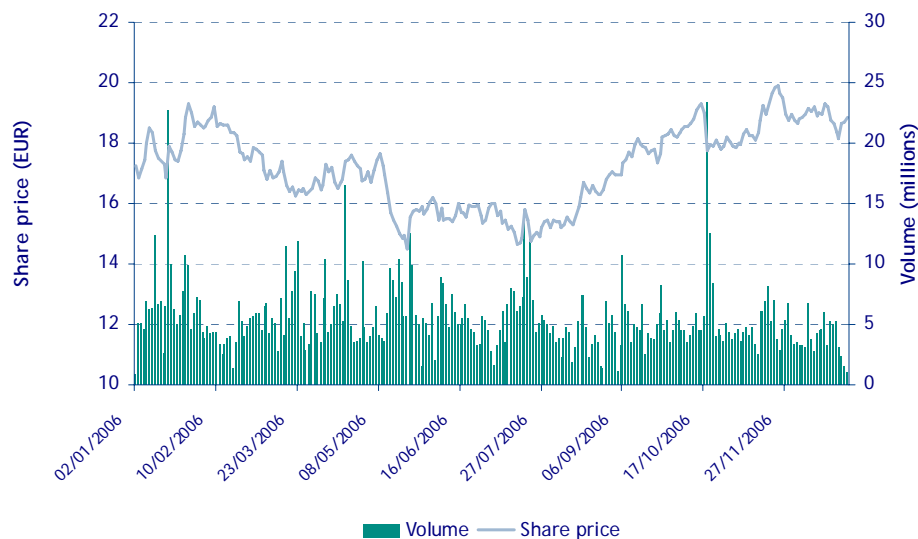
ASML has been one of the most innovative Dutch companies in terms of shareholder remuneration, as it chose not to pay dividends to its shareholders, but instead used (innovative) share buy-backs.

Forward Equity Purchase

In 2006 ASML engaged in multiple forward agreements with an investment bank, to repurchase shares tax-efficiently, in absence of share buy-back capacity in terms of Exemption 4c. The Dutch tax authorities reacted in May 2007 to the forward equity purchase employed by ASML, which they refer to as a Forward Purchase Agreement (FPA), by stating that in fact ASML was indirectly executing an open market share buy-back. For that reason, the tax authority argued, ASML should have accounted for the DWT levied on the share buy-back, and moreover the investment bank cannot reclaim the taxes paid.

Purchased Calls

Also in 2006, ASML announced it had purchased call options, to gain the right to purchase 14.9 million of its own shares, about 3.10% of the shares outstanding. ASML paid €270 million in cash to finance the share buy-back and the underlying call options, which were intended to mitigate half of the dilution effects arising from the conversion of convertible bonds. ASML has paid a 3.7% premium to the market price in order to repurchase the shares, which clearly demonstrates that purchasing calls to enhance a share buy-back comes at a price, the 'insurance premium'.



Source: Bloomberg, SEC and AFM filings, Annual report, Press releases (Appendixes F and G)

Appendix M - Case study: Home Depot

The Home Depot is one of the world's largest home improvement retailers, mostly active in the US. The company announced on 14 December 2006, that its management has authorised the repurchase of \$3 billion of outstanding shares, representing 3.2% of its market capitalisation, through an accelerated share repurchase agreement.



Corporate pay-out policy

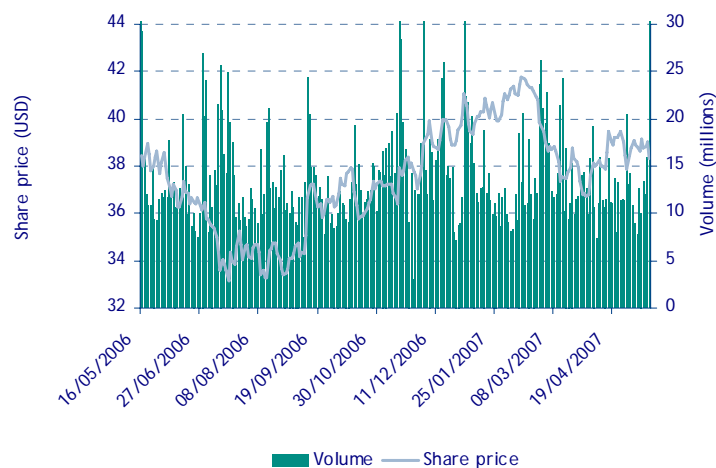
From 2001 until 2006, Home Depot has invested over \$20.0 billion of its revenues back into the business, while returning over \$20.3 billion to shareholders in the form of share buy-backs and dividends. During fiscal 2006, the company has returned approximately \$6.7 billion of cash to its shareholders, repurchasing over 173 million shares, through open market share buy-backs and an accelerated share repurchase. From 2002 until 2006 the company repurchased 19% of its shares outstanding at inception, and the buy/ack program is set to continue. The company pays a quarterly cash dividend, although the US dollar amount spend on dividends is relatively low compared to the buy-backs, as the company distributed a cash dividend of \$1.4 billion in 2006.

Rationale

The rationale of Home Depot's share buy-backs is dual, on the one hand it wants to increase shareholder returns, but on the other increasing leverage is an important objective as well. The leverage increase is effectuated by using debt financing for the accelerated share repurchase. The company's ESOP is relatively small (\$40 million), hence the repurchased shares are not likely to be reissued. Analysts link the drive to increase leverage to leveraged buy-out (LBO) rumours, arguing that Home Depot wants to increase its price for possible private equity investors intending to take the company private. As a result of its increased leverage, Home Depot was downgraded by rating agencies such as S&P and Moody's.

Transaction

Home Depot has entered into an accelerated share repurchase agreement on 14 December 2006, which provides for the immediate purchase of approximately 75 million shares. In March 2007, the accelerated share repurchase was settled financially, as Home Depot received \$36 million in cash from its intermediary.



Conclusion

By means of a \$ 3 billion Accelerated Share Repurchase Home Depot has effectuated part of its extensive share buy-back program. The majority of that program is executed via conventional open market share buy-backs. Apart from remunerating shareholders, the buy-back was intended to increase leverage, in part to fend off the threat of a leveraged buy-out. The transaction is clearly appreciated by investors as the share price increased steadily in the three months following the announcement of the deal.

Sources: Annual Report, Bloomberg, International Financing Review, "Home Depot ups LBO ante", 16 December, 2006

Appendix N - Case study: TeliaSonera

The Swedish-Finnish company TeliaSonera is a telecommunications company, most active in the Nordic and Baltic region. In the first half of 2005 the company decided to effectuate a fixed price tender offer via transferable put rights (TPRs), to repurchase 4% of their shares outstanding, for a total of about 10 billions Swedish Kroner (SEK).

Corporate pay-out policy

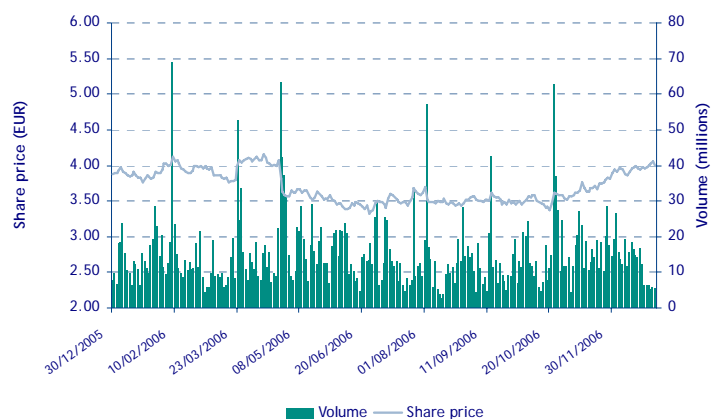
According to their annual report the TeliaSonera's normal pay-out policy is to distribute 30 to 50 % of its net income as dividend to its shareholders. From 2005 until 2007 the company has been much more actively remunerating their shareholders, through regular dividends, a special dividend and a share buy-back. In 2005 the company proposed an ordinary dividend for 2005 of SEK 5,613 million, while through a special dividend it effectuated an additional distribution of SEK 10,104 million to shareholders in 2006. Hence, including the share buy-back, TeliaSonera has returned over SEK 25 billion in 2005 and 2006, which is equivalent to about € 3 billion. All pay-outs to shareholders have been fully financed with cash.

Rationale

The company decided after analysing future cash flows and possible future acquisitions that it had to opportunity to return more capital than their standard policy implied, planning to return up to SEK 30 billion to their shareholders from 2005 until 2007. The company is returning excess capital from its operations to their shareholders, and the choice for share buy-backs seems to be based on flexibility, as the company wants to be able to adjusted the amount if attractive investment opportunities arise beyond its current plan. The shares will not be used in an ESOP, as the company intends to cancel the shares.

Transaction

TeliaSonera announced on 26 April 2005 to repurchase 4.0% of its outstanding shares, by offering its shareholders of to sell every 25th share to TeliaSonera for a cash payment of SEK 55 (EUR 5.98) per share, a premium of almost 50% over the traded share price. The acceptance period to accept the tender offer ended 14 June 2005. During the period about 185 million shares have been tendered, corresponding to an acceptance ratio of 98.8%, amounting to a value of SEK 10,163 million (€ 1,1051 million). Shareholders that decided not to tender their shares, but instead sold their TPRs (commission-free), all received the same price for their rights, which amounted to SEK 0.6782 (€ 0,0737) per share. All shareholders participating in the transaction were registered.



Conclusion

The TPR method intends to provide all shareholders the opportunity benefit from a tender offer, given the high acceptance rate the company has met that objective. Some 200 thousand smaller shareholders did not participate in the offer, as they sold neither their shares nor their TPRs. The share buy-back has been employed at a significant premium to the market price, but the share price never raised to that level. Part of the premium could be used to compensate shareholders for taxes, but still in this specific case the embedded signalling power was minimal.

Sources: Annual Report, Bloomberg, Company press releases.